# OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

## CONTRACT RMP 43-84-15

## DECK REPLACEMENT AND WIDENING
## TINKERS CREEK BRIDGE
## M.P. 185.6
## STA. 717+79.50
## SUMMIT COUNTY AND PORTAGE COUNTY
## ORIGINAL CONTRACT SECTION C-13

INDEX OF SHEETS


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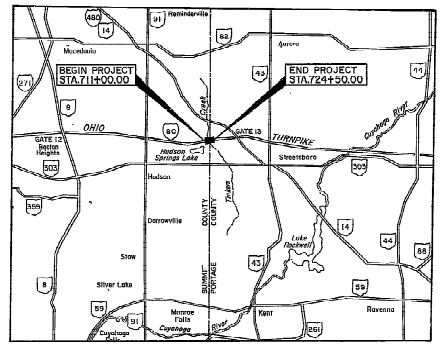



LOCATION MAP

SCALE IN MILES

0 2 4

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

E. Allan Plain
CHIEF ENGINEER
1-25-84
DATE

| SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS | | | | | | | |
|---|---|---|---|---|---|---|---|
| BP-5 | 7-10-81 | FB-1-82 | 8-10-82 | | | | |
| BP-7 | 12-6-76 | RB-1-82 | 2-22-84 | | | | |
| F-2 | 5-1-76 | BR-1 | 5-29-79 | | | | |
| F-8 | 5-1-76 | | | | | | |
| F-9 | 5-1-76 | | | | | | |
| BR-1 | 2-8-82 | | | | | | |
| SR-28 | 2-5-82 | | | | | | |
| GR-5 | 2-8-82 | | | | | | |
| BP-2 | 12-6-76 | | | | | | |
| TC-35.16 | 10-5-77 | | | | | | |
| MC-7 | 10-15-76 | | | | | | |
| MC-9A | 5-1-81 | | | | | | |
| MC-11 | 8-1-78 | | | | | | |

Portion to be Improved
Other Roads

SCALES

Plan _____ 0 20'

Profile: _____ Horizontal 0 20', Vertical 0 10'

Cross Section: _____ Horizontal 0 5', Vertical 0 5'

PLANS PREPARED BY

DALTON • DALTON • NEWPORT
ARCHITECTS ENGINEERS PLANNERS
AKRON OHIO CLEVELAND

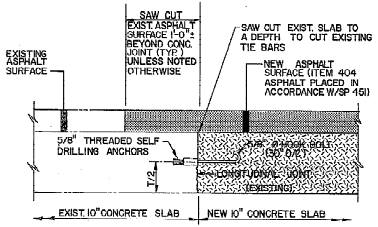
F. J. Richardson
F. J. RICHARDSON REG. ENGINEER No 19531

# GENERAL SUMMARY

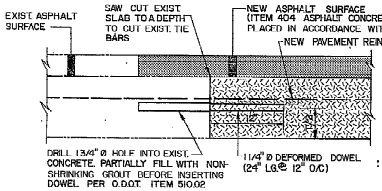
| CALC. BY: DDB DATE: 12/83 | OHIO TURNPIKE COMMISSION | OHIO |
|---|---|---|
| CHKD. BY: RRR DATE: 12/83 | RMP 43-84-15 | F.H.W.A. REGION 5 |

8/30

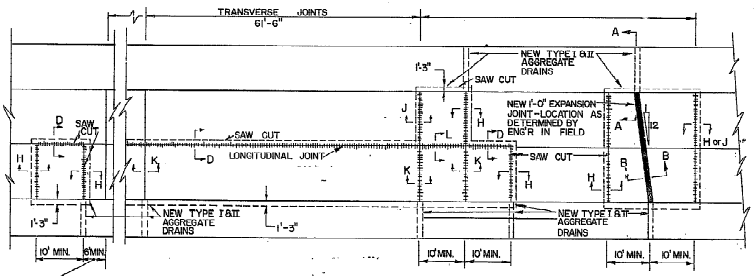
| SHEET NUMBER 2 | SHEET NUMBER 4 | SHEET NUMBER 9 | BID ITEM | BID QUANTITY | BID UNIT | DESCRIPTION |
|---|---|---|---|---|---|---|
| | | | | | | ROADWAY |
| 201 | LUMP | | 201 | LUMP | | CLEARING AND GRUBBING |
| 202 | | 68 | 202 | 68 | LIN. FT. | PIPE REMOVED, 24" & OLDER |
| 202 | | 217 | 202 | 217 | SQ. YD. | PAVEMENT REMOVED |
| 202 | | 1499 | 202 | 1499 | SQ. YD. | WEARING COURSE REMOVED |
| 202 | | 4 | 202 | 4 | EACH | INLET REMOVED |
| | | 980 | 202 | 980 | LIN. FT. | GUARDRAIL REMOVED FOR REUSE |
| 203 | | 218 | 202 | 218 | LIN. FT. | FENCE REMOVED |
| 203 | | 291 | 203 | 291 | CU. YD. | EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION |
| 203 | | 25 | 203 | 25 | CU. YD. | EMBANKMENT |
| 404 | 80 | | 404 | 80 | CU. YD. | ASPHALT LEVELING COURSE FOR MAINTAINING TRAFFIC ON CROSSOVERS |
| SP606 | | 913 | SP606 | 913 | LIN. FT. | GUARDRAIL, REBUILT, TYPE 5 |
| 606 | | 6 | 606 | 6 | EACH | BRIDGE TERMINAL ASSEMBLY, STANDARD TYPE A |
| 607 | | 190 | 607 | 190 | LIN. FT. | FENCE, TYPE 4 |
| SP622 | 4800 | | SP622 | 4800 | LIN. FT. | TEMPORARY CONCRETE BARRIER |
| SP622 | 4800 | | SP622 | 4800 | LIN. FT. | TEMPORARY CONCRETE BARRIER RESET |
| | | | | | | EROSION CONTROL |
| 207 151 | | | 207 | 151 | SQ. YD. | TEMPORARY SEEDING AND MULCHING |
| 659 10 | | | 207 | 10 | EACH | STRAW OR HAY BALES |
| 659 38 | | | 659 | 38 | SQ. YD. | REPAIR SEEDING AND MULCHING |
| 659 .13 | | | 659 | .13 | TON | COMMERCIAL FERTILIZER |
| 659 755 | | | 659 | 755 | SQ. YD. | SEEDING AND MULCHING |
| 660 1.3 | | | 659 | 1.3 | M.GAL. | WATER |
| | | 37 | 660 | 37 | SQ. YD. | REINFORCED SODDING |
| | | | | | | DRAINAGE |
| | | 28 | 603 | 28 | LIN. FT. | 12" TYPE D CONDUIT 707.01 W/CLASS C BEDDING |
| SP604 | | 2 | SP604 | 2 | EACH | CATCH BASIN, AS PER PLAN |
| SP605 100 | | 188 | SP605 | 188 | LIN. FT. | AGGREGATE DRAINS, TYPE II |
| | | | | | | PAVEMENT |
| 304 | | 115 | 304 | 115 | CU. YD. | AGGREGATE BASE |
| 310 50 | | | 310 | 50 | CU. YD. | SUBBASE, GRADING A |
| 402 | | 256 | 402 | 256 | CU. YD. | ASPHALT CONCRETE, AC-20 |
| SP404 | | 42 | SP404 | 42 | CU. YD. | ASPHALT CONCRETE SURFACE COURSE |
| SP407 | | 105 | SP407 | 105 | GAL. | TACK COAT |
| SP408 | | 518 | SP408 | 518 | GAL. | PRIME COAT |
| SP414 | | 518 | SP414 | 518 | GAL. | BITUMINOUS MATERIAL FOR SHOULDER SURFACE TREATMENT |
| SP414 | | 9 | SP414 | 9 | CU. YD. | COVER AGGREGATE FOR SHOULDER SURFACE TREATMENT |
| SP451 100 | | | SP451 | 100 | CU. YD. | COMPACTED SUBGRADE |
| SP451 300 | | | SP451 | 300 | SQ. YD. | FULL DEPTH PAVEMENT REPAIRS |
| SP451 50 | | | SP451 | 50 | LIN. FT. | JOINT REPAIR, TYPE D |
| SP451 400 | | | SP451 | 400 | LIN. FT. | JOINT REPAIR, TYPE H |
| SP451 50 | | | SP451 | 50 | LIN. FT. | JOINT REPAIR, TYPE K |
| SP451 50 | | | SP451 | 50 | LIN. FT. | JOINT REPAIR, TYPE L |
| | | 76 | SP451 | 76 | LIN. FT. | EXPANSION JOINT |
| | | 60 | SP605 | 60 | LIN. FT. | ASPHALT CONCRETE CURB, STANDARD TYPE I |
| | | 258 | SP611 | 258 | SQ. YD. | REINFORCED CONCRETE APPROACH SLAB (T=10") |
| 103 | | | SP617 | 103 | SQ. YD. | SHOULDER PREPARATION |
| 12 | | | SP617 | 12 | CU. YD. | COMPACTED AGGREGATE |
| 5 | | | SP617 | 5 | M. GAL. | WATER |
| 89 | | | SP627 | 89 | TON | STONE SHOULDER PROTECTION |
| 103.05 | | | 103.05 | LUMP | | CONTRACT PERFORMANCE AND PAYMENT BOND |
| SP614 | LUMP | | SP614 | LUMP | | MAINTAINING TRAFFIC |
| SP619 LUMP | | | SP619 | LUMP | | FIELD OFFICE |
| SP623 | | | SP623 | LUMP | | CONSTRUCTION LAYOUT SURVEY |
| 624 | | | 624 | LUMP | | MOBILIZATION, AS PER PLAN |




TYPE 'D' JOINT




TYPE 'H' JOINT



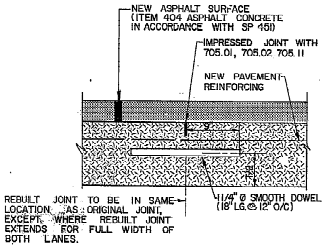

NOTE:

IF A PORTION OF THE SLAB TO BE REPLACED IS CLOSER THAN 5' TO A TRANSVERE JOINT THEN THE ENTIRE SLAB UP TO THE JOINT IS TO BE REPLACED.

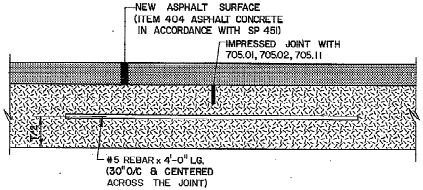
NOTE:

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

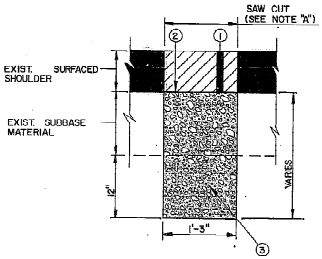
CONCRETE JOINT ARRANGEMENT PLAN




TYPE 'K' JOINT



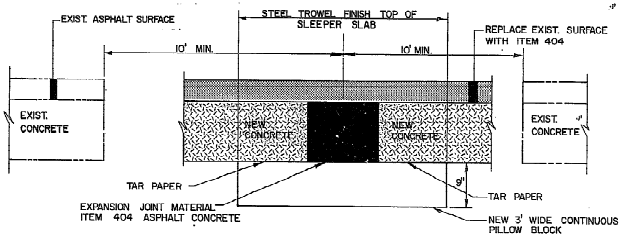

TYPE 'L' JOINT




SECTION C-C

LEGEND:

| | | |
|---|---|---|
| ① | 402 | ASPHALT CONCRETE |
| ② | 408 | PRIME COAT (0.2 to 0.5 GAL/SQ.YD.) |
| ③ | SP605 | AGGREGATE DRAINS, TYPE I (SEE NOTE "B") |
| ④ | SP605 | AGGREGATE DRAINS, TYPE II (SEE NOTE "B") |




SECTION B-B

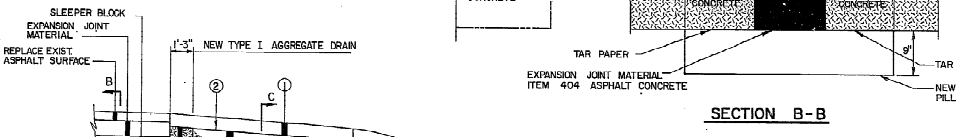
NOTE "A"

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

NOTE "B"

TYPE I AGGREGATE DRAINS WILL BE INSTALLED AT 10' O/C IN NEW FULL DEPTH CONCRETE REPLACEMENT. THE EXISTING DRAIN REMOVED & REPLACED TO THE DEPTH INDICATED HEREON.

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

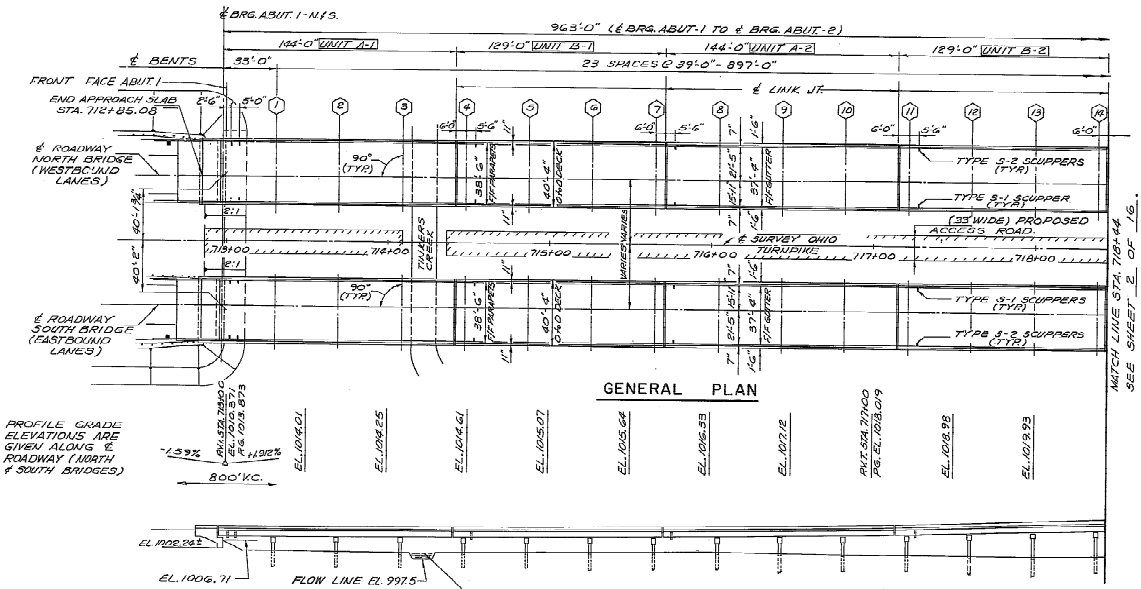



SECTION A-A

OHIO TURNPIKE COMMISSION

CRACK & JOINT DETAILS

| | |
|---|---|
| DATE: JUNE 1983 | SCALE: N.T.S. |
| RMP: 43-84-15 | SHEET 11 |




FOR NOTES SEE SHEET 2 OF 16

(*) THE WEIGHT OF STRUCTURAL STEEL SHOWN INCLUDES 90750 LBS. FOR EXPANSION JOINT ARMOR

## EXISTING STRUCTURE

TYPE: TWIN STRUCTURES, EACH STRUCTURE HAS CONTINUOUS, NON-COMPOSITE STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES.

SKEW: 0°-00'-00"

SPAN: 4 A' UNITS (144'-0" EACH) 3 B' UNITS (129'-0" EACH) SEPARATED BY LINK JOINTS AND LOCATED ALTERNATELY - TOTAL 25 SPANS
UNIT A: 33'-0", 39'-0", 39'-0", 33'-0" ℄ TO ℄ BRG.
UNIT B: 6'-0", 39'-0, 39'-0, 39'-0", 6'-0" ℄ TO ℄ BRG.

ROADWAY: 33'-0" F TO F CONC. PARAPETS

LOADING: CF 2000

WEARING SURFACE: NONE (ASPHALT RESURFACING)

APPROACH SLABS: CONCRETE (VARIABLE LENGTHS)

ALIGNMENT: TANGENT

SLOPE PROTECTION: CONCRETE @ ABUT. #1 & NONE @ ABUT. #2

## PROPOSED STRUCTURE

TYPE: SAME AS FOR EXISTING STRUCTURE.

SKEW: 0°-00'-00"

SPAN: SAME AS FOR EXISTING STRUCTURE.

ROADWAY: 38'-6" F TO F CONC. PARAPETS

LOADING: HS 20-44 (CASE II) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: 15'-0" (EACH ABUTMENT) OHIO TURNPIKE STANDARD

ALIGNMENT: TANGENT

SLOPE PROTECTION: CONCRETE @ ABUT. #1 AND RIP-RAP AT ABUT. #2

## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | BENTS | GEN'L. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SP202 | LUMP | L.S. | PORTIONS OF STRUCTURES REMOVED | LUMP | LUMP | | | | | |
| 503 | 136 | C.Y. | UNCLASSIFIED EXCAVATION | | 69 | 67 | | | | |
| 505 | LUMP | L.S. | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LUMP | | | |
| SP506 | LUMP | L.S. | STATIC LOAD TEST, HP 10 x 42 | | LUMP | | | | | |
| SP506 | LUMP | L.S. | STATIC LOAD TEST, HP 12 x 63 | | | LUMP | | | | |
| SP506 | 2 | EA. | SUBSEQUENT STATIC LOAD TEST, HP 10 x 42 | | 2 | | | | | |
| SP506 | 2 | EA. | SUBSEQUENT STATIC LOAD TEST, HP 12 x 63 | | | 2 | | | | |
| 507 | 650 | L.F. | STEEL PILES, HP 10 x 42 | | 650 | | | | | |
| 507 | 4650 | L.F. | STEEL PILES, HP 12 x 63 | | | 4650 | | | | |
| 509 | 14886 | LB. | REINFORCING STEEL, GRADE 60 | | 6461 | 8425 | | | | |
| 510 | 225 | L.F. | DOWEL HOLES (AS PER PLAN) | | 225 | | | | | |
| 511 | 78 | C.Y. | CLASS "C" CONCRETE, ABUTMENT | | 78 | | | | | |
| 511 | 105 | C.Y. | CLASS "C" CONCRETE, BENTS | | | 105 | | | | |
| SP511 | 256.3 | C.Y. | CLASS "S" CONCRETE, SUPERSTRUCTURE DECK USING SHRINKAGE COMPENSATING CEMENT | 256.3 | | | | | | |
| SP511 | 84 | C.Y. | CLASS "S" CONCRETE, ABUTMENT SLABS USING SHRINKAGE COMPENSATING CEMENT | | 84 | | | | | |
| 512 | 46 | S.Y. | TYPE "A" WATERPROOFING | | 46 | | | | | |

## ESTIMATED QUANTITIES

| ITEM | TOTAL | UNIT | DESCRIPTION | SUPER. | ABUT. | BENTS | GEN'L. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 513 | 373500 | LB | STRUCTURAL STEEL (A-36) AISC CATEGORY I (*) | 373500 | | | | | | |
| 513 | 2520 | EA. | WELDED STUD SHEAR CONNECTORS | 2520 | | | | | | |
| SP514 | 373500 | LB | FIELD PAINTING OF NEW STRUCTURAL STEEL @ | 373500 | | | | | | |
| SP514 | LUMP | L.S. | FIELD PAINTING OF EXISTING STRUCTURAL STEEL | LUMP | | | | | | |
| SP518 | 32 | EA. | SCUPPERS, INCLUDING SUPPORTS | 32 | | | | | | |
| SP519 | 75 | S.F. | PATCHING CONCRETE STRUCTURES | | | 75 | | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST, HP 10 x 42 | | 3 | | | | | |
| 523 | 3 | HOUR | DYNAMIC LOAD TEST, HP 12 x 63 | | | 3 | | | | |
| SP525 | 257 | L.F. | REPAIRS OF EXISTING BENT COLUMNS | | | 257 | | | | |
| SP526 | 180 | EA. | RIVET AND BOLT REPLACEMENT | 180 | | | | | | |
| SP527 | 12606 | S.Y. | CHEM-TRETE B&M 40 WEATHERPROOFING | 12196 | 310 | | | | | |
| SP533A | 635 | L.F. | 4.5 INCH ELASTOMERIC COMPRESSION SEALS | 635 | | | | | | |
| 601 | 265 | S.Y. | RIP-RAP, SLOPE PROTECTION | | 265 | | | | | |
| SP824 | 538458 | LB. | EPOXY COATED REINFORCING STEEL, GRADE 60 | 522220 | 16238 | | | | | |

| REVISED | 'AS BUILTS' | BY: MAB | 1-11-85 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

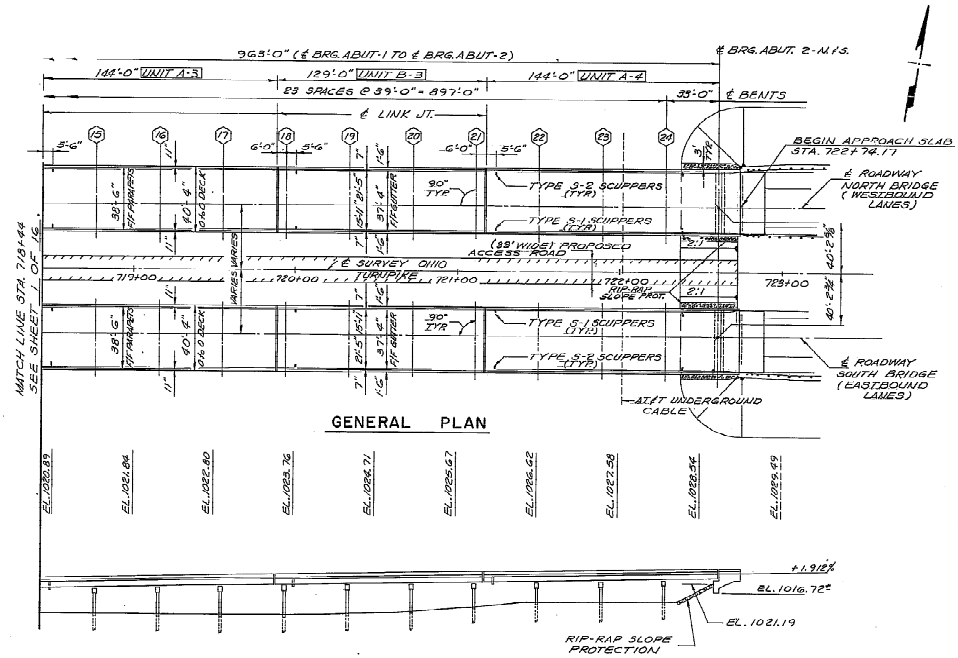
GENERAL PLAN & ELEVATION & ESTIMATED QUANTITIES

OHIO TURNPIKE OVER TINKERS CREEK

MILE POST 185.6

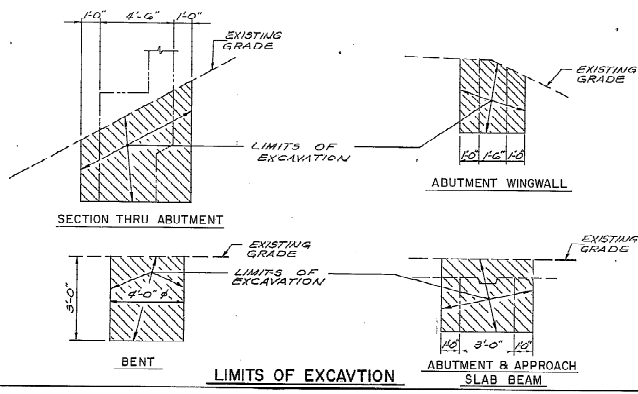
SUMMIT & PORTAGE COUNTIES

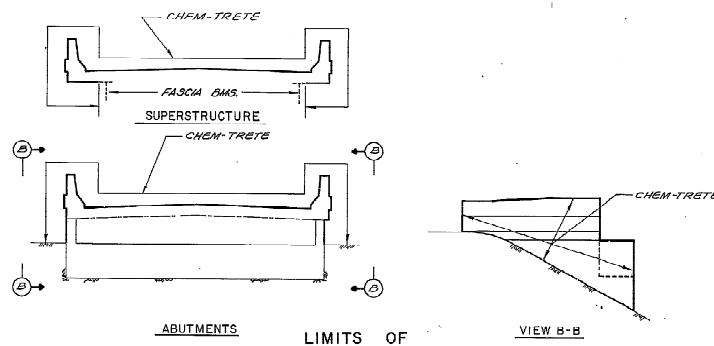
| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 1 OF 16 |




## NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPE SHALL CONFORM TO PLAN CROSS-SECTIONS.
2. THE SPAN LENGTHS AND THE LONGITUDINAL FRAMING DIMENSIONS SHOWN ON THESE PLANS ARE AS DETAILED ON THE EXISTING STRUCTURE PLANS. THE ACTUAL DIMENSIONS MAY VARY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS IN THE FIELD BEFORE USING THEM.
3. ○ INDICATES ℄ OF BENT Nº
4. FOR ADDITIONAL SURVEY, GEOMETRIC LAYOUT AND BENCH MARK DATA SEE ROADWAY DRAWING SHEET 9/30




LIMITS OF CHEM-TRETE BSM 40 WEATHERPROOFING

THE CHEM-TRETE BSM 40 WEATHERPROOFING SHALL BE APPLIED AS DESCRIBED IN THE SPECIAL PROVISION SP 527, "CHEM-TRETE BSM 40 WEATHERPROOFING."

| REVISED | 'AS BUILT' | BY: MAB | 1-11-85 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

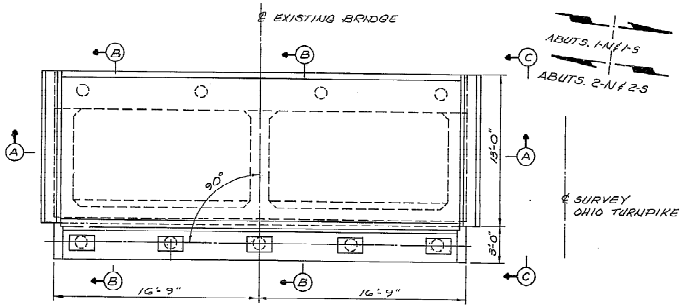
GENERAL PLAN & ELEVATION

OHIO TURNPIKE OVER TINKERS CREEK

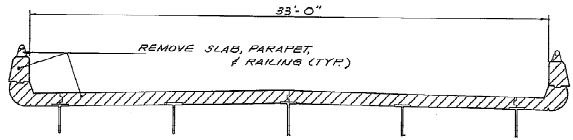
MILE POST 185.6

SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 2 OF 16 |




PLAN ABUTMENT 1 & 2
(SYMMETRICAL ABOUT ℄ SURVEY)




SUPERSTRUCTURE TRANSVERSE SECTION

NOTES

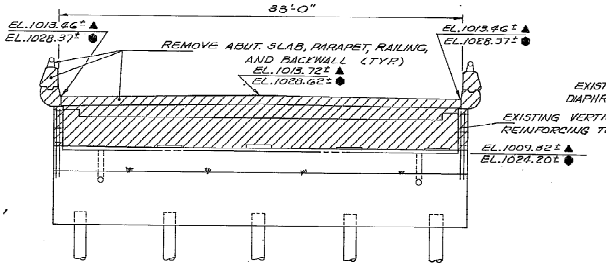
(1) ▨ DENOTES PORTIONS OF EXISTING STRUCTURE TO BE REMOVED AS PER ITEM SP-202.

FOLLOWING ARE THE APPROXIMATE QUANTITIES FOR SOME OF THE MAJOR ITEMS FOR REMOVAL:

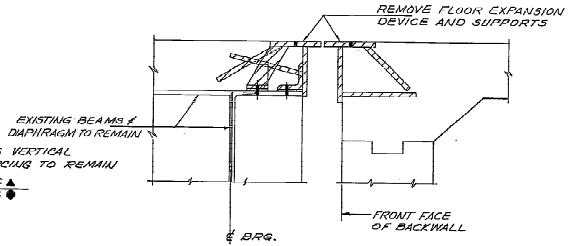
| ITEM | APPROXIMATE QUANTITY | |
|---|---|---|
| A) SUPERSTRUCTURE CONCRETE INCLUDING ABUTMENT SLAB AND PARAPETS. | 2300 | C.Y. |
| B) RAILING | 2032 | L.F. |
| C) STRUCTURAL STEEL | 56900 | LBS. |
| D) SUBSTRUCTURE CONCRETE | 25 | C.Y. |

THE ABOVE REMOVAL QUANTITIES HAVE BEEN ARRIVED AT USING THE EXISTING STRUCTURE PLANS AND HAVE BEEN GIVEN FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE. IT IS THE CONTRACTOR'S REPONSIBILITY TO ARRIVE AT THE REMOVAL QUANTITIES TO BE USED TO BASE HIS BID PRICE FOR ITEM SP-202 PORTIONS OF STRUCTURE REMOVED.

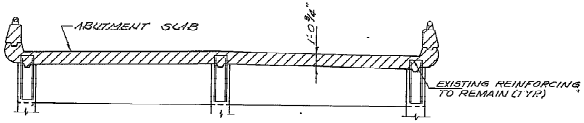
(2) SEE SPECIAL PROVISION SP202 FOR ADDITIONAL INFORMATION.



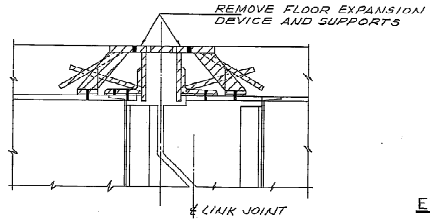

ELEVATION



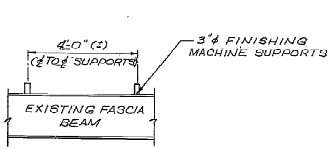

FLOOR EXPANSION DEVICE
AT ABUTMENT



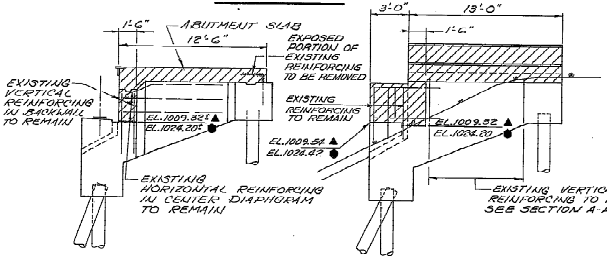

SECTION A-A




FLOOR EXPANSION DEVICE
AT LINK JOINT




EXISTING FINISHING
MACHINE SUPPORTS
(REMAINED ON NORTH BRIDGE, REMOVED ON SOUTH BRIDGE.)




SECTION B-B

VIEW C-C

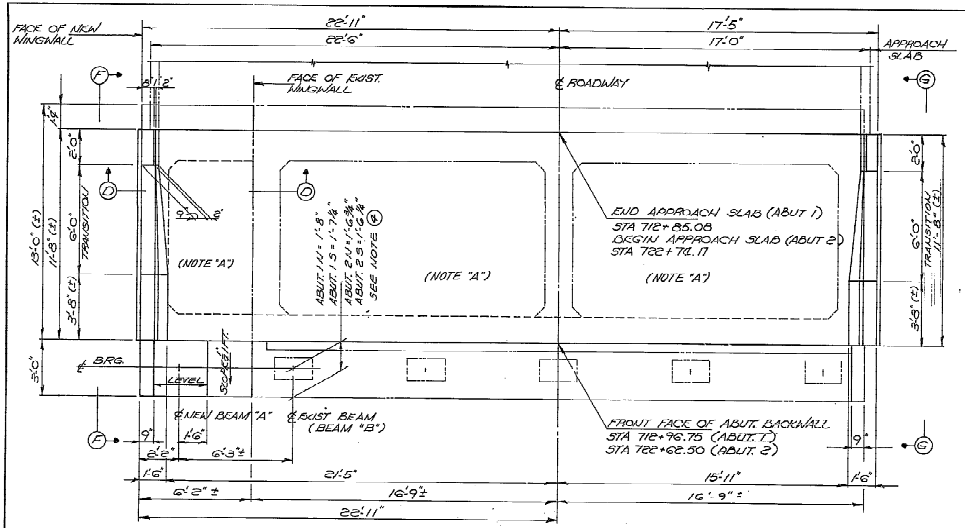
▲ ELEVATIONS AT ABUTMENT 1 NORTH & SOUTH
● ELEVATIONS AT ABUTMENT 2 NORTH & SOUTH

| REVISED | 'AS BUILTS' | BY: MAS | 1-11-86 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

REMOVAL DETAILS
OHIO TURNPIKE OVER
TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 4 OF 16 |

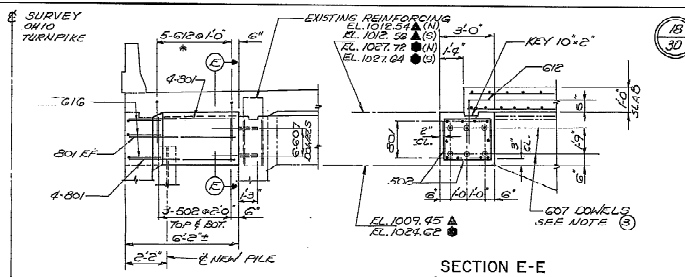



## PLAN OF ABUTMENT

ABUT. 1 SOUTH & ABUT. 2 NORTH ARE AS SHOWN. ABUT 1 NORTH AND ABUT. 2 SOUTH ARE SYMMETRICAL ABOUT ℄ SURVEY

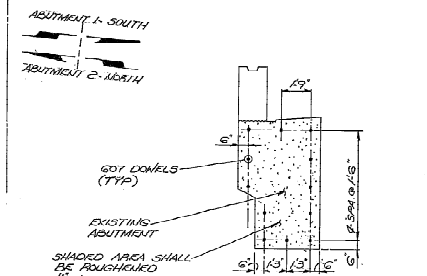
## NOTE "A"

THE VOID AREA WITHIN THE ABUTMENT SHALL BE FILLED IN, AS PER ITEM 503.10 OF THE SPECIFICATIONS. THE COST OF SUCH BACKFILL SHALL BE INCLUDED IN THE COST OF ITEM 503, "UNCLASSIFIED EXCAVATION" FOR PAYMENT.




## SECTION D-D

## SECTION E-E

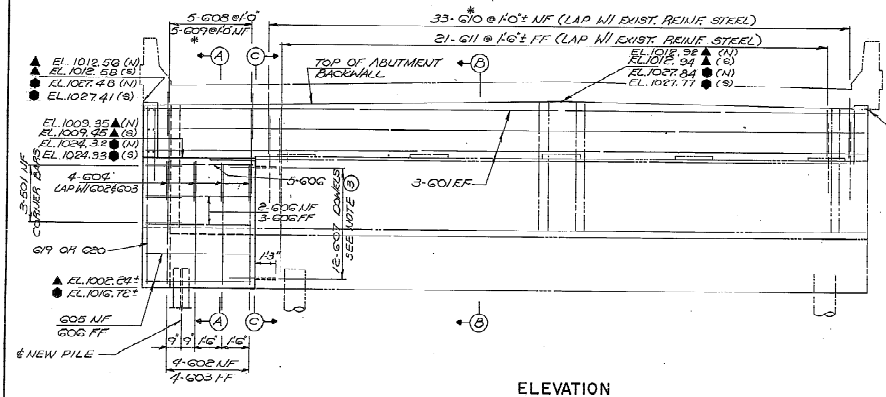



## VIEW C-C

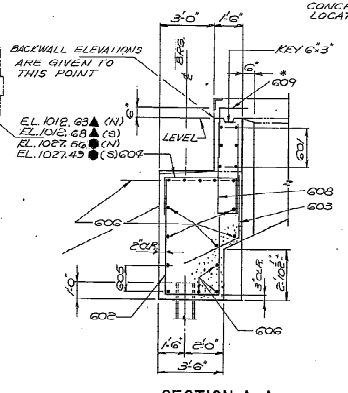
SHOWING SURFACE OF EXISTING CONCRETE TREATMENT AND LOCATION OF 607 DOWELS

### NOTES

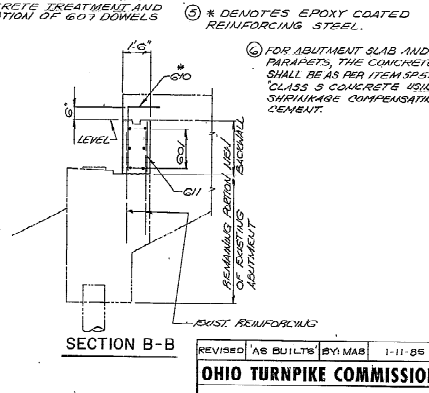
1. THE PREFIX 1A SHALL BE ADDED TO ALL REINFORCING BARS IN ABUTMENTS 1 & 2 SOUTH BRIDGE. THE PREFIX 2A SHALL BE ADDED TO ALL REINFORCING BARS IN ABUTMENTS 1 & 2 NORTH BRIDGE.
2. FOR ABUTMENT SLAB PLAN AND VIEWS F-F AND G-G SEE SHEET 6 OF 16.
3. DOWEL BARS SHALL BE DRILLED AND GROUTED IN THE EXISTING ABUTMENT AS SHOWN, AND IN ACCORDANCE WITH ITEM 510.
4. THIS IS A FIELD MEASURED DIMENSION. THE CONTRACTOR SHALL VERIFY THIS DIMENSION AND ADJUST IT AS NECESSARY FOR THE PLACEMENT OF THE NEW BEARING UNDER THE BEARING STIFFENER.
5. * DENOTES EPOXY COATED REINFORCING STEEL.
6. FOR ABUTMENT SLAB AND PARAPETS, THE CONCRETE SHALL BE AS PER ITEM SP511, "CLASS S CONCRETE USING SHRINKAGE COMPENSATING CEMENT."




## ELEVATION




## SECTION A-A




## SECTION B-B

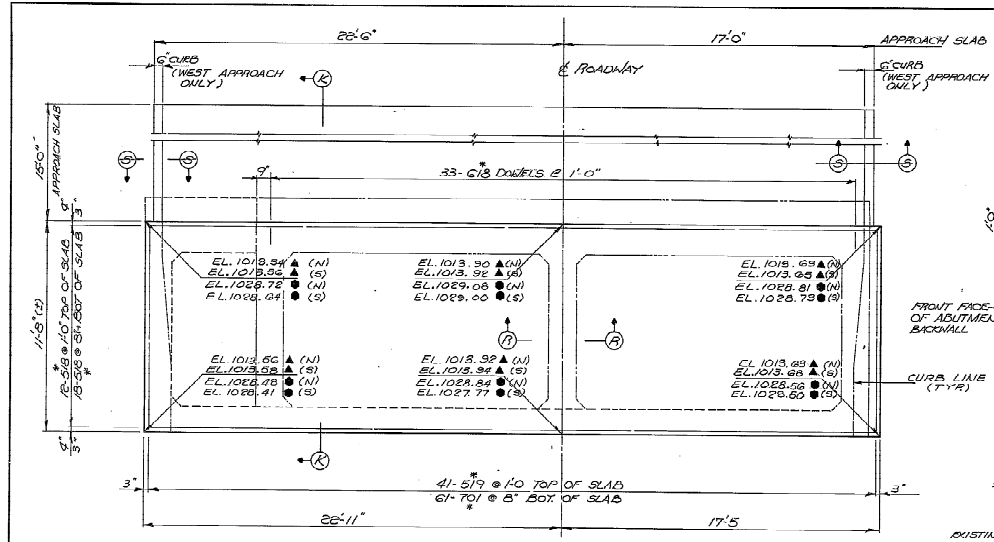
▲ ELEVATION AT ABUTMENT 1
● ELEVATION AT ABUTMENT 2
(N) INDICATES NORTH BRIDGE
(S) INDICATES SOUTH BRIDGE

| REVISED | 'AS BUILTS' | BY: MAB | 1-11-85 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

ABUTMENT DETAILS
OHIO TURNPIKE OVER TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

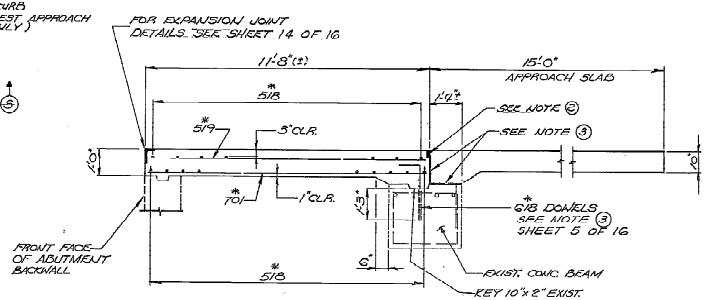
| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 5 OF 16 |



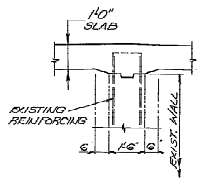

## ABUTMENT SLAB PLAN

(ELEVATIONS SHOWN ARE TO THE TOP OF THE ABUTMENT SLAB.)

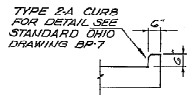
▲ ELEVATION AT ABUTMENT 1
● ELEVATION AT ABUTMENT 2
(N) INDICATES NORTH BRIDGE
(S) INDICATES SOUTH BRIDGE




## SECTION K-K




## SECTION R-R

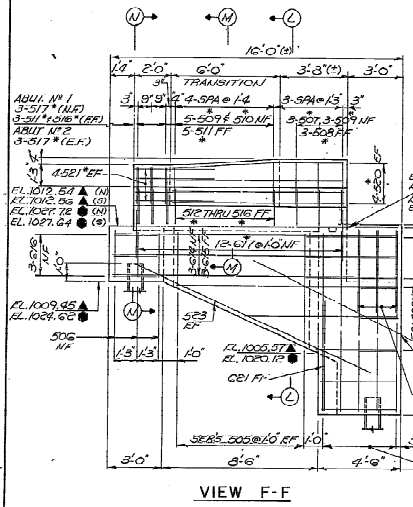



## SECTION S-S

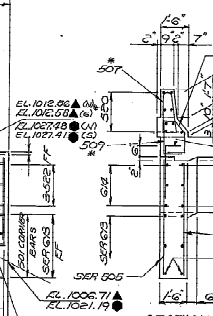
CURBS TO BE ON WEST APPROACH SLABS ONLY.

NOTES

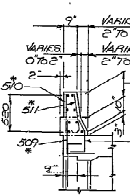
1. REINFORCING BARS SHOWN THUS(*) ARE TO BE EPOXY COATED.
2. PREFORMED ELASTOMERIC JOINT SEALER 705.11 (1 1/8" FOR 12" JOINT) DEPRESSED 1/8" BELOW ROADWAY PLACED IN 2"x 2 1/2" GROOVE.
3. TYPE A WATERPROFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE PREFORMED ELASTOMERIC JOINT SEALER 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.
4. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE SHEET 30/30
5. FOR ADDITIONAL NOTES SEE SHEET 5 OF 16.



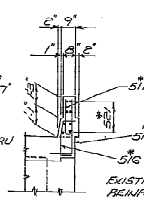

## VIEW F-F




## SECTION L-L

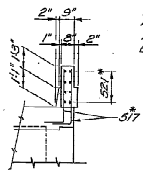



## SECTION M-M



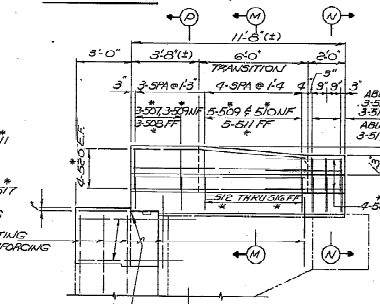

## SECTION N-N

(ABUT. Nº 1 - U.N.O.)

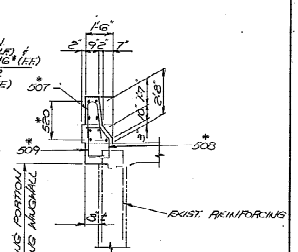



## SECTION N-N

(ABUT. Nº 2 - U.N.O.)




## VIEW G-G




## SECTION P-P

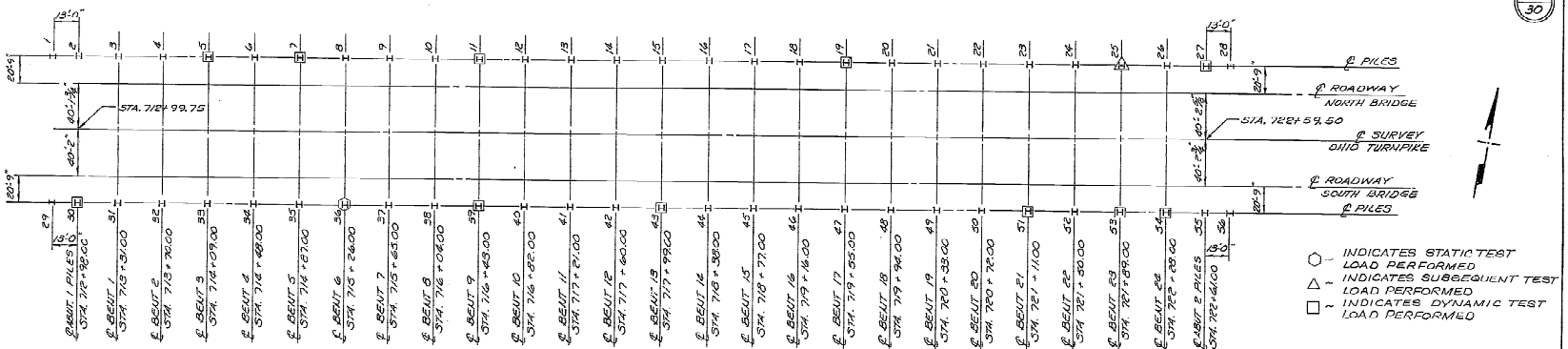
NOTE:
FOR ADDITIONAL DEFLECTOR PARAPET DETAILS AND NOTES SEE STATE OF OHIO STANDARD DRAWING BR-1.

| REVISED | 'AS BUILTS' | BY: MAB | 1-11-86 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

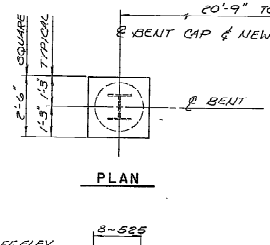
ABUTMENT DETAILS
OHIO TURNPIKE OVER
TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 6 OF 16 |

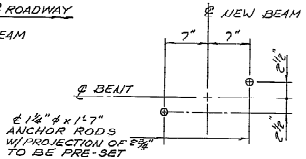



## PILING PLAN

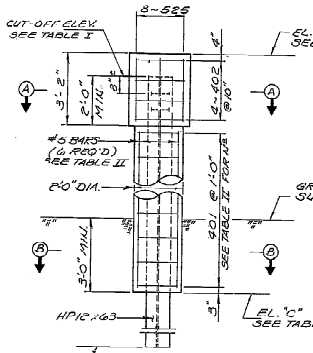
| TABLE I | | | | | |
|---|---|---|---|---|---|
| LOCATION | PILE NO. | EST. TIP ELEV. | CUTOFF EL. | | STEEL PILES SIZE |
| ABUT. 1 | 1 & 29 | 922.5 | 931.5 | 1010.5 | 1010.5 | HP10x42 |
| ABUT. 1 | 2 & 30 | 918.3 | 904.3 | 1009.3 | 1009.3 | HP10x42 |
| BENT 1 | 3 & 31 | 906.9 | 901.9 | 1008.9 | 1008.9 | HP12x63 |
| BENT 2 | 4 & 32 | 905.4 | 906.0 | 1008.9 | 1009.0 | ↓ |
| BENT 3 | 5 & 33 | 915.7 | 909.9 | 1009.2 | 1009.9 | ↓ |
| BENT 4 | 6 & 34 | 926.5 | 906.6 | 1009.5 | 1009.6 | ↓ |
| BENT 5 | 7 & 35 | 924.9 | 922.8 | 1009.9 | 1009.8 | ↓ |
| BENT 6 | 8 & 36 | 911.3 | 915.3 | 1010.3 | 1010.3 | ↓ |
| BENT 7 | 9 & 37 | 932.7 | 929.8 | 1010.7 | 1010.8 | ↓ |
| BENT 8 | 10 & 38 | 926.9 | 930.4 | 1011.3 | 1011.4 | ↓ |
| BENT 9 | 11 & 39 | 912.3 | 916.0 | 1011.9 | 1012.0 | ↓ |
| BENT 10 | 12 & 40 | 876.6 | 938.7 | 1012.6 | 1012.7 | ↓ |
| BENT 11 | 13 & 41 | 932.4 | 933.5 | 1013.4 | 1013.5 | ↓ |
| BENT 12 | 14 & 42 | 804.2 | 933.2 | 1014.2 | 1014.2 | ↓ |
| BENT 13 | 15 & 43 | 866.0 | 899.9 | 1015.0 | 1014.9 | ↓ |
| BENT 14 | 16 & 44 | 880.0 | 864.7 | 1016.0 | 1016.1 | ↓ |
| BENT 15 | 17 & 45 | 868.8 | 926.4 | 1016.8 | 1015.4 | ↓ |
| BENT 16 | 18 & 46 | 869.1 | 917.1 | 1017.1 | 1017.1 | ↓ |
| BENT 17 | 19 & 47 | 863.8 | 932.8 | 1017.8 | 1017.8 | ↓ |
| BENT 18 | 20 & 48 | 872.1 | 909.0 | 1018.6 | 1018.6 | ↓ |
| BENT 19 | 21 & 49 | 941.9 | 898.3 | 1019.3 | 1019.3 | ↓ |
| BENT 20 | 22 & 50 | 872.0 | 920.0 | 1020.0 | 1020.0 | ↓ |
| BENT 21 | 23 & 51 | 875.8 | 913.3 | 1020.8 | 1020.8 | ↓ |
| BENT 22 | 24 & 52 | 871.0 | 869.2 | 1021.0 | 1021.5 | ↓ |
| BENT 23 | 25 & 53 | 816.3 | 874.8 | 1022.3 | 1022.3 | ↓ |
| BENT 24 | 26 & 54 | 874.0 | 887.5 | 1023.0 | 1023.0 | HP12x63 |
| ABUT. 2 | 27 & 55 | 885.5 | 869.5 | 1009.5 | 1009.5 | HP10x42 |
| ABUT. 2 | 28 & 56 | 888.1 | 895.6 | 1026.1 | 1026.0 | HP10x42 |




PLAN

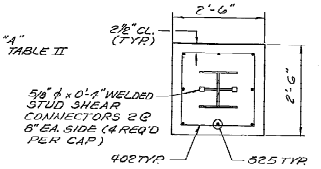



ANCHOR ROD LAYOUT

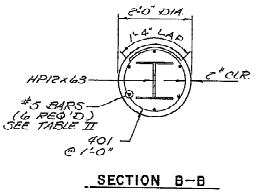



ELEVATION

TYPICAL BENT DETAIL




SECTION A-A




SECTION B-B

| TABLE II | | | | | | | |
|---|---|---|---|---|---|---|---|
| | NORTH | SOUTH | NORTH BRIDGE | | | SOUTH BRIDGE | | |
| BENT | ELEV. "A" | ELEV. "A" | ELEV. "C" | VERT. BARS | No OF MK401 | ELEV. "C" | VERT. BARS | No OF MK401 |
| 1 | 1009.86 | 1009.87 | 1002.86 | 501 | 7 | 999.20 | 501 | 8 |
| 2 | 1010.00 | 1010.00 | 999.08 | 502 | 8 | 998.33 | 502 | 9 |
| 3 | 1010.22 | 1010.21 | 998.55 | 503 | 9 | 998.54 | 503 | 10 |
| 4 | 1010.51 | 1010.50 | 998.59 | 504 | 9 | 998.33 | 504 | 9 |
| 5 | 1010.81 | 1010.84 | 1000.14 | 505 | 8 | 999.17 | 505 | 10 |
| 6 | 1011.29 | 1011.25 | 1000.37 | 506 | 9 | 999.08 | 506 | 10 |
| 7 | 1011.70 | 1011.78 | 1000.58 | 507 | 9 | 999.81 | 507 | 11 |
| 8 | 1012.28 | 1012.27 | 1001.11 | 508 | 9 | 999.10 | 508 | 11 |
| 9 | 1012.97 | 1012.89 | 1001.80 | 509 | 9 | 999.22 | 509 | 10 |
| 10 | 1013.69 | 1013.60 | 1001.42 | 510 | 10 | 998.18 | 510 | 11 |
| 11 | 1014.35 | 1014.35 | 1001.18 | 511 | 11 | 998.08 | 511 | 13 |
| 12 | 1015.05 | 1015.06 | 1000.88 | 512 | 12 | 998.00 | 512 | 15 |
| 13 | 1015.80 | 1015.81 | 1000.63 | 513 | 13 | 998.89 | 513 | 15 |
| 14 | 1016.56 | 1016.58 | 1000.14 | 514 | 14 | 998.00 | 514 | 16 |
| 15 | 1017.28 | 1017.31 | 1000.11 | 515 | 15 | 998.39 | 515 | 17 |
| 16 | 1017.98 | 1018.04 | 1000.81 | 516 | 15 | 999.12 | 516 | 16 |
| 17 | 1018.78 | 1018.81 | 1000.61 | 517 | 16 | 998.04 | 517 | 17 |
| 18 | 1019.54 | 1019.57 | 1000.87 | 518 | 17 | 999.15 | 518 | 19 |
| 19 | 1020.30 | 1020.31 | 1001.13 | 519 | 18 | 998.89 | 519 | 18 |
| 20 | 1021.05 | 1021.03 | 1001.88 | 520 | 17 | 1000.61 | 520 | 18 |
| 21 | 1021.77 | 1021.80 | 1002.10 | 521 | 14 | 1000.68 | 521 | 15 |
| 22 | 1022.51 | 1022.53 | 1006.34 | 522 | 13 | 1005.32 | 522 | 13 |
| 23 | 1023.27 | 1023.28 | 1007.00 | 523 | 12 | 1005.01 | 523 | 15 |
| 24 | 1024.02 | 1024.03 | 1010.52 | 524 | 11 | 1007.30 | 524 | 14 |

NOTES

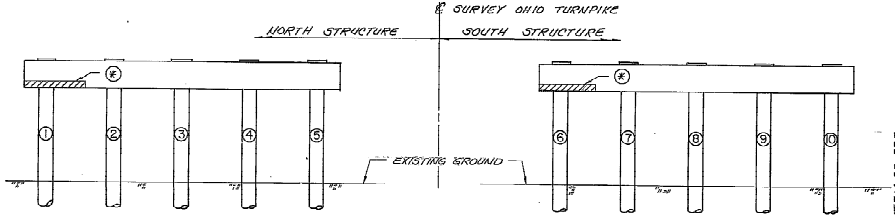
1. SEE STRUCTURE GENERAL NOTES SHEET No 3 OF 16 FOR ADDITIONAL INFORMATION REGARDING SUBSURFACE CONDITION AND PILE DRIVING.
2. THE PREFIX "1-B" SHALL BE ADDED TO ALL REINFORCING BARS IN THE BENTS FOR THE SOUTH BRIDGE, THE PREFIX "2-B" SHALL BE ADDED TO ALL REINFORCING BARS IN THE BENTS FOR THE NORTH BRIDGE.

| REVISED | "AS BUILTS" | BY: MAB | 1-11-86 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

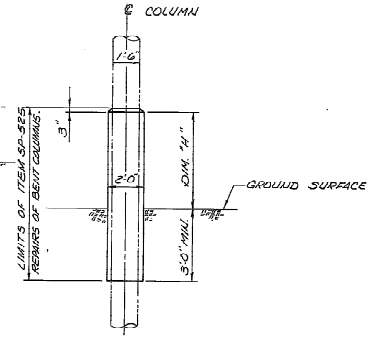
PILING PLAN & BENT DETAILS
OHIO TURNPIKE OVER TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: 1/4" = 1' |
|---|---|
| RMP: 43-84-15 | SHEET 7 OF 16 |




## KEY ELEVATION

(LOOKING EAST)




## COLUMN REPAIR DETAIL

(SEE TABLE OF BENT REPAIRS)

### TABLE OF BENT REPAIRS

| STRUCTURE | NORTH | | | | | | SOUTH | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COLUMN | 1 | 2 | 3 | 4 | 5 | REMARKS | 6 | 7 | 8 | 9 | 10 | REMARKS |
| DIMENSION | "H" | "H" | "H" | "H" | "H" | | "H" | "H" | "H" | "H" | "H" | |
| BENT 1 | — | — | — | — | — | | — | — | — | 3'-0" | — | |
| BENT 2 | — | — | — | 3'-0" | 3'-0" | | — | — | — | — | — | |
| BENT 3 | — | — | — | 3'-0" | — | | — | 3'-0" | — | — | — | |
| BENT 4 | F.H. | — | — | — | — | 3 SQ. FT. (*) (A) | — | — | — | — | — | 15 SQ. FT. (*) (B) |
| BENT 5 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 6 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 7 | — | 3'-0" | 3'-0" | 3'-0" | — | | — | — | — | — | — | |
| BENT 8 | — | 3'-0" | 4'-0" | 3'-0" | — | | — | — | — | — | — | |
| BENT 9 | 3'-0" | 3'-0" | 3'-0" | — | — | | — | — | — | — | — | |
| BENT 10 | 3'-0" | — | 3'-0" | — | 3'-0" | 1 SQ. FT. (*) (C) | — | — | — | — | — | |
| BENT 11 | — | — | — | — | — | 6 SQ. FT. (*) (D) | — | — | — | — | — | |
| BENT 12 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 13 | — | — | — | — | — | | — | — | — | — | — | 11 SQ. FT. (*) (E) |
| BENT 14 | — | — | — | — | — | 3 SQ. FT. (*) (F) | — | — | — | — | — | |
| BENT 15 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 16 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 17 | — | 3'-0" | — | — | — | | — | — | — | — | — | |
| BENT 18 | F.H. | — | 3'-0" | 3'-0" | F.H. | | F.H. | F.H. | 5'-0" | 5'-0" | F.H. | REMOVE EXISTING CONCRETE JACKET (G) |
| BENT 19 | — | — | 3'-0" | 3'-0" | — | | — | — | — | — | 3'-0" | |
| BENT 20 | — | — | — | — | — | | — | — | — | — | — | |
| BENT 21 | — | — | 3'-0" | 3'-0" | — | | — | — | — | 3'-0" | — | |
| BENT 22 | — | — | 3'-0" | — | — | | 3'-0" | 3'-0" | — | — | 5'-0" | REMOVE EXISTING CONCRETE JACKET (H) |
| BENT 23 | 3'-0" | — | — | — | — | | — | — | — | — | — | |
| BENT 24 | — | — | — | — | — | | — | — | — | — | — | |

F.H. ~ DENOTES REPAIRS OF BENT COLUMNS TO EXTEND FULL HEIGHT OF COLUMN. (FROM 2'-0" BELOW BOTTOM OF BENT CAP TO 3'-0" BELOW GROUND SURFACE)

(*) ~ DENOTES AREA OF BENT CAP TO BE REPAIRED UNDER ITEM SP519 PATCHING CONCRETE STRUCTURE (AREAS GIVEN ARE FOR ESTIMATE PURPOSES ONLY)

### NOTES

(1) SEE SPECIAL PROVISION SP519 FOR ADDITIONAL INFORMATION REGARDING PATCHING OF CONCRETE STRUCTURES.

(2) SEE SPECIAL PROVISION SP525 FOR ADDITIONAL INFORMATION REGARDING EXISTING BENT COLUMN REPAIRS.

### REMARKS:

(A) REPAIR AREA LOCATED ON WEST FACE & TOP OF BENT CAP ABOVE COLUMN 1

(B) REPAIR AREA LOCATED ON WEST FACE AND BOTTOM OF BENT CAP ABOVE COLUMN 6

(C) REPAIR AREA LOCATED ON EAST FACE OF BENT CAP ABOVE COLUMN 1

(D) REPAIR AREA LOCATED ON WEST FACE OF BENT CAP ABOVE COLUMN 3

(E) REPAIR AREA LOCATED ON EAST FACE & TOP OF BENT CAP ABOVE COLUMN 6

(F) REPAIR AREA LOCATED ON EAST FACE & TOP OF BENT CAP ABOVE COLUMN 5

(G) COLUMNS 8 & 9

(H) COLUMN 10

| REVISED | 'AS BUILTS' | BY: MAB | 1-11-85 |
|---|---|---|---|

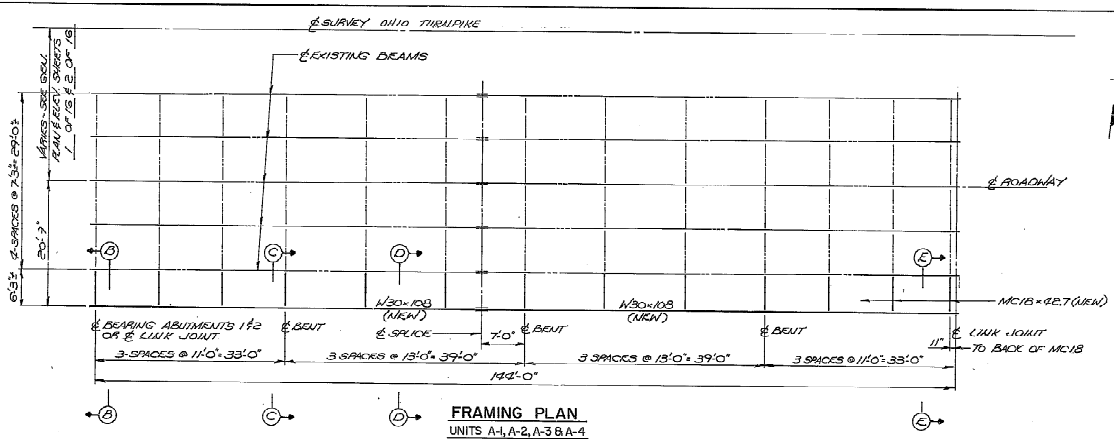
**OHIO TURNPIKE COMMISSION**

**BENT REPAIR DETAILS**

OHIO TURNPIKE OVER
TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 3 OF 16 |

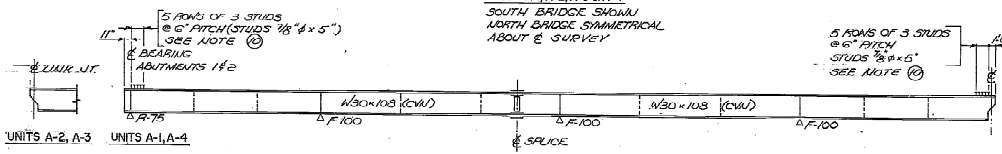
D C B A




## FRAMING PLAN

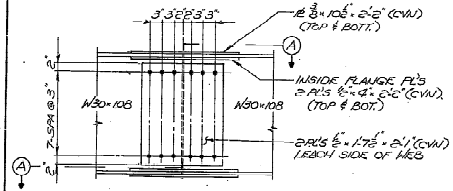
UNITS A-1, A-2, A-3 & A-4

SOUTH BRIDGE SHOWN
NORTH BRIDGE SYMMETRICAL
ABOUT ℄ SURVEY



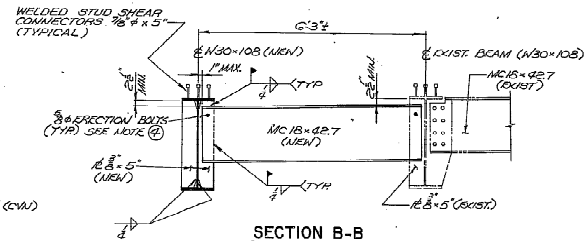

## BEAM ELEVATION

## SECTION A-A

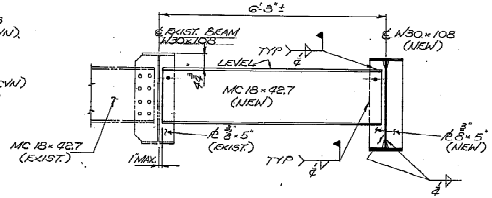



## SPLICE DETAIL

TYPICAL EACH SPLICE

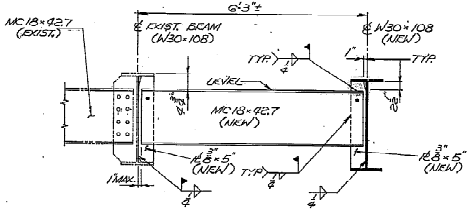



## SECTION B-B




## SECTION C-C

TYPICAL AT EACH BENT




## SECTION D-D

TYPICAL INTERM. DIAPHRAGM

## NOTES

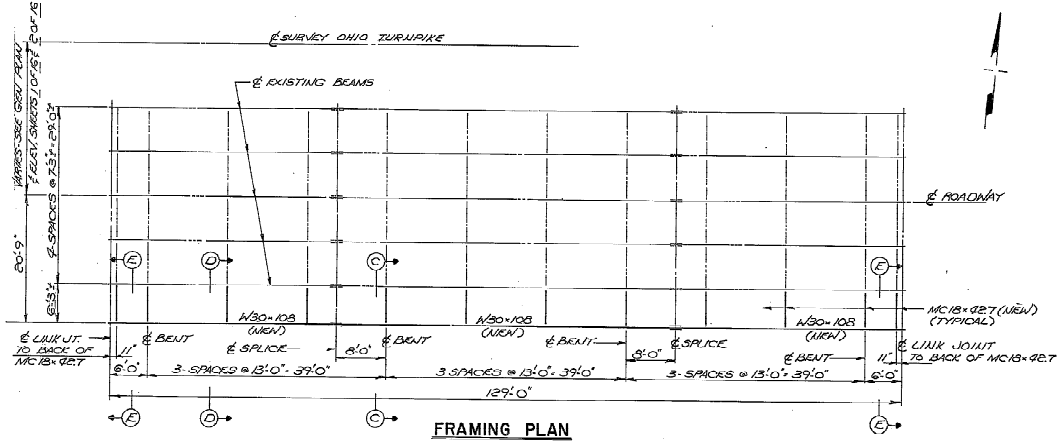
1. ALL STRUCTURAL STEEL SHALL BE ASTM A-36 UNLESS NOTED.
2. THE STRUCTURAL STEEL SHALL BE ASTM A-108 FOR LINK JT. PINS, AND AASHTO M-169 FOR WELDED STUD SHEAR CONNECTORS.
3. HIGH STRENGTH BOLTS SHALL BE ⅞" DIAMETER CONFORMING TO ASTM A-325 UNLESS OTHERWISE NOTED.
4. ERECTION BOLTS: HOLE DIAMETER IN THE DIAPHRAGMS AND DIAPHRAGM CONNECTION PLATES SHALL BE RESPECTIVELY 1/16" AND ⅛" LARGER THAN THE DIAMETER OF THE ERECTION BOLTS, UNLESS REPLACED BY PERMANENT HIGH STRENGTH BOLTS. ERECTION BOLTS SHALL REMAIN IN PLACE. LOCK WASHERS SHALL BE FURNISHED FOR OTHER THAN FULLY TORQUED HIGH STRENGTH ERECTION BOLTS. BOLTS SHALL BE FURNISHED AS PART OF 513.

   IN LIEU OF ERECTION BOLTS AND AT THE OPTION OF THE CONTRACTOR, ALTERNATIVE MEANS OF TEMPORARY BRACING MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER (501.06).
5. PAYMENT FOR ALL STRUCTURAL STEEL INCLUDING THE EXPANSION JOINT ARMOR AND ITS SUPPORTS, SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER POUND OF ITEM 513, "STRUCTURAL STEEL (A-36) ALSO CATEGORY-T.
6. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF THE SPECIFICATIONS.
7. THE STEEL BEAMS SHALL NOT BE CAMBERED. BEAMS SHALL BE FABRICATED WITH THEIR NATURAL CAMBER UP.
8. WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY NOT BE MADE ANYWHERE TO THE FASCIA STRINGER FLANGES.
9. FOR LINK JOINT DETAILS AND SECTION E-E, SEE SHEET 10 OF 16
10. WELDED STUD SHEAR CONNECTORS SHALL BE PLACED ON NEW AND EXISTING STEEL BEAMS.
11. FOR ADDITIONAL NOTES, SEE SHEET 10 OF 16.

**OHIO TURNPIKE COMMISSION**

FRAMING PLAN & DETAILS
UNIT - 1
OHIO TURNPIKE OVER TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

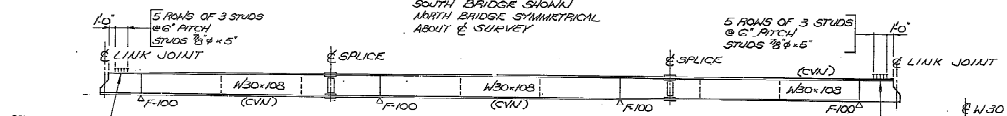
| | |
|---|---|
| DATE: | SCALE: N.T.S. |
| RMP: 43-84-15 | SHEET 9 OF 16 |



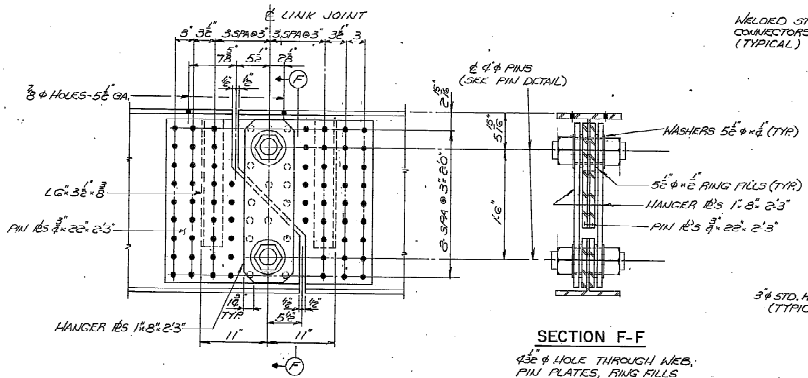

## FRAMING PLAN

UNITS B-1, B-2 & B-3

SOUTH BRIDGE SHOWN
NORTH BRIDGE SYMMETRICAL
ABOUT ℄ SURVEY



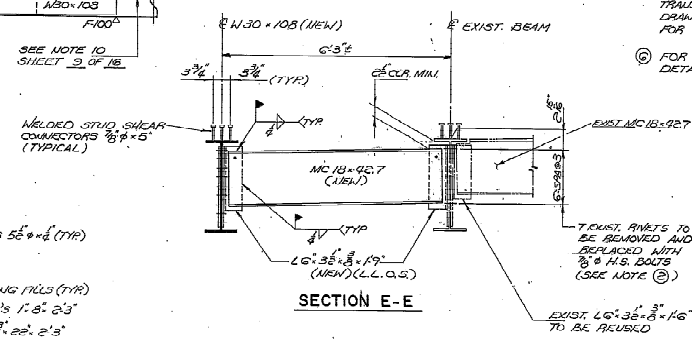

## BEAM ELEVATION




## LINK JOINT DETAIL

TYPICAL

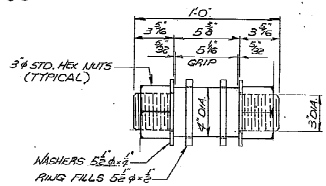
● DENOTES 7/8" φ H.S. BOLTS
○ DENOTES 1" φ HOLES IN PIN PLATES FOR PLUG WELD TO W.B. GRIND SMOOTH




## SECTION E-E

## SECTION F-F

4 3/8" φ HOLE THROUGH WEB, PIN PLATES, RING FILLS AND HANGER PLATES FOR 4" φ PINS.




## PIN DETAIL

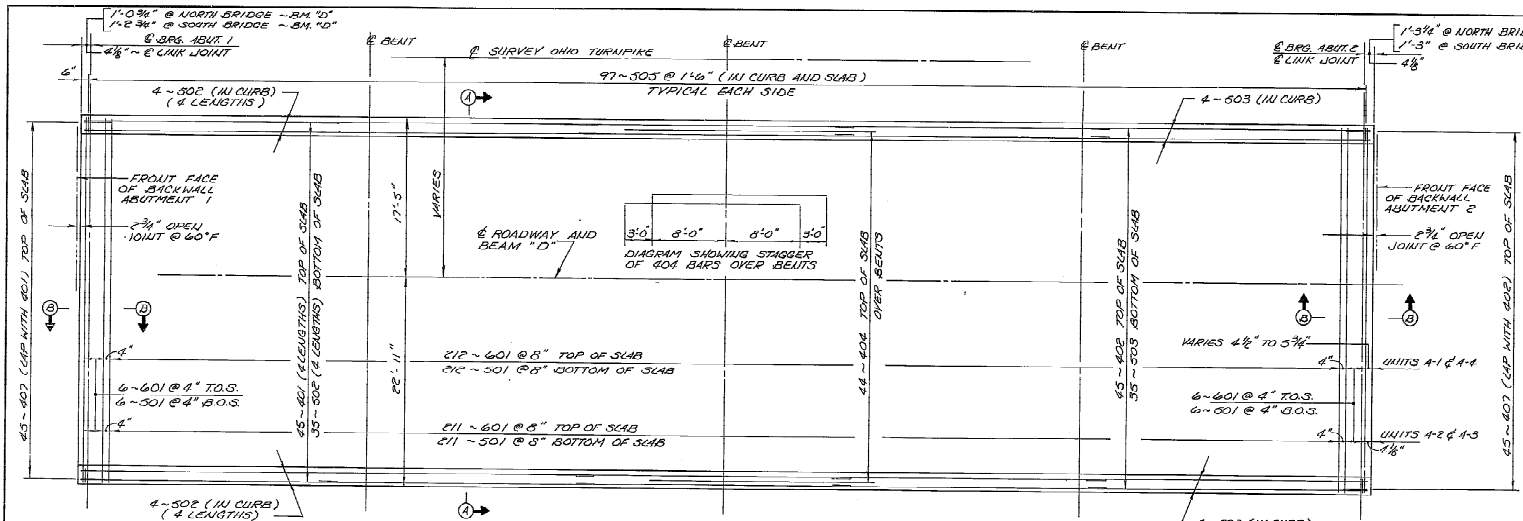
NOTES

1. FOR SPLICE DETAIL AND FOR SECTIONS C-C AND D-D SEE SHEET 9 OF 16
2. SEE SPECIAL PROVISION, SP526, "RIVET & BOLT REPLACEMENT" FOR ADDITIONAL INFORMATION.
3. ALL THE STRUCTURAL STEEL LINK JOINT COMPONENTS SHALL BE (CVN), AND 100 PERCENT OF THEIR BASE MATERIAL SHALL BE TESTED BY ULTRASONIC INSPECTION TO INSURE THE SOUNDNESS OF MATERIAL AGAINST LAMINATIONS AND INCLUSIONS. THE NON-DESTRUCTIVE TESTING SHALL CONFORM TO THE LATEST AMERICAN WELDING SOCIETY STRUCTURAL CODE AND SHALL BE INCIDENTAL TO THE COST OF ITEM 513, "STRUCTURAL STEEL (A-36) AISC CATEGORY-I".
4. ALL FIELD SPLICES SHALL BE MADE WITH 7/8" φ HIGH STRENGTH BOLTS. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF THE EXTERIOR BEAM, ON THE BOTTOM OF THE BOTTOM FLANGE PLATES, AND TOP OF THE TOP FLANGE PLATES.
5. REFERENCE SHALL BE MADE TO THE OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS BR-1-55 AND BR-1-82 FOR BEARING DETAILS.
6. FOR ADDITIONAL NOTES AND DETAILS SEE SHEET 9 OF 16

**OHIO TURNPIKE COMMISSION**

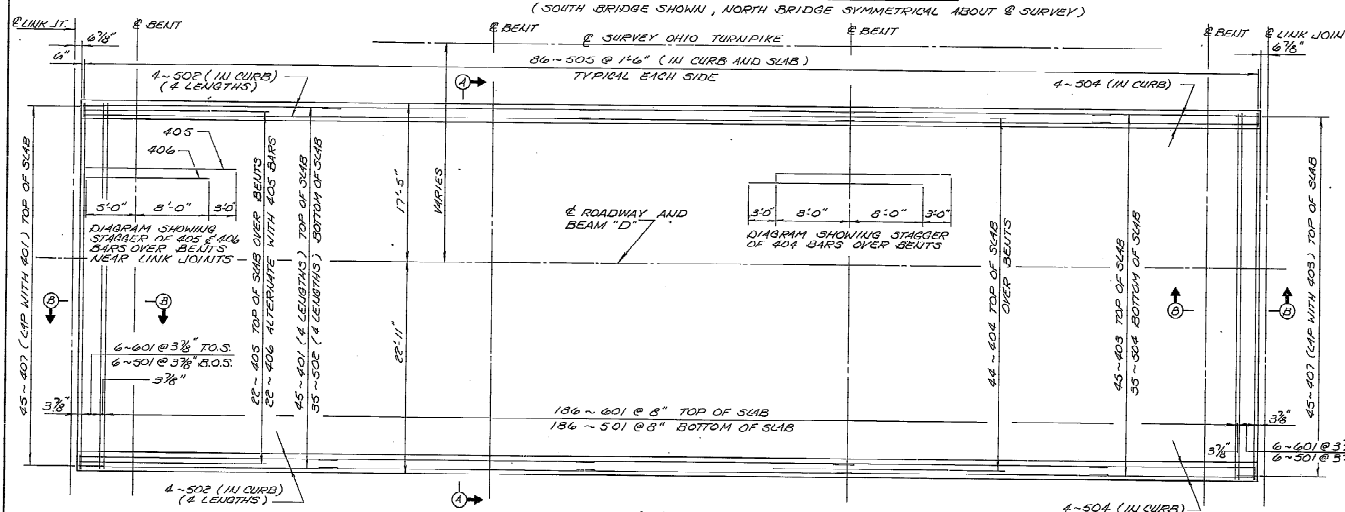
FRAMING PLAN & DETAILS
UNIT - 2
OHIO TURNPIKE OVER TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| | |
|---|---|
| DATE: | SCALE: N.T.S. |
| RMP: 43-84-15 | SHEET 10 OF 16 |



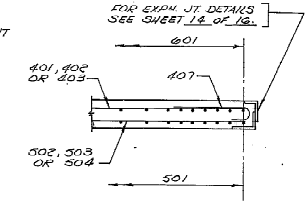

## SLAB PLAN — UNIT A-1 THRU A-4

(SOUTH BRIDGE SHOWN, NORTH BRIDGE SYMMETRICAL ABOUT ℄ SURVEY)




## SLAB PLAN — UNIT B-1 THRU B-3

(SOUTH BRIDGE SHOWN, NORTH BRIDGE SYMMETRICAL ABOUT ℄ SURVEY)




## SECTION B—B

(TYPICAL EACH END)

NOTES

(1) FOR SECTION "A-A" AND NOTES, SEE SHEET 12 OF 16.

**OHIO TURNPIKE COMMISSION**

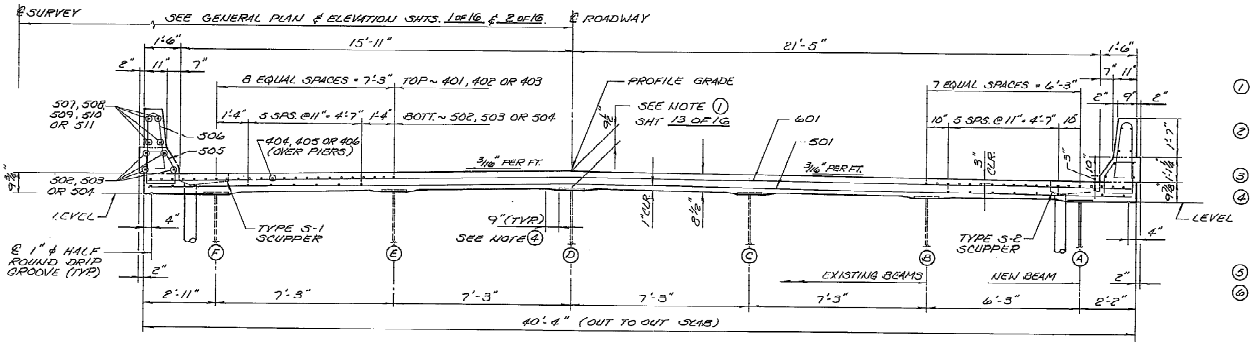
SLAB PLAN

OHIO TURNPIKE OVER TINKERS CREEK

MILE POST 185.6

SUMMIT & PORTAGE COUNTIES

| | |
|---|---|
| DATE: | SCALE: N.T.S. |
| RMP: 43-84-15 | SHEET 11 OF 16 |



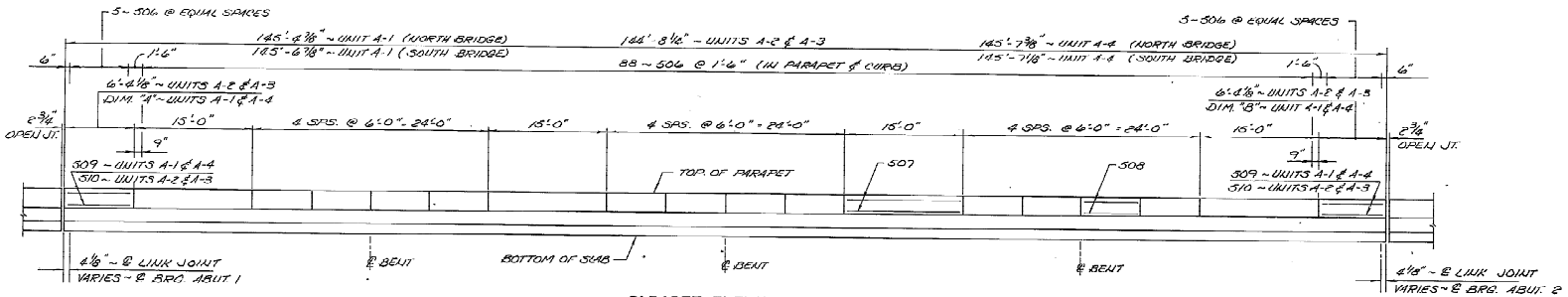

## SECTION A–A

(SOUTH BRIDGE SHOWN, NORTH BRIDGE SYMMETRICAL ABOUT ℄ SURVEY)

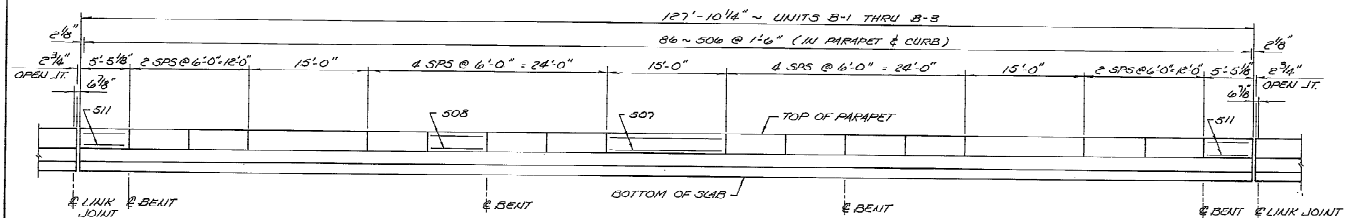
| UNIT | LOCATION | DIM. "A" | DIM. "B" |
|---|---|---|---|
| A-1 | A-1 TO LINK N. BRIDGE | 6'-8 1/2" | 6'-8 7/8" |
| A-4 | LINK TO A-2 N. BRIDGE | 6'-9 3/8" | 6'-9 5/8" |
| A-1 | A-1 TO LINK S. BRIDGE | 6'-9 1/8" | 6'-9 3/8" |
| A-4 | LINK TO A-2 S. BRIDGE | 6'-7 1/2" | 6'-9 5/8" |

## NOTES

1. FOR LOCATIONS OF UNITS A-1 THRU A-4, B-1 THRU B-3 AND SCUPPERS, SEE SHEETS 1 OF 16 AND 2 OF 16.
2. FOR SLAB PLANS OF UNITS A-1 THRU A-4, B-1 THRU B-3 AND ADDITIONAL SLAB DETAILS, SEE SHEET 11 OF 16.
3. FOR DETAILS OF SCUPPERS, SEE SHEET 13 OF 16.
4. 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.
5. ALL REINFORCING SHALL BE EPOXY-COATED.
6. THE PREFIX OF "1-S" (FOR THE SOUTH BRIDGE) AND "2-S" (FOR THE NORTH BRIDGE) SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SUPERSTRUCTURES, CURBS AND PARAPETS UNLESS OTHERWISE NOTED.
7. FOR FRAMING PLANS AND ADDITIONAL FRAMING DETAILS, SEE SHEETS 9 OF 16 AND 10 OF 16.
8. FOR ADDITIONAL NOTES, SEE STRUCTURAL GENERAL NOTES SHEET 3 OF 16.
9. SEE SHEET 14 OF 16 FOR SLAB POURING SEQUENCE.




## PARAPET ELEVATION — UNIT A-1 THRU A-4




## PARAPET ELEVATION — UNIT B-1 THRU B-3

**OHIO TURNPIKE COMMISSION**

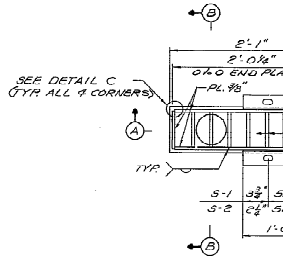
SLAB TRANSVERSE SECTION & PARAPET DETAILS

OHIO TURNPIKE OVER TINKERS CREEK

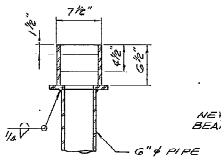
MILE POST 185.8

SUMMIT & PORTAGE COUNTIES

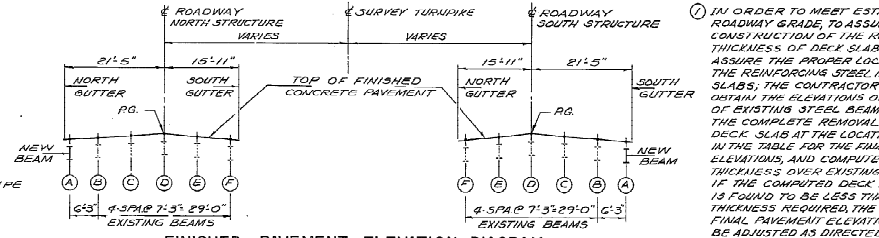
| | |
|---|---|
| DATE: | SCALE: N.T.S. |
| RMP: 43-84-15 | SHEET 12 OF 16 |




PLAN SCUPPER S-1 & S-2




SECTION B-B



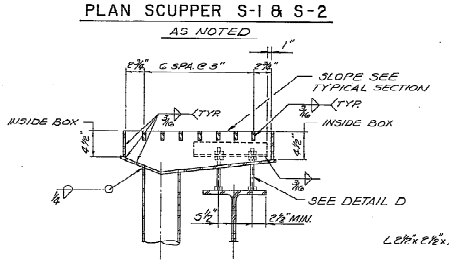

FINISHED PAVEMENT ELEVATION DIAGRAM

( SEE NOTE (1) )

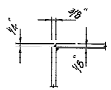
## NOTES

(1) IN ORDER TO MEET ESTABLISHED ROADWAY GRADE, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL IN THE DECK SLABS; THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF EXISTING STEEL BEAMS AFTER THE COMPLETE REMOVAL OF EXISTING DECK SLAB AT THE LOCATIONS SHOWN IN THE TABLE FOR THE FINAL PAVEMENT ELEVATIONS, AND COMPUTE THE DECK THICKNESS OVER EXISTING BEAMS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN MINIMUM THICKNESS REQUIRED, THE TOP OF FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO COMPUTE THE DECK SCREED ELEVATIONS, UTILIZING THE DEAD LOAD DEFLECTION OF 1/8" AT THE 1/4 SPAN. NO ADJUSTMENT IS REQUIRED AT ABUTMENTS, BENTS OR HINGES. PAYMENT FOR THE ABOVE-MENTIONED WORK SHALL BE INCLUDED WITH THE UNIT PRICE FOR ITEM SP623. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON 8 1/2" THICK CONCRETE OUTSIDE THE HAUNCH AREAS AND 9" THICK CONCRETE OVER EXISTING BEAMS AT THE HAUNCHES.

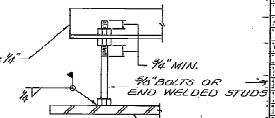
(2) SEE SPECIAL PROVISION SP 518, "SCUPPERS, INCLUDING SUPPORTS" FOR ADDITIONAL INFORMATION.




SECTION A-A



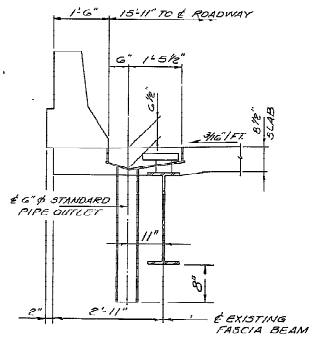

DETAIL C



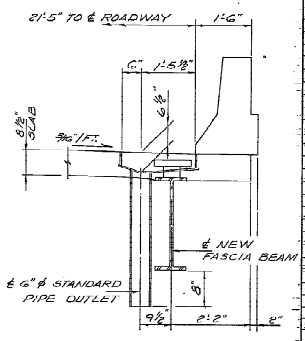

DETAIL D

| LOCATION | NORTH BRIDGE A | NORTH BRIDGE B&F | NORTH BRIDGE C&E | NORTH BRIDGE D | SOUTH BRIDGE D | SOUTH BRIDGE E&C | SOUTH BRIDGE F&B | SOUTH BRIDGE A |
|---|---|---|---|---|---|---|---|---|
| ℄ BRG. ABUT. 1 | 1013.60 | 1013.70 | 1013.81 | 1013.92 | 1013.94 | 1013.83 | 1013.72 | 1013.62 |
| 1/4 SPAN | 1013.65 | 1013.73 | 1013.84 | 1013.95 | 1013.94 | 1013.83 | 1013.72 | 1013.65 |
| ℄ BENT 1 | 1013.68 | 1013.76 | 1013.87 | 1013.98 | 1013.95 | 1013.84 | 1013.73 | 1013.63 |
| 1/2 SPAN | 1013.70 | 1013.80 | 1013.91 | 1014.02 | 1014.01 | 1013.90 | 1013.79 | 1013.69 |
| ℄ BENT 2 | 1013.77 | 1013.87 | 1013.98 | 1014.09 | 1014.08 | 1013.97 | 1013.86 | 1013.76 |
| 1/2 SPAN | 1013.90 | 1014.00 | 1014.11 | 1014.22 | 1014.19 | 1014.08 | 1013.97 | 1013.87 |
| ℄ BENT 3 | 1014.05 | 1014.15 | 1014.26 | 1014.37 | 1014.32 | 1014.21 | 1014.10 | 1014.00 |
| 1/2 SPAN | 1014.18 | 1014.28 | 1014.39 | 1014.50 | 1014.45 | 1014.34 | 1014.23 | 1014.13 |
| ℄ LINK JOINT | 1014.30 | 1014.40 | 1014.51 | 1014.62 | 1014.55 | 1014.44 | 1014.33 | 1014.23 |
| ℄ BENT 4 | 1014.32 | 1014.42 | 1014.53 | 1014.64 | 1014.60 | 1014.49 | 1014.38 | 1014.28 |
| 1/2 SPAN | 1014.47 | 1014.57 | 1014.68 | 1014.79 | 1014.76 | 1014.65 | 1014.54 | 1014.44 |
| ℄ BENT 5 | 1014.65 | 1014.75 | 1014.86 | 1014.97 | 1014.94 | 1014.83 | 1014.72 | 1014.62 |
| 1/2 SPAN | 1014.83 | 1014.93 | 1015.06 | 1015.17 | 1015.15 | 1015.04 | 1014.93 | 1014.83 |
| ℄ BENT 6 | 1015.04 | 1015.14 | 1015.26 | 1015.36 | 1015.37 | 1015.26 | 1015.15 | 1015.05 |
| 1/2 SPAN | 1015.29 | 1015.39 | 1015.50 | 1015.61 | 1015.62 | 1015.51 | 1015.40 | 1015.30 |
| ℄ BENT 7 | 1015.52 | 1015.62 | 1015.73 | 1015.84 | 1015.85 | 1015.78 | 1015.67 | 1015.57 |
| ℄ LINK JOINT | 1015.60 | 1015.70 | 1015.81 | 1015.92 | 1015.97 | 1015.86 | 1015.75 | 1015.65 |
| 1/2 SPAN | 1015.75 | 1015.85 | 1015.96 | 1016.07 | 1016.16 | 1016.05 | 1015.94 | 1015.84 |
| ℄ BENT 8 | 1016.09 | 1016.19 | 1016.30 | 1016.41 | 1016.45 | 1016.32 | 1016.21 | 1016.11 |
| 1/2 SPAN | 1016.38 | 1016.48 | 1016.59 | 1016.70 | 1016.71 | 1016.60 | 1016.49 | 1016.39 |
| ℄ BENT 9 | 1016.70 | 1016.80 | 1016.91 | 1017.02 | 1017.08 | 1016.92 | 1016.81 | 1016.71 |
| 1/2 SPAN | 1017.04 | 1017.14 | 1017.25 | 1017.36 | 1017.38 | 1017.27 | 1017.16 | 1017.06 |
| ℄ BENT 10 | 1017.40 | 1017.50 | 1017.61 | 1017.72 | 1017.73 | 1017.62 | 1017.51 | 1017.41 |
| 1/2 SPAN | 1017.77 | 1017.87 | 1017.98 | 1018.09 | 1018.09 | 1017.98 | 1017.87 | 1017.77 |
| ℄ LINK JOINT | 1018.05 | 1018.15 | 1018.26 | 1018.37 | 1018.38 | 1018.27 | 1018.16 | 1018.06 |
| ℄ BENT 11 | 1018.15 | 1018.25 | 1018.36 | 1018.47 | 1018.48 | 1018.37 | 1018.26 | 1018.16 |
| 1/2 SPAN | 1018.58 | 1018.68 | 1018.73 | 1018.84 | 1018.85 | 1018.74 | 1018.63 | 1018.53 |
| ℄ BENT 12 | 1018.90 | 1019.00 | 1019.11 | 1019.22 | 1019.22 | 1019.11 | 1019.00 | 1018.90 |
| 1/2 SPAN | 1019.26 | 1019.36 | 1019.47 | 1019.58 | 1019.59 | 1019.48 | 1019.37 | 1019.27 |
| ℄ BENT 13 | 1019.62 | 1019.72 | 1019.83 | 1019.94 | 1019.95 | 1019.84 | 1019.73 | 1019.63 |
| 1/2 SPAN | 1020.00 | 1020.10 | 1020.21 | 1020.32 | 1020.31 | 1020.20 | 1020.09 | 1019.99 |
| ℄ BENT 14 | 1020.37 | 1020.47 | 1020.58 | 1020.69 | 1020.67 | 1020.56 | 1020.45 | 1020.35 |
| ℄ LINK JOINT | 1020.47 | 1020.57 | 1020.68 | 1020.79 | 1020.77 | 1020.66 | 1020.55 | 1020.45 |
| 1/2 SPAN | 1020.75 | 1020.85 | 1020.94 | 1021.04 | 1021.04 | 1020.98 | 1020.82 | 1020.72 |
| ℄ BENT 15 | 1021.05 | 1021.15 | 1021.30 | 1021.41 | 1021.43 | 1021.32 | 1021.21 | 1021.11 |
| 1/2 SPAN | 1021.47 | 1021.57 | 1021.68 | 1021.79 | 1021.79 | 1021.68 | 1021.57 | 1021.47 |
| ℄ BENT 16 | 1021.84 | 1021.94 | 1022.05 | 1022.16 | 1022.16 | 1022.05 | 1021.94 | 1021.84 |
| 1/2 SPAN | 1022.21 | 1022.31 | 1022.42 | 1022.53 | 1022.53 | 1022.42 | 1022.31 | 1022.21 |
| ℄ BENT 17 | 1022.58 | 1022.68 | 1022.79 | 1022.90 | 1022.93 | 1022.82 | 1022.71 | 1022.61 |
| 1/2 SPAN | 1022.99 | 1023.09 | 1023.20 | 1023.31 | 1023.30 | 1023.19 | 1023.08 | 1022.98 |
| ℄ LINK JOINT | 1023.27 | 1023.37 | 1023.48 | 1023.59 | 1023.59 | 1023.48 | 1023.37 | 1023.27 |
| ℄ BENT 18 | 1023.37 | 1023.47 | 1023.58 | 1023.69 | 1023.69 | 1023.58 | 1023.47 | 1023.37 |
| 1/2 SPAN | 1023.74 | 1023.84 | 1023.95 | 1024.06 | 1024.05 | 1023.94 | 1023.83 | 1023.73 |
| ℄ BENT 19 | 1024.10 | 1024.20 | 1024.31 | 1024.42 | 1024.42 | 1024.31 | 1024.20 | 1024.10 |
| 1/2 SPAN | 1024.47 | 1024.57 | 1024.68 | 1024.79 | 1024.77 | 1024.66 | 1024.55 | 1024.45 |
| ℄ BENT 20 | 1024.82 | 1024.92 | 1025.03 | 1025.14 | 1025.13 | 1025.02 | 1024.91 | 1024.81 |
| 1/2 SPAN | 1025.20 | 1025.30 | 1025.41 | 1025.52 | 1025.51 | 1025.40 | 1025.29 | 1025.19 |
| ℄ BENT 21 | 1025.59 | 1025.69 | 1025.80 | 1025.91 | 1025.90 | 1025.79 | 1025.68 | 1025.58 |
| ℄ LINK JOINT | 1025.70 | 1025.80 | 1025.91 | 1026.02 | 1026.00 | 1025.89 | 1025.78 | 1025.68 |
| 1/2 SPAN | 1025.90 | 1026.00 | 1026.11 | 1026.22 | 1026.19 | 1026.08 | 1025.97 | 1025.86 |
| ℄ BENT 22 | 1026.33 | 1026.43 | 1026.54 | 1026.65 | 1026.64 | 1026.53 | 1026.42 | 1026.32 |
| 1/2 SPAN | 1026.63 | 1026.73 | 1026.90 | 1027.01 | 1027.01 | 1026.90 | 1026.73 | 1026.69 |
| ℄ BENT 23 | 1027.05 | 1027.15 | 1027.26 | 1027.37 | 1027.38 | 1027.27 | 1027.16 | 1027.06 |
| 1/2 SPAN | 1027.42 | 1027.52 | 1027.63 | 1027.74 | 1027.76 | 1027.65 | 1027.54 | 1027.44 |
| ℄ BENT 24 | 1027.73 | 1027.83 | 1027.90 | 1028.11 | 1028.13 | 1028.02 | 1027.91 | 1027.81 |
| 1/2 SPAN | 1028.10 | 1028.20 | 1028.37 | 1028.48 | 1028.44 | 1028.33 | 1028.22 | 1028.12 |
| ℄ BRG. ABUT. 2 | 1028.49 | 1028.59 | 1028.70 | 1028.81 | 1028.76 | 1028.65 | 1028.54 | 1028.44 |

TABLE OF FINISHED PAVEMENT ELEVATIONS




TYPICAL SECTION SCUPPER S-1




TYPICAL SECTION SCUPPER S-2

SCUPPER DETAILS

| REVISED | AS BUILTS | BY: MAB | 1-11-88 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

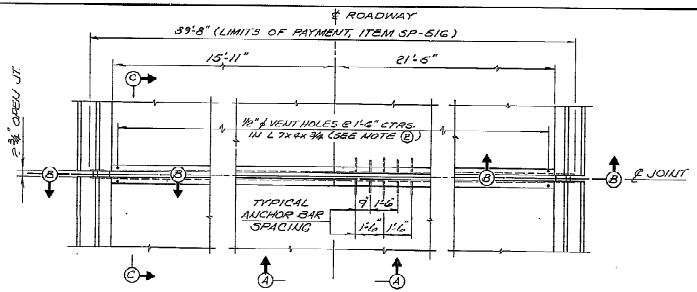
PAVEMENT ELEVATIONS & DRAINAGE DETAILS

OHIO TURNPIKE OVER TINKERS CREEK

MILE POST 186.6

SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| RMP: 43-84-15 | SHEET 13 OF 16 |




PARTIAL PLAN OF EXPANSION JOINT

| UNIT A-1 | UNIT B-1 | UNIT A-2 | UNIT B-2 | UNIT A-3 | UNIT B-3 | UNIT A-4 |
|---|---|---|---|---|---|---|
| 1 | 3 | 2 | 5 | 4 | 7 | 6 |

POUR NUMBER
DIRECTION OF POUR

## SLAB POURING SEQUENCE

(TYPICAL EACH STRUCTURE)

NOTES:

(A) ESTIMATED SLAB CONCRETE, EXCLUDING CURBS & PARAPETS, PER UNIT IS AS FOLLOWS : UNITS NUM. A-1, A-2, A-3, & A-4 = 162± C.Y. EACH
UNITS NUM. B-1, B-2, & B-3 = 143± C.Y. EACH

(B) POUR NUMBERS 4 & 6 MAY BE MADE BEFORE POUR NUMBERS 3,5 & 7

(C) THIS IS A SUGGESTED SLAB POURING SEQUENCE. THE CONTRACTOR MAY PROPOSE HIS OWN SLAB POURING SEQUENCE AND SUBMIT IT TO THE ENGINEER FOR APPROVAL.

(D) A FORTY (40) HOUR MINIMUM WAITING PERIOD WILL BE REQUIRED BEFORE MAKING ADJACENT POURS.

NOTES

(1) THE COMPRESSION SEAL FOR THE EXPANSION JOINT SHALL BE:
A) ACMASEAL "J-450" AS MANUFACTURED BY:
ACME HIGHWAY PRODUCTS CORP.
168 CREEKSIDE DRIVE
AMHERST NEW YORK 14150

B) COMPRESSION SEAL "WD-450" AS MANUFACTURED BY:
WATSON BOWMAN ASSOCIATES INC.
95 PINEVIEW DRIVE
AMHERST NEW YORK 14120

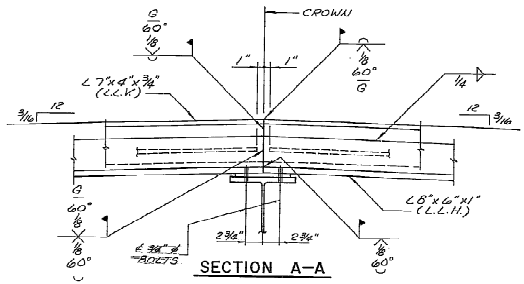
C) OR AN APPROVED EQUAL

SEE SPECIAL PROVISION SP-533A "ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL EXPANSION JOINTS" FOR ADDITIONAL INFORMATION.

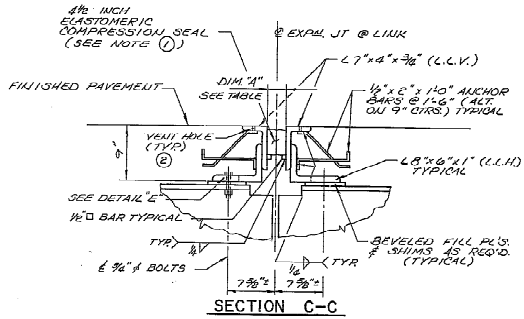
(2) THE 1/2" DIA. VENT HOLES SHALL BE FILLED IN WITH NON-SHRINK EPOXY MORTAR, AFTER THE SLAB CONCRETE IS SET OR AS DIRECTED BY THE ENGINEER. THE COST OF FILLING IN THE VENT HOLES SHALL BE INCIDENTAL TO THE COST OF ITEM SP-511 "CLASS S CONCRETE SUPERSTRUCTURE DECK, USING SHRINKAGE COMPENSATING CEMENT".

(3) REFERENCE SHALL BE MADE TO THE FOLLOWING DRAWINGS FOR ADDITIONAL INFORMATION.

| SHEET No | DESCRIPTION |
|---|---|
| 5 OF 16 | ABUTMENT DETAILS |
| 6 OF 16 | |
| 9 OF 16 | FRAMING PLAN & DETAILS |
| 10 OF 16 | |
| 11 OF 16 | SLAB PLAN & DETAILS |
| 12 OF 16 | |
| 13 OF 16 | PAVEMENT ELEVATIONS |



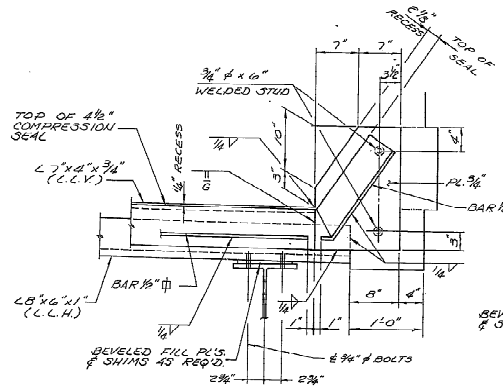

SECTION A–A



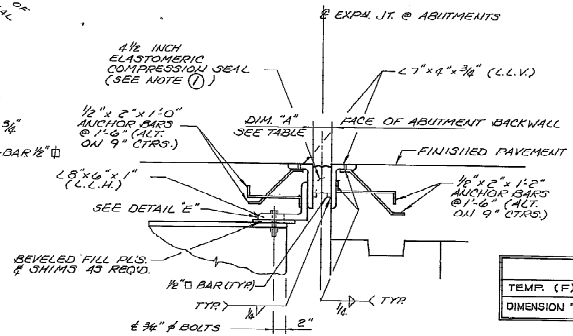

SECTION C–C

(@ INTERMEDIATE JTS.)

NOTE: AT INTERMEDIATE JOINTS ON LINK PL SIDE, L 8"x6"x1" ANGLES AND BEVELED PLATES WERE WELDED TO THE TOP OF BEAMS.



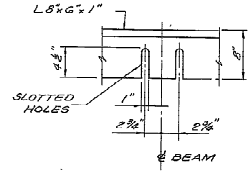

SECTION B–B




SECTION D–D

(@ ABUTMENT JTS.)

| JOINT SETTING TABLE | | | | | | |
|---|---|---|---|---|---|---|
| TEMP. (F) | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
| DIMENSION "A" | 3 1/8" | 3" | 2 7/8" | 2 3/4" | 2 5/8" | 2 1/2" | 2 3/8" |




DETAIL "E"

TYPICAL ADJUSTMENT & ANCHOR SLOT DETAIL

| REVISED | 'AS BUILTS' | BY: MAB | 1-11-86 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

EXPANSION JOINT DETAILS
OHIO TURNPIKE OVER
TINKERS CREEK
MILE POST 185.6
SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: N.T.S. |
|---|---|
| KMP: 43-84-15 | SHEET 14 OF 16 |

# REINFORCING BAR SCHEDULE (SOUTH BRIDGE)

## ABUTMENTS

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 1A501 | 6 | 3'-11" | 1 | 2'-0" | 2'-0" | | | | 25 |
| 1A502 | 12 | 6'-11" | 2 | 2'-4" | 2'-6" | | | | 87 |
| SERIES | 4 SETS | 3'-0" | | | | | | | |
| OF | OF 8# | TO | ST. | | | | | 6 7/16" | 163 |
| 1A503 | 32 BAR | 6'-9" | | | | | | | |
| 1A506 | 6 | 6'-1" | 2 | 2'-7" | 1'-2" | | | | 38 |
| * 1A507 | 12 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 70 |
| * 1A508 | 12 | 3'-3" | 20 | 1'-0" | 9" | 6" | | | 41 |
| * 1A509 | 32 | 2'-7" | 1 | 10" | 1'-10" | | | | 86 |
| * 1A510 | 20 | 2'-1" | ST. | | | | | | 43 |
| * 1A511 | 26 | 2'-8" | 6 | 2'-1" | | | | | 72 |
| * 1A512 | 4 | 3'-3" | 20 | 1'-0" | 9" | 6" | | | 14 |
| * 1A513 | 4 | 3'-1" | 20 | 1'-0" | 8" | 5" | | | 13 |
| * 1A514 | 4 | 3'-1" | 20 | 1'-0" | 8" | 4" | | | 13 |
| * 1A515 | 4 | 3'-0" | 20 | 1'-0" | 7" | 3" | | | 13 |
| * 1A516 | 10 | 2'-10" | 20 | 1'-0" | 6" | 2" | | | 30 |
| * 1A517 | 18 | 3'-11" | 1 | 1'-0" | 3'-0" | | | | 74 |
| * 1A518 | 60 | 39'-11" | ST. | | | | | | 2498 |
| * 1A519 | 82 | 11'-3" | ST. | | | | | | 962 |
| * 1A520 | 32 | 9'-4" | ST. | | | | | | 312 |
| * 1A521 | 32 | 4'-4" | ST. | | | | | | 145 |
| 1A522 | 12 | 5'-6" | ST. | | | | | | 69 |
| 1A523 | 4 | 14'-9" | ST. | | | | | | 62 |
| 1A601 | 12 | 39'-10" | ST. | | | | | | 718 |
| 1A602 | 8 | 14'-3" | 3 | 6'-9" | 3'-2" | 4'-8" | | | 171 |
| 1A603 | 8 | 6'-8" | 12 | 3'-6" | 3'-3" | 2'-11" | | | 80 |
| 1A604 | 8 | 8'-10" | 2 | 2'-6" | 4'-2" | | | | 106 |
| 1A605 | 4 | 9'-10" | 1 | 4'-2" | 5'-10" | | | | 89 |
| 1A606 | 26 | 5'-10" | ST. | | | | | | 228 |
| 1A607 | 36 | 3'-6" | ST. | | | | | | 189 |
| 1A608 | 10 | 10'-10" | 2 | 5'-0" | 1'-2" | | | | 163 |
| * 1A609 | 10 | 3'-7" | 1 | 1'-0" | 2'-9" | | | | 54 |
| * 1A610 | 66 | 4'-1" | 1 | 3'-3" | 1'-0" | | | | 405 |
| 1A611 | 42 | 2'-8" | ST. | | | | | | 168 |
| * 1A612 | 10 | 3'-4" | 1 | 1'-0" | 2'-6" | | | | 50 |
| SERIES | 4 SETS | 11'-9" | | | | | | | |
| OF | OF 3- | TO | ST. | | | | | 3'-7 1/8" | 146 |
| 1A613 | 12 BAR | 4'-6" | | | | | | | |
| 1A614 | 6 | 15'-7" | ST. | | | | | | 180 |
| 1A615 | 6 | 12'-3" | ST. | | | | | | 110 |
| 1A616 | 6 | 5'-2" | 1 | 2'-0" | 2'-8" | | | | 47 |
| * 1A617 | 22 | 3'-10" | 1 | 1'-3" | 2'-9" | | | | 138 |
| * 1A618 | 66 | 8'-10" | 1 | 1'-0" | 2'-0" | | | | 281 |
| 1A619 | 5 | 9'-10" | ST. | | | | | | 76 |
| 1A620 | 5 | 10'-3" | ST. | | | | | | 77 |
| 1A621 | 2 | 6'-0" | ST. | | | | | | 18 |
| * 1A701 | 122 | 11'-3" | ST. | | | | | | 2805 |
| 1A801 | 20 | 5'-10" | ST. | | | | | | 311 |

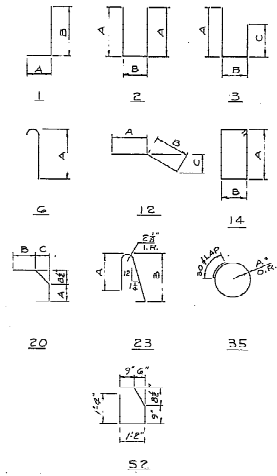
## BENTS

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| NON EPOXY COATED = 3249 | | | | | | | | | |
| EPOXY COATED = 8119 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL ABUTMENTS = 11368 | | | | | | | | | |
| 1B401 | 319 | 6'-4" | 35 | 10" | | | | | 1349 |
| 1B402 | 96 | 8'-9" | 14 | 2'-1" | 2'-1" | | | | 561 |
| 1B501 | 6 | 8'-0" | ST. | | | | | | 50 |
| 1B502 | 6 | 7'-8" | ST. | | | | | | 48 |
| 1B503 | 6 | 11'-5" | ST. | | | | | | 71 |
| 1B504 | 6 | 8'-7" | ST. | | | | | | 54 |
| 1B505 | 6 | 9'-0" | ST. | | | | | | 56 |
| 1B506 | 6 | 9'-5" | ST. | | | | | | 59 |
| 1B507 | 6 | 9'-8" | ST. | | | | | | 60 |
| 1B508 | 6 | 9'-11" | ST. | | | | | | 62 |
| 1B509 | 6 | 11'-1" | ST. | | | | | | 69 |
| 1B510 | 6 | 11'-9" | ST. | | | | | | 74 |
| 1B511 | 6 | 12'-0" | ST. | | | | | | 75 |
| 1B512 | 6 | 13'-3" | ST. | | | | | | 83 |
| 1B513 | 6 | 14'-0" | ST. | | | | | | 88 |
| 1B514 | 6 | 14'-9" | ST. | | | | | | 92 |
| 1B515 | 6 | 14'-3" | ST. | | | | | | 89 |
| 1B516 | 6 | 15'-6" | ST. | | | | | | 97 |
| 1B517 | 6 | 15'-6" | ST. | | | | | | 97 |
| 1B518 | 6 | 17'-0" | ST. | | | | | | 106 |
| 1B519 | 6 | 17'-3" | ST. | | | | | | 108 |
| 1B520 | 6 | 15'-9" | ST. | | | | | | 99 |
| 1B521 | 6 | 14'-0" | ST. | | | | | | 88 |
| 1B522 | 6 | 12'-3" | ST. | | | | | | 77 |
| 1B523 | 6 | 16'-2" | ST. | | | | | | 101 |
| 1B524 | 6 | 17'-8" | ST. | | | | | | 111 |
| 1B525 | 192 | 2'-9" | ST. | | | | | | 551 |
| NON EPOXY COATED = 4375 | | | | | | | | | |
| EPOXY COATED = 0 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL BENTS = 4375 | | | | | | | | | |

## SUPERSTRUCTURES

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| * 1S601 | 1260 | 30'-0" | ST. | | | | | | 25250 |
| * 1S602 | 180 | 30'-6" | ST. | | | | | | 3667 |
| * 1S603 | 135 | 12'-9" | ST. | | | | | | 1150 |
| * 1S604 | 792 | 12'-0" | ST. | | | | | | 10052 |
| * 1S605 | 132 | 16'-0" | ST. | | | | | | 1411 |
| * 1S606 | 132 | 13'-0" | ST. | | | | | | 1146 |
| * 1S607 | 630 | 2'-6" | 6 | 2'-0" | | | | | 1052 |
| * 1S501 | 1488 | 39'-10" | ST. | | | | | | 61881 |
| * 1S502 | 1206 | 30'-0" | ST. | | | | | | 37673 |
| * 1S503 | 172 | 31'-9" | ST. | | | | | | 5696 |
| * 1S504 | 129 | 14'-0" | ST. | | | | | | 1884 |
| * 1S505 | 1292 | 4'-6" | 52 | | | | | | 6066 |
| * 1S506 | 1300 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 1688 |
| * 1S507 | 200 | 14'-6" | ST. | | | | | | 3025 |
| * 1S508 | 672 | 5'-6" | ST. | | | | | | 3855 |
| * 1S509 | 32 | 6'-3" | ST. | | | | | | 209 |
| * 1S510 | 32 | 5'-10" | ST. | | | | | | 195 |
| * 1S511 | 48 | 5'-0" | ST. | | | | | | 250 |
| * 1S601 | 1488 | 39'-10" | ST. | | | | | | 89027 |
| NON EPOXY COATED = 0 | | | | | | | | | |
| EPOXY COATED = 261110 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL SUPERSTRUCTURES = 261110 | | | | | | | | | |
| REINFORCING STEEL, GRADE 60 | | | | | | | | | |
| ABUTMENTS = 3249 LBS. | | | | | | | | | |
| BENTS = 4375 LBS. | | | | | | | | | |
| SUPERSTRUCTURE = 0 LBS. | | | | | | | | | |
| TOTAL = 7624 LBS. | | | | | | | | | |
| EPOXY COATED REINFORCING STEEL, GRADE 60 | | | | | | | | | |
| ABUTMENTS = 8119 LBS. | | | | | | | | | |
| BENTS = 0 LBS. | | | | | | | | | |
| SUPERSTRUCTURE = 261110 LBS. | | | | | | | | | |
| TOTAL 269229 LBS. | | | | | | | | | |

REINFORCING STEEL SAMPLES REFER TO CMS SECTIONS 106.03, 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.




| REVISED | 'AS BUILTS' | BY: MAB | 1-11-85 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

REINFORCING BAR SCHEDULE

OHIO TURNPIKE OVER TINKERS CREEK

MILE POST 185.6

SUMMIT & PORTAGE COUNTIES

| DATE: | SCALE: |
|---|---|
| RMP: 43-84-15 | SHEET 15 OF 16 |

# REINFORCING BAR SCHEDULE (NORTH BRIDGE)

## ABUTMENTS

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2A501 | 6 | 3'-11" | 1 | 2'-0" | 2'-0" | | | | 85 |
| 2A502 | 12 | 6'-11" | 2 | 2'-6" | 2'-6" | | | | 87 |
| SERIES | 6 SETS | 3'-0" | | | | | | | |
| OF | OF 8= | TO | ST. | | | | | 6 7/16 | 163 |
| 2A505 | 32BAR | 6'-9" | | | | | | | |
| 2A506 | 6 | 6'-7" | 2 | 2'-7" | 1'-2" | | | | 38 |
| * 2A507 | 12 | 5'-7" | 23 | 2'-2" | 2'-5" | | | | 70 |
| * 2A508 | 12 | 3'-3" | 20 | 1'-0" | 9" | 6" | | | 41 |
| * 2A509 | 32 | 2'-7" | 1 | 10" | 1'-10" | | | | 86 |
| * 2A510 | 20 | 2'-1" | ST. | | | | | | 43 |
| * 2A511 | 26 | 2'-8" | 6 | 2'-1" | | | | | 72 |
| * 2A512 | 4 | 3'-3" | 20 | 1'-0" | 9" | 6" | | | 14 |
| * 2A513 | 4 | 3'-1" | 20 | 1'-0" | 8" | 3" | | | 13 |
| * 2A514 | 4 | 3'-1" | 20 | 1'-0" | 8" | 4" | | | 13 |
| * 2A515 | 4 | 3'-0" | 20 | 1'-0" | 7" | 3" | | | 13 |
| * 2A516 | 10 | 2'-10" | 20 | 1'-0" | 6" | 2" | | | 30 |
| * 2A517 | 18 | 3'-11" | 1 | 1'-0" | 3'-0" | | | | 74 |
| * 2A518 | 60 | 39'-11" | ST. | | | | | | 2498 |
| * 2A519 | 82 | 11'-3" | ST. | | | | | | 962 |
| * 2A520 | 32 | 9'-4" | ST. | | | | | | 312 |
| * 2A521 | 32 | 4'-4" | ST. | | | | | | 145 |
| 2A522 | 12 | 5'-6" | ST. | | | | | | 69 |
| 2A523 | 4 | 14'-9" | ST. | | | | | | 62 |
| 2A601 | 12 | 39'-10" | ST. | | | | | | 718 |
| 2A602 | 8 | 14'-3" | 3 | 6'-9" | 3'-2" | 4'-8" | | | 171 |
| 2A603 | 8 | 6'-8" | 12 | 3'-6" | 3'-3" | 2'-11" | | | 80 |
| 2A604 | 8 | 8'-10" | 2 | 2'-6" | 4'-2" | | | | 106 |
| 2A605 | 4 | 9'-10" | 1 | 4'-2" | 5'-10" | | | | 59 |
| 2A606 | 20 | 5'-10" | ST. | | | | | | 228 |
| 2A607 | 36 | 3'-6" | ST. | | | | | | 189 |
| 2A608 | 10 | 10'-10" | 2 | 5'-0" | 1'-2" | | | | 163 |
| * 2A609 | 10 | 5'-7" | 1 | 1'-0" | 2'-9" | | | | 54 |
| * 2A610 | 66 | 4'-1" | 1 | 3'-3" | 1'-0" | | | | 405 |
| 2A611 | 82 | 2'-8" | ST. | | | | | | 168 |
| * 2A612 | 10 | 3'-4" | 1 | 1'-0" | 2'-6" | | | | 50 |
| SERIES | 6 SETS | 11'-9" | | | | | | | |
| OF | OF 3= | TO | ST. | | | | | 3'-7 1/2" | 186 |
| 2A613 | 12 BAR | 4'-6" | | | | | | | |
| 2A614 | 6 | 15'-7" | ST. | | | | | | 140 |
| 2A615 | 6 | 12'-9" | ST. | | | | | | 110 |
| 2A616 | 6 | 5'-2" | 1 | 2'-8" | 2'-8" | | | | 67 |
| * 2A617 | 28 | 3'-10" | 1 | 1'-3" | 2'-9" | | | | 138 |
| * 2A618 | 66 | 2'-10" | 1 | 1'-0" | 2'-0" | | | | 281 |
| 2A619 | 5 | 9'-10" | ST. | | | | | | 74 |
| 2A620 | 5 | 10'-3" | ST. | | | | | | 77 |
| 2A621 | 2 | 6'-0" | ST. | | | | | | 18 |
| * 2A701 | 182 | 11'-3" | ST. | | | | | | 2805 |
| 2A801 | 20 | 5'-10" | ST. | | | | | | 311 |

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| NON EPOXY COATED = 3249 | | | | | | | | | |
| EPOXY COATED = 8119 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL ABUTMENTS | | | | | | | | | 11368 |

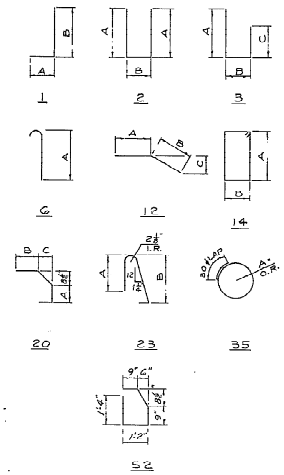
## BENTS

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| 2B401 | 285 | 6'-4 | 35 | 10" | | | | | 1206 |
| 2B402 | 96 | 8'-9" | 14 | 2'-1" | 2'-1" | | | | 561 |
| 2B501 | 6 | 7'-7" | ST. | | | | | | 47 |
| 2B502 | 6 | 8'-5" | ST. | | | | | | 53 |
| 2B503 | 6 | 7'-7" | ST. | | | | | | 47 |
| 2B504 | 6 | 7'-5" | ST. | | | | | | 46 |
| 2B505 | 6 | 7'-3" | ST. | | | | | | 45 |
| 2B506 | 6 | 7'-3" | ST. | | | | | | 45 |
| 2B507 | 6 | 7'-5" | ST. | | | | | | 46 |
| 2B508 | 6 | 8'-0" | ST. | | | | | | 50 |
| 2B509 | 6 | 8'-10" | ST. | | | | | | 55 |
| 2B510 | 6 | 9'-6" | ST. | | | | | | 59 |
| 2B511 | 6 | 10'-6" | ST. | | | | | | 66 |
| 2B512 | 6 | 11'-6" | ST. | | | | | | 72 |
| 2B513 | 6 | 12'-9" | ST. | | | | | | 80 |
| 2B514 | 6 | 13'-6" | ST. | | | | | | 84 |
| 2B515 | 6 | 14'-6" | ST. | | | | | | 91 |
| 2B516 | 6 | 15'-0" | ST. | | | | | | 94 |
| 2B517 | 6 | 16'-2" | ST. | | | | | | 101 |
| 2B518 | 6 | 16'-9" | ST. | | | | | | 105 |
| 2B519 | 6 | 17'-3" | ST. | | | | | | 108 |
| 2B520 | 6 | 16'-9" | ST. | | | | | | 105 |
| 2B521 | 6 | 13'-9" | ST. | | | | | | 86 |
| 2B522 | 6 | 12'-9" | ST. | | | | | | 80 |
| 2B523 | 6 | 11'-8" | ST. | | | | | | 73 |
| 2B524 | 6 | 11'-8" | ST. | | | | | | 73 |
| 2B525 | 198 | 2'-9" | ST. | | | | | | 551 |
| NON EPOXY COATED = 4029 | | | | | | | | | |
| EPOXY COATED = 0 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL BENTS | | | | | | | | | = 4029 |

## SUPERSTRUCTURES

| MARK | Nº REQ'D. | LENGTH | TYPE | DIMENSIONS A | B | C | D | INCRM. | WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|
| * 2S401 | 1260 | 30'-0" | ST. | | | | | | 25250 |
| * 2S402 | 180 | 30'-6" | ST. | | | | | | 3667 |
| * 2S403 | 195 | 12'-9" | ST. | | | | | | 1150 |
| * 2S404 | 792 | 13'-0" | ST. | | | | | | 10052 |
| * 2S405 | 132 | 14'-0" | ST. | | | | | | 1411 |
| * 2S406 | 192 | 13'-0" | ST. | | | | | | 1186 |
| * 2S407 | 630 | 2'-6" | 6 | 2'-0" | | | | | 1052 |
| * 2S501 | 1488 | 39'-10" | ST. | | | | | | 61821 |
| * 2S502 | 1204 | 30'-0" | ST. | | | | | | 37673 |
| * 2S503 | 172 | 31'-9" | ST. | | | | | | 5696 |
| * 2S504 | 129 | 14'-0" | ST. | | | | | | 1884 |
| * 2S505 | 1892 | 4'-6" | 52 | | | | | | 6064 |
| * 2S506 | 1300 | 5'-8" | 23 | 2'-2" | 2'-6" | | | | 7683 |
| * 2S507 | 200 | 14'-6 | ST. | | | | | | 3025 |
| * 2S508 | 672 | 5'-6" | ST. | | | | | | 3835 |
| * 2S509 | 32 | 6'-3" | ST. | | | | | | 209 |
| * 2S510 | 32 | 5'-10" | ST. | | | | | | 195 |
| * 2S511 | 48 | 5'-0" | ST. | | | | | | 250 |
| * 2S601 | 1488 | 39'-10" | ST. | | | | | | 89021 |
| NON EPOXY COATED = 0 | | | | | | | | | |
| EPOXY COATED = 261110 | | | | | | | | | |
| (*) DENOTES BARS TO BE EPOXY COATED | | | | | | | | | |
| TOTAL SUPERSTRUCTURES = 261110 | | | | | | | | | |
| REINFORCING STEEL, GRADE 60 | | | | | | | | | |
| ABUTMENTS = 3249 LBS. | | | | | | | | | |
| BENTS = 4029 LBS. | | | | | | | | | |
| SUPERSTRUCTURE = 0 LBS. | | | | | | | | | |
| TOTAL = 7278 LBS. | | | | | | | | | |
| EPOXY COATED REINFORCING STEEL, GRADE 60 | | | | | | | | | |
| ABUTMENTS = 8119 LBS. | | | | | | | | | |
| BENTS = 0 LBS. | | | | | | | | | |
| SUPERSTRUCTURE = 261110 LBS. | | | | | | | | | |
| TOTAL 269229 LBS. | | | | | | | | | |

REINFORCING STEEL SAMPLES REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 509.08. 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.



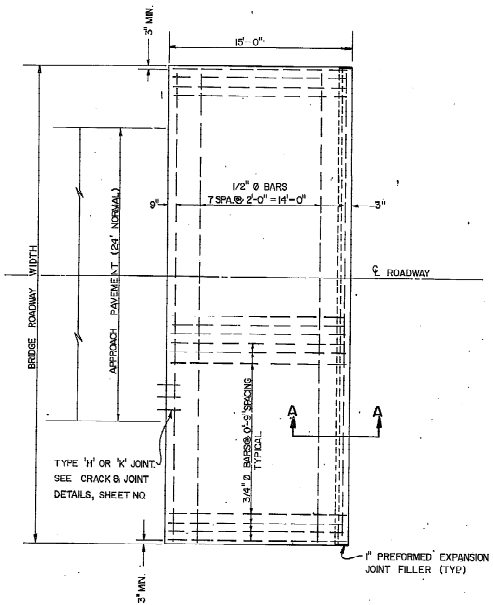

| REVISED | AS BUILTS | BY: MAB | 1-11-86 |
|---|---|---|---|

**OHIO TURNPIKE COMMISSION**

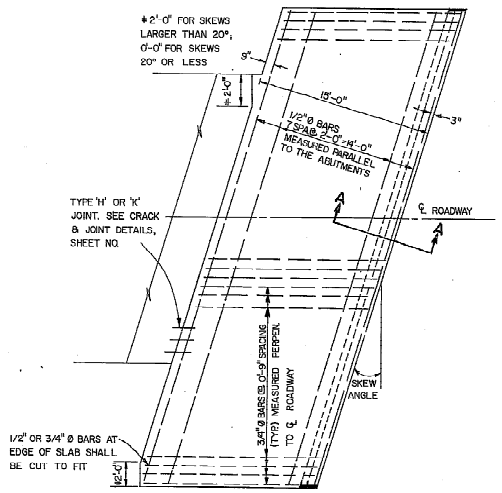
REINFORCING BAR SCHEDULE

OHIO TURNPIKE OVER
TINKERS CREEK
MILE POST 188.6
SUMMIT & PORTAGE COUNTIES

DATE:
SCALE:
RMP: 43-84-15
SHEET 16 OF 16




PLAN




APPROACH SLAB FOR SKEWED BRIDGE

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

DESIGN DATA

CONCRETE CLASS C: COMPRESSIVE STRENGTH 4000 P. S. I.

REINFORCING STEEL: ASTM A615, A616 OR A617 - GRADE 60 MINIMUM 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. YD. FOR THE APPROACH SLAB.

PREFORMED ELASTOMERIC JOINT SEALER SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YD. FOR THE APPROACH SLAB.

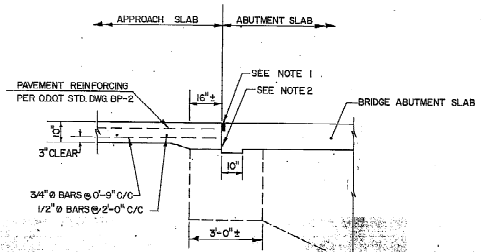
LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 511.09.

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 HEIGH IN A LENGTH AS FOLLOWS: WHERE WINGWALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10FT. 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 APPROACH SLAB IF NECESSARY.

APPROACH SLAB WIDTH: APPROACH SLABS SHALL BE THE SAME WIDTH AS THE BRIDGE ROADWAY, UNLESS SHOWN OTHERWISE ON THE PLANS.

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 TYPE OF JOINT FURNISHED.




SECTION A-A

NOTE 1: PREFORMED ELASTOMERIC JOINT SEALER /U.11 (1 1/4" FOR 1/2" JOINT) DEPRESSED 1/8" BELOW ROADWAY. PLACED IN 1/2" x 2 1/4" GROOVE.

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

| OHIO TURNPIKE COMMISSION | |
|---|---|
| REINFORCED CONCRETE APPROACH SLABS | |
| DATE: OCTOBER 1983 | SCALE: NONE |
| RMP | SHEET OF |