THE OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT 43–94–03

BRIDGE DECK REPLACEMENT

TOWNSHIP LINE ROAD (C.R. 198) OVER THE OHIO TURNPIKE – 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

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LOCATION MAP

1/2 1/4 0 1/2 1 MI
SCALE IN MILES

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
BY

David W. Rowsby
CHIEF ENGINEER

6/9/94
DATE

PLANS PREPARED BY

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

STATE OF OHIO
JOSEPH S. BOLTENUS
E-55423
REGISTERED
PROFESSIONAL ENGINEER

DESIGN CONTRACT: #CIP 71–91–01 & #CIP 71–94–03

GENERAL

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1992, AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS.

DESIGN LOADING – HS 20-44 CASE II, THE ALTERNATE MILITARY LOADING, AND A 60 P.S.F. FUTURE WEARING SURFACE.

DESIGN STRESSES:

CLASS S CONCRETE – COMPRESSIVE STRENGTH 4,500 PSI
CLASS C CONCRETE – COMPRESSIVE STRENGTH 4,000 PSI
REINFORCING STEEL – ASTM A615, A616, OR A617 – GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI. SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615.
STRUCTURAL STEEL – ASTM A572, YIELD STRENGTH 50,000 PSI.

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

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

EXISTING STRUCTURE PLANS: 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 DRAWINGS.

EXISTING STRUCTURE VERIFICATION: DETAILS, DIMENSIONS AND ELEVATIONS 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 AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL 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.

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

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

REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE IS INCLUDED IN ITEM SP 509 FOR THIS PURPOSE.

DRILLING DOWEL HOLES, FURNISHING AND PLACING SP 956 NON-SHRINKING EPOXY MORTAR, AND REINFORCING BAR DOWELS, 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 BARS NECESSARY TO ACCOMMODATE ANY ESSENTIAL ELEMENT OF WORK RELATED TO THE PROJECT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 509 REINFORCING STEEL, GRADE 60 AND/OR ITEM SP 509 EPOXY COATED REINFORCING STEEL, GRADE 60 UNLESS OTHERWISE NOTED.

ITEM SP 536 CONCRETE WEATHERPROOFING: SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGE:

– SUPERSTRUCTURE PARAPETS INCLUDING THE EXTERIOR EXISTING SURFACE TO THE EXTERIOR STRINGER FLANGE.

– ABUTMENT PARAPET INCLUDING THE EXTERIOR EXISTING SURFACE TO THE FACE OF EXISTING ABUTMENT WINGWALLS.

– NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AN CURED.

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

CONSTRUCTION JOINT: SURFACES SHALL BE FREE FROM OIL, LAITANCE, FORM RELEASE AGENT OR ANY OTHER MATERIAL THAT WOULD PREVENT BONDING TO THE CONCRETE SURFACE. ALL LAITANCE AND OTHER CONTAMINANTS SHALL BE REMOVED BY HIGH PRESSURE WATER BLASTING WITH A MINIMUM PRESSURE OF 5,000 PSI. HOWEVER, WATER BLASTING IS NOT REQUIRED WHERE EXISTING CONCRETE HAS BEEN ROUGHENED BY JACKHAMMERS DURING CONCRETE REMOVAL OPERATIONS. SURFACES SHALL BE THOROUGHLY DRENCHED WITH CLEAN WATER AND ALLOWED TO DRY TO A DAMP CONDITION FREE OF STANDING WATER BEFORE PLACING CONCRETE. PREPARATION OF CONSTRUCTION JOINT SURFACES WILL NOT BE MEASURED FOR PAYMENT, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT PRICE ON THE PERTINENT CONCRETE ITEMS.

BRIDGE DECK AND APPROACH PAVEMENT ELEVATIONS: IN ORDER TO ASSURE SMOOTH PROFILES OF THE BRIDGE DECK OVERLAY AND APPROACH PAVEMENTS, THE CONTRACTOR SHALL OBTAIN ELEVATIONS OF THE SCARIFIED BRIDGE DECK AND MODIFIED BRIDGE DECK JOINTS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND OF THE EXISTING APPROACH PAVEMENTS FOR A DISTANCE OF 100 FEET BEYOND THE PROPOSED PAVING LIMITS. ELEVATIONS SHALL BE AT 10' MAXIMUM INTERVALS INCLUDING THE CENTER AND BOTH EDGES OF PAVEMENT.

THE ELEVATIONS SHALL BE FURNISHED TO THE ENGINEER FOR FINAL CHECKING AND FOR DEVELOPMENT OF A SMOOTH PROFILE. THE ENGINEER WILL THEN SUPPLY THE CONTRACTOR WITH FINAL PROFILE GRADES. DECK OVERLAYS AND APPROACH PAVEMENT RESURFACING SHALL NOT BEGIN UNTIL THE CONTRACTOR HAS RECEIVED FINAL PROFILE ELEVATIONS FROM THE ENGINEER.

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

ITEM 254 – PAVEMENT PLANING, BITUMINOUS, AS PER PLAN: THE FOLLOWING ITEM SHALL BE USED TO PLANE THE EXISTING ASPHALT ROADWAYS TO A DEPTH SUFFICIENT TO PLACE THE ASPHALT WEARING COURSE AS SHOWN ON THE PLANS. QUANTITIES HAVE BEEN PROVIDED IN THE PLANS TO PLANE ALL SURFACES WHICH ARE TO BE OVERLAYED, HOWEVER THE CONTRACTOR SHALL ONLY PERFORM THE PLANING WHERE IT IS NECESSARY, AND THE QUANTITY TO BE PAID SHALL BE THAT WHICH IS MEASURED AFTER THE PLANING OPERATIONS ARE COMPLETED.

DECK PROTECTIVE METHOD

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

SUBSTRUCTURE REPAIRS OF EXCESSIVE DEPTH SHALL BE REPAIRED USING ITEM SPECIAL – PORTIONS OF SUBSTRUCTURE REMOVED, AS PER PLAN. THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY LABOR, MATERIAL AND EQUIPMENT TO REMOVE AND DISPOSE OF PORTIONS OF THE PIERS AND/OR ABUTMENTS AS REQUIRED FOR THE SPECIFIED REPAIR OF THE EXISTING BRIDGES. THIS ITEM IS INTENDED FOR CONCRETE REPAIRS EXCEEDING 6 INCHES IN DEPTH. FOR REPAIRS INVOLVING LESS THAN 6 INCHES OF CONCRETE REMOVAL, THE WORK SHALL BE PAID FOR UNDER ITEM SP 519 PATCHING CONCRETE, PER SQUARE FOOT. FOR SUBSTRUCTURE REPAIRS EXCEEDING 6 INCHES IN DEPTH, THE REMOVED AREAS SHALL BE REPLACED WITH CLASS S CONCRETE, TO BE PAID FOR UNDER ITEM 511 CLASS S CONCRETE SUBSTRUCTURE REPAIRS, PER CUBIC YARD. THE CONTRACTOR SHALL REFER TO ALL APPLICABLE SECTIONS OF SP 202 PORTIONS OF STRUCTURES REMOVED FOR THE CONCRETE REMOVAL OPERATIONS, AND TO ALL APPLICABLE SECTIONS OF SP 519 PATCHING CONCRETE, FOR THE CONCRETE REPLACEMENT OPERATIONS. THE QUANTITY OF MATERIAL REMOVED IN SUBSTRUCTURE REPAIRS OF EXCESSIVE DEPTH [redacted] SHALL BE PAID UNDER ITEM SPECIAL PORTIONS OF SUBSTRUCTURE REMOVED, AS PER PLAN. AREAS INVOLVING THE SUBSTRUCTURE REPAIRS OF EXCESSIVE DEPTH REPAIRS SHALL NOT BE PAID FOR UNDER ITEM SP 519 PATCHING CONCRETE.

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

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

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

THE OWNER OF THE UNDERGROUND FACILITY SHALL WITHIN FORTY-EIGHT (48) 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 LOCATION SHALL BE COORDINATED TO STAY APPROXIMATELY TWO (2) DAYS AHEAD OF THE PLANNED CONSTRUCTION.

UTILITY OWNERS:

TELEPHONE
G.T.E. NORTH (S.R. 101 & COPP ROAD)
PO BOX 299
BELLEVUE, OHIO 44811
(419)483-8182
SCOTT WETZEL

AMERITECH (TOWNSHIP LINE ROAD)
130 NORTH ERIE ST., ROOM 206
TOLEDO, OHIO 43624
(419)245-7304

FIBER OPTICS CABLE (ALL BRIDGES)
LITEL TELECOMMUNICATIONS CORP.
200 WILSON BRIDGE ROAD
WORTHINGTON, OHIO 43085
(SEE RELATED NOTE THIS SHEET)

ELECTRIC (TOWNSHIP LINE ROAD)
THE TOLEDO EDISON COMPANY
2600 W. SANDUSKY STREET, USR 20
LINDSEY, OHIO 43442
(800)533-2660 (EXT. 4105)
TIM SHIARLA

OHIO EDISON COMPANY (S.R. 101 & COPP ROAD)
2508 W. PERKINS AVE.
SANDUSKY, OHIO 44870
(419)627-6895
LESTER BARNUM

LITEL TELECOMMUNICATIONS CORP. FIBER OPTIC CABLE: A FIBER OPTIC CABLE IS BURIED ADJACENT TO THE MEDIAN SHOULDER. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS CABLE DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IN THIS AREA FOR ANY REASON 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

ITEM 622 CONCRETE BARRIER, TYPE D, MODIFIED: NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE EXISTING GUARDRAIL, EXCAVATE FOR AND INSTALL THE BARRIER, CURE THE BARRIER FOR 3 DAYS AND RECONNECT THE EXISTING OR REBUILT GUARDRAIL. THE REMOVAL OF GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

PRESERVATION AND RESTORATION OF PROPERTY: PAVEMENTS, SHOULDERS, AND OTHER RELATED ROADWAY ITEMS DAMAGED BY THE CONTRACTOR'S STORAGE, STAGING, HAULING, AND CONSTRUCTION OPERATIONS, BEYOND THE PAVING LIMITS SHOWN ON THE PLANS, SHALL BE RESTORED IN ACCORDANCE WITH G-7.04, PRESERVATION AND RESTORATION OF PROPERTY.

OHIO TURNPIKE COMMISSION

GENERAL NOTES

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: AS SHOWN
CONTRACT: 43-94-03 & -04	SHEET: 2 OF 41

ITEM SPECIAL – RESHAPING BERMS ON SIDE ROADS: BERMS AT LOCATIONS WHERE EXISTING GUARDRAIL IS REMOVED OR WHERE NEW GUARDRAIL IS REMOVED OR WHERE NEW GUARDRAIL IS TO BE ERECTED SHALL BE RESHAPED BEFORE INSTALLATION OF THE NEW GUARDRAIL AS DIRECTED BY THE ENGINEER TO INSURE A SMOOTH SURFACE FREE OF ALL IRREGULARITIES. EXCESS EXCAVATION RESULTING FROM RESHAPING BERMS SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT FOR RESHAPING BERMS AS DESCRIBED SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM SPECIAL, RESHAPING BERMS. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLANS:

BRIDGE	QUANTITY
TOWNSHIP LINE ROAD	1,750 C.Y.
S.R. 101	500 C.Y.
COPP ROAD	500 C.Y.

REMOVAL AND RESETTING OF BEARING DEVICES: THE BEARING DEVICES TO BE RESET SHALL BE CLEANED AND RESET AFTER COMPLETION OF THE PIER REPAIRS. EXISTING WELDS SHALL BE REMOVED BY THE AIR-ARC PROCESS. THE BEARING CLEANING AND RESETTING SHALL BE IN ACCORDANCE WITH SP 524B RESETTING EXPANSION BEARING DEVICES. THE JACKING SYSTEM DESIGN AND STRESS CALCULATIONS SHALL BE PREPARED BY A REGISTERED STRUCTURAL ENGINEER.

THE CONTRACTOR SHALL SUBMIT DETAILS OF THE PROPOSED TEMPORARY SUPPORT AND JACKING SYSTEMS TO THE ENGINEER FOR APPROVAL, PRIOR TO BEGINNING WORK. THE SUBMITTAL SHALL INDICATE MATERIALS, MEMBER SIZES, SPACINGS, SUPPORT LOCATIONS, JACKING POINTS, REACTIONS (I.E. LOADS), AND REMOVAL PROCEDURES. RESETTING OF BEARINGS SHALL BE COMPLETED PRIOR TO THE START OF DECK JOINT MODIFICATIONS.

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, A, B, C, D & E SHALL BE RAISED SIMULTANEOUSLY. THE STRUCTURE SHALL NOT BE RAISED MORE THAN NECESSARY. THE ABOVE PROVISIONS MAY BE WAIVED IF THE ENTIRE SUPERSTRUCTURE IS RAISED UNIFORMLY AND SIMULTANEOUSLY. IN SUCH CASES, FIXED BEARINGS AT PIER 2 SHALL BE DISASSEMBLED AND REASSEMBLED UNDER THE DIRECTION OF AND TO THE SATISFACTION OF THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR WORK PERFORMED ON THE FIXED BEARINGS.

SEEDING: THE REPAIR OF ALL AREAS DISTURBED BY THE CONSTRUCTION IS CONSIDERED INCIDENTAL TO THE WORK WITH EXCEPTION OF THE SLOPE FAILURE RECONSTRUCTION. THE REQUIREMENTS OF ITEM 659 IN THE ODOT CONSTRUCTION MATERIAL SPECIFICATIONS SHALL BE MET. THE COST OF SEEDING AND MULCHING IS TO BE INCLUDED AS INCIDENTAL TO THE APPROPRIATE BID ITEMS FOR ALL AREAS OTHER THAN THE SLOPE FAILURE RECONSTRUCTION. SEEDING OF THE RECONSTRUCTED SLOPES WILL BE PAID FOR UNDER ITEM 659.

CATCH BASIN LOCATIONS: THE LOCATION STATION SPECIFIED FOR THE CATCH BASIN IS FIGURED SO ANY DEVIATION FROM THE STATION SHOWN FOR THE END OF BRIDGE PARAPET WALL AND GUARDRAIL AS SHOWN WILL REQUIRE A CORRESPONDING ADJUSTMENT IN THE LOCATION STATION FOR THE CATCH BASIN.

TEMPORARY SECURITY: AT EACH APPROACH OF THE BRIDGE, THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AT LOCATIONS DIRECTED BY THE ENGINEER FOR SECURITY PURPOSES. TEMPORARY FENCE WITH GATES SHALL BE AS PER THE SPECIAL PROVISION 607. TEMPORARY FENCE MAY BE REMOVED AFTER THE BRIDGE OVERLAY AND PARAPETS ARE COMPLETE.

LOCATION OF GUARDRAIL: THE LOCATION OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECTED TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB WILL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND DECK SLAB MAY BE POURED AT THE SAME TIME.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL: WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

GUARDRAIL POSTS, AS PER PLAN: AS A CONTINGENCY, 12 EACH OF ITEM 606 – GUARDRAIL POSTS, AS PER PLAN HAS BEEN PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE 9' LONG POSTS TO COMPLY WITH THE MINIMUM EMBEDMENT REQUIREMENTS OF THE STANDARD DRAWINGS. THE PRICE BID SHALL INCLUDE THE ADDITIONAL COSTS OVER THE BID PRICE FOR ITEM 606 – GUARDRAIL REBUILT, TYPE 5 TO PROVIDE AND INSTALL 9' LONG POSTS.

LOCAL DETOUR ROUTES

THE CONTRACTOR SHALL PERFORM WORK AS DIRECTED BY THE ENGINEER ON ROUTES DESIGNATED BY THE OHIO DEPARTMENT OF TRANSPORTATION AS "LOCAL DETOUR ROUTES" TO MAINTAIN SUCH ROUTES TO A PASSABLE CONDITION DURING THE TIME THE OFFICIAL DETOUR IS IN EFFECT, AND TO RESTORE THE ROUTES AFTER THE OFFICIAL DETOUR HAS BEEN DISCONTINUED. "LOCAL DETOUR ROUTES" WILL BE SELECTED PRIOR TO THE PRECONSTRUCTION MEETING.

PAYMENT WILL BE MADE ON THE BASIS OF "DIRECT COSTS" PLUS 15% FOR OVERHEAD AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION G.902-(5) OF THE GENERAL CONDITIONS.

THIS ITEM SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO RESTORE HAUL ROADS OR PAVEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES.

BRIDGE DECK REPLACEMENT

PROPOSED WORK: TOWNSHIP LINE ROAD AND S.R. 101 BRIDGES OVER THE OHIO TURNPIKE, SHALL BE REHABILITATED UNDER THIS CONTRACT, MAJOR WORK INCLUDES:

A. REPLACING BRIDGE DECK AND ABUTMENT SLABS WITH REINFORCED CONCRETE, ALONG WITH THE PARAPETS.
B. PROVIDING CHAIN LINK SAFETY FENCE ON THE NEW BRIDGE PARAPETS.
C. REPLACING THE EXISTING EXPANSION JOINTS WITH NEW STRIP SEAL AND COMPRESSION SEAL JOINTS.
D. PATCHING DETERIORATED AREAS OF EXISTING CONCRETE.
E. REPLACING SHOULDER PIER COLUMNS AND CAPS (S.R. 101).
F. MODIFYING ABUTMENTS TO ACCOMMODATE NEW ABUTMENT SLABS AND REPLACING EXISTING ABUTMENT AND LANE PIER BEARINGS (ON S.R. 101 BRIDGE ONLY).
G. TRANSITIONING EXISTING APPROACH PAVEMENT TO ACCOMMODATE THE BRIDGE WORK AND MODIFYING PERTINENT APPROACH ROADWAY ITEMS SUCH AS GUARDRAIL AND DRAINAGE.
H. REPLACING EXISTING GUARDRAIL ALONG THE TURNPIKE ADJACENT TO THE SHOULDER PIERS WITH CONCRETE BARRIER.

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 NEW AND EXISTING STEEL BEAMS, AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLAB, AT THE LOCATIONS SHOWN IN THE TABLE ON SHEETS 14 & 21 FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THEN, THE CONTRACTOR SHALL CALCULATE THE DECK THICKNESS OVER THE BEAMS USING THE DECK SCREED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. THE CONTRACTOR SHALL FURNISH THE ELEVATIONS TO THE ENGINEER FOR FINAL CHECKING. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. FORM WORK SHALL NOT PROCEED UNTIL A CHECK OF THE FINAL ELEVATIONS HAS BEEN PERFORMED BY THE ENGINEER.

THE QUANTITY OF DECK CONCRETE TO BE PAID 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 ROADWAY PAVEMENT AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

PRIOR TO PLACING THE APPROACH SLABS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS AT 12.5' INTERVALS FOR A DISTANCE OF 100' BEYOND THE PAVING LIMITS, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER WILL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE APPROACH SLABS AND APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

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

ITEM SPECIAL – TEMPORARY SUPPORT AND JACKING SYSTEM, AS PER PLAN

AT PIERS 1 AND 3, FOR THE S.R. 101 BRIDGE, THE SUPERSTRUCTURE SHALL BE SUPPORTED BY A TEMPORARY SUPPORT SYSTEM WHILE THE BRIDGE SUBSTRUCTURE IS BEING REPAIRED. THE TEMPORARY SUPPORT AND JACKING SYSTEM DESIGN AND STRESS CALCULATIONS SHALL BE PREPARED BY A REGISTERED STRUCTURAL ENGINEER. THE SYSTEM SHALL BE DESIGNED TO SUPPORT 116.2 KIPS AND 74.2 KIPS FOR EACH BEAM FOR THE INTERIOR SPAN AND ABUTMENT SPAN, RESPECTIVELY. THE EXISTING PIER CAP AND COLUMNS SHALL NOT BE USED AS PART OF THE SYSTEM. THIS ITEM SHALL ALSO INCLUDE THE DISASSEMBLY AND SUBSEQUENT REASSEMBLY OF THE AFFECTED PIER BEARINGS TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILS OF THE PROPOSED TEMPORARY SUPPORT AND JACKING SYSTEMS TO THE ENGINEER FOR APPROVAL, PRIOR TO BEGINNING WORK. THE SUBMITTAL SHALL INDICATE MATERIALS, MEMBER SIZES, SPACINGS, SUPPORT LOCATIONS, JACKING POINTS, REACTIONS (I.E. LOADS), AND REMOVAL PROCEDURES. PAYMENT FOR ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO DESIGN, INSTALL, MAINTAIN, AND REMOVE A TEMPORARY SUPPORT AND JACKING SYSTEM; AND TO DISASSEMBLE AND REASSEMBLE THE PIER BEARINGS, INCLUDING NEW SHEET LEAD (711.19), SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM SPECIAL – TEMPORARY SUPPORT AND JACKING SYSTEM, AS PER PLAN.

BRIDGE DECK REPAIR AND OVERLAY

PROPOSED WORK: COPP ROAD BRIDGE OVER THE OHIO TURNPIKE, SHALL BE REHABILITATED UNDER THIS CONTRACT, MAJOR WORK INCLUDES:

A. RESURFACING BRIDGE DECK AND ABUTMENTS WITH A LATEX MODIFIED CONCRETE OVERLAY OF THE THICKNESS SHOWN IN THE PLANS.
B. MODIFYING THE EXISTING PARAPETS TO CONFORM TO THE DEFLECTOR PARAPET TYPE CONFIGURATION.
C. PROVIDING CHAIN LINK SAFETY FENCE ON THE NEW BRIDGE PARAPETS.
D. MODIFYING THE EXISTING EXPANSION JOINTS TO PROVIDE STRIP SEAL AND COMPRESSION SEAL JOINTS.
E. PATCHING DETERIORATED AREAS OF EXISTING CONCRETE.
F. REPLACING DETERIORATED CONCRETE ON PIER CAPS, THEN CLEANING AND RESETTING EXPANSION BEARING DEVICES ON THE REPAIRED PIER.
G. TRANSITIONING EXISTING APPROACH PAVEMENT TO ACCOMODATE LMC OVERLAY AND MODIFYING PERTINENT APPROACH ROADWAY ITEMS SUCH AS GUARDRAIL AND DRAINAGE.
H. REPLACING EXISTING GUARDRAIL ALONG THE TURNPIKE ADJACENT TO THE SHOULDER PIERS WITH CONCRETE BARRIER.

DETAILS OF THE WORK ARE SHOWN IN THE PLANS.

NO.	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL NOTES, CONT'D

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: AS SHOWN
CONTRACT: 43-94-03 & -04	SHEET: 2A OF 41

GENERAL SUMMARY

TOTAL FROM SHEET NO.								GENERAL SUMMARY				
ITEM	2		4	6		5	40A	ITEM	TOTALS 43-94-03	TOTALS 43-94-04	UNITS	DESCRIPTION
103.05									LUMP	LUMP	L.S.	PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND
202			4	4		4		202	8	4	EACH	REMOVE INLET AND PLUG PIPE
202			75	75		75		202	150	75	L.F.	GUARDRAIL REMOVED FOR STORAGE
202			100	150		150		202	250	150	L.F.	GUARDRAIL REMOVED FOR REUSE
202			1574	557		650		202	2131	650	L.F.	GUARDRAIL REMOVED
202						170		202	--	170	S.Y.	APPROACH SLAB REMOVED
203			29	35		35		203	64	35	C.Y.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
254			542	450		590		254	992	590	S.Y.	PAVEMENT PLANING, BITUMINOUS, AS PER PLAN
SP304			18	30		23		SP304	48	23	C.Y.	AGGREGATE BASE
SP310			14			22		SP310	14	22	C.Y.	SUBBASE, TYPE I, GRADING A
SP402			12	23		15		SP402	35	15	C.Y.	ASPHALT CONCRETE, AC-20
403			15	13		17		403	28	17	C.Y.	ASPHALT CONCRETE, AC-20, EXCLUDING GRAVEL
404			24	26		29		404	50	29	C.Y.	ASPHALT CONCRETE, AC-20, EXCLUDING GRAVEL
407			54	45		59		407	99	59	GAL	TACK COAT
408			28	58		30		408	86	30	GAL	PRIME COAT
601			2	2		2		601	4	2	C.Y.	ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER
603				50		80		603	50	80	L.F.	12" CONDUIT, TYPE B, 706.02, AS PER PLAN
603			199	180		96		603	379	96	L.F.	12" CONDUIT, TYPE F, 707.01 (EXCEPT GALVANIZED) OR 707.05, TYPE C, WITHOUT PAVED INVERT
SP604			4	4		4		SP604	8	4	EACH	CATCH BASIN
604				2				604	2		EACH	MANHOLE NO. 3
606			1500	588		550		606	2088	550	L.F.	GUARDRAIL, TYPE 5
606			50	100		75		606	150	75	L.F.	GUARDRAIL, TYPE 5, USING STEEL POSTS
SP606			100	150		200		SP606	250	200	L.F.	GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS
606			6	6		6		606	12	6	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1
606				2		2		606	2	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2
606				4				606	4		EACH	ANCHOR ASSEMBLY, TYPE A
606				1		1		606	1	1	EACH	ANCHOR ASSEMBLY, TYPE T
606			12	12		12		606	24	12	EACH	GUARDRAIL POSTS, AS PER PLAN
SP607			580	405		485		SP607	985	485	L.F.	TEMPORARY FENCE (7'-0" CHAIN LINK WITH SPECIALS INCLUDING BARBED WIRE)
SP607			2	2		2		SP607	4	2	EACH	TEMPORARY GATE (14'-0")
609			32	94		61		609	126	61	L.F.	CONCRETE CURB, TYPE 6, MODIFIED
SP611			86			132		SP611	86	132	S.Y.	CLASS S CONCRETE APPROACH SLAB, WITH TYPE 4A CURBS, USING SHRINKING COMPENSATING CEMENT (T=10")
617			88	94		97		617	182	97	S.Y.	SHOULDER PREPARATION
617			0.08	0.1		0.1		617	0.18	0.1	M GAL	WATER
617			5	5		6		617	10	6	C.Y.	COMPACTED AGGREGATE, TYPE A
622			84	112		144		622	196	144	L.F.	CONCRETE BARRIER TYPE D, MODIFIED
622							1000	622		1000	L.F.	PORTABLE CONCRETE BARRIER, 32 IN.
SPECIAL							100	SPECIAL		100	EACH	CONCRETE BARRIER DELINEATORS, WHITE
SPECIAL							1	SPECIAL		1	EACH	TEMPORARY IMPACT ATTENUATOR FOUNDATION
SPECIAL							1	SPECIAL		1	EACH	TEMPORARY IMPACT ATTENUATOR (G.R.E.A.T. TYPE) MODEL NO. 200200NF60CZ
SPECIAL	2750							SPECIAL	2750	500	L.F.	RESHAPING BERMS
SP614								SP614	LUMP	LUMP	L.S.	MAINTAINING TRAFFIC
SP619								SP619	LUMP	LUMP	L.S.	FIELD OFFICE
SP623								SP623		LUMP	L.S.	CONSTRUCTION LAYOUT SURVEY FOR DECK REPLACEMENT PROJECT
SP623B								SP623B	LUMP		L.S.	CONSTRUCTION LAYOUT SURVEY FOR DECK REPLACEMENT AND OVERLAY PROJECT
624								624	LUMP	LUMP	L.S.	MOBILIZATION

QUANT. CALC. BY JSB DATE 4/94
QUANT. CHECK BY SSK DATE 4/94

NO.	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY OF ROADWAY QUANTITIES

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994 | SCALE: AS SHOWN
CONTRACT: 43-94-03 & -04 | SHEET: 3 OF 41

℄ COPP ROAD APPROACH	
BRIDGE ℄ STATION	OFFSET
17+00	1.6 Rt
18+90	1.6 Rt
21+10	2.0 Rt
22+00	7.3 Rt
23+00	11.3 Rt

REFERENCES	SHT. NO.
DRAINAGE PROFILE	9
DRAINAGE DETAILS	31
CONCRETE BARRIER DETAILS	30
PAVED SHOULDER DETAILS	9
PAVEMENT TRANSITION	9

CALC: JSB
CHKD: SSK

REFERENCE NUMBER	STATION FROM	STATION TO	SIDE	202 GUARDRAIL, CABLE TYPE REMOVED (L.F.)	202 GUARDRAIL REMOVED FOR RE-USE (L.F.)	202 INLET REMOVED & PIPE PLUGGED (E.A.)	202 GUARDRAIL REMOVED FOR STORAGE ** (L.F.)	203 EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION (C.Y.)	254 PAVEMENT PLANING, BITUMINOUS (S.Y.)	SP304 AGGREGATE BASE (C.Y.)	SP402 ASPHALT CONCRETE AC-20 (C.Y.)	403 ASPHALT CONCRETE + (C.Y.)	404 ASPHALT CONCRETE SURFACE COURSE AC-20 (C.Y.)	407 TACK COAT (GAL.)	408 PRIME COAT (GAL.)	601 ROCK CHANNEL PROTECTION TYPE C WITHOUT FILTER (C.Y.)	603 12" CONDUIT, TYPE F (L.F.)	603 12" CONDUIT, TYPE B, 706.02, AS PER PLAN (L.F.)	SP604 CATCH BASIN (EA.)	604 MANHOLE NO.3 (EA.)	606 GUARDRAIL, TYPE 5, USING STEEL POSTS (L.F.)	606 GUARDRAIL TYPE 5 (L.F.)	SP606 GUARDRAIL REBUILT, TYPE 5 (STEEL POSTS) (L.F.)	606 BRIDGE TERMINAL ASSEMBLY, TYPE 1 (EA.)	606 BRIDGE TERMINAL ASSEMBLY, TYPE 2 (EA.)	606 ANCHOR ASSEMBLY TYPE A (EA.)	606 ANCHOR ASSEMBLY TYPE T (EA.)	SP607 TEMPORARY FENCE (7'-0" CHAIN LINK WITH BARBED WIRE) (L.F.)	SP607 TEMPORARY GATE (14'-0") (EA.)	609 CONCRETE CURB TYPE 6, MODIFIED ⊙ (L.F.)	617 SHOULDER PREPARATION (S.Y.)	617 WATER (M.GAL.)	617 COMPACTED AGGREGATE (C.Y.)	622 CONCRETE BARRIER, TYPE D, MODIFIED ** (L.F.)
1G	17+37	18+87	RT.	149																															
2G	17+42	18+92	LT.	70																			125			1		1							
3G	21+08	22+33	RT.	75																			125			1		1							
4G	21+13	23+76	LT.	283																			100			1		1							
																							237.5			1		1							
1B	1187+40	1187+96	LT.		100*		37.5			3.1	1.0										37.5			100*	1	1									56
2B	1187+69	1188+25	RT.		50*		37.5			3.1	1.0										62.5			50*	1	1		1							56
1C	18+60	18+87	RT.																																
2C	18+66	18+92	LT.																													24			
3C	21+08	21+34	RT.																													23			
4C	21+13	21+40	LT.																													23			
1P	17+60	18+90.6	L&R					16	240	9.6	8.3	6.7	12.7	24	22																	24			
2P	21+04.3	22+35	L&R					19	210	14.0	12.8	5.8	13.3	21	36																		48	.05	2.7
																																	46	.05	2.5
1D	18+70.9		RT.			1												25	1																
2D	18+76.6		LT.			1										1	98		1	1															
3D	21+23.4		RT.			1												25	1																
4D	21+29.1		LT.			1										1	82		1	1															
1F	17+65	EXIST. FENCE	L&R																																
2F	EXIST.FENCE	22+30	L&R																										245	1					
	TOTAL			557	150*	4	75	35	450	30	23	13	26	45	56	2	180	50	4	2	100	588	150*	6	2	4	1	405	2	94	94	0.1	5	112

\+ THIS QUANTITY HAS BEEN ESTABLISHED AS A CONTINGENCY TO BE USED IF REQUIRED AS DIRECTED BY THE ENGINEER FOR THE LEVELING OF UNEVEN EXISTING PAVEMENT.

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

⊙ TAPER CURB HEIGHT FROM 4" AT CATCH BASIN TO 0" AT END.

** SEE NOTE ON SHEET 30

⊙ SEE NOTE ON SHEET 40A OF 41

NO.	REVISION	BY	DATE
7	AS-BUILT	RRK	1/96

OHIO TURNPIKE COMMISSION

APPROACH ROADWAY PLAN

COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994 | SCALE: 1"=20'
CONTRACT: 43-94-03 | SHEET: 6 OF 41

NORTH CONDUIT PROFILE

PAVED SHOULDER DETAIL

WITH CURBS

SOUTH CONDUIT PROFILE

PAVED SHOULDER DETAIL

WITHOUT CURBS

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

TRENCH DETAIL

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

LEGEND

1. ITEM 404 ASPHALT CONCRETE AC-20 (1"MIN.) EXCLUDING GRAVEL
2. ITEM 408 PRIME COAT (APPLICATION RATE: 0.35 GAL/SQ.YD.)
3. ITEM SP402 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
7. ITEM 606 GUARDRAIL, TYPE 5
8. ITEM 617 COMPACTED AGGREGATE, TYPE A
9. ITEM 203 COMPACTED SUBGRADE 6" AS PER 203.13(a)
10. ITEM 403 ASPHALT CONCRETE FOR LEVELING AS DIRECTED BY THE ENGINEER (0"MIN.)

(A) EXISTING 3"± ASPHALT SURFACE COURSE

(B) EXISTING AGGREGATE BASE

NO.	REVISION	BY	DATE

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

PLAN

REAR ABUTMENT SHOWN
FORWARD ABUTMENT SIMILAR

SCALE: 1/4" = 1'

VIEW C-C

SECTION A-A

SECTION E-E

SECTION F-F

NOTES

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. 1" PREFORMED EXPANSION JOINT FILLER, TOPPED WITH 1" MIN. DEPTH 705.04 JOINT SEALER (INCLUDE WITH APPROACH SLAB FOR PAYMENT)
3. FOR THE TYPICAL DECK JOINT DETAILS, SEE SHEET 32, 33 & 34A.
4. SEE ABUTMENT SLAB AND DECK SLAB POURING SEQUENCE NOTE ON SHEET 2.
5. THE PREFIX (RAS & FAS) SHALL BE ADDED TO ALL REINFORCING STEEL IN THE ABUTMENT SLABS.
   REAR ABUT. SLAB = RAS
   FORWARD ABUT. SLAB = FAS

SECTION B-B

SECTION D-D

NO.	REVISION	BY	DATE
7	REVISED NOTE 3	KDF	6/94

OHIO TURNPIKE COMMISSION

ABUTMENT SLAB DETAILS

S.R. 101 BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: 3/4" = 1'
CONTRACT: 43-94-04	SHEET: 22 OF 41

QUAN. CALC. BY JJB DATE 4/3/94
QUAN. CHECK BY SSK DATE 4/4/94

GENERAL PLAN

ELEVATION

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.

PROFILE

ESTIMATED QUANTITIES

	ITEM	TOTAL	UNIT	DESCRIPTION
	SP202C	LUMP	SUM	PORTIONS OF STRUCTURES REMOVED (OVERLAY PROJECT)
	SP509	(7272)	LB.	EPOXY COATED REINFORCING STEEL, GRADE 60
	510	493	L.F.	DOWEL HOLES USING SP853 GROUT ANCHORING
	511	LUMP	SUM	CLASS S CONCRETE, DECK JOINT RETROFIT
*	511	2	C.Y.	CLASS S CONCRETE, SUBSTRUCTURE REPAIRS, AS PER PLAN
	SP511B	53	C.Y.	LIGHTWEIGHT CONCRETE, ABUTMENT AND SUPERSTRUCTURE BARRIERS, USING SHRINKAGE COMPENSATING CEMENT
	SP511B	3	C.Y.	LIGHT WEIGHT CONCRETE, USING SHRINKAGE COMPENSATIING CEMENT, FOR PREPOUR TESTING
*	SP514	5	EACH	FIELD PAINTING OF EXISTING EXPANSION BEARINGS RESET
*	SP519	65	S.F.	PATCHING CONCRETE STRUCTURES
*	SP524B	5	EACH	RESETTING EXPANSION BEARING DEVICES
	SP527A	LUMP	SUM	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES FOR OVERLAY PROJECT
	SP529	10	EACH	TRIM ENDS OF STRUCTURAL STEEL MEMBERS
	SP530	5	EACH	REMOVAL AND ADJUSTMENT OF ANCHOR BOLT NUTS AND WASHERS
	SP533	56.4	L.F.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT
	SP533A	55.8	L.F.	2 INCH ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT
	SP536	265	S.Y.	CONCRETE WEATHERPROOFING
	SP607	439	L.F.	TYPE II FENCE, ALL ALUMINUM (6'-0" CHAIN LINK WITH SPECIALS)
	SP845	625	S.Y.	LATEX MODIFIED CONCRETE OVERLAY (1-1/4 INCHES THICK)
	SP845	13	C.Y.	LATEX MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS)
	SP845	2	C.Y.	FULL DEPTH REPAIR
*	SPECIAL	2	C.Y.	PORTIONS OF SUBSTRUCTURE REMOVED, AS PER PLAN

* CONTINGENCY QUANTITY, TO BE USED AT THE DIRECTION OF THE ENGINEER

EPOXY COATED REINFORCING STEEL LIST

MARK	NUMBER	LENGTH	WEIGHT	SHAPE
ABUTMENTS				
EA501	28	2'-9"	80	BENT
EA502	16	3'-10"	64	BENT
EA503	52	1'-8"	90	BENT
EA504	20	13'-8"	285	STR
EA505	8	13'-8"	114	BENT
EA506	28	3'-6"	102	BENT
EA507	8	3'-8"	30	STR.
EA508	16	3'-3"	54	BENT
TOTAL:			819	
SUPERSTRUCTURE				
ES501	300	4'-3"	1330	1
ES502	48	9'-10"	492	STR
ES503	64	12'-2"	812	STR
ES504	40	6'-6"	271	STR
ES506	12	30'-2"	378	STR
ES507	32	28'-2"	940	STR
ES510	300	1'-5"	443	3
ES511	562	3'-2"	1856	2
TOTAL:			6522	

BENDING DIAGRAMS

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

INDEX OF STRUCTURE WORK ITEMS

ITEM		DETAIL LOCATION
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
8	TRIM ENDS OF BEAMS TO PROVIDE 1/4" CLEARANCE	N/A

NO.	REVISION	BY	DATE
1	REINFORCING REVISIONS DUE TO PARAPET CHANGE ON SHEET 26	SSK	7/94

OHIO TURNPIKE COMMISSION

GENERAL PLAN AND ESTIMATED QUANTITIES
COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994 | SCALE: AS SHOWN
CONTRACT: 43-94-03 | SHEET: 25 OF 41

TYPICAL TRANSVERSE SECTION

(SHOWING EXISTING DECK WITH LATEX MODIFIED CONCRETE OVERLAY)

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 SAWCUT 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 SAW CUT SHALL BE 1-1/2 INCHES DEEP MINIMUM. 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 SPEC. TT-S-00227E.

DETAIL "A"

DEFLECTION JOINT

NOTE: FOR REINFORCING STEEL LIST SEE SHEET 25.

PARTIAL PLAN AT ABUTMENT

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

PANEL (BRIDGE)		
MARK	"L"	NO.REQ'D
P-1	10'-2 5/16"	12
P-2	12'-6 1/16"	16
P-3	6'-10"	10

PANEL ELEVATION

PARAPET PANELS AND FENCE PLAN

** SEE STEP 3 AND STEP 5 FOR DETAILS, SHEET NO. 29
*** SEE SHEET NO. 29 FOR ALTERNATE METHOD, DETAIL "A"

**- HORIZONTAL REINFORCING SHOWN LIES BELOW THE CONSTRUCTION JOINT (SEE PANEL ELEVATION)

SEE SHEET 37 FOR SPECIFICATIONS FOR CONTRACTOR OPTION OF SLIPFORM PARAPETS

FENCE POSTS SHALL NOT BE SET CLOSER THAN 8" FROM ANY PARAPET DEFLECTION JOINTS.

FENCE POSTS ANCHORS: THE CONTRACTOR SHALL GIVE SPECIAL ATTENTION TO FENCE ANCHOR STUD PROJECTION ABOVE TOP OF PARAPET, PROVIDE FOR BASE PLATE THICKNESS, WASHER THICKNESS AND A POSITIVE "STICK THROUGH" AT END OF STUD.

NO.	REVISION	BY	DATE
1	PARAPET END CONFIGURATION CHANGED	SSK	7/94

OHIO TURNPIKE COMMISSION

LATEX OVERLAY AND PARAPET DETAILS

COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: AS SHOWN
CONTRACT: 43-92-03	SHEET: 26 OF 41

PIER NO. 1

PIER NO. 3

SUBSTRUCTURE REPAIR QUANTITIES

LOCATION	PATCHING MEASURED	PATCHING ESTIMATED	REPLACEMENT ESTIMATED
NORTH ABUTMENT	30 S.F.	35 S.F.	0 C.Y.
PIER NO.1	0 S.F.	5 S.F.	0 C.Y.
PIER NO.3	0 S.F.	5 S.F.	2 C.Y.
SOUTH ABUTMENT	15 S.F.	20 S.F.	0 C.Y.

NOTES:

ITEM SP519 – PATCHING CONCRETE STRUCTURES:
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN NOVEMBER, 1993

THE ESTIMATED QUANTITY HAS BEEN INCREASED OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

EXACT LOCATIONS AND DIMENSIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY. (PAYMENT FOR THIS INSPECTION TO BE INCLUDED IN ITEM SP527A).

THE CONTRACTOR SHALL REPAIR DETERIORATED SECTIONS OF THE ABUTMENT BACKWALLS WHEN PERFORMING JOINT REHABILITATION WORK AT THE ABUTMENTS. CONCRETE REPAIRED BEYOND THE NORMAL REMOVAL LIMITS REQUIRED FOR JOINT REHABILITATION SHALL BE PAID FOR UNDER ITEM 519 PATCHING CONCRETE STRUCTURES.

A CONTINGENT QUANTITY OF ITEMS REPAIR USE AS DIRECTED BY THE ENGINEER.

DRAIN PIPE:
FOR DRAIN PIPE CAP DETAIL SEE SHEET 29

PIER CAP CONCRETE REMOVAL AND REPLACEMENT WILL REQUIRE BEAM JACKING, BEARING CLEANING AND RESETTING AS PART OF THE WORK, WHICH IS DESCRIBED ON SHEET 2. THE QUANTITIES FOR THE BEAM JACKING AND BEARING WORK SHALL BE PAID FOR UNDER ITEM SP 524B RESETTING EXPANSION BEARING DEVICES, AND ITEM SP 514 FIELD PAINTING OF EXISTING EXPANSION BEARINGS REBUILT OR RESET. ALL OF THE BEARINGS ON A PIER CAP HAVE BEEN INCLUDED IN THE QUANTITIES TO BE PERFORMED AS DEEMED NECESSARY BY THE ENGINEER.

LEGEND

INDICATES APPROXIMATE AREAS OF REMOVAL AND REPLACEMENT

DETAIL FOR PIER PEDESTAL REPLACEMENT

NOTE: EXACT ELEVATION OF PEDESTAL TO BE DETERMINED PRIOR TO REMOVAL AND NEW PEDESTAL TO BE CAST AT THE ORIGINAL ELEVATION. ALL PORTIONS OF PEDESTAL TO BE REMOVED A MINIMUM OF 1" INTO THE TOP OF THE PIER CAP.

NO.	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

SUBSTRUCTURE REPAIR
COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: AS SHOWN
CONTRACT: 43-94-03	SHEET: 27 OF 41

PARAPET REMOVAL DETAIL OVER PIERS

PARAPET REMOVAL DETAIL AT END DAMS

PLAN VIEW

ABUTMENTS SHOWN, PIERS SIMILIAR

NOTES:

1. FOR ADDITIONAL DETAILS, SEE STANDARD DECK JOINT DETAILS SHEET NOS. 32, 33, AND 34.
2. BEFORE WELDING, THE EXPOSED SURFACES OF THE EXISTING JOINTS SHALL BE BLAST CLEANED IN ACCORDANCE WITH SSPC- SP6 (COMMERCIAL BLAST).
3. EXPOSED SURFACES OF NEW AND EXISTING STEEL SHALL BE PAINTED PER ITEM SP514. PAINTING SHALL BE INCLUDED UNDER ITEM SP533(STRIP SEAL) OR SP533A(COMPRESSION SEAL) FOR PAYMENT.
4. STUDS SHALL BE INCLUDED UNDER ITEM SP533A – 2" ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT FOR PAYMENT.
5. WELDED AREAS AND AREAS WHERE THE OVERLAY CONTACTS STEEL SHALL BE BLAST CLEANED AFTER WELDING IN ACCORDANCE WITH SSPC–SP10 (NEAR WHITE BLAST CLEANING) NOT MORE THAN 12 HOURS BEFORE THE OVERLAY IS PLACED.
6. COMPRESSION SEALS SHALL BE D.S. BROWN CV 2000, WATSON, BOWMAN & ACME WJ200, ERIE METAL SPECIALTIES BR200 OR APPROVED EQUAL.
7. CONTINUOUS STRIP SEALS SHALL BE D.S. BROWN SSE RETAINERS AND 300 A2 GLANDS, ORWATSON BOWMAN & ACME TYPE E1 RETAINERS AND SE300 GLANDS, OR APPROVED EQUAL.
8. PRIOR TO FINAL ACCEPTANCE, JOINT SEAL SYSTEMS SHALL BE FLOODED WITH WATER FOR A MINIMUM OF 1 HOUR. ANY LEAKAGE OF WATER SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER.
9. ALL 511 CLASS "S" CONCRETE SHALL BE WATER CURED IN ACCORDANCE WITH 511.14.
10. FIELD ADJUSTMENT OF 1 1/4" MINIMUM THICKNESS BAR AND EXTRUSION LENGTH SHALL BE MADE AT THE CENTERLINE OF ROADWAY. A WATER TIGHT BUTT WELD SHALL BE MADE IN THE BAR OR EXTRUSION IF FIELD ADJUSTMENT IS NECESSARY.
11. CONTRACTOR SHALL FIELD VERIFY EXISTING JOINT CROSS–SLOPE AND GRADE MISMATCH, FROM ONE SIDE OF JOINT TO THE OTHER, PRIOR TO SUBMITTING SHOP DRAWINGS.
12. ITEM 511 CLASS "S" CONCRETE FOR DECK JOINT RETROFITS SHALL BE PLACED, WATER CURED, AND REACH A MINIMUM MODULUS OF RUPTURE OF 400 PSI PRIOR TO PLACEMENT OF THE LATEX MODIFIED OVERLAY.

‡ AS AN ALTERNATE TO PLACING WELD ON EXISTING PLATE TO CORRECT CROSS–SLOPE OR TO BUILD UP LOW SIDE OF JOINT, THICKER OR TAPER D PLATES MAY BE USED. INCLUDE WITH ITEM SP533 OR SP533A FOR PAYMENT. SHIM PLATES SHALL NOT BE USED.

* CROSS SLOPE SHALL BE 3/16"/FT. PERPENDICULAR TO THE BRIDGE CENTERLINE OR AS DIRECTED BY THE ENGINEER.

* – NORMAL @ 60° F.
** – 2 5/8"

SECTION A-A AT ABUTMENT

COMPRESSION SEAL

SECTION A-A

AT PIERS

SECTION B-B AT ABUTMENTS

SECTION B-B AT PIERS

DETAIL & SECTION D-D

SECTION C-C

VIEW E-E

ABUTMENTS SHOWN, PIERS SIMILIAR

NO.	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

EXPANSION JOINT DETAILS
COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: MARCH, 1994	SCALE: AS SHOWN
CONTRACT: 43-94-03	SHEET: 28 OF 41

CELDIS 3/94

SPECIAL WASHER FOR ANCHOR BOLTS AT BEARINGS
(ITEM SP530)

DRAIN PIPE CAP DETAIL
(INCLUDE WITH ITEM SP202C, "PORTIONS OF STRUCTURES REMOVED" FOR PAYMENT)

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"

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"

WEATHERPROOFING DETAIL

NOTE:
STEP 1, STEP 2, STEP 3, AND DECK JOINT MODIFICATIONS, SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF THE 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.

NOTE:
DEMOLITION, INCLUDING SAWCUTTING, SHALL NOT BEGIN IN CURB AREA UNTIL THE CONCRETE PARAPET ABOVE THE EXISTING CONSTRUCTION JOINT HAS BEEN REMOVED.

STEP 1

STEP 2

STEP 3

EXISTING PARAPET MODIFICATION PROCEDURE

PLACE AND CURE ITEM SP845 LATEX MODIFIED CONCRETE OVERLAY

STEP 5

NO.	REVISION	BY	DATE
1	CHANGED STEP 5 TO STEP 4	JHF	7/94

OHIO TURNPIKE COMMISSION

SUPERSTRUCTURE DETAILS
COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC.
COLUMBUS, OHIO

DATE: APRIL, 1994	SCALE: AS SHOWN
CONTRACT: 43-94-03	SHEET: 25 OF 41

SECTION B-B (STRIP SEAL)
Scale: 1½"=1'-0"

SECTION B-B (COMPRESSION SEAL)
Scale: 1½"=1'-0"

SECTION E-E
No Scale

‡ THE SPLIT EXTRUSION SHOWN IS A NORMAL EXTRUSION WHICH HAS BEEN MODIFIED. AT JOINT UPTURNS, ESPECIALLY ON SKEWED BRIDGE DECKS, THE USE OF SPLIT EXTRUSIONS MAY BE NECESSARY TO ENSURE GOOD SEAL INSTALLATION. ON SHOP DRAWINGS, WHERE THE SPLIT EXTRUSION IS NOT USED, THE SEAL MANUFACTURER OR HIS AGENT WARRANTS TO THE CHIEF ENGINEER THAT THE FURNISHED CONFIGURATION WILL PROVIDE FOR READY INSTALLATION AND REPLACEMENT OF THE SEAL.

TABLE B

	SKEW ANGLE	
	< 10°	10°-45°
d	3/4" MIN.	3/4"
x	6 3/16"	7½"
h	10"	10"

SECTION C-C
No Scale

NOTE:
FOR JOINT DETAILS IN SIDEWALK SEE SHEET N/A

Detail A
Scale ¼"=1"

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 CONCRETE PLACEMENT.

SECTION D-D
Scale: 1½"=1'-0"

STRIP SEAL SELECTION TABLE			
SEAL MOVEMENT RATING (SIZE)	MANUFACTURER & DESIGNATION ‡		
	THE D.S. BROWN COMPANY		WATSON-BOWMAN & ACME CORP
3"	300L		SE-300
4"	400L		SE-400
5"	500L		SE-500

‡ OR APPROVED EQUAL

FOR GENERAL NOTES SEE SHEET 33.

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

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1985 | SCALE: AS NOTED
CIP: 43-M-03 & -04 | SHEET 32 OF 41

PLAN - SKEW ANGLE < 10°
(Strip Seal Shown, Compression Seal Similar)
Scale: ¼"=1'-0"

PLAN - SKEW ANGLE 10° TO 45°
(Strip Seal Shown, Compression Seal Similar)
Scale: ¼"= 1'-0"

PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)
Scale: ¼"= 1'-0"

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

GENERAL NOTES

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

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

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

THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS UNLESS OTHERWISE SHOWN.

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

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

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

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: 43-44-03 & -04 | SHEET 33 OF 41

PLAN – COMPRESSION SEAL JOINT AT ABUTMENTS

SECTION B–B

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

FOR ADDITIONAL NOTES SEE SHEET 33 OF 41.

SECTION C–C

VIEW E–E

SECTION A–A

SECTION D–D

LEGEND

⊙ (Dimensions Are Given Normal To Curb)
△ Normal To ℄

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

ALTERNATE
FIXED DECK JOINT DETAILS
TYPICAL AT ABUTMENTS

COPP ROAD

Designed / Drawn KF/JF	Checked in Charge
Date 6/94	Scale N.T.S.
CONTRACT: 43-94-03	Sheet 34 of 41

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.

D. DIMENSIONS IN EXCESS OF THE CONSTRUCTION TOLERANCES LISTED BELOW:

1. BAR REINFORCEMENT COVER	-0" + 1/2"
2. WIDTH (TOP)	-0" + 1/4"
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 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 PLANE SURFACES.

B. SINCE THE SLIPFORM MOLD WIDTH REMAINS CONSTANT, THE 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.

D. HONEYCOMBING, CRACKING AND TEARING SHALL BE PATCHED PROMPTLY BEFORE THE CONCRETE SETS. DEFECTS SHALL BE COMPLETELY FILLED WITH CONCRETE.

E. 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-S-0027E.

G. 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.

J. 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. 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.

M. END TRANSITIONS SHALL NOT BE SLIPFORMED.

N. SPECIAL 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.

O. FENCE ANCHOR STUDS, 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 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

DATE:	SCALE:
CIP: 43-84-04	SHEET 36 OF 41

SLIPFORM CONSTRUCTION OF BRIDGE PARAPETS

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.

D. DIMENSIONS IN EXCESS OF THE CONSTRUCTION TOLERANCES LISTED BELOW:

1. BAR REINFORCEMENT	COVER	-0" + 1/2"
2. WIDTH (TOP)		-0" + 1/4"
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 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 PLANE SURFACES.

B. SINCE THE SLIPFORM MOLD WIDTH REMAINS CONSTANT, THE 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.

D. HONEYCOMBING, CRACKING AND TEARING SHALL BE PATCHED PROMPTLY BEFORE THE CONCRETE SETS. DEFECTS SHALL BE COMPLETELY FILLED WITH CONCRETE.

E. 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-S-00227E.

G. 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.

J. 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. 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.

M. END TRANSITIONS SHALL NOT BE SLIPFORMED.

N. THE 3/4" CHAMFER ON THE EDGE OF THE NEW CONCRETE ON THE OUTSIDE 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 STUDS, 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 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

GENERAL NOTES

STRUCTURE

DATE: DECEMBER 1991	SCALE:
CIP: 43-91-03	SHEET 37 OF 41

PLAN
(WITHOUT CURB)

APPROACH SLAB FOR SKEWED BRIDGE
(WITHOUT CURB)

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

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

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

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

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

LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 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 10 FT AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY. CURB PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.O.T. STANDARD CONSTRUCTION DRAWING BR-1

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

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

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

ITEM 310 SUBBASE, TYPE 1 GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.

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.

PART PLAN VIEW
(WITH CURB)

SECTION B-B

APPROACH SLAB SEAT DETAIL

Nº	REVISION	BY	DATE
5	UPDATED FOR O.D.O.T. STD. DWG.	K.F.	6-10-92
4	ADDED DETAILS, REVISED NOTE 1	K.F.	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	DFC	10-2-84

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE APPROACH SLABS

DATE: OCTOBER 1983 | SCALE: N.T.S.
93-94-03 & 04 | SHEET 38 OF 41

(BRIDGE)