OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT F.T.P. 43 – 89 – 18
DECK REPLACEMENT

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

CONTRACT C.I.P. 43 – 89 – 17 (PART 2)
DECK REPLACEMENT

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

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LOCATION PLAN
SCALE IN MILES
0 1 2

NOTE:

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

PLANS PREPARED BY

OSBORN
ARCHITECTS · ENGINEERS
CLEVELAND, OHIO

R. M. NAMEN, P. E.

STATE OF OHIO
ROBERT M. NAMEN
25064
REGISTERED PROFESSIONAL ENGINEER
August 9, 1988

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

* FTP 43-89-18
** CIP 43-89-17

GENERAL SUMMARY

SHEET NUMBER 2	4*	6*	8**	10**		ITEM	* QUAN.	** QUAN.	UNIT	DESCRIPTION
LUMP						103.05	LUMP	LUMP	LUMP	PREMIUM FOR CONTRACT PERFORMANCE AND PAYMENT BOND
		50	1575	200		202	50	1575	LIN.FT.	GUARDRAIL REMOVED
	300	100		100		202	400	100	LIN.FT.	GUARDRAIL REMOVED FOR REUSE
	219.0		217			202	219	217	LIN.FT.	FENCE REMOVED
	4		4			202	4	4	EACH	INLET REMOVED & PLUG PIPE
	435		551			203	435	551	SQ. YD.	SUBGRADE COMPACTION
	166		203			203	166	203	CU. YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
	1.0		1.0			203	1	1	CU. YD.	EMBANKMENT
	36		50			301	36	50	CU.YD.	BITUMINOUS AGGREGATE BASE, AC-20
		20		52		SP304	20	52	CU.YD.	AGGREGATE BASE
	72		92			310	72	92	CU.YD.	SUBBASE, TYPE 1, GRADING A
	17	17	24	33		402	34	57	CU.YD.	ASPHALT CONCRETE, AC-20
	9		12			404	9	12	CU.YD.	ASPHALT CONCRETE, AC-20
	128		181			408	128	181	GAL.	PRIME COAT
	2		2			601	2	2	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER
	60		52			603	60	52	LIN.FT.	12" CONDUIT, TYPE B, 706.02
	124		115			603	124	115	LIN.FT.	12" CONDUIT, TYPE F, 707.01 (EXCEPT GALVANIZED) OR 707.15, TYPE C WITHOUT PAVED INVERT
	4		4			SP604	4	4	EACH	CATCH BASIN
200						605	100	100	LIN. FT.	AGGREGATE DRAINS
		50		100		SP606	50	100	LIN. FT.	GUARDRAIL REBUILT TYPE 5
	300					606	300		LIN.FT.	GUARDRAIL, REBUILT, TYPE 5
	37.5		1275			606	37.5	1275	LIN.FT.	GUARDRAIL, TYPE 5
	4	2	4	4		606	6	8	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE A
			4			606		4	EACH	ANCHOR ASSEMBLY, TYPE A
	219		217			607	219	217	LIN.FT.	FENCE, TYPE 47
	330		481			SP607	330	481	LIN.FT.	TEMPORARY FENCE (7'-0" CHAIN LINK WITH SPECIALS)
	2		2			SP607	2	2	EACH	TEMPORARY GATE (14'-0")
	65		68			609	65	68	LIN.FT.	CONCRETE CURB, TYPE 6, AS PER PLAN
	111.0		97			SP611	111	97	SQ.YD.	CLASS S CONCRETE APPROACH SLAB, USING SHRINKAGE COMPENSATING CEMENT (T-10")
LUMP						SP614	LUMP	LUMP	LUMP	MAINTAINING TRAFFIC
	5		11			617	5	11	CU.YD.	COMPACTED AGGREGATE
	0.10		0.24			617	0.10	0.24	M.GAL.	WATER
LUMP						SP619	LUMP	LUMP	LUMP	FIELD OFFICE
		100		200		622	100	200	LIN.FT.	TYPE D MODIFIED CONCRETE BARRIER
LUMP						SP623	LUMP	LUMP	LUMP	CONSTRUCTION LAYOUT SURVEY
LUMP						624	LUMP	LUMP	LUMP	MOBILIZATION
100						653	50	50	CU.YD.	TOPSOIL FURNISHED AND PLACED
2000						659	1000	1000	SQ.YD.	SEEDING AND MULCHING
0.3						659	0.15	0.15	TON	COMMERCIAL FERTILIZER

GENERAL NOTES

ELEVATION DATUM

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

CLEARING AND GRUBBING

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

ITEM 605 AGGREGATE DRAINS

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

ITEM 605-AGGREGATE DRAINS-200 LIN. FT.

ITEM 659 SEEDING AND MULCHING

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

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

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

THE OHIO TURNPIKE COMMISSION

BRIDGES OVER THE OHIO TURNPIKE AT STATE ROUTE 269 (BRIDGE #1), MILEPOST 106.8 & BILLINGS ROAD (BRIDGE #2), MILEPOST 100.7
GENERAL SUMMARY AND GENERAL NOTES

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114

DESIGNED E.L.	DRAWN U.W.	CHECKED J.H.	IN CHARGE D.S.
DATE 9/30/87		SCALE AS SHOWN	
F.I.P. 43-89-8 PART 2		SHEET 2 OF 26	

GENERAL NOTES

ITEM SP607 TEMPORARY FENCE AND GATES

AT EACH APPROACH OF THE BRIDGES, THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE WITH A GATE, AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER FOR SECURITY PURPOSES.

ITEM 607 FENCE REPLACEMENT

AN ALLOWANCE FOR RIGHT-OF-WAY FENCE REPLACEMENT HAS BEEN MADE FOR FENCE REMOVED DURING CONSTRUCTION. THE EXISTING FENCE REMOVED FOR CONSTRUCTION SHALL NOT BE REMOVED UNTIL THE TEMPORARY FENCE AND GATES-SP607, HAVE BEEN INSTALLED. EXISTING FENCE SHALL BE REPLACED IN ITS ORIGINAL LOCATION BY NEW TYPE 47 FENCE, ITEM 607 PRIOR TO REMOVAL OF THE TEMPORARY FENCE AND GATES. LIMITS OF FENCE REPLACEMENT SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ITEM 617 RECONDITIONING SHOULDERS (AS PER PLAN)

THIS WORK SHALL CONSIST OF THE FURNISHING, PLACING AND COMPACTING OF ADDITIONAL AGGREGATE ON THE EXISTING SHOULDERS ADJACENT TO THE NEW APPROACH PAVEMENT AS SHOWN ON THE TYPICAL SECTIONS OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR ITEM 617 WATER SHALL BE THE NUMBER OF M. GAL. OF WATER USED AS MEASURED IN ACCORDANCE WITH THE PROVISIONS OF 617.06. PLAN QUANTITIES HAVE BEEN CALCULATED AS A GUIDE TO THE CONTRACTOR FOR ORDERING MATERIALS.

UTILITIES NOTIFICATION

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC. THE FOLLOWING UTILITIES HAVE POLES AND WIRES IN THE PROJECT AREA.

POWER POLES BELONG TO: OHIO EDISON
76 SOUTH MAIN ST.
AKRON, OHIO 44308

TELEPHONE POLES BELONG TO: OHIO BELL
121 HURON ROAD, ROOM 213.
TOLEDO, OHIO 43604
419-245-7365
ATTN: BOB BARBER

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE UTILITIES PROTECTION SERVICE, TOLL FREE 1-800-362-2764, AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLANS. THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO (2) DAYS AHEAD OF THE PLANNED CONSTRUCTION.

LITEL COMMUNICATIONS CORP. FIBER OPTIC CABLE

ADJACENT TO
THE MEDIAN SHOULDER OF THE WESTBOUND TURNPIKE LANES IS BURIED A FIBER OPTIC CABLE. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS DUCT DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IS THIS AREA FOR ANY REASON IS NOT TO BE PERFORMED WITHOUT LITEL FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY LITEL, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12 INCHES OF THE CABLE DEPTH AS PROVIDED. LITEL REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE 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

CONTINGENCY QUANTITIES

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

LOCATION OF GUARDRAIL

THE LOCATION OF GUARDRAIL RUNS, AS SHOWN IN THE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. MAINLINE GUARDRAIL RUNS MAY BE REMOVED AT THE DIRECTION OF THE ENGINEER TO FACILITATE THE INSTALLATION OF CONCRETE BARRIERS. SEE SHEET *6 (BRIDGE *1) AND SHT.*6(BRIDGE *2). QUANTITIES MAY BE ADJUSTED BY THE ENGINEER DURING CONSTRUCTION. GUARDRAIL POSTS NEED ONLY BE REMOVED WHERE THEY INTERFERE WITH THE WORK OR ARE DETERIORATED AND REQUIRE REPLACEMENT. GUARDRAIL REMOVED SHALL BE REPLACED IN ITS ORIGINAL LOCATION.

FIELD ADJUSTMENTS TO APPROACH PROFILES

SEE STRUCTURAL GENERAL NOTE 6, SHEET 12 "BRIDGE DECK ELEVATIONS, SLAB THICKNESS AND APPROACH PROFILES"

REVISED 1-28-90 AS CONSTRUCTED

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

THE OHIO TURNPIKE COMMISSION	
BRIDGES OVER THE OHIO TURNPIKE AT STATE ROUTE 269 (BRIDGE *1) MILEPOST 106.8 & BILLINGS ROAD (BRIDGE *2) MILEPOST 108.7 GENERAL NOTES	
THE OSBORN ENGINEERING COMPANY CONSULTING ENGINEERS 668 EUCLID AVENUE CLEVELAND, OHIO 44114	
DESIGNED E.L. DRAWN J.W. CHECKED L.M. IN CHARGE D.S.	
DATE: 9/30/87	SCALE: AS SHOWN
FILE 43-86-12 (PART 2) FILE 43-86-16	SHEET 3 OF 28

BENCH MARK
PERMANENT MONUMENT ON
℄ O.T.C. STA. 37+00
ELEV. 708.25.

PROFILE
SCALE:
HORIZ. 1" = 20'
VERT. 1" = 5'

DRAINAGE

APPROACH	REFERENCE No.	STATION FROM	STATION TO	SIDE	604 CATCH BASIN	603 12" CONDUIT TYPE F	603 12" CONDUIT TYPE B 706.02	601 ROCK CHANNEL PROTECTION
					EACH	LIN. FT.	LIN. FT.	CU. YDS
S	D1	18+68.28	18+68.28	LT/RT	1		30	
S	D2	18+68.28	18+68.28	LT	1	54		
S	D3	18+68.28	—	LT				0.9
N	D4	21+31.72	21+31.72	LT/RT	1		30	
N	D5	21+31.72	21+31.72	LT	1	70		
N	D6	21+31.72	—	LT				0.9
					4	124	60	1.8

APPROACH	REFERENCE No.	STATION FROM	STATION TO	SIDE	202 GUARDRAIL REMOVED FOR REUSE	202 FENCE REMOVED	202 INLET REMOVED	202 GUARDRAIL REMOVED
					LIN. FT.	LIN. FT.	EACH	
S	R1	18+21.74	18+30.40	RT	75			
S	R2	18+20.77	18+95.77	LT	75			
N	R3	21+69.23	21+79.23	RT	75			
N	R4	21+09.51	21+78.26	LT	75			
S	R5	18+75	18+93	RT		~~49~~ 63		
S	R6	18+82	18+93	LT		~~68~~ 66		
N	R7	21+02	21+13	RT		~~42~~ 56		
N	R8	21+07	21+42	LT		74		
S	R9	18+93	—	RT			1	
S	R10	18+88	—	LT			1	
N	R11	21+13	—	RT			1	
N	R12	21+17	—	LT			1	
S	R13	17+10	17+67.5	LT				37.5
					300	~~234~~ 219	4	37.5

APPROACH	REFERENCE No.	STATION FROM	STATION TO	SIDE	203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	301 BITUMINOUS AGGREGATE BASE, AC-20	310 SUBBASE TYPE C GRADING A	402 ASPHALT CONCRETE AC-20	404 ASPHALT CONCRETE AC-20	609 CONCRETE CURB TYPE 2 (AS PER PLAN)	SP-611 PRIME CONC. APPROACH SLAB (T=10")	617 COMPACTED AGGREGATE	617 WATER	203 SUBGRADE COMPACTION	203 EMBANKEMENT	408 PRIME COAT
					CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	LIN. FT.	SQ. YDS.	CU. YDS.	M. GALS.	SQ. YDS.	CU. YDS.	GAL.
S	AS1	18+77.92	18+03.13	LT/RT	25.38 ~~79~~		9.87				~~55.5~~			~~57.2~~ 54.0		
N	AS2	21+06.87	21+22.08	LT/RT	25.38 ~~79~~		9.87				~~55.5~~			~~57.2~~ 54.0		
S	C1	18+61.78	18+75.28	RT						13.5	56.33					
S	C2	18+61.78	18+80.56	LT	39.22					18.78						
N	C3	21+19.44	21+22.08	RT						18.78						
N	C4	21+24.72	21+~~22.08~~ 00	LT	36.07	11.44				13.5				142.2		
S	F1	18+36	18+77.92	LT/RT	~~40.4~~ 41.4	~~15.1~~ 14	~~28.7~~ 116	~~17.6~~ 24.6	3.7					~~180.0~~ 180.0		~~54.4~~ 54.4
N	F2	21+~~22.08~~ 00	21+64	LT/RT	~~46.6~~ 63	~~20.5~~ 19	~~30.7~~ 122	~~10.8~~ 17	~~3.0~~ 3.7					~~186.3~~ 186.3		~~74.4~~ 74.4
S	G1	18+36	18+61.78	RT	37.07	11.44						0.9	0.02	142.2	0.25	
S	G2	18+36	18+61.78	LT								0.9	0.02		0.25	
N	G3	21+22.08	21+64	RT								1.4	0.03		0.25	
N	G4	21+22.08	21+64	LT								1.4	0.03		0.25	
					124.7 ~~106.4~~	22.9 ~~35.6~~	43.7 ~~72.4~~	14.9 ~~17.4~~	7.5 ~~8.7~~	.65	112.7 ~~111.6~~	4.6	0.10	490.5 ~~434.7~~	1.0	96.2 ~~126~~

APPROACH	REFERENCE No.	STATION FROM	STATION TO	SIDE	606 GUARDRAIL RESILIT 5 TYPE	606 BRIDGE TERMINAL ASSEMBLY TYPE-A	606 GUARDRAIL TYPE 5		SP-607 TEMPORARY FENCE (TYP) CONSTRUCTION W/ SPECIALS	SP-607 TEMPORARY GATE (24'-0)	607 FENCE TYPE-47	
					LIN. FT.	EACH			LIN. FT.	EACH	LIN. FT.	
S	F1	18+26	18+26	LT/RT					24	1		
S	F2	18+26	18+75	RT					62			
S	F3	18+26	18+82	LT					75			
N	F4	21+16	21+16	LT/RT					24	1		
N	F5	21+13	21+16	RT					71			
N	F6	21+42	21+16	LT					71			
S	F7	18+75	18+93	RT							~~49~~ 63	
S	F8	18+82	18+93	LT							~~68~~ 66	
N	F9	21+02	21+13	RT							~~42~~ 56	
N	F10	21+07	21+42	LT							~~74~~ 74	
S	GR1	18+21.74	18+30.40	RT	75	1						
S	GR2	18+20.77	18+95.77	LT	75	1						
N	GR3	20+99.23	21+79.23	RT	75	1						
N	GR4	21+09.51	21+78.26	LT	75	1						
S	GR5	17+10	17+67.5	LT			37.5					
					300	4	37.5		330	2	~~234~~ 219	

SEE GENERAL NOTES FOR NEW GUARDRAIL

REVISED 1-25-90 AS CONSTRUCTED

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

UTILITY SYMBOL LEGEND
P POWER POLE
T TELEPHONE POLE

THE OHIO TURNPIKE COMMISSION

STATE ROUTE 269 BRIDGE OVER THE OHIO TURNPIKE, (BRIDGE # 1), MILEPOST 106.8
PLANS, PROFILE AND QUANTITIES

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND OHIO 44114

DESIGNED J.A. | DRAWN L.B. | CHECKED L.H. | INCHARGE D.S.

DATE: 9/30/87 | SCALE: AS SHOWN

F.T.P. 43 - 89 - 18 | SHEET 1 OF 28

TYPICAL APPROACH SLAB SECTION
STA. 21+06.81 THRU 21+22.08 (NORTH APPROACH)
STA. 18+71.92 THRU 18+93.15 (SOUTH APPROACH)

APPROACH SLAB CURB DETAIL
(TO BE INCLUDED WITH ITEM SP-611 FOR PAYMENT)
SCALE 3/4"=1'0

SEWER PROFILE - NORTH APPROACH
STA. 21+34.72

SEWER PROFILE - SOUTH APPROACH
STA. 18+68.92
SCALE: 1" = 10'-0"

TYPICAL ROADWAY SECTION
STA. 21+22.08 THRU 21+64 (NORTH APPROACH)
STA. 18+36 THRU 18+71.92 (SOUTH APPROACH)

** EXISTING GRADE TO BE MAINTAINED

TYPICAL EXISTING ROADWAY SECTION

TYPICAL APPROACH SLAB END TREATMENT

ITEM		DESCRIPTION
1	202	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
2	404	1" ASPHALT CONCRETE, AC-20
3	402	2" ASPHALT CONCRETE, AC-20
4	301	3" BITUMINOUS AGGREGATE BASE
5	310	6" SUBBASE, TYPE-1, GRADING A
6	617	RECONDITIONED SHOULDERS, AS PER PLAN
7	606	GUARDRAIL, REBUILT, TYPE 5
8	SP611	CLASS "B" CONCRETE, APPROACH SLAB, USING SHRINKAGE COMPENSATING CEMENT (T-10")
9	609	CONCRETE CURB, TYPE 6, AS PER PLAN
10	659	SEEDING AND MULCHING
11	203	SUBGRADE COMPACTION
12	408	PRIME COAT

		DESCRIPTION
E1	EXISTING	1 1/2" ASPHALT WEARING COURSE
E2	EXISTING	5" WATERBOUND MACADAM BASE
E3	EXISTING	6" COMPACTED SUBBASE
E4	EXISTING	STONE UNDERDRAINS
E5	EXISTING	SLAG SHOULDERS
E6	EXISTING	EXISTING TYPE 5 GUARD RAIL TO BE REMOVED FOR REUSE

PAVEMENT-ELEVATION TABLE
BRIDGE, MILEPOST 10.8

STATION	ELEVATION (SOUTH APPROACH) A	P/G	B	STATION	ELEVATION (NORTH APPROACH) A	P/G	B
18+30.00	727.50	728.05	727.70*				
18+50.00	728.04	728.35	728.04	21+04.33			728.15
18+75.92			728.44	21+09.87		728.40	
18+71.92		728.69		21+09.51	728.15		
18+80.56	728.47			21+19.46			727.99
18+90.69			728.57	21+25.08		728.21	
18+93.15		728.52		21+34.72	727.95		
18+95.71	728.60			21+50.00	727.72	727.91	727.72
				21+64.00	727.65	727.87	727.59

* EXISTING GRADE

REVISED 1-28-90 AS CONSTRUCTED
THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VERIFY INFORMATION TAKEN FROM THIS DRAWING

THE OHIO TURNPIKE COMMISSION
STATE ROUTE 2-20 BRIDGE OVER THE OHIO TURNPIKE, (BRIDGE # 10), MILEPOST 10.8
TYPICAL SECTIONS, DRAINAGE DETAILS AND PAVEMENT ELEVATIONS

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114
DESIGNED W.A.J. DRAWN J.K.S. CHECKED J.A.N. IN CHARGE W.S.
DATE 12/30/87 SCALE: AS SHOWN
F.T.P. 43 - 89 - 18 SHEET 5 OF 28

GENERAL PLAN

WEST ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTRUCTURE	ABUTMENTS	PIERS	GENERAL
SP202	LUMP	LUMP	PORTIONS OF STRUCTURES REMOVED				LUMP
202	354	SQ.YD.	WEARING COURSE REMOVED, AS PER PLAN	354			
503	14	CU.YD.	ABUTMENT BACKFILL, AS PER 503:10		14		
510	10	LIN.FT.	DOWEL HOLES, USING SP853 GROUT ANCHORING *		10		
503	3	CU.YD.	UNCLASSIFIED EXCAVATION, AS PER PLAN				
SP511	1	CU.YD.	CLASS C CONCRETE, ABUTMENTS		1		
SP511A	216	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS, USING SHRINKAGE COMPENSATING CEMENT	216			
SP511A	35	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT		35		
SP513	830	EACH	WELDED STUD SHEAR CONNECTORS	830			
SP514	167	SQ.FT.	FIELD PAINTING OF EXISTING STRUCTURAL STEEL	167			
SP514	907	SQ.FT.	SURFACE PREPARATION-TOP FLANGE OF EXISTING BEAMS	907			
516	6	EACH	LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE, AS PER PLAN (E1)			6	
516	10	EACH	LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE, AS PER PLAN (E2)			10	
516	4	EACH	LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE, AS PER PLAN (E3)			4	
SP519	670	SQ. FT.	PATCHING CONCRETE STRUCTURES			670	
SP527	LUMP	LUMP	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP
SP529	26	EACH	TRIM ENDS OF STRUCTURAL STEEL MEMBERS	18	8		
SP533	65.5	LIN.FT.	3" CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT	65.5			
SP533A	65.5	LIN.FT.	2" ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT	65.5			
SP536	1315	SQ.YD.	CONCRETE WEATHERPROOFING	1086	118		111
* SP607(1)	425	LIN.FT.	TYPE II FENCE (6'-0" CHAIN LINKS WITH SPECIALS)				
* SP607(1)	425	LIN.FT.	TYPE II FENCE, ALL ALUMINUM (6'-0" CHAIN LINK WITH SPECIALS)				
SP824	60,016	LBS.	EPOXY COATED REINFORCING STEEL, GRADE 60	46,990	6,026		

BENCH MARK

PERMANENT MONUMENT

STA. 37+00 CL. OHIO TURNPIKE

ELEVATION 708.25

NOTES:

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

DESCRIPTION	QUANTITY
CONCRETE (SUPERSTRUCTURES)	171 C.Y.
CONCRETE (ABUTMENTS)	30 C.Y.
RAILING	432 L.F.
SCUPPERS INCLUDING DOWNSPOUT REMOVAL TO NEW CONCRETE CAP	4 EA.
TIE PLATES AT PIERS	10 EA.
ASPHALT WEARING COURSE REMOVED (ABUTMENT SLABS AND END SPANS)	311 S.Y.
DRAINAGE DEFLECTORS INTERIOR	8 EA.
DRAINAGE DEFLECTORS EXTERIOR	4 EA.

DRAIN PIPE CAP DETAIL

(Include with Item SP202, Portions of Structures Removed, for payment)

* THIS QUANTITY HAS BEEN INCLUDED IN THE SUMMARY FOR REPLACEMENT OF DETERIORATED DOWELS AS DIRECTED BY THE ENGINEER

EXISTING STRUCTURE

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

SPANS: 28'-1.63", 66'-4.75", 66'-4.75" AND 28'-1.63"

ROADWAY: 28'-0" FACE TO FACE OF SAFETY CURBS

LOADING: CF 30

SKEW: 9 DEGREES AND 26 MINUTES, SEE PLAN

WEARING COURSE: 3/4" MONOLITHIC CONCRETE

ALIGNMENT: TANGENT

MODIFIED STRUCTURE

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

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

ROADWAY: 31'-10 FACE TO FACE OF PARAPET

LOADING: HS-20-44 CASE II WITH A 30 PSF FUTURE WEARING COURSE

WEARING COURSE: 1/2" MONOLITHIC CONCRETE

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

NOTES

1. FENCE POSTS SHALL NOT BE SET CLOSER THAN 8" FROM ANY PARAPET DEFLECTION JOINT.
2. THE CONTRACTOR SHALL GIVE SPECIAL ATTENTION TO FENCE ANCHOR STUD PROJECTION ABOVE TOP OF PARAPET. PROVIDE FOR BASE PLATE THICKNESS, WASHER THICKNESS, AND A POSITIVE "STICK THROUGH" AT END OF STUD.

REVISED 1-25-90 AS CONSTRUCTED

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

(1) SEE PROPOSAL

THE OHIO TURNPIKE COMMISSION

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

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114

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

PART 2

NOTE:

1. CONCRETE INSERT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1, AND GR-3, SHALL BE PROVIDED AT ALL WINGWALL TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS, INCLUDE WITH ITEM SP 511 A FOR PAYMENT
2. FOR ADDITIONAL DETAILS SEE STD. DWG. BR-1
3. FOR REINFORCEMENT SCHEDULE, SEE SHEET 17

REVISED 1-25-90 AS CONSTRUCTED

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THE OHIO TURNPIKE COMMISSION	
STATE ROUTE 269 BRIDGE OVER THE OHIO TURNPIKE, (BRIDGE # 1) MILEPOST 106.8 ABUTMENT SLAB PLANS, SECTIONS AND DETAILS	
THE OSBORN ENGINEERING COMPANY CONSULTING ENGINEERS 668 EUCLID AVENUE CLEVELAND, OHIO 44114	
DESIGNED J.A. DRAWN L.B. CHECKED L.H. IN CHARGE D.S.	
DATE: 9/30/87	SCALE: AS SHOWN
F.T.P. 43 - 89 - 18	SHEET 14 OF 28

SAWCUTS
#1 REPAIRED BY WELDING
#2 REPAIRED BY WELDING
#3 REPAIRED BY GRINDING
#4 REPAIRED BY BOLTED FLANGE SPLICE
#5 REPAIRED BY BOLTED FLANGE SPLICE
#6 REPAIRED BY GRINDING
#7 REPAIRED BY GRINDING

E1, E2, ES = NEW LAMINATED ELASTOMERIC EXPANSION BEARING.

FRAMING PLAN
(EXISTING STEEL)

ALL DIAPHRAGMS IBC 42.7

T.E. = TRIM ENDS OF THESE BEAMS AND INCLUDE FOR PAYMENT WITH ITEM SP529, TRIM ENDS OF STRUCTURAL STEEL MEMBERS.

ELASTOMERIC EXPANSION BEARING.

ELEVATION, SPAN 4 (AS SHOWN)
ELEVATION, SPAN 1 (OPPOSITE HAND)

SECTION D-D

SLAB DETAIL AT BEAM ENDS

SECTION 1-1 & SECTION 2-2
N.T.S.

STUD SPACING DETAIL (BEAMS "A" THRU "E")

TYPICAL BEARING PLAN AT PIERS #1 & #3

Ti = THICKNESS OF INTERNAL ELASTOMER LAYER
Te = THICKNESS OF EXTERNAL ELASTOMER LAYER

ELASTOMERTIC BEARING SCHEDULE									
TYPE.	W	L	T	A	B	C	D	ti	te
E1	8½"	8"	1¼"	8"	¾"	4"	5"	0.185"	0.132
E2	11½"	11½"	1⅜"	8"	¾"	4"	5"	0.185"	0.132
E3	8½"	8"	1¼"	8"	2¼"	4"	5"	0.185"	0.132

LOADS ON BEARINGS.	DEAD LOAD	LIVE LOAD	TOTAL LOAD
E1	14 K	37 K	51 K
E2	27.0 K	44.5 K	71.5 K
E3	14 K	37 K	51 K

PROCEDURE FOR THE REPLACEMENT OF THE EXISTING EXPANSION ROCKER BEARINGS AT THE NORTH AND SOUTH PIERS WITH NEW LAMINATED ELASTOMERIC EXPANSION BEARING PADS **

1. AFTER THE EXISTING SLAB IS REMOVED, REMOVE THE NUTS AT THE EXISTING BEAMS AT THE NORTH AND SOUTH PIERS, AND JACK ADJACENT BEAMS SIMULTANEOUSLY AND SUPPORT THE BEAMS OFF TEMPORARY SUPPORTS DURING THE REPLACEMENT OPERATION. BEARING REPLACEMENT OPERATIONS SHALL BE LIMITED TO ONE END AT A TIME FOR CONTINUOUS BEAMS.
2. REMOVE THE EXISTING EXPANSION SOLE PLATES, THE EXISTING MASONRY PLATE AND THE EXISTING GROUT PADS TO MINIMUM OF 1/2" BELOW THE NEW ELASTOMERIC EXPANSION BEARING PADS AT THE PIERS OR TO SOUND CONCRETE AS DIRECTED BY THE ENGINEER. BURN OFF THE EXISTING ANCHOR BOLTS. EXISTING WELDS SHALL BE REMOVED BY THE AIR ARC PROCESS.
3. INSTALL A NEW VARIABLE HEIGHT, 1/2" MINIMUM, GROUT PAD UNDER THE NEW ELASTOMERIC EXPANSION BEARING PADS. UNDER ALL EXISTING BEAMS DESIGNATED ON THE PLAN ABOVE INSTALL NEW ELASTOMERIC EXPANSION BEARING PADS AT THE NORTH AND SOUTH PIERS. SEE PLAN FOR TYPE AND SCHEDULE FOR DIMENSIONS. GROUT SHALL BE SIKA 212 OR EQUAL.
4. REMOVE THE TEMPORARY SUPPORTS AND LOWER ALL EXISTING BEAMS INTO PLACE ON TOP OF THE NEW ELASTOMERIC EXPANSION OR FIXED BEARING PADS WITH JACKS AND WELD THE BOTTOM FLANGE TO THE LOAD PLATE. WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMERIC BONDED SURFACE DOES NOT EXCEED 300 DEGREES F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER APPROVED TEMPERATURE MONITORING DEVICES.
5. ALL THE ABOVE ITEMS WILL BE PAID FOR AS PART OF ITEM S16,
   * LAMINATED ELASTOMERIC EXPANSION BEARING PADS, COMPLETE, AS PER PLAN *=SEE SCHEDULE FOR BEARING PAD DIMENSIONS.

** ALSO SEE GENERAL NOTE #13 ON SHEET 12 OF 28

SECTION F-F

SLAB DETAIL AT PIER 1 (AS SHOWN.) AND PIER 3 (OPPOSIDE HAND)

NOTES:

INSTALLATION OF STRIP AND COMPRESSION SEALS
DURING THE INSTALLATION OF SUPPORT STEEL ON THE SUPERSTRUCTURE SIDE OF STRIP OR COMPRESSION SEALS THE SEATING ON SUPPORT DIAPHRAGMS SHALL BE CAREFULLY PLACED TO ASSURE THAT PROPER BEARING IS MAINTAINED. THE PROPER VERTICAL FIT OF THE SUPPORT STEEL SHALL BE ACHEIVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN PULLING THE ANGLES IN PLACE BY USE OF CLAMPING OR PULLING FORCE.

WELDED ATTACHMENTS
WELDED ATTACHMENTS FOR SUPPORTS FOR CONCRETE DECK FINISHING MACHINE OR ANY OTHER PURPOSE IS PROHIBITED. ONLY THOSE WELDS SHOWN ON THE PLANS FOR ATTACHMENT OF SHEAR STUDS CONNECTORS, BEARINGS AND STIFFNERS SHALL BE PERMITTED.

SHEAR CONNECTORS
WELDED SHEAR CONNECTORS SHALL CONFORM TO AASHTO M169 AND SP513.

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

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

ELEVATION OF SOUTH ABUTMENT
N.T.S.

SECTION E-E
N.T.S.

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

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

REVISED 1-25-90 AS CONSTRUCTED
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TOLERANCES:

INDIVIDUAL ELASTOMER LAYER THICKNESS:	± 20% OF DESIGN VALUE (NOT TO EXCEED ± ⅛")
PLAN DIMENSIONS	-0, + ⅛"
DESIGN THICKNESS ≤ 1½"	-0, + ⅛"
DESIGN THICKNESS > 1½"	-0, + ¼"
EDGE COVER OF EMBEDDED LAMINATES	-0, + ⅛"

THE OHIO TURNPIKE COMMISSION

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

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114

DESIGNED J.A.	DRAWN L.B.	CHECKED L.H.	IN CHARGE D.S.
DATE: 9/30/87		SCALE: AS SHOWN	
F.T.P. 43 - 89 - 18		SHEET 15 OF 28	

DECK PLAN

NOT TO SCALE

TYPICAL PARAPET UNIT

NUMBER OF PARAPET UNITS	LENGTH (L)	BAR MARK	NUMBER OF ES 507 PER UNIT.
16	12'-0 15/16"	ES 508	9
8	12'-1 1/8 OR 12'-1 3/16"	ES 509	9
12	6'-0"	ES 510	5
4	5'-0"	ES 511	4

DEAD LOAD DEFLECTION (INCHES)				
	SPAN 1 & 4	SPAN 2 & 3		
BEAMS	1/2 SPAN	1/4 SPAN	1/2 SPAN	FIELD SPLICE
A & E	1/16"	7/16"	1/2"	9/16"
B, C, D	3/16"	7/16"	9/16"	1/4"

REQUIRED LAP LENGTHS (EXCEPT AS NOTED)		
NO. 4 BARS	=	1'-6" MINIMUM
NO. 5 BARS	=	1'-10" MINIMUM
NO. 6 BARS	=	2'-2" MINIMUM

TYPICAL BARRIER

NO SCALE.

TOP OF FINAL PAVEMENT ELEVATION (TOP OF DECK ELEVATIONS)												
	SPAN 1		SPAN 2				SPAN 3			SPAN 4		
BEAM	℄ BRG. S. ABUT.	1/2 SPAN	℄ BRG. PIER 3	1/4 SPAN	1/2 SPAN	FIELD SPLICE	℄ BRG. PIER 2	FIELD SPLICE	1/2 SPAN	3/4 SPAN	℄ BRG. PIER 1	1/2 SPAN	℄ BRG. N. ABUT.
A	728.71	728.79	728.86	728.91	728.94	728.94	728.92	728.87	728.79	728.69	728.56	728.44	728.29
B	728.81	728.90	728.96	729.02	729.05	729.05	729.03	728.98	728.91	728.81	728.68	728.56	728.41
C	728.91	729.00	729.07	729.12	729.16	729.16	729.14	729.09	729.02	728.93	728.80	728.68	728.54
D	728.80	728.88	728.95	729.01	729.04	729.05	729.03	728.99	728.92	728.82	728.70	728.58	728.44
E	728.68	728.77	728.84	728.90	728.93	728.94	728.92	728.88	728.81	728.72	728.60	728.48	728.34

NOTES:

1. THE DEFLECTION JOINTS IN THE BARRIER CURB MAY BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GREY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M-153, TYPE 1, EXCEPT THE DENSITY OF THE PVC SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CU. FT.. INCLUDE WITH ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT FOR PAYMENT.
2. THE BRIDGE DECK INCLUDING BARRIERS SHALL BE WATER CURED IN ACCORDANCE WITH SP511A
3. FOR REINFORCEMENT SCHEDULES, SEE SHEET 17
4. THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. BEFORE THE CONCRETE IS PLACED PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.

SECTION 1-1

NO SCALE.

TYPICAL CROSS SECTION A-A

REVISED 1-25-90 AS CONSTRUCTED

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THE OHIO TURNPIKE COMMISSION

STATE ROUTE 269 BRIDGE OVER THE OHIO TURNPIKE, (BRIDGE # 1), MILEPOST 106.8
DECK PLAN, TYPICAL SECTIONS AND PAVEMENT ELEVATIONS

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114

DESIGNED J.A. DRAWN L.B. CHECKED L.H. IN CHARGE D.S.

DATE: 9/30/87 SCALE: AS SHOWN

F.T.P. 43 - 89 - 18 SHEET 16 OF 28

MARK	Nº	LENGTH	TYPE	SER. INC.	WEIGHT (LBS)
SUPERSTRUCTURE					
ES401	80	10'-6"	101		561
ES402	160	30'-0"	STR.		3206
ES403	39	43'-0"	STR.		1120
ES404	160	16'-0"	101		1710
ES501	309	33'-8"	STR.		10850
ES502	168	30'-0"	STR.		5257
ES503	42	20'-0"	STR.		876
ES504	84	28'-11"	STR.		2533
ES505	262	3'-2	103		865
ES506	262	2'-4½"	102		649
ES507	292	5'-3"	104		1599
ES508	64	11'-9"	STR.		784
ES509	32	11'-9"	STR.		392
ES510	48	5'-8"	STR.		284
ES511	16	4'-4"	STR.		72
ES601	321	33'-8"	STR.		16,232
				TOTAL	46,990
SOUTH ABUTMENT					
EB501	10	3'-10"	STR.		40
EB502	4	9'-6"	STR.		40
				TOTAL	80

ABUTMENT PLAN BRIDGES #1 AND #2
(SLAB REMOVED)
3/16" = 1'-0"

	STATE ROUTE 269	BILLINGS ROAD
U	1'-3"	1'-2"
W	#5 @ 2'-0"	#6 @ 12"
X	1'-0"	8"

ELEVATION "1-1"
3/16" = 1'-0"

	STATE ROUTE 269	BILLINGS ROAD
Y	6"	0
Z	#5 @ 2'-0"	#5 @ 12"

SECTION "2-2"
3/8" = 1'-0"

SECTION "3-3"
3/8" = 1'-0"

NOTES:

1. EXISTING RAILING SHALL BE REMOVED AND DISPOSED OF.
2. ▨ — INDICATES LIMIT OF REMOVAL.

DECK SECTION "A" TYPICAL BRIDGE #1

REMOVE EXISTING ASPHALT WEARING COURSE, SEE GENERAL NOTE #14, SHEET 12.

DECK SECTION "B" TYPICAL BRIDGE #2

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

SECTION "5-5"
3/4" = 1'-0

EXTERIOR PLATE

INTERIOR PLATE

EXISTING DEFLECTOR PLATE DETAILS

* PAYMENT FOR THIS ITEM INCLUDED IN ITEM SP202, PORTIONS OF STRUCTURES REMOVED.

BRIDGES	ABUTMENT	ITEM	ABUTMENT SLAB REMOVAL DIMENSIONS
STATE ROUTE 269	NORTH SIDE	A	12'-0"
		B	12'-0"
		C	1'-3"
		D	11'-9"
	SOUTH SIDE	A	12'-0"
		B	12'-0"
		C	1'-3"
		D	11'-9"
BILLINGS ROAD	NORTH SIDE	A	11'-11 13/16"
		B	11'-7 9/16"
		C	1'-3"
		D	9'-7"
	SOUTH SIDE	A	11'-7 9/16"
		B	11'-11 13/16"
		C	1'-3"
		D	9'-7"

REVISED 1-25-90 AS CONSTRUCTED

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

THE OHIO TURNPIKE COMMISSION

TWO BRIDGES OVER THE OHIO TURNPIKE AT MILEPOSTS 106.8 AND 108.7
DEMOLITION PLANS AND SECTIONS

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114

DESIGNED E.L. | DRAWN J.W. | CHECKED L.H. | IN CHARGE D.S.

DATE: 9/30/87 | SCALE: AS SHOWN

F.I.P. 43-89-18 / F.I.P. 43-89-17 PART 2 | SHEET 23 OF 28

PLAN

APPROACH SLAB FOR SKEWED BRIDGE

SECTION A-A

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

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

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

APPROACH SLAB SEAT REPAIR DETAIL

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 I GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.

REVISED 1-25-90 AS CONSTRUCTED

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

Nº	REVISION	BY	DATE
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.

FTP 43-89-18
CLP 43-89-17 PART 2

SHEET 25 OF 28

PLAN - SKEW ANGLE < 10°
(Strip Seal Shown, Compression Seal Similar)
Scale: ¾"= 1'-0"

PLAN - SKEW ANGLE 10° TO 45°
(Strip Seal Shown, Compression Seal Similar)
Scale: ¾"= 1'-0"

PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)
Scale: ¾"= 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.

ALL WELDING SHALL CONFORM WITH A.W.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

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

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

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

TABLE A

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

ABUTMENT — SUPERSTRUCTURE

TABLE B

	SKEW ANGLE	
	< 10°	10° - 45°
d	3/4" MIN.	3/4"
X	6 13/16"	8 3/8"

ABUTMENT — SUPERSTRUCTURE

NOTE: For joint details in sidewalk see sheet #__

Detail A
Scale ¼" = 1"

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

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

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

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

SECTION C-C
No Scale

SECTION D-D
Scale: 1½"= 1'-0"

SECTION E-E
No Scale

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

REVISED 10-87

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1985	SCALE: AS NOTED
CIP 43-89-17 PART 2 FTP 43-89-18	SHEET 26A OF 28