CONTRACT NO. C- 35
COUNTY - SANDUSKY
DATE:

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-12

CONTRACT NO. C-35

TURNPIKE CONSTRUCTION CONTRACT

STATION 985+97 TO STATION 1219+39

LOCATION PLAN
(FROM SANDUSKY COUNTY MAP)

0 1 2 3 4
SCALE IN MILES

APPROVAL RECOMMENDED
BROWN & BLAUVELT
CONTRACTING ENGINEER
Harold A Blauvelt
Mar 6, 1953

APPROVED
J. E. GREINER CO.
CONSULTING ENGINEER
J. E. Greiner Jr
5-25-53

APPROVED
OHIO TURNPIKE COMMISSION
CHIEF ENGINEER
5-29-53

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LATEST REVISION DATE		
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NO.	REVISION	BY	DATE
2	AS-BUILT PLANS		Feb 59
1	Deleted sheet no. 19	HGN	10-6-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

LIST OF DRAWINGS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: DRAWN: CHECKED: HGN IN CHARGE: DATE: March 6, 1953 SCALE: None

CONTRACT NO. C- 35 SHEET 1 OF 59

22M-12
1-89

CIVIL

ALL ELEVATIONS REFER TO THE U.S.C. & G.S. MEAN SEA LEVEL DATUM.

ALL CO-ORDINATES AND BEARINGS SHOWN ON THE PLANS ARE BASED ON THE LAMBERT CONFORMAL CONIC PROJECTION FOR THE STATE OF OHIO - NORTH ZONE.

THE THEORETICAL TURNPIKE GRADE LINE AS SHOWN ON THE PLANS REPRESENTS THE CENTER LINE OF BOTH TURNPIKE ROADWAYS PROJECTED TO THE CENTER LINE OF THE TURNPIKE.

LINES AND GRADES OF NEW PAVEMENTS WILL BE ADJUSTED TO MEET EXISTING PAVEMENTS AS DIRECTED BY THE ENGINEER.

THE PLANS PROVIDE FOR THE PERFORMANCE OF CERTAIN WORK, SUCH AS THE RELOCATION OF STREAMS, GRADED AREAS, ETC., OUTSIDE THE ESTABLISHED OHIO TURNPIKE AND/OR PUBLIC RIGHTS OF WAY. THE CONTRACTOR SHALL NOT ORDER MATERIALS NOR PROCEED WITH THIS WORK UNTIL SPECIFICALLY AUTHORIZED TO DO SO BY THE ENGINEER.

UTILITY

LOCATIONS OF EXISTING UTILITIES PUBLIC AND/OR PRIVATE AND FIELD TILE DRAINAGE AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

MAINTENANCE OF TRAFFIC

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

CAST-IN-PLACE CONCRETE PILES

PILES DRIVEN WITHOUT CORE OR MANDREL SHALL HAVE FORGED STEEL OR CAST STEEL POINT 8" DIAMETER. PILES SHALL TAPER 1" IN 7'-0" FIRST THIRTY FEET OF LENGTH FROM TIP, THEN 5/8" IN 20'-0" TO BUTT. SHELLS SHALL HAVE SUFFICIENT STRENGTH TO WITHSTAND DRIVING BUT SHALL NOT BE LESS THAN 11 GAUGE. UPPER THIRD OF PILE SHALL BE REINFORCED WITH 6#4 BARS WHICH SHALL BE EXTENDED 1'-3" ABOVE THE CUT-OFF, AND #2 TIES 12" O.C. SPLICES SHALL BE OF ADEQUATE STRENGTH AND APPROVED BY THE ENGINEER

PILES DRIVEN WITH CORE OR MANDREL SHALL HAVE FORGED OR CAST STEEL POINT. PILES 37' AND LESS IN LENGTH SHALL HAVE 8" DIAMETER TIP AND TAPER 1" IN 2'-6". PILES OVER 37' LONG SHALL HAVE 8-5/8" DIAMETER TIP AND SHALL BE STEP TAPERED 1" IN 8'-0". CASINGS SHALL BE OF SUFFICIENT STRENGTH TO RESIST EARTH PRESSURE. UPPER HALF OF PILE SHALL BE REINFORCED WITH 6#6 BARS WHICH SHALL EXTEND 1'-3" ABOVE CUT-OFF, AND #2 TIES 12" O.C.

ADEQUATE PROVISIONS SHALL BE MADE TO INSURE THAT A MINIMUM CLEARANCE OF 1 1/2" SHALL BE MAINTAINED BETWEEN THE REINFORCEMENT AND THE PILE SHELL. ALTERNATE DESIGNS OF CAST-IN-PLACE CONCRETE PILES MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

LANDSCAPING

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

BONEMEAL (ITEM L-3) SHALL BE APPLIED AT THE RATE OF 20 LBS. PER ONE THOUSAND (1000) SQ. FT. AND THOROUGHLY INCORPORATED INTO THE SUBGRADE BEFORE THE TOPSOIL HAS BEEN PLACED.

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

COMMERCIAL FERTILIZER 10-6-4 (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 20 LBS. PER ONE THOUSAND SQ. FT. AND THOROUGHLY INCORPORATED INTO THE TOPSOIL.

SEEDING & PROTECTING (ITEM L-9) AND SEEDING & MULCHING (SPECIAL SEEDING, ITEM L-19) SHALL BE DONE ONLY BETWEEN APRIL 15 & JUNE 15, AND FROM AUGUST 15 & OCTOBER 15, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

SPECIFICATIONS

THIS PROJECT SHALL BE CONSTRUCTED UNDER THE FOLLOWING SPECIFICATIONS:

a) OHIO TURNPIKE PROJECT NO.1, GENERAL SPECIFICATIONS, DATED DECEMBER 9, 1952.

b) SPECIAL PROVISIONS FOR CONTRACT C-35

c) SUPPLEMENT SPECIFICATIONS B-20, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS I-18, DATED MAY 28, 1953
SUPPLEMENT SPECIFICATIONS T-30, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS I-29, DATED MAY 28, 1953
SUPPLEMENT SPECIFICATIONS T-35, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS A-5, DATED AUGUST 7, 1953
SUPPLEMENT SPECIFICATIONS B-21, DATED FEBRUARY 20, 1953
SUPPLEMENT SPECIFICATIONS T-31, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS B-35, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS I-9, DATED DECEMBER 9, 1952
SUPPLEMENT SPECIFICATIONS I-30, REV. JULY 9, 1953

LEGEND

SURVEY BASE LINE (630, P.I.)
EXISTING PROPERTY LINE (PL.)
EXISTING FENCE LINE (Fence is PL.)
EXISTING PROPERTY LINE (FENCED)
EXISTING R/W LINE
PROPOSED R/W LINE
EXISTING FARM TILE DRAINAGE
PROPOSED FARM DRAINAGE COLLECTOR (6")
PROPOSED DROP INLET
PROPOSED TILE LINE BREATHER
PROPOSED DITCH AND ELEVATION (Ditch El. 524.2)
PROPOSED GUARD RAIL (FOR TYPE SEE PLANS)
PROPOSED MONUMENT
PROPOSED TILE LINE JUNCTION BOX

STRUCTURAL

DESIGN SPECIFICATIONS & LOADINGS

STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE LATEST REVISION OF THE OHIO HIGHWAY DEPARTMENT "DESIGN SPECIFICATIONS FOR HIGHWAY STRUCTURES."

STRUCTURAL STEEL

15/16" DIAMETER OPEN HOLES AND 7/8" DIAMETER RIVETS UNLESS NOTED.

NO CAMBER IS REQUIRED FOR STEEL BEAMS UNLESS NOTED ON THE DESIGN DRAWINGS BUT ALL BEAMS SHALL BE CHECKED FOR STRAIGHTNESS AND PLACED IN THE STRUCTURE SO THAT ANY CURVATURE WILL GIVE CAMBER. IN GENERAL THIS MEANS THAT ALL BEAMS WILL BE PLACED WITH THE CONVEX SIDE UP WITH THE EXCEPTION OF SHORT BEAM SECTIONS OVER THE SUPPORTS OF CONTINUOUS STRUCTURES WHICH SHOULD BE PLACED WITH THE CONCAVE SIDE UP.

ALL EXPANSION SHOES SHALL BE SET VERTICAL FOR 50° TEMPERATURE. THE SHOES AND EXPANSION DAMS SHALL BE SET IN CORRECT POSITION FOR TEMPERATURE AT TIME OF ERECTION.

ALL BEAM SPLICES SHALL BE ASSEMBLED IN THE SHOP AND REAMED AS SPECIFIED FOR FIELD CONNECTIONS.

WHEN STEEL EXCEEDING ONE INCH IN THICKNESS IS TO BE WELDED, ELECTRODES OF CLASSIFICATION NUMBER E6015 OR E6016 SHALL BE USED.
ALL WELDING SHALL BE CLASS "A".
FOR SPANS WITHOUT HINGED BEARINGS ON AN INCLINED GRADE OF 1% OR MORE THE SOLE PLATES SHALL BE BEVELED SO THAT THE SUBSTRUCTURE BRIDGE SEATS MAY BE LEVEL.

CONCRETE

ALL CONCRETE SHALL BE CLASS "C".

ATTENTION IS DIRECTED TO THE ANCHOR BOLTS REQUIRED FOR ATTACHING HAND RAILS AND GUARD RAILS TO THE PARAPETS OF THE STRUCTURES.

THE SEQUENCE OF DECK SLAB POURS SHALL BE AS SHOWN ON THE DESIGN DRAWINGS. NOT MORE THAN 36 HOURS SHALL ELAPSE BETWEEN ADJACENT POURS.
THE FINISH ON THE TURNPIKE OVER STRUCTURES SHALL BE MACHINE FINISH

SUBSTRUCTURES

THE ENTIRE FILL SHALL BE PLACED BEFORE EXCAVATING FOR THE ABUTMENTS.

NO.	REVISION	BY	DATE
3	[illegible]		Feb 58
2	Rev. breather & junct. box symbols	HSN	12-4-53
1	Rev. suppl. spec. data	HSN	10-6-53

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

GENERAL NOTES & LEGEND

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: CHECKED: L.A. & HSN DATE: March 6, 1953
DRAWN: IN CHARGE: SCALE: None

CONTRACT NO. C- 35 SHEET 2 OF 59

MAINTENANCE OF TRAFFIC

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

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

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

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

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

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

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

———— Denotes Traffic Detour Routing

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

NO.	REVISION	BY	DATE
	AS-BUILT PLANS		12-30-58
1	Add. Str. 31A ; rev detour routing ; rev. & add. notes	HSN	12-4-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

MAINTENANCE OF TRAFFIC

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: DRAWN: L.A.
CHECKED: L.A. & HSN
IN CHARGE: [illegible]
DATE: March 6, 1958
SCALE: No Scale

CONTRACT NO. C-35 SHEET 3 OF 59

REFERENCE NUMBER	SPEC. ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS 5	6 +18 +20	7	9	10 +28	12	13 +34	14	15	17			8	11 +33	16		TOTALS	PROPOSAL QUANTITIES
		ROADWAY																			
1	E-1	Roadway Excavation	C.Y.	1959	16,639	13,323	51,590	50283	17,331	10436	179881	327623	15963			4,842	2804	7330		700,224	700,200
2	E-4	Borrow	C.Y.							10,702										10,702	10,700
3	E-11	Water	M.G.	164	164.7	570.8	68.9	676	612.8	2886.5	146	5.0	0.1			298.6	275.3			4981.3	4,980
4	E-12	Pipe Removed (Under 16")	L.F.		55							30				35	25			145	145
5	I-15	Guard Rail, Type A	L.F.			237.0		59.0		310.5	280	220				269.0				9,255	9,260
6	I-15	Guard Rail, Type B	L.F.		380				160.0	201.0								440		4,430	4,430
7	I-15	Guard Rail, Type C-2 or C-1	L.F.															500		500	500
8	I-15	Guard Rail, Type D-1 or D-2	L.F.														195.5			195.5	196.0
9	I-23	Right-of-Way Fence, Type 2	L.F.	820	567.5	572.0	563.0	564.0	577.0	569.0	576.0	579.0	113.0							4,762.5	4,763.0
10	I-25	Permanent Barricade	L.F.		40							144								184	180
11	I-26	Permanent Monuments	Ea.	1	1	2	1	2	1	2	1	3								14	14
12	I-28	Temporary Cattle Fence	L.F.																	250	250
13	L-3	Placing Stock Piled Topsoil	S.Y.	2311	16467	15186	15620	14826	15673	14045	14873	15089	2910			2684	1999			131,688	131,700
14	L-3	Bonemeal & Raw Bone	Ton	0.21	1.50	1.37	1.41	1.33	1.41	1.26	1.34	1.36	0.26			0.24	0.18			11.87	12
15	L-6	Roadside Cleanup	L.S.																	Lump	Lump
16	L-9	Seeding and Protecting Type A	S.Y.	2311	16467	15186	15620	14826	15673	14045	14873	15089	2910			2684	1999			131,688	131,700
17	L-9	Commercial Fertilizer 10-6-4	Ton	0.21	1.50	1.37	1.41	1.33	1.41	1.26	1.34	1.36	0.26			0.24	0.18			11.87	12
18	L-9	Agricultural Ground Limestone	Ton	1.04	7.41	6.83	7.03	6.67	7.05	6.32	6.69	6.79	1.31			1.20	0.90			59.24	60
19	L-19	Seeding and Mulching (Special Seeding)	S.Y.	5404	32100	39329	37013	33118	37967	49377	47895	38411	7046			18999	20722			387,581	387,600
20	L-12	Pipe Removed (16" and Larger)	L.F.		45												30			75	75
21		Remove Existing Structure - Pearson Rd. (Streambridge over Fuller Creek)	L.S.																	Lump	Lump
		DRAINAGE INCLUDING STRUCTURES (BOX CULVERTS)		29+	29+32	34+36, 4+5 Sta.		100+50, Fuller Rd		101+75 (40 Rt.), 23+00 (75 Rt.), Pearson Rd						15+30, 101+58, Wobser Rd		23+75, 113+10 respec.			
51	E-2	Excavation for Structures	C.Y.		1439	63	45	3649	401	3918	312	278	30							11,497	11,500
52	E-3	Excavation for Channels	C.Y.		1190			1960									14,394			17,544	17,550
53	I-2	15" S.S. Reinf. Conc. Culvert Pipe	L.F.			262	132	156	68	120										738	740
54	I-2	18" Paved Invert Bitum. Coated C.M.P. #12 Ga.	L.F.		202	78	134	126	226	68	196	192	62							1,284	1,280
55	I-5	Pipe Special - 30° 18" Pvd. Inv. C.M.P. Bend #12 Ga. Bit. Coated	Ea.						2											2	2
56	I-5	Pipe Special - 30° 15" S.S. R.C.C.P. Bend	Ea.							2										2	2
57	I-8	Inlets, Type A-1	Ea.			2		1	1	1										5	5
58	I-9	Stone Underdrain No. 1	L.F.		880	320										100	140			1,440	1,440
59	I-10	Rip-Rap, Type A	S.Y.		20	675														695	700
60	I-14	2' Special Paved Side Ditch, 1' Deep, 4" Conc.	L.F.			95				10	20									125	130
61	I-14	2' Special Paved Side Ditch, 2' Deep, 4" Conc.	L.F.		35			10												45	50
62	I-14	6' Special Paved Side Ditch, 2' Deep, 4" Conc.	L.F.		30															30	30
63	I-14	Paved Median Ditch, 4" Conc.	L.F.						50											50	50
64	I-30	6" Extra Quality Drain Tile	L.F.		850	1300	800				770									3,720	3,720
65	I-30	8" Extra Quality Drain Tile	L.F.		400	370	730	330			1500		339							3,669	3,670
66	I-30	10" Extra Quality Drain Tile	L.F.							490	510									1,000	1,000
67	I-30	6" Pipe Outlet For Tile Drains	L.F.		20	20	20													60	60
68	I-30	8" Pipe Outlet For Tile Drains	L.F.					20												20	20
69	I-30	10" Pipe Outlet For Tile Drains	L.F.		20					20										40	40
70	S-1	Class "C" Concrete for Structures	C.Y.		425.06	5.92	8.04	700.14	80.90	227.88	25.29	23.20	2.22				481.00			4,030.59	4,030
71	S-4	Reinforcing Steel	Lb.		45147	316	428	96131	2248	428895	1112	996	112				40417			615,802	615,800
72	I-2	30" S.S. Reinf. Conc. Culv. Pipe	L.F.								200	120								320	320
73	I-2	36" S.S. Reinf. Conc. Culv. Pipe	L.F.									120								120	120
77	S-27	6'-5" x 10'-3" Pvd. Inv. Bit. Ctd. Sec. 12 C.M.P. Arch #8 Ga.	L.F.						144											144	144
78	S-27	6'-5" x 4'-9" Pvd. Inv. Bit. Ctd. Sec. 12 C.M.P. Arch #8 Ga.	L.F.							36										36	40
79	I-30	12" Pipe Outlet For Tile Drains	L.F.		20															20	20
80	S-27	36" S.S. Reinf. Conc. Culv. Pipe	L.F.		50															50	50
82	I-2	42" S.S. Reinf. Conc. Culv. Pipe	L.F.		20						120							40		180	180

REFERENCE NUMBER	SPEC. ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS 5	6	7	9	10	12	13	14	15	17	8	11	16		TOTALS	PROPOSAL QUANTITIES
		PAVEMENT																	
101	I-22	Selected Sub Base	C.Y.	1106	8512	6250	6720	6720	6930	6717	6720	6720	1272					57,667	57,700
102	B-20 &	Water Bound Macadam Base Course (2-4" Courses)	C.Y.											532				532	530
103	B-21	Compacted Aggregate Base Course	C.Y.		490	140									2798			3,364	3,400
104	T-35	Asphaltic Concrete Surface Course, Type B	C.Y.													2		2	2
105	T-30	Prime Coat	Gal.		1770	500								835	700	9		3,814	3,810
106	T-31	Bitum. Surf. Treatment - Bitum. Mat'l.	Gal.		1240	350												1,590	1,590
107	T-31	Bitum. Surface Treatment - #6 Aggregate	C.Y.		352	100												452	450
108	T-33	Bitum. Macadam Surface Course	S.Y.	1640	11400	10420	11200	11200	11200	9940	11200	11200	2120					91,520	91,500
109	T-35	Asphaltic Concrete Surface Course, Type A	C.Y.											99	83	25		207	210
110	T-71	Reinf. Portland Cem. Conc. Pavement 10"	S.Y.	2190	15,200	13880	14900	14900	14900	13,253	14900	14900	2827					121,850	121,900
111	I-1	Reinf. Concrete Approach Slab	S.Y.													81		81	80
				21 STR. NO.30	25 STR. NO.31	29 STR. NO.33	35 STR. NO.37	40 STR. NO.38	44 STR. NO.39	49 STR. NO.40		498-1354 ST.R. NO.31A							
112	E-2	Excavation for Structures	C.Y.	175	744	267	2294	537	375	244		334						4,970	4,970
113	I-10	Rip Rap, Type A	S.Y.		447													447	450
114	I-14	2' Paved Gutter 4" Conc.	S.Y.				117											117	120
115	I-15	Guard Rail, Type A	L.F.		455		708	618										1781	1800
116	S-1	Class "C" Concrete for Structures	C.Y.	458	564	419	2733	923	584	449								6130	6100
117	S-3	Waterproofing, Type C	S.Y.						894									894	890
118	S-3	Premolded Sealing Strip	L.F.				140											140	140
119	S-4	Reinforcing Steel	Lb.	69630	81647	64705	269115	128407	87215	67315		1219						769,253	769,250
120	S-7	Structural Steel	Lb.	141374	300328	139593	361565	216295	346412	144725								1,650,292	1,650,000
121	S-9	Structural Expansion and/or Contraction Jts.	L.b.	12,903	14,290	12,856	40,432	13,000	16,502	12,856								122,845	123,000
122	S-14	Standard Handrail, Type A	L.F.		455		708	618										1781	1,800
123	S-14	Standard Handrail, Type B	L.F.	433		427			575	444								1879	1,900
124	S-16	First Test Pile	Ea.	1	1	1	1	1										5	5
125	S-17	Pile Test Load	Ea.	1	1	1	1	1										5	5
126	S-18	Furnishing Shells for Piles	L.F.	2270	1040	350	1640	1400										6700	6700
127	S-18	Driving and Filling Piles	L.F.	2270	1040	350	1640	1400										6700	6700
128	S-18	Splicing Piles	Ea.	55	60	20	50	45										230	230
129	S-29	Scuppers, Type A	Ea.				4	2										6	6
130	S-29	Scuppers, Type B	Ea.	4		4			4	4								16	16
131	S-29	Drainage Pipe for Structures 6" Wrought Iron	L.F.	100	20	100	112	112	100	90								634	630
132	S-29	Drainage Pipe for Structures 8"	L.F.	280	280	280	280	280	280	240								1920	1900
133	S-29	Porous Backfill	C.Y.				263											263	260
134	T-35	Asphaltic Conc. Surface Course, Type C	C.Y.						30									30	30
135	S-3	Waterproofing, Type A	S.Y.				572											572	570
137	S-1	Class "E" Concrete for Structures	C.Y.									138						138	140
		MISCELLANEOUS																	
136	I-29	Construction Contract Information Signs	Ea															8	8

GRADING ANALYSIS

SHEET NO.	TOTAL EXCAVATION AVAILABLE = C (C.Y.)	TOTAL EMBANKMENT REQUIRED = F (C.Y.)	BORROW = 1.10 (F - 0.85 C) (C.Y.)	REMARKS
5	1,831	2,046	0	576 C.Y. excess haul from Sh 9
6	17,921	20,589	0	6,305 C.Y. excess haul from Sh. 9.
7	13,167	71,350	0	33,741 C.Y. excess haul from Sh. 9; 38,789 C.Y. excess haul from Sh. 10; 234 C.Y. excess haul from Sh. 498-1354
8	4,693	37,330	0	7,413 C.Y. excess haul from Sh. 10; 31,812 C.Y. excess haul from Sh. 14
9	50,754	8,612	0	40,622 C.Y. Excess :- haul 576 C.Y. to Sh. 5, haul 6,305 C.Y. to Sh. 6, haul 33,741 C.Y. to Sh. 7.
10	54,160	8,456	0	44,212 C.Y. Excess :- haul 36,799 C.Y. to Sh. 7, haul 7,413 C.Y. to Sh. 8
11	18,041	35,158	0	23,321 C.Y. excess haul from Sh. 14
12	16,741	76,597	0	73,373 C.Y. excess haul from Sh. 14
13	14,381	360,814	10,702	48,882 C.Y. excess haul from Sh. 14; 338,419 C.Y. excess haul from Sh. 15; 2,232 C.Y. excess haul from Sh. 16; 15,809 C.Y. excess haul from Sh. 17
14	179,536	1,826	0	177,388 C.Y. Excess - haul 31,812 C.Y. to Sh. 8; haul 23,321 C.Y. to Sh. 11 haul 73,373 C.Y. to Sh. 12; haul 48,882 C.Y. to Sh. 13
15	327,151	622	0	326,419 C.Y. excess haul to Sh. 13
16	7,550		0	7,550 C.Y. excess haul to Sh 13
17	15,822	11	0	15,809 C.Y. excess haul to Sh 13
498-1354	234		0	234 C.Y. excess haul to Sh 7

NO.	REVISION	BY	DATE
3	AS-BUILT PLANS		Feb 56
2	Misc. drainage revisions; add Sht. 31A; rev. guard rail	HSN	12-4-53
1	Rev. Gr. Analysis; Rev drainage quantities	HSN	10-6-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

SUMMARY OF ESTIMATES

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: | CHECKED: G. H. Shelton Jr. | DATE: March 6, 1953
DRAWN: E.L. | IN CHARGE: | SCALE: None

CONTRACT NO. C-35 SHEET 4 OF 59

QUANTITIES

NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
	ROADWAY				
E-1	Roadway Excavation		C.Y.	179,881	189,612
E-11	Water		M.Gal.	14.6	6.01
I-15	Guard Rail, Type A		L.F.	280	300
I-23	P.O.W. Fence, Type 2		L.F.	5760	5,735
I-26	Permanent Monument		Ea.	1	1
L-3	Placing Stock Piled Topsoil		S.Y.	14,873	15,792
L-3	Bonemeal		Ton	1.34	0
L-9	Seeding & Protect. Type A		S.Y.	14,873	15,792
L-9	Commercial Fertilizer		Ton	1.34	1.31
L-9	Agricultural Ground Limestone		Ton	6.69	0
L-19	Seeding & Mulching (Special Seeding)		S.Y.	47,895	45,806
	DRAINAGE				
I-14	4'x2' cdp. Par. side ditch, 4" Conc.		L.F.		20
E-2	Excavation for Structure		C.Y.	312	122
I-2	18" Paved Inv. C.M.P. #25a		L.F.	196	196
I-30	6" Extra Quality Drain Tile		L.F.	770	880
I-30	9" Extra Quality Drain Tile		L.F.	1500	1,500
I-30	10" Extra Quality Drain Tile		L.F.	510	510
S-1	Class "C" Conc. for Structure		C.Y.	23.29	31.34
S-4	Reinforcing Steel		Lb.	1112	1307
I-2	30" SSRCCP		L.F.	200	221
I-2	42" SSRCCP		L.F.	120	156
I-14	2' Special Paved side ditch 2' deep 4" Concrete		L.F.	20	0
I-30	6" Tile Outlet				20
	PAVEMENT				
I-22	Selected Sub Base		C.Y.	6,720	7,608
I-33	Dr. Aggr. Mac. Sur. Crse.		C.Y.	11,200	11,197
I-71	Reinf. Part. Cem. Conc. 10" Par.		S.Y.	14,900	14,933

NO.	REVISION	BY	DATE
4	AS-BUILT PLANS		Feb 58
3	Revised agricultural drainage details; deleted perm. bar.	HEN	12-4-53
1	Revised drainage details	HEN	10-6-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

PLAN AND PROFILE
SANDUSKY COUNTY
STA. 1158+00 TO STA. 1186+00

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: | CHECKED: L.A. ECW | DATE: March 6, 1953
DRAWN: L.A. | IN CHARGE: | SCALE: As Shown

CONTRACT NO. C-35 SHEET 14 OF 59

13

QUANTITIES

NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
	ROADWAY				
E-1	Rdway Excav.		C.Y.	327,623	334,434
E-12	Remove Pipe	(Under 16")	L.F.	30	0
E-11	Water	Young Rd. Sta. 18+80	M.Gal.	5.0	2.06
I-15	Guard Rail, Type A		L.F.	220'	250
I-23	R.O.W. Fence, Type 2		L.F.	5,790	5,765
T-26	Permanent Mon.		Ea.	3	3
L-3	Pl. Stk. Pled Topsoil		S.Y.	15,089	15,792
L-3	Bonemeal		Ton	1.36	0
L-9	Seed & Pro., Type A		S.Y.	15,089	15,792
L-9	Com. Fertilizer		Ton	1.36	1.31
L-9	Agric. Grd. Limestone		Ton	6.79	0
L-19	Seed & Mul. (Sp. Seed)		S.Y.	58,411	58,121
I-25	Perm. Barricade		L.F.	144	0
	DRAINAGE				
E-2	Excav. for Str.		C.Y.	278	97
I-2	15" Tar. Inv. CMP #12 Ga.		L.Y.	192	192
S-1	Cl. "C" Conc. for Str.		C.Y.	23.20	24.44
S-4	Rein. Steel		Lb.	996	1272
I-2	30" SS R.C.C.P.		L.F.	120	120
I-2	36" SS R.C.C.P.		L.F.	120	120
I-30	6" Extra Quality Drain Tile		L.F.		1120
I-30	8" Extra Quality Drain Tile		L.F.		390
I-30	8" Tile outlet		L.F.		40
I-30	6" Tile outlet		L.F.		40
	PAVEMENT				
I-22	Select. Sub Base		C.Y.	6,720	7608
T-33	Bit. Mac. Surf. Crse.		S.Y.	11,200	11,197
T-71	Rein. Port. Cem. Conc. Pave. 10"		S.Y.	14,900	14,933

NO.	REVISION	BY	DATE
4	AS-BUILT PLANS		12-6-56
3	Rev. med. ditch profile;	HSW	12-4-53
1	Rev. drainage details	HSW	10-6-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

PLAN AND PROFILE

SANDUSKY COUNTY

STA. 1186+00 TO STA. 1214+00

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: | CHECKED L.A. & C.W. | DATE: March 6, 1952
DRAWN: L.A. | IN CHARGE: | SCALE: As Shown

CONTRACT NO. C- 35 SHEET 15 OF 59

-8M-12

PLAN

ELEVATION

SECTION A-A

References:
For General Notes see Sheet No. 2
For Drainage Details see Std. Dwg. 15
For Architectural Details see Sheet No. 55
For Boring Logs see Sheet 59
Design Frequency Loading CF=30

QUANTITIES

REF. NO.	ITEM NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
	E-2	Exc. for Str. Uncl.		C.Y.	244	278.31
	S-1	Class "C" Conc. Sub. Str.		C.Y.	217	188.88
	S-1	Class "C" Conc. Abut.		C.Y.	131	151.80
	S-1	Class "C" Conc. Abut. Inlets		C.Y.	2	5.44
	S-1	Class "C" Conc. Pier Caps & Cols.		C.Y.	76	74.02
	S-1	Class "C" Conc. Per Feat.		C.Y.	23	22.59
	S-4	Reinf. Steel		Lb.	67,313	61,989.32
	S-7	Struct. Steel		Lb.	144,725	159,383.0
	S-9	Str. Exp. and/or Contr. Joints		Lb.	12,856	9,132.0
	S-14	Rail. Type "B"		L.F.	444	442.42
	S-29	Scuppers Type "B"		Ea.	4	4
	S-29	W.I. Pipe 6" I.D.		L.F.	90	126.93
	S-29	8" Φ Pipe		L.F.	240	216.0

NO.	REVISION	BY	DATE
1	AS-BUILT PLANS		Feb. 56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 40
TWP. ROAD NO. 302 – YOUNG ROAD
PLAN, ELEVATION & SECTION

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: G.R. CHECKED: L.G. DATE: March 6, 1953
DRAWN: C.W.D. IN CHARGE: [illegible] SCALE: 1"=10'

CONTRACT NO. C-35 SHEET 49 OF 59

498-1325

PLAN
Scale: 1" = 10'-0"

CAMBER DIAGRAM
No Scale

SECTION A-A
(Section B-B Similar Except as Noted)
Scale: ½" = 1'-0"

TOP PLAN
(Bottom Plan Similar)

ELEVATION

TYPICAL SPLICE & COVER PLATE
Scale: ¾" = 1'-0"

References:
For General Notes see Sh. 2
For Bearing Details see Sh. 53 & 54
For detail and connections of end diaphragms see Sh. 53

NO.	REVISION	BY	DATE
1			Feb 56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 40
TWP. ROAD NO. 302 — YOUNG ROAD
SUPERSTRUCTURE

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: G.R.	CHECKED: L.G.	DATE: March 6, 1953
DRAWN: A.W.	IN CHARGE: [illegible]	SCALE: As Noted

CONTRACT NO. C-35 SHEET 50 OF 59

ABUTMENT PLAN

Scale: 3/8"=1'-0"

Note:
Bracketed elevations are for tops of roadway slab, other elevations shown are for tops of stringer pads.

KEY PLAN

No scale

SECTION C-C

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

ELEVATION A-A

Scale: 3/8"=1'-0"

SECTION B-B

Scale: 3/8"=1'-0"

References:

For General Notes see Sh. 2
For Details of Bearings & Dams see Sh. 53 & 54

NO.	REVISION	BY	DATE
4	AS-BUILT PLANS		Feb. 50
3	REINFORCEMENT DETAILS	F.B.	3-19-54
1	SKEW ANGLE	L.L.F.	12-4-53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 40
ROAD NO. 302 – YOUNG ROAD.
ABUTMENTS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: J.G. | CHECKED: L.G. | DATE: March 6, 1953
DRAWN: J.G.C. | IN CHARGE: [signature] | SCALE: As shown

CONTRACT NO. C-35 SHEET 51 OF 59

81

51 M-12

BEAM REINFORCEMENT

SECTION A-A
Scale: ½" = 1'-0"

KEY PLAN
STRINGER PAD ELEVATIONS
No Scale

PLAN – PIERS 1, 2 & 3

For Pad Elev. see Key Plan

SECTION B-B
Scale: ½" = 1'-0"

Notes:
For General Notes see Sheet No. 2
For Framing Plan see Sheet No. 50
For Location of Piers see Sheet No. 49
For Bearing Details see Sheet No. 53 & 54
All exposed concrete corners shall have 1" chamfer.

ELEVATION

FOOTING PLAN

NO.	REVISION	BY	DATE
1	AS-BUILT PLANS		6-6-56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

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

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: J.G. | CHECKED: L.G. | DATE: March 6 1953
DRAWN: C.W.D. | IN CHARGE: [illegible] | SCALE: ½" = 1'-0" & as shown

CONTRACT NO. C-35 SHEET 52 OF 59

8/53

498-1938

52 M-12

FIXED BEARING TYPE "A"

EXPANSION BEARINGS TYPE "B"

STOOL DETAIL

EXPANSION BEARING TYPE "C"

EXPANSION BEARING TYPE "D"

DOWEL DETAIL

SCALE: Full Size

SECTION A-A

SECTION B-B

SECTION C-C

SECTION F-F

SECTION G-G

SECTION G_1-G_1 SIMILAR EXCEPT AS NOTED

FIXED BEARING TYPE "E"

DETAIL P ~ PLAN ~ DEFLECTION DAM

DETAIL P' SIMILAR EXCEPT AS NOTED

SCALE: 1"=1'-0"

SECTION E-E

Scale 1"=1'-0"

PLAN

SECTION M-M

SCALE: 1½"=1'-0"

DETAIL OF TRAFFIC PLATE AT EXPANSION DAM

Scale 1½"=1'-0"

PLAN

Scale 1"=1'-0"

DETAIL "S" Plan Expansion Dam (as shown)

DETAIL "S'" Plan Expansion Dam (Substitute Type "A" Traffic Plates for Plates shown) (See Section H-H)

Traffic Plate to be raised Pattern Plate or to be provided with Welded Bead Pattern as shown.

SECTION D-D

Scale 1"=1'-0"

SECTION K-K

Scale 1"=1'-0"

SECTION H-H

Scale 1"=1'-0"

SECTION J-J

SCALE: 1½"=1'-0"

SECTION N-N

Scale 1"=1'-0"

Table For Traffic Pl Clearances			
Structure No.	Det. "R"	Det. "S"	Det. "S'"
30, 33, 37, 40	1"		
31			1"
38		1"	
39	1½"		

NO.	REVISION	BY	DATE
4			
3			
2			
1	Table Revised	LLF	10/14/53

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURAL DETAILS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: L.F. CHECKED: L.G. DATE: March 6 1953
DRAWN: L.F. IN CHARGE: SCALE: 1"=1'-0" Ft. Notes

CONTRACT NO. C-35 SHEET 53 OF 59

26

53 M-12

EXPANSION BEARING TYPE "F"
Scale: 1½" = 1'-0"

ROCKER HEAD DETAIL

SECTION A-A
Section A_1-A_1 similar, except as noted

DETAIL "C"
DEFLECTION JOINT DETAIL
Scale: 3/8" = 1'-0"

SECTION E-E

FIXED BEARING TYPE "G"
Scale: 1½" = 1'-0"

SECTION D-D
Scale: 1½" = 1'-0"

SECTION F-F
Scale: 3/8" = 1'-0"

SECTION G-G
Scale: 3/8" = 1'-0"

DETAIL-CONSTRUCTION JOINT FOR WINGWALLS
Scale: ¾" = 1'-0"

DETAIL-CULVERT EXPANSION JOINT
Scale: ¾" = 1'-0"

EXPANSION BEARING TYPE "HA"
Scale: 1½" = 1'-0"

NO.	REVISION	BY	DATE
2	AS-BUILT PLANS		Feb 58
1	Deleted Structure #29C	HSW	10-6-53

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

STRUCTURAL DETAILS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: L.F. CHECKED: L.G. DATE: March 6, 1953
DRAWN: N.E. IN CHARGE: SCALE: As Shown

CONTRACT NO. C- 35 SHEET 54 OF 59

498-1346

ELEVATION
Scale: 1/4" = 1'-0

SECTION "A-A"
Scale: 1/4" = 1'-0"

ELEVATION "B-B"
Scale: 1/4" = 1'-0"

PARAPET WITH SAFETY CURB
STRUCTURES 30, 33 & 40
Scale: 3/4" = 1'-0"

PARAPET WITH GUARD RAIL
Scale: 3/4" = 1'-0"

PARAPET WITH SAFETY CURB
STRUCTURE NO. 39
Scale: 3/4" = 1'-0"

1½" Copper Tube 4'-0" O.C. Set Top of Tube 4" below Top of Slab, place 4"x4" No. 12 to No. 16 Copper Mesh over top of tube & avoid displacement of Screen when placing Wearing Surface. Adjust spacing to clear Bridge Seats or Structural Members

NOTES:
Chamfer all corners 1"
For details of Railing see Std. Dwg. 5
For details of Roadway Drainage, see Std. Dwg. 15

NO.	REVISION	BY	DATE
4	AS-BUILT PLANS		1-6-65

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

ARCHITECTURAL DETAILS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: L.F. CHECKED: L.G. DATE: March 6, 1959
DRAWN: J.H.J. IN CHARGE: Gawarecki SCALE: As Noted

CONTRACT NO. C- 35 SHEET 55 OF 59

498-1603

01-59
54 M-12
B 12