OHIO TURNPIKE COMMISSION
THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT 43-99-03 PART A
THIRD LANE CONSTRUCTION

RECONSTRUCTION OF BAGLEY ROAD BRIDGE
OVER OHIO TURNPIKE M.P. 152.9
LORAIN COUNTY

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SCALES

PLAN 0 20

PROFILE HORIZONTAL 0 20 VERTICAL 0 5

CROSS SECTIONS HORIZONTAL 0 10 VERTICAL 0 10

2 WORKING DAYS
BEFORE YOU DIG
Call...800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
CALL JAYTEL - (419) 884-0400
(LCI FIBER OPTIC CABLE)
OHIO TURNPIKE DIVISION SUPERINTENDANT
(419) 862-2922
(ROADWAY LIGHTING CABLE)

STATE OF OHIO
STEVEN P. KOCH
REGISTERED
PROFESSIONAL ENGINEER

9/22/99
STEVEN P. KOCH

PLANS PREPARED BY
BELING CONSULTANTS

DESIGN CONTRACT NO. 71-98-32

DESIGNED BY: XX	CHECKED BY:
DATE: XX	DATE:
DRAWN BY: A.	REVISED BY: JJK
DATE: 01/07/97	DATE: 5/19/98
CAD FILE NAME:	001.DWG

EXISTING BAGLEY ROAD SECTION

STA. 11+50.00 AND STA. 18+50.00

NORMAL SECTION

STA. 11+50.00 TO STA. 12+34.26 = 84.26 LIN. FT.
STA. 17+65.74 TO STA. 18+50.00 = 84.26 LIN. FT.
TOTAL = 168.52 L.F.

* UNLESS SHOWN OTHERWISE ON PLANS
** 1/2" FT. (MIN.) 1"/FT. (DESIRABLE)

* UNLESS SHOWN OTHERWISE ON PLANS

APPROACH SLAB SECTION

STA. 13+49.26 TO STA. 13+69.26 = 20.00 LIN. FT.
STA. 16+30.74 TO STA. 16+50.74 = 20.00 LIN. FT.
TOTAL = 40.00 LIN. FT.

ITEM		DESCRIPTION
1	404	1-1/4" ASPHALT CONCRETE, PG64-22
2	402	1-3/4" ASPHALT CONCRETE, PG64-22
3	301	5" BITUMINOUS AGGREGATE BASE, PG64-22
4	304	6" AGGREGATE BASE
5	408	BITUMINOUS PRIME COAT @ 0.40 GAL/SQ. YD.
6	SP 611	CLASS C CONCRETE APPROACH SLAB USING TYPE I CEMENT (T=13")
7	606	GUARDRAIL, TYPE 5
8	659	SEEDING & MULCHING
9	605	AGGREGATE DRAIN
10	203	SUBGRADE COMPACTION
11	609	CURB, TYPE 6
12	304	8" AGGREGATE BASE
13	SP 627	4" STONE SHOULDER PROTECTION
A	EXISTING	8"± ASPHALT SURFACE COURSE
B	EXISTING	10" AGGREGATE BASE COURSE
C	EXISTING	AGGREGATE SHOULDER

DESIGNED BY: AWF	CHECKED BY: SPK		
DATE: 9-27-98	DATE: 10-02-96		
DRAWN BY: AWB	REVISED BY: JJK		
DATE: 09/30/98	DATE: 7/28/98		
CAD FILE NAME:	002.DWG		

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A2 OF 44

FULL DEPTH SHOULDER REPLACEMENT

OTC MAINLINE

TRANSITION SECTION

STA. 12+34.26 TO STA. 13+34.26 = 100 LIN. FT.
STA. 16+65.74 TO STA. 17+65.74 = 100 LIN. FT.
TOTAL = 200 L.F.

* UNLESS SHOWN OTHERWISE ON PLANS
** 1/2" FT. (MIN.) 1"/FT. (DESIRABLE)

ITEM		DESCRIPTION
1	404	1-1/4" ASPHALT CONCRETE, PG64-22
2	402	1-3/4" ASPHALT CONCRETE, PG64-22
3	301	5" BITUMINOUS AGGREGATE BASE, PG64-22
4	304	6" AGGREGATE BASE
5	408	BITUMINOUS PRIME COAT @ 0.40 GAL/SQ. YD.
6	SP 611	CLASS C CONCRETE APPROACH SLAB USING TYPE I CEMENT (T=13")
7	606	GUARDRAIL, TYPE 5
8	659	SEEDING & MULCHING
9	605	AGGREGATE DRAIN
10	203	SUBGRADE COMPACTION
11	609	CURB, TYPE 6
12	304	8" AGGREGATE BASE
13	SP 627	4" STONE SHOULDER PROTECTION
14	402	6" ASPHALT CONCRETE, PG64-22
15	SP 304	9" AGGREGATE BASE
16	622	CONCRETE BARRIER, TYPE D, AS PER PLAN
17	606	GUARDRAIL, TYPE 5, USING STEEL POSTS
A		EXISTING 8"± ASPHALT SURFACE COURSE
B		EXISTING 10" AGGREGATE BASE COURSE
C		EXISTING AGGREGATE SHOULDER

NOTE 1:
CONSTANT
6" STA. 13+44.26 TO 13+49.26
STA. 16+50.74 TO 16+55.74

VARIES
6" STA. 13+44.26
STA. 16+55.74

TO
0" STA. 13+34.26
STA. 16+65.74

CURB TRANSITION SECTION

STA. 13+34.26 TO STA. 13+49.26 = 15.00 LIN. FT.
STA. 16+50.74 TO STA. 16+65.74 = 15.00 LIN. FT.
TOTAL = 30.00 LIN. FT.

* UNLESS SHOWN OTHERWISE ON PLANS

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED:	AWF	CHECKED:	SPK	DATE:	5/22/98
DRAWN:	AWB	IN CHARGE:	GLB	SCALE:	NONE

CONTRACT 43-99-03 SHEET A3 OF 44

DESIGNED BY: AWF	CHECKED BY: SPK		
DATE: 9-27-96	DATE: 10-02-96		
DRAWN BY: AWB	REVISED BY: JJK		
DATE: 09/30/96	DATE: 7/28/98		
CAD FILE NAME:	003.DWG		

ROADWAY – GENERAL NOTES

GENERAL

CONSTRUCTION SPECIFICATIONS

THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS DATED JANUARY 1, 1995, AND THE SPECIAL PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS SHALL GOVERN THIS PROJECT.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH SHOWN OTHERWISE.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

POWER:	CABLE:	FIBER OPTIC CABLE:
OHIO EDISON	MEDIA ONE CABLE	JAYTEL
6326 LAKE AVENUE	576 TERNES AVENUE	2770 LEXINGTON AVENUE
ELYRIA, OH 44035	ELYRIA, OH 44035	MANSFIELD, OH 44904
(440) 326-3276	(216) 363-2556	(419) 884-0400

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS, AS REQUIRED BY SECTION 153.64 O.R.C.

LCI INTERNATIONAL FIBER OPTIC CABLE

EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THE FIBER OPTIC CABLE DURING ALL PHASES OF CONSTRUCTION. SPECIAL CARE SHALL BE EXERCISED DURING THE EXISTING STRUCTURE REMOVAL AND NEW STRUCTURE CONSTRUCTION. THE EXISTING FIBER OPTIC CABLE LOCATED WITHIN THE MEDIAN WILL BE ABANDONED PRIOR TO CONSTRUCTION OF THIS PROJECT, AND A NEW FIBER OPTIC CABLE WILL BE INSTALLED. THE NEW CABLE LOCATION IS DEPICTED ON THE PLAN AND PROFILE SHEETS. ANY EXCAVATION ADJACENT TO THE NEW CABLE FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT LITEL FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY LITEL, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12" OF THE CABLE DEPTH AS PROVIDED. LITEL REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK 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 FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

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 SP-607. AFTER WORK ON BRIDGE HAS BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE THE FENCE AND GATES IN ACCORDANCE WITH SP-607. PAYMENT FOR ALL LABOR, MATERIAL, AND EQUIPMENT, NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE FOLLOWING ITEMS:
ITEM SP-607 TEMPORARY FENCE (7'-0") CHAIN LINK W/SPEC. INC. BARBED WIRE
ITEM SP-607 TEMPORARY GATE (14'-0")
FOR QUANTITIES, SEE GENERAL SUMMARY.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL MEASURES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

AS-BUILT INFORMATION

THE ORIGINAL 1953 AS-BUILT CONSTRUCTION PLANS INCLUDING CROSS SECTIONS, STANDARD DRAWINGS, AND SPECIFIC STANDARD DRAWINGS ARE AVAILABLE FOR INSPECTION BY PROSPECTIVE BIDDERS AT THE OFFICES OF URS GREINER, 564-A WHITE POND DRIVE, AKRON, OHIO, 44320, TELEPHONE (330) 836-9111.

ROADWAY

ITEM 201 - CLEARING AND GRUBBING

SECTION 201.04 OF THE SPECIFICATIONS IS AMENDED AS FOLLOWS: THE LUMP SUM PRICE BID FOR ITEM 201 - CLEARING AND GRUBBING SHALL INCLUDE ALL EXCAVATION AND EMBANKMENT REQUIRED FOR THE REPLACEMENT OF MATERIALS REMOVED IN THE SCALPING OPERATION. NO ADDITIONAL PAYMENT FOR ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION OR ITEM 203 - EMBANKMENT MAY BE CLAIMED. PAYMENT FOR EARTHWORK QUANTITIES WILL BE BASED ON MEASUREMENTS FROM THE EXISTING GROUND LINE TO THE PLAN LINES AS SHOWN ON THE CROSS SECTIONS.

SOFT SUBGRADE

THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE REMEDIATION OF SOFT SUBGRADE.

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	50 CU. YD.
ITEM 203 - EMBANKMENT	50 CU. YD.

ITEM 203 - PROOF ROLLING

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 203- PROOF ROLLING 2 HOURS

ADDITIONAL SOIL INFORMATION

THE SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATION SHEETS CONTAIN AVAILABLE SOIL AND BEDROCK INFORMATION. ADDITIONAL INFORMATION MAY ALSO BE AVAILABLE FROM THE FOLLOWING:

1. SUBSURFACE INVESTIGATION REPORT(S) PREPARED FOR THE PROJECT.

2. ADDITIONAL SUBSURFACE INVESTIGATIONS MADE TO STUDY SOME ASPECT OF THE PROJECT.

   THIS INFORMATION SHALL BE AVAILABLE FOR INSPECTION BY PROSPECTIVE BIDDERS AT THE OFFICES OF URS GREINER 564-A WHITE POND DRIVE, AKRON, OHIO 44320, TELEPHONE: (330) 836-9111.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH THE CROSS SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATION IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. ALL OTHER SLOPE EMBANKMENT AREAS SHALL BE BENCHED AS SET FORTH IN 203.09. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRD UNDER THE PROVISIONS OF 203.09.

ITEM 203 - DITCH CLEANOUT

THIS ITEM SHALL CONSIST OF REGRADING SECTIONS OF EXISTING DITCHES AS DESIGNATED ON THE PLANS. REGRADING WORK SHALL CONSIST OF EARTH EXCAVATION AND EMBANKMENT WORK NECESSARY TO REGRADE THE DITCH TO THE ALIGNMENT SHOWN ON THE PLANS AND MEETING THE EXISTING DITCH ALIGNMENT ON EACH END. REGRADING WORK SHALL TYPICALLY CONSIST OF ELIMINATING SEDIMENT BUILD-UP AREAS, WASHOUTS, AND ALIGNMENT IRREGULARITIES AND SHALL BE SUBJECT TO THE LIMITS DESIGNATED BY THE ENGINEER. CLEARING AND GRUBBING SHALL BE REQUIRED AT THESE LOCATIONS AND SHALL BE PAID FOR UNDER ITEM 201. SURPLUS OR UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER, SHALL BE DISPOSED OF AS PER SP 108. EMBANKMENT REQUIRED FOR WASHOUTS SHALL MEET THE REQUIREMENTS OF SECTION 203.07 OF THE SPECIFICATIONS, EXCEPT THE COMPACTION REQUIREMENTS SHALL BE REDUCED TO 90 PERCENT OF MAXIMUM DRY DENSITY OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT, AS MEASURED ALONG THE CENTERLINE OF DITCH, OF ITEM 203-DITCH CLEANOUT, WHICH PRICE SHALL INCLUDE ALL EMBANKMENT, EXCAVATION, BORROW, SEEDING AND MULCHING, AND RESTORATION OF DISTURBED AREAS, NECESSARY TO COMPLETE THE WORK.

ITEM 630 - SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN

BRIDGE MOUNTED SIGN SUPPORTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 630 AND THE DETAILS SHOWN ON STANDARD CONSTRUCTION DRAWING TC-1. NO WELDING TO EXISTING STRUCTURAL STEEL SHALL BE PERMITTED. PAYMENT, INCLUDING ALL LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTRACT BID PRICE FOR EACH ITEM 630 SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN.

ITEM 630 - SIGN ERECTED (FLAT SHEET OR EXTRUSHEET) AS PER PLAN

SIGNS ERECTED UNDER THIS ITEM SHALL BE SUPPLIED BY THE OHIO TURNPIKE COMMISSION AND PICKED UP BY THE CONTRACTOR AT A LOCATION DESIGNATED BY THE OHIO TURNPIKE COMMISSION. THE CONTRACTOR SHALL GIVE TWO WEEKS NOTICE PRIOR TO PICK-UP.

MEASUREMENT SHALL BE IN ACCORDANCE WITH 630.14 EXCEPT THAT MOUNTING HARDWARE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

GUARDRAIL BEHIND CURBS

WHERE A CURB IS PROVIDED AT THE OUTER EDGE OF THE PAVED SHOULDER, ANY NECESSARY GUARDRAIL SHALL BE POSITIONED SO THAT THE FACE OF THE GUARDRAIL SHALL BE ALIGNED VERTICALLY WITH THE FACE OF CURB AND THE TOP OF THE RAIL SHALL BE 27" ABOVE THE GUTTER LINE.

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 ODOT STANDARD CONSTRUCTION DRAWING GR-1.1M. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL NOTES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED:	AWF	CHECKED:	SPK	DATE:	5/22/98
DRAWN:	AWB	IN CHARGE:	GLB	SCALE:	NONE

CONTRACT 43-99-03 SHEET A4 OF 44

DESIGNED BY: XX	CHECKED BY:		
DATE: XX	DATE:		
DRAWN BY: AWB	REVISED BY: JJK		
DATE: 12/22/97	DATE: 4/15/98		
CAD FILE NAME:	004.DWG		

ROADWAY – GENERAL NOTES

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE, AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, 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.

EROSION CONTROL

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

ITEM 207 - TEMPORARY SEEDING AND MULCHING	700	SQ. YD.
ITEM 207 - STRAW OR HAY BALES	50	EACH
ITEM 207 - TEMPORARY BENCHES, DAMS AND SEDIMENT BASINS	225	CU. YD.
ITEM 207 - FILTER FABRIC FENCE	200	LIN. FT.
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER	50	CU. YD.
ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER	50	CU. YD.
ITEM 659 - REPAIR SEEDING AND MULCHING	175	SQ. YD.
ITEM 659 - WATER	2	M. GAL.
ITEM 659 - COMMERICAL FERTILIZER	0.03	TON

ITEM 207 - FILTER FABRIC FENCE

FILTER FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 207.02 OF THE SPECIFICATIONS.

THE BOTTOM OF THE FENCE SHALL BE BURIED SIX (6) INCHES BELOW THE GROUND. THE FENCE SHALL BE HIGH ENOUGH TO RETAIN SEDIMENT LADEN WATER AND ADEQUATELY SUPPORTED TO PREVENT COLLAPSE OR BURSTING. THE GROUND ELEVATION OF THE FENCE SHALL BE HELD CONSTANT EXCEPT THAT THE END ELEVATION SHALL BE RAISED TO PREVENT FLOW AROUND THE END OF THE FENCE.

THE FILTER FABRIC SHALL AT THE DIRECTION OF THE ENGINEER BE MAINTAINED TO BE FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, AND/OR REPLACEMENT OF THE FILTER FABRIC.

THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 207 - FILTER FABRIC FENCE.

DRAINAGE

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE THE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

FARM DRAINS

ALL FARM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE RIGHT-OF-WAY LIMITS BY ITEM 603 - CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 - CONDUIT, TYPE F. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603 - CONDUIT, TYPE E, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OR REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS. EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER ODOT STANDARD CONSTRUCTION DRAWING MC-4, EXCEPT WHEN OUTLETTED INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY OF THE WORK NOTED ABOVE:

ITEM 603 - 6" CONDUIT, TYPE B, 707.17 NON-PERFORATED ASTM D 3034 (SDR-35), SS931 OR SS944	50	LIN. FT.
ITEM 603 - 6" CONDUIT, TYPE E	50	LIN. FT.
ITEM 603 - 6" CONDUIT, TYPE F, 707.17 NON-PERFORATED ASTM D 3034 (SDR-35), SS931 OR SS944	50	LIN. FT.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OHIO TURNPIKE COMMISSION, REPRESENTATIVES OF THE COMMISSION AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE COMMISSION.

THE EXISTING UNDERDRAIN PIPE OUTLETS SHALL ALSO BE LOCATED DURING THIS INSPECTION. ONCE LOCATED, THE EXISTING UNDERDRAIN PIPE OUTLET LOCATIONS SHALL BE MARKED ON THE SHOULDER PAVEMENT WITH PAINT AND RECORDED IN THE INSPECTOR'S REPORTS.

ALL NEW UNDERDRAIN PIPE OUTLETS, CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE COMMISSION.

ALL EXISTING UNDERDRAIN PIPE OUTLETS AND SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

DESIGNED BY: XX	CHECKED BY:		
DATE: XX	DATE:		
DRAWN BY: AWB	REVISED BY: JJK		
DATE: 12/22/97	DATE: 4/15/98		
CAD FILE NAME:	005.DWG		

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL NOTES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED:	AWF	CHECKED:	SPK	DATE:	5/22/98
DRAWN:	AWB	IN CHARGE:	GLB	SCALE:	NONE

CONTRACT 43-99-03 SHEET A5 OF 44

NOTES

1. THE FOLLOWING ROADS ARE "DESIGNATED LOCAL DETOUR ROUTES":
   1. STEARNS ROAD BETWEEN BAGLEY AND COOK ROADS.
   2. COOK ROAD BETWEEN STEARNS AND BUTTERNUT BRIDGE (LORAIN) ROAD.
   3. BUTTERNUT BRIDGE (LORAIN) ROAD BETWEEN COOK AND BAGLEY ROADS.

   THE CONTRACTOR SHALL PERFORM WORK AS DIRECTED BY THE ENGINEER ON THESE 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. PAYMENT WILL BE MADE ON THE BASIS OF "DIRECT COSTS" PLUS 15% FOR OVERHEAD PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION G.9.02-(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.

2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (O.M.U.T.C.D.)

3. THE CONTRACTOR SHALL ERECT, MAINTAIN, AND REMOVE, THE DETOUR. PAYMENT FOR ALL MATERIAL, LABOR, AND EQUIPMENT, TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614, MAINTAINING TRAFFIC.

4. THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCY AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST 72 HOURS BEFORE CLOSING ROAD:
   LORAIN COUNTY
   KENNETH CARNEY (216) 244-6261
   247 HADAWAY ST.
   ELYRIA, OH 44035

   CUYAHOGA COUNTY
   THOMAS NEFF (216) 348-3800
   1370 ONTARIO ST.
   CLEVELAND, OH 44113

5. NOTICE OF CLOSURE SIGNS (OC-60) SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT HAND SIDE OF THE ROAD AT BOTH ENDS OF THE BRIDGE FACING TRAFFIC. THEY SHALL BE POSITIONED SO AS TO NOT INTERFER WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS.

LEGEND

- SIGN MOUNTED ON TYPE III POST SUPPORT
- SIGN MOUNTED ON PORTABLE BARRICADE. SEE FIG. C-5 OF THE O.M.U.T.C.D.
- SIGNS MOUNTED ON GATE AND BARRICADE. SEE "GATES AND BARRICADES IN POSITION" MT-101.60
- DETOUR ROUTE

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: SKR	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NTS

CONTRACT 43-99-03 SHEET A6 OF 44

DESIGNED BY: XX	CHECKED BY:
DATE:	DATE:
DRAWN BY: AWB	REVISED BY: JJK
DATE: 01/06/97	DATE: 5/19/98
CAD FILE NAME:	006.DWG

GENERAL SUMMARY

ITEM	SHEET NUMBER A4	A5			A9	A10	A11	A12	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
												ROADWAY	
201									201	LUMP		CLEARING AND GRUBBING	
202					192				202	192	LIN. FT.	CONCRETE BARRIER REMOVED	
202					400				202	400	LIN. FT.	GUARDRAIL REMOVED FOR REUSE	
202					1095				202	1095	LIN. FT.	GUARDRAIL REMOVED	
202					195				202	195	LIN. FT.	FENCE REMOVED	
SP 202L					1				SP 202L	1	EACH	ANCHOR ASSEMBLY, SYRO STEEL ET-2000, REMOVED AND RESET	
203	2								203	2	HOUR	PROOF ROLLING	
203	50				501		90		203	641	CU. YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	
203	50				103				203	153	CU. YD.	EMBANKMENT	
203							216	1218	203	1434	SQ.YD.	SUBGRADE COMPACTION	
203					393				203	393	LIN. FT.	DITCH CLEANOUT	
SP 606					525				SP 606	525	LIN. FT.	GUARDRAIL REBUILT, TYPE 5	
606					912.5				606	912.5	LIN. FT.	GUARDRAIL, TYPE 5	
606					1000				606	1000	LIN. FT.	GUARDRAIL, TYPE 5 USING STEEL POSTS	
SP 606A					8				SP 606A	8	EACH	ANCHOR ASSEMBLY, SYRO STEEL, ET-2000, OPTION A, WITH ALL POSTS IN FOUNDATION TUBES	
606					2				606	2	EACH	ANCHOR ASSEMBLY, TYPE T	
606					4				606	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
606					2				606	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1, USING STEEL POSTS	
607					153				607	153	LIN. FT.	FENCE, TYPE 47, AS PER PLAN	F-1
SP 607					276				SP 607	276	LIN. FT.	TEMPORARY FENCE (7'-0" CHAIN LINK WITH SPECIALS, INCLUDING BARBED WIRE)	A4
SP 607					2				SP 607	2	EACH	TEMPORARY GATE (14'-0")	A4
622					122				622	122	LIN. FT.	CONCRETE BARRIER, TYPE D, AS PER PLAN	CBR-30H
												EROSION CONTROL	
207		225							207	225	CU. YD.	TEMPORARY BENCHES, DAMS, AND SEDIMENT BASINS	
207		50				35			207	85	EACH	STRAW OR HAY BALES	
207		200				393			207	593	LIN. FT.	FILTER FABRIC FENCE	
207		700							207	700	SQ. YD.	TEMPORARY SEEDING & MULCHING	
601		50							601	50	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER	
601		50							601	50	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER	
659						4875			659	4875	SQ. YD.	SEEDING AND MULCHING	
659		0.03				0.44			659	0.47	TON	COMMERCIAL FERTILIZER	
659		2				11			659	13	M. GAL.	WATER	
659		175							659	175	SQ. YD.	REPAIR SEEDING & MULCHING	
												DRAINAGE	
602						0.42			602	0.42	CU. YD.	CONCRETE MASONRY	
603		50							603	50	LIN. FT.	6" CONDUIT, TYPE B, 707.17, NON-PERFORATED ASTM D 3034 (SDR-35) SS931 OR SS944	
603		50							603	50	LIN. FT.	6" CONDUIT, TYPE E	
603		50							603	50	LIN. FT.	6" CONDUIT, TYPE F, 707.17, NON PERFORATED ASTM D 3034 (SDR-35) SS931 OR SS944	
603						80			603	80	LIN. FT.	12" CONDUIT, TYPE B, 706.02	
603						125			603	125	LIN. FT.	12" CONDUIT, TYPE F, 707.01 (EXCEPT GALVANIZED) OR 707.05, TYPE C (WITHOUT PAVED INVERT)	
604						4			604	4	EACH	CATCH BASIN, NO. 3A	
605						196			605	196	LIN. FT.	AGGREGATE DRAIN	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A7 OF 44

CHECKED BY: XX
DATE: XX
DRAWN BY: AWB
DATE: 01\06\98
CAD FILE NAME: 007.DWG

CHECKED BY:
DATE:
REVISED BY: JJK
DATE: 8/4/98

GENERAL SUMMARY

ITEM	SHEET NUMBER A3	A4	A5		A9	A10	A11	A12	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
												PAVEMENT	
255							285	40	255	325	LIN. FT.	FULL DEPTH PAVEMENT SAWING	
301								142	301	142	CU. YD	BITUMINOUS AGGREGATE BASE, PG64-22	
304								345	304	345	CU. YD	AGGREGATE BASE	
SP 304							54		SP 304	54	CU. YD.	AGGREGATE BASE	A5
402							36	48	402	84	CU. YD.	ASPHALT CONCRETE, PG64-22	
404								34	404	34	CU. YD.	ASPHALT CONCRETE, PG64-22	
408							87	381	408	468	GAL.	BITUMINOUS PRIME COAT	
609								60	609	60	LIN. FT.	CURB, TYPE 6	
SP 611								147	SP 611	147	SQ. YD.	CLASS C CONCRETE, APPROACH SLAB, USING TYPE I CEMENT, (T=13")	
SP 627								120	SP 627	120	TON	STONE SHOULDER PROTECTION	
												TRAFFIC CONTROL	
630							2		630	2	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN	A4
630							2		630	2	SQ. FT.	SIGN, FLAT SHEET, TYPE G, AS PER PLAN	A4
642							0.26		642	0.26	MILE	EDGE LINE, TYPE 1	
642							0.17		642	0.17	MILE	CENTER LINE, TYPE 1	
802							36		802	36	EACH	BARRIER REFLECTOR, TYPE A	
802							4		802	4	EACH	BARRIER REFLECTOR, TYPE B	
												STRUCTURES (FOR QUANTITIES SEE SHEET A29)	
												LIGHTING	
625						680			625	680	LIN. FT.	CONDUIT, 2", 713.07	
625						4			625	4	EACH	PULL BOX, 713.08, 18"	
625						20			625	20	LIN. FT.	TRENCH, 24" DEEP	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A8 OF 44

DESIGNED BY: X	CHKED BY:
DATE: XX	DATE:
DRAWN BY: AWB	REVISED BY: JJK
DATE: 01\08\98	DATE: 7/28/98
CAD FILE NAME:	008.DWG

					ROADWAY																		
					202				SP 202L	203			606					SP 606	SP 606A	607	SP 607		622
					GUARDRAIL REMOVED FOR REUSE	GUARDRAIL REMOVED	CONCRETE BARRIER REMOVED	FENCE REMOVED	ANCHOR ASSEMBLY, SYRO STEEL ET-2000, OPTION A, WITH ALL POSTS IN FOUNDATION TUBES, REMOVED AND RESET	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	EMBANKMENT	DITCH CLEANOUT	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5 W/ STEEL POSTS	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 1, USING STEEL POSTS	GUARDRAIL REBUILT, TYPE 5	ANCHOR ASSEMBLY, SYRO STEEL ET-2000, OPTION A, WITH ALL POSTS IN FOUNDATION TUBES	FENCE, TYPE 47, AS PER PLAN	TEMPORARY FENCE (7'-0" CHAIN LINK WITH SPECIALS, INCLUDING BARBED WIRE)	TEMPORARY GATE (14'-0")	CONCRETE BARRIER, TYPE D, AS PER PLAN
SHEET NO.	REF. NO.	STATION TO STATION		SIDE	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	CU. YD.	CU. YD.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	LIN. FT.	EACH	LIN. FT.	LIN. FT.	EACH	LIN. FT.
A14	R-01	13+38.25	13+80.50	LT				56															
A14	R-02	13+98.75	14+18.75	RT				60															
A14	R-03	15+99.50	16+01.50	LT				33															
A14	R-04	16+19.50	16+60.00	RT				46															
A23	R-05	10+60.00	13+65.00	LT		30.5																	
A23	R-06	11+10.00	13+83.00	RT		273																	
A23	R-07	16+17.00	18+46.00	LT		229																	
A23	R-08	16+35.00	18+60.00	RT		225																	
A23	R-13	1082+63.00	1083+13.00	RT		187.5																	
A23	R-14	1081+57.00	1083+43.50	RT	137.5	50																	
A23	R-15	1084+16.50	1086+02.50	LT	137.5	50																	
A23	R-16	1084+47.50	1086+22.50	LT	125	50																	
A23	R-17	1083+13.00	1083+61.00	RT			48																
A23	R-18	1083+43.50	1083+91.50	RT			48																
A23	R-19	1083+68.00	1084+16.00	LT			48																
A23	R-20	1083+99.00	1084+47.00	LT			48																
A14	TF-01	13+38.25	14+18.75	LT & RT																			
A14	TF-02	15+99.50	16+60.00	LT & RT																	151	1	
																					125	1	
A14	F-01	13+38.25	13+58.50	LT																			
A14	F-02	13+82.00	14+18.75	RT																30			
A14	F-03	15+99.50	16+19.00	LT																65			
A14	F-04	16+41.50	16+60.00	RT																35			
																				23			
A13	DC-01	10+39.00	12+50.00	LT																			
A14	DC-02	12+50.00	13+10.00	LT								233											
A14	DC-03	12+50.00	13+47.50	RT								62											
												98											
A22	GR-01	10+65.00	13+65.00	LT																			
A22	GR-02	11+20.50	13+83.00	RT									275			1			1				
A22	GR-03	16+17.00	18+42.00	LT									237.5			1			1				
A22	GR-04	16+35.00	18+60.00	RT									200			1			1				
A22	GR-05	1079+96.00	1084+08.50	RT									200			1			1				
A22	GR-06	1083+50.50	1087+63.00	LT					1					262.5	1			137.5	1				
A22	GR-07	1079+25.00	1083+00.00	RT										262.5	1			137.5	1				
A22	GR-08	1084+53.50	1088+66.00	LT										237.5			1	125	1				
														237.5			1	125	1				
A23	B-01	1082+99.65	1083+60.65	RT																			
A23	B-02	1083+98.55	1084+59.55	LT																			61
																							61
A17		12+00	13+00	LT & RT						139	15												
A18		13+50	14+50	LT & RT						45	20												
A20		16+50	17+50	LT & RT						122	25												
A21		18+00	19+00	LT & RT						121													
A21A		1083+00	1084+00	MEDIAN						44	35												
A21B		1084+25	1084+50	MEDIAN						30	8												
				TOTALS																			
		TOTALS CARRIED TO GENERAL SUMMARY			400	1095	192	195	1	501	103	393	912.5	1000.0	2	4	2	525	8	153	276	2	122

DESIGNED BY:	CHECKED BY:
DATE: XX/	DATE:
DRAWN BY: AWB	REVISED BY: JJK
DATE: 01/05/97	DATE: 8/4/98
CAD FILE NAME:	009.DWG

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

SUBSUMMARIES

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A9 OF 44

					EROSION CONTROL					DRAINAGE					LIGHTING		
					207		659			602	603		604	605	625		
					STRAW OR HAY BALES	FILTER FABRIC FENCE	SEEDING AND MULCHING	COMMERCIAL FERTILIZER	WATER	CONCRETE MASONRY	12" CONDUIT, TYPE B, 706.02	12" CONDUIT, TYPE F, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT	CATCH BASIN NO. 3A	AGGREGATE DRAIN	CONDUIT 2", 713.07	PULL BOX, 713.08, 18"	TRENCH, 24" DEEP
SHEET NO.	REF. NO.	STATION TO STATION		SIDE	EACH	LIN. FT.	SQ. YD.	TON SQ. YD. * 0.00009 TON/SQ. YD.	M. GAL. SQ. YD. * 1.08 GAL/SQ. YD. * 1/1000 * 2 APPL.	CU. YD.	LIN. FT.	LIN. FT.	EACH	LIN. FT.	LIN. FT.	EACH	LIN. FT.
A13	FF-01	10+39.00	12+50.00	LT	20	233											
A14	FF-02	12+50.00	13+10.00	LT	5	62											
A14	FF-03	12+50.00	13+47.50	RT	10	98											
A18		11+50	12+50	LT & RT										65			
A19		12+50	13+25	LT & RT										33			
A19		16+75	17+50	LT & RT										33			
A20		17+50	18+50	LT & RT										65			
A16		10+00	11+50	LT & RT			397	0.04	0.86								
A17		12+00	13+00	LT & RT			1503	0.13	3.25								
A18		13+50	14+50	LT & RT			473	0.04	1.02								
A19		15+00	16+00	LT & RT			417	0.04	0.90								
A20		16+50	17+50	LT & RT			769	0.07	1.66								
A21		18+00	19+00	LT & RT			762	0.07	1.65								
*A14	D-01	16+48.4	16+70.0	LT & RT							40		2				
*A14	D-02	12+31.8	13+54.1	LT & RT							40		2				
*A14	D-03	13+44	13+54.1	RT						0.21		65					
*A14	D-04	16+40	16+70.0	RT						0.21		60					
A14	E-01	13+38.41	13+39.30	RT											340	2	10
A14	E-02	13+60.70	16+69.59	RT											340	2	10
A21A		1083+00	1084+00	MEDIAN			387	0.03	0.84								
A21B		1084+25	1084+50	MEDIAN			167	0.02	0.36								
		* SEE SHEETS A18 AND A21 FOR DRAINAGE PROFILES															
				TOTALS					10.54								
				TOTALS CARRIED TO GENERAL SUMMARY	35	393	4875	0.44	11	0.42	80	125	4	196	680	4	20

DESIGNED BY: X.X. CHECKED BY:
DATE: XX DATE:
DRAWN BY: AWB REVISED BY: JJK
DATE: 12/30/97 DATE: 8/4/98
CAD FILE NAME: 010.DWG

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

SUBSUMMARIES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A10 OF 44

TRAFFIC CONTROL

SHEET NO.	REF. NO.	STATION TO STATION *		SIDE			630 SIGN, FLAT SHEET, TYPE G, AS PER PLAN (SQ. FT.)	630 SIGN SUPPORT ASSEMBLY BRIDGE MOUNTED, AS PER PLAN (EACH)	642 EDGE LINE, TYPE 1 (MILE)	642 CENTER LINE, TYPE 1 (MILE)	802 BARRIER REFLECTOR, TYPE A (EACH)	802 BARRIER REFLECTOR, TYPE B (EACH)
A23	B-01	1082+99.65	1083+60.65	RT								2
A23	B-02	1083+98.50	1084+59.55	LT								2
A23	GR-05	1079+92.00	1084+17.00	RT							9	
A23	GR-06	1083+38.00	1087+63.00	LT							9	
A23	GR-07	1079+25.00	1083+00.00	RT							9	
A23	GR-08	1084+53.50	1086+66.00	LT							9	
A24	EL-1	11+50.00	18+50.00	LT					0.13			
A24	EL-1	11+50.00	18+50.00	RT					0.13			
A24	CL-1	10+50.00	19+50.00	C/L						0.17		
A24	S-1	15+00.00		LT			1	1				
A24	S-1	15+00.00		RT			1	1				
						TOTALS						
						TOTALS CARRIED TO GENERAL SUMMARY	2	2	0.26	0.17	36	4

PAVEMENT CALCULATIONS

STATION TO STATION			SIDE	DISTANCE D FEET	AVG. WIDTH W FEET	AREA A = D * W SQ. FT.	203 SUBGRADE COMPACTION A/9 SQ. YD.	203 EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION (15") A*15/12/27 CU. YD.	255 FULL DEPTH PAVEMENT SAWING LIN. FT.	SP 304 AGGREGATE BASE (9") A*9/12/27 CU. YD.	402 ASPHALT CONCRETE PG64-22 (6") A*6/12/27 CU. YD.	408 BITUMINOUS PRIME COAT @ 0.4 GAL./SQ. YD.
1083+05	1083+65	OUTSIDE SHOULDER	EB	60	10	600	66.67	27.78	80	16.67	11.11	27
1083+45	1083+90	MEDIAN SHOULDER	EB	45	8	360	40.00	16.67	61	10.00	6.67	16
1083+67	1084+44	MEDIAN SHOULDER	WB	47	8	376	41.78	17.41	63	10.44	6.96	17
1083+95	1084+56	OUTSIDE SHOULDER	WB	61	10	610	67.78	28.20	81	16.94	11.30	27
						TOTALS	216.23	90.06	285	54.05	36.04	87
						TOTALS CARRIED TO GENERAL SUMMARY	216	90	285	54	36	87

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

SUBSUMMARIES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-98-XX SHEET A11 OF 44

DESIGNED BY:	CHECKED BY:
DATE: XX	DATE:
DRAWN BY: AWB	REVISED BY: JJK
DATE: 01\07\98	DATE: 5/19/98
CAD FILE NAME:	011.DWG

PAVEMENT CALCULATIONS

STATION TO STATION		SIDE	DISTANCE D FEET	AVG. WIDTH W FEET	AREA A = D*W SQ. FT.	SSP WIDTH SW FEET	SSP AREA SW FEET	203 SUBGRADE COMPACTION A/9 SQ. YD.	255 FULL DEPTH PAVEMENT SAWING LIN. FT.	301 BITUMINOUS AGGREGATE BASE, PG 64-22 (5") A*5/12*1/27 CU. YD.	304 AGGREGATE BASE (6") A*6/12*1/27 CU. YD.	304 AGGREGATE BASE (8") A*8/12*1/27 CU. YD.	402 ASPHALT CONCRETE, PG 64-22 (1.75") A*1.75/12*1/27 CU. YD.	404 ASPHALT CONCRETE, PG 64-22 (1.25") A*1.25/12*1/27 CU. YD.	408 BITUMINOUS PRIME COAT 0.40*A/9 GAL.	609 CURB, TYPE 6 D * 2 LIN. FT.	SP 611 CLASS C CONCRETE, APPROACH SLAB, USING TYPE I CEMENT, (T=13") A/9 SQ. YD.	SP 627 STONE SHOULDER PROTECTION (4") 2*(A*4/12*1/27) TON
11+50		RT & LT		20					20									
18+50		RT & LT		20					20									
11+50	12+34.26	RT & LT	84.26	22.34	1882.37	12	1011.12	209.15			34.86				83.66			24.96
11+50	12+34.26	RT & LT	84.26	20.34	1713.85								9.26	6.61				
11+50	12+34.26	RT & LT	84.26	21.34	1798.11					27.75								
11+50	12+34.26	RT & LT	84.26	12	1011.12							24.97						
12+34.26	13+34.26	RT & LT	100	22.17	2217.00	10	1000											
12+34.26	13+34.26	RT & LT	100	23.17	2317.00								11.97	8.55				24.69
12+34.26	13+34.26	RT & LT	100	24.17	2417.00					35.76					102.97			
12+34.26	13+34.26	RT & LT	100	10	1000			268.55			44.76							
												24.69						
13+34.26	13+49.26	RT & LT	15	32	480	8	256	53.33		7.41	8.89		2.59	1.85	3.56	30		6.32
16+50.74	16+65.74	RT & LT	15	32	480	8	256	53.33		7.41	8.89		2.59	1.85	3.56	30		6.32
13+49.26	13+69.26	RT & LT	20	33	660	8	160											
13+49.26	13+69.26	RT & LT	20	35	700													
16+30.74	16+50.74	RT & LT	20	33	660	8	160	77.78			12.96						73.33	3.95
16+30.74	16+50.74	RT & LT	20	35	700													
								77.78			12.96						73.33	3.95
16+65.74	17+65.74	RT & LT	100	22.17	2217.00	10	1000											
16+65.74	17+65.74	RT & LT	100	23.17	2317.00								11.97	8.55				24.69
16+65.74	17+65.74	RT & LT	100	24.17	2417.00					35.76					102.97			
16+65.74	17+65.74	RT & LT	100	10	1000			268.55			44.76							
												24.69						
17+65.74	18+50	RT & LT	84.26	22.34	1882.37	12	1011.12	209.15			34.86				83.66			24.96
17+65.74	18+50	RT & LT	84.26	20.34	1713.85								9.26	6.61				
17+65.74	18+50	RT & LT	84.26	21.34	1798.11					27.75								
17+65.74	18+50	RT & LT	84.26	12	1011.12							24.97						
							TOTALS (THIS SHEET)	1217.62	40	141.84	202.94	99.32	47.64	34.02	380.38	60	146.66	119.84

DESIGNED BY: DATE: XX
CHECKED BY: DATE:
DRAWN BY: AWB DATE: 12/23/97
REVISED BY: JJK DATE: 7/28/98
CAD FILE NAME: 012.DWG

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PAVEMENT CALCULATIONS
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: AWF	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: NONE

CONTRACT 43-99-03 SHEET A12 OF 44

BENCH MARK

BM #2
CHISLED CROSS ON N.W. CORNER
OF GUARDRAIL ANCHOR
STA. 11+17, 19'RT.
ELEV. 792.02

PLAN

HORIZONTAL SCALE IN FEET
0 10 20 40 60

VERTICAL SCALE IN FEET
0 2.5 5 10 20

PROFILE
ALONG C/L BAGLEY ROAD

LEGEND

- (R XX) REMOVAL ITEM
- (DC XX) DITCH CLEANOUT
- (F XX) FENCE
- (TF XX) TEMPORARY FENCE
- (FF XX) FILTER FABRIC FENCE
- (D XX) DRAINAGE ITEM

FOR TYPICAL SECTION, SEE SHEET A2.
FOR QUANTITIES, SEE SHEET A12.
FOR CROSS SECTIONS, SEE SHEET A16 & A17.
FOR GUARDRAIL ITEMS, SEE SHEET A23.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PLAN & PROFILE
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: SPK	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: AS NOTED

CONTRACT 43-99-03 SHEET A13 OF 44

DESIGNED BY:	CHECKED BY: XXX
DATE: XX-XX-XX	DATE: XX-XX-XX
DRAWN BY: AWB	REVISED BY: JJK
DATE: 12-23-97	DATE: 5/19/98
CAD FILE NAME:	013.DWG

PLAN

OHIO TURNPIKE MONUMENTS			
#	MILE POST	NORTHING	EASTING
1	154.4	620732.673	211958.543
2	153.8	620288.458	2116767.233
3	153.4	620426.269	2114466.824
4	152.9	621732.522	2112567.531
5	152.5	622977.171	2111394.085

COORD. FURNISHED BY U.R.S. 154.4; 153.8; 153.4

MONUMENTS 152.9 & 152.5 COORD. SURVEYED BY CENTRAL ENG.

HORIZONTAL SCALE IN FEET: 0 10 20 40 60

VERTICAL SCALE IN FEET: 0 2.5 5 10 20

LEGEND

- R XX — REMOVAL ITEM
- DC XX — DITCH CLEANOUT
- F XX — FENCE
- TF XX — TEMPORARY FENCE
- FF XX — FILTER FABRIC FENCE
- D XX — DRAINAGE ITEM
- E XX — ELECTRICAL ITEM

PROFILE

ALONG ℄ BAGLEY ROAD

FOR TYPICAL SECTION, SEE SHEET A2 & A3.

FOR QUANTITIES, SEE SHEET A12.

FOR CROSS SECTIONS, SEE SHEET A17 TO A19.

FOR GUARDRAIL ITEMS, SEE SHEET A22.

FOR EROSION CONTROL AND DRAINAGE ITEMS, SEE SHEET A10.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PLAN & PROFILE

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: SPK	CHECKED: SPK	DATE: 5/22/98
DRAWN: AWB	IN CHARGE: GLB	SCALE: AS NOTED

CONTRACT 43-99-03 SHEET A14 OF 44

DESIGNED BY:	CHECKED BY: XXX
DATE: XX-XX-XX	DATE: XX-XX-XX
DRAWN BY: AWB	REVISED BY: JJK
DATE: 01-08-97	DATE: 5/19/98
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PLAN

NOTE:
EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

BENCH MARK

BM #1
CHISLED CROSS ON N.E. CORNER OF GUARDRAIL ANCHOR
STA. 18+45, 22' LT. ELEV. 793.82

BM #2
CHISLED CROSS ON N.W. CORNER OF GUARDRAIL ANCHOR
STA. 11+17, 19' RT. ELEV. 792.02

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 32.25'±, 59.82'±, 40.27'±, 59.82'± & 32.25'±

ROADWAY: 25'-10"± TOE TO TOE PARAPET

ORIGINAL DESIGN LOADING: HS-20-44 CASE II

SKEW ANGLE: 34°48'55" RIGHT FORWARD

WEARING SURFACE: 0.75" MONOLITHIC CONCRETE

APPROACH SLABS: NONE

DATE BUILT: 1956

DECK REPLACED: 1983

PROPOSED STRUCTURE

TYPE: FOUR SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE. A572 GRADE 50 STEEL.

SPANS: 48', 80', 80', 48' MEASURED CENTER TO CENTER BEARING.

ROADWAY: 32'-0" TOE/TOE BARRIER

DESIGN LOADING: HS 20-44 AND ALTERNATE MILITARY LOADING (CASE II) FUTURE WEARING SURFACE = 60 PSF

SKEW ANGLE: 34°48'55" RIGHT FORWARD

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: 20'-0" (AS-1-81)

ALIGNMENT: TANGENT

CROWN: 3/16" PER FOOT BOTH DIRECTIONS

ADT = 2000
ADTT = 200

MINIMUM VERTICAL CLEARANCE				
	EXISTING	PROPOSED	REQUIRED	LANE
⊕1	14'-5"±	15'-3~]"	15'-0"	EASTBOUND
⊕2	14'-5"±	15'-6~$"	15'-0"	WESTBOUND
⊕3	N/A	15'-11~$"	15'-0"	FUTURE 3RD LANE

PROFILE
ALONG ℄ OF SURVEY AND CONSTRUCTION – BAGLEY ROAD

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

SITE PLAN

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER | CHECKED: WCT/SBB | DATE: 5/21/98
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CONTRACT 43-99-03 SHEET A25 OF 44

DESIGNED BY: JLS 5/22/98 | CHECKED BY: SBB DATE: 5/22/98
DRAWN BY: MML | REVISED BY:
DATE: 5/22/98 | DATE:
CAD FILE NAME: 025.DWG

1/20

STRUCTURE – GENERAL NOTES

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1992 INCLUDING THE 1993, 1994 AND 1995 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

HS20-44 CASE II, THE ALTERNATE MILITARY LOADING, AND A 60 P.S.F. FUTURE WEARING SURFACE.

DESIGN STRESSES

CONCRETE CLASS S – COMPRESSIVE STRENGTH 4500 P.S.I. (SUPERSTRUCTURE)

CONCRETE CLASS C – COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)

REINFORCING STEEL – ASTM A615, A616, A617
GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.
SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615

EXISTING STRUCTURAL STEEL ASTM A7 (ASSUMED) – YIELD STRENGTH 33,000 P.S.I.

NEW STRUCTURAL STEEL ASTM A36 – YIELD STRENGTH 36,000 P.S.I.

ASTM A572 – YIELD STRENGTH 50,000 P.S.I.

ODOT STANDARD DRAWINGS

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS:

AS-1-81	09-15-94
BR-1	12-15-94
F-2	05-01-79
F-3	05-01-79
HL-30.31	05-01-87

OTC STANDARD DRAWINGS

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO TURNPIKE COMMISSION STANDARD DRAWINGS:

CL-2	6-25-97
DJ-2	11-11-97
DJ-4	11-11-97
GR-1	1-15-98
CBR-2	8-21-95

UTILITIES LINES

THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO PROTECT THE EXISTING UTILITY LINES IN THE VICINITY OF THE STRUCTURE WHILE PERFORMING ANY WORK. THE CONTRACTOR AND UTILITY COMPANY(IES) ARE REQUESTED TO COOPERATE BY ARRANGING WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER BE HELD TO A MINIMUM. ALL EXPENSE INVOLVED IN RELOCATION (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY COMPANY(IES).

REFER TO SHEETS A14, A15, A16 FOR FURTHER INFORMATION.

EXISTING STRUCTURE PLANS

THE ORIGINAL CONSTRUCTION PLANS OR THE DECK REPLACEMENT DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OFFICES OF URS GREINER, 564-A WHITE POND DRIVE, AKRON, OHIO 44320, TELEPHONE: (330) 836-9111.

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 SECTION 513.02 OF THE SPECIFICATIONS 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 FIELD VERIFIED BY THE CONTRACTOR. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT SIXTY (60) DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

DECK PROTECTIVE METHOD

THE DECK PROTECTIVE METHODS FOR THE SUPERSTRUCTURE DECK AND ABUTMENT SLAB ARE EPOXY COATED REINFORCING STEEL IN THE TOP AND BOTTOM MATS, 2~¼" CONCRETE COVER AND CONCRETE WEATHERPROOFING SEALER ON THE TOP SURFACE.

MONOLITHIC WEARING SURFACE

THE THICKNESS OF THE MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ONE INCH.

CONCRETE WEATHERPROOFING

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

- THE TOPS OF NEW ABUTMENT AND NEW SUPERSTRUCTURE SLABS.
- ALL PARAPET SURFACES AND SLAB SIDE EDGES.
- THE BOTTOM SURFACE OF THE NEW SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE.
- APPROACH SLABS AND BARRIERS ON THE APPROACH SLABS.
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

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

EPOXY COATED REINFORCING STEEL SUPPORT

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 509 AND SECTION 509.09, OF THE SPECIFICATIONS THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING THREE (3) FOOT CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF REINFORCING STEEL.

PILE DRIVING

IF EQUIPMENT FOR PILE DRIVING OPERATIONS OCCUPIES ANY PORTION OF THE EXISTING STRUCTURE, STRESS CALCULATIONS BY A REGISTERED STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH SECTION 501.09 OF THE SPECIFICATIONS.

PILE DESIGN LOADS (SAFE BEARING CAPACITY)

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 50 TONS PER PILE.

FOUNDATION BEARING PRESSURE: PIER FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM BEARING PRESSURE OF 1.9 TONS PER SQUARE FOOT. THE ALLOWABLE BEARING PRESSURE IS 2.0 TONS PER SQUARE FOOT.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

STRUCTURE GENERAL NOTES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: RER/JLS	CHECKED: WCT/SBB	DATE: 5/22/98
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DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 026.DWG	

STRUCTURE – GENERAL NOTES

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 STEEL BEAMS, DELINEATED IN THE PLANS AT THE LOCATIONS SHOWN IN THE TABLE ON SHEET 17 OF 20 FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THE CONTRACTOR SHALL THEN 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 FOR SHALL BE BASED UPON 8 1/2" THICK CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE PROPOSED BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF NINE (9) INCHES SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN SIX (6) AND TWELVE (12) INCHES, PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN NINE (9) INCHES IN WIDTH.

PRIOR TO PLACING THE APPROACH SLABS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE EDGE OF NEW AND EXISTING PAVEMENT ELEVATIONS AND EDGE OF SHOULDER ELEVATIONS AT 25 FOOT INTERVALS FOR A DISTANCE OF 200 FEET BEYOND THE END OF THE APPROACH SLAB, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER SHALL 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–CONSTRUCTION LAYOUT SURVEY.

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 AND/OR ITEM SP 825 GALVANIZED REINFORCING STEEL, GRADE 60 UNLESS OTHERWISE NOTED.

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.

CONSTRUCTION JOINTS

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 P.S.I. HOWEVER, WATER BLASTING SHALL NOT BE 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 SHALL NOT BE MEASURED FOR PAYMENT. THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT PRICE ON THE PERTINENT CONCRETE ITEMS.

ITEM 503 – UNCLASSIFIED EXCAVATION, AS PER PLAN

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH SECTION 503 OF THE SPECIFICATIONS EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE GRANULAR MATERIAL AS PER SECTION 203.02 OF THE SPECIFICATIONS AND PLACED IN LIFTS NOT TO EXCEED A THICKNESS OF SIX (6) INCHES.

EXCAVATION FOR SHOULDER PIER REPLACEMENT
THE EXCAVATION REQUIRED FOR THE REPLACEMENT OF THE EXISTING SHOULDER PIERS SHALL BE THE DIFFERENCE BETWEEN THE VOLUME OF EXCAVATION BASED ON THE EXISTING FOOTING DIMENSIONS (PAID FOR UNDER 202 FOR PAYMENT) AND THE VOLUME OF EXCAVATION REQUIRED FOR THE NEW PIER FOOTING PER 503.11

ABUTMENT FOOTING
(LIMITS OF UNCLASSIFIED EXCAVATION)

PIER 2 FOOTING
(LIMITS OF UNCLASSIFIED EXCAVATION)

WINGWALL
(LIMITS OF UNCLASSIFIED EXCAVATION)

PIER 1 & 3 FOOTING
(LIMITS OF UNCLASSIFIED EXCAVATION)

ITEM 518 – 6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE SP.

ITEM 518 – 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE S. THIS ITEM SHALL INCLUDE ALL ELBOWS, TEES AND END CAPS REQUIRED TO COMPLETE THE ABUTMENT DRAINAGE SYSTEM.

CONCRETE PARAPETS

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 SHALL BE THE WIDTH OF THE SAW BLADE, NOT TO EXCEED ONE QUARTER (0.25) INCH, AND SHALL BE ONE AND ONE-HALF (1.5) INCHES DEEP. THE SAW CUT SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK, EXCEPT AS NOTED ON THE PLANS AND SHALL BE CAULKED WITH A ONE (1) INCH THICKNESS OF MATERIAL CONFORMING TO FEDERAL SPECIFICATION TT-S-00227E. THE BOTTOM ONE HALF (0.5) INCH OF THE SAWED JOINT AT THE OUTSIDE FACE OF THE PARAPET SHALL BE LEFT UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

NOTE: THE COST OF SAWCUTTING AND CAULKING SHALL BE INCLUDED WITH THE APPROPRIATE CONCRETE PAY ITEM.

ABBREVIATIONS

E.F. – EACH FACE
F.F. – FAR FACE
N.F. – NEAR FACE
TYP. – TYPICAL
BOTT. – BOTTOM
BRG. – BEARING
PL. – PLATE
O.C. – ON CENTER
SPA. – SPACES
U.N. – UNLESS NOTED
C.P.P. – CORRUGATED PLASTIC PIPE
E.B. – EASTBOUND
W.B. – WESTBOUND
EL. – ELEVATION
R.A. – REAR ABUTMENT
F.A. – FORWARD ABUTMENT
F.S. – FIELD SPLICE

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

STRUCTURE GENERAL NOTES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML/JLS	IN CHARGE: GLB	SCALE: NTS

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DATE: 3/9/98	DATE:
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STRUCTURE – GENERAL NOTES

PARAPET FORMS

FORMS FOR THE BRIDGE PARAPETS AND SLAB SIDE EDGES SHALL BE IN ACCORDANCE WITH SECTION 508.02 OF THE SPECIFICATIONS AND THE FOLLOWING:

WHEN WOOD FORMS ARE USED THEY SHALL PRODUCE A SMOOTH SURFACE OF UNIFORM TEXTURE AND COLOR SUBSTANTIALLY EQUAL TO THAT WHICH WOULD BE OBTAINED WITH THE USE OF NEW PLYWOOD CONFORMING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY PRODUCT STANDARD PSI FOR EXTERIOR B-B CLASS I PLYWOOD.

FORMS SHALL BE OF A CONSTRUCTION WHICH WOULD ALLOW FOR THEIR REMOVAL WITHIN 24 HOURS OF THE CONCRETE PLACEMENT WITHOUT CAUSING DAMAGE TO THE CONCRETE.

GROUT CLEANING

ALL BARRIER SURFACES AND DECK EDGES SHALL BE GROUT CLEANED IN ACCORDANCE WITH SECTION 511.15 OF THE SPECIFICATIONS USING WHITE PORTLAND CEMENT.

STRUCTURAL STEEL ERECTION/SHOP ASSEMBLY

IN ACCORDANCE WITH SP 614-MAINTAINING TRAFFIC, THE ROADWAYS OF THE OHIO TURNPIKE MAY BE CLOSED FOR THE ERECTION OF THE STRUCTURAL STEEL, PROVIDED THE DURATION OF THE CLOSURES DOES NOT EXCEED TEN (10) MINUTES INTERVALS. TO INSURE THE CLOSURES DO NOT EXCEED THE SPECIFIED INTERVALS, THE FIRST LINES OF STRUCTURAL STEEL ERECTED SHALL BE IN A PAIR. E.G., BEAM LINES ONE (1) AND TWO (2) SHALL BE ERECTED AS ONE UNIT WITH DIAPHRAGMS BOLTED IN PLACE. SUBSEQUENT BEAM LINES IN THE TRANSVERSE DIRECTION MAY BE ERECTED ONE AT A TIME. HOWEVER, THE REQUIREMENT TO PLACE THE FIRST TWO (2) BEAM LINES AS A UNIT SHALL APPLY AS THE STRUCTURE ADVANCES IN THE LONGITUDINAL DIRECTION.

THE ABOVE ERECTION REQUIREMENTS SHALL APPLY UNLESS ALTERNATE PROCEDURES ARE APPROVED BY THE CHIEF ENGINEER.

IN ADDITION TO THE ABOVE REQUIREMENTS, TO INSURE PROPER FIT-UP SO AS TO MINIMIZE ERECTION TIME, THE STRUCTURE SHALL BE SHOP ASSEMBLED IN ACCORDANCE WITH SHOP ASSEMBLY SECTION 513.20, OF THE SPECIFICATIONS.

ALL APPLICABLE SECTIONS OF 501.06 OF THE SPECIFICATIONS, APPROVAL OF CONSTRUCTION PLANS, SHALL APPLY TO THIS PROJECT. PLANS FOR THE PROPOSED ERECTION AND HANDLING PROCEDURES SHALL INCLUDE THE PROPOSED LOCATION OF ALL EQUIPMENT.
A PRE-STRUCTURAL STEEL ERECTION MEETING SHALL BE SCHEDULED PRIOR TO THE STRUCTURAL STEEL ERECTION.

PAYMENT FOR LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 513-STRUCTURAL STEEL A572, GRADE 50, AISC CATEGORY I, AS PER PLAN.

PAINTING OF STRUCTURAL STEEL

THE NEW STRUCTURAL STEEL SHALL BE TOTALLY SHOP PAINTED WITH ALL COATS IN ACCORDANCE WITH ITEM SP 514A, TOTAL SHOP PAINTING – SYSTEM IZEU. THE THREE COAT SHOP APPLICATION OF THE PAINT IS INCLUDED FOR PAYMENT UNDER "ITEM 513, STRUCTURAL STEEL, A572 GRADE 50, AISC CATEGORY I AS PER PLAN".

ANY FIELD TOUCH UP OF DAMAGED AREAS SHALL BE INCIDENTAL TO ITEM 513.

SURFACE PREPARATION OF STEEL PRIOR TO PAINTING

THE CONTRACTOR'S ATTENTION IS CALLED TO SPECIAL PROVISIONS SP 514A PART 3 – EXECUTION, SECTION 3.02 SURFACE PREPARATION, SPECIFICALLY PARAGRAPH A, WHICH ADDRESSES SURFACE PREPARATION.

ALL SHOP EDGES SUCH AS THOSE CREATED BY FLAME CUTTING AND SHEARING OF STEEL SHALL BE ADDRESSED ACCORDING TO THESE SPECIFICATIONS IN ORDER TO ENSURE A PROPER PAINT SYSTEM. BREAKING THE EDGE CAN BE ACCOMPLISHED BY A SINGLE PASS OF A GRINDER IN ORDER TO FLATTEN THE EDGE. HOWEVER, CARE SHALL BE TAKEN TO ENSURE THAT DURING THE REMOVAL OPERATION NEW SHARP EDGES ARE NOT CREATED. THIS REQUIREMENT IS APPLICABLE TO ALL STRUCTURES WHETHER OR NOT IT IS SPECIFICALLY ADDRESSED IN THE CONTRACT DRAWINGS.

NO SEPARATE PAYMENT FOR ANY GRINDING REQUIRED TO CONFORM TO THE SPECIFICATIONS WILL BE MADE UNDER SP 514A. PAYMENT FOR THE SHOP APPLIED COATING SYSTEM IS INCLUDED IN THE COMPLETED WORK OF ITEM 513 – STRUCTURAL STEEL (A572, GRADE 50 AISC CATEGORY 1, AS PER PLAN) PER PART 4 – MEASUREMENT AND PAYMENT OF SPECIAL PROVISION SP514A.

PROTECTION OF PAINTED STEEL DURING ERECTION

THE NEW STRUCTURAL STEEL THAT IS TOTALLY PAINTED IN THE SHOP SHALL CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF SP514A TOTAL SHOP PAINTING – SYSTEM IZEU AND SPECIFICALLY TO PART 3 – EXECUTION, SECTION V "SHIPPING, STORAGE AND HANDLING OF SHOP PAINTED STEEL."

IN ADDITION TO THESE REQUIREMENTS THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT THE FINISHED PAINTED SURFACE FROM DAMAGE DURING THE ERECTION OF THE STEEL, THE INSTALLATION OF THE FALSEWORK AND FORMWORK AND THE POURING OF THE CONCRETE DECK AND PARAPETS. THIS PROTECTION SHALL INCLUDE THE USE OF PADDING ON BRACKETS AND FORMWORK SUPPORTS, CONSTRUCTION OF TIGHT FITTING FORMS AND OTHER PROTECTIVE METHODS THE CONTRACTOR MAY DEEM NECESSARY FOR PROTECTING NEWLY PAINTED SURFACE.

THE CHIEF ENGINEER SHALL HAVE THE AUTHORITY TO INSTRUCT THE CONTRACTOR TO DELAY THE START OF HIS OPERATIONS OR SUSPEND HIS OPERATIONS IN WHOLE OR IN PART IF HE DOES NOT UTILIZE PROPER CARE OR MEANS TO PROTECT THE NEWLY PAINTED STEEL DURING ERECTION OR HIS FORMING OPERATIONS.

ITEM 202 – STRUCTURE REMOVED, AS PER PLAN

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC THE EXISTING STRUCTURE SHALL BE REMOVED UPON RECEIVING PERMISSION FROM THE ENGINEER. REMOVAL OF EXISTING STRUCTURES AS SHOWN ON THE CONTRACT DRAWINGS SHALL CONFORM IN ALL RESPECTS TO ITEM 202 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL PREPARE DETAILED PROCEDURES AND PLANS FOR THE REMOVAL OF THE EXISTING STRUCTURES INCLUDING METHODS OF PROTECTING EXISTING UTILITIES AND VEHICULAR TRAFFIC WITHIN THE LIMITS OF THE PROJECT. THESE PROCEDURES AND PLANS SHALL BE PREPARED AND SEALED BY A REGISTERED ENGINEER IN THE STATE OF OHIO AND SHALL INCLUDE INFORMATION AS TO THE METHODS, EQUIPMENT, AND MATERIALS TO BE USED, PERSONNEL, SUPERVISION, THE HOURS OF OPERATION, AND DURATION OF THE JOB AND SHALL BE SUBMITTED IN QUADRUPLICATE, TO THE ENGINEER FOR APPROVAL.

THESE PLANS SHALL BE APPROVED BY THE ENGINEER BEFORE COMMENCING ANY DEMOLITION OF OPERATION. THE REVIEW AND APPROVAL BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF HIS FULL RESPONSIBILITY FOR SAFE DEMOLITION OPERATIONS. THE CONTRACTOR SHALL BE AND SHALL REMAIN RESPONSIBLE FOR A SAFE DEMOLITION.

REMOVAL OF THE EXISTING BAGLEY ROAD STRUCTURE OVER THE OHIO TURNPIKE: THE EXISTING STRUCTURE SHALL BE REMOVED TO THE ELEVATIONS INDICATED BELOW.

STRUCTURE DESCRIPTION: FIVE SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE ON SPREAD FOOTINGS.

ELEVATION: REMOVE ENTIRE STRUCTURE INCLUDING ABUTMENTS, PIERS AND FOOTINGS.

ALL DEMOLITION OPERATIONS PERFORMED UNDER ITEM 202 SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF OTC SPECIAL PROVISION SP 525A – LEAD PAINT REMOVAL, WORKER/ENVIRONMENTAL PROTECTION AND WASTE HANDLING AND/PR SP 525B – DEMOLITION OF BRIDGES WITH STEEL COATED WITH LEAD PAINT – WORKER/ENVIRONMENTAL PROTECTION/DISPOSAL.

ITEM 202 – STRUCTURE REMOVED, AS PER PLAN–CONTINUED

CONCRETE REMOVAL: DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL MAKE FULL PROVISIONS FOR MAINTENANCE AND PROTECTION OF VEHICULAR TRAFFIC UNDER THE BRIDGES.

THE CONCRETE DECK SLAB AND ABUTMENT SLAB SHALL BE SAW CUT AND REMOVED IN SECTIONS WITH THE FOLLOWING RESTRICTIONS.

1. BEFORE ANY SAWING IS COMMENCED, THE OUTLINES OF THE TOP FLANGES AND COVER PLATES OF ALL STRINGERS SHALL BE DRAWN ON THE BRIDGE DECK AND (1) INCH ± DIAMETER PILOT HOLES MADE TO THE OUTSIDE OF THESE LINES TO CONFIRM THE WIDTH OF THE FLANGES. PILOT HOLES SHALL BE DRILLED TO THE OUTSIDE OF THE STRINGERS AT EACH SAW CUT LOCATION. IN NO CASE SHALL PILOT HOLES BE DRILLED OVER BEAM FLANGES.
2. THE SAW CUT LONGITUDINAL OVER THE BEAM SHALL BE LIMITED TO A MAXIMUM DEPTH OF 1 1/2 INCHES. SAWING OUTSIDE THE FASCIA BEAM (SAWING OF THE PARAPET) SHALL BE STOPPED 2 INCHES ± OUTSIDE THE CONFIRMED LIMITS OF THE BEAM FLANGES OR COVER PLATES.
3. THE CONTRACTOR'S REMOVAL PROCEDURE AS WELL AS HIS GENERAL SAWING PATTERN SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
4. PNEUMATIC HAMMERS MAY BE USED IN THE BEAM AREAS IF THE OPERATION IS OBSERVED AND APPROVED BY THE ENGINEER, AND THEN ONLY TO A DEPTH NOT PENETRATING THE LOWER REINFORCING STEEL MAT. THE ENGINEER HAS THE RIGHT TO TERMINATE HAND SAWING OR HAMMERING OVER THE FLANGES ANY TIME THE ENGINEER FEELS THE BRIDGE INTEGRITY IS IN JEOPARDY.
5. THE USE OF HYDRAULIC OR PNEUMATIC HOE-RAMS TO LINE PUNCH A SECTION OF THE DECK IN LIEU OF, OR IN COMBINATION WITH A SAW CUTTING OPERATION OR FOR THE REMOVAL OF ABUTMENT SLABS AND ADJACENT SUPPORT AREAS IS PROHIBITED.

CERTAIN CONDITIONS MAY WARRANT THE USE OF THE HYDRAULIC OR PNEUMATIC HOE-RAM AND WILL BE PERMITTED WITH SPECIFIC APPROVAL OF THE ENGINEER. THESE CONDITIONS ARE AS FOLLOWS:

1. WHERE AN ENTIRE CONCRETE UNIT IS TO BE REMOVED SUCH AS ENTIRE ABUTMENT OR PIER.
2. PUNCHING THROUGH THE DECK TO PROVIDE LIFTING HOLES FOR TOTAL SLAB REMOVAL.
3. LIMITED LOCALIZED AREAS ON THE CONCRETE DECK WHERE SAWING, INCLUDING THE VERMIER SAW, CANNOT PRACTICALLY MAKE THE COMPLETE CUT.

WHEN SO DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL WET DOWN CONCRETE THOROUGHLY DURING THE REMOVAL OPERATIONS TO PREVENT SPREAD OF DUST. ALL NECESSARY LABOR, EQUIPMENT AND MATERIAL SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED WITH ITEM 202 – STRUCTURES REMOVED, AS PER PLAN, FOR PAYMENT.

THE USE OF EXPLOSIVES AND HEADACHE BALLS ARE NOT PERMITTED.

CONSTRUCTION STRESSES: NO PART OF THE STRUCTURE SHALL BE SUBJECTED TO UNIT STRESSES THAT EXCEED BY MORE THAN ONE-THIRD THE ALLOWABLE UNIT STRESSES, AS GIVEN IN A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" DUE TO ERECTION, REMOVAL AND CONSTRUCTION METHODS, OR TO THE USE OR MOVEMENT OF CONSTRUCTION EQUIPMENT ONTO OR ACROSS THE STRUCTURE.

WHEN EQUIPMENT HAVING A GROSS WEIGHT IN EXCESS OF 40,000 POUNDS IS TO BE PLACED ON THE STRUCTURE AND USED FOR THE REMOVAL AND CONSTRUCTION PURPOSES, STRUCTURAL ANALYSIS CALCULATIONS BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO SHOWING THE STRESSES PRODUCED BY THE EQUIPMENT AND ASSOCIATED LOADS SHALL BE SUBMITTED TO THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE WORK FOR REVIEW AND APPROVAL.

ITEM 202 – STRUCTURE REMOVED, AS PER PLAN–CONTINUED

DISPOSAL OF REMOVED MATERIAL: ALL CONCRETE, STEEL, ETC., REMOVED FROM THE STRUCTURE, UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED BY HIM FROM THE SITE ACCORDING TO THE PROVISIONS OF SP 108, SP525A, AND SP525B.

PROTECTIVE STRUCTURES: PROTECTIVE STRUCTURES FOR CATCHING FALL DEBRIS AND WATER FROM THE DEMOLITION OPERATION SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION SP 527 – "FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES".

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 202, AND TO THE SATISFACTION OF THE ENGINEER.

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OHIO TURNPIKE COMMISSION

STRUCTURE GENERAL NOTES

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML/JLS	IN CHARGE: GLB	SCALE: NTS

ESTIMATED QUANTITIES

								DATE
						CALC BY:	WCT,RER	12/97
						CHECKED BY:	RER,JLS	1/98
ITEM	TOTAL	UNIT	DESCRIPTION	GENERAL	ABUTMENTS	PIERS	SUPER	AS PER PLAN SHEET NO.
202 *	LUMP SUM		STRUCTURE REMOVED, AS PER PLAN					
503	483	CU. YD.	UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP				4 OF 20
503	LUMP SUM		COFFERDAMS, CRIBS AND SHEETING		258	225		3 OF 20
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION	LUMP				
507	1350	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES	LUMP				
509	17,933	POUND	REINFORCING STEEL, GRADE 60		1350			
SP509	78,537	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60		4042		13,891	
SP511	126	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		11,576		66,961	
SP511	86	CU. YD.	CLASS C CONCRETE, PIER CAP AND COLUMNS			126		
SP511	175	CU. YD.	CLASS C CONCRETE, ABUTMENTS		175	86		
SP511A T	272	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB USING SHRINKAGE COMPENSATING CEMENT	6			266	
SP511A	65	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS USING TYPE I CEMENT		5		60	
SP511A	3	CU. YD.	CLASS S CONCRETE, USING SHRINKAGE COMPENSATING CEMENT, FOR PRE-PLACEMENT TESTING	3				
513	262,049	POUND	STRUCTURAL STEEL, A572-50, AISC CATEGORY I, AS PER PLAN				262,049	4 OF 20
513	4,482	EACH	WELDED STUD SHEAR CONNECTOR				4482	
516	30	EACH	LAMINATED ELASTOMERIC BEARINGS, COMPLETE, AS PER PLAN		12	18		14 OF 20
SP516B	516	LIN. FT.	SEALING OF CONSTRUCTION JOINTS				516	
518	50	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC		50			
518	84	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN		84			3 OF 20
518	122	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN		122			3 OF 20
SP525B	LUMP SUM		SCRAP STEEL/PAINT/WASTE - REMOVAL, HANDLING, STORAGE, CLASSIFICATION, TRANSPORTATION AND DISPOSAL	LUMP				
SP525B	25	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET	25				
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES	LUMP				
SP533	82	LIN. FT.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT		82			
SP536	1201	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS	142			1059	
SP536	441	SQ. YD.	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS		26		415	
SP536	414	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE		96	318		
601	586	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		586			
SP607	576	LIN. FT.	TYPE II FENCE, ALL ALUMINUM (6'-0" CHAIN LINK WITH SPECIALS)		60		516	
SP825	23,947	POUND	GALVANIZED REINFORCING STEEL, GRADE 60			23,947		

T AS A CONTINGENCY, 6 CU. YD. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR SUPERSTRUCTURE CONCRETE, IN THE GENERAL COLUMN, TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO THE PROFILE ADJUSTMENT.

* ITEM 202 - STRUCTURE REMOVED, AS PER PLAN, INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

SUPERSTRUCTURE CONCRETE	234	CU. YD.
SUBSTRUCTURE CONCRETE	486	CU. YD.
STRUCTURAL STEEL	175,900	POUNDS
STRUCTURAL EXPANSION JOINT	90	LIN. FT.
6" PIPING	313	LIN. FT.
8" PIPING	81	LIN. FT.
SCUPPERS	4	EACH
CONCRETE PARAPETS	2	EACH

THE ABOVE QUANTITIES ARE GIVEN FOR INFORMATION ONLY. THE CONTRACTOR SHALL OBTAIN HIS OWN QUANTITIES TO BE USED AS A BASIS FOR DETERMINING HIS BID PRICE FOR ITEM 202 - STRUCTURE REMOVED, AS PER PLAN.

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OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: RAM	IN CHARGE: GLB	SCALE: NTS

PLAN

NOTES

⇩ BATTER PILING 4" PER FOOT IN DIRECTION INDICATED.

PILE TABLE					
UNIT	PILE NO.	CUT-OFF ELEVATION	ESTIMATED PILE LENGTH	PILE SIZES	DESIGN LOAD
REAR ABUT.	1 THRU 15	793.25	45 L.F.	12"ø C.I.P. CONC.	50 TONS
FORWARD ABUT.	16 THRU 30	793.25	45 L.F.	12"ø C.I.P. CONC.	50 TONS

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

FOUNDATION PLAN

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
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FOOTING PLAN

(TYPICAL FOR FORWARD AND REAR ABUTMENTS)

TERMINATE 6" C.P.P. AT FRONT SLOPE

NOTES

(RA) = REAR ABUTMENT
(FA) = FORWARD ABUTMENT

THE FOLLOWING PREFIXES ARE USED IN THE BAR MARKS:

AP-DENOTES "ABUTMENT-PLAIN" REINFORCING
AE-DENOTES "ABUTMENT-EPOXY COATED" REINFORCING

ABUTMENT CONCRETE SHALL BE PAID UNDER ITEM SP 511, CLASS C CONCRETE, ABUTMENT. THE ABUTMENT BARRIERS SHALL BE PAID FOR UNDER ITEM SP 511A, CLASS S CONCRETE, BARRIERS USING TYPE I CEMENT.

REINFORCING SPLICE LENGTHS FOR UNCOATED BARS SHALL BE 2'-2" FOR #4 BARS AND 6'-4" FOR #8 BARS, UNLESS NOTED OTHERWISE.

REINFORCING SPLICE LENGTHS FOR EPOXY COATED BARS SHALL BE 2'-6" FOR #5 BARS AND 2'-11" FOR #6 BARS, UNLESS NOTED OTHERWISE.

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OHIO TURNPIKE COMMISSION

ABUTMENT FOOTING PLAN
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: RER/JLS	CHECKED: WCT/SBB	DATE: 5/22/98	
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7/20 CONTRACT 43-99-03 SHEET A31 OF 44

PLAN
(FOOTING NOT SHOWN)

■ RADIUS = 12"

FOR RADIUS LAYOUT DETAILS SEE O.T.C. STANDARD DRAWING "DJ-1".

REINFORCING SPLICE LENGTHS FOR EPOXY COATED BARS SHALL BE 2'-6" FOR #5 BARS AND 2'-11" FOR #6 BARS UNLESS NOTED OTHERWISE.

CHAIN LINK SAFETY FENCE (TYP.) REFER TO OTC STANDARD CL-2 FOR DETAILS.

ELEVATION

NOTES

BACKWALL CONCRETE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 19 OF 20.

SEISMIC PEDESTALS TO BE PLACED MONOLITHICALLY WITH ABUTMENT BODY.

SURFACE UNDER BEARINGS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN 1/16 INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO ONE FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

SECTION THRU ABUTMENT BODY

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

REAR ABUTMENT
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: J.S/RER	CHECKED: WCT/SBB	DATE: 5/22/98
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■ RADIUS = 12"

FOR RADIUS LAYOUT DETAILS SEE O.T.C. STANDARD DRAWING "DJ-1"

PLAN
(FOOTING NOT SHOWN)

REINFORCING SPLICE LENGTHS FOR EPOXY COATED BARS SHALL BE 2'-6" FOR #5 BARS AND 2'-11" FOR #6 BARS UNLESS NOTED OTHERWISE.

ELEVATION

NOTES

BACKWALL CONCRETE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 19 OF 20.

SEISMIC PEDESTALS TO BE PLACED MONOLITHICALLY WITH ABUTMENT BODY.

SURFACE UNDER BEARINGS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN 1/16 INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO ONE FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

SECTION THRU ABUTMENT BODY

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

FORWARD ABUTMENT

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

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DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
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WING 1 ELEVATION (RA)
WING 4 ELEVATION (FA)

EL. 791.25 (RA) & (FA)

WING 2 ELEVATION (RA)
WING 3 ELEVATION (FA)

REINFORCING SPLICE LENGTHS FOR EPOXY COATED BARS SHALL BE 2'-6" FOR #5 BARS AND 2'-11" FOR #6 BARS UNLESS NOTED OTHERWISE.

NOTES

FOR PARAPET TRANSITION DETAILS, SEE O.D.O.T. STANDARD DRAWING BR-1, SHEET 1 OF 2.

FOR 6" C.P.P. TERMINATION DETAIL, SEE SHT. 7 OF 20.

SECTION A-A
(WING 2, WING 3 SECTION SIMILAR)

FRONT VIEW OF SEISMIC PEDESTAL

VIEW B-B

BEARING DETAIL

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

ABUTMENT DETAILS

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: RER/JLS	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML	IN CHARGE: GLB	SCALE: NTS

10/20 CONTRACT 43-99-03 SHEET A34 OF 44

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 034.DWG	

PLAN

ELEVATION
(LOOKING NORTH)

BOTTOM REINFORCEMENT

TOP REINFORCEMENT

FOOTING PLAN
(SHOWING REINFORCEMENT)

REINFORCING SPLICE LENGTHS FOR PLAIN OR GALVANIZED BARS SHALL BE 2'-2" FOR #5 BARS, 3'-3" FOR #7 BARS, 4'-3" FOR #8 BARS AND 5'-4" FOR #9 BARS UNLESS NOTED OTHERWISE.

SECTION THRU COLUMN

FRONT VIEW OF SEISMIC PEDESTAL

VIEW B-B

ELEVATION

SECTION THRU PIER CAP

NOTES

THE FOLLOWING PREFIXES ARE USED IN THE REINFORCING BAR MARKS:
PP DENOTES "PIER-PLAIN" REINFORCING
PG DENOTES "PIER-GALVANIZED" REINFORCING.
SPG DENOTES "SPIRAL-PIER-GALVANIZED" REINF.

FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 20 OF 20.

COLUMN SPIRAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.

SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN ~!" INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

FOR BEARING DETAILS, SEE SHEET 14 OF 20.

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 035.DWG	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PIER 1
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML/JLS	IN CHARGE: GLB	SCALE: NTS

11/20 CONTRACT 43-99-03 SHEET A35 OF 44

PLAN

SECTION THRU COLUMN

REINFORCING SPLICE LENGTHS FOR PLAIN OR GALVANIZED BARS SHALL BE 2'-2" FOR #5 BARS, 3'-3" FOR #7 BARS, 4'-3" FOR #8 BARS AND 5'-4" FOR #9 BARS UNLESS NOTED OTHERWISE.

NOTES

THE FOLLOWING PREFIXES ARE USED IN THE REINFORCING BAR MARKS:
PP DENOTES "PIER-PLAIN" REINFORCING
PG DENOTES "PIER-GALVANIZED" REINFORCING.
SPG DENOTES "SPIRAL-PIER-GALVANIZED" REINF.

FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 20 OF 20.

COLUMN SPIRAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.

SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN ~!" INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

FOR BEARING DETAILS, SEE SHEET 14 OF 20.

ELEVATION
(LOOKING NORTH)

ELEVATION

SECTION THRU PIER CAP

BOTTOM REINFORCEMENT

TOP REINFORCEMENT

FOOTING PLAN
(SHOWING REINFORCEMENT)

ANCHOR BOLT DETAIL

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PIER 2
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML/JLS	IN CHARGE: GLB	SCALE: NTS

12/20 CONTRACT 43-99-03 SHEET A36 OF 44

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 036.DWG	

PLAN

SECTION THRU COLUMN

REINFORCING SPLICE LENGTHS FOR PLAIN OR GALVANIZED BARS SHALL BE 2'-2" FOR #5 BARS, 3'-3" FOR #7 BARS, 4'-3" FOR #8 BARS AND 5'-4" FOR #9 BARS UNLESS NOTED OTHERWISE.

NOTES

THE FOLLOWING PREFIXES ARE USED IN THE REINFORCING BAR MARKS:
PP DENOTES "PIER-PLAIN" REINFORCING
PG DENOTES "PIER-GALVANIZED" REINFORCING.
SPG DENOTES "SPIRAL-PIER-GALVANIZED" REINF.

FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 20 OF 20.

COLUMN SPIRAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.

SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN ~1" INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

FOR BEARING DETAILS, SEE SHEET 14 OF 20.

FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 11 OF 20.

ELEVATION
(LOOKING NORTH)

ELEVATION

SECTION THRU PIER CAP

BOTTOM REINFORCEMENT

TOP REINFORCEMENT

FOOTING PLAN
(SHOWING REINFORCEMENT)

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 037.DWG	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

PIER 3
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML/JLS	IN CHARGE: GLB	SCALE: NTS

SECTION A–A

LAMINATED ELASTOMERIC EXPANSION BEARING

SECTION B–B

LAMINATED ELASTOMERIC FIXED BEARING

DETAIL "A"

STEEL LOAD PLATE

BEARING ORIENTATION PLAN

NOTES

1. ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND, ARTICLES 18.2.5 THROUGH 18.2.8 OF SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION OF THE AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", FIFTEENTH EDITION, 1992. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS CORRESPONDING TO DESIGN METHOD "A". 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 18.2.7.6, SHORT DURATION COMPRESSION TESTS ON BEARINGS, DIVISION II, CONSTRUCTION OF THE AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", FIFTEENTH EDITION, 1992. THE TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS. ACCEPTANCE OF THE BEARING SHALL BE ACCORDING TO ARTICLE 10.2.7.6 AND 711.23 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE MANUFACTURER SHALL FURNISH CERTIFIED TEST DATA. THE MANUFACTURER SHALL SUPPLY A SAMPLE BEARING OF EACH DESIGN, AS SHOWN ON THE PLANS, FOR DESTRUCTIVE TESTING AND APPROVAL PURPOSES. SAMPLE BEARINGS WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM.
2. WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300° F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
3. BEARING REPOSITIONING: IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80° F OR LOWER THAN 40° F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60° F (±) 10° F, THE BEAMS OR GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60° F (±) 10° F.
4. THE STEEL LOAD PLATE SHALL BE ASTM A572 GRADE 50 STEEL AND SHALL BE PAINTED IN ACCORDANCE WITH SP 514, SP 514A, OR SP 514B.
5. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
6. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE.
7. ELASTOMER SHALL BE 50 DUROMETER HARDNESS.
8. BEARING ANCHOR RODS: AT THE OPTION OF THE CONTRACTOR, THE BEARING ANCHOR RODS (OR FORMED HOLES), LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST-IN-PLACE. IF ANCHOR RODS ARE NOT CAST-IN-PLACE THEY SHALL BE GROUTED IN ACCORDANCE WITH SP 853.
9. ANCHOR RODS SHALL BE GALVANIZED AS PER O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATION 711.02. ANCHOR RODS SHALL EXTEND 1 INCH ABOVE THE LOAD PLATE (PIER BEARINGS).
10. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. SAMPLE BEARINGS SHALL NOT BE MEASURED FOR PAYMENT.

BEARING LOCATION	BEARING TYPE	NO. REQ'D.	DEAD LOAD KIPS	LIVE LOAD KIPS	TOTAL LOAD (DL+LL) KIPS	Le	We	Tpi	NO. OF Tpi'S	Tpe (2 EA.)	NUMBER OF INTERNAL LAMINATES (14 GAGE)	Te	STEEL LOAD PLATE				Tt	FILLET WELD SIZE
													Wt	Lt	t1	t2		
R. ABUTMENT	EXPANSION	6	21.6	39.3	60.9	7"	10"	0.20"	8	0.15"	9	2 9/16"	15"	8"	1"	1 1/4"	3 9/16"	5/16"
PIER 1	EXPANSION	6	93.2	51.6	144.8	10"	15"	0.25"	3	0.19"	4	1 7/16"	16"	11"	1 3/4"	1 15/16"	3 3/16"	5/16"
PIER 2	FIXED	6	111.6	57.5	169.1	10"	17"	0.25"	4	0.18"	5	1 3/4"	23"	11"	2"	2"	3 3/4"	5/16"
PIER 3	EXPANSION	6	93.2	51.6	144.8	10"	15"	0.25"	3	0.19"	4	1 7/16"	16"	11"	1 15/16"	1 3/4"	3 3/16"	5/16"
F. ABUTMENT	EXPANSION	6	21.6	39.3	60.9	7"	10"	0.20"	8	0.15"	9	2 9/16"	15"	8"	1 1/4"	1"	3 9/16"	5/16"

DESIGNED BY: JLS | CHECKED BY: SBB
DATE: 3/9/98 | DATE: 3/9/98
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DATE: 3/9/98 | DATE:
CAD FILE NAME: 038.DWG

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

BEARING DETAILS

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER | CHECKED: WCT/SBB | DATE: 5/22/98
DRAWN: MML/JLS | IN CHARGE: GLB | SCALE: NTS

◮ = ~^" X 5~]" CONNECTION PLATE (TYP.). SEE DETAIL "C" ON SHEET 16 OF 20.

FRAMING PLAN

◪ = ~•" X 5~]" BRG STIFFENER ONE PLATE EACH SIDE. TYP. @ ℄ BRG. ABUTMENTS AND ℄ PIERS SEE DETAIL "B" ON SHT. 16 OF 20.

• LOCATION OF TEMPORARY HOLD DOWN RODS TO BE PLACED AT THE ABUTMENT WHERE THE SLAB PLACEMENT TERMINATES, TYP. BETWEEN ALL BEAMS. SEE DETAIL "C" ON THIS SHEET.

END DIAPHRAGM DETAIL "A"

INTERMEDIATE DIAPHRAGM IN SPANS AND AT PIERS DETAIL "B"

SECTION

TEMPORARY HOLD DOWN DEVICE DETAIL "C"

TEMPORARY HOLD DOWN DEVICES SHALL BE PLACED AT THE ABUTMENT WHERE THE SLAB PLACEMENT TERMINATES. COST OF FURNISHING, INSTALLING AND REMOVING HOLD DOWN DEVICES SHALL BE INCLUDED IN ITEM 513 – STRUCTURAL STEEL, A572-50, AISC CATEGORY I, AS PER PLAN.

NOTES

HIGH STRENGTH BOLTS SHALL BE 7/8" DIAMETER GALVANIZED, UNLESS OTHERWISE NOTED, AND SHALL CONFORM TO ASTM A325, SP513, SP514, SP514A, OR SP514B, AND SP711.

THE STRUCTURAL EXPANSION JOINTS SHALL BE A CONTINUOUS 3" STRIP SEAL. ALL STRUCTURAL STEEL ASSOCIATED WITH STRUCTURAL EXPANSION JOINTS SHALL BE INCLUDED WITH ITEM SP533, CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINTS. FOR EXPANSION JOINT DETAILS, SEE OTC STANDARD DRAWINGS "DJ-2" AND "DJ-4".

WELDED SHEAR STUD CONNECTORS SHALL CONFORM TO AASHTO M169 AND SPECIFICATION ITEM 513.

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

FOR THE HALF BEAM ELEVATION, SEE SHEET 16 OF 20.

FOR ADDITIONAL NOTES, SEE THE STRUCTURAL GENERAL NOTES ON SHEETS 2, 3, AND 4 OF 20.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

FRAMING PLAN

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML	IN CHARGE: GLB	SCALE: NTS

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 039.DWG	

HALF BEAM ELEVATION

BEAM SPLICE DETAIL "A"

BEARING STIFFENER PLATES DETAIL "B"

INTERMEDIATE DIAPHRAGM CONNECTION PLATE "C"

TYPICAL WELD DETAIL "D"

SHEAR CONNECTORS DETAIL "E"

NOTES

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM 572, GRADE 50 UNLESS NOTED OTHERWISE

ALL FIELD SPLICES SHALL BE MADE WITH 1" DIAMETER HIGH STRENGTH STEEL BOLTS, CONFORMING TO A325, TYPE 3. THE BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR BEAMS AND ON THE BOTTOM OF THE BOTTOM FLANGE PLATES AND TOP OF THE TOP FLANGE PLATES.

FOR DEFLECTION AND CAMBER DETAILS, SEE SHEET 17/20.

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.

WELDED ATTACHMENTS FOR FINISHING MACHINE SUPPORTS ARE NOT PERMITTED.

▲ TOP FLANGE TENSION (DEAD LOAD + LIVE LOAD + IMPACT)

● TOP FLANGE COMPRESSION (DEAD LOAD + LIVE LOAD + IMPACT)

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

BEAM DETAILS

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML	IN CHARGE: GLB	SCALE: NTS

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 042.DWG	

LAYOUT DIAGRAM

ELEVATION KEY
(LOOKING EAST)

CAMBER TABLE

		SPAN 1			SPAN 2					SPAN 3					SPAN 4		
		1/4 PT.	1/2 PT.	3/4 PT.	F.S. #1	1/4 PT.	1/2 PT.	3/4 PT.	F.S. #2	F.S. #3	1/4 PT.	1/2 PT.	3/4 PT.	F.S. #4	1/4 PT.	1/2 PT.	3/4 PT.
BEAMS 2-5	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	1/16	1/8	3/16	1/8	1/16	1/16	1/8	3/16	1/8	1/16	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	1/8	1/16	0	1/2	11/16	1 1/16	9/16	1/2	1/2	9/16	1 1/16	11/16	1/2	0	1/16	1/8
	ADJUSTMENT REQUIRED FOR VERTICAL CURVE	3/8	1/2	3/8	3/4	1	1 3/8	1	15/16	15/16	1	1 3/8	1	3/4	3/8	1/2	3/8
	REQUIRED SHOP CAMBER	1/2	9/16	3/8	1 5/16	1 13/16	2 5/8	1 11/16	1 1/2	1 1/2	1 11/16	2 5/8	1 13/16	1 5/16	3/8	9/16	1/2
BEAMS 1 & 6	DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	1/16	1/8	3/16	1/8	1/16	1/16	1/8	3/16	1/8	1/16	0	0	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	1/8	1/16	0	7/16	5/8	7/8	1/2	7/16	7/16	1/2	7/8	5/8	7/16	0	1/16	1/8
	ADJUSTMENT REQUIRED FOR VERTICAL CURVE	3/8	1/2	3/8	3/4	1	1 3/8	1	15/16	15/16	1	1 3/8	1	3/4	3/8	1/2	3/8
	REQUIRED SHOP CAMBER	1/2	9/16	3/8	1 1/4	1 3/4	2 7/16	1 5/8	1 7/16	1 7/16	1 5/8	2 7/16	1 3/4	1 1/4	3/8	9/16	1/2

NOTES

ALLOWANCES FOR DEAD LOAD DEFLECTIONS SHALL BE ADDED TO THE FINAL PAVEMENT ELEVATIONS TO OBTAIN THE PROPER FORMING ELEVATIONS.

FINAL PAVEMENT ELEVATIONS

	℄ BRG. R. ABUT.	1/4 PT.	1/2 PT.	3/4 PT.	℄ PIER 1	℄ F.S. #1	1/4 PT.	1/2 PT.	3/4 PT.	℄ F.S. #2	℄ PIER 2	℄ F.S. #3	1/4 PT.	1/2 PT.	3/4 PT.	℄ F.S. #4	℄ PIER 3	1/4 PT.	1/2 PT.	3/4 PT.	℄ BRG. F. ABUT.
FLOW L. 7	801.20	801.42	801.62	801.81	801.97	802.13	802.20	802.37	802.48	802.49	802.54	802.55	802.54	802.49	802.38	802.34	802.22	802.09	801.95	801.78	801.59
BEAM 1	801.21	801.44	801.64	801.82	801.98	802.14	802.21	802.38	802.49	802.50	802.55	802.56	802.55	802.50	802.39	802.34	802.22	802.10	801.95	801.78	801.60
BEAM 2	801.39	801.61	801.80	801.98	802.13	802.29	802.35	802.50	802.61	802.61	802.65	802.65	802.64	802.58	802.45	802.41	802.28	802.14	801.99	801.82	801.62
BEAM 3	801.56	801.78	801.96	802.13	802.28	802.43	802.48	802.63	802.72	802.72	802.75	802.74	802.74	802.65	802.52	802.46	802.33	802.19	802.03	801.85	801.64
CROWN	801.65	801.86	802.04	802.21	802.35	802.49	802.55	802.69	802.77	802.78	802.80	802.78	802.77	802.69	802.55	802.49	802.35	802.21	802.04	801.86	801.65
BEAM 4	801.64	801.85	802.03	802.19	802.33	802.46	802.52	802.65	802.73	802.74	802.75	802.72	802.72	802.63	802.48	802.43	802.28	802.13	801.96	801.78	801.56
BEAM 5	801.62	801.82	801.99	802.14	802.28	802.41	802.45	802.58	802.64	802.65	802.65	802.61	802.61	802.50	802.35	802.29	802.13	801.98	801.80	801.61	801.39
BEAM 6	801.60	801.78	801.95	802.10	802.22	802.35	802.39	802.50	802.55	802.56	802.55	802.50	802.49	802.38	802.21	802.14	801.98	801.82	801.64	801.44	801.21
FLOW L. 8	801.59	801.78	801.95	802.09	802.22	802.34	802.38	802.49	802.54	802.55	802.54	802.49	802.48	802.36	802.20	802.13	801.97	801.81	801.62	801.42	801.20

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

CAMBER & ELEVATION TABLES
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER | CHECKED: WCT/SBB | DATE: 5/22/98
DRAWN: MML/JLS | IN CHARGE: GLB | SCALE: NTS

DESIGNED BY: SBB | CHECKED BY: SBB | DATE: 3/9/98
DRAWN BY: ML | REVISED BY: | DATE: 3/9/98
CAD FILE NAME: 041.DWG

SLAB PLAN

REINFORCING SPLICE LENGTHS FOR EPOXY COATED BARS SHALL BE 2'-0" FOR #4 AND 2'-6" FOR #5 BARS UNLESS NOTED OTHERWISE.

* SEAL WITH SP516B SEALING OF CONST. JOINTS (TYP.)

TRANSVERSE SECTION THRU ROADWAY
(LOOKING EAST)

PARAPET DETAIL

NOTES

FOR PARAPET NOTES AND SAW-CUT DETAILS, SEE GENERAL NOTES, SHEET 3 OF 20.

THE TRANSVERSE DECK REINFORCING BARS SHALL BE FIELD BENT TO CONFORM TO THE ROADWAY CROWN. FIELD BENDING SHALL BE INCLUDED WITH ITEM SP 509 - "EPOXY COATED REINFORCING STEEL, GRADE 60", FOR PAYMENT.

FOR REINFORCING BAR SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 19 OF 20.

A HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.

LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN THE DECK SLAB.

DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE THEORETICAL DESIGN DIMENSION INCLUDING THE DESIGN HAUNCH THICKNESS OF 2 INCHES. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, MINUS THE DESIGN HAUNCH THICKNESS, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP OF FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

SUPERSTRUCTURE
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98
DRAWN: MML	IN CHARGE: GLB	SCALE: NTS

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 042.DWG	

REAR ABUTMENT
ITEM SP509– "EPOXY COATED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
AE504	37	6'–6"	3	0'–10"	5'–9"					251
AE505	37	9'–2"	1	3'–5"	3'–0"					354
AE506	38	22'–0"	STR							872
AE508	7	5'–0"	STR							37
AE509	4	7'–7"	3	0'–10"	6'–10"					32
AE510	8	12'–5"	STR							104
AE511	8	8'–11"	STR							74
AE512	28	15'–8"	STR							458
AE513	22	3'–0"	8	2'–5"						69
AE514	6	6'–1"	15							38
AE601	37	13'–5"	2	5'–4"	5'–9"	2'–7"				746
AE602	18	19'–3"	1	1'–2"	9'–2"					520
AE603	38	10'–2"	1	1'–5"	4'–6'					580
AE604	38	6'–8"	1	0'–11"	3'–0"					381
AE605	28	6'–5"	1	1'–2"	2'–9"					270
AE606	28	5'–0"	STR							210
AE607	28	3'–8"	12	0'–8"	0'–6"	0'–8~∘"	2'–3"			154
AE608	6	7'–2"	1	1'–11"	2'–9"					65
AE609	12	4'–5"	3	1'–9"	2'–9"					80
AE805	22	4'–9"	9	2'–6"	1'–0"	1'–0"				279
AE901	12	4'–0"	3	1'–9"	2'–9"					163
AE902	4	3'–9"	STR							51

TOTAL WEIGHT = 5788

FORWARD ABUTMENT
ITEM SP509– "EPOXY COATED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
AE504	37	6'–6"	3	0'–10"	5'–9"					251
AE505	37	9'–2"	1	3'–5"	3'–0"					354
AE506	38	22'–0"	STR							872
AE508	7	5'–0"	STR							37
AE509	4	7'–7"	3	0'–10"	6'–10"					32
AE510	8	12'–5"	STR							104
AE511	8	8'–11"	STR							74
AE512	28	15'–8"	STR							458
AE513	22	3'–0"	8	2'–5"						69
AE514	6	6'–1"	15							38
AE601	37	13'–5"	2	5'–4"	5'–9"	2'–7"				746
AE602	18	19'–3"	1	1'–2"	9'–2"					520
AE603	38	10'–2"	1	1'–5"	4'–6'					580
AE604	38	6'–8"	1	0'–11"	3'–0"					381
AE605	28	6'–5"	1	1'–2"	2'–9"					270
AE606	28	5'–0"	STR							210
AE607	28	3'–8"	12	0'–8"	0'–6"	0'–8~∘"	2'–3"			154
AE608	6	7'–2"	1	1'–11"	2'–9"					65
AE609	12	4'–5"	3	1'–9"	2'–9"					80
AE805	22	4'–9"	9	2'–6"	1'–0"	1'–0"				279
AE901	12	4'–0"	3	1'–9"	2'–9"					163
AE902	4	3'–9"	STR							51

TOTAL WEIGHT = 5788

SUPERSTRUCTURE
ITEM SP509– "EPOXY COATED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
SE401	440	33'–0'	STR							9699
SE402	110	7'–2"	8	6'–10"						527
SE501	496	32'–0"	STR							16554
SE502	648	34'–6"	STR							23317
SE503	4 SER. 27 BARS	5'–3" to 32'–2"	STR						0'–9~]"	2108
SE504	165	32'–0"	STR							5507
SE505	516	6'–0"	15							3229
SE506	62	20'–6"	STR							1326
SE507	12	5'–0"	STR							63
SE601	516	2'–7"	3	0'–11"	1'–9"					2002
SE602	516	3'–1"	13	0'–9"	0'–6"	0'–8~∘"	0'–10"	0'–10~∘"		2389
SE603	4	40'–0"	STR							240

TOTAL WEIGHT = 66961

REAR ABUTMENT
ITEM 509– "REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
AP501	37	9'–1"	1	5'–4"	2'–0"					350
AP502	18	11'–5"	5	3'–2"	2'–3"					214
AP503	2	4'–0"	STR							8
AP801	16	25'–0"	STR							1068
AP802	2	16'–0"	STR							85
AP803	2	11'–6"	STR							61
AP804	8	11'–0"	STR							235

TOTAL WEIGHT = 2021

FORWARD ABUTMENT
ITEM 509– "REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
AP501	37	9'–1"	1	5'–4"	2'–0"					350
AP502	18	11'–5"	5	3'–2"	2'–3"					214
AP503	2	4'–0"	STR							8
AP801	16	25'–0"	STR							1068
AP802	2	16'–0"	STR							85
AP803	2	11'–6"	STR							61
AP804	8	11'–0"	STR							235

TOTAL WEIGHT = 2021

BAR BENDING DIAGRAMS

NOTES

EPOXY COATED REINFORCING STEEL SUPPORT: IN ACCORDANCE WITH THE REQUIREMENTS OF SP509 AND 509.09, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3'–0" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL.

REINFORCING STEEL SAMPLES: REFER TO O.T.C. GENERAL CONDITIONS, SECTION G–6.02 AND C.M.S. SECTIONS 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 STRUCTURE BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

THE PREFIX "E" DENOTES EPOXY COATED REINFORCING STEEL.

THE PREFIX "G" DENOTES GALVANIZED REINFORCING STEEL.

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 043.DWG	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

REINFORCEMENT SCHEDULE

BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: RER/JLS	CHECKED: WCT/SBB	DATE: 5/22/98	
DRAWN: RAM	IN CHARGE: GLB	SCALE: NTS	

PIER 1
ITEM SP825– "GALVANIZED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
SPG401	3	14'–9"	20	2'–6"	0'–4~8"					773
PG503	10	40'–0"	STR							417
PG504	14	5'–11"	9	2'–8"	3'–4"	0'–6"				86
PG505	168	6'–7"	1	1'–11~8"	2'–5"					1153
PG601	6	7'–3"	1	2'–1"	2'–9"					65
PG602	12	4'–6"	3	1'–11"	2'–9"					81
PG802	42	8'–5"	3	1'–4"	7'–3"					944
PG803	42	17'–2"	8	16'–3"						1925
PG804	7	33'–0"	STR							617
PG 901	7	33'–7"	3	31'–4"	2'–6"					799
PG 902	7	18'–9'	3	16'–6"	2'–6"					446
PG 903	12	4'–5"	3	1'–11"	2'–9"					187
PG 904	4	3'–3"	STR							44
									TOTAL WEIGHT =	7537

PIER 2
ITEM SP825– "GALVANIZED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
SPG401	3	17'–1"	20	2'–6"	0'–4~8"					888
PG503	10	40'–0"	STR							417
PG504	16	5'–11"	9	2'–8"	3'–4"	0'–6"				99
PG505	184	6'–7"	1	1'–11~8"	2'–5"					1263
PG802	8	33'–0"	STR							705
PG 901	42	8'–8"	3	1'–7"	7'–3"					1238
PG 902	42	19'–9"	8	18'–6"						2820
PG 903	8	33'–7"	3	31'–4"	2'–6"					913
PG 904	8	18'–9"	3	16'–6"	2'–6"					510
									TOTAL WEIGHT =	8853

PIER 3
ITEM SP825– "GALVANIZED REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
SPG401	3	14'–9"	20	2'–6"	0'–4~8"					773
PG503	10	40'–0"	STR							417
PG504	14	5'–11"	9	2'–8"	3'–4"	0'–6"				86
PG505	168	6'–7"	1	1'–11~8"	2'–5"					1153
PG601	6	7'–3"	1	2'–1"	2'–9"					65
PG602	12	4'–6"	3	1'–11"	2'–9"					81
PG802	42	8'–5"	3	1'–4"	7'–3"					944
PG803	42	17'–2"	8	16'–3"						1925
PG804	7	33'–0"	STR							617
PG 901	7	33'–7"	3	31'–4"	2'–6"					799
PG 902	7	18'–9'	3	16'–6"	2'–6"					446
PG 903	12	4'–5"	3	1'–11"	2'–9"					187
PG 904	4	3'–3"	STR							44
									TOTAL WEIGHT =	7537

PIER 1
ITEM 509– "REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
PP501	40	10'–6"	STR							438
PP502	22	11'–2"	7	10'–6"						256
PP701	27	12'–2"	7	10'–6"						672
PP801	30	39'–6"	STR							3164
									TOTAL WEIGHT =	4530

PIER 2
ITEM 509– "REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
PP501	40	11'–3"	STR							469
PP502	22	11'–11"	7	11'–3"						274
PP701	27	12'–11"	7	11'–3"						713
PP801	32	39'–6"	STR							3375
									TOTAL WEIGHT =	4831

PIER 3
ITEM 509– "REINFORCING STEEL, GRADE 60"

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	INCR.	WEIGHT
PP501	40	10'–6"	STR							438
PP502	22	11'–2"	7	10'–6"						256
PP701	27	12'–2"	7	10'–6"						672
PP801	30	39'–6"	STR							3164
									TOTAL WEIGHT =	4530

BAR BENDING DIAGRAMS

NOTES

SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF FOOTING TO THE BOTTOM LAYER OF REINFORCING STEEL IN THE PIER CAP. SPIRAL REINFORCING BARS MAY HAVE DEFORMATION AND SHALL IN ALL OTHER RESPECTS CONFORM TO ITEM SP825. 1 1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. THREE STEEL HOT-DIPPED GALVANIZED ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LBS. PER LIN. FT. OF SPIRAL, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE TOTAL NUMBER OF POUNDS OF THESE SPACERS, BASED ON 2.40 LBS. PER LIN. FT. OF SPIRAL, WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED WEIGHT OF SPIRAL BARS.

CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES, EQUAL IN QUALITY AND DURABILITY TO THE COLUMN CONCRETE, SHALL BE USED NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 10' TO ENSURE A MINIMUM 3" CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE COLUMN DESIGN DIMENSION.

DESIGNED BY: JLS	CHECKED BY: SBB
DATE: 3/9/98	DATE: 3/9/98
DRAWN BY: MML	REVISED BY:
DATE: 3/9/98	DATE:
CAD FILE NAME: 044.DWG	

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION

REINFORCEMENT SCHEDULE
BAGLEY ROAD OVER THE OHIO TURNPIKE
MILE POST 152.9 LORAIN COUNTY

BELING CONSULTANTS

DESIGNED: JLS/RER	CHECKED: WCT/SBB	DATE: 5/22/98	
DRAWN: RAM	IN CHARGE: GLB	SCALE: NTS	