

CONVENTIONAL SIGNS

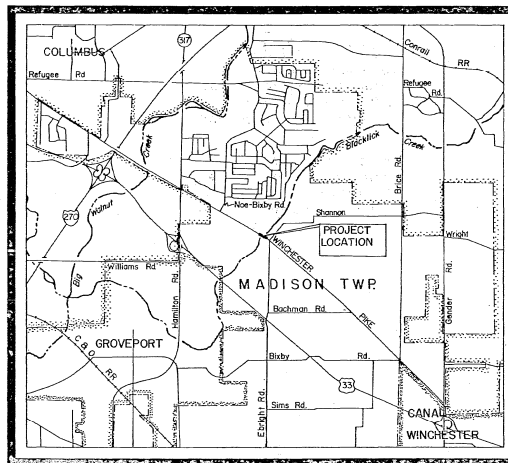
PROPOSED R/W	---
PROPOSED EASEMENT	---
CENTER LINE	---
EXISTING R/W	---
PROPERTY LINE	---
COUNTY LINE	---
TOWNSHIP LINE	---
SECTION LINE	---
CORPORATION LINE	---
EXISTING FENCE	---
PROPOSED FENCE	---
WATER LINE	---
GAS LINE	---
EXISTING SEWER	---
PROPOSED SEWER	---
EXISTING GUARDRAIL	---
PROPOSED GUARDRAIL	---
VALVES	---
EXISTING MANHOLES	---
PROPOSED MANHOLES	---
MANHOLES ADJUSTED TO GRADE	---
MANHOLES REMOVED OR ABANDONED	---
EXISTING INLETS OR CATCH BASINS	---
PROPOSED INLETS OR CATCH BASINS	---
CATCH BASINS REMOVED OR ABANDONED	---
TREES AND STUMPS	---
TREES AND STUMPS TO BE REMOVED	---
TELEPHONE OR TELEGRAPH POLE	---
LIGHT POLE	---
POWER POLE	---
WATER HYDRANT	---
EXISTING UNDERGROUND TELEPHONE OR ELECTRIC	---

INDEX OF SHEETS

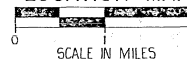
- Title Sheet
- Typical Section
- General Notes & Calculations
- Maintenance of Traffic
- General Summary
- Plan & Profile
- Cross Sections
- Structures Over 20' Span

1
2
3
4
5
6
7,8
9-18

FRANKLIN COUNTY ENGINEERING DEPARTMENT WINCHESTER PIKE BRIDGE OVER BLACKLICK CREEK MAD-376-3.27 MADISON TOWNSHIP COUNTY ROAD 376



LOCATION MAP



PORTION TO BE IMPROVED
STATE & FEDERAL ROADS
OTHER ROADS
DESIGNATED DETOUR ROUTE

SCALES

PLAN
PROFILE
PAVEMENT DETAILS
CROSS SECTIONS

STANDARD DRAWINGS

STATE OF OHIO	STATE OF OHIO	STATE OF OHIO	STATE OF OHIO	STATE OF OHIO
STD. DWG.	DATE	STD. DWG.	DATE	STD. DWG.
GR-1.1	5-6-91	AS-1-81	11-27-81	
GR-1.2	5-6-91			
GR-2.1	5-6-91	DBR-2-73	4-10-73	
GR-3.4	5-6-91			
MC-7	10-15-76	EXJ-4-87	1-5-89	
MC-11	8-1-78	SD-1-69	6-12-69	

Plan Prepared By:
FRANKLIN CONSULTANTS INC.
2999 EAST GRANVILLE ROAD
COLUMBUS, OHIO 43231

WINCHESTER PIKE
COUNTY ROAD 376

OHIO
FHWA REGION
FEDERAL PROJECT

1
18

1991 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal, shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will require the closing of the highway to traffic and that detours will be provided as indicated on the plans.
(see sheet 4)

FOR FRANKLIN COUNTY

Chief Deputy Engineer
County Engineer
County Auditor

We the Commissioners of Franklin County, hereby approve these plans and declare that the right of way as shown on the plan is available for construction, maintenance and repair of the road.

County Commissioner

County Commissioner
County Commissioner

NUMBER	DATE	NUMBER	DATE
836	11-12-85		
852	6-10-87		
952	12-14-88		
802	5-4-88		

LINE DATA

Begin Project: Sta. 264+80.92
End Project: Sta. 266+82.12
Length of Project = 201.20 L.F. = 0.038 Mi.

Begin Work: Sta. 264+43.00
End Work: Sta. 267+20.00
Length of Work = 277.00 L.F. = 0.052 Mi.

DESIGN DESIGNATION

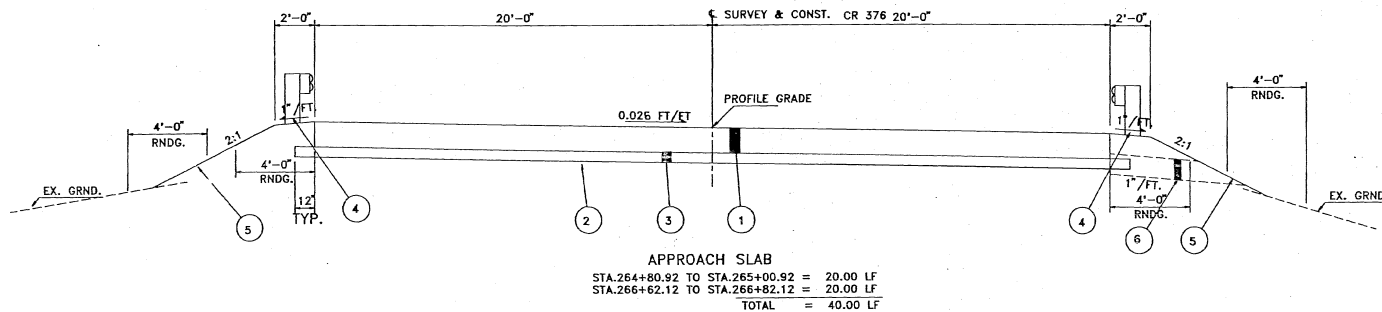
V (Design Speed) = 60 MPH
Current ADT (1990) =
Design Year ADT (2010) =
Functional Classification Rural Minor Arterial

Project: MAD-376-3.27
Date of Letting 19__, Contract No. ____

5110 010 TITLE SHEET

3.27 1991 0010 060

TYPICAL SECTION TYPE 611



LEGEND

- ① ITEM 611 REINFORCED CONCRETE APPROACH SLAB (T=15')
- ② ITEM 203 SUBGRADE COMPACTION
- ③ ITEM 304 6" AGGREGATE BASE, AS PER PLAN
- ④ ITEM 606 GUARDRAIL, TYPE 5
- ⑤ ITEM 659 SEEDING & MULCHING
- ⑥ ITEM 605 AGGREGATE DRAINS

NOTES

1. TYPICAL SECTIONS ARE INTENDED TO SHOW GENERAL ROADWAY AND PAVEMENT FEATURES ONLY. FOR FURTHER DETAILS SEE REMAINING PLAN & PROFILES AND CROSS SECTIONS.
2. SLOPE CONDITIONS AND GUARDRAIL LOCATIONS ARE GENERAL AND DO NOT NECESSARILY CONFORM TO THE LIMITING STATIONS SHOWN ON THE TYPICAL.

GENERAL NOTES

WINCHESTER PIKE
COUNTY ROAD 376



FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A TYPE A FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE WHICH SHALL BE IN ACCORDANCE WITH 619.02. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 619 FIELD OFFICE. TYPE A. KEROSENE HEATERS SHALL NOT BE USED AS A SOURCE OF HEAT. THE FIELD OFFICE SHALL BE IN PLACE AND ALL UTILITIES HOOKED UP BEFORE WORK BEGINS.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS, APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.54 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

OHIO BELL TELEPHONE
150 EAST GAY STREET
COLUMBUS, OHIO 43215
PHONE: (614)223-7570

COLUMBUS SOUTHERN POWER CO.
215 N. FRONT STREET
COLUMBUS, OHIO 43215
PHONE: (614)464-7396

CITY OF COLUMBUS
DIVISION OF WATER
910 DUBLIN ROAD
COLUMBUS, OHIO 43215
PHONE: (614)645-7788

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

DUST CONTROL

A QUANTITY OF CALCIUM CHLORIDE AND WATER IS PROVIDED FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

ITEM 616 CALCIUM CHLORIDE 1 TONS
ITEM 616 WATER 5 M GALS

WATERING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

ITEM 659 WATER 1 M GAL

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 STRAW OR HAY BALES 50 EACH
ITEM 207 TEMPORARY SEEDING AND MULCHING50 SY
ITEM 659 REPAIR SEEDING AND MULCHING50 SY
ITEM 659 COMMERCIAL FERTILIZER0.01 TON
ITEM 659 WATER 1 M GAL

ITEM 304 AGGREGATE BASE, AS PER PLAN

MATERIALS FURNISHED FOR THIS ITEM SHALL EXCLUDE ALL SLAG EXCEPT GRANULATED SLAG OR CRUSHED AIR-COOLED BLAST FURNACE SLAG.

EROSION CONTROL

ITEM 601, IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE THIS ITEM. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES AND/OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THIS PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE FOLLOWED AND ALL COSTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

PAVEMENT QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN ADDED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR ANY DAMAGED PAVEMENT AREAS BETWEEN THE PROPOSED APPROACH SLAB AND THE EXISTING PAVEMENT.

ITEM 404 ASPHALT CONCRETE, AC-20 1 CY
ITEM 402 ASPHALT CONCRETE, AC-20 1 CY
ITEM 301 BITUMINOUS AGGREGATE BASE, AC-20 2 CY

CALCULATIONS

ITEM 611 REINFORCED CONCRETE APPROACH SLAB	=	177.78 SY
A=(40 X 20 X 2) 1/9	=	178 SY
TOTAL ITEM 611 TO GENERAL SUMMARY	=	
ITEM 304 AGGREGATE BASE, AS PER PLAN	=	31.1 CY
V=(42 X 20 X 0.5 X 2) 1/27	=	31 CY
TOTAL ITEM 304 TO GENERAL SUMMARY	=	
ITEM 203 SUBGRADE COMPACTION	=	177.78 SY
A=(40 X 20 X 2) 1/9	=	178 SY
TOTAL ITEM 203 TO GENERAL SUMMARY	=	
ITEM 605 AGGREGATE DRAINS	=	12.00 LF
L= (6 X 2)	=	12 LF
TOTAL ITEM 605 TO GENERAL SUMMARY	=	
ITEM 659 COMMERCIAL FERTILIZER	=	0.02 TONS
V=[(223 X 9 X 20)/(2000 X 1000)]	=	0.02 TONS
TOTAL ITEM 659 TO GENERAL SUMMARY	=	

MAINTENANCE OF TRAFFIC

WINCHESTER PIKE
COUNTY ROAD 376

MAINTENANCE OF TRAFFIC

THE MAINTENANCE OF TRAFFIC SHALL BE GOVERNED BY THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS, HEREIN—AFTER CALLED THE MANUAL, AND SUPPLEMENTED BY PERTINENT ITEMS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (IN PROPER POSITION, CLEAN, LEGIBLE AND IN GOOD WORKING CONDITION) AND REMOVE ALL SIGNS, SIGN SUPPORTS, BARRICADES, DRUMS AND ALL OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC.

THE COST OF PROVIDING, INSTALLING, MAINTAINING AND REMOVING ALL TRAFFIC CONTROL DEVICES REQUIRED TO MAINTAIN TRAFFIC DURING CONSTRUCTION INCLUDING SIGNS, SIGN SUPPORTS, DRUMS AND BARRICADES SHALL BE INCLUDED IN THE LUMP SUM PRICE PER ITEM 614, "MAINTAINING TRAFFIC".

ITEM 614 MAINTAINING TRAFFIC

BEFORE WORK IS STARTED ON THIS PROJECT THE CONTRACTOR SHALL SUBMIT A WRITTEN SCHEDULE OF OPERATIONS AND A TRAFFIC MAINTENANCE CONTROL PLAN FOR APPROVAL BY THE ENGINEER. IN NO CASE SHALL THE STIPULATIONS OF THIS NOTE WAIVE THE REQUIREMENTS OF EITHER THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OR THE CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM CONTROL DEVICES.

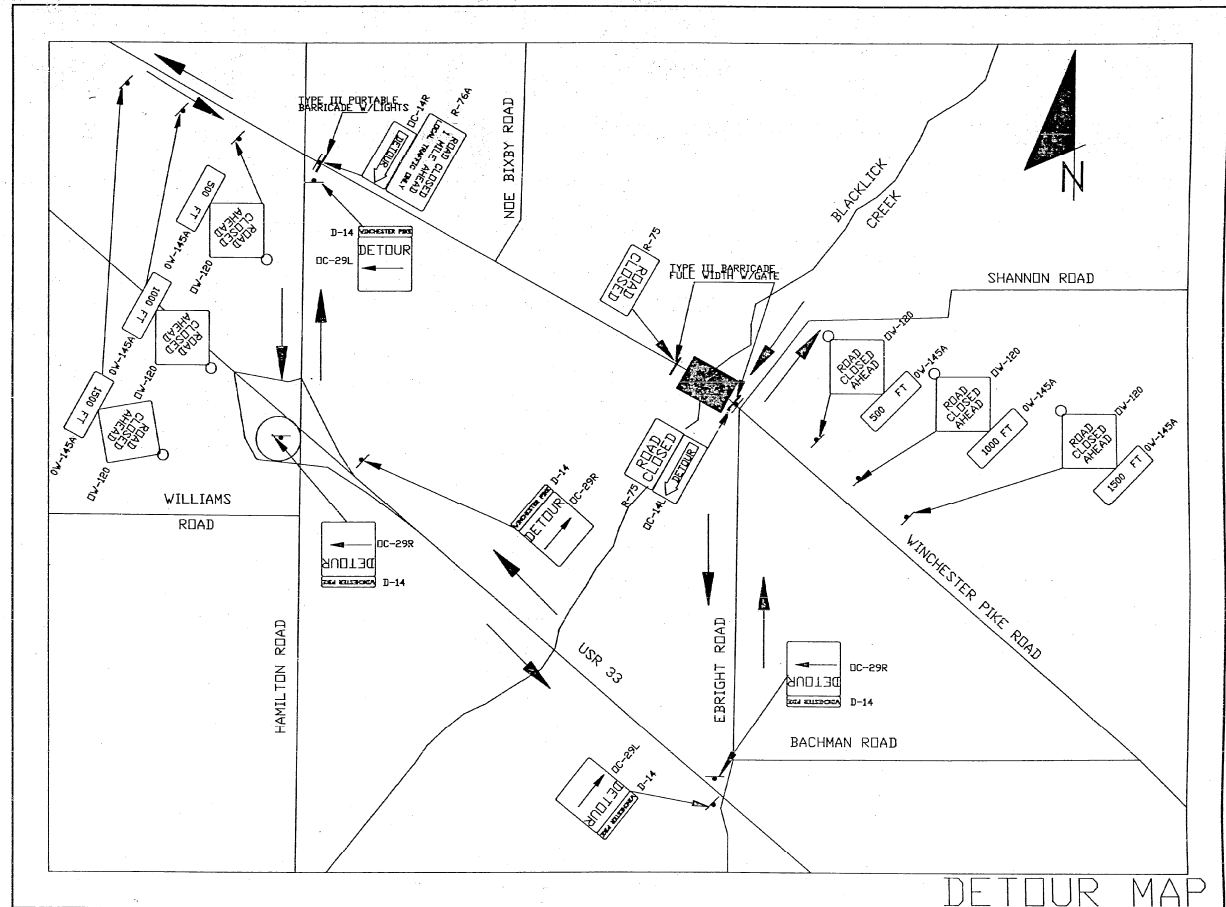
NO WORK SHALL BE STARTED THAT WILL CLOSE THE ROADWAY TO TRAFFIC UNLESS IT IS THE INTENT OF THE CONTRACTOR TO WORK FULL TIME WITH A FULL FORCE IN ORDER TO COMPLETE THE WORK WITH NO UNNECESSARY DELAYS.

THE CONTRACTOR SHALL PLAN TO CLOSE THE ROAD FOR NO LONGER THAN 120 CALENDAR DAYS. IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT AN ALTERNATE METHOD FOR THE MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO LONGER INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE FRANKLIN COUNTY ENGINEER'S OFFICE.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS
THE CONTRACTOR SHALL, IN ADDITION TO GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT, PROVIDE, ERECT AND MAINTAIN ALL SIGNS SHOWN ON THE DETOUR MAP.

THE CONTRACTOR CAN NOTIFY THE COUNTY ENGINEER'S TRAFFIC DEPARTMENT AT 462-3063 TWO WEEKS PRIOR TO CLOSING ROADWAY. THIS INSURES ADEQUATE TIME TO NOTIFY PROPER AUTHORITIES, MAKE PRESS RELEASE AND PLACE NOTICE SIGNS ON ROADWAY. ALL TEMPORARY SIGNS TO BE ERECTED BY THE CONTRACTOR SHALL BE PICKED UP AT THE ENGINEERS OFFICE, 970 DUBLIN ROAD, COLUMBUS OHIO 43215. A DEPOSIT WILL BE REQUIRED TO PICK UP SIGNS.

SIGN LEGEND	
SIGNS	No. REQUIRED
DC-14 L	1
DC-14 R	1
DW-120	6
DW-145A	6
DC-29 L	2
DC-29 R	3
D-14	5
R-75	2
R-76A	1
TYPE III BARRICADE W/LIGHTS	1
TYPE III BARRICADE W/GATE	2



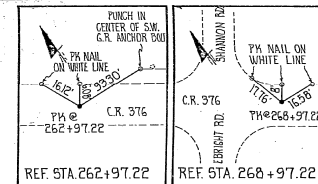
GENERAL SUMMARY

WINCHESTER PIKE
COUNTY ROAD 376

OHIO
FHWA
REGION 5
DISTRICT

5
18

ITEMS	SHEET NUMBER																PARTICIPATION				ITEMS	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
																									ROADWAY
201																					201	11000	LUMP		CLEARING AND GRUBBING
202																					202	23000	80	SQ YD	PAVEMENT REMOVED
202																					202	38000	62.5	LIN FT	GUARDRAIL REMOVED
203																					203	12000	77	CU YD	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203																					203	20000	55	CU YD	EMBANKMENT
203																					203	50000	178	SQ YD	SUBGRADE COMPACTION
																					254	010000	110	SQ YD	PAVEMENT PLANING, BITUMINOUS
606																					606	13000	62.5	LIN FT	GUARDRAIL, TYPE 5
606																					606	30500	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4
																									EROSION CONTROL
207																					207	10000	50	SQ YD	TEMPORARY SEEDING AND MULCHING
207																					207	70000	50	EACH	STRAW OR HAY BALES
601																					601	32100	499	CU YD	ROCK CHANNEL PROTECTION, TYPE B W/FILTER
659																					659	10000	223	SQ YD	SEEDING AND MULCHING
659																					659	14000	50	SQ YD	REPAIR SEEDING AND MULCHING
659																					659	20000	0.03	TON	COMMERCIAL FERTILIZER
659																					659	35000	2	M GAL	WATER
																									DRAINAGE
605																					605	31100	12	LIN FT	AGGREGATE DRAIN
																									PAVEMENT
301																					301	10002	2	CU YD	BITUMINOUS AGGREGATE BASE, AC-20
304																					304	20001	31	CU YD	AGGREGATE BASE, AS PER PLAN
402																					402	20000	1	CU YD	ASPHALT CONCRETE, AC-20
404																					404	20000	5	CU YD	ASPHALT CONCRETE, AC-20
407																					407	10000	9	GAL	TACK COAT
611																					611	15000	178	SQ YD	REINFORCED CONCRETE APPROACH SLAB(13')
																									TRAFFIC CONTROL
802																					802	00300	6	EACH	BARRIER REFLECTOR, TYPE A2
																									MAINTENANCE OF TRAFFIC
616																					616	10000	5	M GAL	WATER
616																					616	20000	1	TON	CALCIUM CHLORIDE
																									FOR STRUCTURE QUANTITIES SEE SHEET 9
614																					614	11000	LUMP		MAINTAINING TRAFFIC
619																					619	10000	LUMP		FIELD OFFICE, TYPE A
623																					623	10000	LUMP		CONSTRUCTION LAYOUT STAKES
624																					624	10000	LUMP		MOBILIZATION



ITEM 404: FEATHER AS DIRECTED
BY THE ENGINEER. TYPICAL
EACH END OF PROJECT

NOTES:

1. TIE PROPOSED BRIDGE TERMINAL ASSEMBLY ON EACH CORNER OF BRIDGE TO EXISTING GUARDRAIL.
2. FOR CROSS SECTIONS SEE SHEETS 748.
3. FOR STRUCTURE DETAILS SEE SHEETS 9+18.
4. GUARDRAIL ON EXISTING BRIDGE SHALL BE REMOVED AND STORED FOR PICK-UP BY COUNTY FORCES.

CALCULATIONS:

I-R 12-R ITEM 202 (24+15+9)+40 SY
I-D ITEM 601 1/2(65+79)+25+3+27+200.0 CY
2-D ITEM 601 1/2(66+86)+34.5+7(11+17)(60/360)133(1/27)+298.4 CY

FRA-53-25.18
EX. CURVE DATA (NOT USED)
PI. 266+93.38
Δ = 7° 51' 00" OLD & LOCATED
D = 0' 48" 32.5' NORTH OF
R = 7161.97 NEW REFERENCED
L = 981.26 & SURVEY
T = 491.39
S = 0.026 %

EXCAVATION 77 CY
EMBANKMENT 55 CY
SEEDING 223 SY

EXISTING STRUCTURE
TYPE: CONTINUOUS STEEL BEAM WITH
REINFORCED CONC. DECK & SUBSTRUCTURES.
SPANS: 45'-60'-48" 2% BEARINGS
ROADWAY: 40' 7" GUARDRAILS
LOADING: 5-20-46
WEARING SURFACE: BITUMINOUS
SKEW: 30° LF
APPROACH SLAB: AS-4-47
ALIGNMENT: 0°48'00" RIGHT CURVE
SUPERELEVATION: 0.026 %
BUILT: 1954

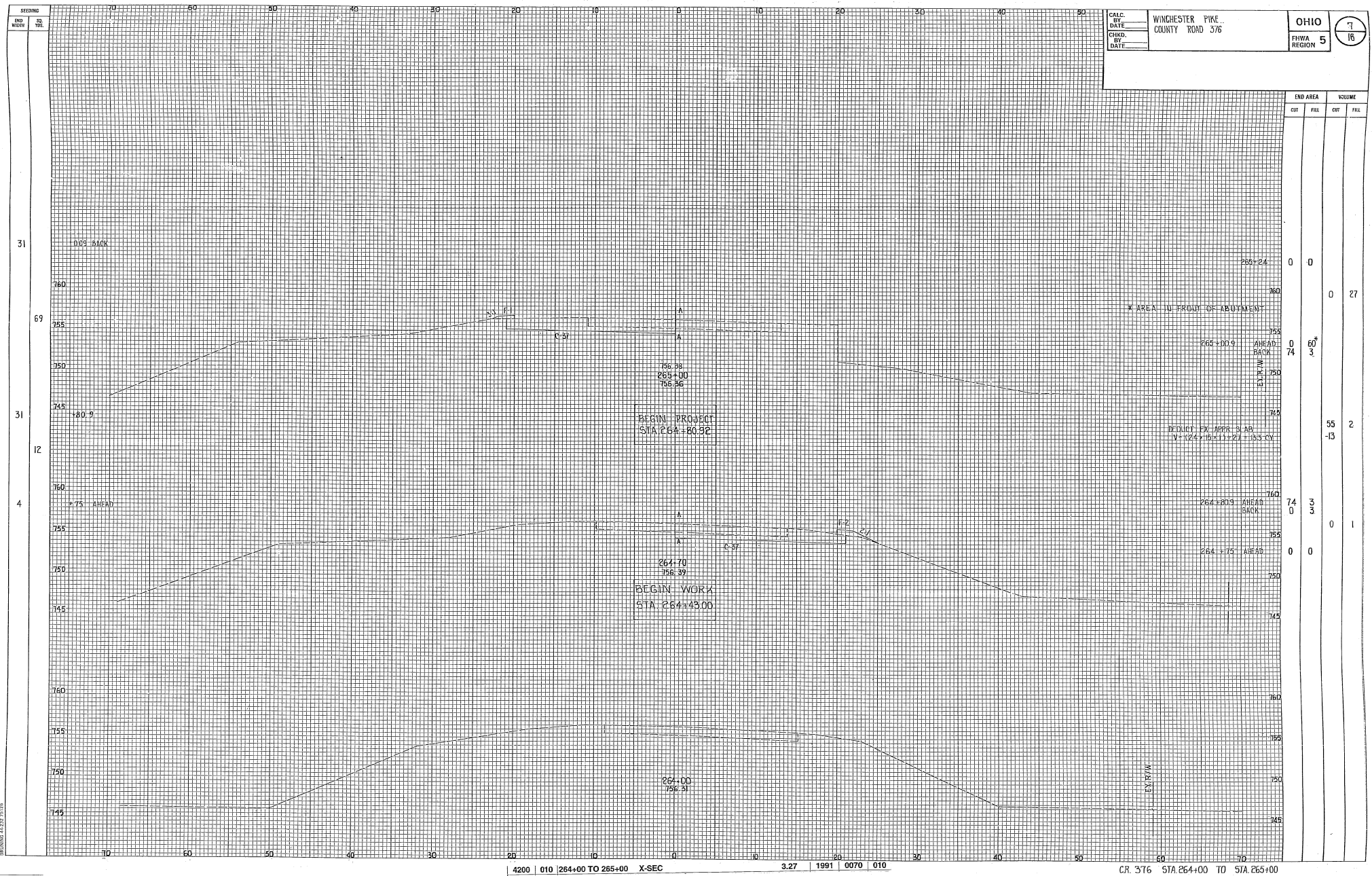
PROPOSED STRUCTURE
TYPE: CONTINUOUS NON-COMPOSITE STEEL BEAM
WITH REINFORCED CONCRETE DECK AND
SUBSTRUCTURES
SPANS: 45'-60'-48" 2% BEARINGS
ROADWAY: 40' 7" GUARDRAILS
LOADING: HS-20-44 1 AIT MIL. LOADING
WEARING SURFACE: MONOLITHIC CONCRETE
SKEW: 30° LF
APPROACH SLAB: AS-1-B1 (20'-0" LONG)
ALIGNMENT: 0°48'00" RIGHT CURVE
SUPERELEVATION: 0.026 %

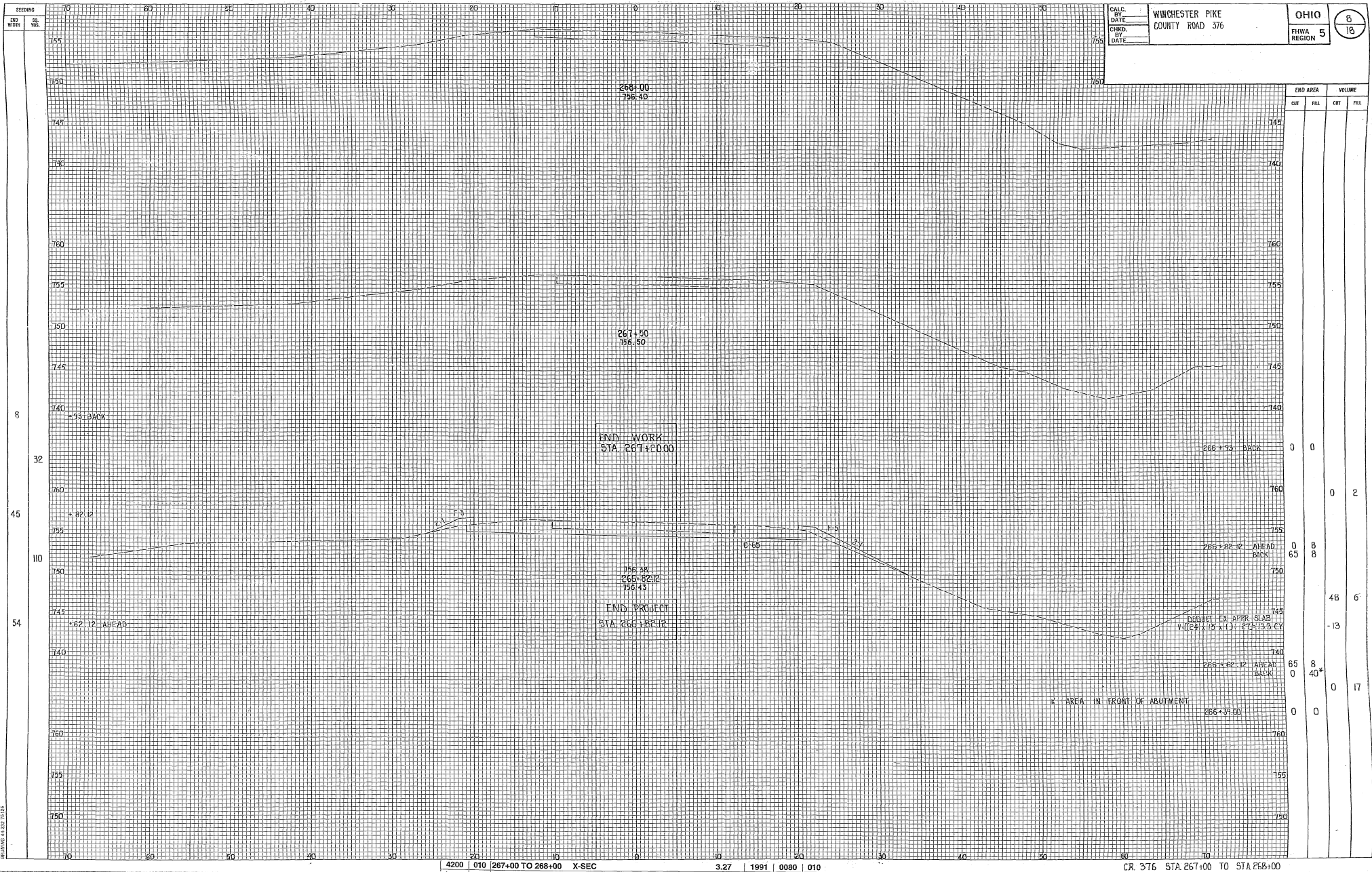
REF.	STATION TO STATION	SIDE	202 PAVEMENT REMOVED	202 GUARDRAIL REMOVED	254 PAVEMENT PLANTING	601 ROCK CHANNEL PROT. TYPE B	606 GUARDRAIL TYPE 5	606 BRIDGE TERMINAL ASSEMBLY TYPE 4	404 ASPHALT CONCRETE	602 BARRIER REFLECTOR TYPE A2
			SY	LF	SY	CY	LF	EA	CY	EA
I-R	264+85.92 TO 265+00.92	L&R	40							
2-R	266+62.12 TO 266+77.12	L&R	40							
3-R	264+70.34 TO 264+82.94	RT		12.5						
4-R	264+92.70 TO 265+11.45	LT		18.75						
5-R	266+51.59 TO 266+70.34	RT		18.75						
6-R	266+80.20 TO 266+92.70	LT		12.5						
7-R	264+60.92 TO 264+80.92	L&R			55				2	
8-R	266+82.12 TO 267+02.12	L&R			55				2	
1-GR	264+70.34 TO 264+82.94	RT					12.5	1		1
2-GR	264+92.70 TO 265+11.45	LT					18.75	1		1
3-GR	266+51.59 TO 266+70.34	RT					18.75	1		2
4-GR	266+80.20 TO 266+92.70	LT					12.5	1		2
I-D	264+91 TO 265+53	L&R				200				
2-D	266+00 TO 266+70	L&R				298.4				
TOTALS			80	62.5	110	499	62.5	4	4	6

5110 010 264+00 TO 268+00 ALIGN

3.27 1991 0060 060

STA. 264+00.00 TO STA. 266+00.00





GENERAL NOTES

FWHA REGION	STATE	PROJECT
5	OHIO	

FRANKLIN COUNTY
MAD-376-3.27

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-81 ----- DATED ----- 11-27-81
DBR-2-73 ----- DATED ----- 04-10-73
EXJ-4-87 ----- DATED ----- 01-05-89
SD-1-69 ----- DATED ----- 06-12-69 SHEET 1 OF 4

AND TO SUPPLEMENTAL SPECIFICATIONS:

836 ----- DATED ----- 11-12-85
852 ----- DATED ----- 06-10-87
952 ----- DATED ----- 12-14-88

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1989, INCLUDING THE 1990 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA: BRIDGE COMPUTATIONS ARE BASED ON SERVICE LOAD DESIGN:

DESIGN LOADING: HS20-44 AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES: CONCRETE CLASS S - UNIT STRESS 1500 P.S.I.
(SUPERSTRUCTURE)

CONCRETE CLASS C - UNIT STRESS 1333 P.S.I.
(SUBSTRUCTURE)

STRUCTURAL STEEL A588 - UNIT STRESS 27,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616 or A617
GRADE 60 - UNIT STRESS 24,000 PSI

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL, AND SEALING OF CONCRETE SURFACES AND ALL ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE USING TYPE K EXPANSIVE HYDRAULIC CEMENT AND SHALL HAVE 10% MICRO-SILICA BY WEIGHT OF CEMENT, SEE PROPOSAL NOTE.

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

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.02.

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 AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

CONCRETE REMOVAL SHALL BE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18-INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18-INCH LIMIT, A HAMMER HEAVIER THAN 35 POUNDS, BUT NOT TO EXCEED 85 POUNDS, MAY BE USED AT THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

SUITABLE WASTE MASONRY MAY BE PLACED AS BANK PROTECTION AS DIRECTED BY THE ENGINEER.

REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE OF 100 POUNDS IS INCLUDED IN ITEM 509 FOR THIS PURPOSE.

CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS ONE AND ONE HALF INCH (1-1/2") DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. WHERE PRACTICABLE, AT LEAST A ONE FOOT (1'-0") LENGTH OF PROTRUDING REINFORCING STEEL SHALL BE LEFT IN PLACE. INSTALL DOWEL BARS AS SPECIFIED. PRIOR TO CONCRETE PLACEMENT, SANDBLAST JOINT SURFACE AND EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THEN, THE JOINT SURFACE AND EXPOSED REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ALL DIRT, DUST, OR OTHER FOREIGN MATERIALS BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHOD THAT PRODUCES RESULTS SATISFACTORY TO THE ENGINEER. THE CONCRETE BONDING SURFACE SHALL BE WET WITHOUT FREE WATER AS CONCRETE IS PLACED.

CALCULATED BY: MTC DATE: 7/91
CHECKED BY: CAB DATE: 10/91

ESTIMATED QUANTITIES									
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTIONS	SUPER	ABUT.	PIERS	GEN'L	
202	11200		SUM	PORTIONS OF STRUCTURE REMOVED					
202	38100	337.50	LIN FT	BRIDGE RAIL REMOVED FOR STORAGE	337.50				LUMP
509	15800	67,418	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	52,591	7,431	7,294	100	
511	33404	191	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE (USING SHRINKAGE COMPENSATING CEMENT)	191				
511	42500	32	CU YD	CLASS C CONCRETE, PIER CAP			32		
511	44100	31	CU YD	CLASS C CONCRETE, ABUTMENT NOT INCLUDING FOOTING		31			
511	46500	17	CU YD	CLASS C CONCRETE, FOOTING		17			
512	44400	40	SQ YD	TYPE B WATERPROOFING		40			
SPECIAL	51267502	294	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY)		97	197		
SPECIAL	51267504	157	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)	157				
513	11300	125,156	POUND	STRUCTURAL STEEL, A588 AISC CATEGORY 1	125,156				
514	02501		LUMP	FIELD PAINT NEW STRUCTURAL STEEL, SYSTEM A, AS PER PLAN	LUMP				
516	11210	93	LIN FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	93				
516	44000	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (1-5/8"x9"x16" LAMINATED ELASTOMERIC PAD WITH 1-1/2"x10"x22" STEEL LOAD PLATE)			5		
516	44000	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (1-5/8"x9"x16" LAMINATED ELASTOMERIC PAD WITH 1-1/2"x10"x17" STEEL LOAD PLATE)			5		
516	44100	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (2-13/16"x7"x10-1/2" LAMINATED ELASTOMERIC PAD WITH 1-1/2"x8"x13" STEEL LOAD PLATE)		10			
517	72300	337.5	LIN FT	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS AND ANCHOR BOLTS)	337.5				
518	21101	27	CU YD	POROUS BACKFILL, AS PER PLAN		27			
SPECIAL	51822300	64	LIN FT	GALVANIZED STEEL DRIP STRIP	64				
518	41100	120	LIN FT	6" PERFORATED HELICAL CORRUGATED STEEL PIPE, 707.01		120			
518	41200	17	LIN FT	6" NON-PERFORATED HELICAL CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01		17			
519	11100	12	SQ FT	PATCHING CONCRETE STRUCTURE		12			

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING OR INSTALLING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

THE CONTRACTOR SHALL BE CAREFUL TO PREVENT DEBRIS FROM ENTERING THE STREAM AND NO EQUIPMENT FORDS IN THE STREAM WILL BE PERMITTED.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES: A NON-EPOXY CONCRETE SEALER SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON SHEET [7/10]. AN EPOXY SEALER SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON SHEETS [4,5 & 6/10]. SEE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.

ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE CONCRETE SHALL BE CURED BY 511.14 METHOD (A) WATER CURING.

CONCRETE SEALING OF PIERS SHALL BE APPLIED BEFORE STRUCTURAL STEEL IS ERECTED.

FRANKLIN CONSULTANTS, INC. Consulting Engineers						1 / 10
COLUMBUS, OHIO						
GENERAL NOTES AND ESTIMATED QUANTITIES						
BRIDGE No. MAD-376-0327 WINCHESTER PIKE OVER BLACKLICK CREEK						
DESIGNED MTC	DRAWN SMH	TRACED SMH	CHECKED CAB	REVIEWED JH	DATE 4-5-91	REVIEWED

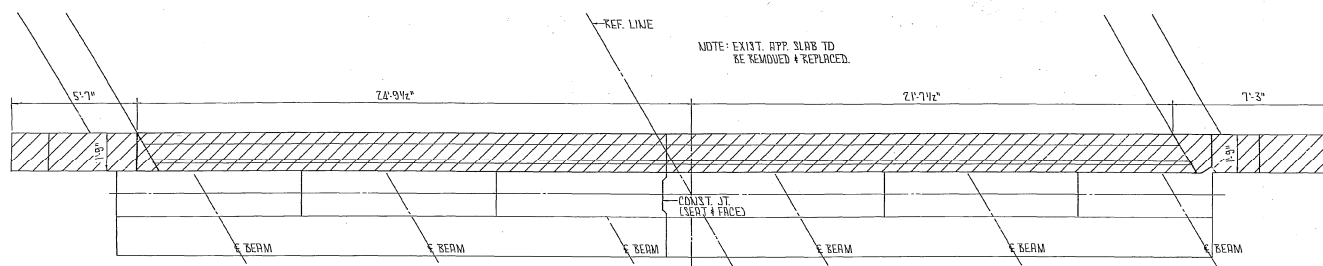
5110 | 010 | GENERAL NOTES

3.27 | 1991 | 0090 | 060

FHWA REGION	STATE	PROJECT
5	OHIO	

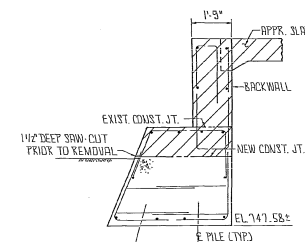
10
18

FRANKLIN COUNTY
MAD-376-3.27

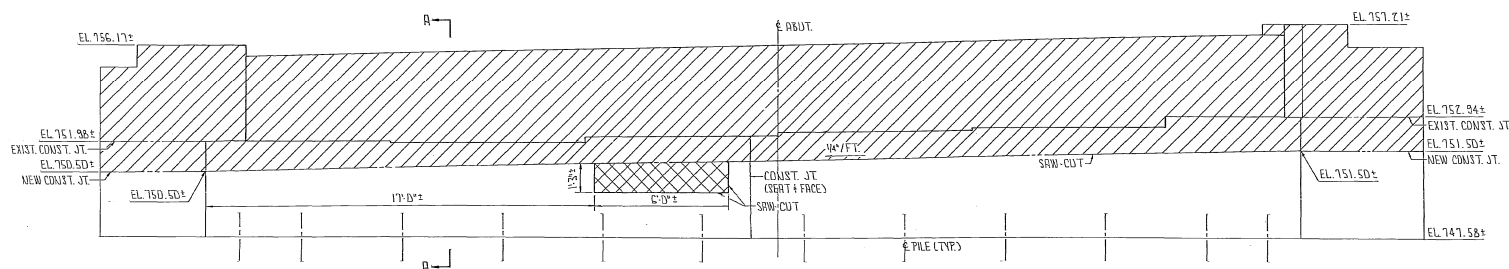


PLAN

NOTE: PER SHRI, KE TAKEN INTO DISTURB VERTICAL STEEL THAT IS TO BE REUSED IN NEW SECTION. ANY STEEL DAMAGE OR MADE UNUSABLE DUE TO THE CONTRACTORS REMOVAL SHALL BE REPLACED AND DOWELED INTO THE ABUTMENT AT HIS COST.



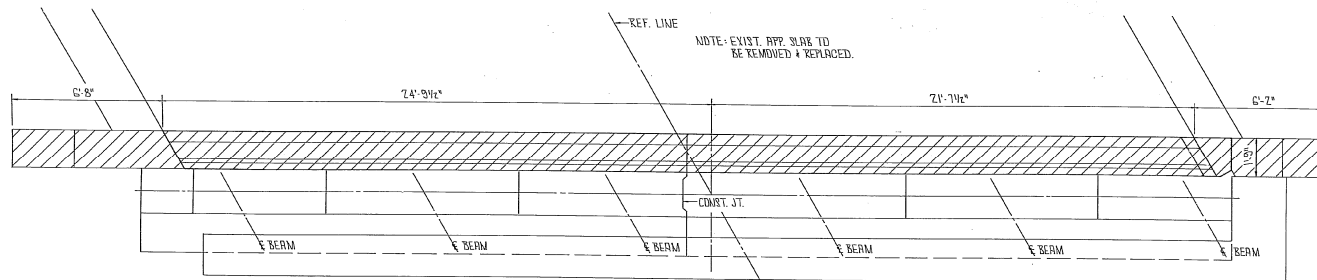
SECTION A-A



ELEVATION

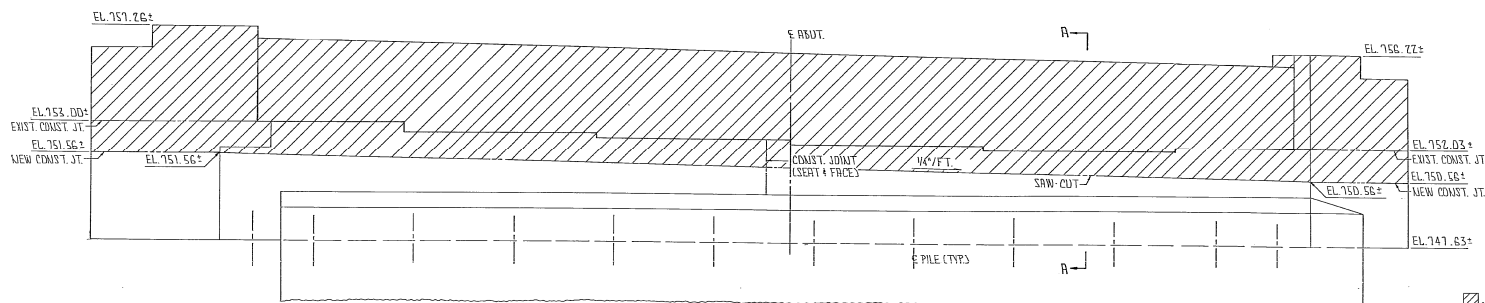
LEGEND
- REMOVAL
- CONC. REPAIR

FRANKLIN CONSULTANTS INC.					
Consulting Engineers					
COLUMBUS, OHIO					
CONCRETE REMOVAL AT REAR ABUTMENT					
BRIDGE NO. MAD-376-0327					
WINCHESTER PIKE OVER BLACKLICK CREEK					
FRANKLIN CO.					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
MTC	MTC	NK	CRT	JL	8/5-7/1

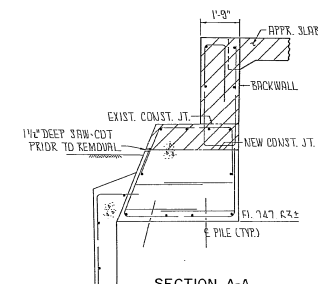


PLAN

NOTE: CARE SHALL BE TAKEN NOT TO DISTURB VERTICAL STEEL THAT IS TO BE REUSED IN NEW SECTION. ANY STEEL DAMAGED OR MADE UNSERVICEABLE DUE TO THE CONTRACTOR'S REMOVAL SHALL BE REPLACED AND DOWELED INTO THE ABUTMENT AT HIS COST.



ELEVATION

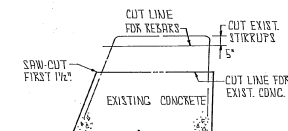


SECTION A-A

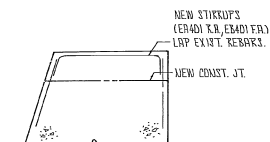
LEGEND
- CONCR. REMOVAL

FWHA REGION	STATE	PROJECT	17
5	OHIO		18

FRANKLIN COUNTY
MAD-376-3.27

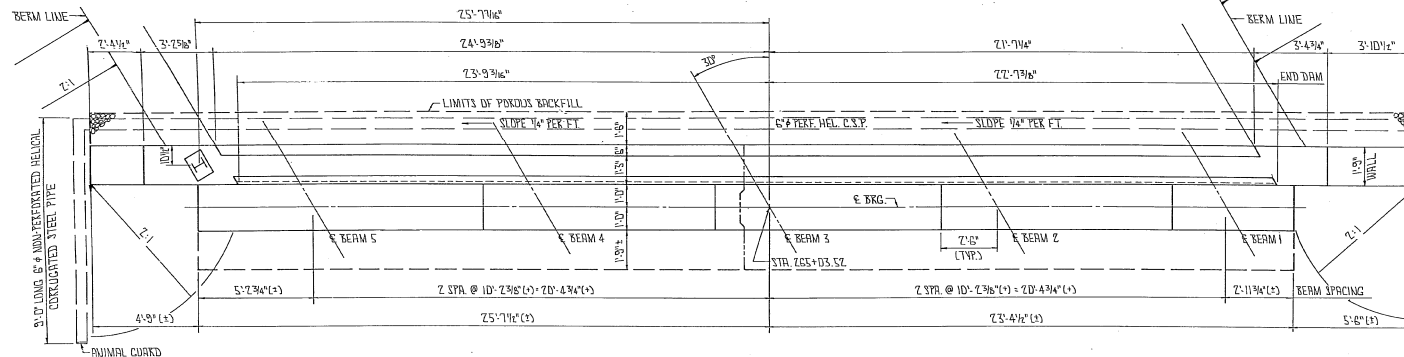


STEP 1

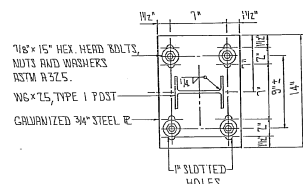


STEP 2

TREATMENT OF EXISTING
STIRRUPS IN BEAM SEAT



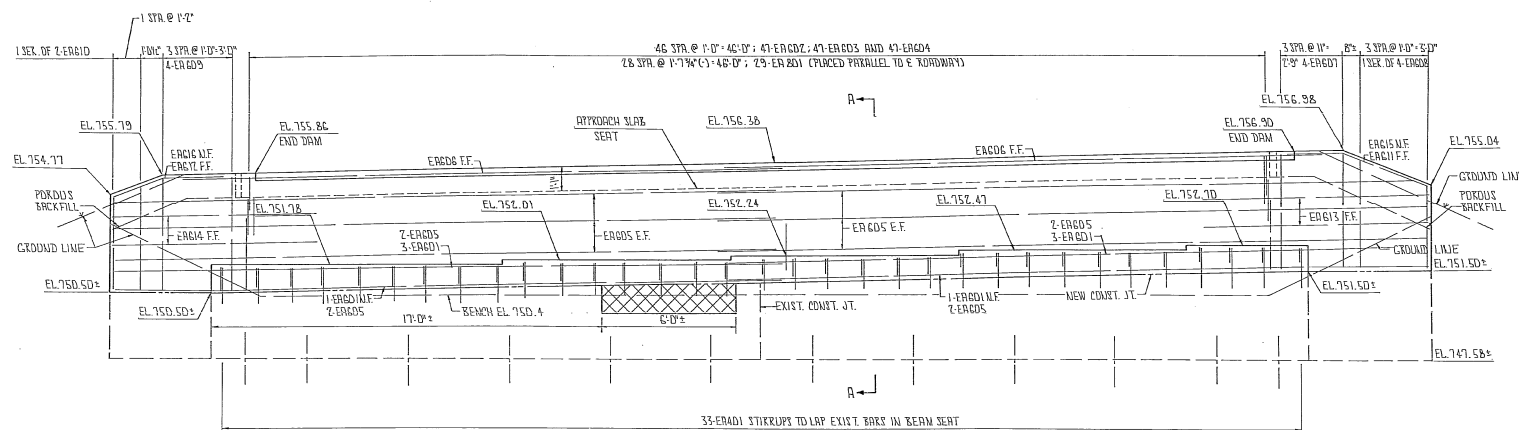
PLAN



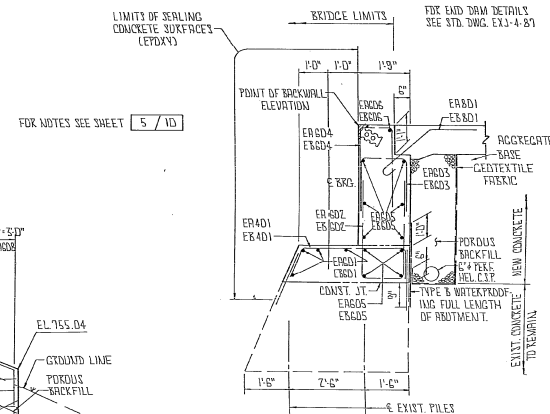
GUARDRAIL POST
ATTACHMENT TO ABUTMENTS

LEGEND
R.A. - REAR ABUTMENT
F.A. - FORWARD ABUTMENT
E.F. - EACH FACE
F.F. - FAY FENCE
N.F. - NEAR FACE

MIN. BAR LAP
#4 - 1'-0"
#5 - 2'-0"
#6 - 2'-0"
#8 - 4'-0"



ELEVATION



SECTION A-A
(REAR & FORWARD ABUTMENTS)

FRANKLIN CONSULTANTS INC.				4 / 10
Consulting Engineers				
COLUMBUS			OHIO	
REAR ABUTMENT RECONSTRUCTION				
BRIDGE NO. MAD-376-0327				
WINCHESTER PIKE OVER				
BLACKLICK CREEK				
FRANKLIN CO.				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
MTG	MTG	MC	CNS	JH 11-11
DATE				
REVIEWED				

5110 | 010 | REAR ABUTMENT RECONSTRUCTION

3.27 | 1991 | 0120 | 060

BACKFILL 14" THICK SHALL EXTEND
THE PLANE OF THE SUBGRADE, TO 1'
THE EMBANKMENT SURFACE, AND
ALLY TO THE ENDS OF THE WINGWALLS.
TILE FABRIC SHALL CONFORM WITH
D, TYPE A, AND BE INCLUDED WITH
BACKFILL FOR PAYMENT.

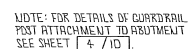
GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE PAVED BACKFILL AND THE APPROACH FILL. IT SHALL TURN UNDER THE BOTTOM OF THE PAVED BACKFILL AND RETURN UP SIX INCHES AGAINST THE BACK FACE OF THE ABUTMENT.

SEALING OF CONCRETE SURFACES:
EPOXY SEAL FRONT FACE OF ABUTMENT BACK-
WALLS FROM TOP TO BRIDGE SEAT, BRIDGE SEAT
AND BREASTWALL DOWN TO THE GROUND LINE
AND THE ENTIRE FRONT FACE ABOVE THE GROUND
LINE OF WINGWALLS.

FOR APPROACH SLAB DETAILS SEE STD. DRWG.
AS-1-81.

ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT
CONSTRUCTION JOINTS SHALL NOT BE PLACED
UNTIL AFTER THE BEAMS ARE SET.

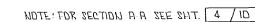
TYPE B WATERPROOFING SHALL EXTEND 1'-0" ABOVE THE HIGHER CONSTRUCTION JOINT AND 9" BELOW THE LOWER CONSTRUCTION JOINT. TYPE B WATERPROOFING SHALL BE APPLIED BEFORE FILTER FABRIC AND POROUS BACKFILL ARE PLACED.



PLAN

LEGEND
R.A. = REAR ABUTMENT
F.A. = FORWARD ABUTMENT
E.F. = EACH FACE
F.F. = FAR FACE
N.F. = NEAR FACE

MIN 208 10P

$$\begin{aligned} \#4 &= 1 \cdot 9^n \\ \#5 &= 2 \cdot 2^n \\ \#6 &= 2 \cdot 7^n \\ \#8 &= 4 \cdot 3^n \end{aligned}$$


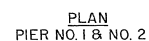
FRANKLIN CONSULTANTS INC.	5	10
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COLUMBUS, OHIO

**FORWARD ABUTMENT
RECONSTRUCTION**
BRIDGE NO. MAD-376-0327
WINCHESTER PIKE OVER
BLACKLICK CREEK

FRANKLIN CO.						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIS
MTC	MTC	WK	CBB	JF	8/5-91	

BRIDGE SEAT REINFORCING STEEL IN THE VICINITY OF BEAM SEAT SHALL BE PLACED SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR HOLES OR THE PRESETTING OF BEARING ANCHORS.



EL. 752.74
5-EC100S
OR 5-ED003S
3-EC801
OR 3-ED801
EL. 752.51
EL. 752.78
EL. 752.05
EL. 751.82
EL. 749.03 ± P1
EL. 748.91 ± P2

1-EC40S OR 1-ED40S
TYP. EA. END

7-EC1001
OR 7-ED1001
7-EC801
OR 7-ED801
7-EC801
OR 7-ED801
5-ED002
OR 5-ED001

12-3/8" @ 9"-10" 13-EC407 OR 13-ED407
STIRRUPS IN PIRKS

12-3/8" @ 9"-10" 13-EC407 OR 13-ED407
STIRRUPS IN PIRKS

12-3/8" @ 9"-10" 13-EC403 OR 13-ED403
STIRRUPS IN PIRKS

12-3/8" @ 10"
3-7/16" @ 2'-0"
3-7/16" @ 2'-0"

EXIST. NO. 8 BARS
TO REMAIN (TYP.)

EXIST. KEIRAKS TO
REMAIN, ALL COLUMNS
(TYP.)

CUT TOP OF BARS IF
CLOSER THAN 2 INCHES
TO REIN. SEAT

SEAL ALL FACES OF EXISTING PIERS
COLUMNS WITH EPOXY SEALER
ABOVE NORMAL WATER (EL. 740.50)
(TYP.)

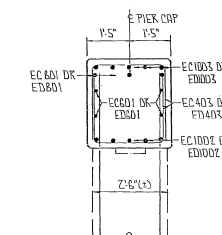
REMOVE EXIST. CONCRETE ABOVE
NEW CONCRETE (ITEM 51, BARS
& CONCRETE)

REMOVE EXIST. CONCRETE
ABOVE NEW CONCRETE (ITEM 51, BARS
& CONCRETE)

EXISTING CONCRETE
COLUMNS TO REMAIN

EL. 749.03 ± P1
EL. 748.91 ± P2

ELEVATION
PIER NO. 1 & NO. 2

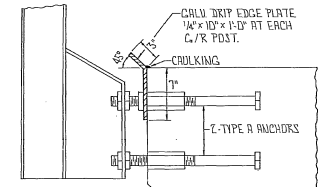
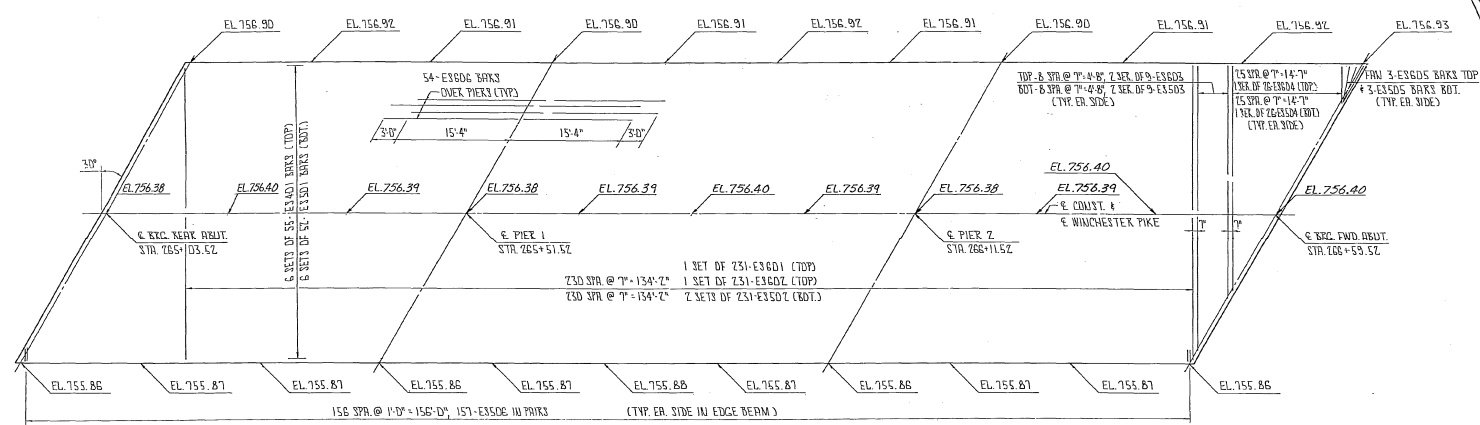


SECTION A-A

COLUMBUS, OHIO

BRIDGE NO. MAD-376-0327
WINCHESTER PIKE OVER
BLACKLICK CREEK

FRANKLIN CO.						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
MTC	MTC	NK	CAB	JF	4/5-91	



GALVANIZED STEEL DRIP STRIP

A GALVANIZED DRIP STRIP 1/4" X 10" X 12" LONG SHALL BE PLACED AT EACH CORNER OF POST 1 (CENTERED AT POST) ADDITIONAL DRIP STRIPS SHALL BE PLACED AT EACH CORNER OF THE DECK SLAB EXTENDING FROM THE FIRST CORNER POST TO THE END DAM. GALVANIZING SHALL BE IN ACCORDANCE WITH 711.01. PAYMENT SHALL BE AT THE CONTRACTOR'S RISK FOR ITEM SPECIAL, GALVANIZED STEEL DRIP STRIP, AS PER PLAN, WHICH SHALL INCLUDE ALL MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

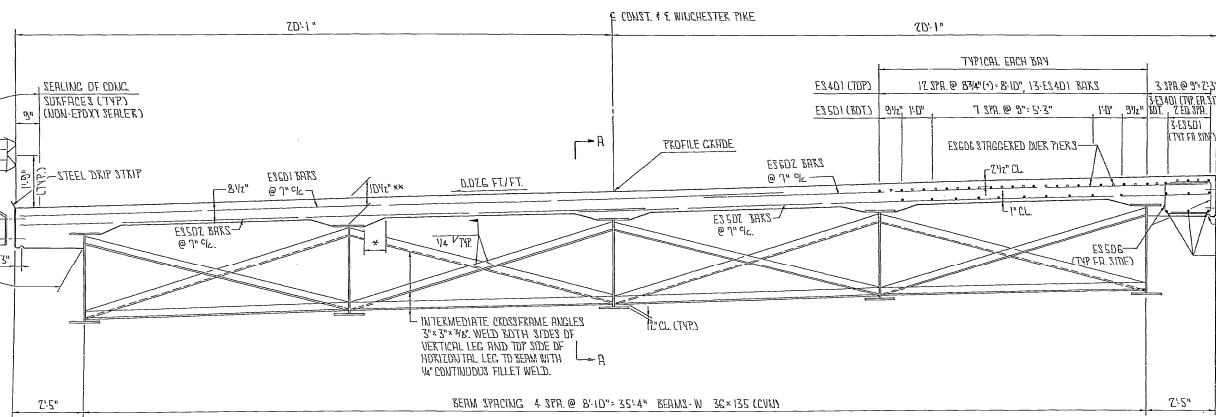
SEALING OF CONCRETE SURFACES: EXTERIOR 9 INCHES ON TOP, FASCIA AND UNDERDECK TO FASCIA BEAM WITH A NON-ETDXY SEALER.

SLAB REINFORCING & SCREED ELEVATIONS

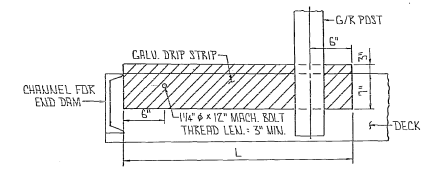
SCREED ELEVATIONS SHOWN ARE AT TOP OF CONCRETE DECK AT E. BARS, TYPED POINTS OF SPANS 1 & 3 AND AT QUARTER POINTS AND MIDSPAN OF SPAN NO. 2. ALLOWANCE HAS BEEN MADE FOR THE DEFLECTION DUE TO THE WEIGHT OF CONCRETE.

* A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

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

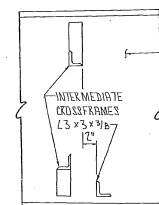


TRANSVERSE SECTION (LOOKING DOWN STATION)



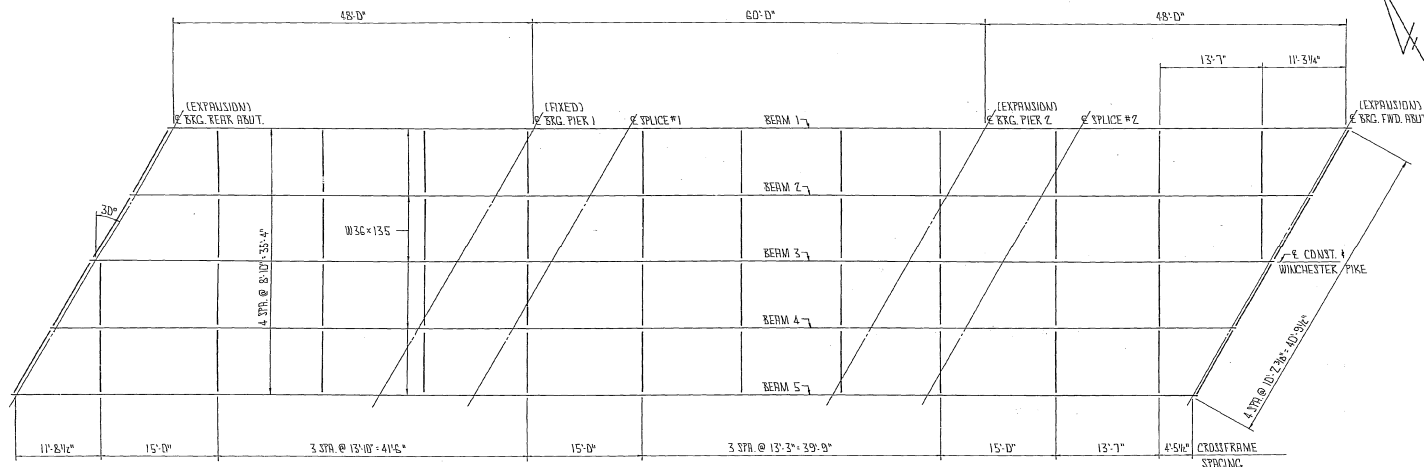
ELEVATION

L = 3'6" FOR LEFT EDGE OF DECK @ REAR ABUT. AND RIGHT EDGE OF DECK @ FORWARD ABUT.
L = 4'4" FOR RIGHT EDGE OF DECK @ REAR ABUT. AND LEFT EDGE OF DECK @ FORWARD ABUT.



SECTION A-A

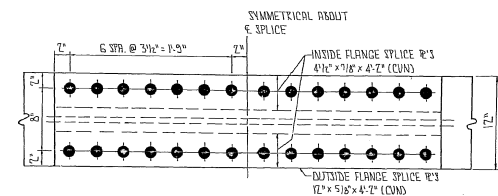
FRANKLIN CONSULTANTS INC.		7 / 10	
COLUMBUS, OHIO		Consulting Engineers	
SUPERSTRUCTURE DETAILS			
BRIDGE NO. MAD-376-0327			
WINCHESTER PIKE OVER			
BLACKLICK CREEK			
FRANKLIN CO.			
DESIGNED	DRAWN	TRACED	CHECKED
MTG	MTG	MTG	MTG
DATE		REVIEWED	
11-11		11-11	



FRAMING PLAN

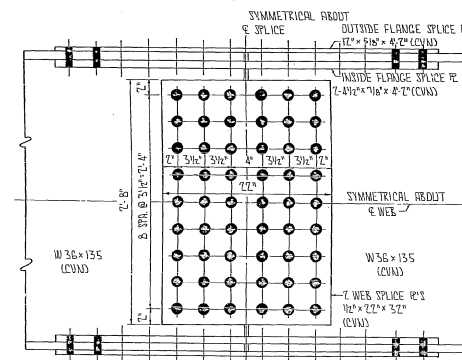
FOR END CROSSFRAME DETAILS SEE STD. DRAWG.
SD-1-89 & EXJ-4-87 WITH THE EXCEPTION
4' x 4' x 3/4" SHALL BE 4' x 4' x 3/8"

PARTIAL PAINTING OF A588 STEEL: AN 8 FOOT LENGTH OF THE ENDS OF BEAMS ADJACENT TO ABUTMENTS, AND ALL CROSSFRAMES AND OTHER A588 STEEL WITHIN THESE LIMITS SHALL BE PAINTED. PAINT SHALL BE S-4 SYSTEM A, THE PRIME COAT SHALL BE 108.17. THE TOP COAT SHALL BE 108.18 EXCEPT THAT THE COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595A-20045 OR 20059, (THE COLOR OF WEATHERING STEEL). THE REMAINDER OF THE A588 STEEL IS TO BE LEFT UNPAINTED. SEE CMJ 513.121 FOR CLEARING REQUIREMENTS.

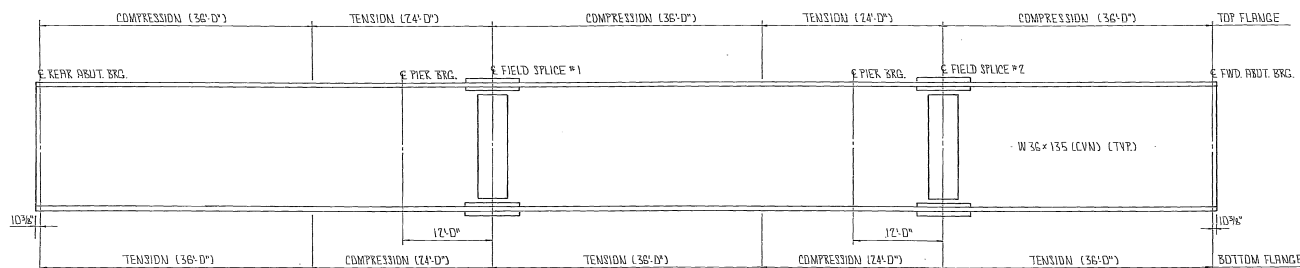


FLANGE SPlice PLAN

ALL SPlice PLATES ARE (CONV).
ALL FASTENERS TO BE 1" x 4" HIGH
STRENGTH BOLTS, A325 TYPE 3.
ALL SPlice PLATES ARE TO BE
A588 STEEL.



WEB SPlice ELEVATION



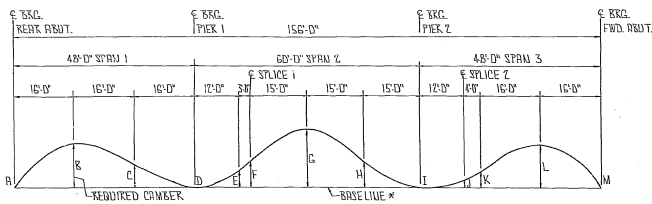
BEAM ELEVATION

ALL STRUCTURAL STEEL TO BE A588.

WHERE A SHAPE OR PLATE IS DESIGNATED (CONV) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 710.01 OF CMS.

ALL A588 STEEL SHALL HAVE THE TYPE OF STEEL PERMANENTLY FIELD LABELED ON THE BRIDGE BEAMS.

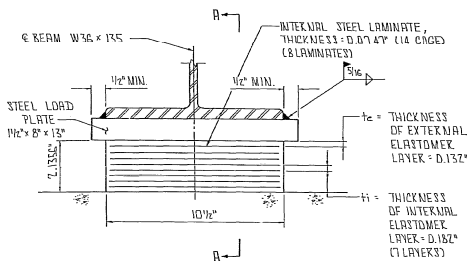
WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FLOOR STRINGER FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 1" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE PRESCRIBED BY AWS D1.1.



LAYOUT DIAGRAM

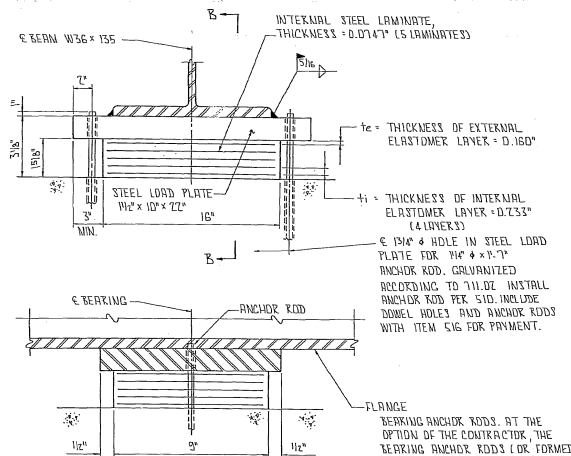
*BASELINE IS FROM E. BEARING REAR ABUTMENT TO E. BEARING AT E. BEARING FORWARD ABUTMENT.

	DEFLECTION & CAMBER (IN.)												
	SPAN 1					SPAN 2				SPAN 3			
	R. ABUT.	1/4	3/4	PIER 1	1/4	1/2	3/4	PIER 2	1/4	1/2	3/4	R. ABUT.	
DEFLECTION DUE TO WEIGHT OF STEEL	A	B	C	D	E	F	G	H	I	J	K	L	M
DEFLECTION DUE TO WEIGHT OF CONCRETE	0	3/16	1/8	0	1/8	1/4	1/8	0	1/8	1/4	1/8	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJUSTMENT REQUIRED FOR HORIZONTAL CURVE & SUPERELEVATION	0	0	0	0	0	0	0	0	0	0	0	0	0
REQUIRED SHOP CAMBER	0	1/4	1/8	0	1/8	1/4	1/8	0	1/8	1/4	1/8	0	0



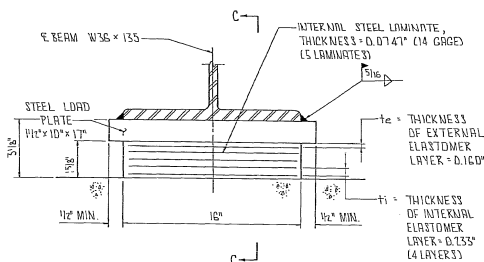
SECTION A-A
LAMINATED ELASTOMERIC EXPANSION BEARING
(ABUTMENTS)

SERVICE LOAD REACTIONS: DEAD LOAD = 20.10 K.
LIVE LOAD (NO IMPACT) = 53.10 K.
MAX. DESIGN LOAD = 73.45 KIPS



SECTION B-B
LAMINATED ELASTOMERIC FIXED BEARING
(PIER 1)

SERVICE LOAD REACTIONS: DEAD LOAD = 83.60 K.
LIVE LOAD (NO IMPACT) = 53.10 K.
MAX. DESIGN LOAD = 140.70 KIPS



SECTION C-C
LAMINATED ELASTOMERIC EXPANSION BEARING
(PIER 2)

SERVICE LOAD REACTIONS: DEAD LOAD = 83.60 K.
LIVE LOAD (NO IMPACT) = 53.10 K.
MAX. DESIGN LOAD = 140.70 KIPS

FHWA REGION	STATE	PROJECT	17
5	OHIO		15

FRANKLIN COUNTY
MAD-376-3.27

ELASTOMERIC TEST PAD: THE ELASTOMERIC BEARING MANUFACTURER SHALL SUPPLY A PLAIN ELASTOMERIC PAD FOR TESTING PURPOSES. THE PAD SHALL BE FURNISHED FROM THE SAME BATCH OF VULCANITE THAT IS USED IN THE FABRICATION OF THE LAMINATED ELASTOMERIC BEARINGS AND THE FABRICATOR SHALL CERTIFY THE IDENTITY OF THE ELASTOMER. THE PAD SHALL HAVE A 1/2 INCH THICKNESS AND SHALL HAVE MINIMUM LENGTH AND WIDTH DIMENSIONS OF 6 INCHES. PAYMENT FOR THE TEST PAD WILL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS.

BEARING REPOSITIONING: IF DECK CONCRETE IS PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 60°F AND THE BEARING SHEAR DEFLECTION EXCEEDS ONE-SIXTH OF THE BEARING HEIGHT AT 60°F ± 10°F, THE BEARINGS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F ± 10°F.

Basis of Payment: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL. a) EXPANSION LAMINATED ELASTOMERIC BEARINGS FOR ABUTS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 EACH LAMINATED ELASTOMERIC BEARING (2.1358" 7" x 10" LAMINATED ELASTOMERIC PAD WITH 1/2" x 8" x 13" STEEL LOAD PLATE). b) FIXED LAMINATED ELASTOMERIC BEARINGS FOR PIER 1. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 EACH LAMINATED ELASTOMERIC BEARING (1/2" x 9" x 16" LAMINATED ELASTOMERIC PAD WITH 1/2" x 10" x 22" STEEL LOAD PL.) c) EXPANSION LAMINATED ELASTOMERIC BEARINGS FOR PIER 2. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 EACH LAMINATED ELASTOMERIC BEARING (1/2" x 9" x 16" LAMINATED ELASTOMERIC PAD WITH 1/2" x 10" x 17" STEEL LOAD PLATE).

ELASTOMER SHALL BE SODIUMMETER.

WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BOUNDARY SURFACE SHALL NOT EXCEED 400°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

ALL LOAD PLATES SHALL BE ASTM A588 STEEL.

LOAD PLATES SHALL BE VULCANIZED BONDED TO ELASTOMER UNDER HEAT AND PRESSURE.

ALLOWABLE TOLERANCES:
INDIVIDUAL ELASTOMER LAYER THICKNESS: ± 20% OF DESIGN VALUE (NOT TO EXCEED ± 1/16")

PLAN DIMENSIONS: -0, +1/4"

DESIGN THICKNESS: -0, +1/4"

EDGE COVER OF EMBEDDED LAMINATES: -0, +1/8"

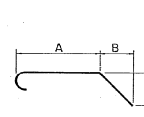
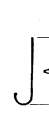
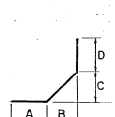
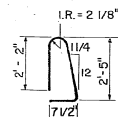
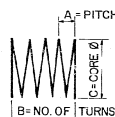
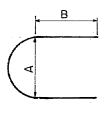
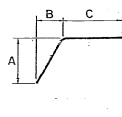
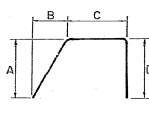
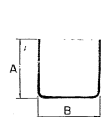
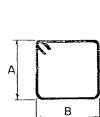
FRANKLIN CONSULTANTS INC. 9 / 10

COLUMBUS, OHIO

SUPERSTRUCTURE DETAILS

BRIDGE NO. MAD-376-0327
WINCHESTER PIKE OVER
BLACKLICK CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
MTC	MTC		CBS		4/9/11	



FHWA REGION	STATE	PROJECT	
5	OHIO		

[illegible]