

## DESIGN DESIGNATION

1984 ADT	24,000
2004 ADT	33,600
DHV	3,360
D	50%
T	25%
V	60 MPH

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
**ASD-71-4.56, WAY-71-0.00**  
MONTGOMERY, PERRY, JACKSON TOWNSHIPS  
ASHLAND COUNTY  
CONGRESS TOWNSHIP  
WAYNE COUNTY

ASD-71-4.56	OHIO
WAY-71-0.00	FHWA REGION 5
IR-71-4 (62) 183	FEDERAL PROJECT

1/70

IR-71-4 (62) 183

## LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02, Revised Code of Ohio.

## 1985 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 not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

MICROFILMED  
DEC 6 1991

## CONVENTIONAL SIGNS

County Line	-----	Limited Access (only)	-----	LA
Township Line	-----	Right of Way (only)	-----	RW
Section Line	-----	Limited Access & Right of Way	-----	LA & RW
Corporation Line	-----	Existing Right of Way	-----	
Fence Line (existing)	-x-x-	Property Line	-----	(in existing fence) -x-x-
Center Line	-----	Railroad	-----	or -----
Trees, Stumps, (to be removed)	---X---	Guardrail (existing)	-----	(proposed) -----
Utility Poles: Telephone, Power, Light	---o---			

## INDEX OF SHEETS

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## LINE DATA

BEGIN PROJECT	STA. 58+50.0
END PROJECT	STA. 691+32.0
GROSS PROJECT LENGTH	63,282.00 LIN. FT.
DEDUCT FOR STATION EQUATIONS	-1,449.68 LIN. FT.
NET PROJECT LENGTH	61,832.32 LIN. FT.

ADD FOR WORK:

STA 57+15 TO STA 58+50	135.00 LIN. FT.
STA. 691+32 TO STA. 698+22	690.00 LIN. FT.
SIDE ROAD GRADE SEPARATIONS (SEE SHT. 3)	13,475.00 LIN. FT.
NET WORK LENGTH	76,132.32 LIN. FT.

OR

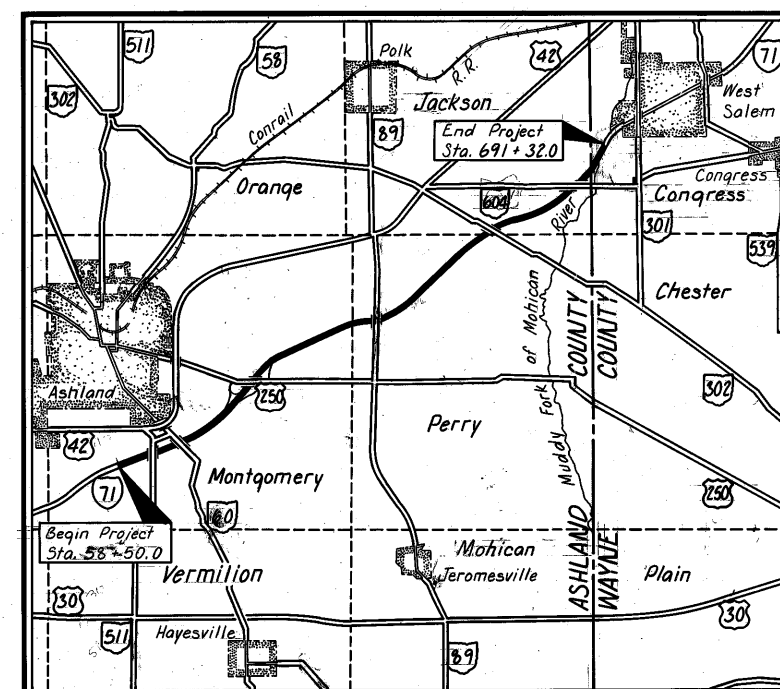
UNDERGROUND UTILITIES

48 HOURS  
**BEFORE YOU DIG**  
Call 800-362-2764 (Toll free)  
OHIO UTILITIES PROTECTION SERVICE

NON-MEMBERS  
MUST BE CALLED DIRECTLY

Plan Prepared By:  
O.D.O.T.  
DISTRICT 3  
DESIGN

SEAL



LOCATION MAP

SCALE IN MILES

Portion to be improved: \_\_\_\_\_  
State & Federal Routes: \_\_\_\_\_  
Other Roads: \_\_\_\_\_

## SCALES

Plan: \_\_\_\_\_

Profile: \_\_\_\_\_ Horizontal \_\_\_\_\_ Vertical \_\_\_\_\_

Cross Section: Horizontal \_\_\_\_\_ Vertical \_\_\_\_\_

SUPPLEMENTAL SPECIFICATIONS			
	947	10-17-83	
	953	8-21-80	
824	10-8-82		
845	1-13-84	812	11-7-83
847	10-17-83	933	8-21-80
848	10-2-85		
846	10-3-85		
861	9-9-83	961	9-9-83

Approved: \_\_\_\_\_  
Date: 1/30/85 District Deputy Director of Transportation

Approved: \_\_\_\_\_  
Date: 2-14-85 Engineer, Bureau of Bridges and Structural Design

Approved: \_\_\_\_\_  
Date: 11-5-85 Chief Engineer, Planning & Design

Approved: \_\_\_\_\_  
Date: 11-5-85 Director, Department of Transportation

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

Project: ASD-71-4.56 WAY-71-0.00  
Date of Letting: 19 Contract No. \_\_\_\_\_

LD0300 Rev. 1-1-81

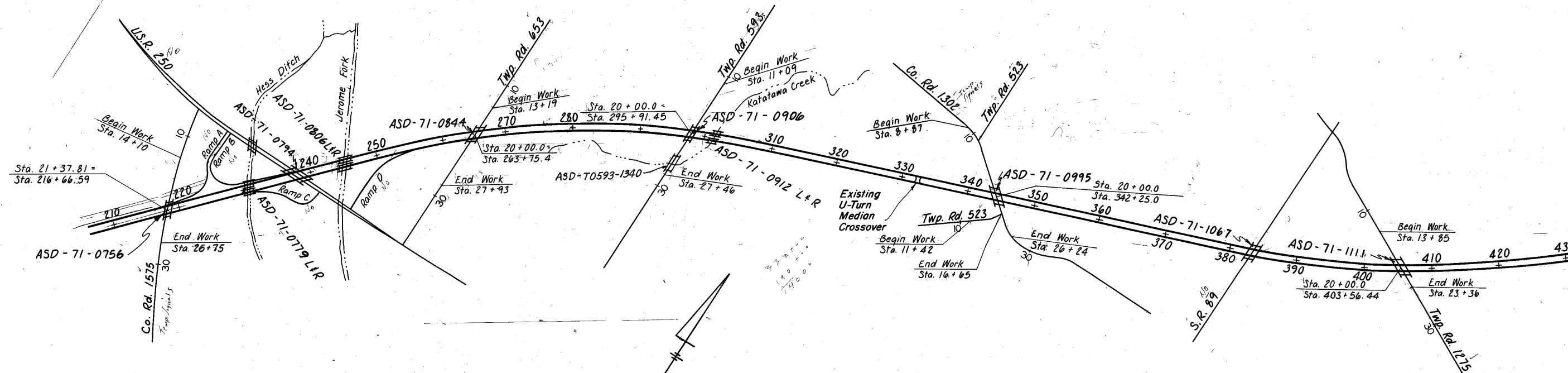
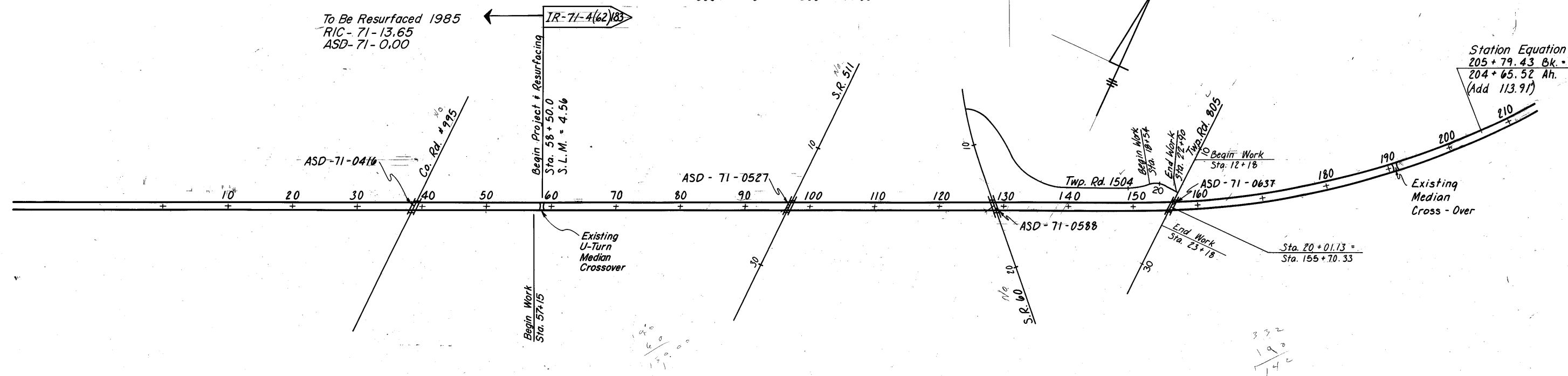
Rev. 12-24-85

# SCHEMATIC PLAN

FHWA REGION	STATE	PROJECT
5	OHIO	

2  
70

ASD-71-4.56  
WAY-71-0.00



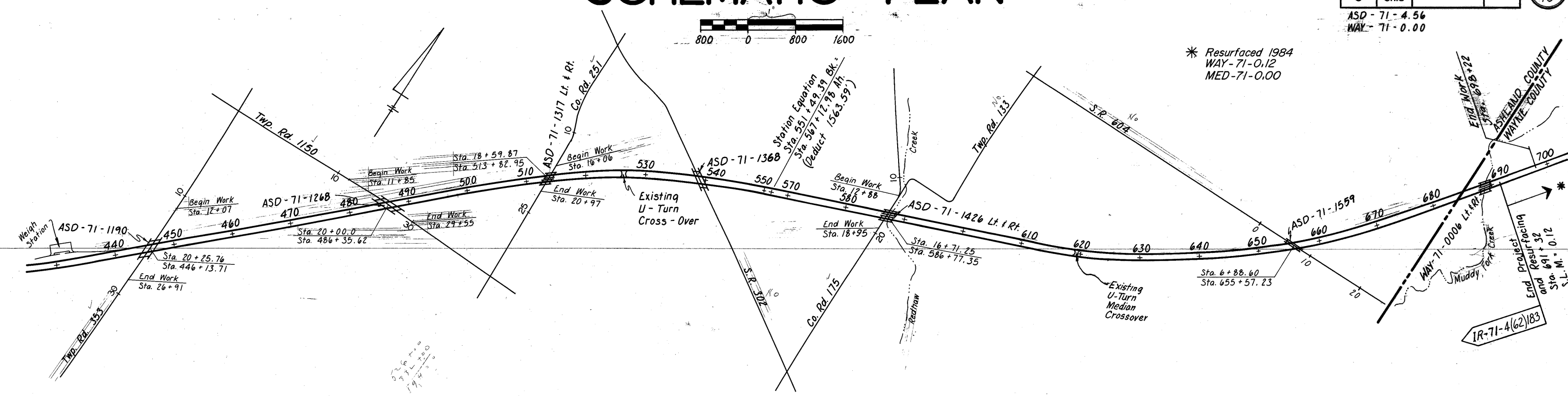
# SCHEMATIC PLAN

FHWA REGION	STATE	PROJECT
5	OHIO	

3  
70

ASD - 71 - 4.56  
WAY - 71 - 0.00

\* Resurfaced 1984  
WAY - 71 - 0.12  
MED - 71 - 0.00



SIDE ROAD	STATION WORK LIMITS	LENGTH
TWP. ROAD 1504	18 + 54 TO 22 + 90	436 LIN.FT.
* TWP. ROAD 805	12 + 18 TO 23 + 18	1,100
* CO. ROAD 1575	14 + 10 TO 26 + 75	1,265
* TWP. ROAD 653	13 + 19 TO 27 + 93	1,474
** TWP. ROAD 593	11 + 09 TO 27 + 46	1,637
* CO. ROAD 1302	8 + 87 TO 26 + 24	1,737
TWP. ROAD 523	11 + 42 TO 16 + 65	523
* TWP. ROAD 1275	13 + 85 TO 23 + 36	951
* TWP. ROAD 353	12 + 07 TO 26 + 91	1,484
* TWP. ROAD 1150	11 + 85 TO 29 + 55	1,770
CO. ROAD 251	16 + 06 TO 20 + 97	491
CO. ROAD 175	12 + 88 TO 18 + 95	607 LIN.FT.
TOTAL SIDE ROAD WORK LENGTH =		13,475 LIN.FT.

\* Late Mod. on structure.

CALC. BY EDD 11/84  
CHK'D BY HEN 12/84

FIELD OFFICE:

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 400 SQ. FT. OF FLOOR SPACE. PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

CONTINGENCY QUANTITIES:

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

ALIGNMENT AND PROFILE:

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THIS EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT EXCEPT THAT IT WILL BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE RESURFACING COURSES SPECIFIED IN THESE PLANS.

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS:

REFERENCE TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 859, 957, 958, AND 959 ON THE TRAFFIC CONTROL STANDARD DRAWINGS IN THIS PLAN SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 632, 730, 731, AND 732.

WORK WITHIN EXISTING RIGHT-OF-WAY:

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY AT ALL LOCATIONS ON THIS PROJECT.

UNDERGROUND UTILITIES:

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.

UTILITY NOTIFICATION:

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ANY AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN IN THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

UTILITY OWNERSHIP:

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

TELEPHONE: GENERAL TELEPHONE COMPANY  
1534 S.R. 511 SOUTH - P.O. BOX 9  
ASHLAND, OHIO 44805  
PHONE: (419) 289-6616

OIL: ARCO PIPE LINE CO.  
P.O. BOX 8225  
359 ST. CLAIR ST.  
TOLEDO, OHIO 43605  
(419-698-8218)

FLUSHING AND REPAIR OF UNDERDRAINS:

ALL EXISTING UNDERDRAINS SHALL BE FLUSHED WITH WATER TO DETERMINE IF THEY ARE FUNCTIONING PROPERLY AND IF NOT THE OBSTRUCTIONS ARE TO BE LOCATED AND REPAIRED. THE FOLLOWING PROCEDURES AND METHODS OF PAYMENT ARE PROVIDED FOR THIS PURPOSE. A COPY OF THE ORIGINAL CONSTRUCTION PLANS SHOWING THE LOCATION OF THE UNDERDRAINS AND OUTLETS WILL BE ON FILE IN THE PROJECT OFFICE.

1) ITEM SPECIAL- UNDERDRAIN OPENING- (EACH). THIS ITEM SHALL CONSIST OF EXPOSING THE FIRST TILE AT THE UPPER END OF AN UNDERDRAIN LINE OR A SUBSEQUENT INTERMEDIATE UNDERDRAIN OPENING AS APPROVED HEREIN. PAYMENT FOR EACH OPENING SHALL INCLUDE THE TRENCH EXCAVATION LENGTHWISE OVER THE EXISTING TILE, REPLACING THE 6" TILE BROKEN IN MAKING THE OPENING AND THE BACKFILLING WITH NO. 8 AGGREGATE AS PER 605, EXCEPT THAT A MINIMUM OF 6" 301 OR 848 TYPE 2 MATERIAL SHALL BE PLACED AND COMPACTED AT THE TOP OF THE TRENCH TO THE LEVEL OF ADJACENT PAVED BERM. PAYMENT FOR THE OPERATIONS DESCRIBED ABOVE SHALL INCLUDE ALL, LABOR, TOOLS, EQUIPMENT AND MATERIALS INCIDENTAL TO COMPLETING THE ITEM INCLUDING A MAXIMUM OF 6 LIN. FT. OF 6" UNDERDRAIN AND SHALL BE MADE FOR "EACH" - ITEM SPECIAL-UNDERDRAIN OPENING.

2) ITEM SPECIAL - WATER - (M-GALS.). AFTER THE UNDERDRAIN OPENING HAS BEEN MADE AND THE EXPOSED TILE REMOVED, THE LINE SHALL BE FLUSHED WITH WATER USING A MINIMUM SIZE HOSE OF 2" AND A MAXIMUM VOLUME OF WATER CALCULATED AT 1-1/2 GALLONS PER LIN. FT. OF UNDERDRAIN LINE. THE FLUSHING OPERATION MAY BE STOPPED AT ANY TIME BY THE ENGINEER IF FIELD OBSERVATIONS SHOW THE LINE TO BE EITHER PLUGGED OR OPERATING EFFICIENTLY.

IN THE EVENT THE LINE IS FOUND TO BE PLUGGED OR FLOW RESTRICTED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE RESTRICTION BY RODDING OR OTHER METHOD APPROVED BY THE ENGINEER. AN INTERMEDIATE UNDERDRAIN OPENING WILL BE PERMITTED AND PAID FOR, PROVIDING THE DISTANCE TO THE OUTLET IS MORE THAN 500 FT. FROM THE INITIAL OPENING (OR INTERMEDIATE OPENING). THE COST OF RODDING THE LINE IS TO BE INCLUDED IN THE UNIT BID PRICE FOR WATER.

THE METHOD OF MEASUREMENT FOR THE ITEM SPECIAL-"WATER" WILL BE IN ACCORDANCE WITH SPECIFICATION - SECTION 616.03 AND PAYMENT WILL BE PER THOUSAND GALLONS (M-GAL.) USED AND MEASURED IN TANKS, TRUCKS, ETC. AS PER REQUIREMENTS OF 616.03.

3) WHERE A SECTION OF TILE IS FOUND TO BE PLUGGED OR BROKEN, IT SHALL BE REMOVED AFTER BEING ISOLATED AS NOTED ABOVE. THE SECTION SHALL THEN BE REPLACED WITH 6" PIPE UNDERDRAIN AT APPROXIMATELY THE ORIGINAL LINE AND GRADE. THE COST OF REMOVAL OF EXISTING TILE IS CONSIDERED TO BE INCIDENTAL TO THIS WORK AND EXTREME CARE IS TO BE EXERCISED IN NOT DAMAGING OR REMOVING ANY MORE TILE THAN IS NECESSARY. MEASUREMENT FOR THIS WORK WILL BE AS PER SECTION 605.06. BASIS OF PAYMENT SHALL BE PER LINEAR FOOT OF 605 6" UNCLASSIFIED PIPE UNDERDRAIN, AS PER PLAN.

4) AFTER ALL REPAIRS HAVE BEEN MADE TO A LINE, A FINAL FLUSHING WILL BE PERFORMED TO ASCERTAIN THAT THE LINE IS FUNCTIONING PROPERLY. THE CLOSING OF THE INITIAL OPENING WILL THEN BE PERMITTED.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE SUMMARY FOR THIS WORK ON THIS PROJECT (100 % STATE ITEMS):

ITEM SPECIAL - UNDERDRAIN OPENING	300	EACH
ITEM SPECIAL - WATER	385	M-GAL.
ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN	650	LIN. FT.
ITEM 603 - 6" CONDUIT, TYPE F	300	LIN. FT.
***** ALL 100 % STATE ITEMS*****		

ITEM 847 - PAVEMENT MARKINGS:

THE THERMOPLASTIC PAVEMENT MARKINGS SHALL BE APPLIED ON THE NEWLY PLACED 848 SURFACE COURSE AS PER SUPPLEMENTAL SPECIFICATION 847.06.

ITEM 407 - TACK COAT, AS PER PLAN:

BITUMINOUS MATERIAL SHALL BE APPLIED AT THE RATE OF 0.1 GALLONS PER SQ. YD. ON THE PAVEMENT AND BERM SURFACES, BUT COMPLETE PAVEMENT SURFACE COVERAGE SHALL BE REQUIRED. AREAS OF TACK STRIPPED BY CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE RECOATED PRIOR TO PLACING ASPHALT CONCRETE. ITEM 407.06 SHALL BE FOLLOWED UNLESS WAIVED BY THE ENGINEER. IF ASPHALT EMULSION IS USED SUFFICIENT TIME MUST BE ALLOWED FOR COMPLETE BREAKING TO OCCUR BEFORE THE OVERLAY IS PLACED. WITH ASPHALT EMULSION, IF COMPLETE PAVEMENT SURFACE COVERAGE CANNOT BE OBTAINED AT A RATE OF 0.1 GAL/SQ. YD., A DILUTED MATERIAL SHALL BE USED. THE APPLICATION RATE SHALL BE INCREASED BY THE PERCENTAGE OF WATER USED FOR DILUTION, BUT METHOD OF MEASUREMENT FOR 407 SHALL BE GALLONS OF ASPHALT EMULSION PRIOR TO DILUTION. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 7 LBS. PER SQUARE YARD OF COVER AGGREGATE FOR ESTIMATING PURPOSES.

PROJECT FEATHERS:

A BUTT JOINT AS PER STANDARD DRAWING BP-5 SHALL BE USED WHERE THE FEATHER IS ON EXISTING ASPHALT.

ITEM 848 - ASPHALT CONCRETE:

ON THIS PROJECT, ITEM 848, TABLE 2-2, PROPERTIES OF MIXTURES SHALL BE FOR HEAVY TRAFFIC VOLUMES.

LONGITUDINAL JOINTS, 848 COURSES:

A HOT LONGITUDINAL JOINT SHALL BE MADE BETWEEN THE PAVEMENT LANE AND THE ADJOINING BERM AS SHOWN ON THE TYPICAL SECTIONS, ITEM 5 FOR THE SURFACE COURSE. ALL OTHER LONGITUDINAL JOINTS BETWEEN PAVEMENT LANES AND CENTERLINE SHALL BE COLD JOINTS SEALED BY COATING THE VERTICAL FACE, AS PER 401.15.

THE LONGITUDINAL JOINT BETWEEN ADJACENT PAVEMENT LANES IN THE SAME TRAVEL DIRECTION SHALL BE MADE THE FOLLOWING WORK DAY FOR BOTH COURSES.

SPREADING EQUIPMENT AND ROLLERS:

AN AUTOMATIC SCREED CONTROL HAVING A 40-FOOT SKI-ARM SHALL BE USED FOR PLACING THE 848 INTERMEDIATE COURSE (SEE PROPOSAL NOTE). THE WIDTH LAID ON ANY ONE PASS SHALL NOT EXCEED THE PAVER'S RATED WIDTH AS RECOMMENDED BY THE PAVER MANUFACTURER.

A PNEUMATIC TIRE ROLLER AS PER 401.11 SHALL BE REQUIRED AS AN INTERMEDIATE ROLLER FOR COMPACTION OF THE 848 COURSES. THE FINISH ROLLER SHALL BE A STEEL WHEELED TANDEM ROLLER AS PER 401.11. NO VIBRATORY ROLLER WILL BE PERMITTED AS A FINISH ROLLER.

SUSPENSION OF RESURFACING OVER WINTER:

IF THIS PROJECT SHOULD CARRY OVER THE WINTER SEASON, THE INTERMEDIATE COURSE(S) SHALL NOT BE ALLOWED TO LAY EXPOSED TO TRAFFIC OVER THE WINTER. ALL ASPHALT PAVING WORK SHALL BE SCHEDULED FOR COMPLETION BY OCTOBER 31. AFTER OCTOBER 31, IF WEATHER PERMITS AS PER 401.05, A PERMISSIVE CHANGE ORDER MAY BE WRITTEN BY THE DISTRICT CONSTRUCTION ENGINEER WHICH SHALL INCLUDE THE FOLLOWING REQUIREMENT:

ANY INTERMEDIATE COURSE LAID SHALL BE COVERED BY THE SURFACE COURSE WITHIN TWO (2) WORK DAYS.

ALSO, ALL FINAL PAVEMENT MARKINGS SHALL BE APPLIED TO THE NEW SURFACE COURSE BEFORE WINTER. IF THIS CANNOT BE ACCOMPLISHED UNDER SPECIFICATION CONDITIONS, THE CONTRACTOR SHALL APPLY TEMPORARY LANE AND EDGE LINES, CLASS I, AT HIS EXPENSE. THE PERMANENT PAVEMENT MARKINGS SHALL THEN BE APPLIED THE NEXT SPRING.

CALC. BY *R.D. Allen*  
CHKD. BY *R.E.N. 12/84*

ITEM SPECIAL - CRACK SEALING, HOT APPLIED, ASTM D-3405

AFTER ALL PAVEMENT REPAIR WORK AND THE PAVEMENT AND BERM PLANING WORK HAVE BEEN COMPLETED IN AN AREA, ALL OPEN CRACKS AND JOINTS IN THE EXISTING PAVEMENT AND BETWEEN THE PAVEMENT AND THE BERMS SHALL BE CLEANED AND SEALED AS PER THE PROPOSAL NOTE.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED WHERE DIRECTED BY THE ENGINEER ON THIS PROJECT.

ITEM SPECIAL - CRACK SEALING, HOT APPLIED, 50.000 LBS.  
ASTM D-3405

FLEXIBLE BERM REPAIR:

THIS ITEM OF WORK SHALL CONSIST OF PARTIAL DEPTH REPAIR OF THE EXISTING PAVED BERM IN AREAS EXHIBITING SEVERE CRACKING, DETERIORATION AND SURFACE DISTORTIONS. THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE.

THE MATERIAL WITHIN THE DESIGNATED AREAS SHALL BE REMOVED BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT BERM. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL BROKEN AND LOOSE ASPHALT OR PRIMED AGGREGATE, BUT TO A MINIMUM OF SIX INCHES BELOW THE ADJACENT BERM THROUGHOUT THE REPAIR AREA. THE MATERIAL SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.05.

AFTER REMOVAL OF THE DETERIORATED MATERIALS, ITEM 407 TACK COAT SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY COAT THE SURFACE AND PENETRATE CRACKS. ITEM 301 BITUMINOUS AGGREGATE BASE THEN SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT BERM SURFACE. THE LENGTH OF EXCAVATION OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER. NO EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. IN CASE OF EMERGENCY, THE OPEN EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS DIRECTED.

THIS WORK SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF THE 848 COURSE ON THE PAVED BERM.

THE NUMBER OF CUBIC YARDS TO BE PAID SHALL BE FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK, INCLUDING THE 301 AND 407.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO MAKE REPAIRS ON THE PAVED BERMS.

ITEM SPECIAL - FLEXIBLE BERM REPAIR 845 CU.YDS.

ITEM SPECIAL - RESHAPING BERMS:

BERMS AT LOCATIONS WHERE EXISTING GUARDRAIL IS REMOVED OR WHERE NEW GUARDRAIL IS TO BE ERECTED SHALL BE RESHAPED AS DIRECTED BY THE ENGINEER TO INSURE A SMOOTH SURFACE FREE OF ALL IRREGULARITIES. EXCESS EXCAVATION RESULTING FROM RESHAPING BERMS SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT FOR RESHAPING BERMS AS DIRECTED SHALL BE INCLUDED IN THE CONTRACT PRICE BID PER LINEAL FOOT FOR ITEM SPECIAL - RESHAPING BERMS.

ITEM SPECIAL - PARTIAL DEPTH PAVEMENT REPAIR:

THIS ITEM OF WORK SHALL CONSIST OF PARTIAL DEPTH REMOVAL OF EXISTING ASPHALT AND CONCRETE PAVEMENT IN AREAS EXHIBITING DETERIORATION AT THE SURFACE, APPLYING TACK COAT, AND PLACING AND COMPACTING ASPHALT CONCRETE.

THE ENGINEER SHALL DESIGNATE THE LOCATION AND THE LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIR AREAS WILL BE ROUGHLY RECTANGULAR IN SHAPE AS REQUIRED TO ENVELOP SURFACE DETERIORATION. UNLESS OTHERWISE SHOWN IN THE PLANS, TYPICAL REPAIR AREAS WILL BE AT TRANSVERSE CRACKS AND JOINTS AND ALONG PORTIONS OF LONGITUDINAL JOINTS. THE REMOVAL SHALL BE AS INDICATED ON THE PLAN. (SEE SHT. 34)

THE PAVEMENT SHALL BE REMOVED TO THE SPECIFIED DEPTH WITHIN THE DESIGNATED LIMITS BY A METHOD THAT WILL NOT LOOSEN OR OTHERWISE DAMAGE ADJACENT PAVEMENT. PAVEMENT SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.05.

AFTER REMOVAL OF THE PAVEMENT, TACK COAT USING AC-20 SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY COAT ALL EXPOSED SURFACES AND TO FILL CRACKS AND JOINT OPENINGS.

ASPHALT CONCRETE AS SPECIFIED IN DETAIL SHALL THEN BE PLACED AND COMPACTED IN ONE OR MORE LIFTS AS NECESSARY TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

THE NUMBER OF CUBIC YARDS TO BE PAID FOR SHALL BE THE ACCEPTED QUANTITY OF ASPHALT CONCRETE MATERIAL COMPLETE IN PLACE\*. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK, INCLUDING TACK COAT AND ASPHALT CONCRETE. PAYMENT WILL BE PAID FOR UNDER:

ITEM SPECIAL - PARTIAL DEPTH PAVEMENT REPAIR CU.YDS.  
SEE SHEET 34 FOR QUANTITY  
\* CALCULATED BY WEIGHT CONVERSION AS PER 401.17.  
SEE SHEET 34 FOR ESTIMATED QUANTITIES

ITEM SPECIAL - ASPHALT PAVEMENT PLANING:

THIS WORK SHALL CONSIST OF PLANING THE EXISTING PAVEMENT AND DISPOSING OF THE CUTTINGS IN ACCORDANCE WITH THESE SPECIFICATIONS.

EXISTING PAVEMENT TYPE: THE ITEM DESCRIPTION INDICATES THE PREDOMINANT TYPE OF PAVEMENT. ALL PAVEMENT ENCOUNTERED IN THE AREAS DESIGNATED ON THE PLANS SHALL BE PLANED, MEASURED AND PAID FOR UNDER THE ITEM, REGARDLESS OF PAVEMENT TYPE.

EQUIPMENT: PLANING EQUIPMENT SHALL BE SELF-PROPELLED WITH SUFFICIENT POWER AND STABILITY TO CONSISTENTLY AND EFFICIENTLY PRODUCE THE REQUIRED RESULTS. THE CUTTING ELEMENT MAY BE OF THE GRINDING, SAWING OR MILLING TYPE.

PLANING CUTTERS SHALL BE MOUNTED RIGIDLY TO THE CARRIER AND SHALL BE ADJUSTABLE AND CONTROLLABLE AS TO DEPTH OF CUT AND CROSS-SLOPE. LONGITUDINAL PLANING ACTION MAY BE PRODUCED EITHER BY MEANS OF A SUITABLE CARRIER WHEELBASE OR BY MEANS OF AN AUTOMATIC CONTROL SYSTEM HAVING AN EXTERNAL REFERENCE. CROSS-SLOPE ADJUSTMENTS OR AUTOMATIC CONTROLS SHALL BE CAPABLE OF PRODUCING EITHER A VARIABLE OR A CONSTANT CROSS-SLOPE AS REQUIRED.

PLANING CUTTERS SHALL BE DESIGNED, MAINTAINED AND OPERATED SO AS TO PRODUCE A SURFACE FREE FROM GROOVES, RIDGES, GOUGES OR OTHER IRREGULARITIES DETRIMENTAL TO THE SAFE OPERATION OF VEHICLES IN TRAFFIC ROUTED ONTO THE PLANED SURFACE, TEMPORARILY OR PERMANENTLY.

AN AUTOMATIC MILLING HEAD PROFILE CONTROL HAVING A 30-FOOT MINIMUM SKI-ARM SHALL BE USED DURING THE PLANING OPERATION. THE DEPTH OF CUT MAY BE CONTROLLED FROM EITHER THE PAVEMENT CENTERLINE OR EDGE.

SUITABLE SUPPLEMENTAL EQUIPMENT OR METHODS, APPROVED BY THE ENGINEER, MAY BE USED IN SMALL OR CONFINED AREAS.

PLANING: ONE OR MORE PLANING PASSES SHALL BE MADE OVER THE DESIGNATED AREA AS NECESSARY TO REMOVE SUCH IRREGULARITIES AS BUMPS, CORRUGATIONS, AND WHEEL RUTS, AND WHEN REQUIRED, AS NECESSARY TO ESTABLISH A NEW PAVEMENT SURFACE ELEVATION OR CROSS-SLOPE.

PLANING WHERE TRAFFIC IS TO BE MAINTAINED SHALL BE STARTED ON THE DRIVING OR PASSING LANE AND THE ADJACENT LANE SHALL BE PLANED THE NEXT WORK DAY UNLESS THAT LANE IS LEFT CLOSED FOR OTHER PAVING OPERATIONS.

CUTTINGS SHALL BE REMOVED FROM THE SURFACE FOLLOWING EACH PASS OF THE EQUIPMENT. BEFORE OPENING THE COMPLETED AREA TO TRAFFIC, THE SURFACE SHALL BE CLEANED THOROUGHLY OF ALL LOOSE MATERIAL THAT WOULD CREATE A HAZARD, A NUISANCE, OR WOULD BE REDEPOSITED INTO THE SURFACE TEXTURE. CUTTINGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.05(2).

EFFECTIVE MEASURES SHALL BE TAKEN TO CONTROL DUST, SMOKE, CONTAMINATION OF THE PAVEMENT, AND THE SCATTERING OF LOOSE PARTICLES DURING PLANING AND CLEANING OPERATIONS.

WHERE SOUND PAVEMENT HAS BEEN GOUGED, TORN OR OTHERWISE DAMAGED DURING PLANING OPERATIONS, THE DAMAGED AREAS SHALL BE REPAIRED AT NO ADDITIONAL COST IN A MANNER SATISFACTORY TO THE ENGINEER TO CONFORM TO THE ADJACENT PAVEMENT IN SMOOTHNESS AND DURABILITY. SURFACE TOLERANCES: THE SURFACE SHALL BE PLANED TO A SMOOTHNESS OF PLUS OR MINUS 1/4 INCH IN 10 FEET AND THE SURFACES AT THE EDGE OF ADJACENT PASSES SHALL BE MATCHED WITHIN PLUS OR MINUS 1/4 INCH. THE CROSS-SLOPE OF THE PLANED SURFACE SHALL CONFORM TO THE SPECIFIED CROSS-SLOPE WITHIN PLUS OR MINUS 3/8 INCH IN TEN FEET.

METHOD OF MEASUREMENT: THE QUANTITY OF PAVEMENT PLANING INCLUDING THE REMOVAL AND DISPOSAL OF CUTTINGS SHALL BE THE NUMBER OF SQUARE YARDS PLANED. SEE SHEET 13 FOR PAVEMENT PLANING QUANTITIES.

IN ADDITION TO THE QUANTITIES ON PLAN SHEETS FOR ASPHALT PAVEMENT PLANING, THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED TO BE USED WHERE DIRECTED BY THE ENGINEER FOR ASPHALT PAVEMENT PLANING IN AREAS WHERE BAD RUTTING HAS OCCURRED.

ITEM SPECIAL - ASPHALT PAVEMENT PLANING 5000 SQ.YDS.

PROFILE CORRECTION UNDER OVERHEAD BRIDGES:

IN ORDER TO MAINTAIN ADEQUATE VERTICAL CLEARANCE UNDER OVERHEAD BRIDGES, THE EXISTING ASPHALT CONCRETE SHALL BE PLANED OFF THE EXISTING CONCRETE PAVEMENT, WHERE REQUIRED, FOR APPROXIMATELY 150-FEET EACH SIDE OF THE BRIDGE. THE PROFILE SHALL BE TRANSITIONED BACK TO THE NORMAL PAVEMENT PLANING PROFILE AS PER DETAIL ON SHEET 53. CARE SHALL BE TAKEN SO THAT POSITIVE PAVEMENT AND BERM DRAINAGE WILL BE MAINTAINED AND TO ASSURE A SMOOTH TRANSITION.

CONSTRUCTION EQUIPMENT MEDIAN CROSSINGS:

CONSTRUCTION EQUIPMENT SHALL CROSS THE MEDIAN ONLY AT THE EXISTING U-TURN CROSSOVERS AND AT OTHER ADDITIONAL LOCATIONS APPROVED BY THE ENGINEER. A MAXIMUM OF FIVE (5) ADDITIONAL EQUIPMENT CROSSINGS MAY BE ALLOWED WITH EACH LOCATED APPROXIMATELY MIDWAY BETWEEN THE EXISTING CROSSOVERS AS SHOWN ON THE SCHEMATIC PLAN.

THE CONTRACTOR SHALL BE RESPONSIBLE, AT HIS EXPENSE, FOR THE RESTORATION OF THE ADDITIONAL EQUIPMENT CROSSINGS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING PRIOR TO HIS WORK OPERATIONS, INCLUDING RESEEDING AS PER 659.

WHEN THE MEDIAN CROSSINGS ARE BEING USED IN THE AREA OF ONE-LANE TRAFFIC OPERATION, THE CONTRACTOR SHALL PROVIDE AT HIS EXPENSE THE SERVICES OF A LAW ENFORCEMENT OFFICER WITH PATROL CAR TO CONTROL TRAFFIC FLOW.

ITEM 203 - EMBANKMENT, AS PER PLAN:

AT LOCATIONS WHERE SLOPES ARE TO BE EXTENDED AND DITCHES ARE TO BE FILLED, THE EXISTING SHOULDERS ARE TO BE WIDENED AND BUILT-UP AS PER THE DETAILS ON SHEET 29. AREAS WHERE EMBANKMENT MATERIALS ARE TO BE PLACED SHALL BE SCALPED. THE REQUIREMENTS FOR MOISTURE, DENSITY CONTROL AND BENCHING SHALL BE WAIVED. THE DEPTH OF LAYERS IN WHICH THE EMBANKMENT IS PLACED AND ITS COMPACTION SHALL, IN LIEU OF THE REQUIREMENTS OF ITEM 203, CONFORM TO ACCEPTABLE CONSTRUCTION PRACTICES AS DIRECTED BY THE ENGINEER. THE METHOD OF MEASUREMENT FOR EMBANKMENT MATERIAL FURNISHED AND PLACED AT SLOPE EXTENSIONS AND SHOULDER WIDENINGS SHALL BE THE NUMBER OF CUBIC YARDS MEASURED BY LOOSE VOLUME IN THE CARRIER AT THE WORK SITE, IN LIEU OF THE REQUIREMENTS OF 203.15. PAYMENT FOR ACCEPTED QUANTITIES SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR "ITEM 203 - EMBANKMENT, AS PER PLAN".



CALC. BY PPA 1/84  
CHKD. BY HFN 12/84

EROSION CONTROL:

ALL PERMANENT EROSION CONTROL ITEMS SHALL BE PLACED IMMEDIATELY AFTER THE EARTHWORK IS COMPLETED AT EACH LOCATION.

ITEM 659 - SEEDING AND MULCHING:

SEEDING QUANTITIES ASSOCIATED WITH THE 203 - EARTHWORK ITEMS SHOWN ON THE PLAN ARE ONLY APPROXIMATE AND FINAL PAYMENT SHALL BE THE ACTUAL NUMBER OF SQUARE YARDS OF DISTURBED AREAS SEEDED AND MULCHED AS PER ITEM 659. COMMERCIAL FERTILIZER SHALL BE APPLIED AS PER 659.08.

ITEM 202 - CURB REMOVED, AS PER PLAN:

AFTER THE CONCRETE CURBS ARE REMOVED, THE REMAINING TRENCH SHALL BE BACK FILLED WITH 848 ASPHALT CONCRETE AND COMPACTED TO THE LEVEL OF THE ADJA- CENT PAVEMENT AND/OR PAVED BERM, SEE DETAIL ON SHEET 30. IN ADDITION, SOME MINOR GRADING WORK MAY BE NECESSARY ON THE EMBANKMENT BEHIND THE PORTION OF THE CURB REMOVAL BEYOND THE MAINLINE PAVED BERM, SEE DETAIL ON SHEET NO. 30. THE COST OF THE 848 ASPHALT BACKFILL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202 CURB REMOVED, AS PER PLAN.

ALL CURB REMOVAL AND BACKFILL WORK SHALL BE COMPLETED PRIOR TO THE PLAC- ING OF THE 848 ON THE ADJACENT PAVEMENT AND/OR PAVED BERM.

ITEM 202 - GUARDRAIL REMOVED FOR STORAGE:

GALVANIZED GUARDRAIL DESIGNATED FOR REMOVAL FOR STORAGE SHALL BE CAREFULLY DISMANTLED AND THE RAIL ELEMENTS, GALVANIZED POST BOLTS, GALVANIZED POSTS AND SPACER BLOCKS STORED FOR REMOVAL BY STATE FORCES. ALL POSTS, BLOCKS, BOLTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE SHALL BE DISPOSED OF AS DIRECTED. ALL POST AND CONCRETE ANCHOR HOLES SHALL BE CAREFULLY FILLED AND TAMPED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR 202 GUARD- RAIL REMOVED FOR STORAGE, MEASURED BY THE LINEAR FOOT CENTER TO CENTER OF CONCRETE ANCHORS.

ITEM 202 - ANCHOR POST REMOVED:

THE EXISTING TYPE A ANCHOR ASSEMBLIES ON THE APPROACH END OF THE GUARD- RAIL ON THIS PROJECT SHALL BE MODIFIED TO REMOVE POST "C" INCLUDING SPACER BLOCKS AND CONCRETE ENCASEMENT TO A MINIMUM OF ONE FOOT BELOW THE GROUND LINE. THE RESULTING POST HOLE SHALL BE BACKFILLED AND TAMPED AND THE SITE RESTORED. SPECIAL CARE SHALL BE EXERCISED SO AS NOT TO DAMAGE THE RAIL ELEMENT OF THE ANCHOR ASSEMBLY AND ANY DAMAGE SHALL BE REPAIRED AS DIR- ECTED BY THE ENGINEER AT NO COST TO THE STATE. ALL MATERIALS REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR.

PAYMENT FOR ALL THE ABOVE WORK TO REMOVE THE POST FROM THE EXISTING TYPE "A" ANCHOR ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 202, ANCHOR POST REMOVED, AS PER PLAN.

\* FIRST POST FROM CONCRETE  
END ANCHOR

LOCATIONS OF GUARDRAIL:

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THE PLANS, ARE SUBJECT TO ADJUSTMENT IN THE FIELD TO ASSURE THAT THE PLANNED INSTALLATIONS WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC.

ITEM 606 - RAISING TYPE 5 GUARDRAIL,

WHERE DESIGNATED ON THE PLAN, THE TYPE 5 GUARDRAIL SHALL BE RAISED ON THE EXISTING STEEL POSTS AS PER THE DETAIL ON SHEET NO. 30, WITH NEW STEEL BLOCKS AND NEW POST BOLTS.

THE RAIL SHALL BE DISMANTLED ONLY TO THE EXTENT NECESSARY TO FIELD BORE OR PUNCH NEW BOLT HOLES IN THE STEEL POST, TO REPAIR OR REGALVANIZE THE HOLE AREA, AND TO RECONNECT THE RAIL AND NEW BLOCKS TO THE EXISTING POSTS.

THE NEW BOLT HOLE AREA SHALL BE REGALVANIZED IN ACCORDANCE WITH AASHTO SPECIFICATION M36-731 SECTION 23 OR REPAIRED UNDER THE DIRECTION OF THE ENGINEER WITH STICK-FORM GALVANIZING REPAIR COMPOUND MEETING THE REQUIRE- MENTS OF FSS-O-G-93.

THE EXISTING TYPE "A" ANCHOR ASSEMBLIES AND/OR BRIDGE TERMINALS WILL NOT BE ADJUSTED, UNLESS REQUIRED BY THE PLAN, AND THE LAST RAIL ELEMENT HEIGHT WILL HAVE TO BE TRANSITIONED TO MEET THESE ASSEMBLIES.

PAYMENT FOR ALL THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 606, RAISING TYPE 5 GUARDRAIL, AS PER PLAN.

IN ADDITION TO THE QUANTITIES ON PLAN SHEETS 15 TO 26 FOR RAISING EXIST- ING TYPE 5 GUARDRAIL, THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED TO BE USED WHERE DIRECTED BY THE ENGINEER TO RAISE OTHER RUNS OF GUARDRAIL WHICH ARE FOUND TO BE TO LOW AFTER THE RESURFACING IS COMPLETED:

ITEM 606 - RAISING TYPE 5 GUARDRAIL, AS PER PLAN 1800 LIN.FT.

ITEM 606 - TYPE A MODIFIED BRIDGE TERMINAL ASSEMBLY:

THE STANDARD TYPE A BRIDGE TERMINAL ASSEMBLY AS PER STANDARD DRAWING GR-3 SHALL BE MODIFIED AS PER THE DETAILS ON SHEET 31 TO RECONNECT THE EXISTING GUARDRAIL RUNS ONTO THE APPROACH END OF THE NEW BRIDGE SAFETY PARAPETS. A NEW RAIL ELEMENT SHALL BE PROVIDED AND NEW SPACER BLOCKS AS DETAILED SHALL BE PROVIDED AT THE EXISTING STEEL GUARDRAIL POSTS. THE CONTRACTOR SHALL SUPPLY ALL NEW POST BOLTS, SPLICE BOLTS, AND MISCELLANEOUS HARDWARE.

PAYMENT FOR ALL THE ABOVE, INCLUDING NEW GUARDRAIL AND REMOVAL OF THE EXISTING GUARDRAIL PANEL, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - BRIDGE TERMINAL ASSEMBLY, STANDARD TYPE A, MODIFIED AS PER PLAN.

ITEM 606 - TYPE J MODIFIED BRIDGE TERMINAL ASSEMBLY:

THE STANDARD TYPE J BRIDGE TERMINAL ASSEMBLY AS PER STANDARD DRAWING GR-3B SHALL BE MODIFIED AS PER THE DETAILS ON SHEET 31 TO RECONNECT THE EXISTING GUARDRAIL RUNS ONTO THE TRAILING END OF THE NEW SAFETY PARAPETS. NEW RAIL ELEMENTS SHALL BE PROVIDED AND NEW SPACER BLOCKS AS DETAILED SHALL BE PROVIDED AT THE EXISTING STEEL GUARDRAIL POSTS. THE CONTRACTOR SHALL PROVIDE ALL NEW POST BOLTS, SPLICE BOLTS AND MISCELLANEOUS HARDWARE.

PAYMENT FOR ALL THE ABOVE, INCLUDING NEW GUARDRAIL AND REMOVAL OF THE EXISTING GUARDRAIL PANEL, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - BRIDGE TERMINAL ASSEMBLY, STANDARD TYPE J, MODIFIED AS PER PLAN.

ITEM 606 - INTERMEDIATE GUARDRAIL POST:

ADDITIONAL INTERMEDIATE GUARDRAIL POSTS SHALL BE ADDED TO PRO- VIDE 3'-1 1/2" POST SPACING AS PER STANDARD DRAWING GR-7. IN THE EXISTING GUARDRAIL RUNS IN FRONT OF THE BRIDGE PIERS ON THIS PROJECT. ALL THE NEW INTERMEDIATE POSTS SHALL BE STEEL POSTS (MATCH EXISTING) AS PER STANDARD DRAWING GR-2B. THE INTERMEDIATE POST BOLT SLOT SHALL BE FIELD PUNCHED OR DRILLED AND THE HOLES SHALL BE REGAL- VANIZED AS DIRECTED BY THE ENGINEER WITH SPRAY-ON OR STICK-FORM GALVANIZING REPAIR COMPOUND MEETING THE REQUIREMENTS OF FSS-O-G-93. THE CONTRACTOR SHALL PROVIDE A NEW WOOD BLOCKOUT, BACK-UP PLATE, POST BOLT AND MISCELLANEOUS HARDWARE AS PER THE REQUIREMENTS FOR TYPE 5 GUARDRAIL.

WHEN SUFFICIENT POST DEPTH IS NOT AVAILABLE DUE TO A PIER FOOTER, THE INTERMEDIATE GUARDRAIL POSTS DIRECTLY OVER THE PIER FOOTER SHALL NOT BE DRIVEN BUT SET IN HOLES. IF THE DISTANCE BELOW THE GROUND LINE AND THE TOP OF THE PIER FOOTER IS LESS THAN THREE (3) FEET, THE INTERMEDIATE POST SHALL BE ENCASED IN A MINIMUM OF FOUR (4) INCHES THICKNESS OF CLASS C CONCRETE FOR THE FULL DEPTH OF GROUND COVER.

PAYMENT FOR PROVIDING EACH INTERMEDIATE POST, CONCRETE ENCASE- MENT WHEN REQUIRED, AND ACCESSORIES AS DETAILED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "ITEM 606 - INTERMEDIATE GUARDRAIL POST, AS PER PLAN".

GUARDRAIL OVER CULVERTS AND PIER FOOTINGS:

WHEN SUFFICIENT POST DEPTH IS NOT AVAILABLE DUE TO A CULVERT OR PIER FOOT- ING, THE GUARDRAIL POSTS DIRECTLY OVER THE CULVERT OR PIER FOOTING SHALL NOT BE DRIVEN BUT SET IN HOLES. IF THE DISTANCE BETWEEN THE GROUND LINE AND THE TOP OF THE CULVERT OR PIER FOOTING IS LESS THAN THREE FEET, THE POST SHALL BE ENCASED IN A MINIMUM OF 4" THICKNESS OF COVER OF CLASS C CONCRETE FOR THE FULL DEPTH BELOW GROUND. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - GUARDRAIL TYPE 5.

RESTORATION OF DISTURBED AREAS ASSOCIATED WITH GUARDRAIL AND SIGN WORK:

THE CONTRACTOR SHALL RESTORE ALL SEEDED AND SODDED AREAS, PAVED BERMS, AND OTHER DISTURBED SURFACES TO A CONDITION EQUAL TO THAT EXISTING BEFORE THIS WORK WAS STARTED. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH THE PERTINENT SPECIFICATION ITEM AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL RESTORATION WORK, INCLUDING MATERIALS, EQUIPMENT, LABOR, INCIDENTALS AND DISPOSAL OF SURPLUS MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS 606 AND 630 ITEMS.

PUBLIC SAFETY:

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE AND REINSTALL THE GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL EXISTING GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE NEW MATERIALS ARE ON THE SITE, READY FOR INSTALLATION. THE EXPOSED APPROACH END OF THE FINAL SECTION OF AN INCOMPLETE GUARDRAIL RUN SHALL BE DROPPED TO THE GROUND UNTIL THE INSTALLATION IS COMPLETED. WHEN A GAP EXISTS IN A GUARDRAIL RUN, RAIL ELEMENTS SHALL BE BOLTED TOGETHER TO ELIMINATE EXPOSED ENDS DURING NON-WORKING HOURS. FAILURE TO COMPLY WITH THESE REQUIREMENTS SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

ITEM 622 - CONCRETE BARRIER TYPE D, AS PER PLAN:

ON THIS PROJECT, THE TYPE D CONCRETE BARRIER SHALL BE LIMITED TO ONLY THE CAST-IN-PLACE OPTION. THE BARRIER SHALL BE PLACED AS PER THE TYPICAL DETAIL ON SHEET NO. 32. THE PLACEMENT OF THE CONCRETE BARRIER SHALL COMMENCE IMMEDIATELY AFTER THE REMOVAL OF THE EXISTING GUARDRAIL PIER PROTECTION AND THE BARRIER SHALL BE CAST-IN-PLACE WITHIN THREE (3) WORK- ING DAYS AFTER THE GUARDRAIL IS REMOVED. ALL DISTURBED AREAS SHALL BE SEEDED AS PER 659. ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 622 CONCRETE BARRIER, TYPE D, AS PER PLAN.

DURING THE PERIOD BETWEEN THE GUARDRAIL REMOVAL AND THE COMPLETION OF THE BARRIER, THE WORK AREA SHALL BE PROTECTED BY DRUMS SPACED AT 25 FOOT CENTERS, COST INCLUDED IN ITEM 614

ADDITIONAL NOTES:

BRIDGES - DECK OVERLAY AND REPAIRS ..... SEE SHEETS 37&38  
ITEM 620 - REFLECTORS, TYPE D, AS PER PLAN ..... SEE SHEET 28  
ITEM 622 - TEMPORARY PRECAST CONCRETE BARRIER, AS PER PLAN ..... SEE SHEET 56  
ITEM 605 - AGGREGATE DRAINS, AS PER PLAN ..... SEE SHEET 33

CALC. BY PDN 1/84  
CHKD. BY HCN 12/84

## ITEM SPECIAL - LAW ENFORCEMENT OFFICER WITH PATROL CAR:

IN ADDITION TO THE REQUIREMENTS OF ITEM 614, A UNIFORMED SPECIAL DUTY LAW ENFORCEMENT OFFICER AND AN OFFICIAL PATROL CAR WITH EMERGENCY FLASHERS OPERATING SHALL BE PROVIDED FOR CLOSURE ON INTERSTATE 71. THE LAW ENFORCEMENT OFFICERS (LEOS) WILL BE REQUIRED DURING INITIAL SETUP PERIODS AND UNTIL TRAFFIC IS STABILIZED, DURING TEAR DOWN PERIODS, AND WHERE SUBSTANTIAL SHIFTS OCCUR BETWEEN DIFFERENT PHASES OF TRAFFIC CONTROL AS OUTLINED IN THE PLANS.

IT IS NOT THE INTENT TO USE LEOS IN SITUATIONS WHERE ADEQUATE TRAFFIC CONTROL AND/OR FLAGGERS WILL DO THE JOB.

THE FOLLOWING CRITERIA SHOULD BE USED FOR SCHEDULING LEOS UNDER THIS PAY ITEM.

- 1) FOR SHORT TERM CLOSURES (ONE DAY OR LESS WHICH WILL BE REMOVED AT NIGHT) A LEO IS NOT REQUIRED AND WILL NOT BE PAID FOR.
- 2) FOR LONGER TERM CLOSURES (MORE THAN ONE DAY), WHERE WORKERS ARE EXPOSED TO TRAFFIC FOR A CONSIDERABLE PERIOD OF TIME FOR SETTING UP DRUMS, REMOVING CONFLICTING PAVEMENT MARKING, INSTALLING NEW TEMPORARY MARKINGS, ETC., A LEO WILL BE REQUIRED AND PAID FOR AS DESCRIBED ABOVE.

THESE REQUIREMENTS DO NOT PRECLUDE THE CONTRACTOR'S USE OF A LAW ENFORCEMENT OFFICER FOR OTHER PURPOSES IN THE PROJECT AREA. HOWEVER, WHERE SUCH USAGE IS AT THE OPTION OF THE CONTRACTOR, PAYMENT FOR THE LAW ENFORCEMENT OFFICER'S SERVICES INVOLVED SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ARRANGEMENTS AND PAYMENTS FOR THE SERVICES OF THE LAW ENFORCEMENT OFFICER WILL BE MADE BY THE CONTRACTOR.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY:

ITEM SPECIAL - LAW ENFORCEMENT OFFICER WITH PATROL CAR 420 HOURS

INFORMATION REGARDING ARRANGEMENTS AND PAYMENTS BY THE CONTRACTOR FOR THE LAW ENFORCEMENT OFFICER WITH PATROL CAR MAY BE OBTAINED BY CONTACTING:

THE STATE HIGHWAY PATROL HEADQUARTERS  
660 EAST MAIN STREET  
COLUMBUS, OHIO 43205  
TELEPHONE NUMBER: (614) 469-2300

ASHLAND COUNTY SHERIFF  
COUNTY OFFICE BUILDING  
ASHLAND, OHIO 44805  
TELEPHONE NUMBER: (419) 289-0000

## ITEM 614 - MAINTAINING TRAFFIC:

A) GENERAL- THROUGH TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION AT ALL TIMES ON I.R.-71 AND ON ALL RAMPS. TRAFFIC CONTROL SHALL BE MAINTAINED AS PER THE SPECIFICATIONS, PLAN DETAILS, AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION WITH THE LATEST REVISIONS. IN ADDITION, THE FOLLOWING REQUIREMENTS SHALL APPLY:

FOR WEIGH STA RAMPS SEE (F).

1) THE CONTRACTOR SHALL SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE DIRECTOR AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

2) A WATCHMAN SHALL BE ON THE PROJECT FULL-TIME AFTER WORKING HOURS DURING THE TIMES I-71 TRAFFIC IS DIVERTED FROM ITS NORMAL TRAFFIC LANES TO INSURE THE PROPER FUNCTIONING OF THE VARIOUS TRAFFIC CONTROL DEVICES.

B) TRAFFIC CONTROL - 4 - LANE SECTIONS - A MINIMUM OF ONE LANE OF THROUGH TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION AT ALL TIMES DURING WORKING HOURS. ALL TRAFFIC SHALL BE RETURNED TO ITS NORMAL PATTERN AFTER THE

COMPLETION OF EACH WORK DAY, EXCEPT DURING THE REQUIRED PERIODS FOR THE REPAIR AND OVERLAY OF THE VARIOUS BRIDGE DECKS ON THE PROJECT (SEE DETAILS, SHEETS 57-63 IN THE PLAN). AND PAVEMENT REPAIR. (See sheet 34)

IN ALL CASES, TRAFFIC SHALL BE SEPARATED FROM THE WORK AREA BY DRUMS, OR CONES (DAYTIME ONLY) SPACED AS PER THE PLAN DETAILS. THE LENGTH OF ALL RESTRICTED TRAFFIC ZONES SHALL BE KEPT TO A MINIMUM AS DIRECTED BY THE ENGINEER.

AT EACH RAMP, THERE SHALL BE AN AREA OF 175 (PLUS OR MINUS) FEET IN LENGTH IN THE OUTSIDE DIRECTIONAL LANE WHICH SHALL BE RESURFACED AT THE SAME TIME AS THE MEDIAN DIRECTIONAL LANE OR SHALL BE OMITTED DURING THE TIME THE OUTSIDE DIRECTIONAL LANE IS BEING RESURFACED TO MAINTAIN ACCESS TO OR FROM RAMPS AT INTERCHANGES. THESE AREAS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROVIDE SAFE FLOW OF TRAFFIC ENTERING OR LEAVING THE RAMPS WHILE THE OUTSIDE DIRECTIONAL LANE IS BEING RESURFACED. THE SPEED CHANGE LANES ADJACENT TO THE 175 (PLUS OR MINUS) FOOT AREAS SHALL BE USED TO PROVIDE ONE-LANE TRAFFIC WHILE THE MEDIAN LANE IS BEING RESURFACED.

IN ADDITION, NO LANE RESTRICTIONS, EXCEPT FOR BRIDGE WORK, SHALL BE ALLOWED BETWEEN 3:00 PM ON FRIDAY AFTERNOON TO MONDAY MORNING (OR TUESDAY MORNING WHEN MONDAY IS A CELEBRATED HOLIDAY).

C) TRAFFIC CONTROL - RAMPS: TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON ALL RAMPS BY USE OF THE EXISTING PAVEMENT AND PAVED BERMS. ALL TRAFFIC SHALL BE RETURNED TO ITS NORMAL PATTERN BY THE COMPLETION OF EACH WORK DAY, EXCEPT DURING DECK OVERLAYS. SPECIAL PROVISIONS SHALL BE MADE TO WARN TRAFFIC ENTERING A ONE-LANE TRAFFIC ZONE FROM A RAMP. FOR WEIGH STA RAMPS SEE (F)

D) TRAFFIC CONTROL - LOCAL ROAD OVERPASSES OVER I-71:

- 1) COUNTY ROAD 1575 AND COUNTY ROAD 1302: TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THESE COUNTY ROAD OVERPASSES. ONE-LANE TRAFFIC WITH FLAGGERS (SEE SHEET 69) WILL BE PERMITTED DURING WORKING HOURS FOR THE GUARDRAIL REPLACEMENT WORK. DURING THE DECK OVERLAY OPERATIONS, ONE-LANE TRAFFIC SHALL BE MAINTAINED WITH A TRAFFIC SIGNAL SYSTEM AS PER THE DETAILS ON SHEETS 64, 65 & 69.
- 2) TOWNSHIP ROADS 805, 653, 593, 1275, 353, AND 1150: ONE-LANE OF TRAFFIC WITH FLAGGERS (SEE SHEET 69) WILL BE PERMITTED DURING WORKING HOURS FOR THE GUARDRAIL REPLACEMENT WORK. DURING BRIDGE DECK OVERLAY WORK, EACH TOWNSHIP ROAD SHALL BE CLOSED TO THROUGH TRAFFIC. GATES AND BARRICADES AS PER PLATE C-7 OF THE OMUTCD SHALL BE ERECTED AT EACH END OF THE BRIDGE. EACH CLOSURE SHALL BE LIMITED TO A MAXIMUM OF THREE (3) WEEKS DURATION. NO TWO ADJACENT ROADS SHALL BE CLOSED AT THE SAME TIME. THESE CLOSURES SHALL BE SCHEDULED, IF PRACTICAL, DURING THE MONTHS OF JUNE, JULY, AND AUGUST.

THE CONTRACTOR SHALL, IN ADDITION TO THE REQUIREMENTS OF 614, PROVIDE, ERECT AND MAINTAIN R-76C "ROAD CLOSED TO THRU TRAFFIC" SIGNS WITH LIGHTS AT THE FOLLOWING LOCATIONS DURING THE PERIOD EACH ROAD IS CLOSED TO TRAFFIC:

- 1) ON TOWNSHIP ROAD 805: JUST NORTH OF THE TOWNSHIP ROAD 1524 INTERSECTION, JUST SOUTH OF THE U.S.R. 250 INTERSECTION, AND JUST NORTH OF THE COUNTY ROAD 1775 INTERSECTION.
- 2) ON TOWNSHIP ROAD 653: JUST NORTH OF THE U.S.R. 250 INTERSECTION AND JUST SOUTH OF THE TOWNSHIP ROAD 685 INTERSECTION.
- 3) ON TOWNSHIP ROAD 593: JUST NORTH OF THE U.S.R. 250 INTERSECTION AND JUST SOUTH OF THE COUNTY ROAD 1302 INTERSECTION.
- 3) ON TOWNSHIP ROAD 1275: JUST EAST OF THE S.R. 89 INTERSECTION AND JUST WEST OF THE TOWNSHIP ROAD 353 INTERSECTION.
- 4) ON TOWNSHIP ROAD 353: JUST NORTH OF THE TOWNSHIP ROAD 1275 INTERSECTION AND JUST SOUTH OF THE TOWNSHIP ROAD 1150 INTERSECTION.
- 5) ON TOWNSHIP ROAD 1150: JUST EAST OF THE TOWNSHIP ROAD 353 INTERSECTION AND JUST WEST OF THE COUNTY ROAD 251 INTERSECTION.

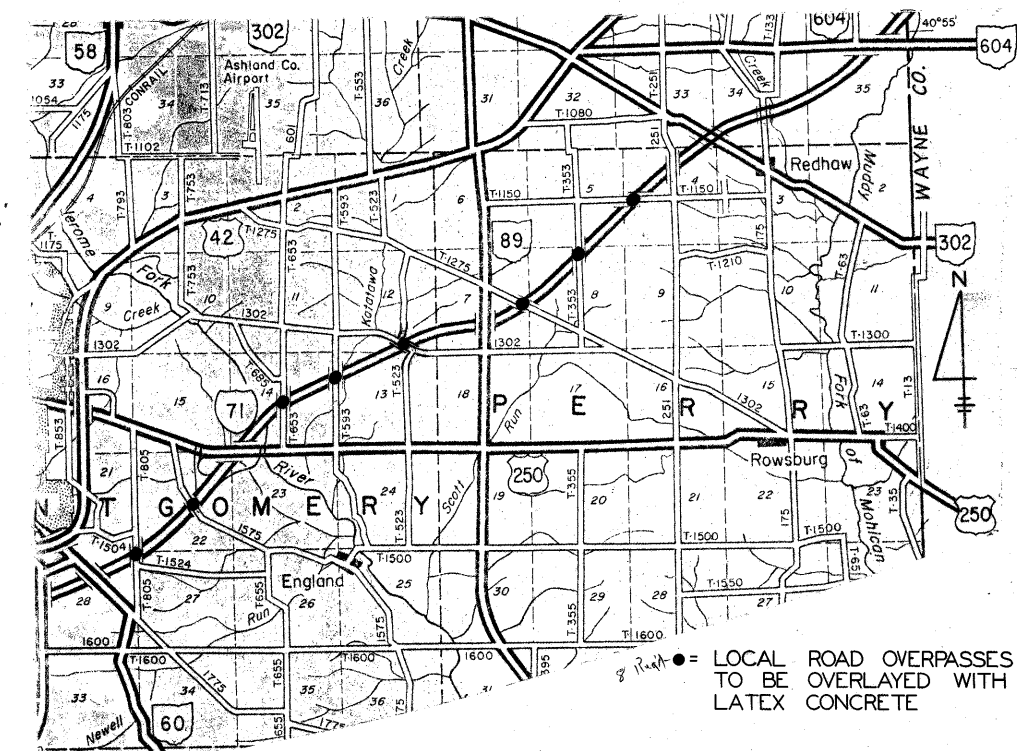
THE SIGN SUPPORTS AND LIGHTS FOR THE R-76C SIGNS SHALL BE AS DETAILED ON PLATE C-5 AND PAGES 7-12 OF THE MANUAL. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE ASHLAND COUNTY ENGINEER IN WRITING, AT LEAST ONE (1) WEEK IN ADVANCE OF ANY LOCAL ROAD CLOSURE.

E) TRAFFIC CONTROL - LOCAL ROADS UNDER I-71: (COUNTY ROAD 251 AND COUNTY ROAD 175) ONE-LANE TRAFFIC WITH FLAGGERS (SEE SHEET 69) WILL BE PERMITTED DURING WORKING HOURS FOR THE ERECTION OF GUARDRAIL AT THE BRIDGE PIERS AND FOR PROTECTING THE AREAS UNDER THE I-71 BRIDGES DURING BRIDGE PARAPET REMOVAL AND REPLACEMENT.

F) TRAFFIC CONTROL - WEIGH STATION: TRAFFIC SHALL BE MAINTAINED AT ALL TIMES TO THE WEIGH STATION, EXCEPT FOR A MAXIMUM PERIOD OF TWO (2) WEEKS FOR THE REPLACEMENT OF THE RAMP PAVEMENTS AS DETAILED ON SHEET 35. DURING THIS PERIOD, THE WEIGH STATION SHALL BE CLOSED AT THE ENTRANCE AND EXIT RAMP BY GATES AND BARRICADES AS PER PLATE C-7 OF THE OMUTCD. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND DISTRICT 3 OPERATIONS ENGINEER, IN WRITING, AT LEAST TWO (2) WEEKS IN ADVANCE OF THIS CLOSURE.

G) QUANTITIES FOR MAINTAINING TRAFFIC - THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR MAINTAINING TRAFFIC, AS OUTLINED ABOVE, TO BE USED AS DIRECTED BY THE ENGINEER ON THIS PROJECT:

614 - MAINTAINING TRAFFIC	LUMP SUM
404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	150 CU. YDS.



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 OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGE ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND OHIO.

CONTRACT BID PRICES SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

WORK LIMITATIONS:

NO CONCRETE DECK OVERLAYS SHALL BE PLACED BEFORE MAY 1.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO THAT ALL DECK OVERLAYS ARE PLACED BEFORE OCTOBER 15. IF FOR SOME UNFORESEEN CIRCUMSTANCES THE DECK OVERLAYS OR PORTIONS OF DECK OVERLAY ARE NOT PLACED BY OCTOBER 15, REGARDLESS OF THE WORK REMAINING, THE FULL DEPTH REPAIRS SHALL BE COMPLETED AS PER 511 AND THE UNFINISHED DECK SHALL BE RESURFACED WITH ITEM 404 ASPHALT CONCRETE AND OPENED TO TRAFFIC. THE CONTRACTOR SHALL PLACE AND MAINTAIN AT HIS EXPENSE THE ASPHALT WEARING SURFACE UNTIL REMOVED AT HIS EXPENSE THE FOLLOWING SPRING WHEN THE DECK OVERLAY CAN BE PLACED AFTER MAY 1.

TEMPORARY WEDGE:

AFTER THE CONCRETE OVERLAY HAS BEEN PLACED AND BEFORE THE BRIDGE IS OPENED TO TRAFFIC A TEMPORARY WEDGE WILL BE INSTALLED TO MAINTAIN TRAFFIC IF THE PERMANENT ASPHALT IS NOT IN PLACE. THE TEMPORARY WEDGE SHALL BE 848 ASPHALT CONCRETE BUILT AS PER STANDARD DRAWING BP-5, EXCEPT NO TACK COAT WILL BE REQUIRED. THE TEMPORARY WEDGE WILL BE FEATHERED AT ONE INCH PER TWENTY-FIVE FEET OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY WEDGE WILL BE COMPLETELY REMOVED JUST BEFORE ANY NEW ASPHALT SURFACE COURSE IS INSTALLED AND IN NO CASE SHALL TRAFFIC BE ALLOWED TO CROSS AN END DAM WITHOUT AN APPROVED TEMPORARY WEDGE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL, ASPHALT PAVEMENT PLANING

ALL ASPHALT, SEALS, AND WATERPROOFING SHALL BE PLANED FROM THE BRIDGE BEFORE ANY DECK OVERLAY WORK MAY BEGIN. THE CONCRETE DECK SHALL NOT BE SCARIFIED AT THE SAME TIME AS THE ASPHALT IS PLANED. THE ASPHALT ON THE BRIDGE SHALL NOT BE PLANED UNTIL THE CONTRACTOR IS READY TO BEGIN DECK WORK ON THE BRIDGE WITHIN THREE (3) DAYS.

FOR ALL ASHALT PLANING, REQUIREMENTS SEE GENERAL NOTE ON SHEET NO.7

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL, ASPHALT PAVEMENT PLANING WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 PORTIONS OF STRUCTURES REMOVED, PARAPET, AS PER PLAN

THIS ITEM OF WORK SHALL BE USED TO REMOVE THE BRIDGE AND ABUTMENT PARAPET AS PER DETAILS ON SHEET NO. 45. THE PARAPET SHALL BE REMOVED BY A HYDRAULIC SPLITTING METHOD. A LINE OF HOLES SHALL BE DRILLED ALONG THE REMOVAL LINE AND A HYDRAULIC SPLITTER USED AS PER THE MANUFACTURER'S RECOMMENDATIONS. THIRTY-FIVE (35) AND FIFTEEN (15) POUND JACK HAMMERS MAY BE USED FOR THE FINAL FINISH WORK. A HOE RAM WILL NOT BE PERMITTED TO DO ANY OF THE WORK. CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING, OR DAMAGING OF THE EXISTING REINFORCING STEEL TO BE SALVAGED. IF EXISTING REINFORCING STEEL DESIGNATED FOR SALVAGE IS DAMAGED DURING REMOVAL OPERATIONS, DOWELLED REINFORCING STEEL MUST BE ADDED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 202 PORTIONS OF STRUCTURES REMOVED, PARAPET, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 CLASS S CONCRETE, ABUTMENT, AS PER PLAN

PORTIONS OF THE ABUTMENT SEATS SHALL BE REPLACED AS PER DETAILS ON SHEET NO. 51. ALL LOOSE AND DISINTEGRATED CONCRETE AND CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS, AND NOMINAL 15-POUND CHIPPING HAMMERS. WITHIN TWENTY FOUR (24) HOURS BEFORE PLACING CONCRETE THE SURFACE OF THE EXISTING ABUTMENT AGAINST WHICH THE CONCRETE SHALL BE PLACED AND EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. THE EXISTING CONCRETE SURFACE AGAINST WHICH CONCRETE SHALL BE POURED SHALL BE KEPT WET FOR AT LEAST ONE (1) HOUR BEFORE PLACING CONCRETE, AND BE APPROACHING DRYNESS AT THE TIME OF THE PLACING OF THE CONCRETE TO FACILITATE THE BOND.

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD. COARSE AGGREGATE SHALL BE NO. 8 LESTONE AND SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF 703.02 OF THE SPECIFICATIONS.

FINE AGG. (LBS)	COARSE AGG. (LBS)	TOTAL AGG. (LBS)	CEMENT CONTENT (LB)	MAXIMUM WATER/CEMENT RATIO
1555	1100	2655	715	0.50

AIR CONTENT 8% PLUS OR MINUS 2%

ALL OTHER PROVISIONS OF ITEM 511 SHALL REMAIN IN EFFECT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 511, CLASS S CONCRETE, ABUTMENT, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511, CLASS S CONCRETE, PIER COLUMN, AS PER PLAN

PIER COLUMNS SHALL BE ENCASED AS PER DETAILS ON SHEET NO. 55. ALL LOOSE AND DISINTEGRATED CONCRETE AND CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS. WITHIN TWENTY-FOUR (24) HOURS BEFORE PLACING CONCRETE, THE SURFACE OF THE EXISTING PIERS AGAINST WHICH THE CONCRETE SHALL BE PLACED AND THE REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. THE EXISTING CONCRETE SURFACE AGAINST WHICH CONCRETE SHALL BE POURED SHALL BE KEPT WET FOR AT LEAST ONE (1) HOUR BEFORE PLACING CONCRETE, AND BE APPROACHING DRYNESS AT THE TIME OF THE PLACING OF THE CONCRETE TO FACILITATE THE BOND.

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE, THE COARSE AGGREGATE SHALL BE LESTONE.

QUANTITIES PER CUBIC YARD (USING NO.8 LESTONE)

AGGREGATE			CEMENT CONTENT	WATER/CEMENT RATIO
FINE (LB)	COURSE (LB)	TOTAL (LB)	(LB)	
1591	1127	2718	715	0.40

AIR CONTENT- 8% PLUS OR MINUS 2%

HIGH RANGE WATER REDUCER (SUPERPLASTICIZER) MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE DOSAGE RATE WILL BE DETERMINED BY THE CONTRACTOR BASED ON THE MANUFACTURER'S RECOMMENDATION TO ACHEIVE THE DESIRED WORKABILITY LEVEL.

HIGH RANGE WATER REDUCERS SHALL CONFORM TO 705.12, ASTM-C494 TYPE F AND SHALL NOT CONTAIN CALCIUM CHLORIDE.

THE CEMENT CONTENT SHALL BE MAINTAINED AND A MAXIMUM WATER-CEMENT RATIO OF 0.40 SHALL NOT BE EXCEEDED. THE SLUMP OF THE UNPLASTIZED CONCRETE DELIVERED TO THE JOB SITE SHALL BE 1 1/2" PLUS OR MINUS 1/2". THE SUPERPLASTICIZING ADMIXTURE SHALL BE ADDED AT THE JOB SITE AND MIXED A MINIMUM OF FIVE (5) MINUTES. AFTER THE SUPERPLASTICIZER HAS BEEN ADDED, THE SLUMP SHALL BE 6 1/2" PLUS OR MINUS 1/2". THE CONTRACTOR SHALL FURNISH A VOLUMERIC DISPENSER FOR THE SUPERPLASTICIZER.

CONCRETE MIXTURES CONTAINING A HIGH RANGE WATER REDUCER SHALL MEET THE SAME REQUIREMENTS FOR ENTRAINED AIR CONTENT, MINIMUM STRENGTH, AND MAXIMUM WATER-CEMENT RATIO AS REQUIRED FOR THE RESPECTIVE GRADE OF CONCRETE WITHOUT A HIGH RANGE WATER REDUCER.

SAMPLING AND TESTING FOR ENTRAINED AIR CONTENT AND MINIMUM STRENGTH SHOULD BE TAKEN FROM THE CONCRETE THAT HAS BEEN TREATED WITH A HIGH RANGE WATER REDUCER.

CURING SHALL BE IN ACCORDANCE WITH 511.14 TYPE A WATER CURING.

ALL OTHER PROVISIONS OF ITEM 511 SHALL REMAIN IN EFFECT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 511, CLASS S CONCRETE, PIER COLUMN, AS PER PLAN WHICH SHALL INCLUDE ANY EXCAVATION REQUIRED AND ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511, CLASS S CONCRETE, AS PER PLAN

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE, THE COARSE AGGREGATE SHALL BE LESTONE.

AGGREGATE			CEMENT CONTENT	WATER/CEMENT RATIO
FINE (LB)	COURSE (LB)	TOTAL (LB)	(LB)	
1591	1127	2718	715	0.40

AIR CONTENT- 8% PLUS OR MINUS 2%

HIGH RANGE WATER REDUCER (SUPERPLASTICIZER) MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE DOSAGE RATE WILL BE DETERMINED BY THE CONTRACTOR BASED ON THE MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE DESIRED WORKABILITY LEVEL.

HIGH RANGE WATER REDUCER SHALL CONFORM TO 705.12, ASTM-C494 TYPE F AND SHALL NOT CONTAIN CALCIUM CHLORIDE.

\*\*\* NOTE CONTINUED ON NEXT SHEET \*\*\*



THE CEMENT CONTENT SHALL BE MAINTAINED AND A MAXIMUM WATER-CEMENT RATIO OF 0.40 SHALL NOT BE EXCEEDED. THE SLUMP OF THE UNPLASTICIZED CONCRETE DELIVERED TO THE JOB SITE SHALL BE 1 1/2" PLUS OR MINUS 1/2". THE SUPERPLASTICIZING ADMIXTURE SHALL BE ADDED AT THE JOB SITE AND MIXED A MINIMUM OF FIVE (5) MINUTES. AFTER THE SUPERPLASTICIZER HAS BEEN ADDED, THE SLUMP SHALL BE 6 1/2" PLUS OR MINUS 1/2". THE CONTRACTOR SHALL FURNISH A VOLUMERIC DISPENSER FOR THE SUPERPLASICIZER.

CONCRETE MIXTURES CONTAINING A HIGH RANGE WATER REDUCER SHALL MEET THE SAME REQUIREMENTS FOR ENTRAINED AIR CONTENT, MAXIMUM STRENGTH, AND MAXIMUM WATER-CEMENT RATIO AS REQUIRED FOR THE RESPECTIVE GRADE OF CONCRETE WITHOUT A HIGH RANGE WATER REDUCER.

SAMPLING AND TESTING FOR ENTRAINED AIR CONTENT AND MINIMUM STRENGTH SHOULD BE TAKEN FROM THE CONCRETE THAT HAS BEEN TREATED WITH A HIGH RANGE WATER REDUCER.

CURING SHALL BE IN ACCORDANCE WITH 511.14 TYPE A WATER CURING.

PAYMENT FOR THE ABOVE COMPLETED AND ACCEPTED QUANTITIES, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS, WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	UNIT	DESCRIPTION
511	CU. YD.	CLASS S CONCRETE, BRIDGE PARAPET, AS PER PLAN
511	CU. YD.	CLASS S CONCRETE, ABUTMENT PARAPET, AS PER PLAN

ITEM 516 VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, MODIFICATION A OR B, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL THE WORK REQUIRED TO REMOVE PORTIONS OF STRUCTURES IN CURBS, REMOVE EXISTING VERTICAL EXTENSION BARS AS REQUIRED, TRIM EXISTING ANGLES, PROVIDE ALL ANCHORS, STUDS, STEEL EXTRUSIONS, STEEL BARS, NEOPRENE EXTRUSION, PREFORMED EXPANSION JOINT FILLER AND REPLACEMENT CONCRETE IN ACCORDANCE WITH DETAILS ON SHEET NO'S.43-44.

THE STEEL EXTRUSION SHALL BE EITHER TYPE E WITH S300E NEOPRENE EXTRUSION OR TYPE A WITH S300E NEOPRENE EXTRUSION AS MANUFACTURED BY WATSON BOWMAN ASSOCIATES, INC., 1280 NIAGRA STREET, BUFFALO,NEW YORK, 14213.

THE STEEL EXTRUSION SHALL BE PROVIDED IN MAXIMUM LENGTHS POSSIBLE TO ALLOW FOR TRAFFIC MAINTENANCE AND SHALL BE WELDED TOGETHER TO FORM A WATERTIGHT JOINT. THE NEOPRENE EXTRUSION SHALL BE ONE CONTINUOUS PIECE. THE NEOPRENE SHALL NOT BE INSTALLED UNTIL ALL OTHER WORK IS COMPLETE UPON THE STRUCTURE. AN ADHESIVE SHALL BE USED TO FACILITATE PLACEMENT OF THE NEOPRENE EXTRUSION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

PHYSICAL PROPERTIES:

- A. THE STEEL EXTRUSION SHALL CONFORM TO ASTM A242, A36 OR, A588.
- B. ADHESIVES SHALL BE ONE-PART MOISTURE CURING POLYURETHANE AND HYDRO-CARBON MIXTURES AS DISTRIBUTED UNDER THE TRADE NAME BONALASTIC BY WATSON BOWMAN ASSOCIATES, INC., OF BUFFALO, NEW YORK; OR AN APPROVED EQUIVALENT.
- C. THE NEOPRENE EXTRUSION SHALL CONFORM TO THE PHYSICAL PROPERTIES SPECIFIED FOR AASHO M220 EXCEPT FOR THE RECOVERY TEST.
- D. SET SCREWS FOR FASTENING OF SPLIT EXTRUSION SHALL BE STAINLESS STEEL.

ALTERNATE DESIGNED - THESE DETAILS AND PROVISIONS ARE BASED ON WABO-MAURER STRIP SEAL BY WATSON BOWMAN ASSOCIATES, INC., OF BUFFALO, NEW YORK.

ACME TYPE E EXTRUSION WITH AS-3LP SEAL OR ACME TYPE A EXTRUSION WITH AS-300 SEAL, BY ACME HIGHWAY PRODUCTS, INC., 33 CHANDLER STREET, BUFFALO, NEW YORK, WILL BE ACCEPTED AS ALTERNATES. THE D.S. BROWN COMPANY, P.O.BOX 58, NORTH BALTIMORE, OHIO 45872, WILL ALSO BE ACCEPTED AS AN ALTERNATE. THE STEEL EXTRUSION SHALL BE TYPE SS-E WITH SS 300 SEAL. THE CONTRACTOR SHALL FURNISH MATERIAL SPECIFICATION, CERTIFIED MATERIAL TEST RESULTS, CERTIFICATION THAT THE PRODUCT MEETS SPECIFICATIONS, APPROPRIATE INSTALLATION PROCEDURES NECESSARY TO ACCOMMODATE THE ALTER-NATE DESIGN.

THE APPROVAL OF AN ALTERNATE JOINT SEAL DESIGN AND THE ISSUANCE OF REVISED PROJECT PLANS SHALL BE BASED ON THE UNDERSTANDING THAT SUCH PROJECT MODIFICATIONS WILL BE DONE WITHOUT COST TO THE STATE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAL FOOT FOR ITEM 516, VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, MODIFICATION A OR B AS PER PLAN, WHICH SHALL INCLUDE ALL THE LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECSSARY TO COMPLETE THE ABOVE WORK FOR ALL THE VARIOUS MODIFICATIONS OF THE TYPE A, TYPE E, AND TYPE SS-E EXTRUSIONS AS DETAILED.

ITEM 519 PATCHING CONCRETE STRUCTURES, AS PER PLAN

THIS ITEM SHALL BE USED TO REPAIR CURBS, PARAPETS, ABUTMENTS, WING-WALLS, PIERS AND OTHER PARTS OF THE SUPERSTRUCTURE AS DIRECTED BY THE ENGINEER.

WITHIN TWENTY-FOUR (24) HOURS BEFORE PLACING CONCRETE, THE EXISTING SURFACE AGAINST WHICH THE CONCRETE SHALL BE PLACED, AND EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. SANDBLASTING SHALL BE AT LEAST EQUAL TO SA2 "THOROUGH BLAST CLEANING" AS OUTLINED IN ASTM D-2200 OR SSPC-SP6. ALL LOOSE AND DETERIORATED CONCRETE AND CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS BEFORE SANDBLASTING. CONCRETE QUANTITIES SHALL BE ADJUSTED TO INCLUDE ADDITIONAL VOLUMES REQUIRED. SOUND CONCRETE SHALL BE REMOVED TO A DEPTH OF AT LEAST TWO (2) INCHES BELOW ANY EXPOSED REINFORCING STEEL.

PAYMENT FOR ALL THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 519 PATCHING CONCRETE STRUCTURES, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 609 ASPHALT CONCRETE CURB, AS PER PLAN

THIS ITEM SHALL BE PLACED AS SHOWN IN DETAILS ON SHEET NO. 52 .

PAYMENT SHALL BE AT THE UNIT PRICE BID PER LINEAL FOOT FOR ITEM 609 ASPHALT CONCRETE CURB, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, EXCAVATION AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 845 LATEX MODIFIED CONCRETE OVERLAY, AS PER PLAN

COARSE AGGREGATE SHALL BE LIMESTONE OR SLAG. PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 845 LATEX MODIFIED CONCRETE OVERLAY, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL- JOINT SEAL

THE PARAPET EXPANSION JOINTS AND THE GAP BETWEEN THE APROACH SLAB AND THE PARAPET AND BACKWALL ON STRUCTURES SHALL BE SEALED AS PER DETAILS ON SHEET NO. 52 .

THE JOINT SEAL SHALL BE EVAZOTE 50 AS MANUFACTURED BY E-POXY INDUSTRIES INC., 14 WEST SHORE STREET, RAVENA, NEW YORK 12143, TELEPHONE (518)-756-6193 OR E.V.A. AS MANUFACTURED BY THERMAL-CHEM INC, 1400 LOUIS AVENUE, ELK GROVE VILLAGE, IL. 60007 USA, TELEPHONE (323)-364-0364.

THE SEAL SHALL BE CEMENTED IN WITH AN ADHESIVE AS RECOMMENDED BY THE MANUFACTURER OF THE JOINT SEAL. ALL LAITANCIES OR SURFACES CONTAMINANTS SHALL BE REMOVED TO INSURE MAXIMUM ADHESION. THE CONTRACTOR SHALL ESTABLISH THE PARAPET JOINT SEAL SIZE AND INSTALL THE APPROPRIATE SEAL AS RECOMMENDED BY THE MANUFACTURER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM SPECIAL - JOINT SEAL WHICH SHALL INCLUDE THE SURFACE PREPARATION, ADHESIVE AND ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL SCUPPER EXTENSION AND BAR REMOVAL

THIS ITEM SHALL INCLUDE RAISING THE EDGE OF THE SCUPPERS AND REMOVING THE BARS AS SHOWN IN DETAILS ON SHEET NO. 54 .

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM SPECIAL, SCUPPER EXTENSION AND BAR REMOVAL, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL SEALING OF CONCRETE SURFACES (EPOXY)

AN EPOXY CONCRETE SEALER SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACE: PARAPETS AND PIER ENCASEMENT. SEE THE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES. SEE SHEET NO. 52 FOR SEALING LIMITS.

TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS OR BOATS, OR TO VEHICLES TRAVELING UNDER SPANS WHICH ARE BEING PAINTED, THE CONTRACTOR SHALL INSTALL AND MAINTAIN SUITABLE SHIELDS BETWEEN HIS OPERATIONS AND THE ABOVE. THE SHIELDS SHALL BE OF A TYPE AND CONSTRUCTION, APPROVED BY THE ENGINEER, THAT WILL PREVENT PAINT FROM DROPPING ONTO OR BEING BLOWN INTO PAVEMENT LANES OPEN TO TRAFFIC. THEY SHALL BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATIONS IN THE OPEN LANES. PAYMENT FOR THE SHIELDS SHALL BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING ITEM. WORK SHALL BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, PARKED CARS OR BOATS, OR TRAVELING VEHICLES IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY BY OR ON ACCOUNT OF ANY ACT, OMMISSION, NEGLECT OR MISCONDUCT IN THE EXECUTION OF THE WORK, HE SHALL RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE, BY REPAIRING, REBUILDING OR OTHERWISE RESTORING AS MAY BE DIRECTED, OR HE SHALL MAKE GOOD SUCH DAMAGE OR INJURY IN AN ACCEPTABLE MANNER.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL SEALING OF CONCRETE SURFACES (EPOXY), WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

# BRIDGE QUANTITIES (CONTINUED)

CALCULATED BY pac 10-15-84  
 CHECKED BY KW 10-16-84

FHWA REGION	STATE	PROJECT
5	OHIO	

ASD-71-4.56  
 WAY-71-0.00

39  
70

STRUCTURAL FILE NUMBER	STRUCTURE NUMBER	TYPE	SKEW	LENGTH	WIDTH	AREA	NUMBER OF SCUPPERS	END DAM LENGTH	ROAD WIDTH	BERM WIDTH	TYPE OF WEARING SURFACE	SPECIAL				845				845				845				SPECIAL			
												ASPHALT PAVEMENT PLANING				LATEX MODIFIED CONCRETE OVERLAY (1 1/4 INCHES THICK) AS PER PLAN				LATEX MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS)				FULL DEPTH REPAIR				SCUPPER EXTENSION AND BAR REMOVAL			
												SQ. YD.				SQ. YD.				CU. YD.				CU. YD.				EACH			
			DEGREES	FT.	FT.	SQ. YD.	EACH	FT.	FT.	FT.		IR				IR				IR				IR				IR			
0305529	ASD-71-0527 UNDER S.R. 511	322	NO BRIDGE DECK WORK									—				—				—				—				—			
0302228	ASD-71-0588 UNDER S.R. 60	322	NO BRIDGE DECK WORK									—				—				—				—				—			
0302643	ASD-71-0637 UNDER T.R. 805	322	25° 29' 40" RE	294.0	24.0	784	12	26.6	18.0	3.0	ASPH	784				784				30				1				12			
0302708	ASD-71-0756 UNDER C.R. 1575	322	26° 52' 23" RE	346.0	24.0	923	12	26.9	19.0	3.0	ASPH	923				923				34				1				12			
0302732	ASD-71-0779L OVER HESS DITCH	322	18° 26' 03" LF	111.8.7	58.3 REAR 63.7 FWD	805	12	61.5 REAR 67.1 FWD			ASPH	2105				805				98				1				12			
0302767	ASD-71-0779R OVER HESS DITCH	322	18° 26' 03" LF	118.7	60.8 REAR 68.2 FWD	851	12	64.1 REAR 71.9 FWD			ASPH	2151				851				56				1				12			
0304921	ASD-71-0794 UNDER U.S.R. 250	322	NO BRIDGE DECK WORK									—				—				—				—				—			
0302821	ASD-71-0806L OVER JEROME FORK	322	20° 00' LF	128.3	39.7	566	26	42.2	24.0	10 O. 6 I.	ASPH	1866				566				39				1				26			
0302856	ASD-71-0806R OVER JEROME FORK	322	20° 00' LF	128.3	39.7	566	26	42.2	24.0	10 O. 6 I.	ASPH	1866				566				70				1				26			
0302880	ASD-71-0844 UNDER T.R. 653	322	40° 37' 39" RE	375.9	24.0	1003	20	31.6	17.0	4.0	ASPH	1115				1003				37				1				20			
0302910	ASD-71-0906 UNDER T.R. 593	322	25° 30' 52" RE	294.0	24.0	748	16	26.6	16.0	4.0	ASPH	748				748				29				1				16			
0302945	ASD-71-0912L OVER KATOTAWA CREEK	322	25° 00' LF	122.1	39.7	539	20	43.8	24.0	10 O. 6 I.	ASPH	1839				539				37				1				22			
0303003	ASD-71-0912R OVER KATOTAWA CREEK	322	25° 00' LF	121.8	39.7	537	20	43.8	24.0	10 O. 6 I.	ASPH	1837				537				37				1				20			
0303038	ASD-71-0995 UNDER C.R. 1302	322	30° 00' LF	308.2	24.0	822	14	27.7	19.0	3.0	ASPH	822				822				31				1				14			
0303631	ASD-71-1067 UNDER S.R. 89	322	NO BRIDGE DECK WORK									—				—				—				—				—			
0303097	ASD-71-1111 UNDER T.R. 1275	322	31° 19' 27" LF	313.3	24.0	829	16	28.1	17.0	4.0	ASPH	829				829				31				1				16			
0303127	ASD-71-1190 UNDER T.R. 353	322	43° 42' 00" RE	368.2	24.0	982	24	33.2	16.0	4.0	ASPH	982				982				36				1				24			
	SUBTOTAL (QUANTITIES CARRIED TO SHT 40.)											17867				9955				565				13				232			

BRIDGE QUANTITIES

## BRIDGE QUANTITIES

CALCULATED BY ACC-10-15-87  
CHECKED BY HW-10-16-87

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

41  
70ASD - 71 - 4.56  
WAY - 71 - 0.00

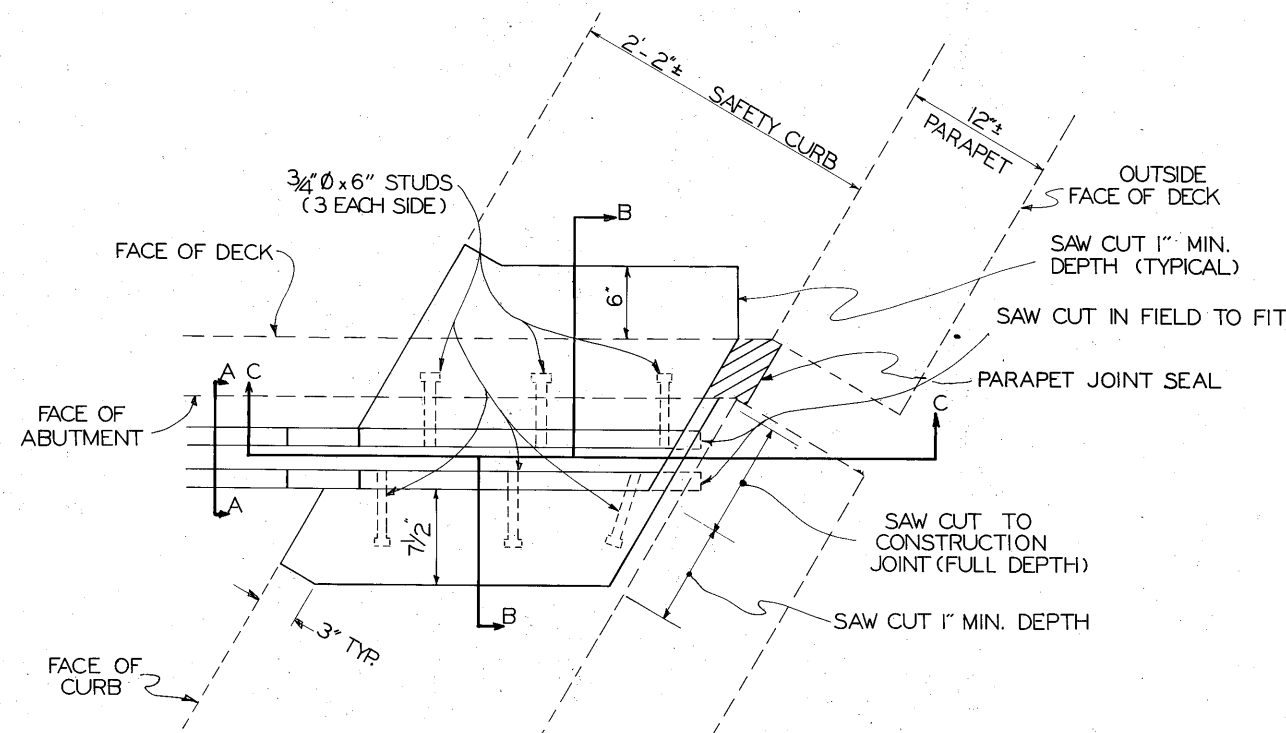
\* BRIDGE PARAPET ONLY

		STRUCTURE NUMBER	516				516				519				202				511				511				510				SPECIAL				609				SPECIAL			
			VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, MODIFICATION A, AS PER PLAN				VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, MODIFICATION B, AS PER PLAN				PATCHING CONCRETE STRUCTURES, AS PER PLAN				PORTION OF STRUCTURES REMOVED PARAPET, AS PER PLAN				CLASS S CONCRETE BRIDGE PARAPET, AS PER PLAN				CLASS S CONCRETE ABUTMENT PARAPET, AS PER PLAN				DOWEL HOLES				SEALING OF CONCRETE SURFACES (EPOXY) (SEE PROPOSAL NOTE)				ASPHALT CONCRETE CURB, AS PER PLAN				JOINT SEAL			
			LIN. FT.				LIN. FT.				SQ. FT.				LIN. FT.				CU. YD.				CU. YD.				EACH				SQ. YD.				LIN. FT.				LIN. FT.			
			1R				1R				1R	100% STATE			1R				1R				1R				1R				1R				1R							
		ASD-71-0527	—				—				—	—			—				—				—				504				—				21	*						
		ASD-71-0588	—				—				—	—			—				—				—				484				—				21	*						
		ASD-71-0637	62.0				—				10	10														487				60				136								
		ASD-71-0756	62.8				—				15	15														567				60				151								
		ASD-71-0779L	—				132.8				35	35			281				28				9				238				113				60			144				
		ASD-71-0779R	—				140.2				10	10			281				28				9				238				113				60			151				
		ASD-71-0794	—				—				—	—			—				—				—				648				—				21	*						
		ASD-71-0806L	—				88.8				25	25			297				30				8				262				119				60			99				
		ASD-71-0806R	—				88.8				10	10			297				30				8				262				119				60			99				
		ASD-71-0844	73.8				—				10	10															638				60				169							
		ASD-71-0906	62.0				—				10	10															495				60				135							
		ASD-71-0912L	—				92.0				15	15			284				29				8				250				114				60			103				
		ASD-71-0912R	—				92.0				10	10			284				29				8				250				114				60			103				
		ASD-71-0995	64.6				—				10	10															508				60				135							
		ASD-71-1067	—				—				15	15			—				—				—				484				—				21	*						
		ASD-71-1111	65.6				—				10	10															509				60				141							
		ASD-71-1190	77.4				—				10	10															607				60				171							
SUBTOTAL			468.2				634.6				195	195			1724				174				50				1500				6623				780			1821				
QUANTITIES CARRIED TO SHT 42.																																										

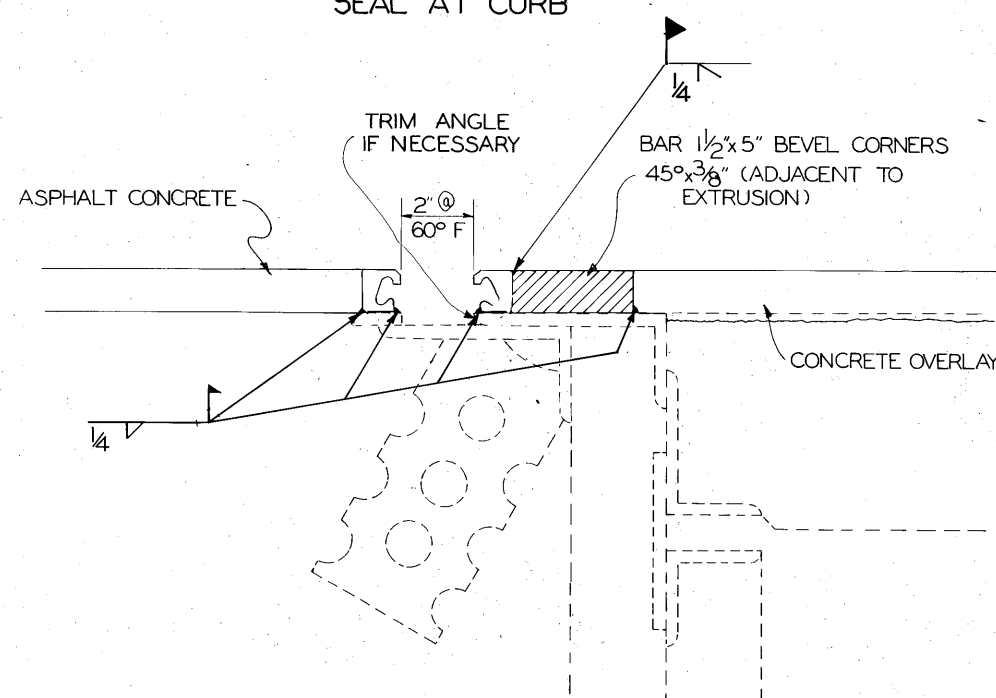
BRIDGE QUANTITIES



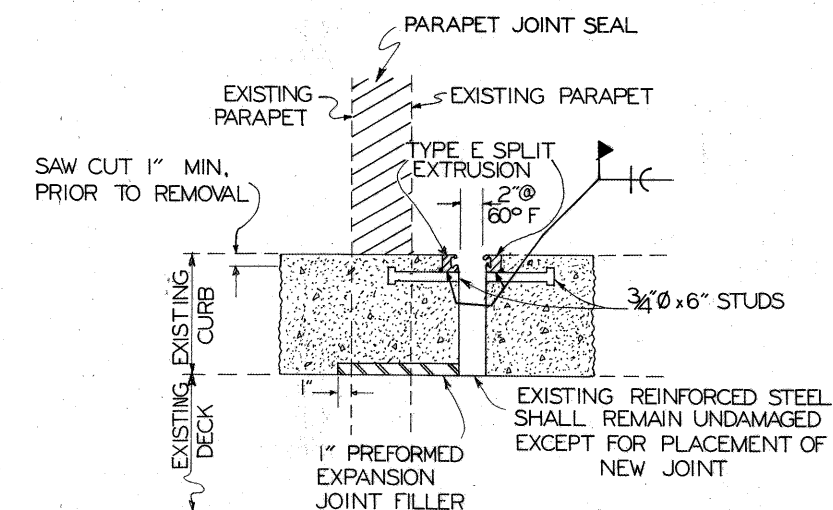




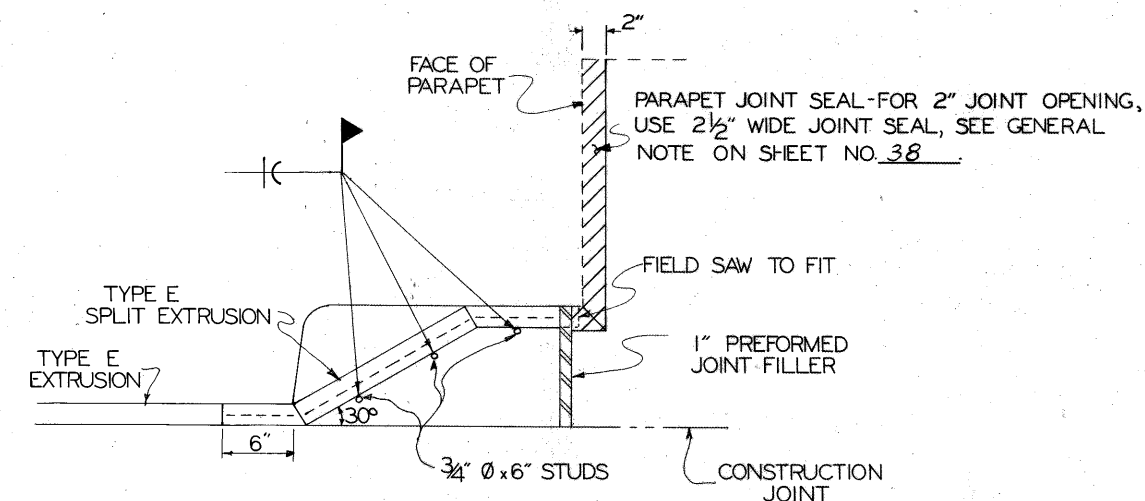
EXPANSION JOINT PLAN VIEW  
SEAL AT CURB



SECTION A-A  
JOINT NORMAL THROUGH ROADWAY  
MODIFICATION A



SECTION B-B  
JOINT NORMAL THROUGH CURB

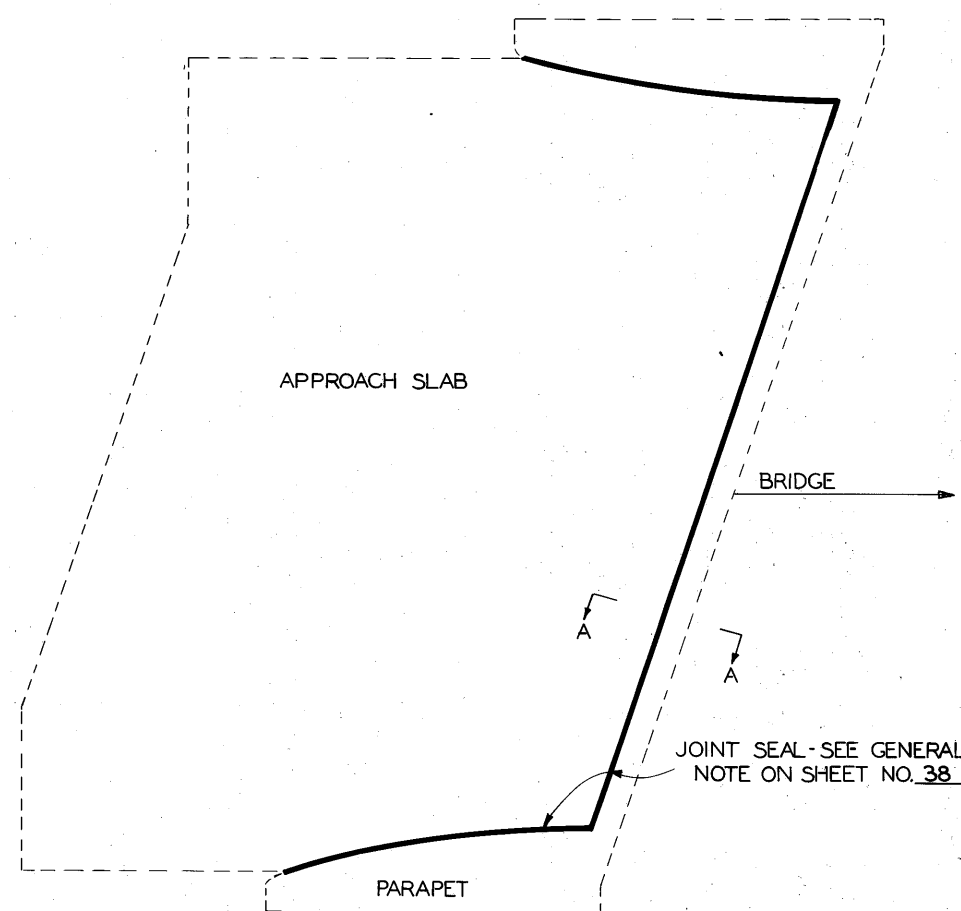


SECTION C-C  
JOINT TRANSVERSE THROUGH CURB

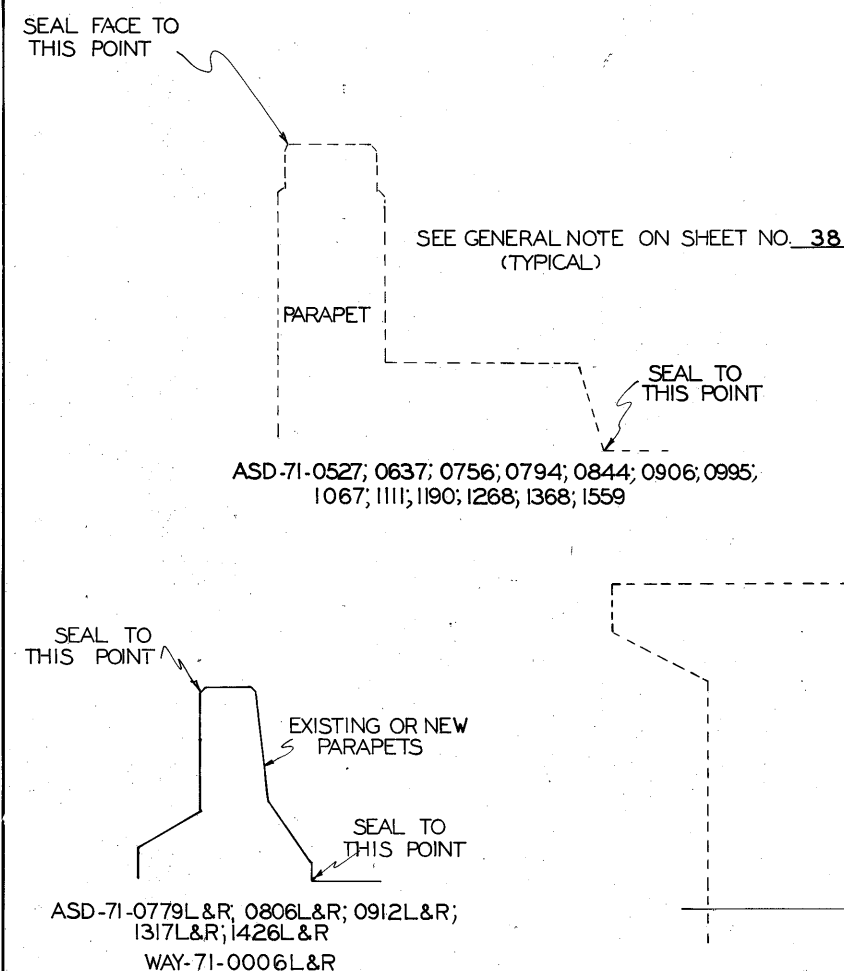
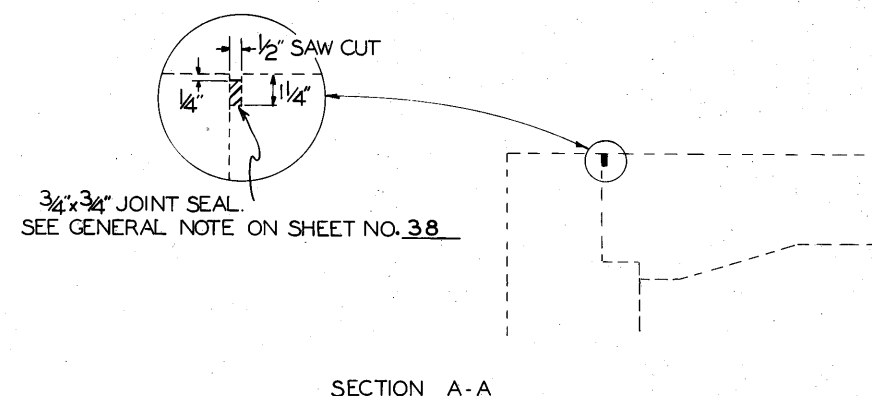
NOTE: EXTRUSIONS DESCRIBED ON THESE PLANS AS  
SPLIT EXTRUSIONS NEED NOT BE SPLIT IF A  
STRIP SEAL CAN BE PROPERLY INSTALLED IN  
AND REMOVED FROM A NON-SPLIT EXTRUSION.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE						
EXPANSION JOINT DETAILS MODIFICATION A						
FOR STRUCTURES:						
ASD-71-0637; 0756; 0844; 0906; 0995; 1111; 1190; 1268 ASD-T0593-1340						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
KW	DES	DES		DEC	1-14-85	

NOTE: PIER SEALING TO BE DONE AFTER PIER  
ENCASEMENT WORK IS COMPLETED. SEE  
SHEET NO. 55 FOR PIER ENCASEMENT  
DETAILS.

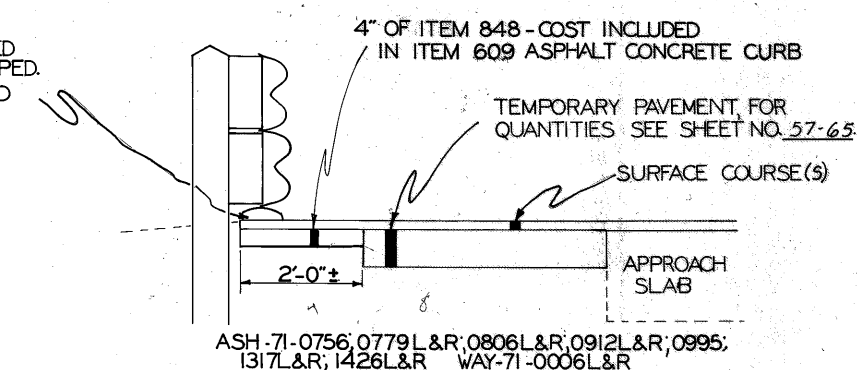


APPROACH SLAB JOINT SEAL DETAILS  
SEE BRIDGE QUANTITIES SHEETS FOR WHICH BRIDGES

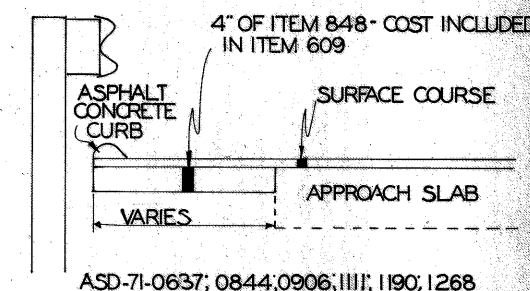


DETAILS FOR SEALING CONCRETE SURFACES

15 LINEAL FEET OF TYPE I ASPHALT  
CONCRETE CURB - REFER TO STANDARD  
DRAWING BP 5. THE CURB SHALL BE PLACED  
AS PER 609.06, EXCEPT IT MAY BE HAND TAMPED.  
THE CURB FACE SHALL NOT EXTEND BEYOND  
THE GUARDRAIL FACE. (TYPICAL)

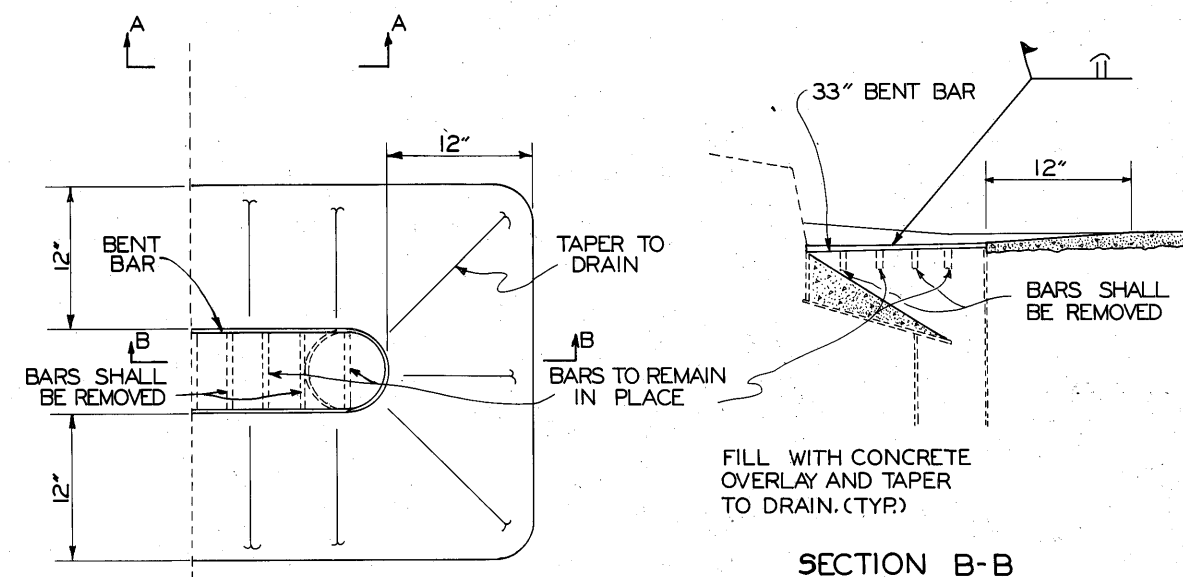


ASPHALT CONCRETE CURB DETAILS



STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

MISC. DETAILS

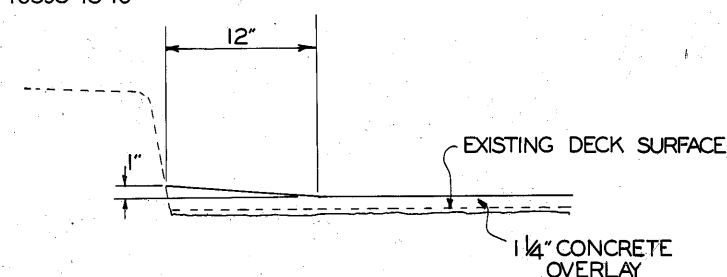


SECTION B-B

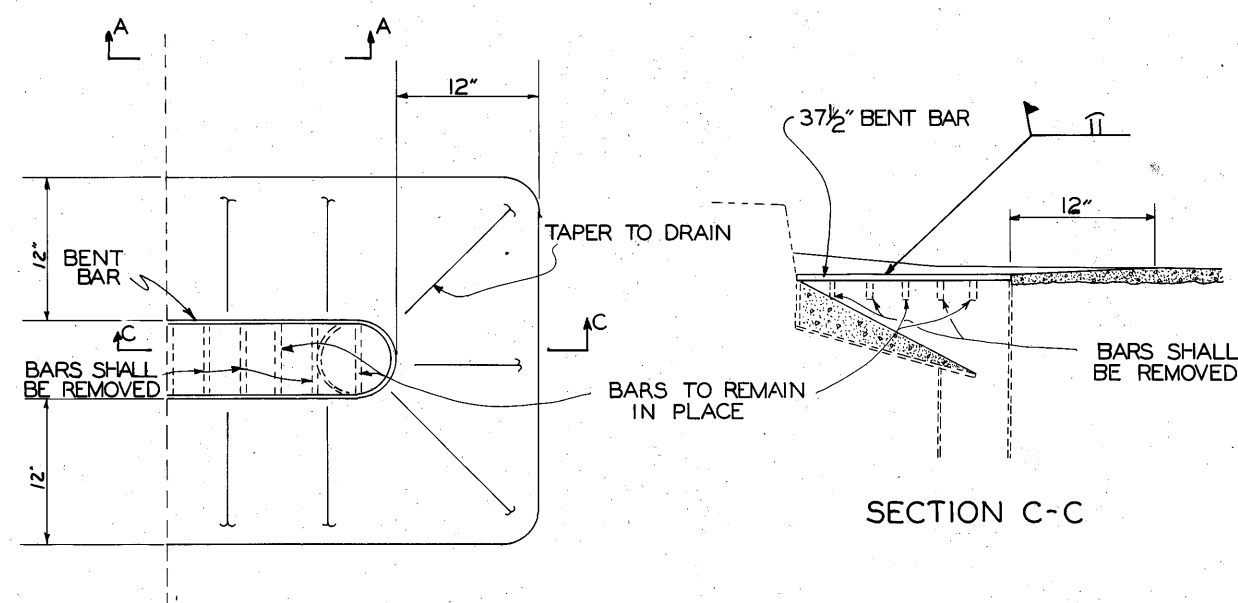
ASD-71-0637; 0779L&R; 0806L&R; 0906; 0912L&R; 0995; 1111; 1190; 1317L&R; 1426 L&R  
WAY-71-0006L&R ASD-T0593-1340

NOTE: A BAR SHALL BE BENT TO CONFORM WITH SCUPPER EDGE AND WELDED IN PLACE AFTER EXISTING SURFACE HAS BEEN CLEANED TO THE ENGINEER'S SATISFACTION.  $1\frac{1}{2} \times \frac{3}{8}$ " (SEE DRAWINGS FOR LENGTH) BAR SHALL BE USED. (TYP)

NOTE: CONTRACTOR SHALL CLEAN ALL SURFACES, WHICH NEW CONCRETE IS TO BE PLACED AGAINST, TO THE ENGINEER'S SATISFACTION. (TYP)



SECTION A-A



SECTION C-C

ASD-71-0756; 0844; 1268

# SCUPPER EXTENSION AND BAR REMOVAL DETAILS

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

SCUPPER EXTENSION AND  
BAR REMOVAL DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Jac	DES	DES	KW	JAC	1-14-85	