MICROFILMED
JUL 6 1988

STATE OF OHIO, DEPARTMENT OF HIGHWAYS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	STATE	

1/19

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)

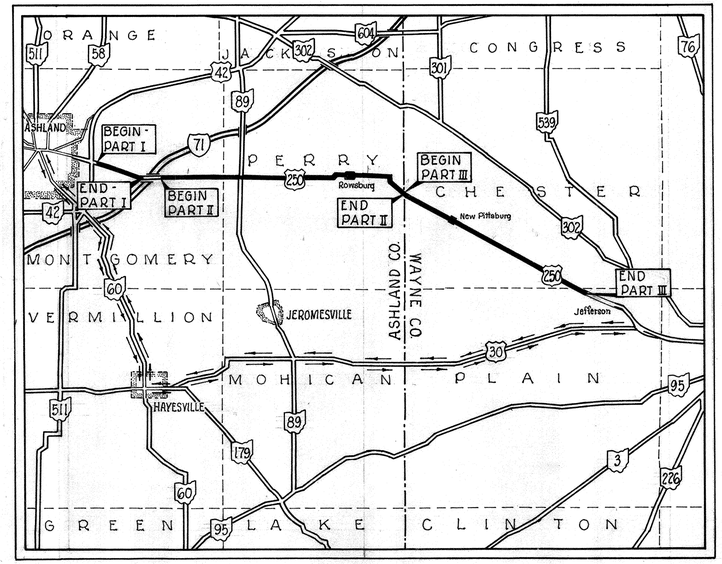
MICROFILMED
JUL 6 1987

									NET LENGTH	
PART 1	ASHLAND	COUNTY	S.R. # 250	SEC. 15.85	TO	SEC. 17.05			1.20	MI.
PART 2	ASHLAND	COUNTY	S.R. # 250	SEC. 17.78	TO	SEC. 24.59			6.81	MI.
PART 3	WAYNE	COUNTY	S.R. # 250	SEC. 0.00	TO	SEC. 5.46			5.46	MI.
PART		COUNTY	S.R. #	SEC.	TO	SEC.				MI.
PART		COUNTY	S.R. #	SEC.	TO	SEC.				MI.
PART		COUNTY	S.R. #	SEC.	TO	SEC.				MI.

NET LENGTH OF PROJECT & WORK = 71,101 LIN. FT. OR 13.47 MI.

PART	COUNTY	TOWNSHIP	CITY	VILLAGE
1	ASHLAND	MONTGOMERY		
2	ASHLAND	MONTGOMERY PERRY		
3	WAYNE	CHESTER PLAIN		

PART	DELIVERY POINT	RAILROAD	AVERAGE HAUL
1	ASHLAND	ERIE	2.7 MILES
2	ASHLAND	ERIE	7.4 MILES
3	WOOSTER	B&O	6.7 MILES



LOCATION MAP
SCALE: 1" = 2 Miles

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS	2
CONSTRUCTION DETAILS	3
GENERAL NOTES	4
GENERAL SUMMARY	5
PAVEMENT AND BASE WIDENING QUANTITIES	6
CULVERT EXTENSION ASD-250-1931	7
BRIDGE REPLACEMENT DETAILS ASD-250-1984	8-10
GUARD RAIL REPLACEMENT & CULVERT EXTENSION ASD-250-2052	11-13
CULVERT EXTENSION ASD-250-2080	14
GUARD RAIL REPLACEMENT	14&15
RIGHT OF WAY	16-19

PORTION TO BE IMPROVED
STATE AND FEDERAL HIGHWAYS
INTERSTATE HIGHWAYS
DETOUR

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-5	6-1-65	HW-E	6-1-65	1001	3-21-66
GR-1	6-1-65	MC-1	6-1-65		
GR-2	6-1-65	MC-4	6-1-65		
MC-3	6-1-65	L-1	6-1-65		
MC-6	6-1-65	BP-6	6-1-65		
SP-53	6-30-61	SBC-45	9-18-47		
GR-2A	9-1-65				

1965 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT

THE RIGHT OF WAY NECESSARY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE PART TIME CLOSING OF THE HIGHWAY TO TRAFFIC, AS NOTED ON SHEET NO. 5, DURING WHICH TIME DETOURS WILL BE PROVIDED AS SHOWN HEREON. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED D.H. Cimmer
DATE 4-22-66 DIVISION DEPUTY DIRECTOR

APPROVED E. W. Wilson
DATE 5-24-66 DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

OK BFG

APPROVED C. N. Altwater
DATE 5-2-66 ENGINEER OF BRIDGES

APPROVED R.V. Ricketts
DATE 5-11-66 ENGINEER OF LOCATION AND DESIGN

APPROVED R.E. Hoult
DATE 5-11-66 DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

APPROVED T.H. Bovard
DATE 5-24-66 DEPUTY DIRECTOR OF RIGHT OF WAY

APPROVED
DATE ENGINEER OF MAINTENANCE

APPROVED
DATE DEPUTY DIRECTOR OF OPERATIONS

APPROVED
DATE FIRST ASSISTANT DIRECTOR

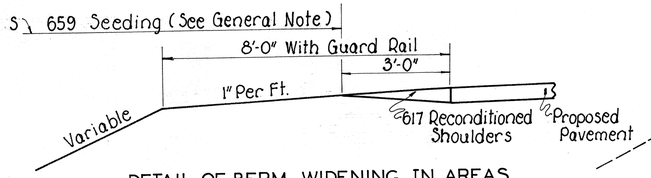
APPROVED P.E. Masheter
DATE 5/24/66 DIRECTOR OF HIGHWAYS

TYPICAL SECTIONS
TYPE 404

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

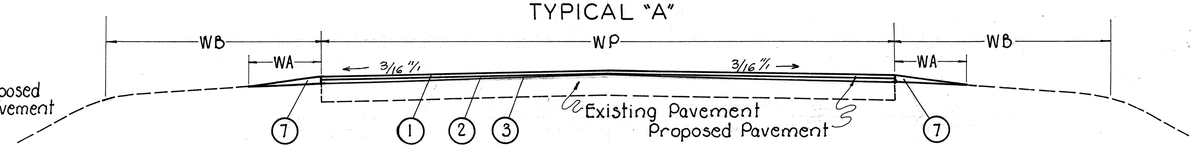
2
19

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)



DETAIL OF BERM WIDENING IN AREAS OF GUARD RAIL REPLACEMENT
(Limits As Shown On Plans & Cross Sections)

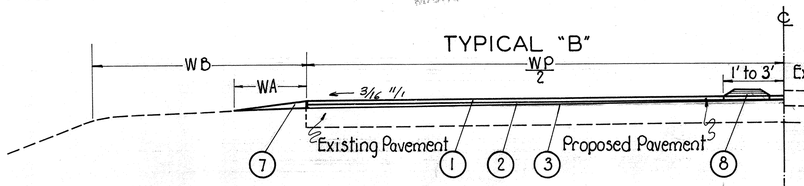
TYPICAL "A"



Parts-1(a), 2(a), 2(b) & 2(L)

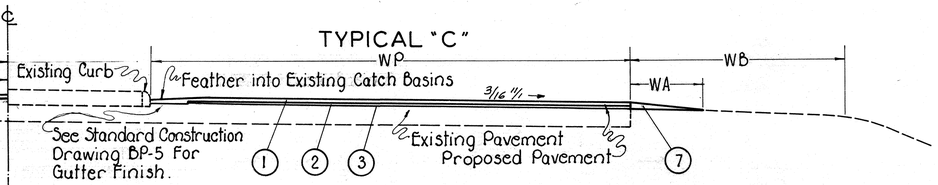
NOTE: Details of Shoulders, Slopes, and Ditches not shown are to conform with Standard Drawing MC-1 unless otherwise shown on Cross Sections.

TYPICAL "B"



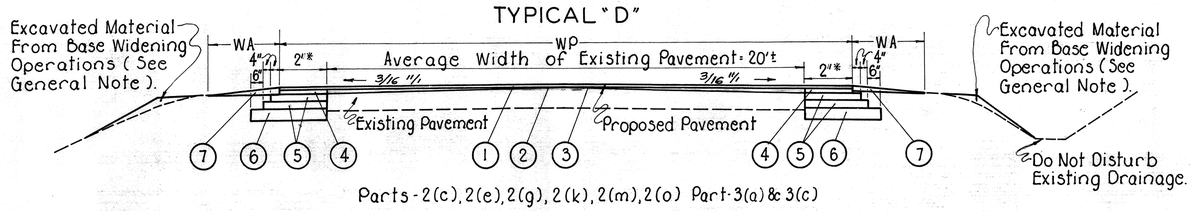
APPLIES LT. & RT. OF ℄ Part-1(b)

TYPICAL "C"



APPLIES LT. & RT. OF ℄ Part-1(c)

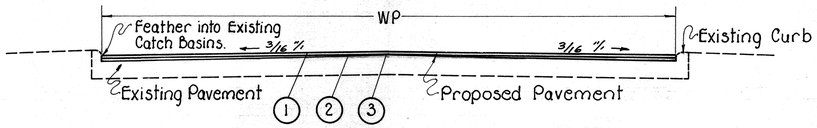
TYPICAL "D"



Parts-2(c), 2(e), 2(g), 2(k), 2(m), 2(o) Part-3(a) & 3(c)

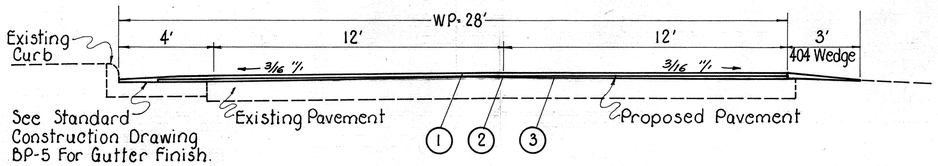
* EXCEPTIONS: Part-2(c): S.L.M. 19.26 to 19.37 (See Sheet No. 7)
Part-2(g): Transition Zone: S.L.M. 22.51 to 22.55-Base Widening Tapers From 2' to 0' Each Side.

TYPICAL "E"



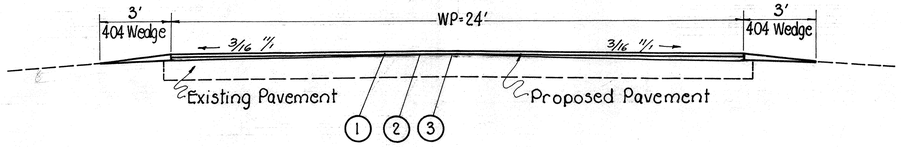
Parts-2(f), 2(j), & 2(n)

TYPICAL "G"



Part-2(i)

TYPICAL "F"

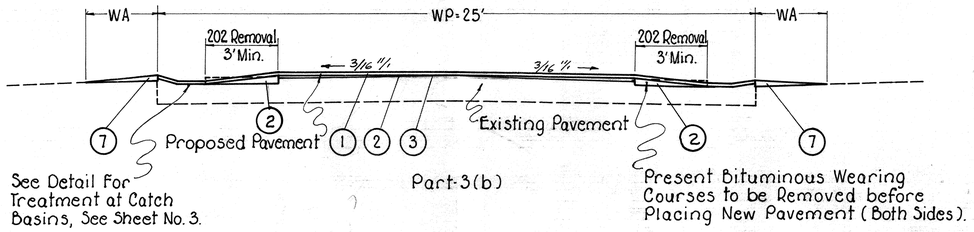


Part-2(h)

TYPICAL "I"

Part-2(d) - See Sheet No. 8.

TYPICAL "H"



Part-3(b)

1. 1" 404 Asphalt Concrete (70-85)
2. 0" Min. 403 Asphalt Concrete (70-85) Pre-Leveling Course (See Note in Proposal and General Note "PRE-LEVELING COURSE EDGE LIMITS")
3. 407 Tack Coat, Sec. 702.04 MS-2 or RS-1, or Sec. 702.02, RC-70 or RC-250, Applied at the rate of 0.10 Gal. per Sq. Yd. (Existing Pavement & Paved Berms Only)
4. 1½" 402 Asphalt Concrete (70-85)
5. 4" 301 Bituminous Aggregate Base (Applied in 2-4" Courses) 702.01 (85-100) or 702.09, RT-12
6. 6" 310 Subbase
7. 617 Aggregate (See Note in Proposal) & Reconditioned Shoulders
8. 613 Temporary Traffic Dividers, As per plan (See General Note)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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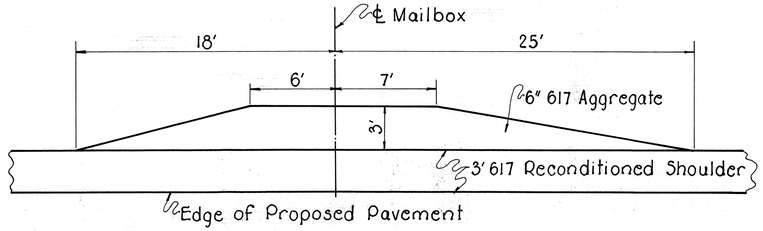
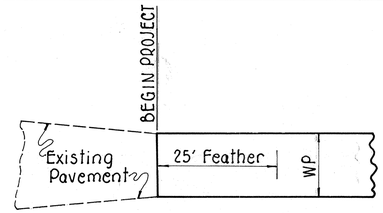
WAY-250-(0.00-1.72)



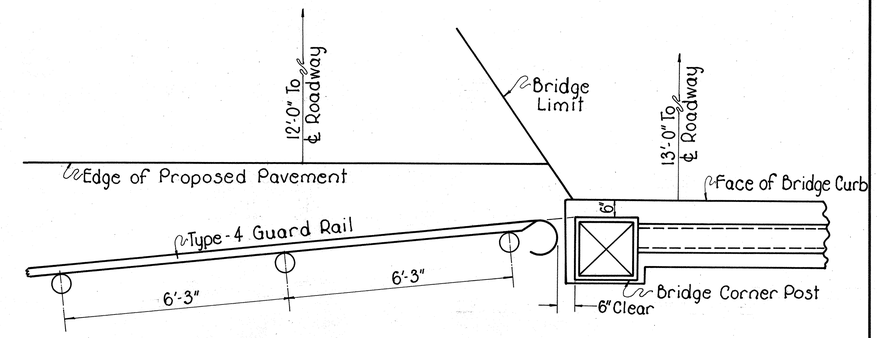
TYPICAL MAILBOX APPROACH

(To be used in Base Widening Areas as Directed by the Engineer).

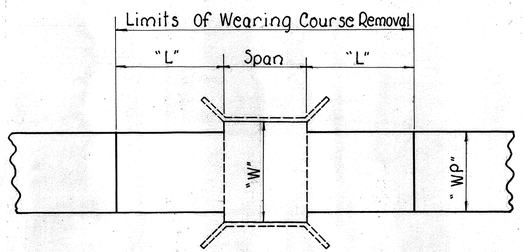
ESTIMATED QUANTITIES:
6" 617 AGGREGATE Part-2: 40 Cu.Yds.
& 203 EXCAVATION Part-3: 48 Cu.Yds.



TYPICAL FEATHER AT BEGINNING OR END OF RESURFACING



DETAIL OF TERMINATION OF GUARD RAIL AT BRIDGE RAILING - TYPICAL ALL 4 CORNERS OF STRUCTURES WAY-0120 & 0505



BRIDGE NO.	SPAN	W	L	WP(Existing)
ASD-250-1804	50'	29'	40'	22'
WAY-250-0120	25'	26'	80'	20'
WAY-250-0505	30'	26'	70'	20'

DETAIL OF WEARING COURSE REMOVAL AT STRUCTURES

NOTE: The following thicknesses of Bituminous Wearing Courses shall be removed on the designated Structures:

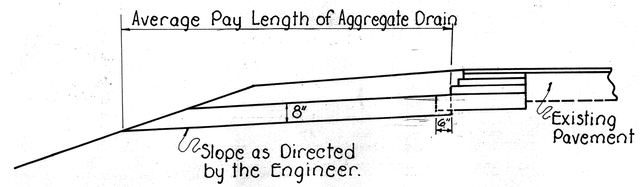
ASD-250-1804 4"
WAY-250-0120 8"
WAY-250-0505 7"

Item 512 Type C Waterproofing shall be applied to all exposed surfaces. Place a 1" 403 Asphalt Concrete Leveling Course and a 1" 404 Asphalt Concrete Surface Course over the entire Structure area. To eliminate an abrupt change in the profile grade at the Structures, partial removal of the wearing courses on the approach pavements shall be made for a distance of 10 feet per 1 inch of removal in each direction from the structure, as directed by the Engineer. On all other structures, the 1" 404 Asphalt Concrete Surface only, shall be placed full width through the structure. The 403 & 404 Asphalt Concrete Quantities for the approach pavement width through the structure are included in the Pavement Calculations.

ESTIMATED QUANTITIES:

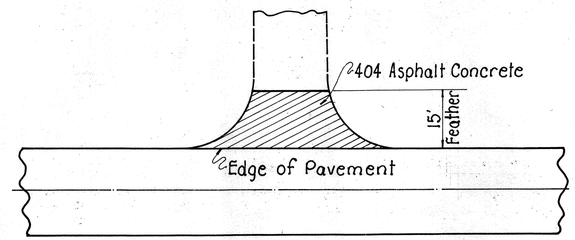
	ASD-1804	WAY-0120	WAY-0505
202 Existing Wearing Course Removed & Disposed Of (Sq.Yds.)	357	429	398
512 Type C Waterproofing (Sq.Yds.)	161	72	87
403 Asphalt Concrete (Cu.Yds.) (For Extra Width Only)	1.1	0.3	0.4
404 Asphalt Concrete (Cu.Yds.) " " " "	1.1	0.3	0.4

NOTE: Extra Width Quantities for other Structures are included in Extra Area Totals in Pavement Quantity Calculations, sheet No. 6.

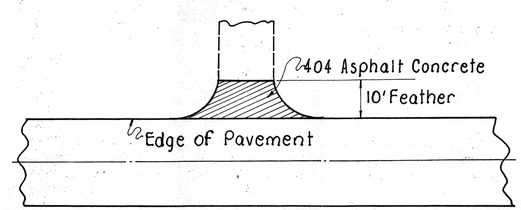


DETAIL OF 605 AGGREGATE DRAINS

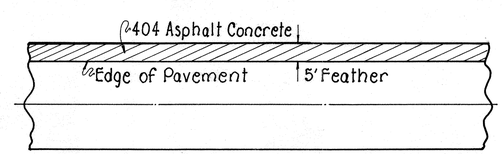
(Located As Directed By The Engineer - See General Note)



TYPICAL FEATHER DETAIL AT PAVED INTERSECTIONS

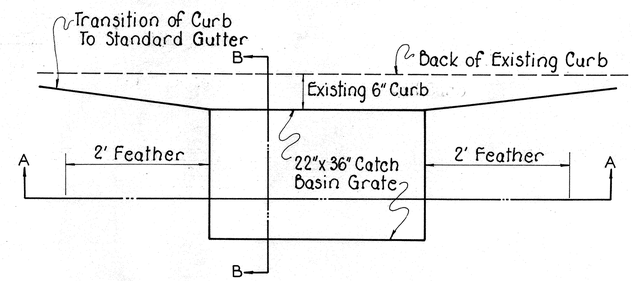


TYPICAL FEATHER DETAIL AT PAVED DRIVES

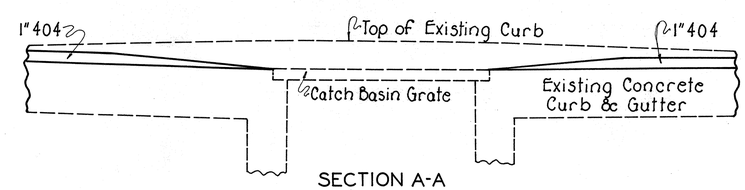


FEATHER DETAIL AT TRUCK WEIGH STATION PART-1(a) & ROADSIDE PARK-PART-3(a)

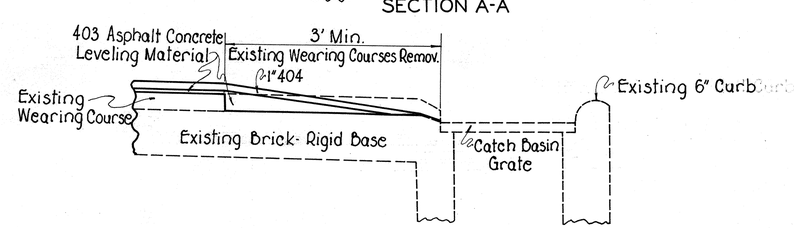
DETAILS FOR EXTRA PAVEMENT AREAS



PLAN



SECTION A-A



SECTION B-B

DETAIL OF FEATHER AROUND CATCH BASINS IN NEW PITTSBURG - PART-3(b)

GENERAL NOTES

FIELD OFFICE:

THE CONTRACTOR SHALL, IN ADDITION TO THE REQUIREMENTS OF 105.152, PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE. THE CONTRACTOR SHALL HAVE A TELEPHONE INSTALLED AND MAINTAINED IN THIS FIELD OFFICE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ALSO PROVIDE AND MAINTAIN SANITARY PROVISIONS AS PER 107.06. ALL THE ABOVE IS INCLUDED IN THE LUMP SUM PRICE BID FOR FIELD OFFICE.

DETOUR LIMITATION:

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT THAT, FOR A PERIOD NOT TO EXCEED THIRTY (30) CONSECUTIVE CALENDAR DAYS, THROUGH TRAFFIC MAY BE DETOURED, AS SHOWN ON THE TITLE SHEET, FOR THE BRIDGE REPLACEMENT, STRUCTURE NO. ASD-250-1984.
THIS DETOUR SHALL NOT BE PLACED INTO EFFECT PRIOR TO JULY 11, 1966.

TRENCH FOR BASE WIDENING:

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE PERFORMED ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME, EXCEPT DURING THE TIME TRAFFIC IS DETOURED FOR THE BRIDGE REPLACEMENT. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH TEMPORARY GUIDE MARKERS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS:

THE ROUNDED CORNERS SHOWN ON STANDARD DRAWING MC-1 APPLY TO ALL CROSS SECTIONS, EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

ALIGNMENT AND PROFILE:

THE WORK PROPOSED FOR ALL PORTIONS OF THIS PROJECT, EXCEPT PART 2 (D), IS FOR THE RESURFACING OR RESURFACING AND WIDENING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE 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 APPROXIMATELY 1 TO 1½ INCHES ABOVE THAT OF THE EXISTING PAVEMENTS, AS INDICATED ON THE TYPICAL SECTIONS.

REFERENCE IS HEREBY MADE TO THE FOLLOWING DESIGNATED PLANS FOR FORMER CONSTRUCTION PROJECTS, PORTIONS OF WHICH COVER AREAS INCLUDED IN THIS PROPOSED IMPROVEMENT. COPIES OF THESE PLANS ARE ON FILE IN THE DIVISION OFFICE OF THE OHIO DEPARTMENT OF HIGHWAYS, OR AT THE OFFICE OF THE ADMINISTRATOR OF CONTRACT SALES, COLUMBUS, OHIO.

C.H. 141, SEC. D & A (PT.), ASHLAND COUNTY, 1939.
C.H. 141, SEC. A, ASHLAND COUNTY, 1926.
C.H. 141, SEC. B, ASHLAND COUNTY, 1932
C.H. 141, SEC. A, WAYNE COUNTY, 1931.

PLACEMENT OF ASHPALT CONCRETE:

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES (SEE DETOUR **LIMITATION** NOTE), EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF THE COMPLETED ASPHALT CONCRETE COURSES.

PRE-LEVELING COURSE EDGE LIMITS:

PRIOR TO THE PLACING OF THE LEVELING COURSE IN BASE WIDENING AREAS, THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE ENGINEER, LOCATE THE OUTSIDE EDGES OF RIGID TYPE BASE AND STAKE OUT A NEAT LINE FOR GUIDING THE PLACEMENT OF THE PRE-LEVELING COURSE. SEE PROPOSAL NOTE.

BASE WIDENING THROUGH INTERSECTIONS:

FOR ALL PARTS WHERE BASE WIDENING IS SPECIFIED, THE QUANTITIES ARE CALCULATED FOR THE WIDENING THROUGH ALL INTERSECTIONS. HOWEVER, THIS ITEM MAY BE NON-PERFORMED AT LOCATIONS DIRECTED BY THE ENGINEER.

EARTHWORK:

PORTIONS OF THE EXCESS MATERIAL FROM BASE WIDENING OPERATIONS SHALL BE USED TO WIDEN EXISTING BERMS AS DIRECTED BY THE ENGINEER. EXISTING BERMS WHICH ARE TO BE BUILT UP WITH EXCESS EXCAVATED MATERIAL, SHALL FIRST BE SCALPED. WATERING OF EMBANKMENTS, BENCHING AND DENSITY TESTS WILL NOT BE REQUIRED IN THOSE AREAS. HOWEVER, IN THOSE AREAS WHERE CROSS SECTIONS ARE SHOWN FOR BERM WIDENING, ITEM 203 SHALL INCLUDE NECESSARY BENCHING, WATERING AND THE THOROUGH COMPACTING OF EMBANKMENT MATERIAL IN LAYERS NOT EXCEEDING EIGHT (8) INCHES LOOSE DEPTH, AND SHALL INCLUDE ANY OPERATIONS OF GRADING NECESSARY TO FINISH THE SHOULDERS AND SLOPES SUBSTANTIALLY TO THE LINES INDICATED ON THE TYPICAL SECTIONS AND CROSS SECTIONS. NO PROVISIONS OF THE SPECIFICATIONS SHALL BE WAIVED FOR EMBANKMENTS WHICH SUPPORT ANY PORTION OF THE NEW PAVEMENT.

SPECIAL CARE SHALL BE TAKEN TO MAINTAIN EXISTING DRAINAGE FACILITIES. IF EXISTING DRAINAGE IS DISTURBED BY THE CONTRACTOR, IT SHALL BE RESTORED BY HIM AT NO COST TO THE STATE.

SEEDING:

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS BY THE SYMBOL: ⌒ 3, *OR AS DIRECTED BY THE ENGINEER.*

AREAS TO BE SEEDED SHALL BE FERTILIZED USING A COMMERCIAL FERTILIZER HAVING A FORMULA OF 12-12-12 AND THE FOLLOWING SEED MIXTURE SHALL, IN LIEU OF THE MIXTURES LISTED IN 659.09, BE USED THROUGHOUT THE LIMITS OF THIS PROJECT:

75% KENTUCKY 31 FESCUE
20% KENTUCKY BLUEGRASS
5% RED TOP

IN ADDITION TO THE SEEDING SHOWN ON CROSS SECTIONS, AN ESTIMATED 5000 S.Y. 659 SEEDING AND 0.45 TON 659 FERTILIZER ARE INCLUDED IN THE SUMMARY TO BE USED, AS DIRECTED BY THE ENGINEER, IN OTHER EARTHWORK AREAS DESCRIBED ABOVE.

TRAFFIC DIVIDERS:

THE EXISTING PRECAST TRAFFIC DIVIDERS IN PART 1 (B) SHALL BE CAREFULLY REMOVED, AND LATER RESET IN THEIR ORIGINAL LOCATIONS AFTER THE NEW ASPHALT CONCRETE SURFACE COURSE HAS BEEN COMPLETED. FOR ANY DIVIDERS NOT SUITABLE FOR RE-USE, THROUGH NO FAULT OF THE CONTRACTOR, **SUITABLE DIVIDERS** WILL BE *FURNISHED* BY THE STATE. THE ITEM 613, TRAFFIC DIVIDERS, AS PER PLAN SHALL CONSIST OF USING THE PRECAST TRAFFIC DIVIDERS REMOVED UNDER ITEM 202 *OR FURNISHED BY THE STATE, AND SET IN PLACE BY THE CONTRACTOR.*

ESTIMATED QUANTITIES: PART 1 (B)
202 PRECAST TRAFFIC DIVIDERS REMOVED FOR RE-USE (EACH) 31
613 TRAFFIC DIVIDERS, AS PER PLAN (EACH) 31

GUARD RAIL REMOVED FOR STORAGE:

WHEN GUARD RAIL, REMOVED FOR STORAGE IS SPECIFIED, THE GUARD RAIL SHALL BE CAREFULLY DISMANTLED, ALL BOLTS, CLIPS, AND OTHER HARDWARE SHALL BE REMOVED FROM ALL RAILS AND POSTS AND ALL PARTS SHALL BE SORTED AND STORED ON THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER. ALL POSTS AND OTHER MATERIALS NOT CONSIDERED SALVAGEABLE SHALL BE DISPOSED OF BY THE CONTRACTOR.

REMOVAL OF TREES AND STUMPS:

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM 201 CLEARING AND GRUBBING.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS
18"	1	2
30"	0	0
48"	0	0
60"	0	0

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE THE LIMITS OF CONSTRUCTION, BUT WITHIN THE RIGHT OF WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 CLEARING AND GRUBBING.

AGGREGATE DRAINS:

AGGREGATE DRAINS SHALL BE PLACED IN ALL AREAS WHERE BASE WIDENING IS SPECIFIED AT ONE HUNDRED (100) FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS AND AT FIFTY FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS.

AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE.

CONNECTIONS TO EXISTING PIPE:

AT PLACES WHERE THE PLANS PROVIDE FOR PROPOSED PIPE TO BE CONNECTED TO EXISTING PIPE, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED PIPE. THE COST OF THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEM.

UTILITY POLES:

UTILITY POLES WILL NOT BE RELOCATED AND THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND ANY POLES THAT ARE LOCATED WITHIN THE CONSTRUCTION LIMITS.

TACK COAT:

A TACK COAT SHALL BE APPLIED AT THE RATE AND ON THE AREAS DETERMINED BY A PRE-CONSTRUCTION CONFERENCE, ON THE PROJECT, PRIOR TO THE START OF THE WORK. IN NO CASE SHALL THE RATE OF APPLICATION EXCEED 0.10 GAL. PER SQ. YD.

CONSTRUCTION LAYOUT STAKES:

SEE NOTE IN PROPOSAL DESCRIBING THE WORK INCLUDED IN THIS LUMP SUM PAY ITEM.

JUTE MATTING, AS PER PLAN:

THE JUTE MATTING, IN LIEU OF 667.03, SHALL BE PLACED AFTER THE MULCHING MATERIAL. A MINIMUM OF ONE (1) INCH OF MULCHING MATERIAL SHALL BE APPLIED IN THE AREAS TO BE COVERED BY JUTE MATTING.

PAVEMENT REMOVAL:

PAVEMENT REMOVAL QUANTITIES, ITEM 202, SHALL CONSIST OF RIGID TYPE PAVEMENT ONLY. AREAS OF RIGID TYPE PAVEMENT REMOVAL ARE INDICATED ON THE PLANS BY SHADING.

SUBGRADE PREPARATION

THE SUBGRADE UNDER THE PROPOSED FLEXIBLE PAVEMENT, ITEM 404 ON 301, SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE THIRD PARAGRAPH OF 203.13(a).

GENERAL SUMMARY

CALCULATIONS

LINE	DESCRIPTION	QUANTITY
1	203 Water	
2	From Totals: (Emb.+20%)+Items 617 & 310	
3	Totals-Part-1= 105 x 5 ÷ 1000=0.5 Part-1=	1 M-Gal.
4	Totals-Part-2= 3773+649+3092= 7514	
5	from Line 4: 7514 x 5÷1000=37.6 Part-2=	38 M-Gal.
6	Totals-Part-3= 80+591+3101= 3772	
7	From Line 6: 3772 x 5 ÷ 1000=18.9 Part-3=	19 M-Gal.
8		
9	659 Commercial Fertilizer	
10	Total 659 Seeding x 9 x 20 ÷ (1000 x 2000)	
11	Total Part-2= 6049 x 9 x 20 ÷ (1000 x 2000)=0.54	
12	Total Part-2=	0.5 Tons
13	Total Part-3= 382 x 9 x 20 ÷ (1000 x 2000)=0.03	
14	Total Part-3=	0.1 Tons
15		
16		

EARTHWORK TABLE

FROM SHEET NO.	EXCAVATION PART-2	EXCAVATION PART-3	EMBANKMENT PART-2	EMBANKMENT PART-3
6	7793	8011		
7	81		171	
9	127		877	
10	248		75	
12	26		1571	
13	12		267	
14	23		183	
15				67
3	40	48		
TOTALS	8350	8059	3144	67
EMBANKMENT + 20% =			3773	80

Total Excavation = 16,409 Cu.Yds.
Total Embank.+20% = 3853 Cu.Yds.
EXCESS EXCAVATION = 12,556 Cu.Yds.
See Note on Sheet 4

SEEDING TABLE

FROM SHEET NO.	SQUARE YARDS PART-2	SQUARE YARDS PART-3
7	863	
9	943	
10	469	
12	2861	
13	403	
14	510	
15		382
TOTALS	6049	382

FROM SHEET NUMBER																										
PART-1			TOTAL	PART-2									TOTAL	PART-3							TOTAL	ITEM	PLAN TOTAL	UNITS	DESCRIPTION
4	5	6	PART-1	4	3	5	6	7	8	11	14		PART-2	3	5	6	14	15			PART-3				
																									ROADWAY
													Lump								Lump	201	Lump	Lump	Clearing and Grubbing
									Lump(1)				Lump(1)									202	Lump	Lump	Existing Structures Removed
								Lump(1)		Lump(1)	Lump(1)		Lump(3)									202	Lump	Lump	Portions Of Existing Structures Removed
									42				42									202	42	Lin.Ft.	Pipe Removed, 24" and Under
									273				273									202	273	Sq.Yds.	Existing Pavement Removed and Disposed Of
					357								357	827		1547					2374	202	2731	Sq.Yds.	Existing Wearing Course Removed and Disposed Of
31			31																			202	31	Each	Precast Traffic Divider Removed For Re-use
										24			24									202	24	Lin.Ft.	Guard Rail, Removed For Re-use, Type-2
									194				194									202	194	Lin.Ft.	Guard Rail, Removed For Re-use, Type-4
										1523	240		1763									202	1763	Lin.Ft.	Guard Rail, Removed For Storage, Type-2
						8350							8350		8059						8059	203	16409	Cu.Yds.	Excavation, Including Embankment Construction, As per plan
	1		1			38							38		19						19	203	58	M-Gal.	Water
										1362.5	212.5		1575				250	450			700	606	2275	Lin.Ft.	Guard Rail, Type-4
										24			24									606	24	Lin.Ft.	Guard Rail, Rebuilt, Type-2
									175	12.5			187.5									606	187.5	Lin.Ft.	Guard Rail, Rebuilt, Type-4
								6	47	15			68									601	68	Cu.Yds.	Dumped Rock Channel Protection
				5000		6049							11,049		382						382	659	11,431	Sq.Yds.	Seeding and Mulching, As per plan
				0.45		0.5							0.95		0.1						0.1	659	1.05	Tons	Commercial Fertilizer (12-12-12)
									97		55		152									667	152	Sq.Yds.	Jute Matting, As per plan
																									DRAINAGE
									24				24									602	24	Cu.Yds.	Concrete Masonry
									96				96									603	96	Lin.Ft.	14'-3" x 8'-11" Conduit, Type A, 707.03, 3-1 Gage, With Class B Bedding
									70				70									603	70	Lin.Ft.	15" Conduit, Type C, With Class B Bedding
									50				50									603	50	Lin.Ft.	18" Conduit, Type C, With Class B Bedding
							4128		24				4152			4224					4224	605	8376	Lin.Ft.	Aggregate Drains
								2		2	4		8									503	8	Cu.Yds.	Excavation For Structures
								594		570	729		1893									509	1893	Lbs.	Reinforcing Steel
								22		16	26		64									510	64	Each	Dowel Hole
								7		5.5	9		21.5									511	21.5	Cu.Yds.	Concrete For Structures, Class C
					161								161	159							159	512	320	Sq.Yds.	Type C Waterproofing
							3177		96				3273			3266					3266	301	6539	Cu.Yds.	Bituminous Aggregate Base, 702.01 (85-100) or 702.09, RT-12
							3016		76				3092			3101					3101	310	6193	Cu.Yds.	Subbase
							476		17				493			490					490	402	983	Cu.Yds.	Asphalt Concrete (70-85)
		236	236		1		1326						1327	1		1163					1164	403	2727	Cu.Yds.	Asphalt Concrete (70-85)
		479	479		1		2674		12				2687	1		2155					2156	404	5322	Cu.Yds.	Asphalt Concrete (70-85)
		1737	1737				8513						8513			6590					6590	407	16840	Gal.	Tack Coat, 702.02, RC-70 or RC-250; or 702.04, MS-2 or RS-1
31			31																			613	31	Each	Traffic Divider, As per plan
		3992	3992				22,334						22334			19029					19029	617	45355	Sq.Yds.	Shoulder Reconditioned
		105	105		40		584		25				649	48		543					591	617	1345	Cu.Yds.	Aggregate
			Lump										Lump								Lump		Lump	Lump	Field Office
													Lump								Lump		Lump	Lump	Construction Layout Stakes
			Lump										Lump								Lump	614	Lump	Lump	Maintaining Traffic

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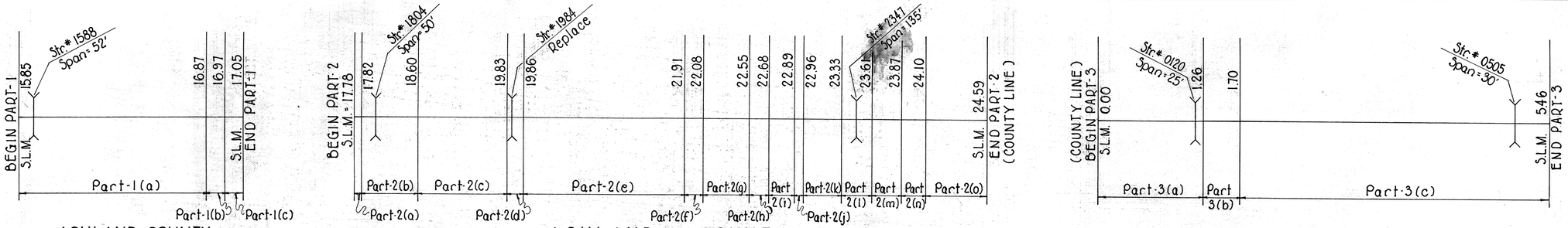
2	OHIO		

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)



STRAIGHT LINE DIAGRAMS

PAVEMENT DATA

Part	Typical Section	Section To Section S.L.M. To S.L.M.	Length Miles	Length Δ Lin. Ft.	WP Feet	Existing Pavement Type & Thickness	Pavement Area Sq. Yds.	407 Tack Coat @0.10/Sq.Yd. Gallons	Asphalt Concrete 404 Thick. Inches	Asphalt Concrete 404 Cu. Yds.	Asphalt Concrete 403 Min. Thick. Inches	Asphalt Concrete 403 Cu. Yds.	407 Tack Coat @0.10/S.Y. Gal.	404 Berms 1½"x3' Wedge Cu. Yds.	202 Wearing Course Removed & Disp. Of Sq. Yds.	Shoulders Existing WB Feet	Shoulders Recondition WA Feet	Shoulders Recondition Item 617 Sq. Yds.	Shoulders Aggregate Ave. Thick. Inches	Shoulders Aggregate Item 617 Cu. Yds.
1(a)	"A"	15.85 to 16.87	1.02	5400	22	404 Surface on Concrete	13,200	1320	1"	367	0"*	184				9'±	3'	3600		90
1(b)	"B"	16.87 to 16.97	0.10	500	22-42	" " " "	1778	178	1"	49	0"*	25				9'±	3'	333	1½"x 3' Wedge ± 20%	8
1(c)	"C"	16.97 to 17.05	0.08	400	2 @ 18-25	" " " "	1911	191	1"	53	0"*	27				9'±	3'	267		7
						Extra Areas:	480	48		10								-208		
						TOTALS-PART-1		1737		479		236						3992		105
2(a)	"A"	17.78 to 17.82	0.04	225	36-22	404 Surface on Concrete	725	73	1"	20	0"*	10				9'±	3'	150	1½" x 3' Wedge ± 20%	4
2(b)	"A"	17.82 to 18.60	0.78	4118	22	" " " "	10,066	1007	1"	280	0"*	140				9'±	3'	2712	" "	68
2(c)	"D"	18.60 to 19.83	1.23	6477	24	404 Surface on Brick-Rigid	17,272	1439	1"	480	0"*	240				5'±	3'	4318	1½" x 3' Wedge ± 30%	117
2(d)	See Sheet No. 8 For Pavement Quantities																			
2(e)	"D"	19.86 to 21.91	2.05	10,853	24	404 Surface on Brick-Rigid	28,941	2412	1"	804	0"	402				5'±	3'	7235	1½" x 3' Wedge ± 30%	196
2(f)	"E"	21.91 to 22.08	0.17	850	24	404 Surface on Brick-Rigid	2267	227	1"	63	0"*	32				5'±	3'	567	1" x 3' Wedge	8
2(g)	"D"	22.08 to 22.55 ‡	0.47	2525	24	" " " " "	6733	561	1"	187	0"*	94				5'±	3'	1683	1½" x 3' Wedge ± 30%	46
2(h)	"F"	22.55 to 22.68	0.13	665	24	404 Surface on Brick-Rigid	1773	177	1"	49	0"*	25	44	9		5'±				
2(i)	"G"	22.68 to 22.89	0.21	1137	28	" " " " "	3537	354	1"	98	0"*	49	38	8		5'±				
2(j)	"E"	22.89 to 22.96	0.07	348	24	" " " " "	928	93	1"	26	0"*	13				5'±				
2(k)	"D"	22.96 to 23.33	0.37	1947	24	" " " " "	5192	433	1"	144	0"*	72				6'±	3'	1298	1½" x 3' Wedge ± 30%	35
2(l)	"A"	23.33 to 23.61	0.28	1500	24	404 Surface on Waterbound Macadam	4000	400	1"	111	0"*	56				8'±	3'	1000	1½" x 3' Wedge ± 30%	27
2(m)	"D"	23.61 to 23.87	0.26	1366	24	404 Surface on Brick-Rigid	3643	304	1"	101	0"*	51				6'±	3'	911		25
2(n)	"E"	23.87 to 24.10	0.23	1208	24	404 Surface on Brick-Rigid	3221	322	1"	90	0"*	45				5'±	3'	805	1" x 3' Wedge	11
2(o)	"D"	24.10 to 24.59	0.49	2602	24	" " " " "	6939	578	1"	193	0"*	97				6'±	3'	1735	1½" x 3' Wedge ± 30%	47
						Extra Areas:	510	51		11								-80		
						TOTALS-PART-2		8431		2657		1326	82	17				22,334		584
3(a)	"D"	0.00 to 1.26	1.26	6650	24	404 Surface on Brick-Rigid	17,733	1478	1"	493	0"*	247				8'±	3'	4417	1½" x 3' Wedge ± 30%	120
3(b)	"H"	1.26 to 1.70	0.44	2320	25	404 Surface on Brick-Rigid	6444	644	1"	179	0"*	180			1547	5'±	3'	1547	3"x 3' Wedge	64
3(c)	"D"	1.70 to 5.46	3.76	19,855	24	" " " " "	52,947	4412	1"	1471	0"*	736				8'±	3'	13,237	1½" x 3' Wedge ± 30%	359
						Extra Areas:	560	56		12								-172		
						TOTALS-PART-3		6590		2155		1163			1547			19,029		543

PROPOSED BASE WIDENING DATA

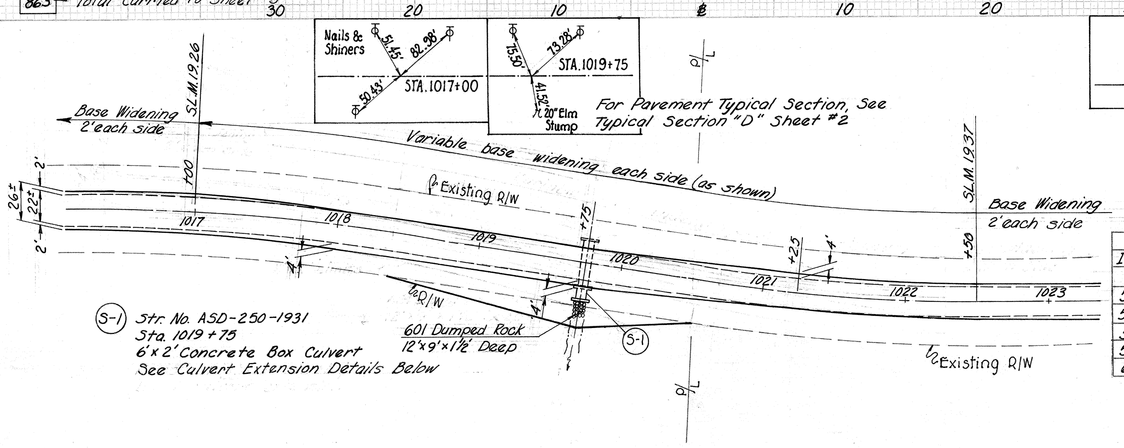
Widening Courses	Surface Areas Sq. Yds.	402 Asphalt Concrete 1½" Cu. Yds.	301 Bituminous Aggregate Base 8" Cu. Yds.	310 Subbase 6" Cu. Yds.	203 Excavation Including Embankment Const. Cu. Yds.	605 Aggregate Drains Lin. Ft.
Asphalt Concrete Leveling Course	2879	120				
Bituminous Aggregate Base Courses	3598		800			
Subbase Course	4555			759	1961	1040
402 - Asphalt	4824	201				
301 - Bitum. Base	6029		1340			
310 - Subbase	7633			1272	3286	1744
402 - Asphalt	1100	46				
301 - Bitum. Base	1381		307			
310 - Subbase	1754			292	755	400
402 - Asphalt	865	36				
301 - Bitum. Base	1082		240			
310 - Subbase	1369			228	589	312
402 - Asphalt	607	25				
301 - Bitum. Base	759		169			
310 - Subbase	961			160	414	216
402 - Asphalt	1156	48				
301 - Bitum. Base	1446		321			
310 - Subbase	1830			305	788	416
BASE WIDENING TOTALS-PART-2		476	3177	3016	7793	4128
Asphalt Concrete Leveling Course	2944	123				
Bituminous Aggregate Base Courses	3681		818			
Subbase Course	4660			777	2007	1056
402 - Asphalt	8811	367				
301 - Bitum. Base	11,014		2448			
310 - Subbase	13,944			2324	6004	3168
BASE WIDENING TOTALS-PART-3		490	3266	3101	8011	4224

‡ 200' Transition Zone (22.51 to 22.55) - Base Widening Tapers From 2' to 0' Each Side. * Leveling Material to be Placed as Directed by the Engineer. Δ Lengths From Old Plans.

PAVEMENT & BASE WIDENING QUANTITIES

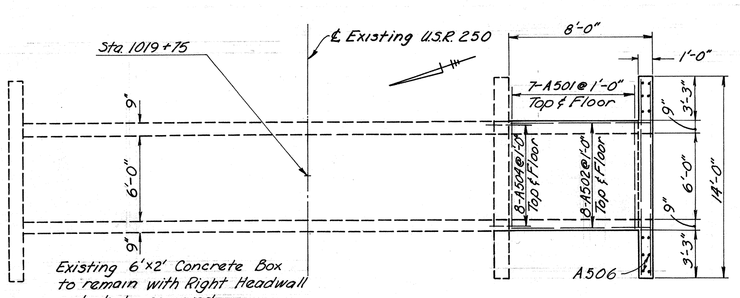
SEEDING END WIDTH	SEEDING YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0		Material from base widening operations; END EARTHWORK L.T. 1022+50	0	0		
	36				5	5
13		1022+00	5	5		
	81				12	9
16		1021+50	8	4		
	89				15	8
16		1021+00	9	4		
	89				14	14
16		1020+50	6	11		
16	18	Sta. 1020+40; END EARTHWORK R.T. Sta. 1020+40	6	11	2	4
	111				10	20
34		1020+00	8	16		
17		Ahead Sta. 1019+82; BEGIN EARTHWORK L.T. Sta. 1019+82			4	18
8	6					
8		Culvert Flowline; END VIEW	0	24		
6						
8		Ahead Sta. 1019+68; 1019+75			2	19
16	32					
16		1019+50	3	18		
	86				5	28
15		1019+00	2	12		
	78				3	18
13		1018+50	1	8		
	72				3	14
13		1018+00	2	7		
	72				4	10
13		1017+50	2	4		
	36				2	4
0		Sta. 1017+00; BEGIN EARTHWORK R.T. Sta. 1017+00	0	0		
	863	Total Carried to Sheet #5			81	171

NOTE:
Earthwork Quantities For Base Widening
Are Included in Calculations on Sheet No. 6.



S-1 Str. No. ASD-250-1931
Sta. 1019+75
6'x2' Concrete Box Culvert
See Culvert Extension Details Below

ESTIMATED QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
202	Lump	Sum	Portions of exist. struct. remov.
503	2.0	Cu.Yd.	Excavation for Structure
509	594	Lbs.	Reinforcing Steel
510	22	Each	Dowel holes
511	6.7	Cu.Yd.	Concrete for structures
601	6	Cu.Yd.	Dumped Rock Channel Protection

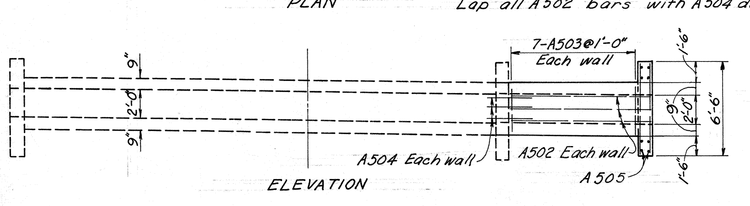


PLAN

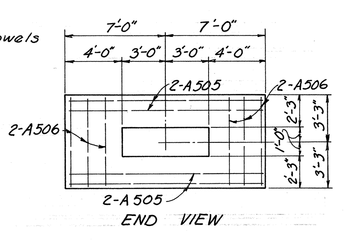
REINFORCING STEEL LIST			
MARK	No.	LENGTH	WEIGHT
A501	14	7'-2"	105
A502	22	7'-8"	176
A503	14	3'-2"	46
A504	22	3'-4"	76
A505	8	13'-8"	114
A506	12	6'-2"	77
Total			594

TYPE: Standard 6'x2' Concrete Box Extension
MATERIAL: Reinforced Concrete, Class C
LENGTH: 8'-0 Extension
WORK REQUIRED: Remove existing Right (South) headwall and build new 6'x2' Concrete extension and one headwall.

Lap all A502 bars with A504 dowels



ELEVATION



END VIEW

CULVERT EXTENSION-STR. ASD-250-1931

ASD-250-(15.65)(17.78-23.61)
WAY-250-0.00-1.72)
Part-2(c)

NO.	DATE	REVISION	BY
2			

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7
19

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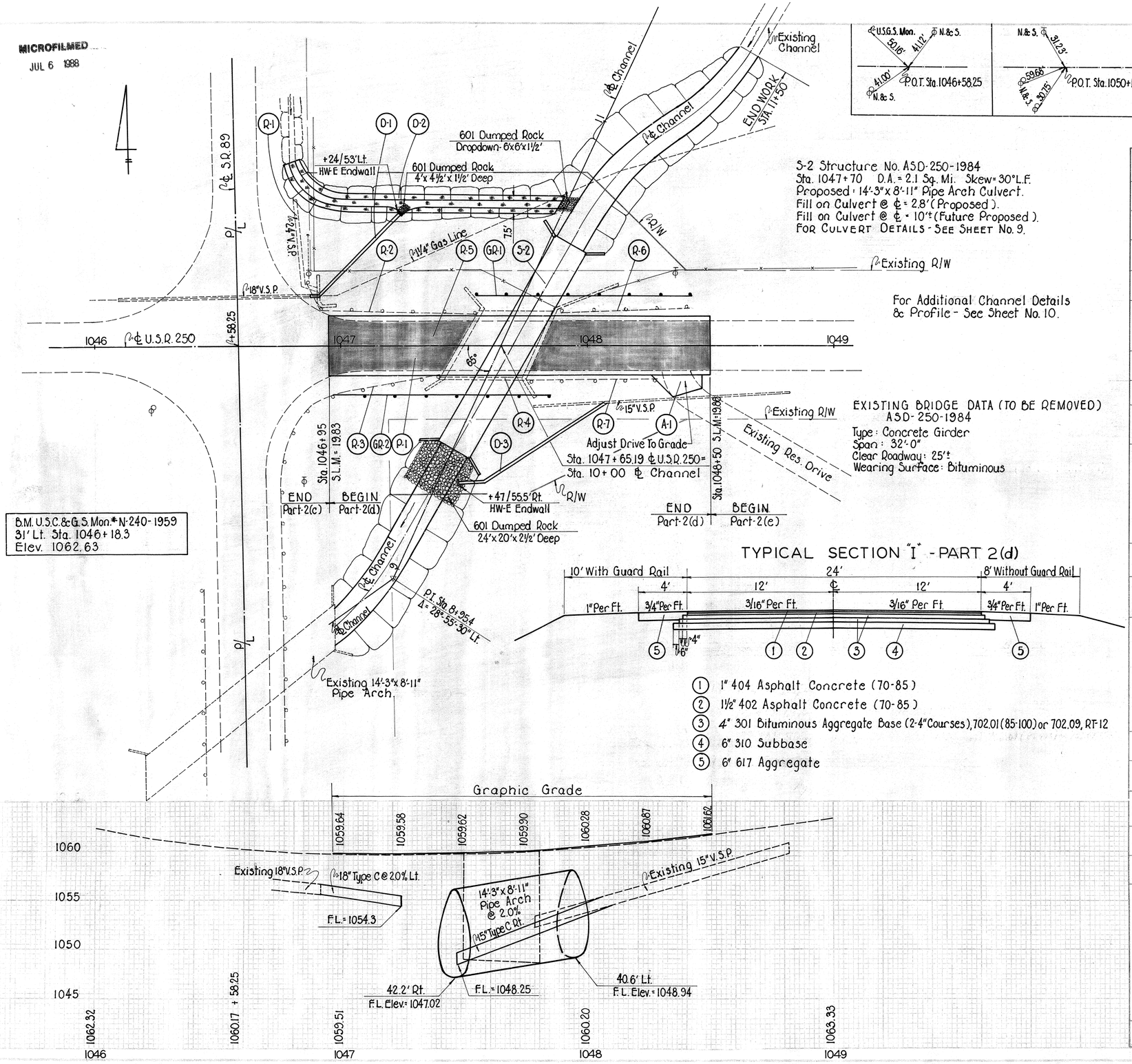
JUL 6 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)
PART-2(d)



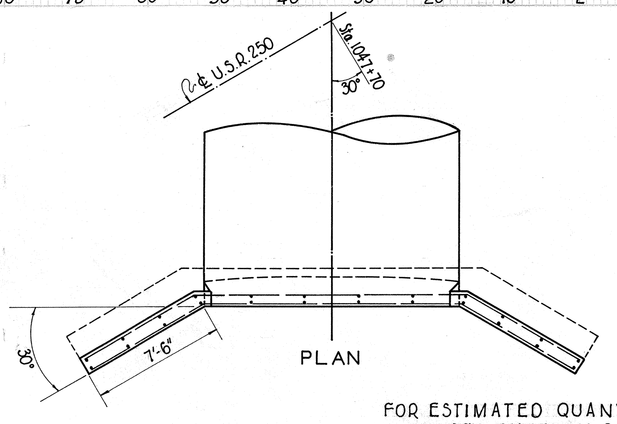
Ref. No.	Station	402 Asphalt Concrete Cu.Yds.	404 Asphalt Concrete Cu.Yds.	301 Bituminous Aggregate Base Cu.Yds.	310 Subbase Cu.Yds.	202 Existing Obstructions Removed & Disposed Of: Pipe 24" & Under Lin.Ft.	202 Guard Rail For Re-use Type-4 Lin.Ft.	202 Structure Lump	202 Pavement Sq.Yds.	601 Dumped Rock Channel Protection Cu.Yds.	602 Concrete Masonry Cu.Yds.	603 Conduit Class D Bedding Type C 15" Lin.Ft.	603 Conduit Class D Bedding Type C 18" Lin.Ft.	603 Conduit Type A 707.03-1 Gage 14-5/8" Lin.Ft.	606 Guard Rail Rebuilt Type-4 Lin.Ft.	617 Aggregate Cu.Yds.	667 Jute Matting Sq.Yds.	Bends & Branches 15" x 30° Bend	Bends & Branches 18" x 45° Bend	605 Aggregate Drains Lin.Ft.
A-1	1048+36 Rt.		1½"	8"	6"											2				
P-1	1046+95 to 1048+50	17	12	96	76											23				24
D-1	1046+88 to 1047+24 Lt.									1	0.30°		50				97		1	
D-2	1046+80 to 1047+93 Lt.									2								2		
D-3	1047+47 to 1048+08 Rt.										0.26°	70								
S-2	1047+70									44.4	23.44			96						
GR-1	1047+55 to 1048+42.5 Lt.														87.5					
GR-2	1046+97 to 1047+84.5 Rt.														87.5					
R-1	1046+82 to 1046+91 Lt.					42*														
R-2	1046+87 to 1047+55.5 Lt.						50													
R-3	1046+97 to 1047+40.5 Rt.						44													
R-4	1047+48 to 1047+81							Lump												
R-5	1046+95 to 1048+50								273											
R-6	1047+90.5 to 1048+40.5 Lt.						50													
R-7	1047+77.5 to 1048+27.5 Rt.						50													
Totals		17	12	96	76	42	194	Lump	273	47.4	24.00	70	50	96	175.0	25	97	2	1	24

*Includes Removal of Existing Headwall. ⊙ HW-E Endwall.

MICROFILMED JUL 6 1988

SEEDING End Width	SEEDING Sq. Yds.		END AREA Cut	END AREA Fill	C.U. YDS. Cut	C.U. YDS. Fill
	943	Total Carried to Sheet #5 / Totals Carried to Sheet #5			127	877
		1049+00 1063.33				
0		Ahead Back Sta. 1048+50 — 1048+50 END NEW PAVEMENT — Sta. 1048+50 Ahead	0	0		
4		Back	10	0		
15	15	1048+36 1061.06	12	10	6	3
	73				10	31
40		1048+12 1060.47	10	59		
	103				8	102
37		1047+88 1059.99	8	171		
	39				2	35
		END AREA x COS 35° Sta. 1047+81 Ahead	7	324		
		Back	0	577		
62		END WIDTH x Cos 35° — 1047+81 (35° L.F. Skew) 1059.90			22	632
	255	Deduct for pipe Arch				-222
		END AREAS x Cos 35° Sta. 1047+48 Ahead	36	456		
		Back	41	214		
77		END WIDTH x Cos 35° — 1047+48 (35° L.F Skew) 1059.54			10	65
	67					
74		1047+40 1059.48	26	221		
	183				37	161
69		1047+17 1059.48	34	43		
	170				27	55
		1046+95 BEGIN NEW PAVEMENT — Sta. 1046+95 Ahead	24	47		
		Back	16	47		
57		1046+92 1059.59			2	5
	38		15	47		
0		Sta. 1046+80 — 1046+80 BEGIN WORK — Sta. 1046+80	0	0	3	10

80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60



PLAN

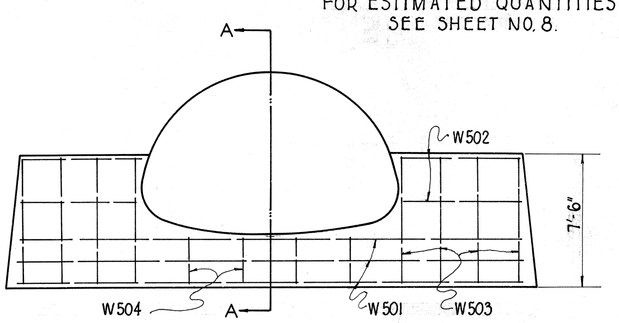
FOR ESTIMATED QUANTITIES SEE SHEET NO. 8.

STEEL LIST
(For Two Headwalls)

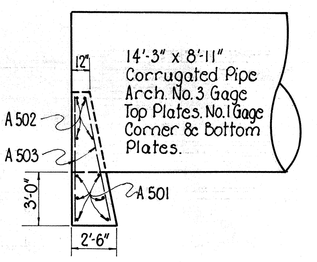
Mark	No.	Length	Weight
W501*	12	28'-9"	360
W502	16	7'-2"	120
W503	32	7'-2"	239
W504	16	2'-6"	42
Total (Included in 602)			761

*Field Bend.

NOTE: See Standard Drawing SP-53 for additional Details and Notes, with the following exceptions:
(a) Concrete shall be Class "C".
(b) The portion of the Arch which extends above the Headwall shall not be cut off to conform to the slope.



ELEVATION



SECTION A-A

HEADWALL DETAILS - ASD-250-1984 - STA. 1047+70

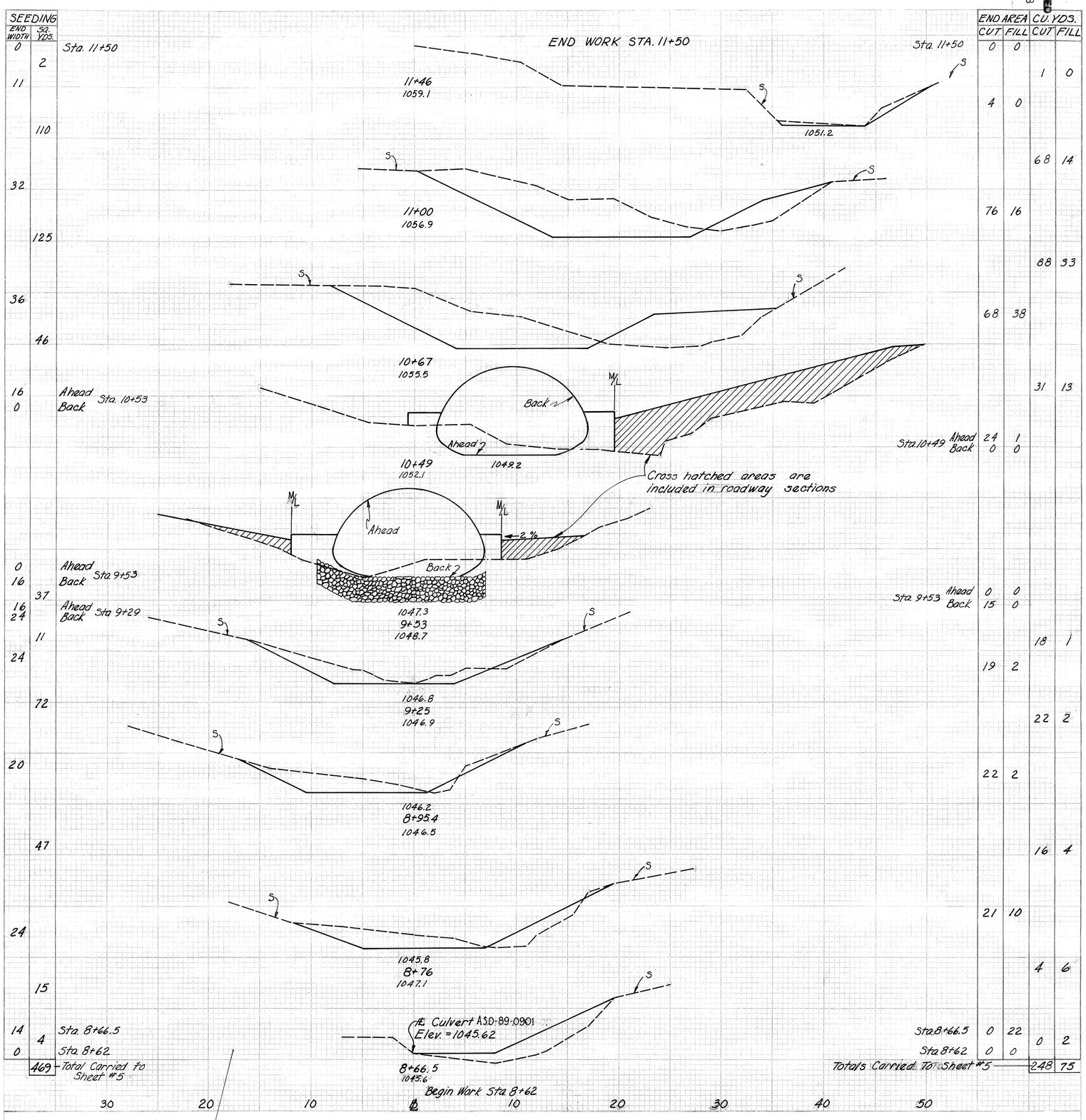
HEADWALL DETAILS-ASD-250-1984 & RDWY. SECTION

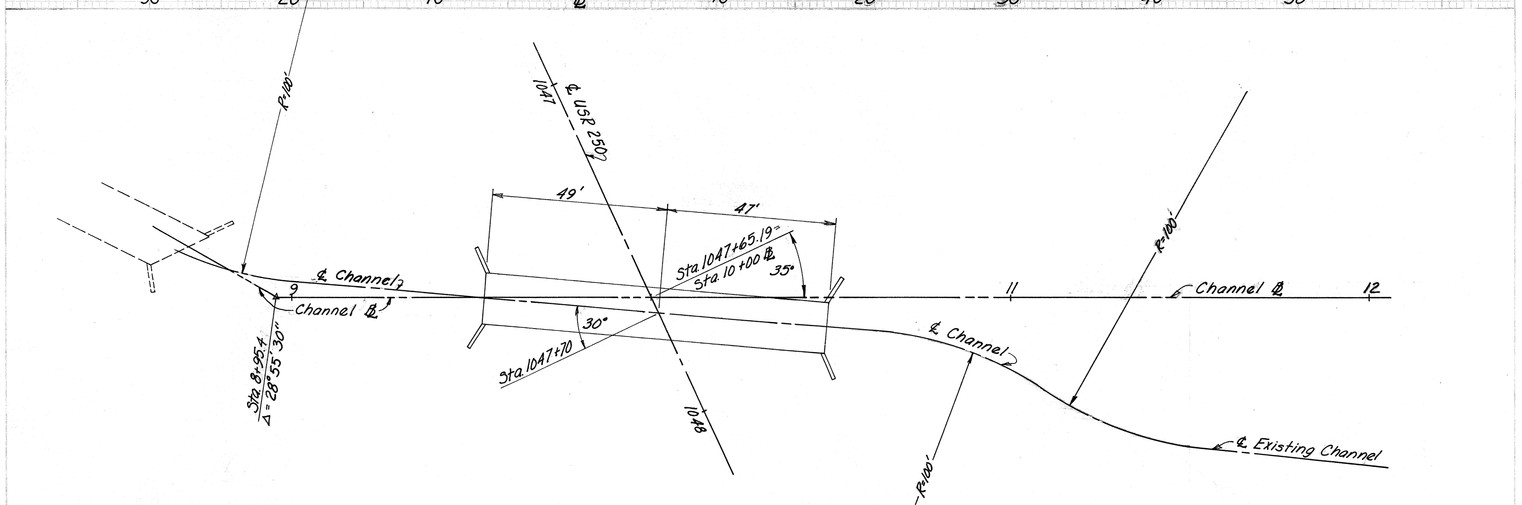
REG. NO. DESIGN	STATE	PROJECT
2	OHIO	

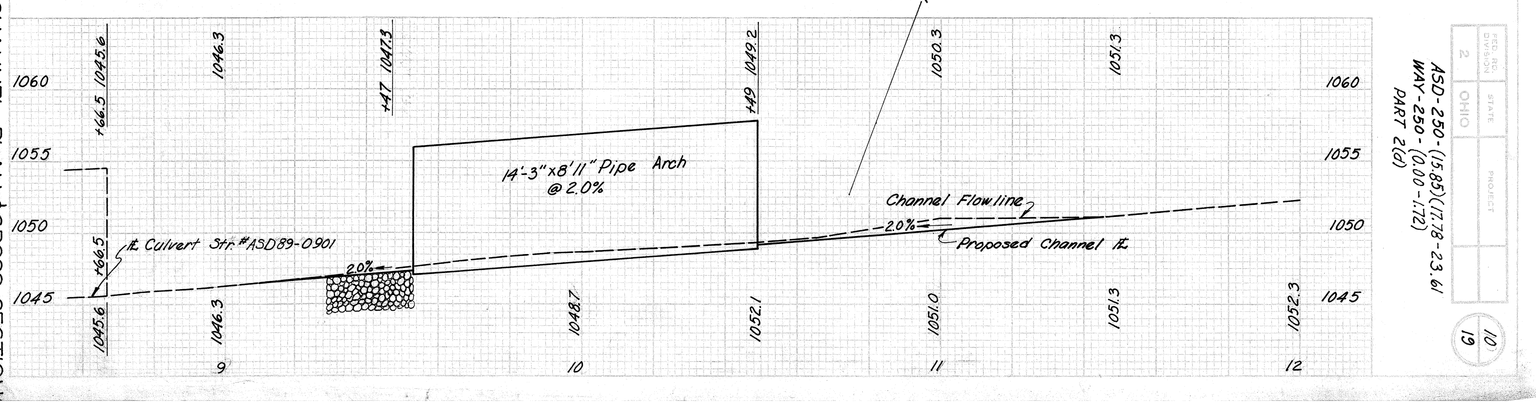
ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)
Part-2(d)

MICROFILMED
JUL 9 1998

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
0		Sta. 11+50	0	0		
	2				1	0
11			4	0		
	110				68	14
32			76	16		
	125				88	33
36			68	38		
	46				31	13
16		Ahead Sta. 10+53				
0		Back				
		Sta. 10+49 Ahead	24	1		
		Back	0	0		
0		Ahead Sta. 9+53				
16		Back				
	37					
16		Ahead Sta. 9+29	0	0		
24		Back	15	0		
	11				18	1
24			19	2		
	72				22	2
20			22	2		
	47				16	4
24			21	10		
	15				4	6
14		Sta. 8+66.5				
	4					
0		Sta. 8+62				
	469	Total Carried to Sheet #5				
		Sta. 8+66.5	0	22	0	2
		Sta. 8+62	0	0		
		Totals Carried To Sheet #5			248	75







ASD-250-(15.85)(17.78-23.61
WAY-250-(0.00-1.72)
PART 2(d)

DISTRICT	STATE	PROJECT
2	OHIO	

10/19

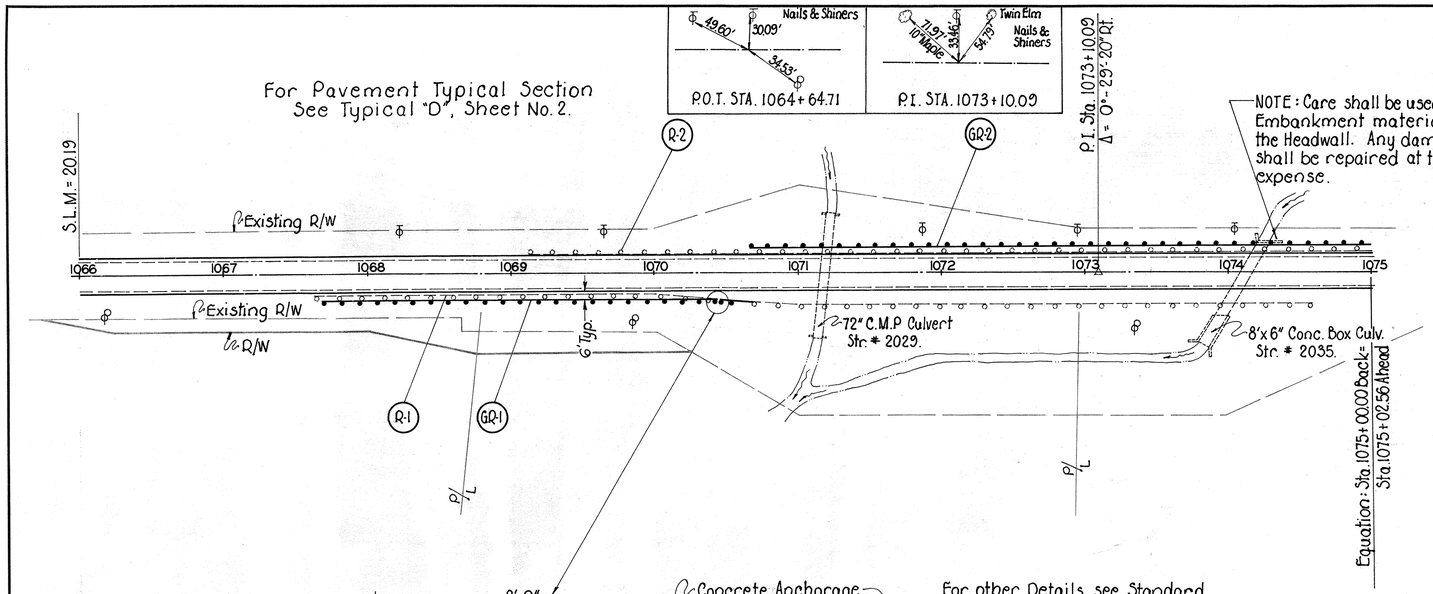
STR. ASD-250-1984 CHANNEL PLAN & CROSS SECTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

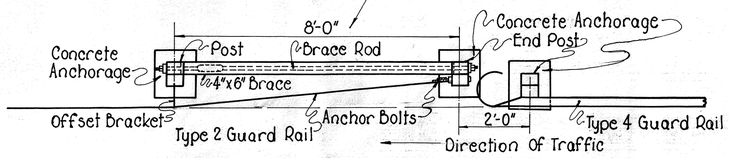
11
19

ASD-250-(15.85)(17.78)(23.61)
WAY-250-(0.00-1.72)
PART-2(e)

For Pavement Typical Section
See Typical "D", Sheet No. 2.



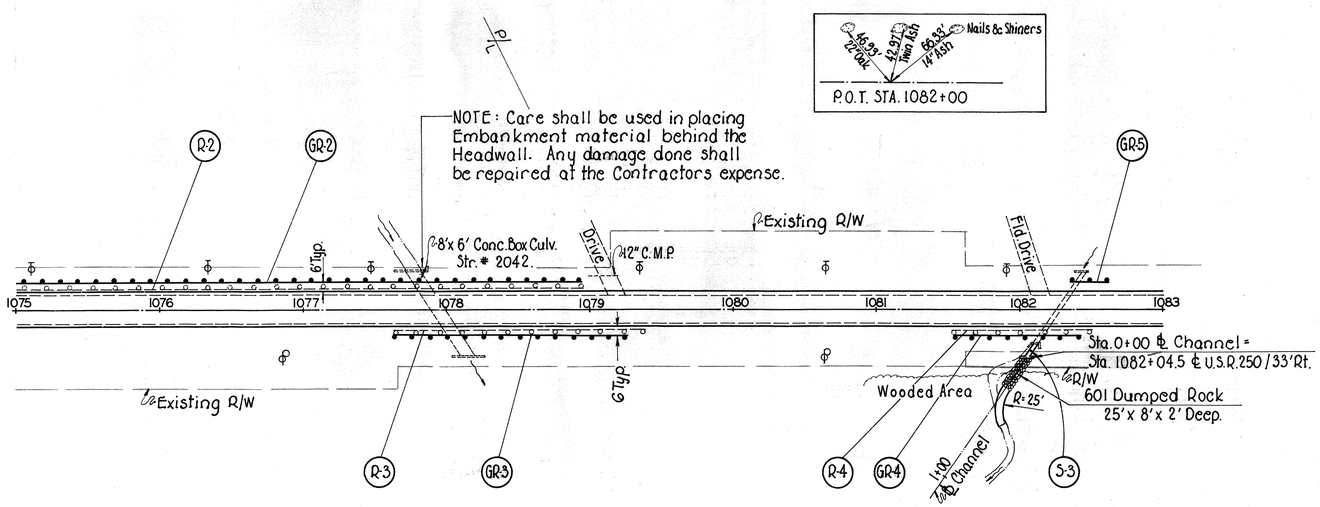
NOTE: Care shall be used in placing Embankment material behind the Headwall. Any damage done shall be repaired at the Contractors expense.



DETAIL OF TRANSITION FROM TYPE-4 TO TYPE-2 GUARD RAIL

For other Details see Standard Construction Drawings GR-1, GR-2 & GR-2A.

Ref. No.	Station	202 Guard Rail Type-2 Removed For Re-use (Lin. Ft.)	202 Guard Rail Type-2 Removed For Storage (Lin. Ft.)	202 Portion of Existing Structure Removed (Lump)	606 Guard Rail Type-4 (Lin. Ft.)	606 Guard Rail Type-2 Rebuilt (Lin. Ft.)	606 Guard Rail Type-4 Rebuilt (Lin. Ft.)	601 Dumped Rock Channel Protection (Cu.Yds.)	503 Excavation For Structures (Cu.Yds.)	509 Reinforcing Steel (Lbs.)	510 Dowel Holes (Each)	511 Concrete for Structures Class C (Cu.Yds.)
GR-1	1067+68 to 1070+69 Rt.				275.0	24						
GR-2	1070+67 to 1078+92 Lt.				812.5		12.5					
GR-3	1077+63 to 1079+22.5 Rt.				162.5							
GR-4	1081+54 to 1082+41.5 Rt.				87.5							
GR-5	1082+36 to 1082+61 Lt.				25.0							
R-1	1067+63.5 to 1070+69 Rt.	24	281.5									
R-2	1069+25 to 1078+94 Lt.		969.0									
R-3	1077+62 to 1079+38 Rt.		176.0									
R-4	1081+53.5 to 1082+49.5 Rt.		96.0									
S-3	1082+27			Lump				14.8	2	570	16	5.5
	Totals	24	1522.5	Lump	1362.5	24	12.5	14.8	2	570	16	5.5

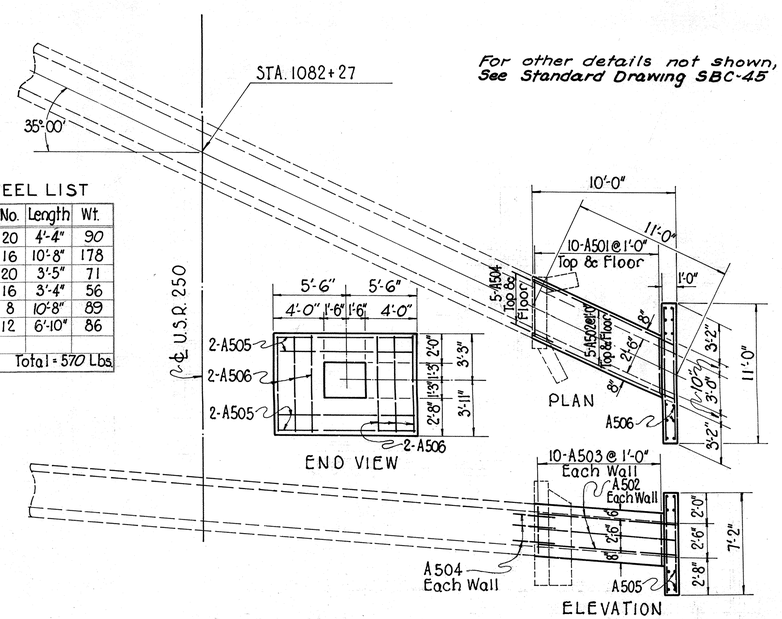


NOTE: Care shall be used in placing Embankment material behind the Headwall. Any damage done shall be repaired at the Contractors expense.

S-3 Structure No. ASD-250-2052
Sta. 1082+27 Skew = 35° L.F.
Existing 30" C.I.P. & 2½' x 2½' Concrete Box Culvert.
Remove Rt. Headwall & Wingwalls and Construct Box Culvert Extension with New Headwall. (SEE DETAIL).

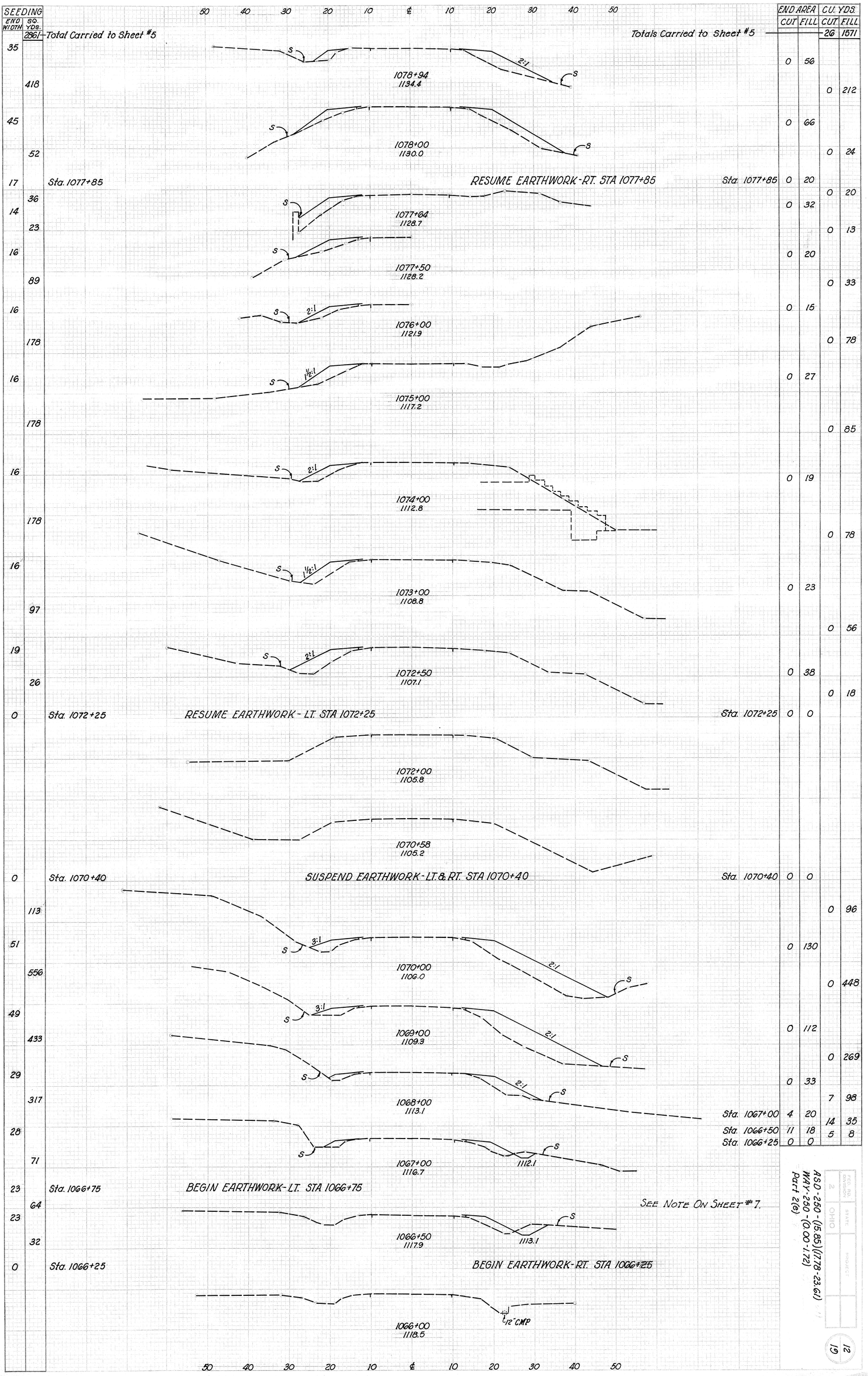
STEEL LIST

Mark	No.	Length	Wt.
A501	20	4'-4"	90
A502	16	10'-8"	178
A503	20	3'-5"	71
A504	16	3'-4"	56
A505	8	10'-8"	89
A506	12	6'-10"	86
		Total = 570 Lbs.	

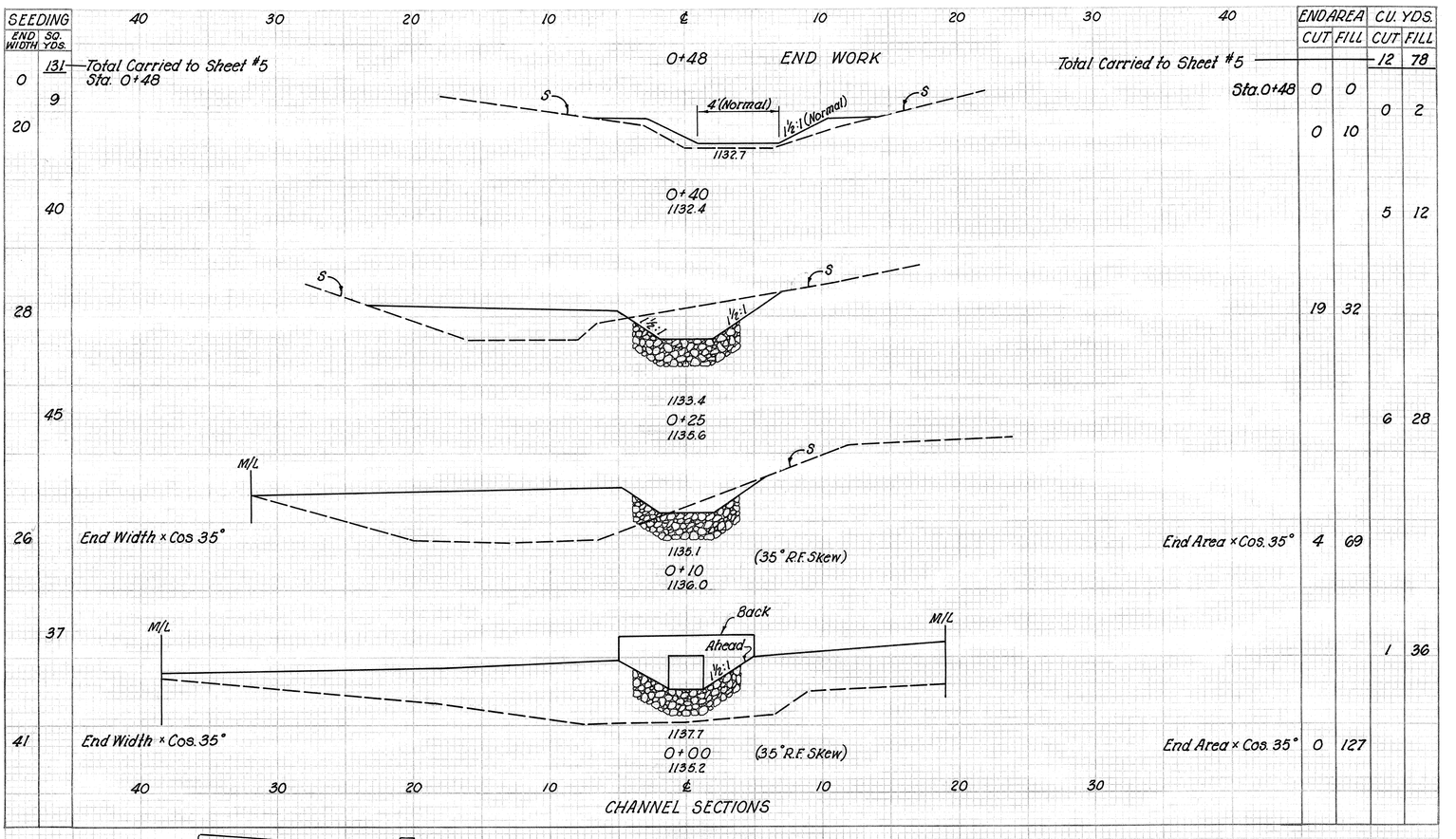


S-3 STRUCTURE NO. ASD-250-2052 STA. 1082+27

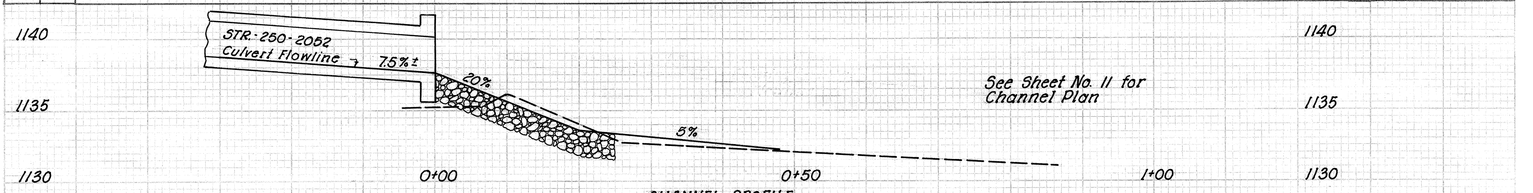
GUARD RAIL REPLACEMENT & CULVERT EXTENSION ASD-250-2051


SEEDING
END WIDTH
SQ. YDS.
286 Total Carried to Sheet #5
Totals Carried to Sheet #5
END AREA
CUT
FILL
CU. YDS.
CUT
FILL
26
1571
50 40 30 20 10 ℄ 10 20 30 40 50
35
418
1078+94
1134.4
0 56
0 212
45
52
1078+00
1130.0
0 66
0 24
17
Sta. 1077+85
RESUME EARTHWORK-RT. STA 1077+85
Sta. 1077+85
0 20
0 20
36
14
23
1077+64
1128.7
0 32
0 13
16
89
1077+50
1128.2
0 20
0 33
16
178
1076+00
1121.9
0 15
0 78
16
178
1075+00
1117.2
0 27
0 85
16
178
1074+00
1112.8
0 19
0 78
16
97
1073+00
1108.8
0 23
0 56
19
26
1072+50
1107.1
0 38
0 18
0
Sta. 1072+25
RESUME EARTHWORK - LT. STA 1072+25
Sta. 1072+25
0 0
1072+00
1105.8
1070+58
1105.2
0
Sta. 1070+40
SUSPEND EARTHWORK-LT.& RT. STA 1070+40
Sta. 1070+40
0 0
113
51
556
1070+00
1106.0
0 130
0 96
0 448
49
433
1069+00
1109.3
0 112
0 269
29
317
1068+00
1113.1
0 33
7 98
28
71
1067+00
1116.7
1112.1
Sta. 1067+00
Sta. 1066+50
Sta. 1066+25
4 20
11 18
0 0
14 35
5 8
23
Sta. 1066+75
BEGIN EARTHWORK-LT. STA 1066+75
SEE NOTE ON SHEET #7.
23
64
32
1066+50
1117.9
1113.1
0
Sta. 1066+25
BEGIN EARTHWORK-RT. STA 1066+25
1066+00
1118.5
12" CMP
50 40 30 20 10 ℄ 10 20 30 40 50
ASD-250-(15.85)(1778-23.61)
MAY-250-(0.00-1.72)
Part 2(e)
OHIO
12
19

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	131	Total Carried to Sheet #5			12	78
0		Sta. 0+48 — 0+48 END WORK — Total Carried to Sheet #5				
	9	Sta. 0+48	0	0		
20			0	10	0	2
	40				5	12
28			19	32		
	45				6	28
26		End Width × Cos 35° — End Area × Cos. 35°	4	69		
	37				1	36
41		End Width × Cos. 35° — End Area × Cos. 35°	0	127		

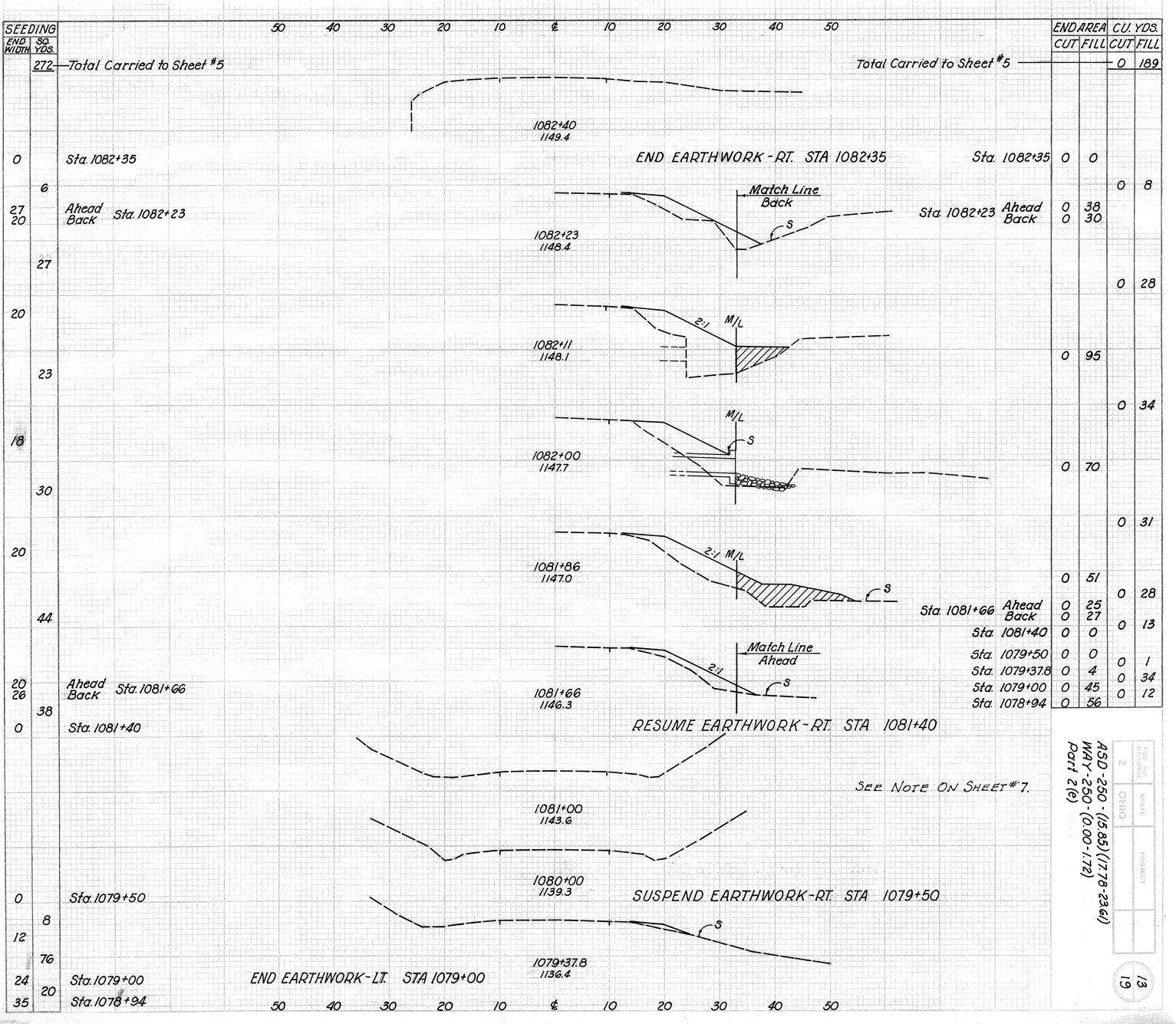


CHANNEL SECTIONS



CHANNEL PROFILE
STR. ASD-250-2052

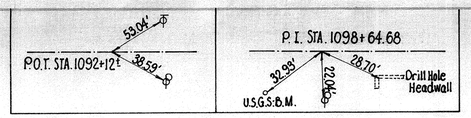
SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
	272	Total Carried to Sheet #5			0	189
0		Sta. 1082+35 — END EARTHWORK-RT. STA 1082+35 — Sta. 1082+35	0	0		
	6				0	8
27		Ahead	0	38		
20		Back Sta. 1082+23 — Sta. 1082+23 Back	0	30		
	27				0	28
20						
	23		0	95		
					0	34
18						
	30		0	70		
					0	31
20						
	44		0	51	0	28
		Sta. 1081+66 Ahead	0	25		
		Back	0	27	0	13
		Sta. 1081+40	0	0		
		Sta. 1079+50	0	0	0	1
		Sta. 1079+37.8	0	4	0	34
20		Ahead				
26		Back Sta. 1081+66 — Sta. 1079+00	0	45	0	12
	38					
0		Sta. 1081+40 — RESUME EARTHWORK-RT. STA 1081+40 — Sta. 1078+94	0	56		
0		Sta. 1079+50 — SUSPEND EARTHWORK-RT. STA 1079+50				
12	8					
	76					
24		Sta. 1079+00 — END EARTHWORK-LT. STA 1079+00				
35	20	Sta. 1078+94				



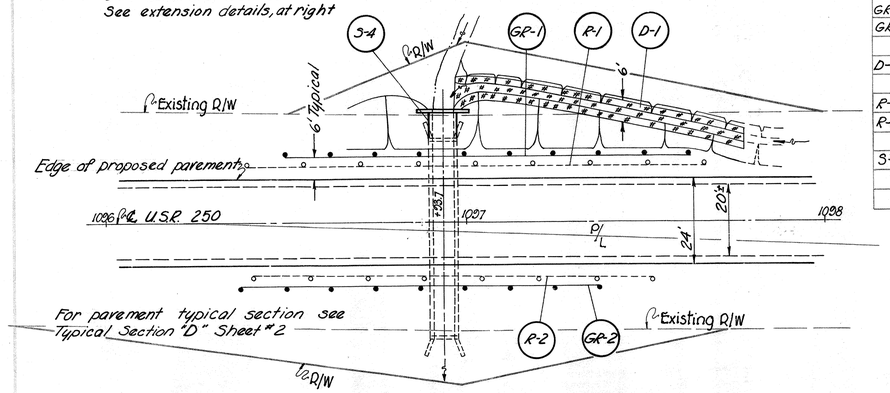
SEE NOTE ON SHEET #7.

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)
Part 2(e)

REG. NO. DIVISION	STATE	PROJECT
2	OHIO	



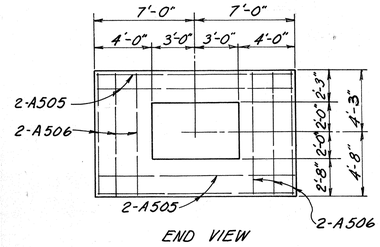
S-4 Str.# ASD-250-2080- Sta. 1097+93.7
6'x4' Concrete Box Culvert
See extension details, at right



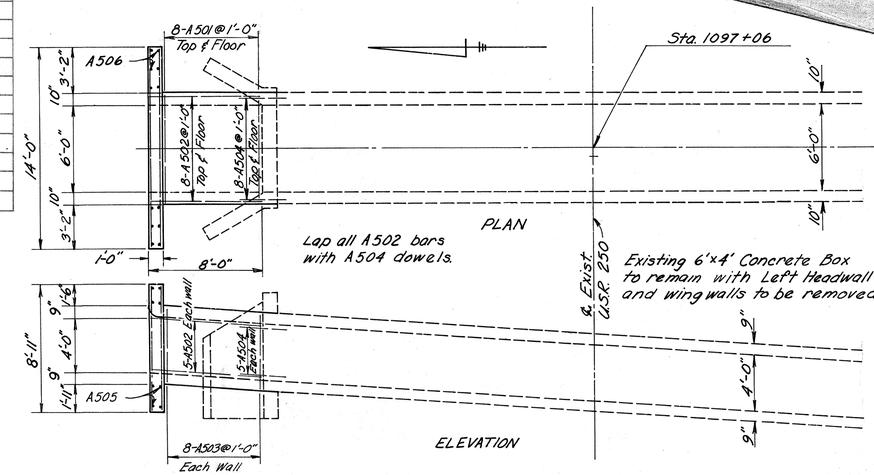
REF NO.	STATION	202 Guard Rail Type 2 Removed for Storage	202 Portions of Exist. Structures Removed	606 Guard Rail Type 4	667 Jute Matting	503 Excavation for Structure	509 Reinforcing Steel	510 Dowel Holes	511 Concrete for Structures
		Lin. Ft.	Lump	Lin. Ft.	Sq. Yds.	Cu. Yds.	Lbs.	Each	Cu. Yds.
GR-1	STA. 1096+50 to Sta. 1097+62.5			112.5					
GR-2	Sta. 1096+37.5 to Sta. 1097+37.5			100					
D-1	Sta. 1096+97 to Sta. 1097+78				55				
R-1	Sta. 1096+39 to Sta. 1097+67	128							
R-2	Sta. 1096+50.5 to Sta. 1097+52.5	112							
S-4	Sta. 1096+93.7 Lt.		Lump			3.6	729	26	8.6
	Totals	240	Lump	212.5	55	3.6	729	26	8.6

STEEL LIST

Mark	No.	Length	Wt.
A501	16	7'-4"	122
A502	26	7'-8"	210
A503	16	5'-2"	86
A504	26	3'-4"	90
A505	8	13'-8"	114
A506	12	8'-7"	107
		Total=	729

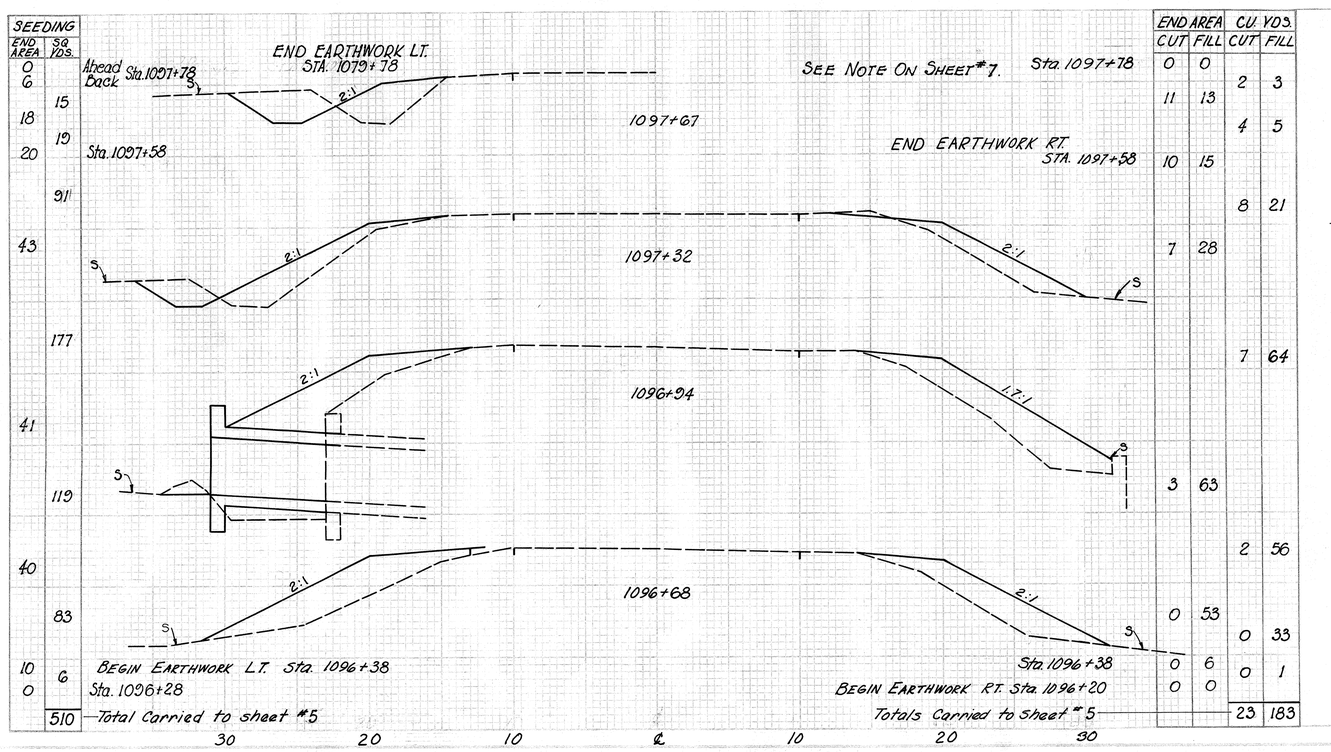


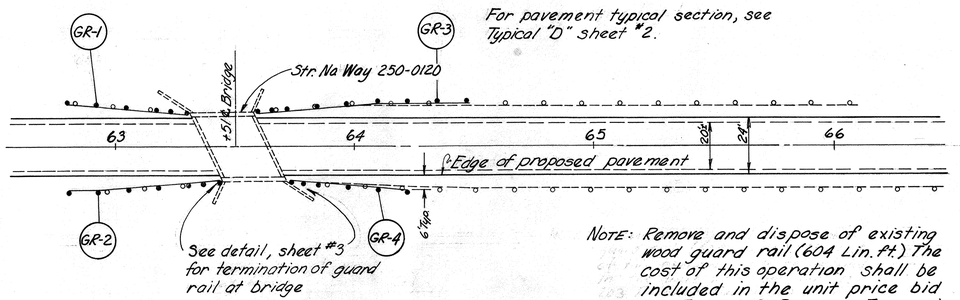
END VIEW



For details not shown,
See Standard Drawing SBC-45

TYPE: Standard 6'x4' Concrete Box Extension
MATERIAL: Reinforced Concrete, Class C
LENGTH: 8'-0" Extension
WORK REQUIRED: Remove existing Left (North) headwall and wingwalls and build new 6'x4' Concrete extension and one headwall.





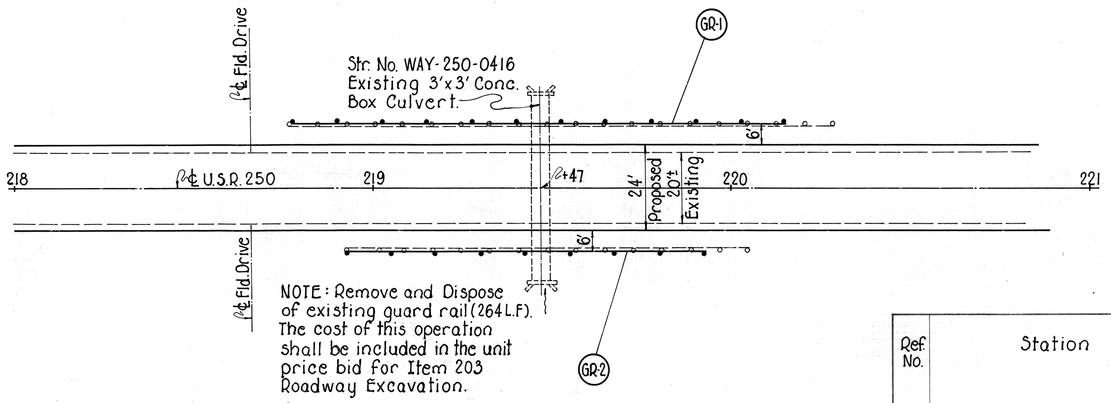
NOTE: Remove and dispose of existing wood guard rail (604 Lin. ft.) The cost of this operation shall be included in the unit price bid for Item 203 Roadway Excavation.

ESTIMATED QUANTITIES		
Ref. No.	Station Limits	606 Guard Rail Type 4 Lin. Ft.
GR-1	62+79.5 to 63+29.5	50
GR-2	62+80 to 63+42.5	62.5
GR-3	63+59.5 to 64+47	87.5
GR-4	63+72 to 64+22	50
TOTAL		250.0

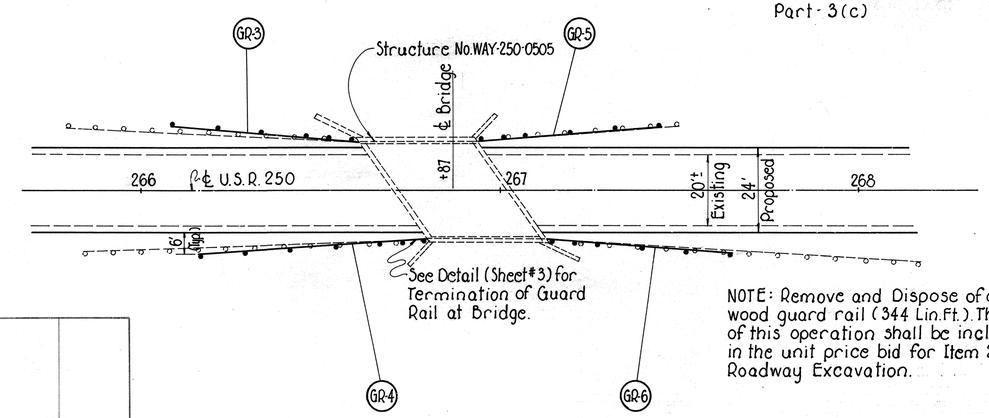
STRUCTURE WAY-250-0120
GUARD RAIL REPLACEMENT

EXTENSION DETAILS-ASD-250-2080 & GUARD RAIL REPLAC. WAY-250-0120

ASD-250-(15.85)(17.78-23.61)
WAY-250-(0.00-1.72)
Part-3(c)

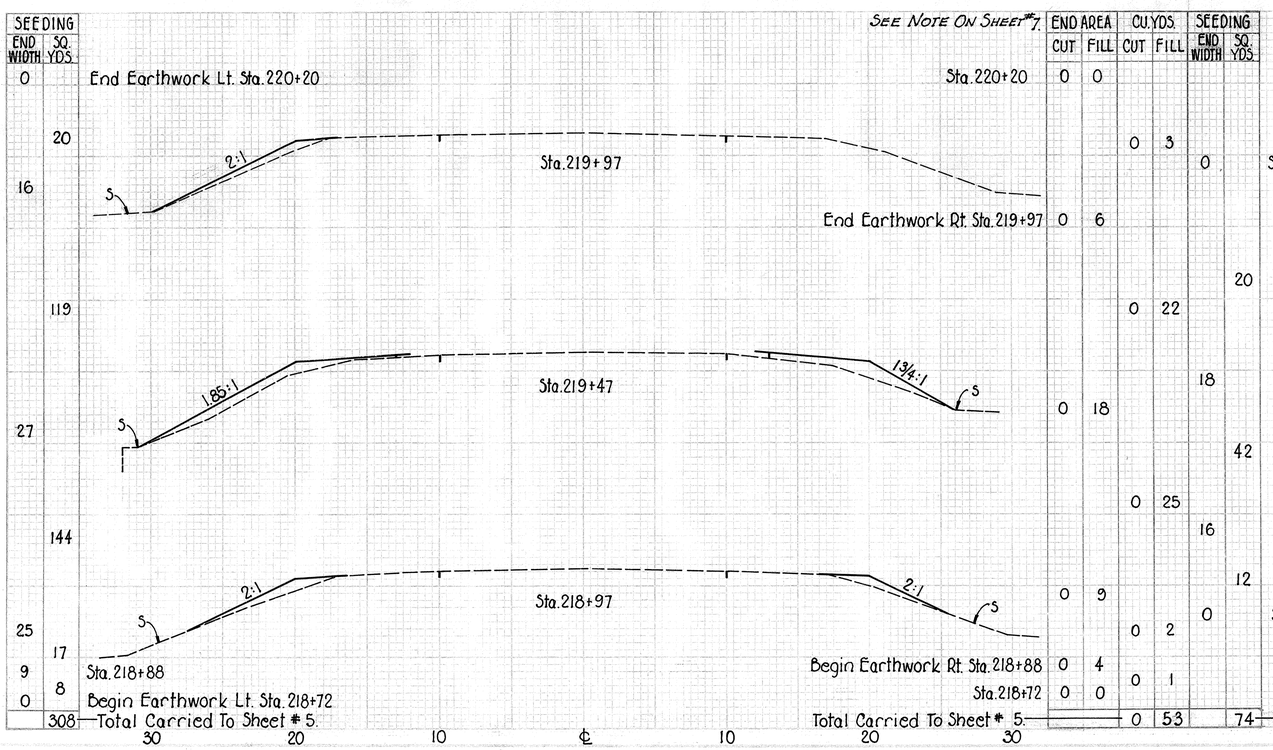


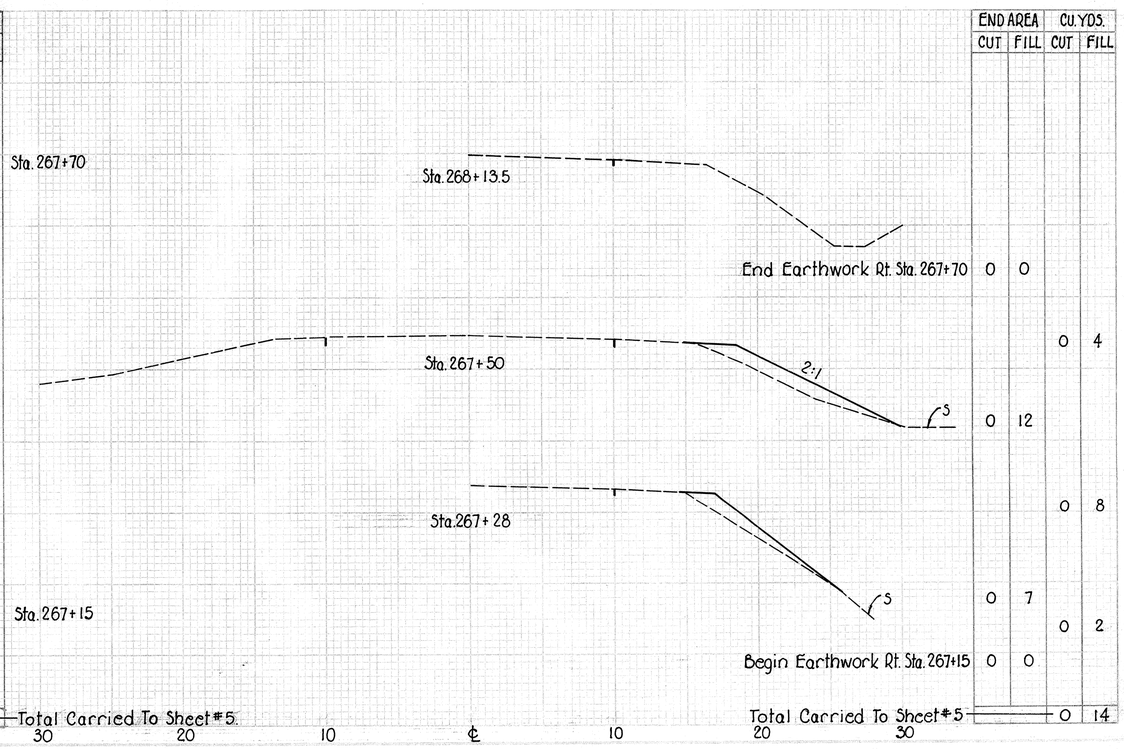
NOTE: Remove and Dispose of existing guard rail (264 L.F.). The cost of this operation shall be included in the unit price bid for Item 203 Roadway Excavation.



NOTE: Remove and Dispose of existing wood guard rail (344 Lin.Ft.). The cost of this operation shall be included in the unit price bid for Item 203 Roadway Excavation.

Ref. No.	Station	606 Guard Rail Type-4 Lin.Ft.		
GR-1	218+77.5 to 220+15 Lt.	137.5		
GR-2	218+92.5 to 219+92.5 Rt.	100.0		
GR-3	266+09 to 266+59 Lt.	50.0		
GR-4	266+16.5 to 266+79 Rt.	62.5		
GR-5	266+94.5 to 267+44.5 Lt.	50.0		
GR-6	267+14.5 to 267+64.5 Rt.	50.0		
	Totals	450.0		





FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

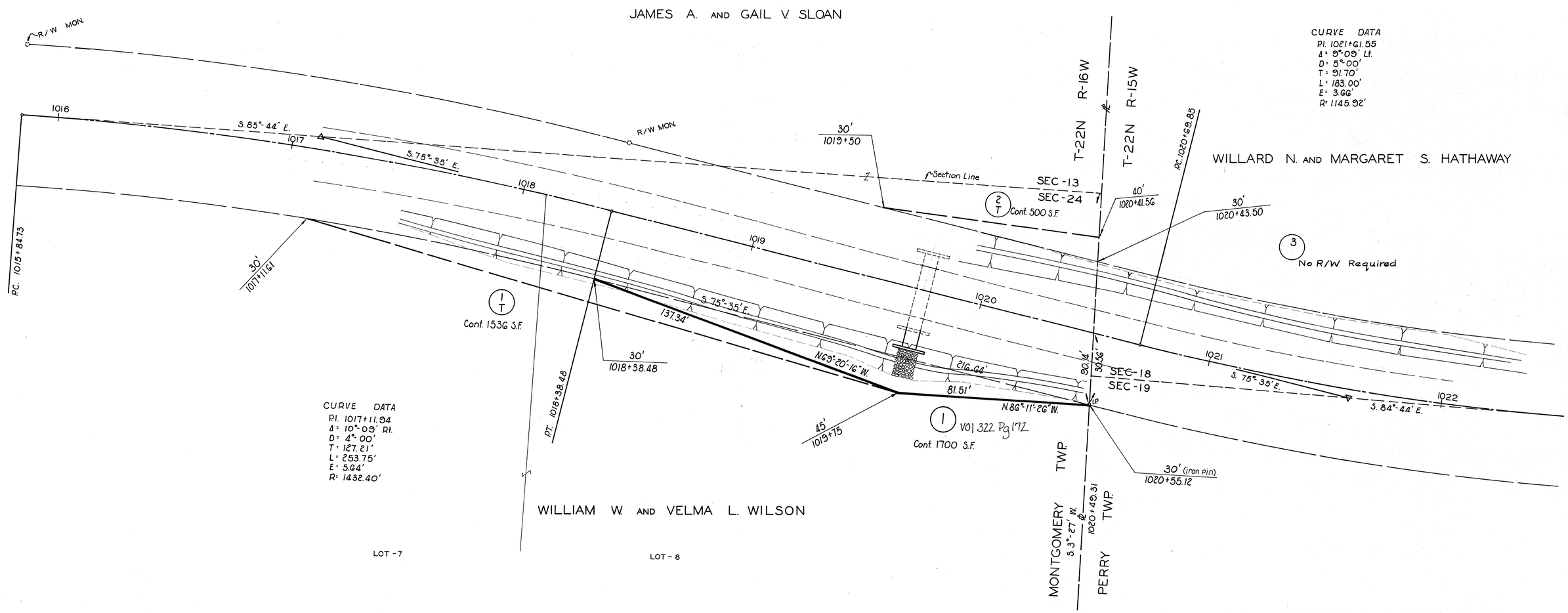
16 / 19

1 / 4

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)
RIGHT OF WAY PLAN
SCALE: 1" = 20'

STR. NO. ASD-250-1931

NOTE :- P.I. Sta. 1017+11.94 = P.I. Sta. 204+55.86 on R/W plan Asd S.H. 141 Sec C, D, A



CURVE DATA
P.I. 1021+61.55
Δ = 9°-09' Lt.
D = 5°-00'
T = 91.70'
L = 183.00'
E = 3.66'
R = 1145.92'

CURVE DATA
P.I. 1017+11.94
Δ = 10°-09' Rt.
D = 4°-00'
T = 127.21'
L = 253.75'
E = 5.64'
R = 1432.40'

TYPE FUNDS - STATE

PLAN COMPLETED 4-22-66	
REV. DATE	DESCRIPTION
6-30-66	Parcel 3T deleted.

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)
STR. NO. ASD-250-1931

MONTGOMERY TWP. SEC-13 & 24 T-22N R-16W
PERRY TWP. SEC-18 & 19 T-22N R-15W

RIGHT OF WAY

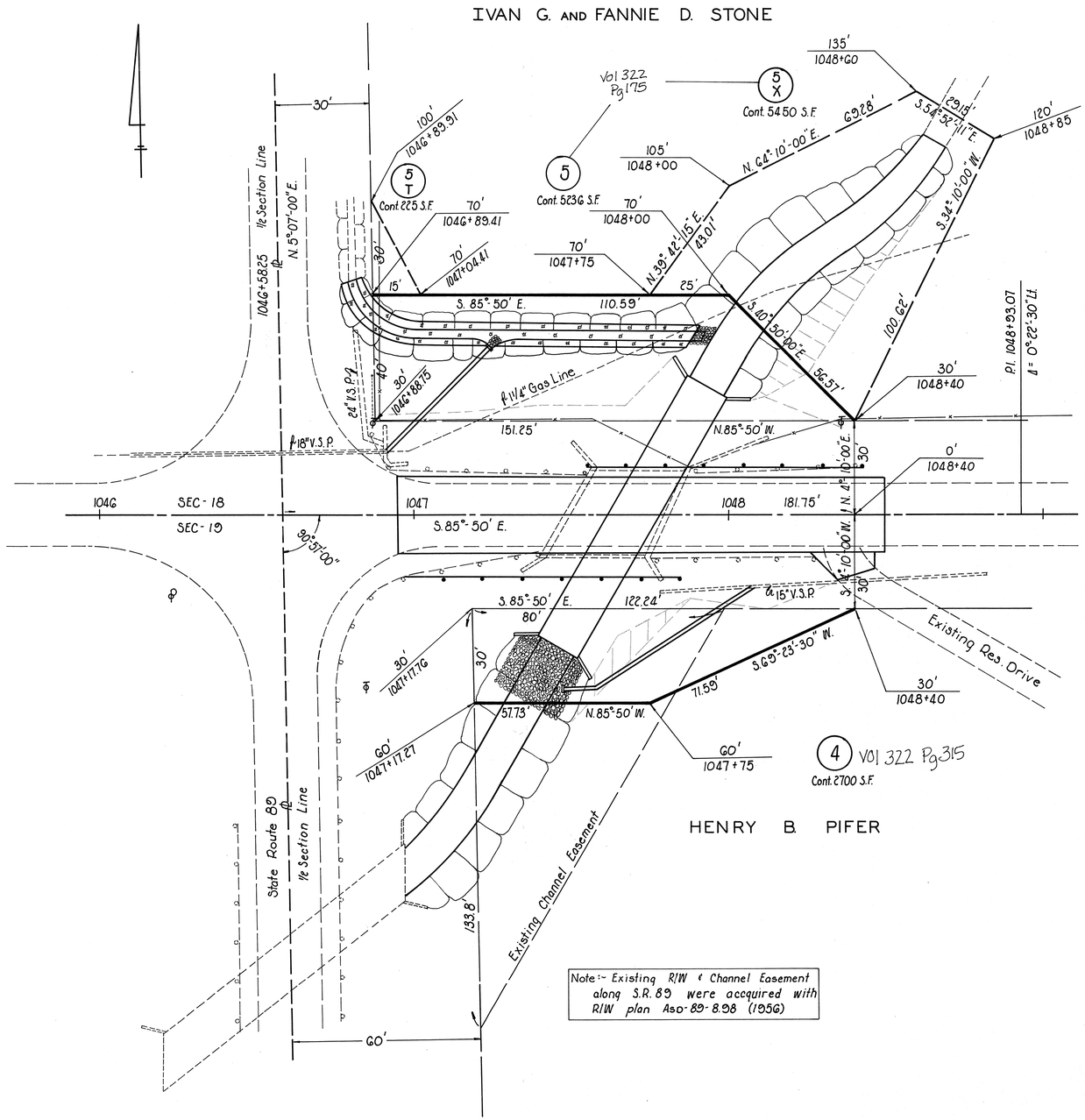
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

17 / 19

2 / 4

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)
RIGHT OF WAY PLAN
SCALE: 1" = 20'

STR. NO. ASD-250-1984



Note:- Existing R/W & Channel Easement along S.R. 89 were accquired with R/W plan Aso-89-8.98 (1956)

TYPE FUNDS - STATE

PLAN COMPLETED 4-22-66	
REV DATE	DESCRIPTION

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)
STR. NO. ASD-250-1984

PERRY TOWNSHIP SEC-18 & 19 T-22N R-15W

SHEET 2/4

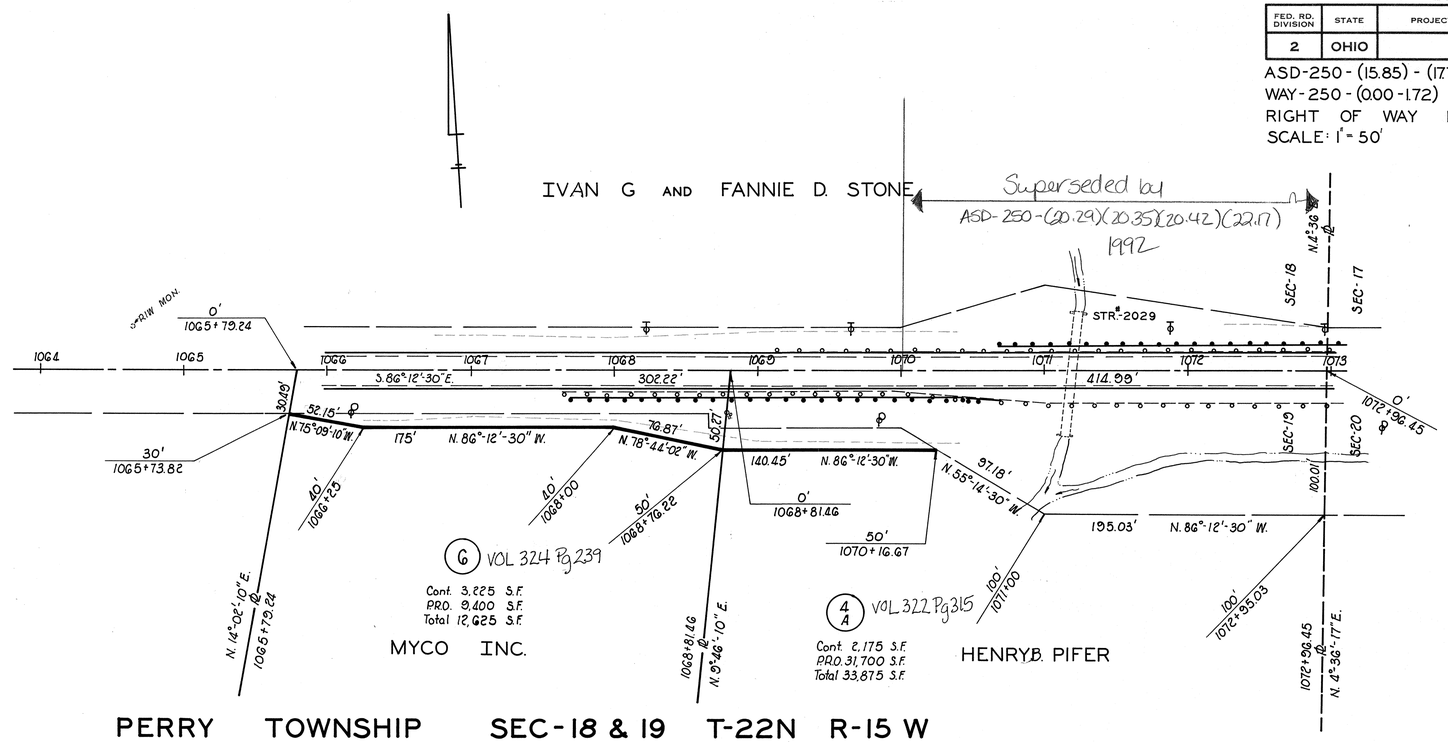
RIGHT OF WAY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

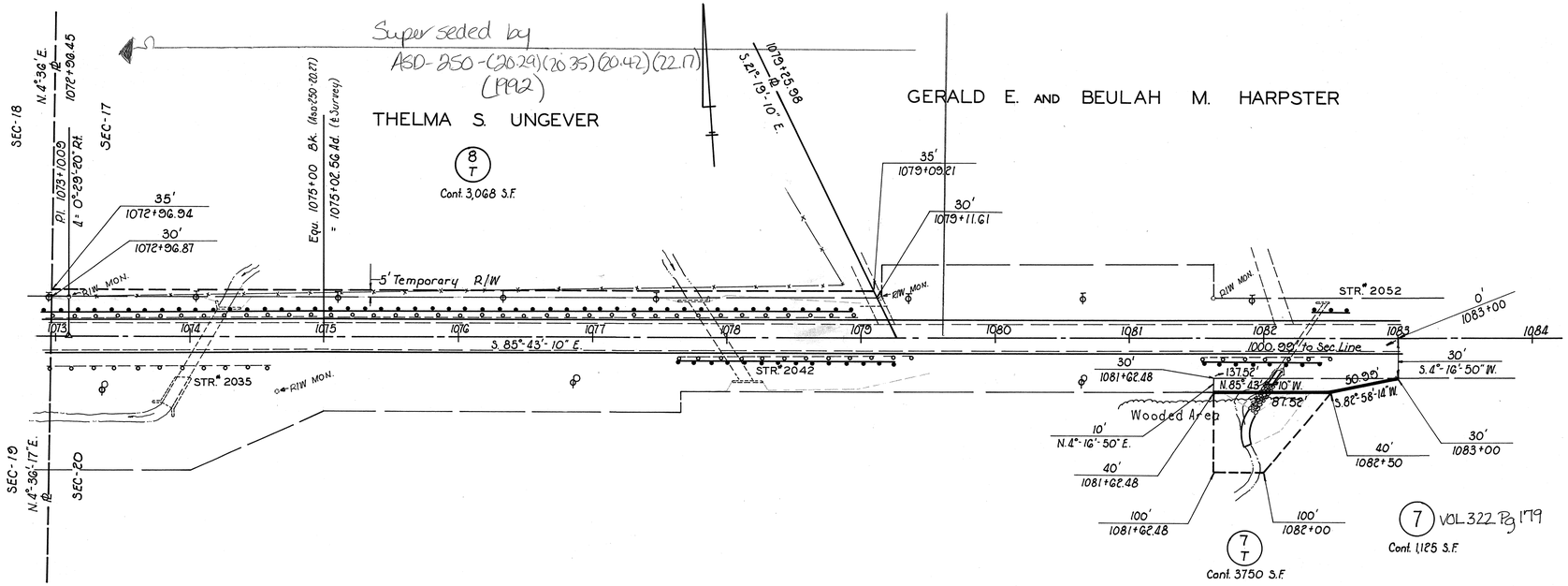
18
19

3
4

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)
RIGHT OF WAY PLAN
SCALE: 1" = 50'



PERRY TOWNSHIP SEC-18 & 19 T-22N R-15 W



CARLTON JOHN AND BILLIE HARPSTER

ASD-250-(15.85)-(17.78-23.61)
WAY-250-(0.00-1.72)

PERRY TOWNSHIP SEC-17 & 20 T-22N R-15W

TYPE FUNDS - STATE

PLAN COMPLETED 4-22-66	
REV. DATE	DESCRIPTION

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

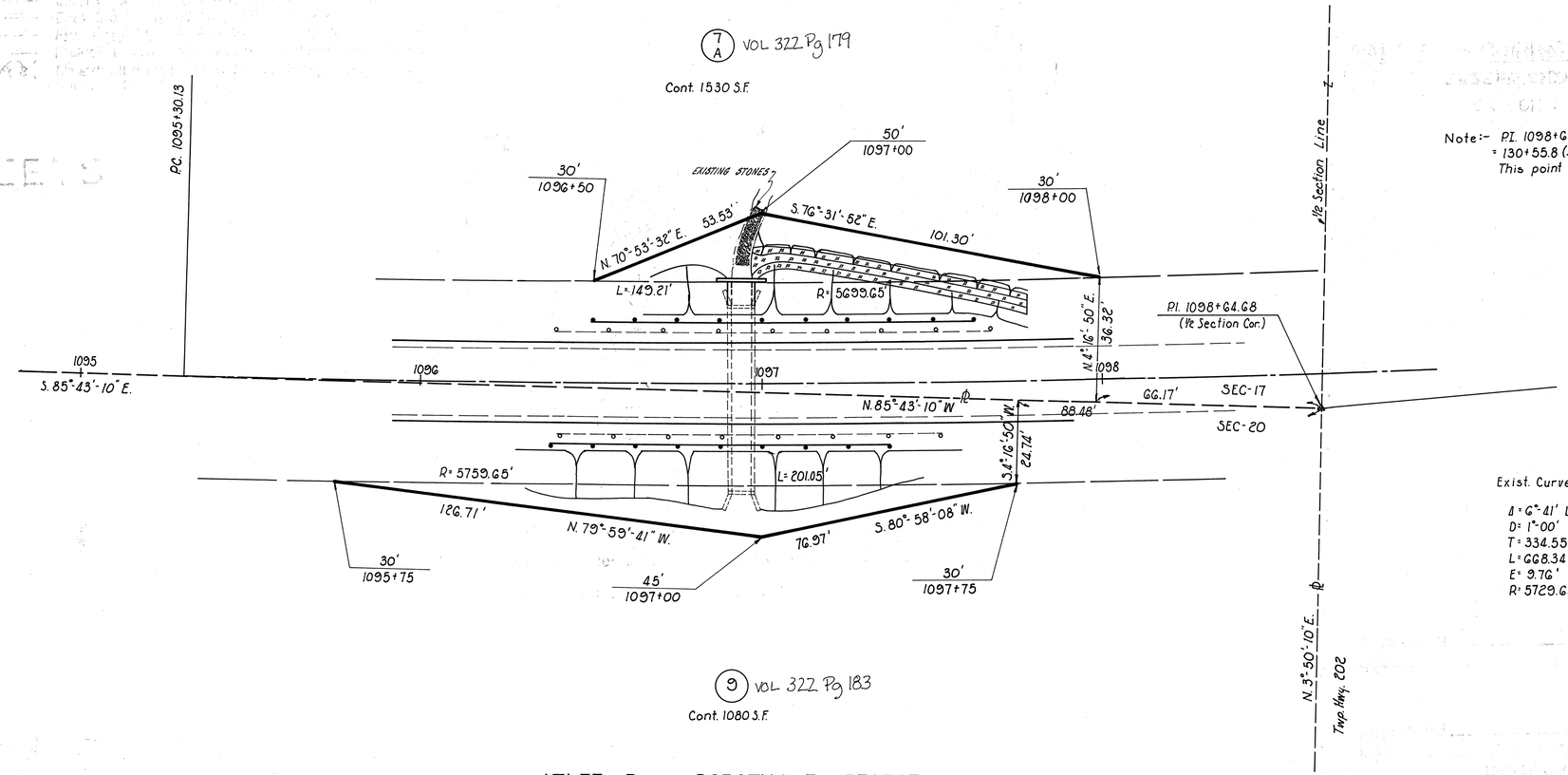
19/19

4/4

ASD-250-(15.85)-(17.78-23.16)
WAY-250-(0.00-1.72)
RIGHT OF WAY PLAN
SCALE 1" = 20'

STR. NO. ASD-250-2080

CARLTON JOHN AND BILLIE HARPSTER



Note:- P.I. 1098+64.68 & Survey
= 130+55.8 (S.H.-141 Sec. C, D, A) & (S.H. 141 Sec. B)
This point also S.L.M. 20.81

Exist. Curve Data

Δ = 6°-41' Lt.
D = 1°-00'
T = 334.55'
L = 668.34'
E = 9.76'
R = 5729.65'

ATLEE P. AND DOROTHY E. PEARCE

TYPE FUNDS - STATE

PLAN COMPLETED 4-22-66	
REV. DATE	DESCRIPTION

ASD-250-(15.85)-(17.78-23.16)
WAY-250-(0.00-1.72)
SHEET 4/4

PERRY TOWNSHIP SEC-17 & 20 T-22N R-15W