MICROFILMED
MAY 6 1968

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OCT 18 1978
REPRODUCTION

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

F-591(6)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-591(6)	

VAN WERT COUNTY
VAN-224-9.34

1 / 99

VAN-224-9.34

VAN WERT COUNTY

PLEASANT TOWNSHIP

GRADE SEPARATION WITH THE PENNA. RAIL ROAD

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 OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

CONVENTIONAL SIGNS

RIGHT-OF-WAY ——— R/W ———
LIMITED ACCESS RIGHT-OF-WAY ——— L.A. R/W ———
STATE LINE
COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CENTER LINE
CORPORATION LINE
PROPERTY LINE
FENCE LINE
GUARD RAIL (EXISTING)
GUARD RAIL (PROPOSED)
RAILROAD
POWER POLES
TELEPHONE POLES
TREES OR STUMPS (EXISTING)
TREES OR STUMPS (TO BE REMOVED)

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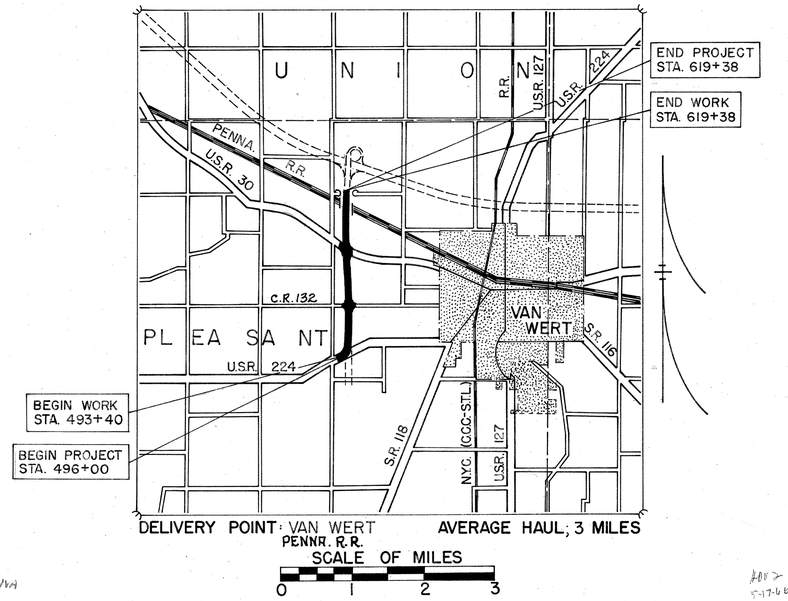
RIGHT-OF-WAY	82-99

LINE DATA

BEGIN PROJECT STA. 496+00 END PROJECT STA. 619+38
NO ADDITIONS OR DEDUCTIONS
TOTAL LENGTH OF PROJECT 12,338.00 LIN. FT. OR 2.336 MILES

BEGIN WORK STA. 493+40 END WORK STA. 619+38
ADD FOR APPROACH
STA. 0+12 TO STA. 3+75 (EXIST. 224) = 363.00 LIN. FT.
TOTAL LENGTH OF WORK 12,961.00 LIN. FT. OR 2.454 MILES



LOCATION MAP

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS

SCALE

PLAN	1 INCH = 50 FEET
PROFILE (HORIZONTAL)	1 INCH = 50 FEET
PROFILE (VERTICAL)	1 INCH = 5 FEET
CROSS SECTIONS	1 INCH = 10 FEET

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 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 NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Norman R. Penn
DATE 7-22-65 DIVISION DEPUTY DIRECTOR

APPROVED C. H. Alvarez
DATE 5-17-66 ENGINEER OF BRIDGES

APPROVED R. M. Ricketts
DATE 5-25-66 ENGINEER OF LOCATION AND DESIGN

APPROVED W. E. Shultz
DATE 5-25-66 DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

APPROVED T. H. Board
DATE 6-7-66 DEPUTY DIRECTOR OF RIGHT-OF-WAY

Add 7 5-17-66

APPROVED R. W. Wilson
DATE 6-7-66 DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

APPROVED
DATE FIRST ASSISTANT DIRECTOR

APPROVED P. E. Masheter
DATE 6/7/66 DIRECTOR OF HIGHWAYS

STANDARD DRAWINGS

BP-1	G-1-65	MC-1	G-1-65	GR-1	G-1-65	RS-1-54	8-10-65
BP-2	G-1-65	MC-3	5-1-66	GR-2R	9-1-65	CS-1-65	G-1-65
BP-3	G-1-65	MC-4	G-1-65	L-1	G-1-65	P-1-54	11-8-65
BP-4	G-1-65	F-2	G-1-65			R-1-54	11-8-65
BP-5	G-1-65	F-3	G-1-65			SD-1-63 Sh 2,3,4	11-12-63
BP-6	G-1-65	FRCI-1	G-1-65			FSB-1-62	1-15-63
BP-7	1-1-66	FRCI-2	G-1-65	BR-1-65, Sh. 1	11-24-65	SD-2-64	11-25-64

SUPPLEMENTAL SPECIFICATIONS

801	9-2-65	828	3-21-66
808	2-7-66	1001	3-21-66
811	3-29-65		
815	8-6-65		
816	8-6-65		
825	4-22-65		

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

FILE Nº _____

VAN-224-9.34
DATE OF LETTING _____ 19___
CONTRACT NO. _____

MICROFILMED
MAY 6 1988

LOCATION PLAN

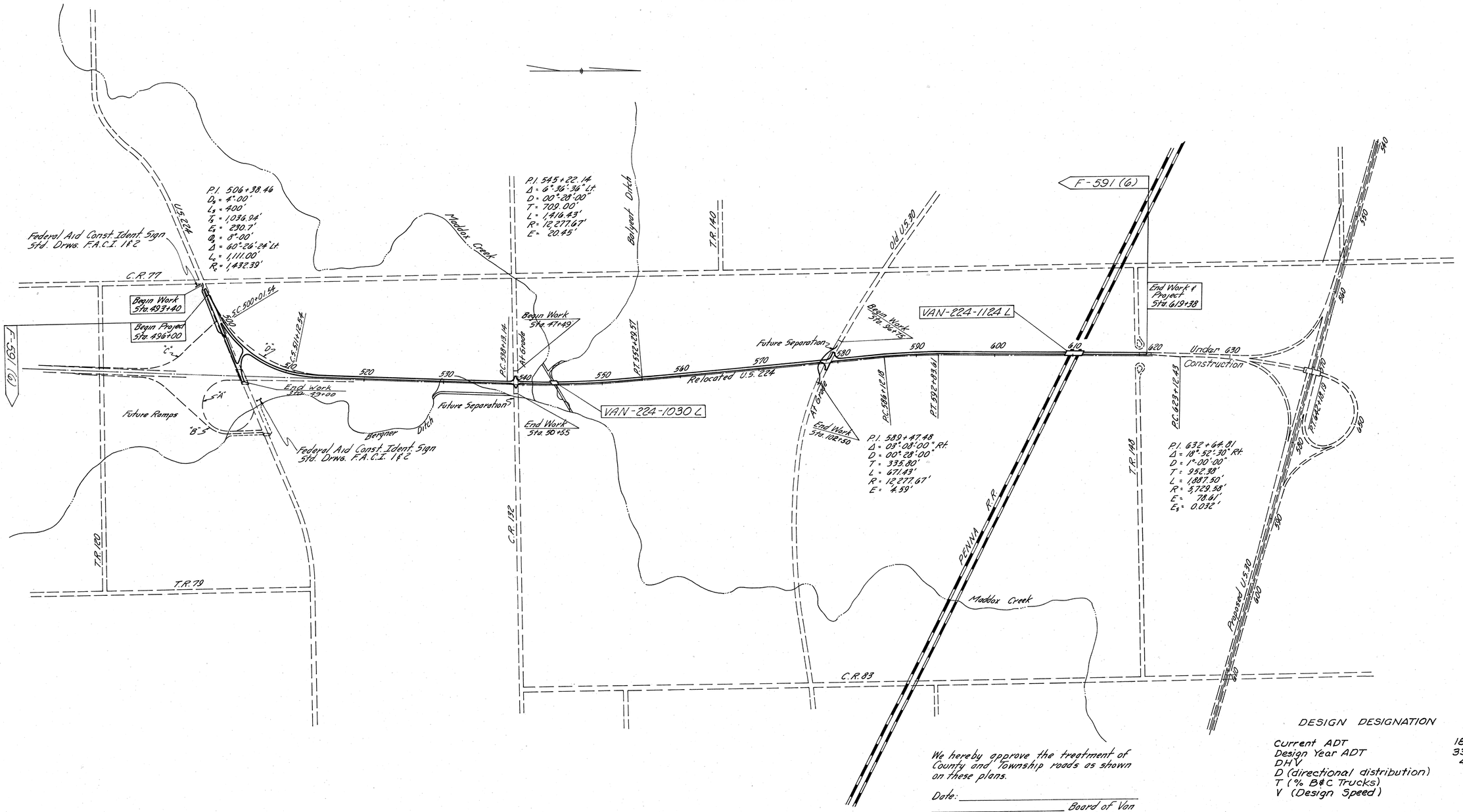
U.S. ROUTE 224
VAN-224-9.34

Scale: 0 250 500 1000 Feet

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

2
99

VAN WERT COUNTY
VAN-224-9.34



We hereby approve the treatment of County and Township roads as shown on these plans.

Date: _____

_____ Board of Van
_____ Wert County
_____ Commissioners

_____ Van Wert County Engineer

DESIGN DESIGNATION

Current ADT	1850
Design Year ADT	3320
DHV	490
D (directional distribution)	60 %
T (% B&C Trucks)	24 %
V (Design Speed)	70 MPH

Location Plan (Relocated U.S. 224)

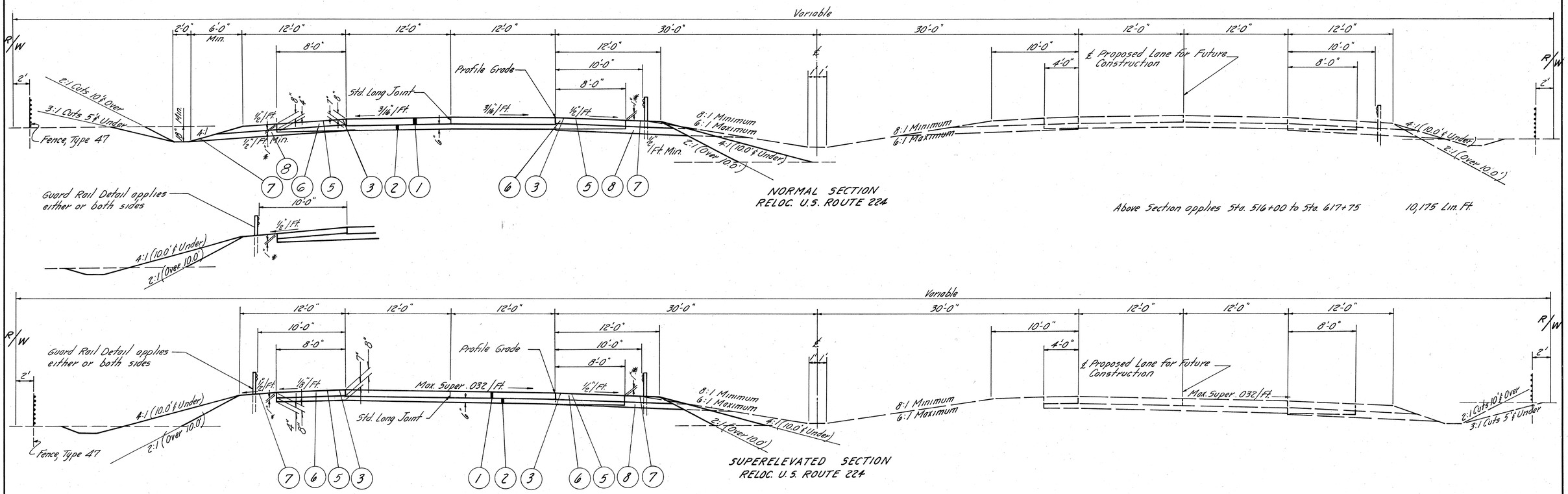
TYPICAL SECTIONS

TYPE 451

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

3
99

VAN WERT COUNTY
VAN-224-9.34



For Details not shown see Std. Dwg. MC-1 or cross sections

* Note: Finish earth shoulder 1" below paved shoulder

1. Item 451 9" Reinforced Portland Cement Concrete Pavement.
2. Item 310 Variable as shown Subbase, Grading A or B
3. Item 409 Seal Coat using 0.008 cu. yd. No. 8 Aggregate per sq. yd. and 0.25 gal. Bituminous Material 702.09, RT-8 or RT-9 or 702.03 CBAE-3
5. Item 408 Bituminous Prime Coat 702.09, RT-2 or RT-3 applied at the rate of 0.40 Gal. per Sq. Yd.
6. Item 304 8" Aggregate Base Course
7. Item 659 Seeding and mulching, as per plan.
8. Item 605 Aggregate Drains ⊛

Note: ℄ of Proposed Lanes is ℄ of Survey from Sta. 496+00 to Sta. 515+12.54

⊛ The 605 aggregate drains shall be constructed prior to construction of the paved berm.

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

VAN WERT COUNTY
VAN-224-9.34

4
99

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.

UTILITY ADJUSTMENT:
ANY OR ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS.

FIELD OFFICE:
THE CONTRACTOR SHALL, IN ADDITION TO THE REQUIREMENTS OF 105.15 2, PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 500 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 INSTALL WIRING AND OUTLETS SUITABLE FOR CONNECTING ELECTRIC LIGHTS AND OFFICE EQUIPMENT IN THE FIELD OFFICE AND PROVIDE 110-VOLT ALTERNATING CURRENT TO THE OFFICE DURING THE ENTIRE PERIOD OF 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.

UNDERGROUND UTILITIES:
THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO MAKES NO GUARANTEES AS TO THEIR ACCURACY OR COMPLETENESS.

SUPERELEVATION:
SUPERELEVATED CURVES SHALL BE BUILT WITHOUT CROWN. THE CROWN SHALL BE WORKED OUT OF THE PAVEMENT IN THE PORTION BETWEEN THE BEGINNING OF TRANSITION AND THE POINT WHERE THE SUPERELEVATION EQUALS TWICE THE CROWN.

CONTRACTOR'S MAINTENANCE RESPONSIBILITY:
ON THIS PROJECT, THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF THE EXISTING PAVEMENT PER ITEM 614 SHALL BE LIMITED TO THOSE PORTIONS OF THE EXISTING PAVEMENT LYING WITHIN THE PROPOSED WORK LIMITS.

REMOVING OF EXISTING PIPE:
THE REMOVAL OF ALL EXISTING PIPE DRAINS WITHIN THE LIMITS OF PROPOSED EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

REMOVAL OF TREES AND STUMPS:
ALL TREES AND STUMPS LYING WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR 201 CLEARING AND GRUBBING, EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

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

SIZES	NO. TREES	NO. STUMPS
18"	62	10
30"	35	3
48"	17	1
60"		

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES AND STUMPS OUTSIDE OF 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 201, CLEARING AND GRUBBING.

SEEDING:
QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN RIGHT-OF-WAY LINES EXCEPT THOSE AREAS WHERE THE EXISTING COVER TEN (10) FEET BEYOND THE WORK LIMITS IS CONSIDERED TO BE ACCEPTABLE (SUCH AS WOODLANDS, GRASSLANDS, ETC.) AT THE TIME OF CONSTRUCTION, THE ENGINEER SHALL DETERMINE THE ACCEPTABLE AREAS THAT SHALL NOT BE SEEDED.

SEEDING FORMULA:
THE FOLLOWING SEED MIXTURES SHALL, IN LIEU OF THE MIXTURES LISTED IN 659.09, BE USED THROUGHOUT THE LIMITS OF THIS PROJECT:

2:1 SLOPE AREAS:	ALL OTHER AREAS:
100% KENTUCKY 31 FESCUE	60% KENTUCKY 31 FESCUE
	25% KENTUCKY BLUE GRASS
	15% RED TOP

(ANY STONE OR OTHER DEBRIS 2" OR OVER IN DIAMETER SHALL BE REMOVED FROM THE EXPOSED SURFACE OF THE SEED BED.)

ITEM 203 PROOF ROLLING
AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE IN PROOF ROLLING OF SUBGRADE FOR THE MAINLINE AND RAMP PAVEMENTS, AND FOR PAVED SHOULDERS, IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 801.

CONNECTIONS TO EXISTING PIPE:
AT PLACES WHERE THE PLANS PROVIDE FOR PROPOSED DRAINAGE PIPE TO BE CONNECTED TO EXISTING PIPES, 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 PIPE ITEM.

ESTIMATED QUANTITIES TO BE USED AS DIRECTED:
ALL FARM TILE WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY 603 TYPE B CONDUIT CLASS B BEDDING.

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

THE CONTRACTOR SHALL PROVIDE OUTLETS INTO THE ROADWAY DITCH FOR EXISTING AND PROPOSED FARM SURFACE DRAINAGE. THE BACKSLOPE OF THE ROADWAY DITCH SHALL BE SODDED WHERE THESE SURFACE DRAINS OUTLET INTO THE ROADWAY DITCH. THE LOCATION, SIZE AND FLOWLINE OF THESE DRAINS SHALL BE DETERMINED BY THE ENGINEER. PAYMENT FOR THE CU. YD. OF EXCAVATION FOR THE SURFACE DRAINS SHALL BE AT THE UNIT PRICE BID FOR 203 EXCAVATION.

A QUANTITY OF 601 AND 660 HAS BEEN INCLUDED FOR EROSION CONTROL.

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

603	8" CONDUIT, TYPE B WITH CLASS B BEDDING	100 LIN. FT.
603	6" CONDUIT, TYPE E	200 LIN. FT.
603	8" CONDUIT, TYPE E	200 LIN. FT.
603	6" CONDUIT, TYPE F	100 LIN. FT.
603	8" CONDUIT, TYPE F	100 LIN. FT.
601	CRUSHED AGGREGATE SLOPE PROTECTION	100 SQ. YD.
660	SODDING	300 SQ. YD.

THE LOCATION, TYPE, SIZE, GRADE, AND USAGE OF THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT. THESE QUANTITIES ARE NOT TO BE DELIVERED TO THE PROJECT UNTIL SO DIRECTED BY THE ENGINEER.

605 AGGREGATE DRAINS:
STONE UNDERDRAINS SHALL BE PLACED AT TRANSVERSE PAVEMENT JOINTS ON EACH SIDE OF NORMAL CROWNED SECTIONS AND AT TRANSVERSE PAVEMENT JOINTS AND CENTERED BETWEEN TRANSVERSE JOINTS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS, EXCEPT WHERE 605 PIPE UNDERDRAINS HAVE BEEN PROVIDED.

MAINTENANCE OF SEWER FLOWS:
THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES SEWER FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PLACED INTO USE.

PAYMENT FOR ANY ADDITIONAL COSTS INVOLVED IN MAINTAINING THESE FLOWS BY PUMPING OR BY ANY OTHER MEANS APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE ITEMS OF 603 CONDUIT.

CONTRACTION AND EXPANSION JOINTS:
ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION AND CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL IN ALL CASES BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-4.

ELEVATION DATUM:
ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

DRIVEWAYS AND MAILBOX TURN OUTS:
UNLESS OTHERWISE SHOWN ON THESE PLANS, ALL DRIVEWAYS AND MAILBOX TURNOUTS ON THIS PROJECT SHALL BE TYPE 1 STANDARD DRAWING BP-6, MODIFIED BY DELETING THE 12" OFFSET AT THE EDGE OF THE PAVEMENT. PAVEMENT COURSES AND THICKNESSES ARE AS FOLLOWS:

	DRIVE APRONS		OTHER AREAS	
TYPE OF APPROACH:	~~404~~ *	~~304~~	~~404~~ *	~~304~~
MAILBOX APPROACHES	2"	5"		
RESIDENCE DRIVE	2"	5"	**	8"
COMMERCIAL DRIVE	2"	7"	**	9"
FIELD DRIVE	0"	6"	0"	6"

** IF EXISTING DRIVE IS HARD-SURFACED THE SAME COURSES AND THICKNESSES SHALL BE USED BEYOND THE DRIVE APRONS AS WITHIN THE DRIVE APRONS.

* TWO 1" COURSES.

COMMERCIAL FERTILIZER:
FORMULA 12-12-12 SHALL BE APPLIED AT THE RATE OF TWENTY (20) POUNDS PER THOUSAND (1000) SQUARE FEET TO ALL AREAS TO BE SEEDED OR SODDED.

ITEM 407 TACK COAT:
ALTHOUGH THIS ITEM HAS BEEN ESTIMATED FOR USE ON THE ENTIRE EXISTING BITUMINOUS PAVEMENT AREA TO BE RESURFACED, IT SHALL BE USED ONLY ON DRY OR CHECKED PAVEMENT AREAS WHERE SPECIFICALLY DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON FINAL MEASUREMENT.

CONSTRUCTION LAYOUT STAKES:
SEE NOTE IN PROPOSAL DESCRIBING THE WORK INCLUDED IN THIS LUMP SUM PAY ITEM.

TRAFFIC AND CONSTRUCTION PROCEDURE:
THE CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS CONSTRUCTION OPERATIONS SO THAT TRAFFIC ON INTERSECTING ROADS WILL BE MAINTAINED IN THE FOLLOWING MANNER:

EXISTING AND PROPOSED USR 224 INTERSECTION:
TRAFFIC SHALL BE MAINTAINED OVER THE CLASS "B" TEMPORARY PAVEMENT AS SHOWN ON SHEET NO. 7, WHILE THE CONNECTIONS BETWEEN THE EXISTING AND PROPOSED PAVEMENTS ARE MADE.

EXISTING USR 30 AND PROPOSED USR 224 INTERSECTION:
A CLASS "B" TEMPORARY PAVEMENT AS SHOWN ON SHEET NO. 15 SHALL BE PROVIDED FOR THE MAINTENANCE OF TRAFFIC WHILE THE EXISTING USR 30 - PROPOSED USR 224 AT GRADE INTERSECTION IS CONSTRUCTED. IF RELOCATED USR 30 FROM NORTH OF CONVOY TO EAST OF VAN WERT IS COMPLETED AND OPEN TO TRAFFIC PRIOR TO THE CONSTRUCTION OF THIS INTERSECTION, THE TEMPORARY PAVEMENT AND TEMPORARY ROAD ITEMS SHALL BE NON-PERFORMED AT THE DIRECTION OF THE ENGINEER.

AT NO TIME SHALL EXISTING USR 30 AND OLD TILE FACTORY ROAD BE CLOSED TO TRAFFIC DURING THE SAME PERIOD OF TIME.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS:
THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT PERFORM THE FOLLOWING:

PROVIDE, ERECT, AND MAINTAIN STANDARD 40" X 24" SIZE "ROAD CLOSED" SIGNS, SIGN SUPPORTS, AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

1. OLD TILE FACTORY ROAD JUST EAST OF LIBERTY UNION ROAD INTERSECTION.
2. OLD TILE FACTORY ROAD JUST WEST OF JOHN BROWN ROAD INTERSECTION.

SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING, AND REMOVING LIGHTS, SIGNS, AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR 614 MAINTAINING TRAFFIC.

TRAFFIC SIGN ERECTION:
THE CONTRACTOR SHALL ERECT SIGN PANELS FURNISHED BY OTHERS AS NOTED ON THE SCHEMATIC SIGNING LAYOUT SHEETS NO. 66, 67, and 68, INCLUSIVE. THE PANELS SHALL BE MOUNTED ON THE BRACKETS OR BEAM SUPPORTS PROVIDED IN THE PLANS.

A SCHEDULE FOR SIGN ERECTION SHALL BE SUBMITTED TO THE ENGINEER, BUREAU OF TRAFFIC, 450 EAST TOWN STREET, COLUMBUS, OHIO, 60 CALENDAR DAYS PRIOR TO THE START OF ANY SCHEDULED ERECTION WORK. THE SCHEDULE SHALL INCLUDE PROPOSED DATES, TIME, AND DELIVERY POINT.

THE PRICE BID PER SQUARE FOOT FOR, "ITEM 815 SIGN ERECTION BY TYPE, AS PER PLAN", SHALL INCLUDE ALL NECESSARY EQUIPMENT, MANPOWER, AND TOOLS TO ERECT THE SIGNS NOTED. ALL SIGN MATERIAL AND ACCESSORIES WILL BE FURNISHED AND TRANSPORTED TO A DESIGNATED DELIVERY POINT, ON OR NEAR THE SUBJECT PROJECT, BY OTHERS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING AND STORAGE OF THE SIGN PANELS AND ACCESSORIES FROM THE TIME OF ARRIVAL AT THE DELIVERY POINT.

GALVANIZED SUPPORTS:
THE STRUCTURAL STEEL BEAM SUPPORTS INCLUDING THE 8 LB. AND 4 LB. BEAM, AND 4 LB., 2 LB. DRIVE POST SHALL BE GALVANIZED (AFTER PUNCHING) IN ACCORDANCE WITH ASTM A123. ALL BOLTS, NUTS PLAIN AND LOCKWASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, EXCEPT WHERE ALUMINUM OR STAINLESS STEEL IS REQUIRED.

816 CONCRETE FOR SIGN SUPPORT FOUNDATIONS, AS PER PLAN:
PAYMENT FOR THIS ITEM SHALL BE BASED ON PLAN DIMENSIONS (OR DIMENSIONS AS MODIFIED BY THE ENGINEER) IN LIEU OF PLAN QUANTITIES AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 816.

STRUCTURAL SIGN SUPPORTS QUANTITIES:
QUANTITIES FOR ITEM 816 STRUCTURAL BEAM SUPPORTS APPEARING IN THE SUMMARY TABLES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT SUPPORT LENGTHS PRIOR TO FABRICATION AND GALVANIZING OF SUPPORTS. DETAILS FOR PLAN QUANTITIES AND ALTERNATE DETAILS ARE SHOWN ON SHEET NO. 70 and 71.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS:
THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS AT EACH OF THE FOLLOWING APPROXIMATE LOCATIONS:

1. STA. 493+40, RT.
2. STA. 52+20, LT. (EXISTING S.R. 224)

SIGN DETAILS SHALL BE AS SPECIFIED ON STANDARD DRAWING FACI-1, "CODE N-54(1)-96(2)".

THE SIGNS SHALL BE ERECTED IN ACCORDANCE WITH STANDARD DRAWING FACI-2. ADDITIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH NOTES IN THE PROPOSAL.

202, BUILDING REMOVALS
The buildings to be removed as a part of this project are located on existing USR 224, right of Sta. 55+50 on parcel no. 200-WL, and right of Sta. 56+75 on parcel no. 200-Y.

PAVEMENT COMPUTATIONS

Station From	Station To	Corr.	Lin. Ft.		304 Aggregate Base	302 Asphalt Concrete	402 Asphalt Concrete	404 Asphalt Concrete	408 Bituminous Prime Coat	407 Tack Coat	409 Seal Coat Bituminous Material	409 Seal Coat Cover Aggregate No. 8	451 9" Reinforced Portland Cement Conc. Pav't.	611 Reinf. Conc. Approach Slabs	605 Aggregate Drains	610 Subbase Grading "A" or "B"	609 Asphaltic Concrete Curb	609 Concrete Curb Type 6	203 Subgrade Preparation (Including Structures)	202 Pavement Removal
					Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Gals.	Gals.	Gals.	Cu. Yds.	Sq. Yds.	Sq. Yds.	Lin. Ft.	Cu. Yds.	Lin. Ft.	Lin. Ft.	Sq. Yds.	Sq. Yds.
496+00	543+38.13	-1.79	4,736.34		1,767.53				3,181		1,988	63.63	12,630.24			3,320.07			20,584	
543+38.13	543+63.13		25.00	Appr. Slab	9.88				18		11	.36		66.67		16.90			111	
543+63.13	544+36.37		73.24	Structure																
544+36.37	544+61.37		25.00	Appr. Slab	9.88				18		11	.36		66.67		16.90			111	
544+61.37	608+52.96	-0.32	6,391.27		2,525.07				4,545		2,841	90.90	17,043.39			4,576.33			28,405	
608+52.96	608+77.96		25.00	Appr. Slab	9.88				18		11	.36		66.67		16.90			111	
608+77.96	610+51.99		174.03	Structure																
610+51.99	610+76.99		25.00	Appr. Slab	9.88				18		11	.36		66.67		16.90			111	
610+76.99	619+38		861.01		340.17				612		383	12.25	2,296.02			616.51			3,827	
Intersection 1-P. Exist. U.S.R. 224					381.75	98.15	45.56	67.30	675	90	123	3.93	809.61			399.68	600		2,350	650
Intersection 2-P. Old Tile Factory Rd., C.R. 132					-23.40			7.40	9	9	-26	-.30	714.80			116.80			633	
Intersection 3-P. U.S.R. 30					12.00						14	.40	1,302.0			228.00		143	1,481	800
					5,042.64	98.15	45.56	74.70	9,094	99	5,367	172.25	34,696.06	266.68		9,324.99	600	143	57,724	1,450

FENCE-607

Left of Centerline Station From	Station To	Length Lin. Ft.	Right of Centerline Station From	Station To	Length Lin. Ft.
497+91.53 Full Ramp	510+84.64 Full Ramp	1,231.63	52+20 Exist. 224	505+97.01	184.84
510+84.64 Full Ramp	511+49.24	67.00	505+97.01	511+54.93	557.92
511+49.24	537+02.00	2,552.92	511+54.93	511+54.52	15.00
41+25 C.R. 132	537+02.00	687.00	511+54.52	530+00.00	1,845.48
46+87.01 C.R. 132	46+87.29 C.R. 132	105.00	530+00.00	532+00.00	200.56
46+87.29 C.R. 132	539+50.00	134.00	532+00.00	537+22.00	522.00
539+50.00	543+14.00	360.20	50+78.5 C.R. 132	51+05.1 C.R. 132	26.60
544+02.00	578+78.51	3,467.88	51+05.1 C.R. 132	55+00 C.R. 132	395.00
9+50 U.S. 30	95+68.53 U.S. 30	419.60	539+18.00	50+92 C.R. 132	40.00
95+68.53 U.S. 30	578+78.51	368.48	539+18.00	544+65.00	552.70
96+02 U.S. 30	581+02.36	192.00	545+30.00	551+30.43	606.69
581+02.36	609+81.48	2879.47	551+30.43	551+31.20	15.00
610+60.28	616+00 Exist. I.M.R.R.	540.18	551+31.20	577+38.63	2,608.46
			577+38.63	103+00 U.S. 30	105.00
			579+69.00	592+83.61	1,305.00
			592+83.61	607+00.00	1,414.00
			607+00.00	607+98.13	110.00
			608+96.67	616+00 Exist. I.M.R.R.	705.18
Total		13,005.36	Total		11,209.43
Grand Total 24,214.79					

SEEDING-659

Sheet No.	Seeding Sq. Yd.	Sheet No.	Seeding Sq. Yd.
21	17,470	38	8,488
22	20,865	39	6,366
23	10,087	40	6,366
24	4,617	41	12,604
25	8,525	42	6,839
26	8,488	43	7,117
27	8,488	44	7,205
28	6,306	45	9,226
29	7,961	46	9,966
30	18,271	47	11,205
31	11,270	48	9,228
32	7,766	49	10,094
33	9,675	50	6,400
34	9,026	52	9,828
35	8,695	53	8,078
36	8,562	54	2,743
37	8,510		
	Total		306,335
Less	Sodding & Special		- 539
Less	Riprap		- 45
	Total		305,751

EARTHWORK-203

Station From	Station To	Excava. Cu. Yd.	Embank. Cu. Yd.	Embank. +20% Cu. Yd.
495+00	505+00	2,212	1,623	1,948
505+00	510+00	1,026	1,671	2,005
510+00	520+00	1,888	3,793	4,552
520+00	530+00	4,112	4,491	5,389
530+00	540+00	12,852	26,220	31,464
540+00	550+00	5,860	4,293	5,152
550+00	560+00	5,891	422	506
560+00	570+00	854	5,110	6,132
570+00	580+00	1,078	9,677	11,612
580+00	590+00	2,236	20,920	25,104
590+00	600+00	2,861	33,537	40,244
600+00	610+00	1,398	127,280	152,736
610+00	619+38	892	110,585	132,702
From Chan. Sect.		8,695	7,137	8,564
Totals		51,855	356,759	428,110
203 - Borrow = 428,110 - 51,855 = 376,255 Cu. Yd.				

JUTE MATTING-667

Sheet No.	Jute Matting Sq. Yd.	Sheet No.	Jute Matting Sq. Yd.
42	311		
43	877	51	4,172
44	1,033	52	5,072
45	1,399	53	4,688
46	1,544	54	2,594
47	4,567		
48	4,439		
49	4,934		
Total	35,630 Sq. Yd.		

MISCELLANEOUS COMPUTATIONS

203 WATER
Embankment 356,759 Cu. Yd.
Subbase 9,325 Cu. Yd.
366,084 Cu. Yd.
366,084 x 5 ÷ 1,000 = 1,830 M. Gal.

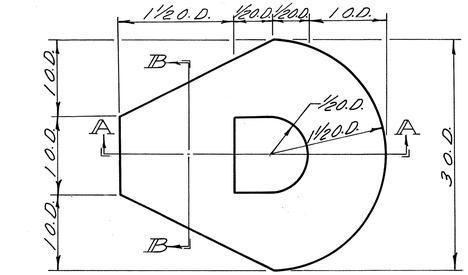
203 PROOF ROLLING
57,699 Sq. Yd. Subgrade ÷ 2,000 = 28.85 Hrs.

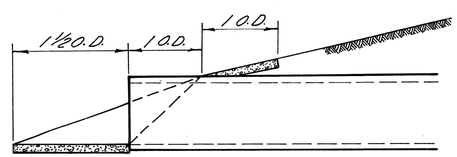
304 WATER
304 Aggregate Base 5034 Cu. Yd.
5,034 x 5 ÷ 1000 = 25 M. Gal.

605 AGGREGATE DRAINS
12,388 L.F. x 2 ÷ 60 x 16 Ave. Length = 6,068 L.F.

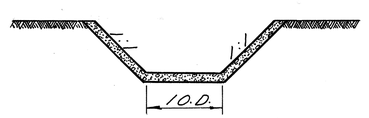
659 COMMERCIAL FERTILIZER
Seeding 305,751 Sq. Yd.
Sodding 385 Sq. Yd.
Special Berm Sodding 152 Sq. Yd.
306,288 Sq. Yd.
306,288 x 9 x 20 ÷ 1,000 ÷ 2,000 = 27.57 Tons

RIPRAP DETAIL FOR PIPE ENDS





Section A-A



Section B-B

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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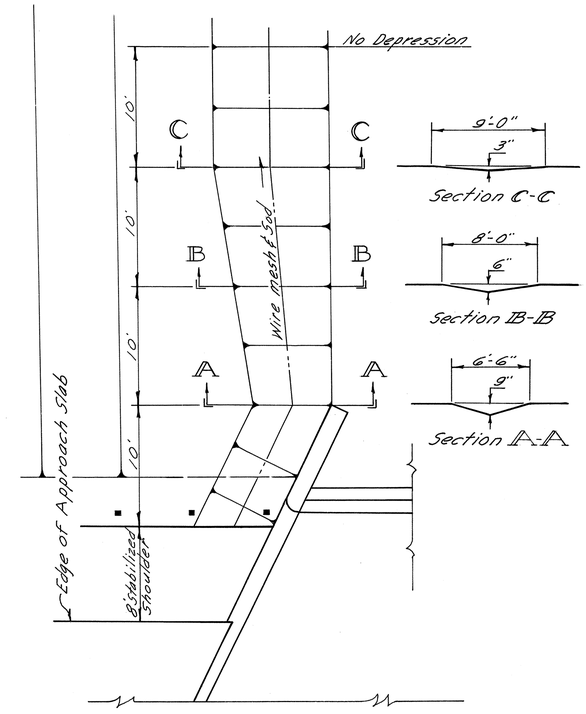
VAN WERT COUNTY
VAN-224-9.34



SPECIAL BERM AND SLOPE PROTECTION

Prior to placement of sod in the berm and slope, galvanized poultry fence shall be placed on the finished grade in strands which shall be at right angles to the direction of flow. Each strand shall be staked securely on top and bottom with stakes spaced at four foot intervals and alternated in rows four feet apart.

Stakes shall be 1"x1"x8" wood stakes and shall be perpendicular to the ground and flush with the finished grade.

The fence shall be Straight Line Poultry Fence or equivalent with strand width of four feet, having a two inch mesh and all wires No. 20 Gauge.

Each strand of fencing shall be fastened together at twelve inch intervals by means of hog rings.

The fence shall be secured to the wood stakes by metal staples.

Sod shall be laid in accordance with Construction and Materials Specifications 660.06

Payment for all of the above shall be included in the unit price bid for 660 Sodding for special berm and slope protection, as per plan.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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VAN WERT COUNTY
VAN-224-9.34

GENERAL SUMMARY

ITEM	SHEET NO.	QUANTITIES	UNIT	DESCRIPTION
	69	Code 7221		TRAFFIC CONTROL
815	58	58	S.F.	Sign Erection, Extrusheet Type, Ground Mounted Signs
815	270	270	S.F.	Sign Erection, Flat Sheet Type, Ground Mounted Signs
816	50	50	L.F.	Steel Drive Posts, 2 lbs. per foot
816	282	282	L.F.	Steel Drive Posts, 4 lbs. per foot
816	174	174	L.F.	Structural Supports, 4 lb. beam, as per plan
816	97	97	L.F.	Structural Supports, 8 lb. beam, as per plan
816	4.0	4.0	C.Y.	Concrete Foundations for Ground Mounted Sign Supports, as per plan

ITEM	SHEET NO.													QUANTITIES	UNIT	DESCRIPTION
	5	4	7	9	10	11	12	14	15	16	17	18	19	Code Y005 Code 7221		ROADWAY
201														Lump	L.S.	Clearing and Grubbing
202		lump												Lump	L.S.	Parcel No. 200Y, Removal of one frame barn
202		lump												Lump	L.S.	Parcel No. 200WL, Removal of one frame barn.
202			4											4	Ea.	Catch Basins and/or Inlets Removed
202	1700													1700	S.Y.	Existing Pavement Removed & Disposed of
203	51,855													51,855	C.Y.	Excavation including Embankment Construction
203	376,255													376,255	C.Y.	Borrow
203	57,724													57,724	S.Y.	Subgrade Preparation
203	1,830													1,830	M.G.	Water
203	29													29	Hrs.	Proof Rolling
606							428.52			787.26	1409.26	1753.48	1775	6,153.52	L.F.	Guard Rail, Type 4
607	24,215													24,215	L.F.	Fence, Type 47
615			1586						1493					3,079	S.Y.	Class B Temporary Pavement
615			Lump											Lump	L.S.	Temporary Road No. 1-TR
615									Lump					Lump	L.S.	Temporary Road No. 3-TR, as per plan
																EROSION CONTROL
659	27.57													27.57	Ton	Commercial Fertilizer (12-12-12)
659	305,751														S.Y.	Seeding and Mulching, as per plan
660		300			148							92	145	685	S.Y.	Sodding
660												73	79	152	S.Y.	Sodding for Special Berm & Slope Protection, as per plan
667	35,630													35,630	S.Y.	Jute Matting
601		100												100	S.Y.	Crushed Aggregate Slope Protection
601						29.5						15.5		45	S.Y.	Riprap, using 6" Reinforced Concrete Slab
601						173	47							220	C.Y.	Dumped Rock Channel Protection
																DRAINAGE
603						66								66	L.F.	42" Conduit, Type A with Class B Bedding
603		100		567	200	200		274						1,341	L.F.	8" Conduit, Type B with Class B Bedding
603									230					230	L.F.	12" Conduit, Type B with Class B Bedding, 706.02 Class III or 706.08
603									230					230	L.F.	15" Conduit, Type B with Class B Bedding, 706.02 Class III or 706.08
603												268		268	L.F.	30" Conduit, Type A with Class B Bedding 707.05, 12 Ga.
603			70											70	L.F.	12" Conduit, Type A, 706.01, 706.02, or 706.08, with class B Bedding.
603		200			182									382	L.F.	6" Conduit, Type E
603		200	26											226	L.F.	8" Conduit, Type E
603					33	20								53	L.F.	10" Conduit, Type E
603		100								10			60	170	L.F.	6" Conduit, Type F
603		100	10		10	20								140	L.F.	8" Conduit, Type F
603						10				10		20		40	L.F.	10" Conduit, Type F
605	6068													6068	L.F.	Aggregate Drains
																PAVEMENT
302	98													98	C.Y.	Asphalt Concrete (70-85)
304	5043								43					5,086	C.Y.	Aggregate Base
304	25													25	M Gal.	Water
310	9325													9,325	C.Y.	Subbase, Grading A or B
402	46													46	C.Y.	Asphalt Concrete (70-85)
404	75													75	C.Y.	Asphalt Concrete (70-85)
407	99													99	Gal	Tack Coat 702.04 MS-2 or RS-1 or 702.02 RC-70 or RC-250
408	9094													9,094	Gal	Bituminous Prime Coat 702.09 RT-2 or RT-3
409	5367													5,367	Gal	Seal Coat, Bituminous Material 702.09, RT-8 or RT-9 or 702.03 CBAE-3
409	172													172	C.Y.	Seal Coat, Cover Aggregate, No. 8
451	34,962													34,962	S.Y.	9" Reinforced Portland Cement Concrete Pavement
609	143													143	L.F.	Standard Type 6 Concrete Curb
609	600													600	L.F.	Asphalt Concrete Curb (70-85)
611	267													267	S.Y.	Reinforced Concrete Approach Slabs (T=13")
																STRUCTURES 20' SPAN AND OVER
																VAN-224-1030L For Quantities See Sheet 73
																VAN-224-1152L, For Quantities See Sheet 77
614														Lump	L.S.	Maintaining Traffic
														Lump	L.S.	Field Office
														Lump	L.S.	Construction Layout Stakes

VAN WERT COUNTY
VAN-224-9.34

Begin Work Sta. 493+40

Sta 493+40 Relocated U.S.R. 224

Guard Rail Post 120.41' 28.20' 50.61'

T.S. Sta. 496+01.54

Inlet (Remove)

27.07' Button in Edge of Pavt. 18.85' 44.83' Approx. 4' From N. Edge of Pavt.

S.C. Sta. 500+01.54

Note: See R/W Plans for future ramp curve data.

Begin Project Sta. 496+00

S.L.M. 9.34

F-591(6)

T.S. Sta 496+01.54 on Reloc. U.S.R. 224 = Sta. 37+90.66 on Exist U.S.R. 224

(Future Ramp) 497+93.53 E.R.A. Rt. Ctr.

1-D 2-D 3-D

8"x30° Bend

8"F.I. 8"F.I. (Aban.)

S.C. Sta 500+01.54

LAR/W

100' +37.06

Asphaltic Conc. Curb

8"F.I. (Aban.)

Existing U.S.R. 224

C&E.M.P.

Part. Removal

P.C.C.

Feather & Transition 40'

P.T.

Sta. 35+75 230' R.

230' R.

D_c = 0°-30'

D_c = 0°-30'

1-TR

℄ Temporary Road, Class B Pavt. (22' Wide)
Note: Grade for Temporary-Runaround shall be approx. the same as exist. Pavement.

1-P See Sheets #58 & 59 for details 1-P

P.C.C. Sta 43+80 230' R.

4-D

P.T. Sta 46+73.07

100'

+22.76

Sta 49+00

Sta 49+15 N 4°-16'-43" E

Plug

Tan.

10"F.I.

8"F.I.

Feather 40'

End Work, Sta. 3+75

48+30 on Exist. 224 = 504+44.10 on Reloc. 224

Iron Pipe 503

Inlet (Remove)

Inlet (Remove)

Inlet (Remove)

Inlet (Remove)

Prop. U.S.R. 224

Sta. 504+45 on Prop. 224 = Sta. 0+00 @ Intersection

Begin Work, Sta. 0+12

5-D 6-D

+71.46 230' R.

+152.2 +70.2 +70.2 +152.2

Δ = 59°-51'-40"
R = 230'
T = 132.41'
L = 240.30'
D = 24°-54'-40.35"

+11.76

Sta 35+75 230' R.

P.C.C.

Feather & Transition 40'

P.T.

30'

℄ Temporary Road, Class B Pavt. (22' Wide)
Note: Grade for Temporary-Runaround shall be approx. the same as exist. Pavement.

1-TR

Note:
The Profile for 1,000' beyond the Begin of work is a maximum grade of -0.40% and the Alignment is a 0°-30' Rt. Curve

22' 20' 2' 5½" Asphalt on 8" Stone 2½" Asph. Conc. 9-7-7-9 Plain Conc.

TYPICAL SECTION-ADJOINING PAVEMENT

SPIRAL CURVE DATA

P.I. Sta. 506+38.46
D_c = 4°-00'
L_s = 400'
T_s = 1,036.94'
E_s = 230.7'
θ_s = 8°-00'
Δ = 60°-26'-24"
L_c = 1,111.00'
R_c = 1,432.39'

See Sheets #58 & 59 for details 1-P

See Sheet #8 for Approach Profile

SHEET SUMMARY

Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type F (8")	Type ⊗ (12")	Type E (8")	202 Inlet Removed Each	202 Specials Each
1-D	497+38	497+60	Lt.	10		26		1
2-D	497+37		Lt.				1	
3-D	501+02		Rt.				1	
4-D	502+90		Rt.				1	
5-D	504+15	504+85	Rt.		70			
6-D	1+75		Rt.				1	
	Totals			10	70	26	4	1

TEMPORARY ROAD 615					
	From	To	Side	Class B, Temp. Pavt. S.Y.	Temp. Rd.
1-TR	35+75	43+50	Rt.	1,506.5	L.S.
	Totals			1,506.5	L.S.

⊗ Type A, 706.01, 706.02, or 706.08 with Class B Bedding.

Ref. Line	Profile Grade Lt. Edge	E Grade
788.53	788.70	
788.65	788.77	
788.77	788.85	
788.88	788.93	
789.00	789.00	
789.10	788.80	
789.20	788.78	
789.28	788.75	
789.36	788.72	
789.45	788.69	
789.53	788.66	
789.61	788.63	
789.69	788.60	
789.78	788.57	
789.86	788.54	
789.95	788.51	
790.03	788.48	
790.12	788.45	
790.20	788.42	
790.28	788.39	
790.33	788.36	
790.33	788.33	
790.30	788.30	
790.27	788.27	
790.24	788.24	
790.21	788.21	
790.18	788.18	
790.15	788.15	
790.12	788.12	
790.08	788.08	
790.03	788.03	
789.96	787.96	
789.87	787.87	
789.76	787.76	
789.64	787.64	
789.51	787.51	
789.38	787.38	
789.25	787.25	
789.12	787.12	
788.99	787.99	
788.86	788.86	

P.I. +75 788.03

-0.12%

-0.52%

8"F.I. 8"F.I. 150' V.C. 8"F.I. 12"(A) 10"F.I.

8"(F)

+15.45 Rt. 788.8

+15.45 Rt. 788.6

795
790
785
780

788.70 788.60 788.52 788.41 788.07 788.77 788.97 787.92 787.42 787.12 787.02

495 496 497 498 499 500 501 502 503 504 505

Excavation. 2,212 Cu.Yd.
Embankment. 1,623 Cu.Yd.
Emb.+20% 1,948 Cu.Yd.

STA. 493+40 TO STA. 505+00

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

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VAN WERT COUNTY
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P.O.T Sta. 504+73.05

504 — 28.10' — 505 ℄ Survey — 56.86 — 34.15' — Oak Tree — Exist. 224 — Iron Pin

Fence Post 7 — 30.44' — 70.20' — Δ=60°26'24" Lt. — P.I. Sta. 506+38.46

SPIRAL CURVE DATA
P.I. Sta. 506+38.46
D_c = 4°00'
L_s = 400'
T_s = 1,036.94'
E_s = 230.7'
θ_s = 8°00'
Δ = 60°26'24"
L_c = 1,111.00'

FENCE LEGEND
Corner Post Assy.	C.P.A.
End Post Assy.	E.P.A.
Intermed. Anchor Post Assy.	I.A.P.A.

UTILITIES
Ohio Power Co., Canton, O.
Van Wert Tele. Co., Van Wert, O.
Railroad - Pennsylvania Railroad Co.

Sta. 500+00 — Begin Sheet — Sta. 510+00 — End Sheet

℄ Prop. U.S.R. 224 — 505 — 506 — 507 — 508 — 509

Rel. (A) — +202.2 — +169.8 ℄ 60 R. — +71.46 — 230' R. +111.76 — 10°17'

Exist U.S.R. 224 — 4 Dar. Brick Planter — 16 — 20 R. — 14 — 47 — 45 — 28 — 3 — 4 — 3.5 — 3.5 Brick Planter

Prop. Future U.S.R. 127 — 500 — 501 — 502 — 503 — 504 — 505 — 506 — 507 — 508 — 509 — 510

℄ Proposed Future Pavement — ℄ Proposed Future Pavement

Plug — Sta. 3+75 — N 4°16'43"E — Sta. 49+00 — Prop. Future U.S.R. 224

Rel. Bm. — 12'St. Dr. — 70 — 40+58 on Exist U.S.R. 224 = 504+44.10 on Relc. U.S.R. 224 — 12'St. Dr. — +67 — F.E. — 50 — N 69°07'57"E — 107.7' — F.E.

505+070.13 Rt. C.P.A. — LAR/W — LAR/W

40' Dar. (201)

B.M. U.S.C.&G.S., Marker N.E. Abut. Brdg. Sta. 507+08, 406' Rt. Elev. 783.87

	Lt. Edge Pav't.	Rt. Edge Pav't.	Profile Grade	Lt. Edge	Rt. Edge
500	789.67	789.19		788.96	788.96
501	790.43	790.43		788.73	788.73
502	790.03	790.74		788.60	788.60
503	789.36	790.34		788.47	788.47
504	788.65	789.65		788.34	788.34
505	787.96	788.96		788.21	788.21
506	787.27	788.20		788.08	788.08
507	786.58	787.43		787.95	787.95
508	786.32			787.82	787.82
509	786.24			787.69	787.69
510	786.20			787.56	787.56
	786.04			787.43	787.43
				787.30	787.30
				787.17	787.17
				787.04	787.04
				786.91	786.91
				786.78	786.78
				786.65	786.65
				786.52	786.52
				786.41	786.41
				786.34	786.34

805 / 800 / 795 / 790 / 785 / 780

20' V.C. — +3.33% — 30' V.C. — +3.33% — -2.76%

+32 P.T. 789.98 — 0 — 780.91

788.87 — +50 P.I. — 787.50 — 786.60 — 786.06 — 785.55

0 — 1 — 2 — 3

APPROACH PROFILE

-0.52% — P.I. +00 784.28 — 100' V.C.

787.02 — 785.82 — 785.42 — 785.22 — 784.21 — 782.31

505 — 506 — 507 — 508 — 509 — 510

Excavation	1,026 Cu.Yd.
Embonkment	1,671 Cu.Yd.
Emb. +20%	2,005 Cu.Yd.

STA. 505+00 to STA. 510+00

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

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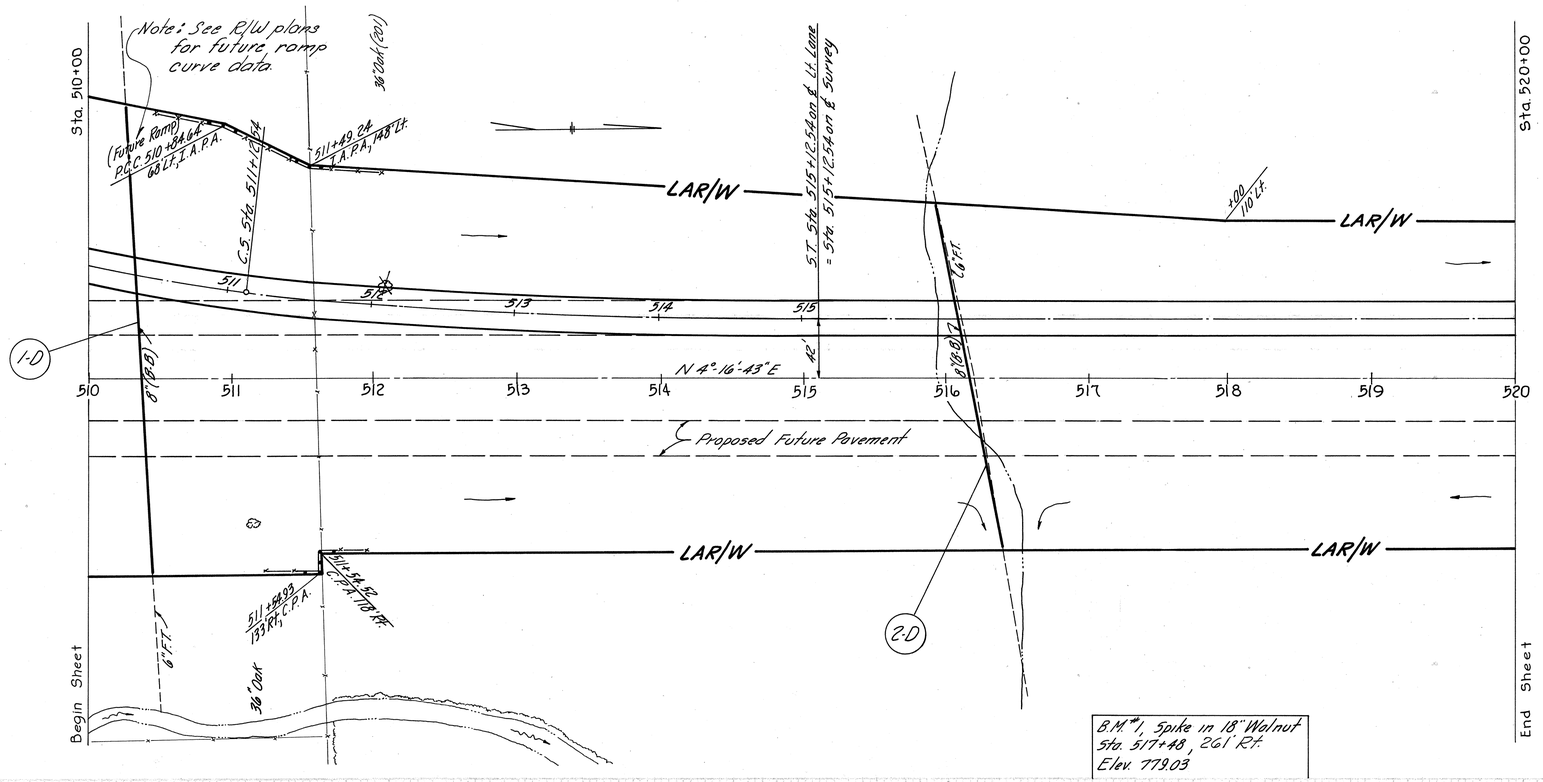
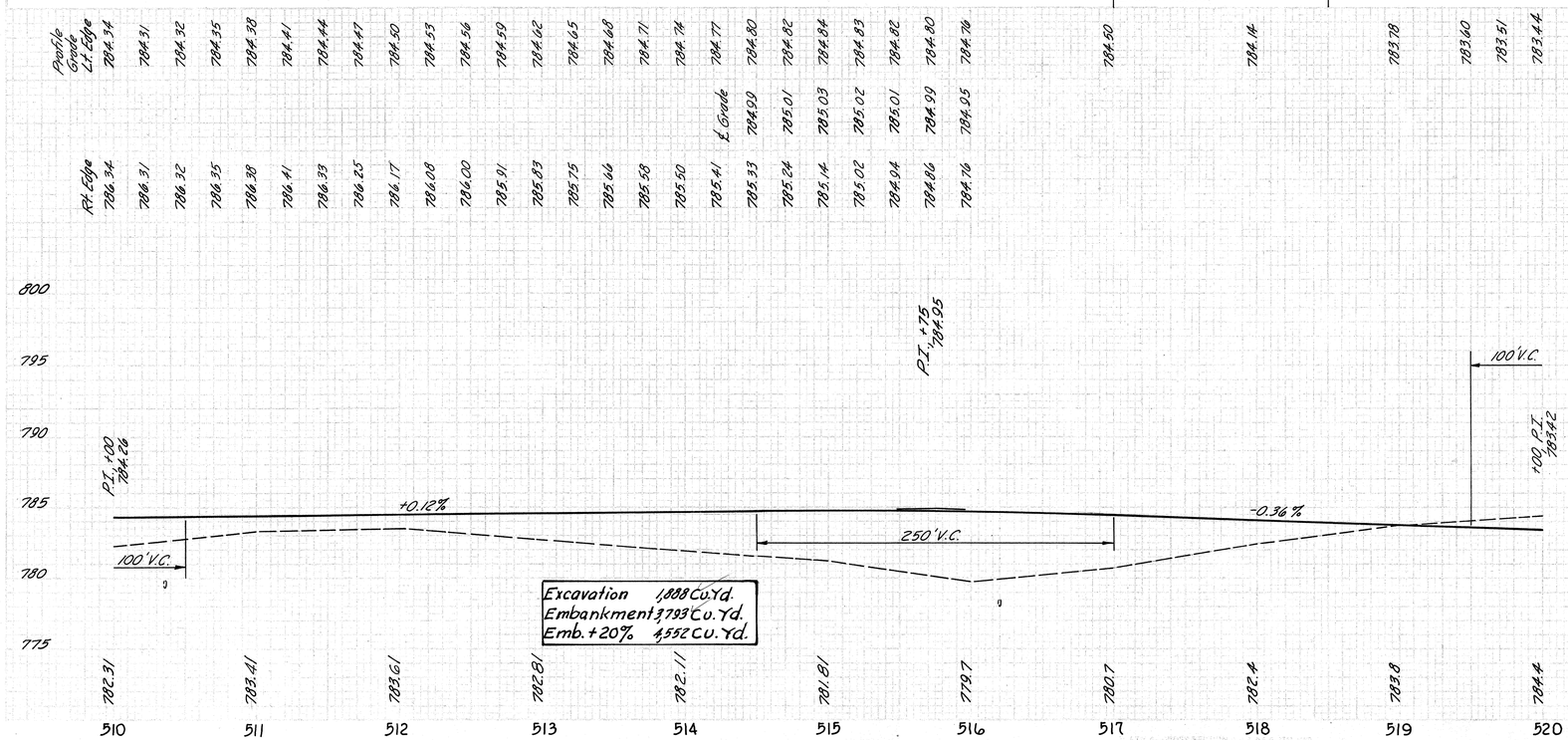
VAN WERT COUNTY
VAN-224-9.34



SHEET SUMMARY					
Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type B-B 8"	
1-D	510+37		Lt. Rt.	325	
2-D	515+88	516+38	Lt. Rt.	242	
Totals				567	

B.M. #1, Spike in 18" Walnut
Sta. 517+48, 261' Rt.
Elev. 779.03



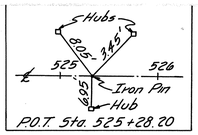
Excavation 1,808 Cu. Yd.
Embankment 3,793 Cu. Yd.
Emb. +20% 4,552 Cu. Yd.

STA. 510+00 to STA. 520+00

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO		

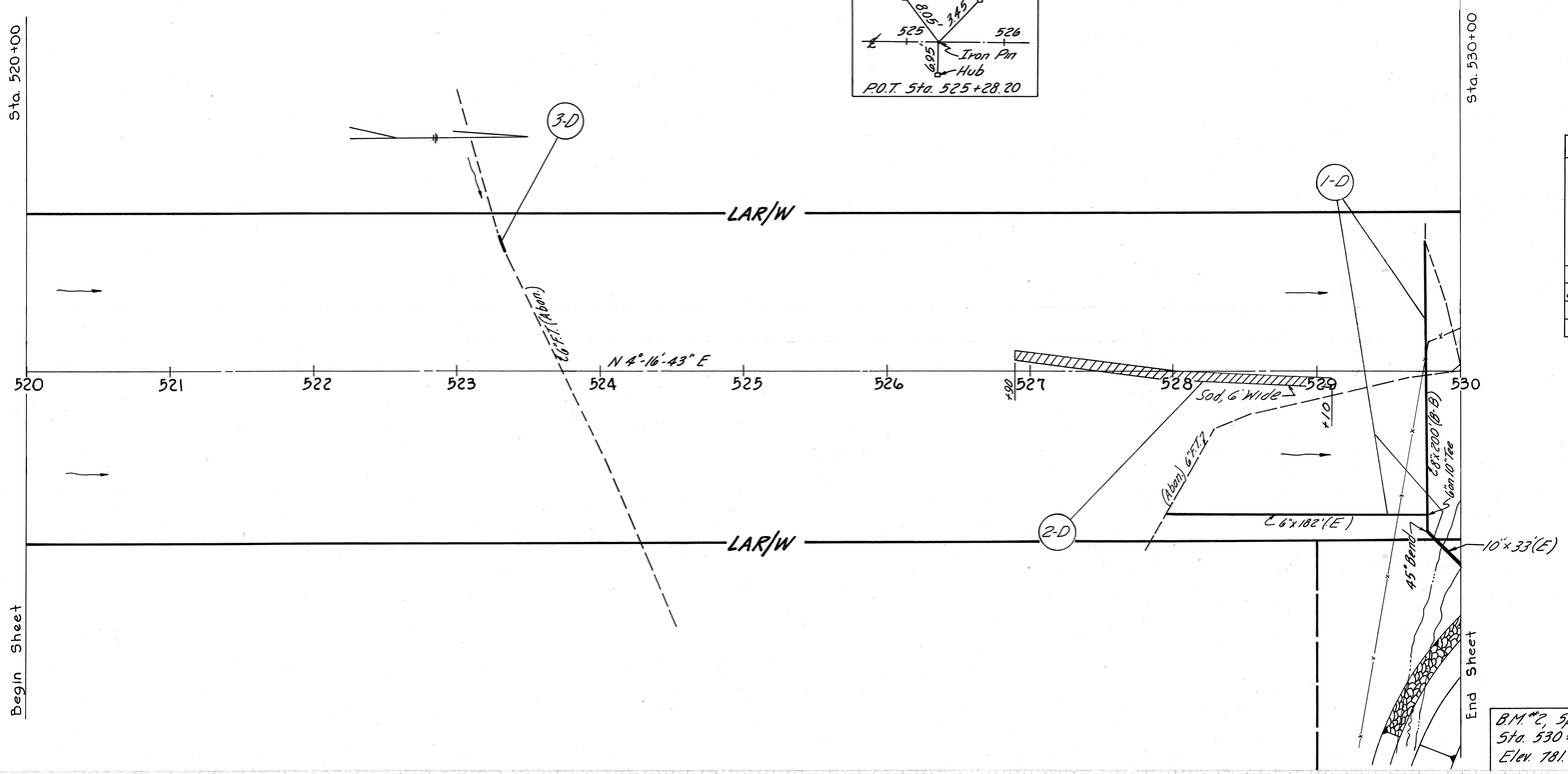
10
99

VAN WERT COUNTY
VAN-224-9.34

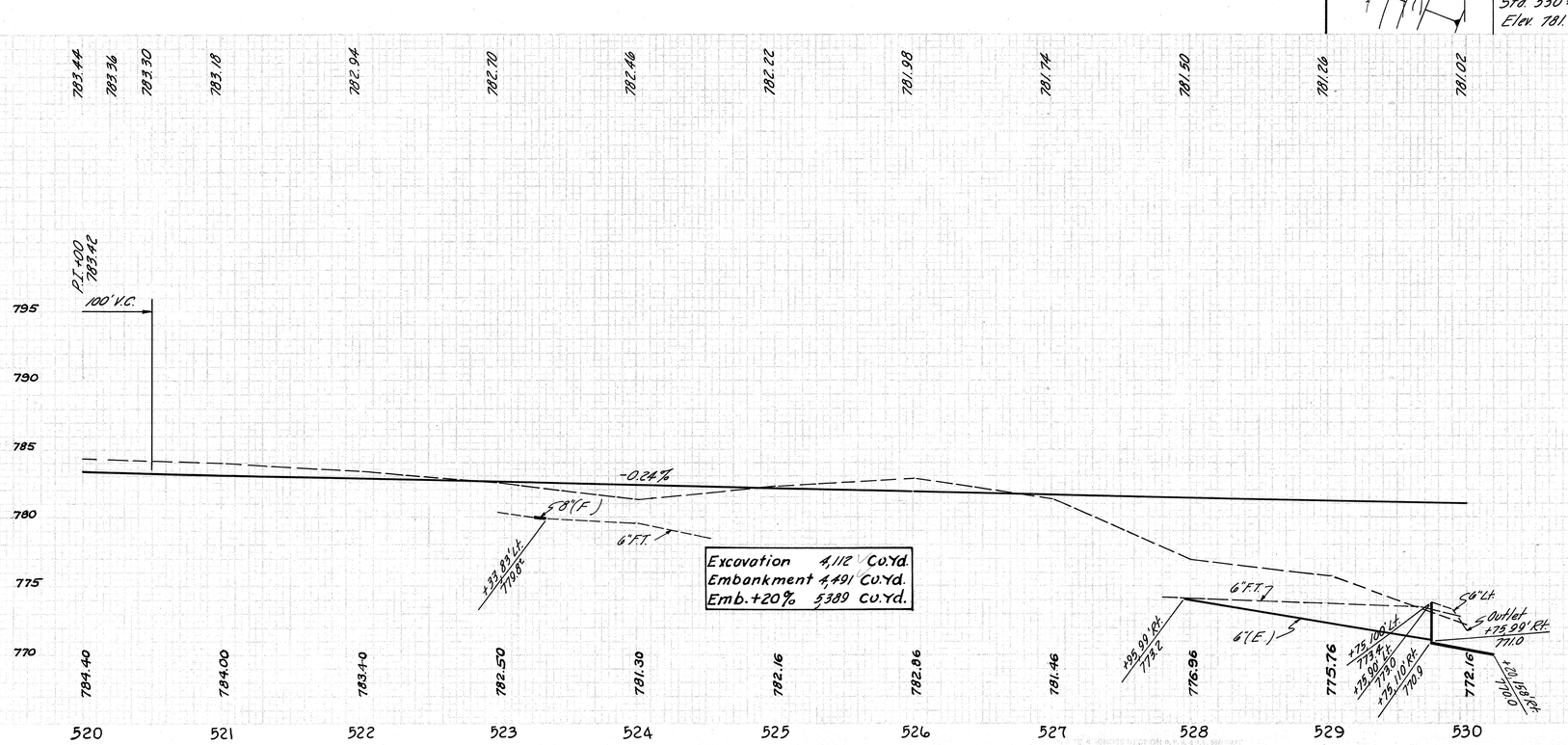


SHEET SUMMARY

Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type E 6"	Type B-B 10"	Type B-B 8"	Type F 8"	Specials			660 Sodding SY
1-D	527+93	530+00	Rt. Lt.	182	33	200		2			
2-D	526+90	529+10	Rt.								148
3-D	523+30	523+33	Lt.				10				
Totals				182	33	200	10	2			148



B.M. #2, Spike in 30" Oak
Sta. 530+26, 208' Rt.
Elev. 781.35



STA. 520+00 to STA. 530+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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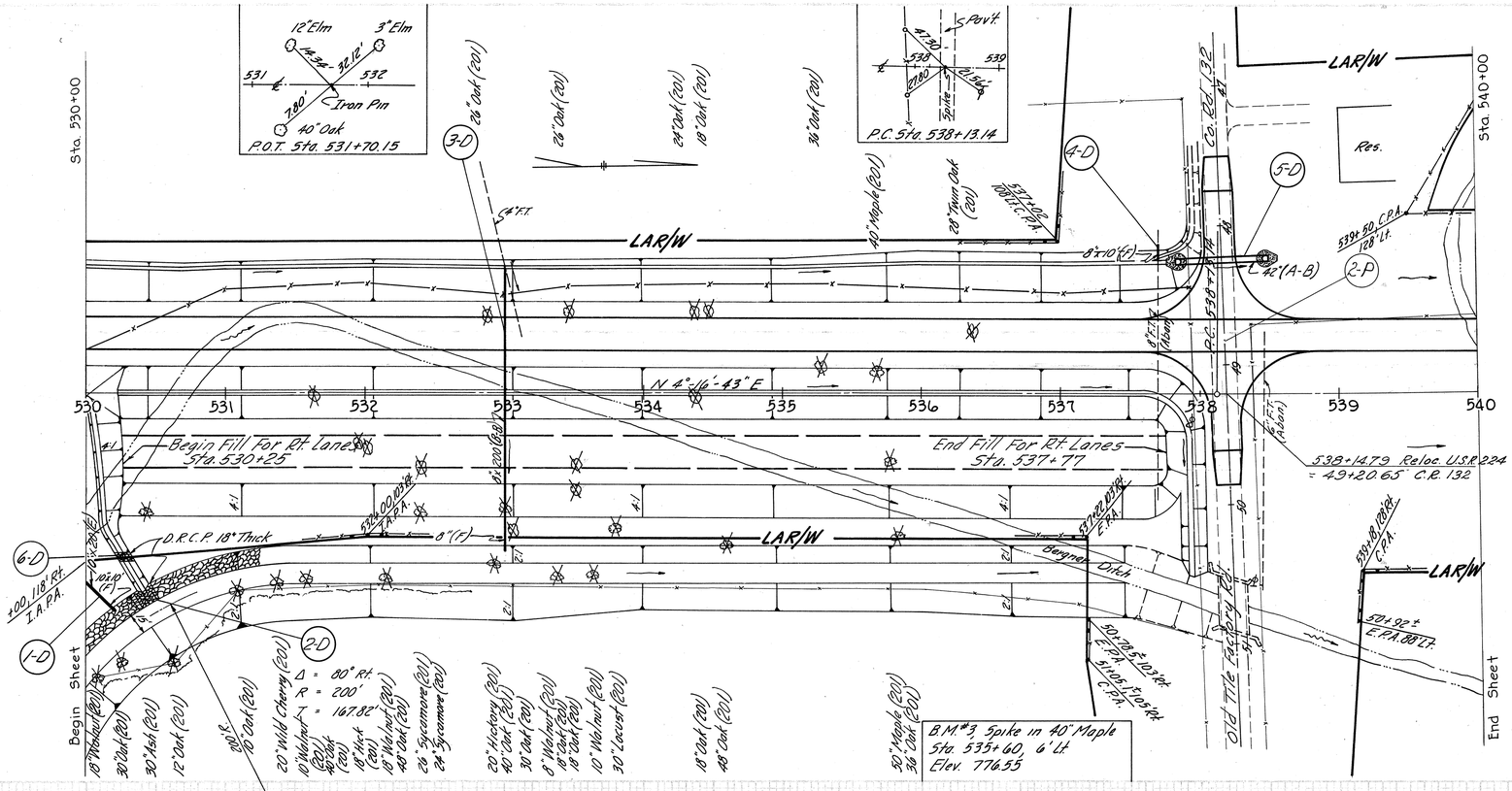
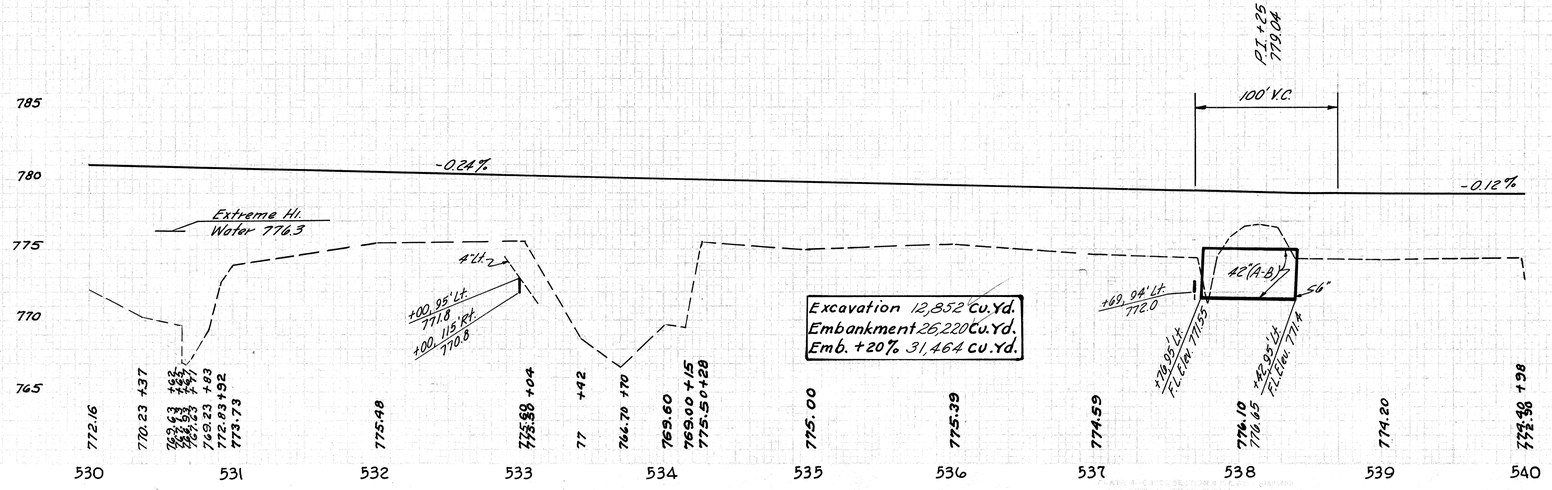
99

VAN WERT COUNTY
VAN-224- 9.34



SHEET SUMMARY											
Ref. No.	Station		Side	603 Conduit Lin. Ft. Type						601 Dump Pad, Chan. Prot. Conc. Rip Rap	
				F		E	A-B	B-B			
	From	To		8"	10"	10"	42"	8"		Cu.Yd.	Sq.Yd.
1-D	530+00	530+20	Rt.		10	20					
2-D	529+50	531+10	Rt.							170	
3-D	533+00		Rt./Lt.	10				200			
4-D	537+70		Lt.	10							
5-D	537+75	538+41	Lt.				66				29.36
6-D	530+22	530+32	Rt.							3	
Totals				20	10	20	66	200		173	29.36

5-D
Drainage Area = 104 Acres
Q_{10} = 190 x .86 x .4 x .65 = 42 c.f.s.
Q_{25} 190 x 1 x .4 x .65 = 49 c.f.s.



STA. 530+00 to STA. 540+00.

MICROFILMED
MAY 6 1988

FED.RD DIVISION	STATE	PROJECT	
2	OHIO		

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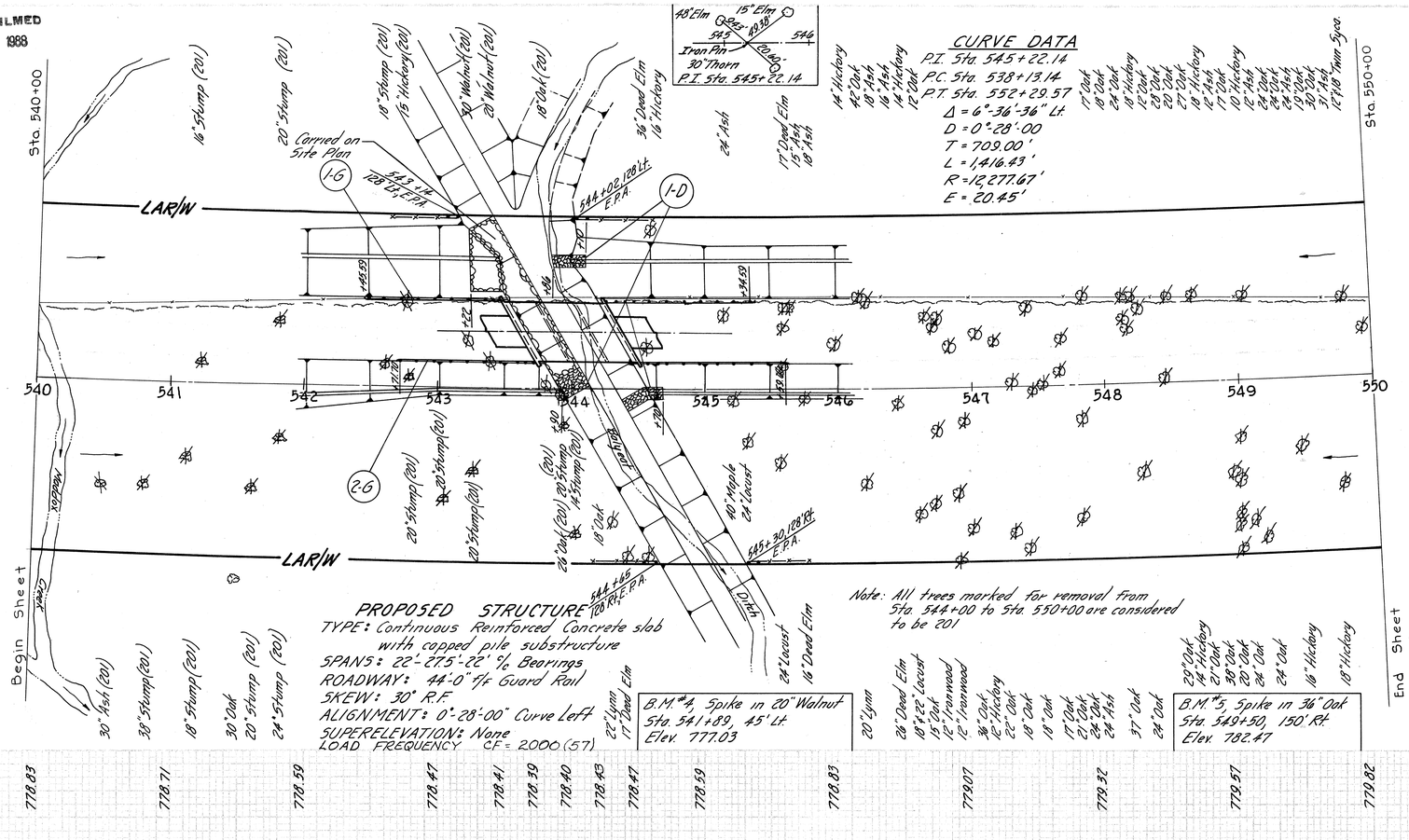
99

VAN WERT COUNTY
VAN-224-9.34



CURVE DATA

P.I. Sta. 545+22.14
P.C. Sta. 538+13.14
P.T. Sta. 552+29.57
$\Delta = 6°-36'-36"$ Lt.
$D = 0°-28'-00$
$T = 709.00'$
$L = 1,416.43'$
$R = 12,277.67'$
$E = 20.45'$

PROPOSED STRUCTURE

TYPE: Continuous Reinforced Concrete slab with capped pile substructure
SPANS: 22'-27.5'-22' c/c Bearings
ROADWAY: 44'-0" c/c Guard Rail
SKEW: 30° R.F.
ALIGNMENT: 0°-28'-00" Curve Left
SUPERELEVATION: None
LOAD FREQUENCY CF = 2000 (57)

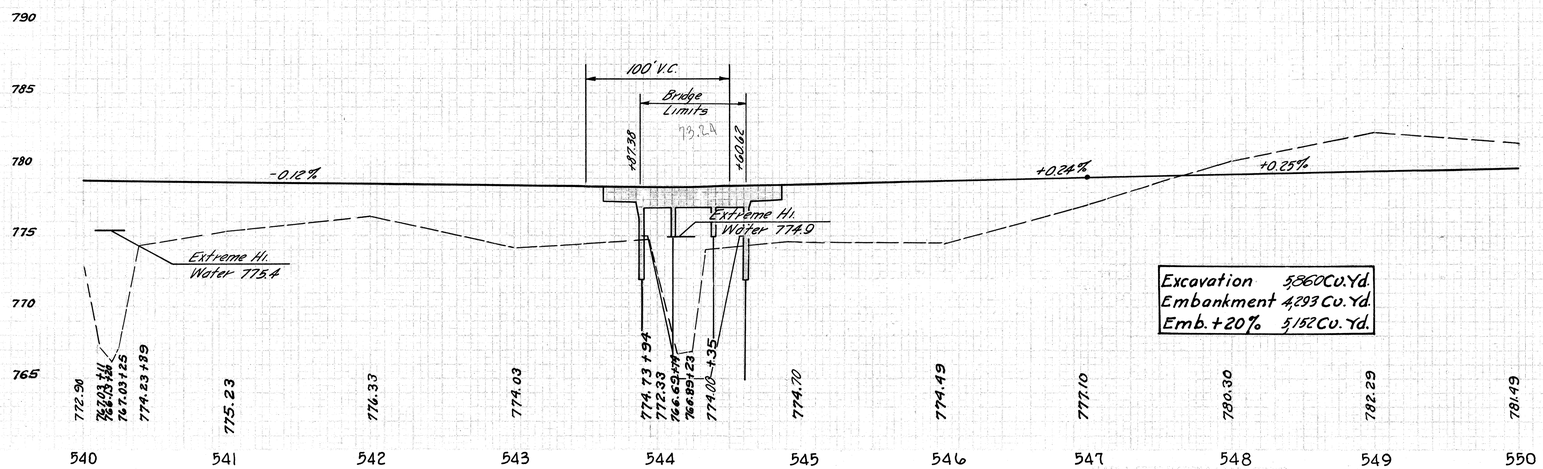
Note: All trees marked for removal from Sta. 544+00 to Sta. 550+00 are considered to be 201

B.M. #4, Spike in 20" Walnut
Sta. 541+89, 45' Lt.
Elev. 777.03

B.M. #5, Spike in 36" Oak
Sta. 549+50, 150' Rt.
Elev. 782.47

SHEET SUMMARY

Ref. No.	Station From	Station To	Side		606 Guard Rail L.F.	601 Dumped Rock Channel Protection Cu. Yd.	
1-D						47	
1-G	542+45.59	545+34.59	Lt.		214.26		
2-G	542+71.70	545+59.66	Lt.		214.26		
Totals					428.52	47	



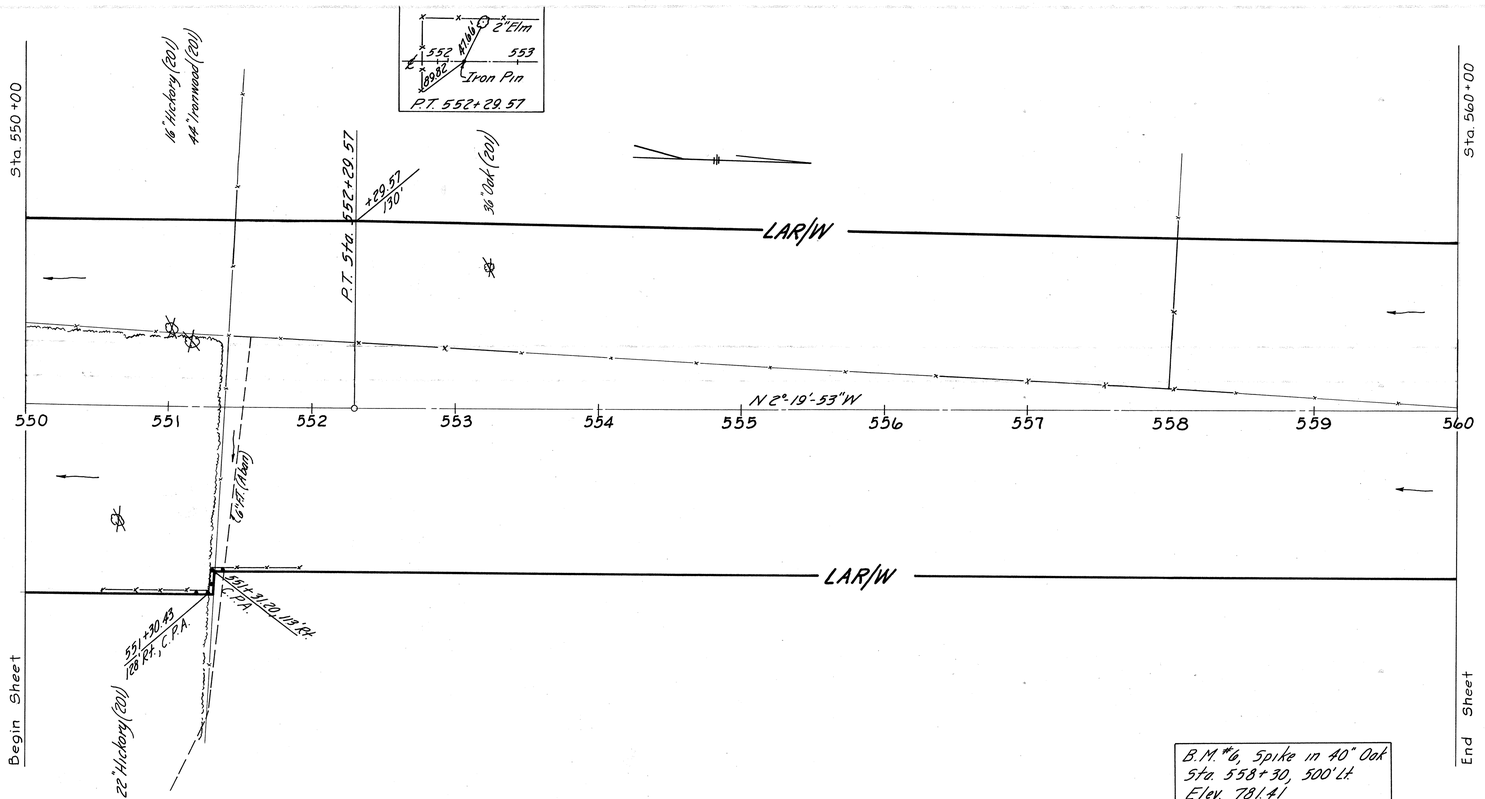
Excavation	5,860 Cu. Yd.
Embankment	4,293 Cu. Yd.
Emb. +20%	5,152 Cu. Yd.

STA. 540+00 to STA. 550+00.

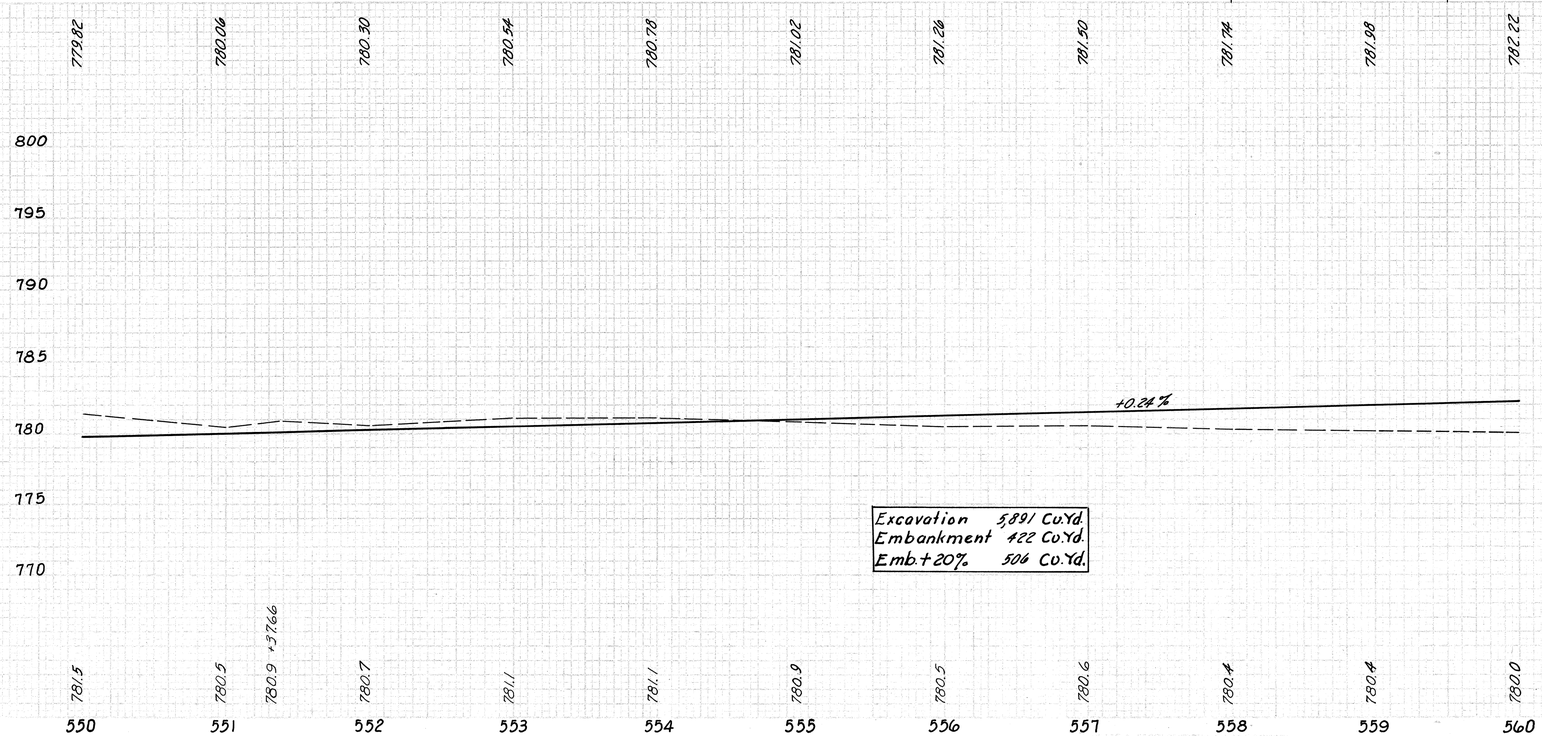
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

13
99

VAN WERT COUNTY
VAN-224-9.34



B.M. #6, Spike in 40" Oak
Sta. 558+30, 500' Lt.
Elev. 781.41



Excavation	5,891 Cu.Yd.
Embankment	422 Cu.Yd.
Emb.+20%	506 Cu.Yd.

Sta. 550+00 to Sta. 560+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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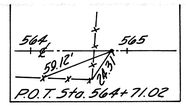
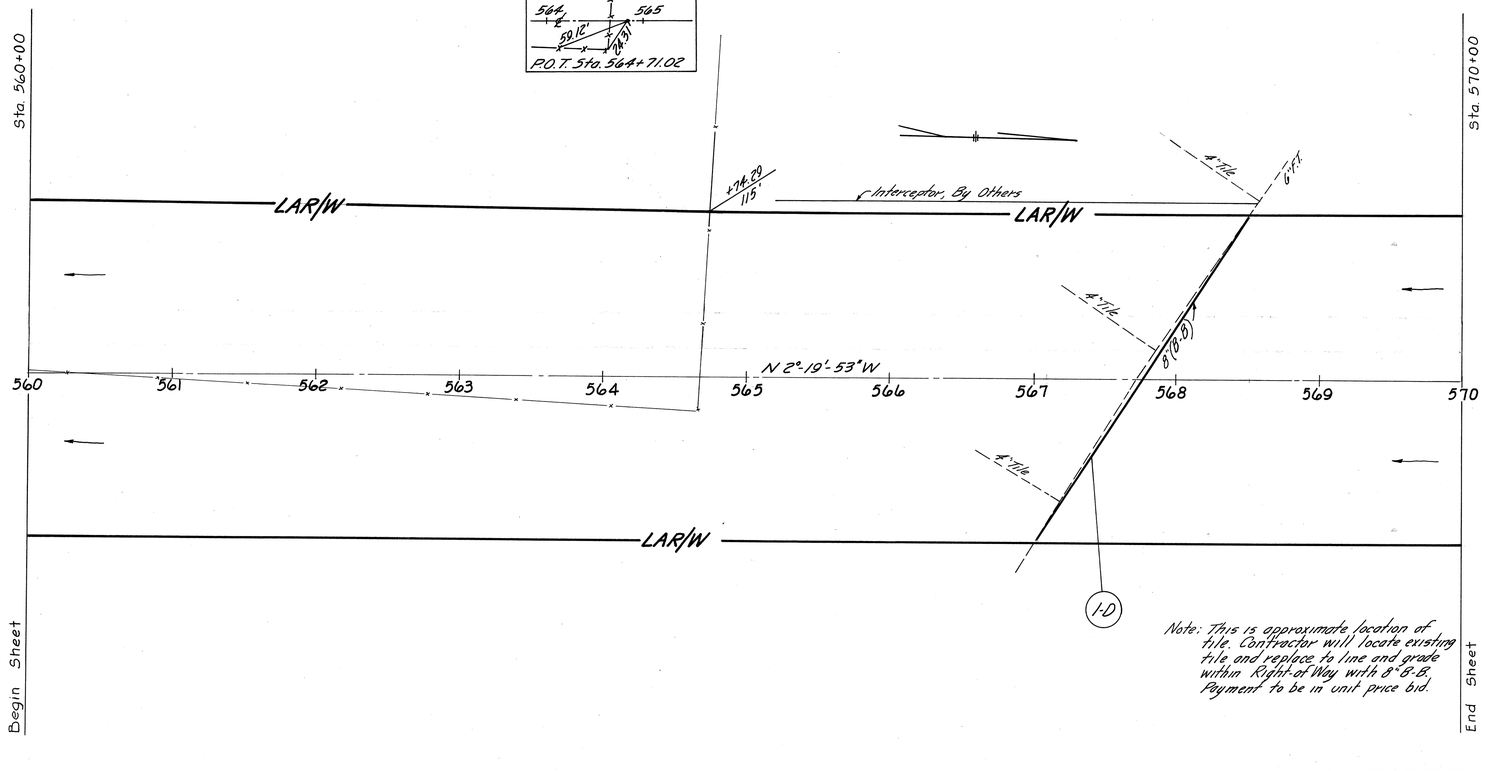
99

VAN WERT COUNTY
VAN-224-9.34

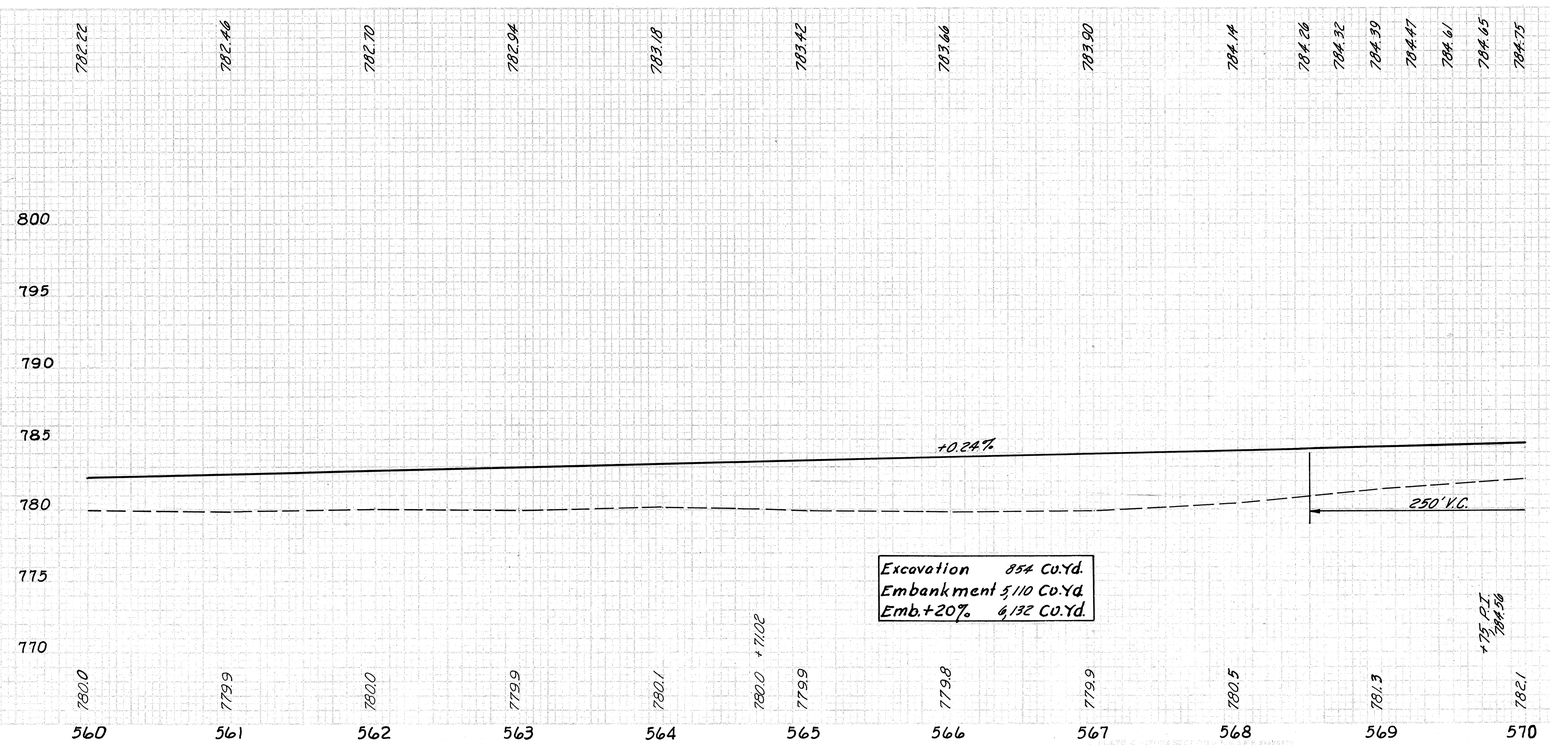




Note: This is approximate location of tile. Contractor will locate existing tile and replace to line and grade within Right-of Way with 8" B.B. Payment to be in unit price bid.

SHEET SUMMARY

Ref. No.	Station From	Station To		603 Conduit Lin. Ft. Type B-B 8"				
1-D	567+00±	568+50±	Rt.-Lt.	274				
Totals				274				



Excavation 854 CU.YD.
Embankment 5,110 CU.YD.
Emb.+20% 6,132 CU.YD.

Sta. 560+00 to Sta. 570+00

FINAL SURVEY — SURVEYED / STAKED / PLOTTED / CHECKED — BY / DATE / INIT.

ORIGINAL SURVEY — SURVEYED / STAKED / NOTE BOOK / PLOTTED / CHECKED — BY / DATE / INIT.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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99

VAN WERT COUNTY
VA N-224-9.34

Sta. 570+00

Begin Sheet

Sta. 580+00

End Sheet

Brush Line 7

24" Stump (20')

24" Stump (20')

L.T. 230' (B-B)

L.T. 230' (B-B)

LAR/W

LAR/W

℄

N 2°19'-53"W

570 571 572 573 574 575 576 577 578 579 580

1-D

2-D

3-TR

3-P

2-A

Existing 10" Field Tile at approx. Sta. 575+75 is too deep to locate by methods available to survey party. Contractor will locate existing 10" tile and will replace to required line and grade with 12" Type "B" Conduit within Right-of-Way. Payment to be included in unit price bid.

Existing 10" Field Tile at Sta. 575+45± is too deep to locate by methods available to survey party. Contractor will locate existing 10" tile and will replace to required line and grade with 15" Type "B" Conduit within Right-of-Way. Payment to be included in unit price bid.

Note: For Fence on U.S.R. 30 see Future Proposed Sheets

P.O.T. Sta. 579+23.08

Pav't.

579 580

5788+78.51 E.P.A. 113 Lt.

Temporary Road

100'R

Sta. 579+23.08 Reloc. U.S.R. 224 = Sta. 100+00 on U.S.R. 30

122°-21'-18"

25'11" Bearos

5770+38.2 113 Rt. E.P.A.

Prop. Fld. Dr. 7.30

5790+89 113.4' Rt. E.P.A.

10'CT.

10' FT.

102+50 End Work

100'R.

Exist. ℄ U.S.R. 30

103+00.38 Rt. E.P.A.

15" Heavy (20')

30" Walnut

Res.

24" Walnut

Res.

SHEET SUMMARY

Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type B-B 12"	15"	*304 Aggr. Base Cu.Yd.	615 Temp. Road As Per Pl. Lump	615 Temp. Pipe & Inl. & 24 Wd. L.S.
1-D	575+45±		Lt. & Rt.		238*		6"	
2-D	575+75±		Lt. & Rt.	238*				
1-A	91+15	U.S.R. 30	Rt.			14.7		
3-TR	578+63±		Lt. & Rt.				Lump	1493
2-A	101+30	U.S.R. 30	Lt.			28.3		
Totals				238*	238*	43.0	Lump	1493

* 12" Fld Drives 304 to R/W
⊗ 706.02 Class III or 706.08

784.75 784.85 784.96 785.08 785.21 785.79 786.25 786.77 787.29 787.81 788.33 788.85 788.97 789.07 789.14 789.20 789.20 789.19 789.15 789.00

+00 P.I. 789.37

800 795 790 785 780 775 770

200' V.C.

+.52% +.52% -.28%

250' V.C.

Excavation 1,078 Cu.Yd.
Embankment 9,677 Cu.Yd.
Emb. +20% 11,612 Cu.Yd.

5+10 Approx. Location (Too deep to locate)

782.1 782.2 782.0 781.7 781.0 780.7 781.1 782.1 785.2 787.2 +.50 789.0 +.81 789.0 789.35 +.08 789.37 +23.08 788.81 +36.2 788.3 +.49 786.9 +.64 787.0

570 571 572 573 574 575 576 577 578 579 580

Sta. 570+00 to Sta. 580+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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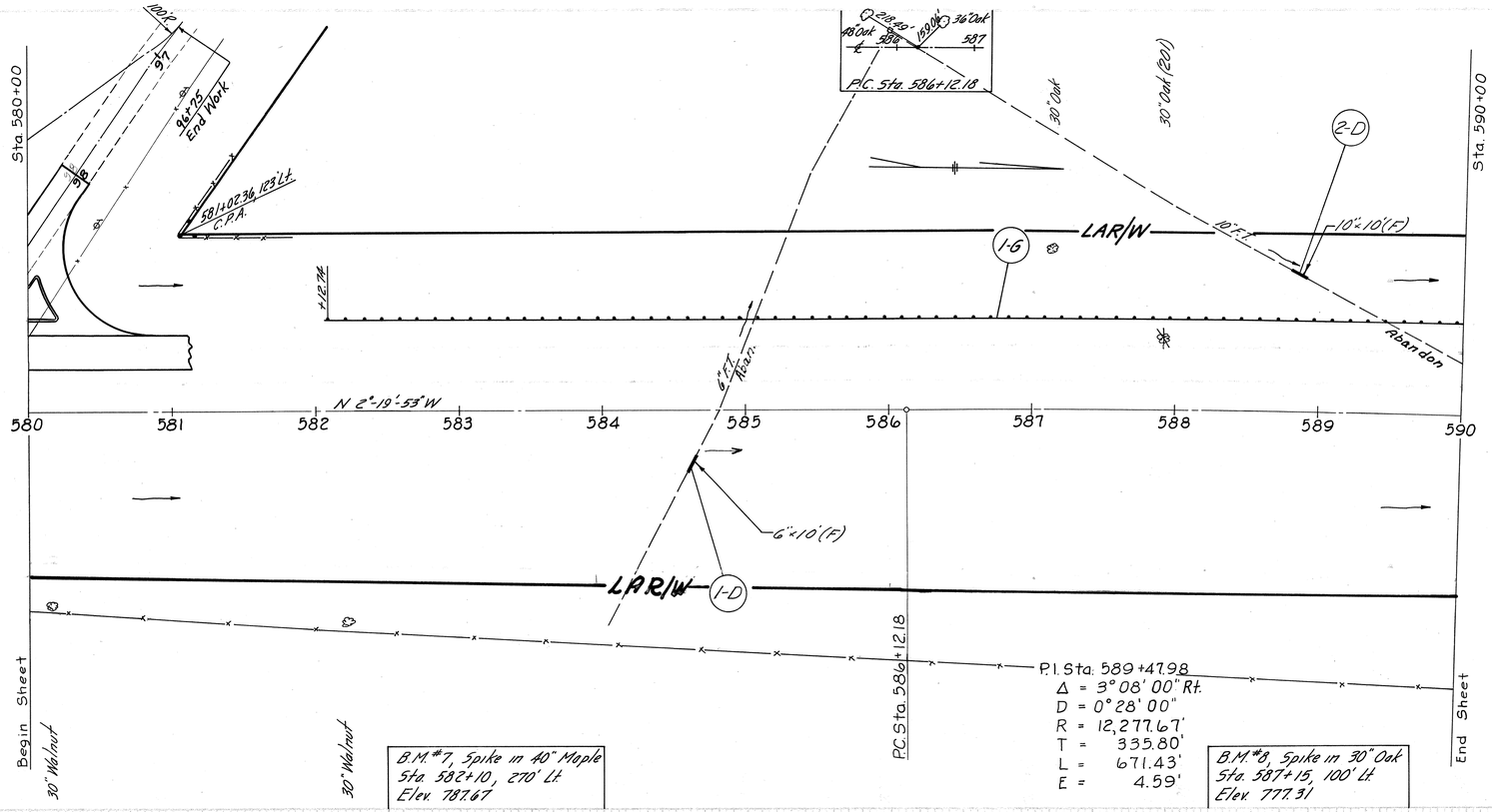
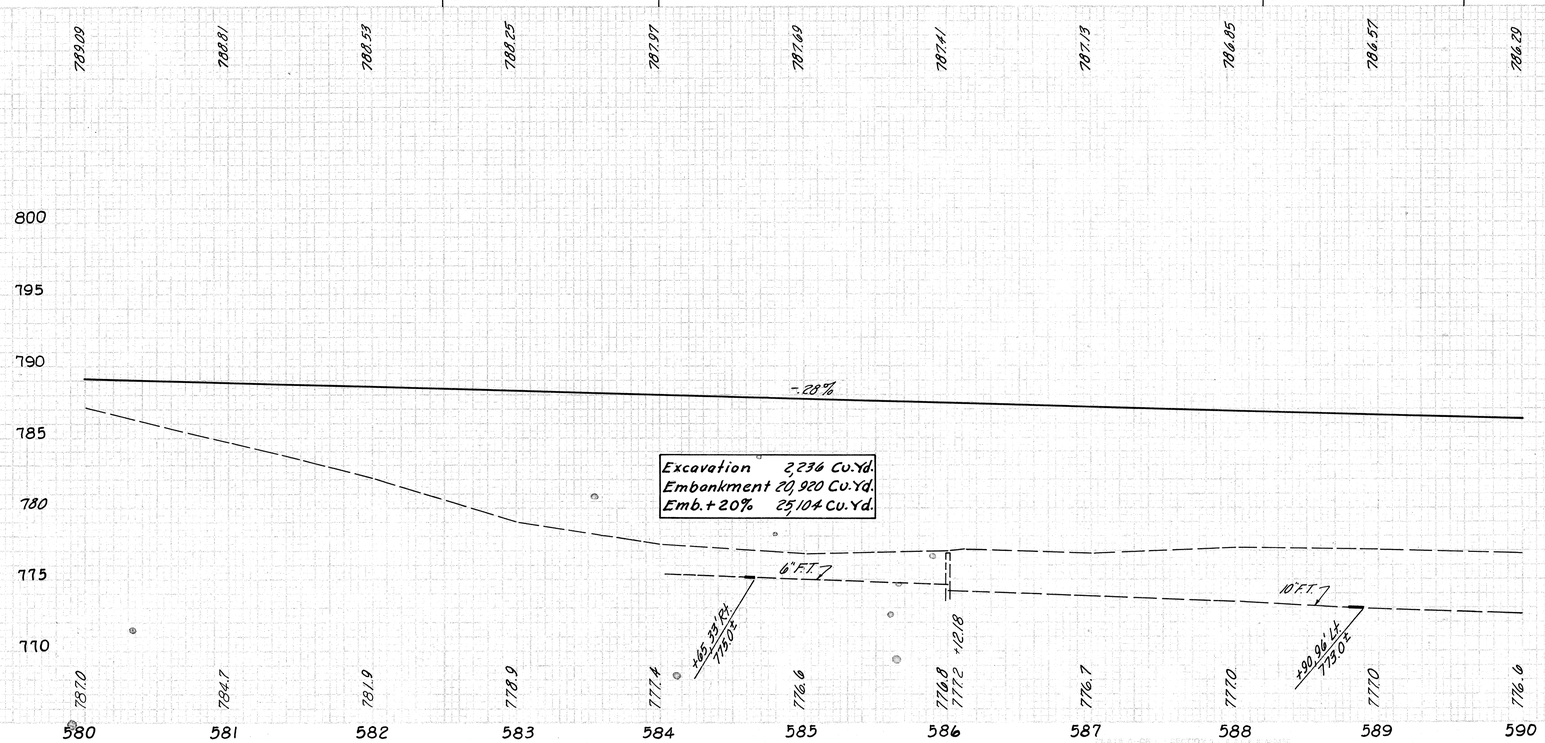
99

VAN WERT COUNTY
VAN-224-9.34



SHEET SUMMARY

Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type F 6"	Type F 10"		606 Guard Rail Lin. Ft.
1-D	584+65		Rt.	10			
2-D	588+90		Lt.		10		
1-G	582+12.74	590+00	Lt.				787.26
Totals				10	10		787.26



Sta. 580+00 to Sta. 590+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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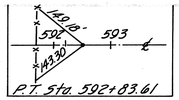
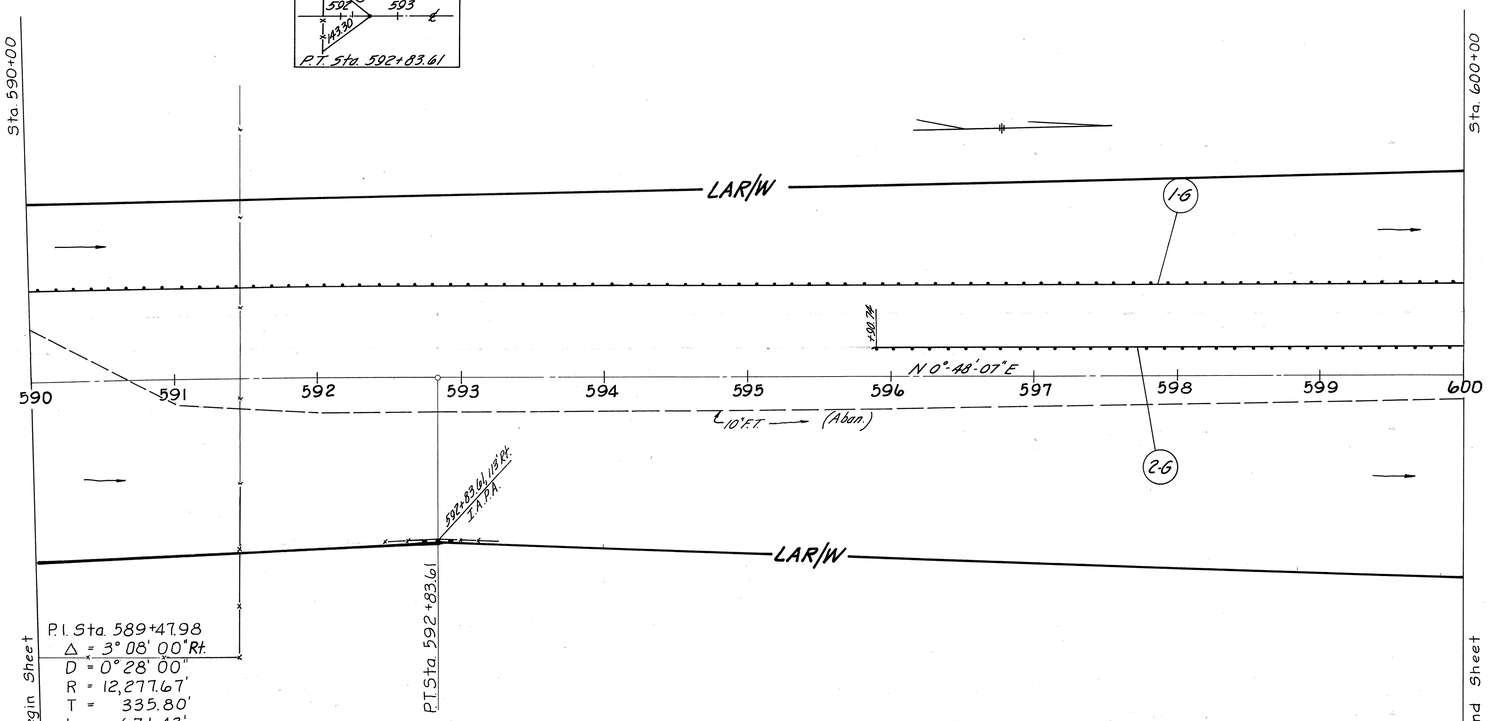
99

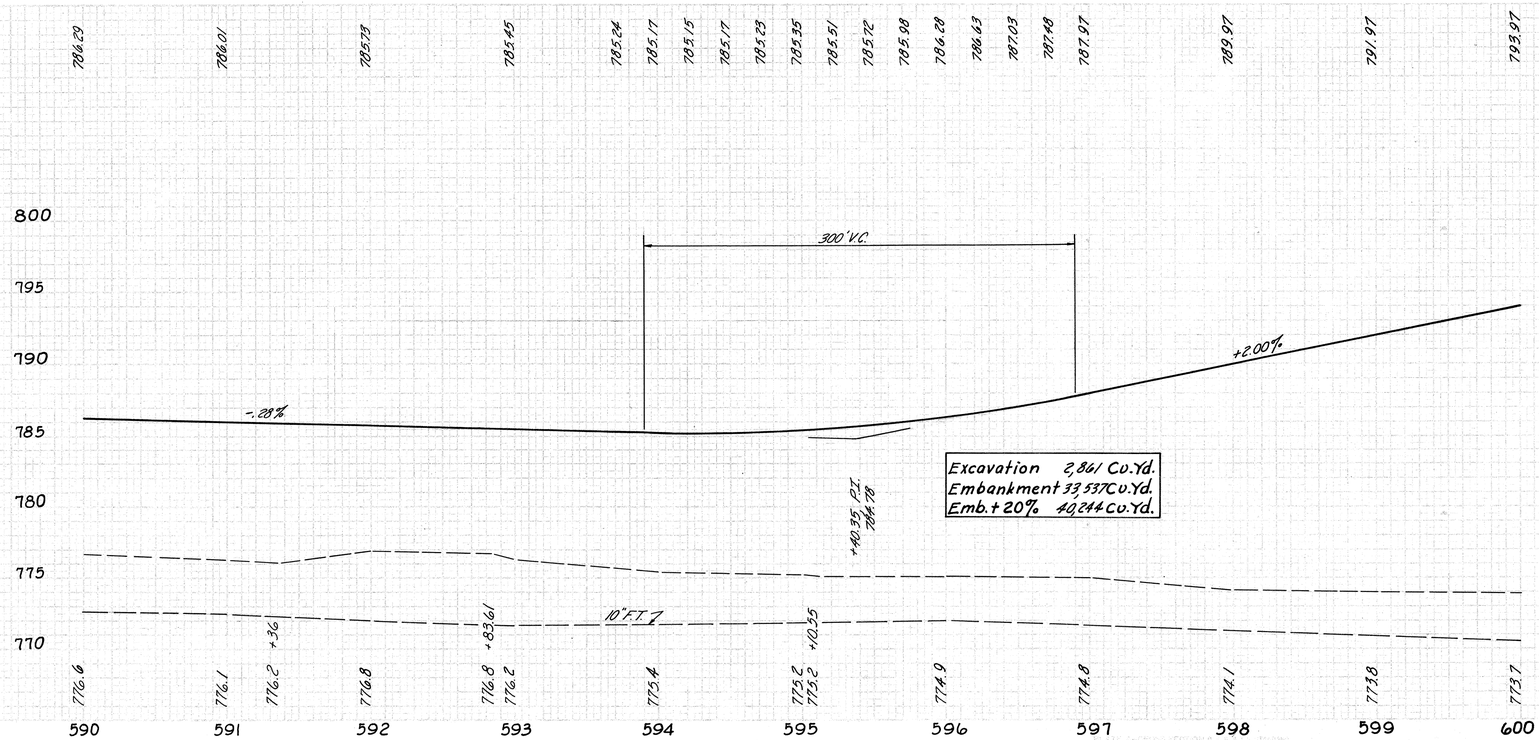
VAN WERT COUNTY
VAN-224-9.34





SHEET SUMMARY

Ref. No.	Station From	Station To	Side	606 Guard Rail Lin. Ft.		
1-G	590+00	600+00	Lt.	1,000		
2-G	595+90.74	600+00	Lt.	409.26		
Totals				1,409.26		



Sta. 590+00 to Sta. 600+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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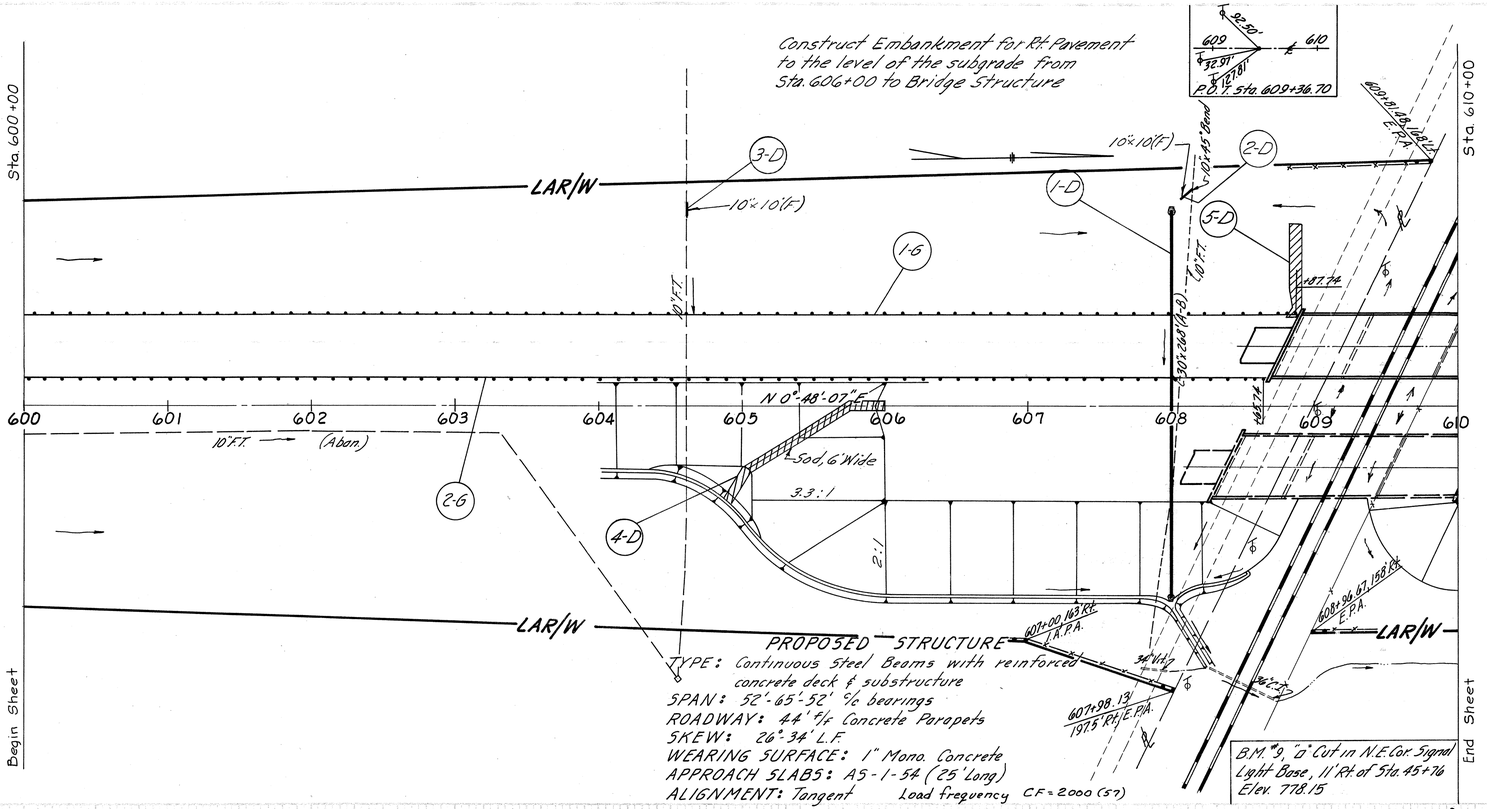
99

VAN WERT COUNTY
VAN-224-9.34



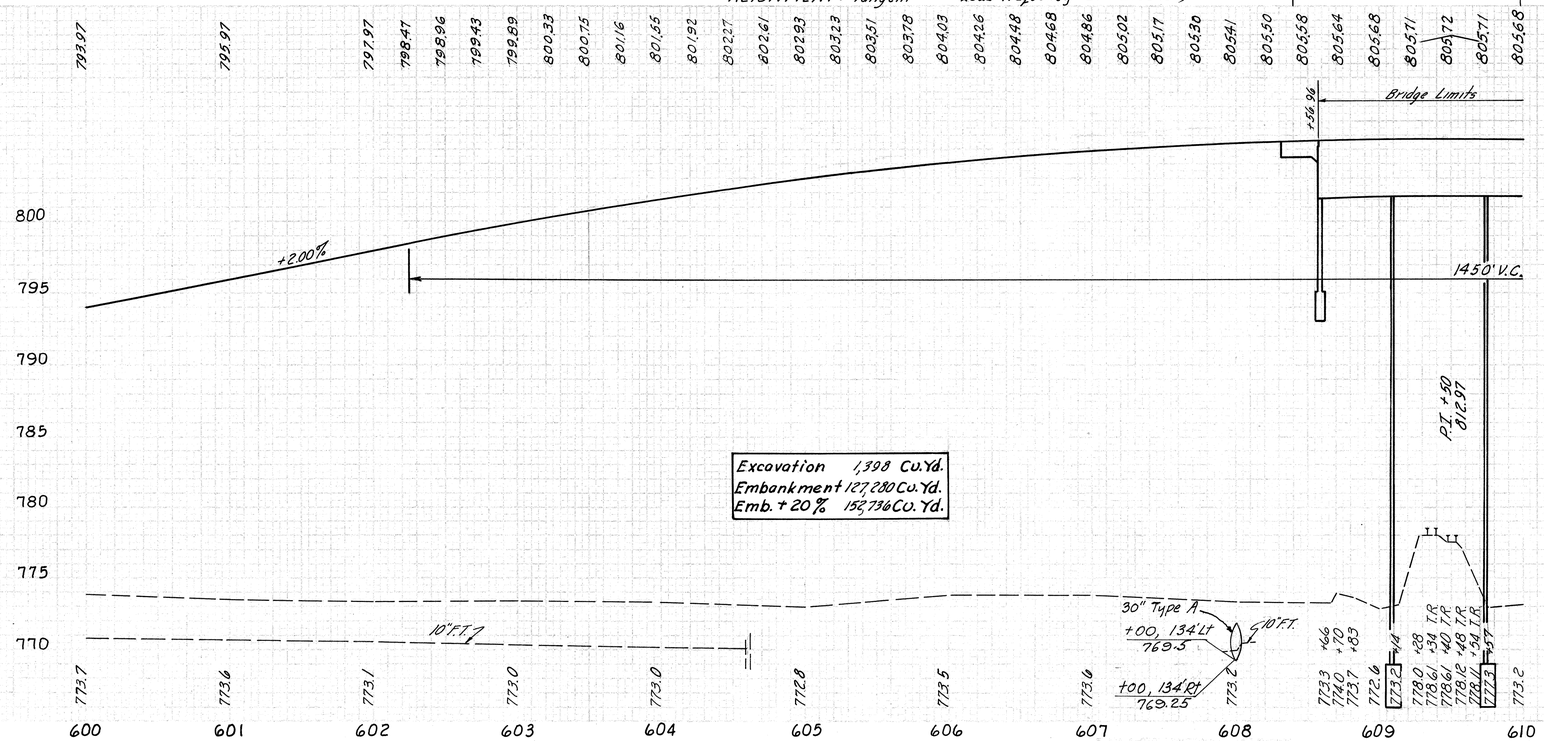
SHEET SUMMARY

Ref. No.	Station From	Station To	Side	603 Conduit Lin. Ft. Type #A-B 30"	603 Conduit Lin. Ft. Type F 10"	603 Specials	606 Guard Rail	601 Conc. Pip Apr.	660 Sodding	660 Special Berm & Slope Prot.
							Lin. Ft.	S.Y.	S.Y.	S.Y.
1-D	608+00		Lt.&Rt.	268				15.44		
2-D	608+07	608+15	Lt.		10	1				
3-D	604+60		Lt.		10					
4-D	604+87	606+00	Rt.						92	
5-D	608+75	608+91	Lt.							73 *
1-G	600+00	608+87.74	Lt.				887.74			
2-G	600+00	608+65.74	Lt.				865.74			
Total				268		20	1,753.48	15.44	92	73

707.05 12 Ga.

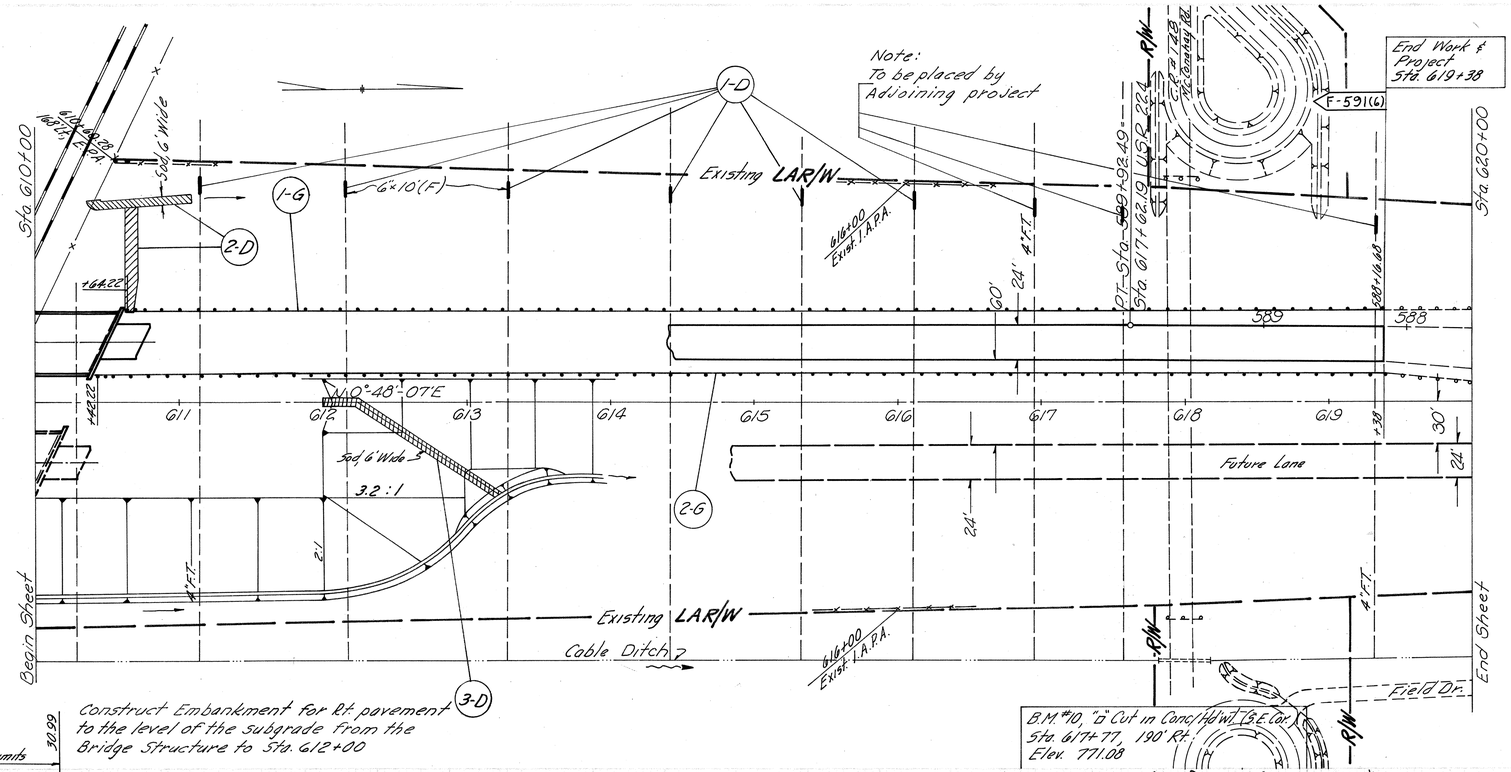
* See Sheet No. 5 For Special Detail (Berm & Slope Protection)

1-D
Drainage Area = .55 Acres
Q_{25} = .65 x 1 x .25 x 130 = 21 c.f.s.



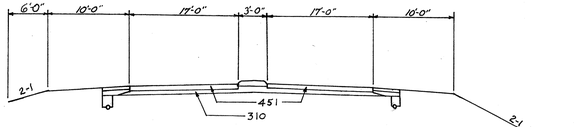
Sta. 600+00 to Sta. 610+00

VAN WERT COUNTY
VAN-224-9.34



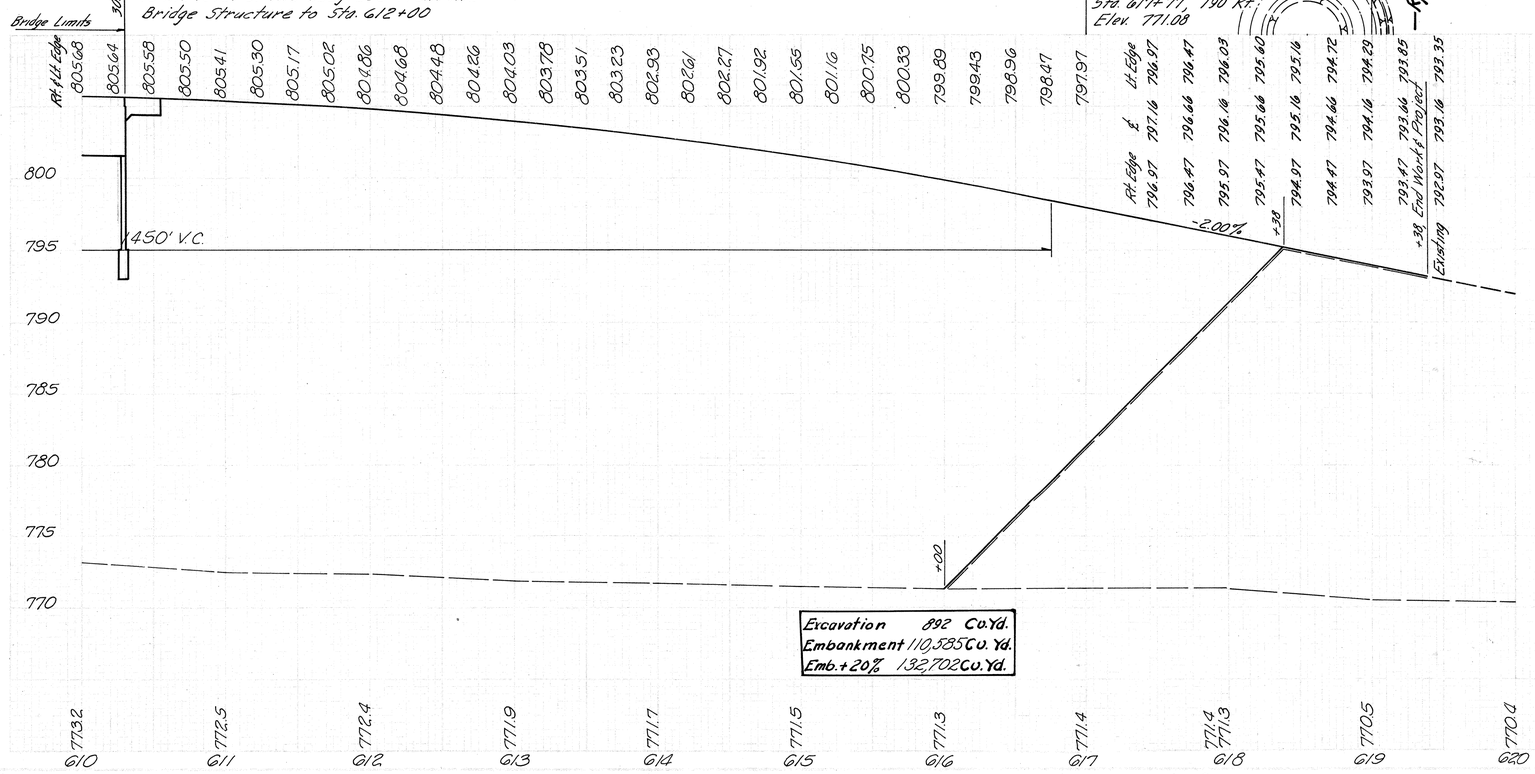
SHEET SUMMARY										
Ref. No.	Station		Side	603			606	660	
				Conduit Lin. Ft. Type			Guard Rail	Sodding	Spcl. Berm Slope Prot.
	From	To		6"	F		Lin. Ft.	S.Y.	S.Y.
1-D	611+14	616+10	Lt.	60					
2-D	610+40	610+83	Lt.					50	79*
3-D	612+00	613+25	Rt.					95	
1-G	610+44.22	619+38	Lt.				875 ⊗		
2-G	610+44.22	619+38	Lt.				900 ⊗		
Totals				60			1775 ⊗	145	79

* See Sheet No. 5 for Special Detail (Berm & Slope Protection)
⊗ Length of "connecting panel" shall be adjusted in field.



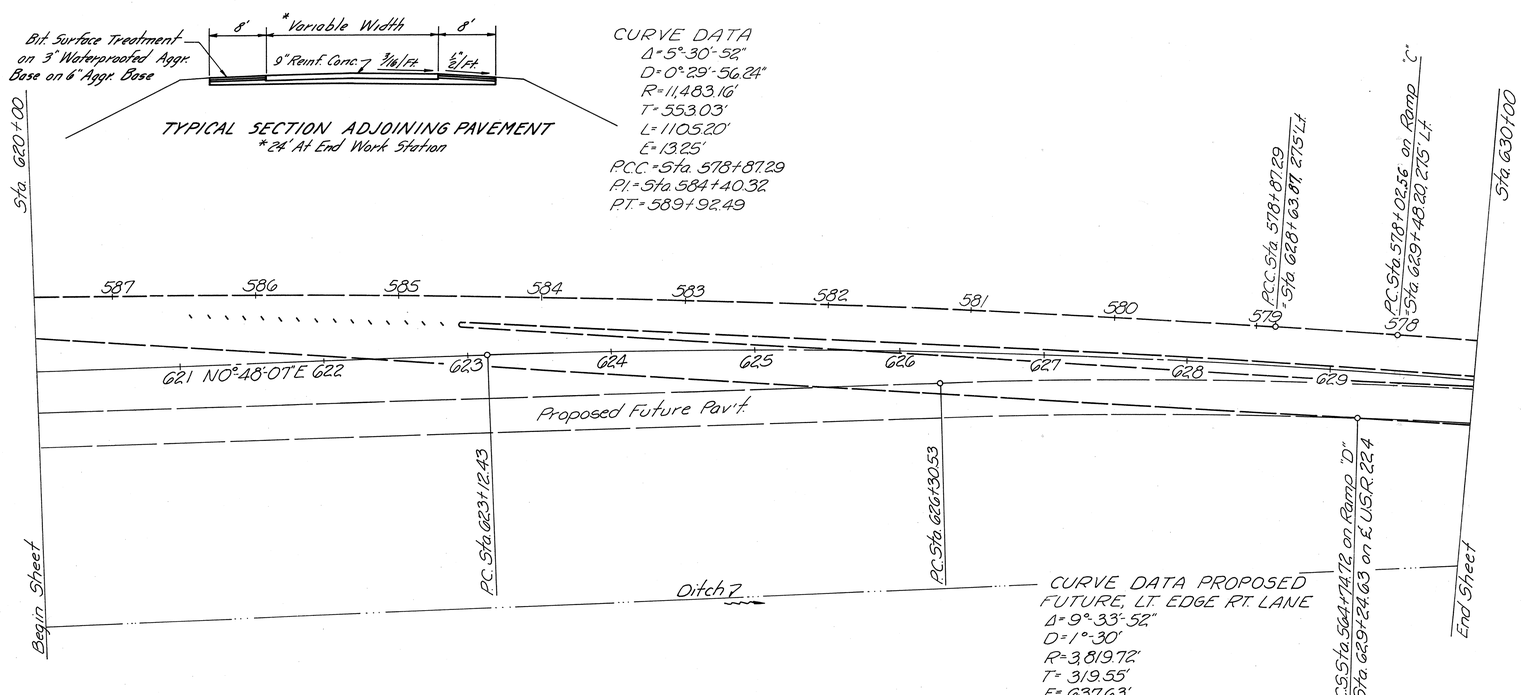
Typ. Section of adjoining pavement
Beyond Sta. 623±

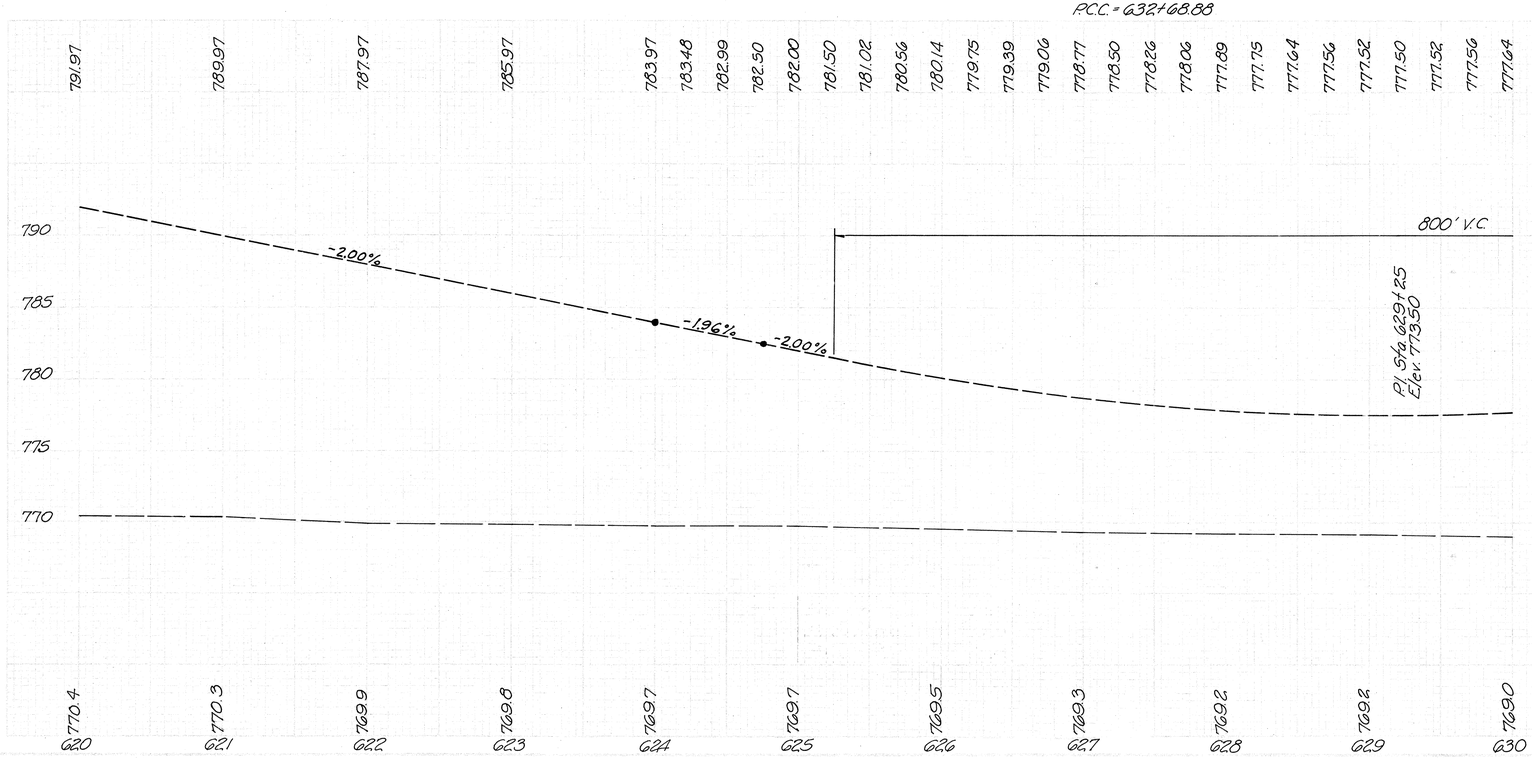
Construct Embankment for Rt. pavement to the level of the subgrade from the Bridge Structure to Sta. 612+00



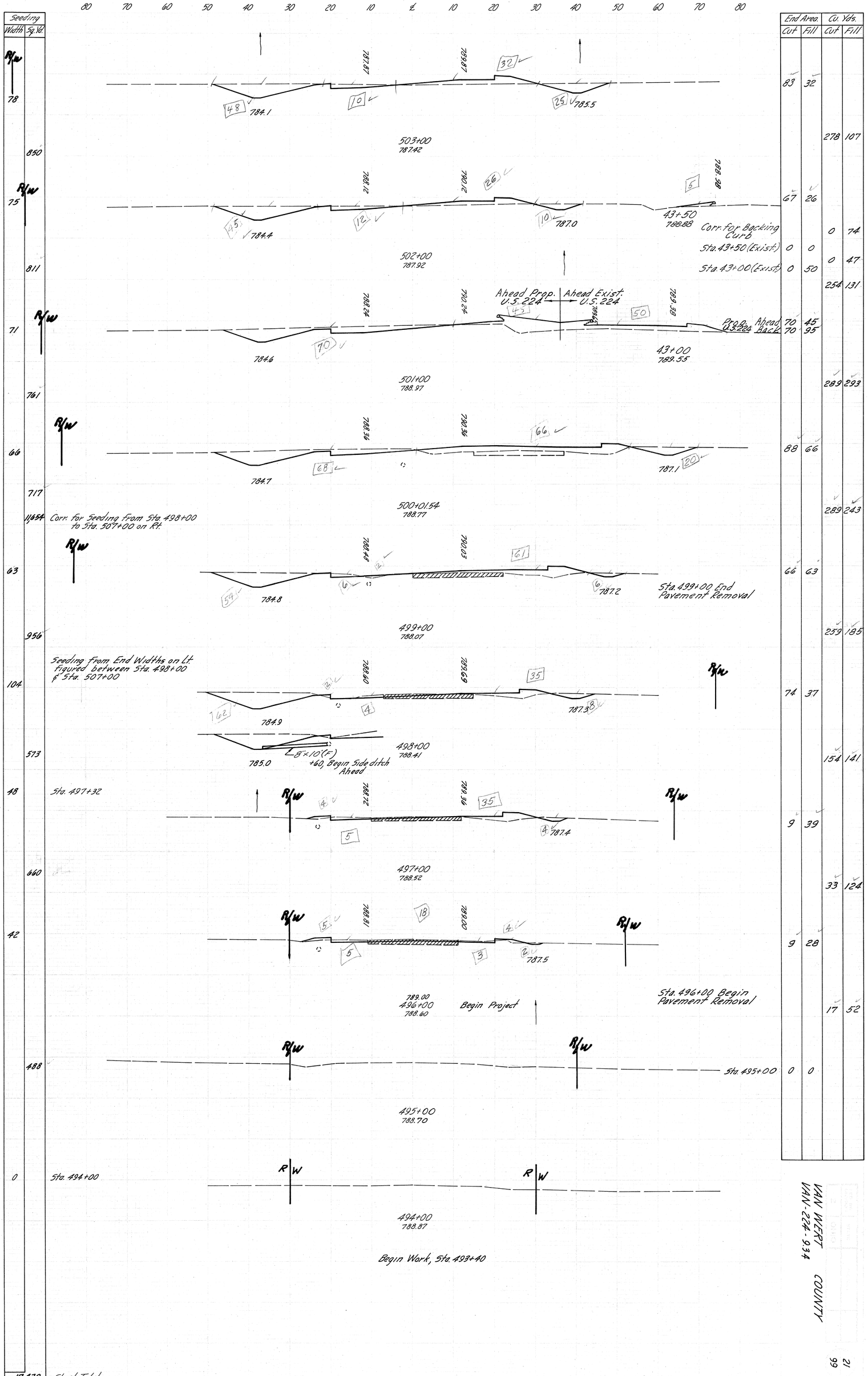
From Sta. 610+00 to Sta. 620+00

VAN WERT COUNTY
VAN-224-9.34





Sta. 620+00 to Sta. 630+00


80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80
Seeding Width
Seeding Sq. Yd.
End Area Cut
End Area Fill
Cu. Yds. Cut
Cu. Yds. Fill
R/W
78
850
75
811
71
761
66
717
63
956
104
573
48
660
42
488
0
503+00
787.42
502+00
787.92
501+00
788.97
500+01.54
788.77
499+00
788.07
498+00
788.41
497+00
788.52
496+00
788.60
495+00
788.70
494+00
788.87
784.1
784.4
784.6
784.7
784.8
784.9
785.0
785.5
787.0
787.1
787.2
787.38
787.4
787.5
43+50
788.88
43+00
789.55
Corr. for Backing Curb
Sta. 43+50 (Exist.)
Sta. 43+00 (Exist.)
Ahead Prop. U.S. 224
Ahead Exist. U.S. 224
Prop. Ahead
Exist. Ahead
Back
Corr. for Seeding from Sta. 498+00 to Sta. 507+00 on Rt.
11,654
Seeding from End Widths on Lt. Figured between Sta. 498+00 & Sta. 507+00
8'x10'(Ft.)
+60, Begin Side ditch Ahead
Sta. 497+32
Sta. 499+00 End Pavement Removal
Sta. 496+00 Begin Pavement Removal
Begin Project
Sta. 495+00
Sta. 494+00
Begin Work, Sta. 493+40
From Sta. 494+00 to Sta. 503+00
17,470
Sheet Total
VAN WERT
VAN-224-9.34
COUNTY
21
99

Cut	Fill	Cut	Fill
23	85	31	281
5	168	2.90	
2	178	2.158	
3	151	59	419
29	75	139	196
46	31	185	126
54	37	194	137
51	37	243	128
80	32	320	117
93	31	319	109
79	28		

VAN WERT COUNTY
VAN-224-9.34

22
99

Qu. 2-23-65
J.M.C.

R/w 200'
786.38
784.38
511+00
783.41
R/w 112'

R/w 214'
8"x 325' (B-B)
786.32
784.32
510+40
782.71
6"x 77'
781.6
781.4
R/w 115'

R/w 210'
786.31
784.31
510+26
781.31
781.8
R/w 115'

R/w 220'
786.34
784.34
510+00
782.31
782.0
R/w 115'

R/w 250'
786.78
784.78
509+00
784.21
782.3
R/w 114'

R/w 290'
787.30
785.30
508+00
785.22
782.6
R/w 112'

R/w 340'
787.82
785.82
507+00
785.42
782.9
R/w 110'

788.34
786.34
506+00
785.82
783.2
R/w 109'

516+505+00
516+504+00
788.86
786.86
505+00
787.02
783.5
R/w 105'

516+503+00
789.38
787.38
504+00
787.12
783.8
R/w 102'

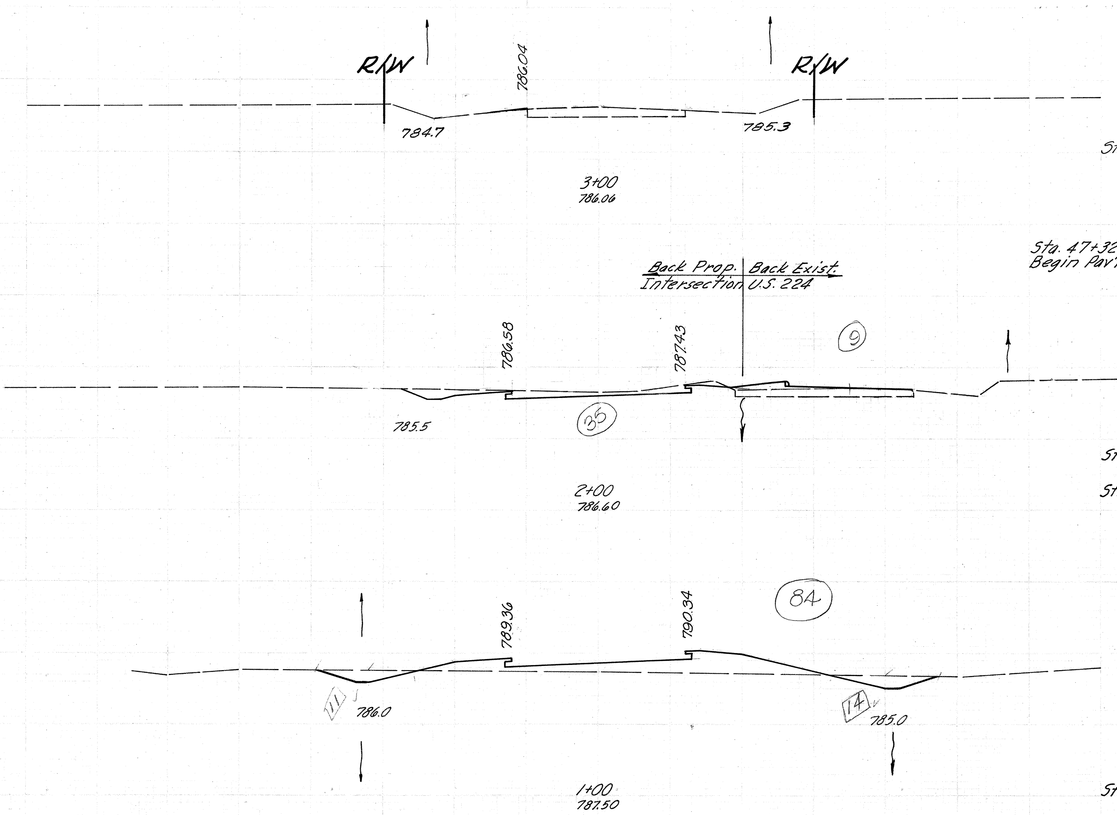
Sta. 503+00
Sheet Total

Seeding	Width & Rd.	
282	1,910	
291	450	
287	044	
297	3,439	
322	3,811	
304	4,035	
410	2,772	
89	947	
85	928	
82	889	
78	20,885	

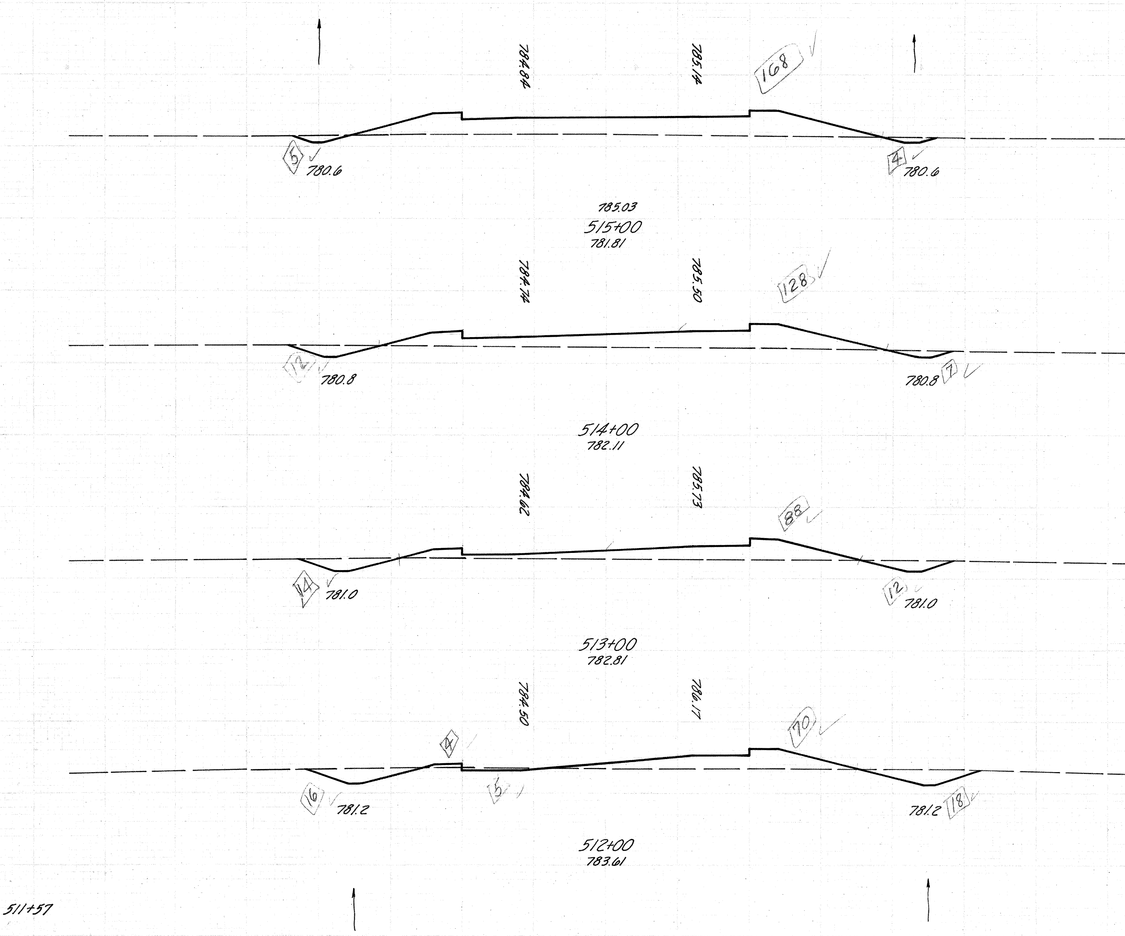
From Sta. 504+00 to Sta. 511+00

Seeding Width	Seeding Sq Yd.
214	
	2,366
212	
	2,400
220	
	2,500
230	
	1,142
268	
	1,679
282	
10,087	Sheet Total

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



	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
Sta. 2+50	0	0		
Sta. 47+32 (Exist) U.S. 224 Begin Pavt. Removal			65	0
Ahead	35	0		
Back	35	12		
Sta. 47+18 (Exist)	18	15		
Sta. 46+50 (Exist.)	0	0	22	19
			111	178
	25	84		
			51	198
Sta. 0+45 Ahead	25	110		
Corr. for Inter.			-43	270



From Sta. 5+12+00 to Sta. 5+15+00 and From Sta. 0+45 to Sta. 3+11.78

Sta. 5+11+57

Sta. 5+11+00

	Cut	Fill	Cu. Yds. Cut	Cu. Yds. Fill
R/W 162'	9	168		
			52	349
R/W 162'	19	128		
			83	400
R/W 165'	26	88		
Sta. 5+12+00	39	74	120	300
Sta. 5+11+00	23	85	115	294
R/W 172'				

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

VAN WERT
VAN-224-9.34
COUNTY

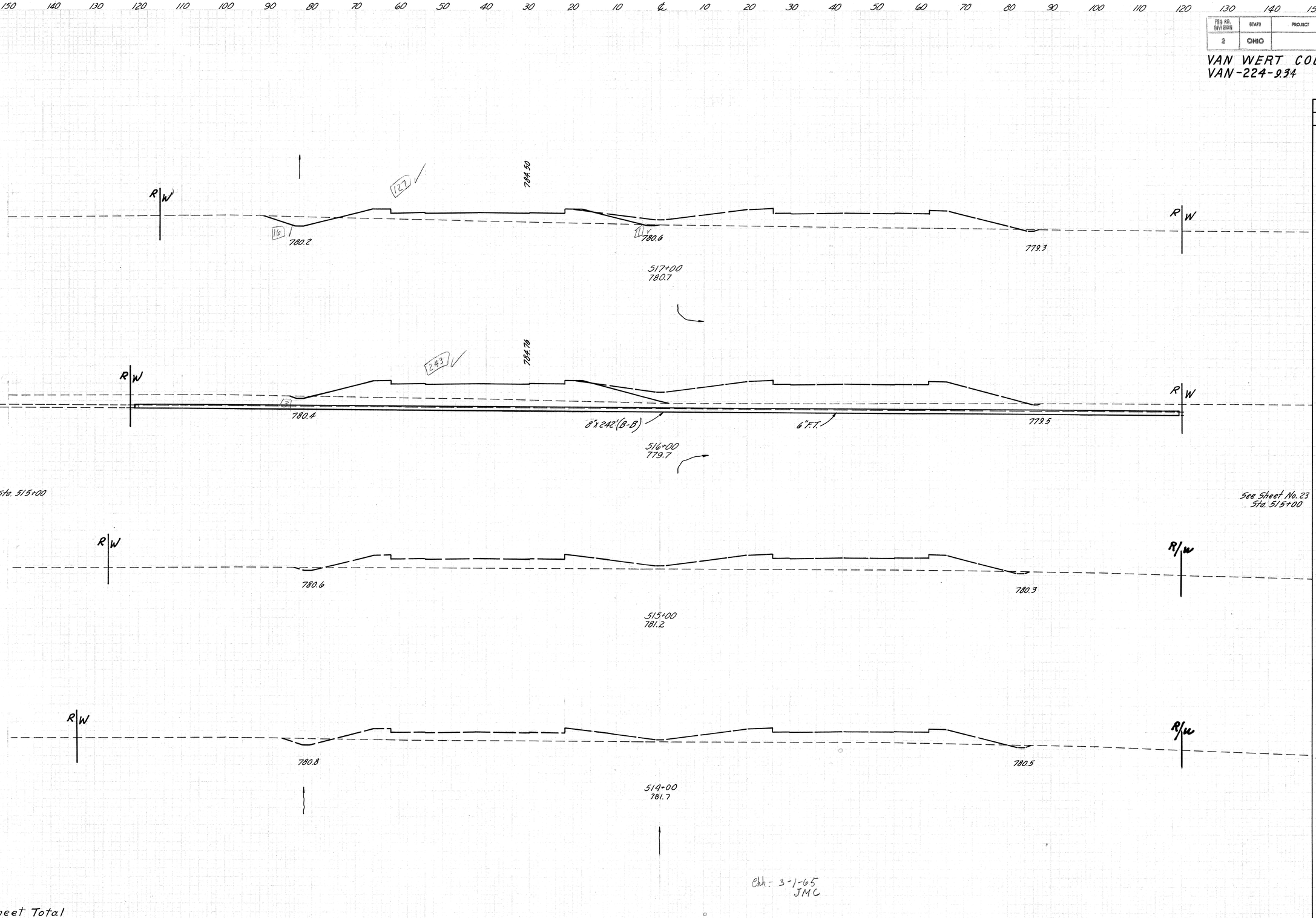
99 23

FED. HWY. DIVISION	STATE	PROJECT	
2	OHIO		

24
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
198		17	127		
	2,289			37	685
205		3	243		
	2,328			22	761
214		9	168		
	4,617 Sheet Total				



Chk. 3-1-65
JMC

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

25
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
	955
191 196	
	1,204
198	
	8,525

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

783.18
R/W
779.4
150
781.0
521+00
784.0
778.5
R/W

783.44
R/W
779.6
200
781.2
520+00
784.4
778.7
R/W

783.78
R/W
779.8
200
781.0
519+00
783.8
778.9
R/W

784.14
R/W
780.0
62
3
4
8
10
780.8
518+00
782.4
779.1
R/W

Sta. 517+55 Ahead
Back

Sta. 517+00
Sheet Total

Chk. 2-26-65
J.M.C

END AREA		VOLUME	
CUT	FILL	CUT	FILL
150	0		
		648	0
200	0		
		741	0
200	0		
		511	20
76	11		
		172	256
17	127		

Sta. 517+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 518+00 to Sta. 521+00

FED RD DIVISION	STATE	PROJECT	
2	OHIO		

26
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
191		160	0		
	2,122			430	11
191		72	6		
	2,122			278	15
191		78	2		
	2,122			404	4
191		140	0		
	2,122			537	0
191		150	0		
	2,488				

Sheet Total

Sta. 522+00

Sta. 521+00

Sta. 522+00 to Sta. 525+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

782.22
778.6
160
780.2
525+00
782.2
777.7

782.46
8"(F)
778.8
48
18
(Abandon)
6
780.4
Plug
524+00
781.3
777.9

782.70
14
779.0
20
14
780.6
523+00
782.5
778.1

782.94
779.2
140
780.8
522+00
783.4
778.3

Chk 2-26-65
J.M.C

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

27
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
	2,122
191	
	8,488

Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 525+00

R/W

340

781.28

Sta. 529+10 8' Rt.
End Sod, 6' Wide

776.0 — 775.0 — 6" — 775.0

529+00
775.8

162

781.59

778.0 — 776.5 — 776.0 — 6"

528+00
777.0

136

781.74

778.2 — 779.8 — 777.3

Sta. 526+90, 11' Lt.
Begin Sod, 6' Wide

527+00
781.5

242

781.98

778.4 — 780.0 — 777.5

526+00
782.9

Chk 2-26-65
J.M.C.

Sta. 525+00 Sta. 526+00 to Sta. 529+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
7	340		
		31	930
10	162		
		270	300
136	0		
		760	0
242	0		
		744	0
160	0		

FED. HWY. DIVISION	STATE	PROJECT	
V	OHIO		

28
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
			589		750
180					
	3039				2565 3055
187					
	706				732 1,253
198 198					
	1,444				536 3,170
190					280 200
	2,117		31	1,405	70 3,231
191					
	6,306		7	340	
Sheet Total					

Sta. 529+00

Sta. 530+00 to Sta. 532+00

CM. 3-1-65
J.M.C.

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

29
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
179	
	1,989
179	
	1,989
179	
	1,989
179	
	1,994
180	
Sta. 532+00 Sheet Total	7,961

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		1,328	3,978
		1,302	3,100
		1,600	3,159
		2,050	2,978
		Sta. 532+00	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

779.68
782
2
7730
536+00
775.4
765.85
338
360
782

779.82
826
1
773.3
535+00
775.0
766.00
340
357
826

780.06
848
11
773.6
534+00
769.6
766.15
335
346
848

780.30
858
3
4'F.T.
+00.95 Lt.
Inv. El. 771.82
4" Outlet
773.9
8"(B-B)
533+00
775.6
8'×10'(F)
+00.115 Rt.
Inv. El. 770.8
766.30
510
518
858
589
750

C&M. 3-2-65
J.M.C.

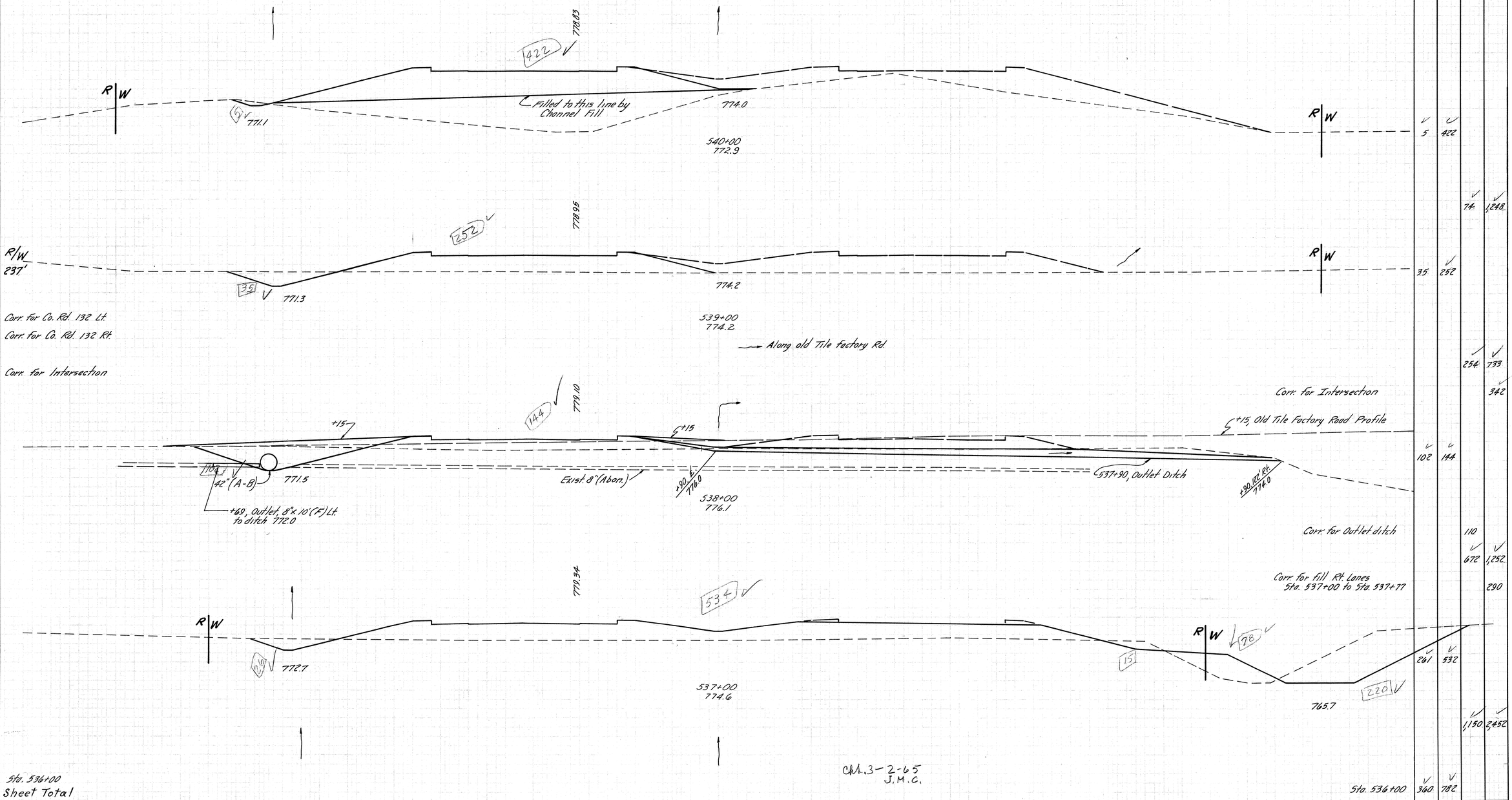
Sta. 533+00 to Sta. 536+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

30
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
220	
	3,939
219	
	6,645 Corr. for Co. Rd. 132 Lt.
	3,634 Corr. for Co. Rd. 132 Rt.
	880 Corr. for Intersection
	2,333
201	
	2,111
179	
	1,989
179	Sta. 536+00
	18,271 Sheet Total



END AREA		VOLUME	
CUT	FILL	CUT	FILL
5	422	74	1,248
35	252	254	733
			342
102	144	110	
		672	1,252
			290
261	532		
		1,150	2,452
Sta. 536+00	360	782	

Ch. 3-2-65
J.M.C.

Sta 537+00 to Sta. 540+00

FED RD. DIVISION	STATE	PROJECT		31
2	OHIO			99

VAN WERT COUNTY
VAN-224-9.34

SEEDING END WIDTH	SEEDING SQ. YDS.
220	1,814
220	599
220	1,325
220	2,444
220	2,444
220	2,444
220	11,270 Sheet Total

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			25	12
	152	116		
			149	123
Ahead	177	156		
Back	177	164		
			414	368
	181	154		
			717	424
	208	75		
			519	398
	74	140		
			146	1041
	5	422		

Corr. for Balyeat Ditch

Sta. 544+61.72 Ahead
Sta. 543+62.38 Back

Sta. 540+00

Sta. 541+00 to Sta. 544+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

D.R.C.P, 18" Thick — Sta. 544+61.72 Ahead, 776.0 — Sec. back of Abutment, Sec. on skew distances Rt. L

STRUCTURE

Sta. 543+22 Lt. Begin D.R.C.P.

D.R.C.P, 18" Thick — 543+86.88, 776.6 — Sec. back of Abutment, Sec. on skew distances Rt. L

Sta. 543+62.38, 774.5 — Begin Appr. Slab, Sec. on 30° R.F. Skew distances Rt. L

Sta. 543+00, 774.0

Sta. 542+00, 776.3

Sta. 541+00, 775.2

CM 3-2-65 J.M.C

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

32
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
220		314	0		
	2,444			661	178
220		43	96		
	2,444	117	615		
220		20	236		
	2,444	96	896		
220		32	248		
	540			28	105
	320				
180		Ahead 73	148		
	544	Back 73	148	92	133
220		130	144		
	7,766				

Sheet Total

Corr. for Channel & Dumped Rock Channel Protection Areas

Sta. 544+61.12

Sta. 544+85.62

Back

Ahead

Sec. on skew 30° R.F. End Appr. Slab distances Ref. ℄

Chk. 3-24-65 J.M.C.

Sta 545+00 to Sta. 548+00

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

33
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
215	
	1,390
195	
200	
	926
226	
	2,480
220	
	2,444
220	
	2,444
220	
9,675	Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

R/W

780.80
776.2
208
776.5
552+00
780.7
776.5

Sta. 551+39 Ahead Back

780.06
776.0
236
776.3
551+00
780.5
776.3

779.82
775.7
338
776.1
550+00
781.5
776.1

779.57
775.4
456
775.9
549+00
782.3
775.9

Sta. 548+00

CHK. 3-4-65
J.M.C.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
208	0		
		822	0
236	0		
		1,063	0
338	0		
		1,470	0
456	0		
		1,426	0
314	0		

Sta. 548+00 to Sta. 552+00

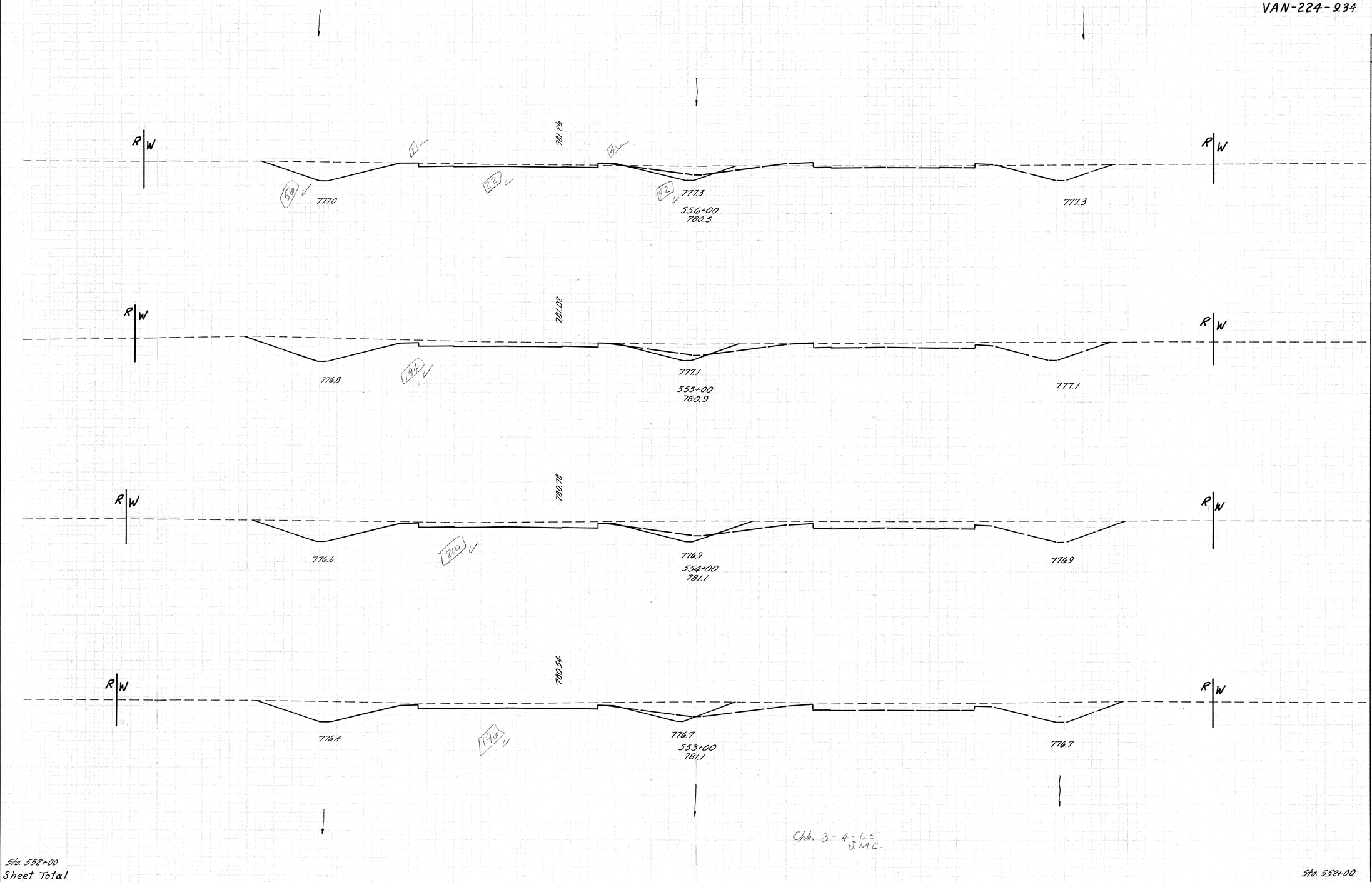
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

34
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
198	
	2211
200	
	2,233
202	
	2,255
204	
	2327
215	
Sta. 552+00	9026
Sheet Total	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



Chk. 3-4-65
J.M.C.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
120	5		
		581	9
194	0		
		748	0
210	0		
		752	0
196	0		
		748	0
208	0		

Sta. 552+00

Sta. 553+00 to Sta. 556+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

35
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
195	
	2,167
195	
	2,167
195	
	2,172
196	
	2,189
198	
	8,695 Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

782.22 90 RW 26 7778 16 778.1 778.1 RW
560+00
780.0

781.98 47 RW 32 7776 25 777.9 777.9 RW
559+00
780.4

781.74 14 RW 40 7774 32 777.7 777.7 RW
558+00
780.4

781.50 1 3 RW 60 7772 12 36 7775 7775 RW
557+00
780.6

Chk. 3-4-65
J.M.C.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
42	90		
		182	248
57	44		
		239	111
72	16		
		333	37
108	4		
		422	17
120	5		

Sta. 556+00

Sta. 557+00 to Sta. 560+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

36
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING			END AREA		VOLUME	
	END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
190			✓ 25	✓ 130		
		2,117			✓ 94	✓ 411
191			✓ 26	✓ 92		
		2,134			✓ 102	✓ 328
193			✓ 29	✓ 85		
		2,150			✓ 113	✓ 313
194			✓ 32	✓ 84		
		2,161			✓ 137	✓ 322
195						
Sta. 560+00 Sheet Total		8,562	Sta. 560+00 42	90		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

R W — 130 — 782.18 — 15 — 778.6 — 10 — 778.9 — 564+00 780.1 — 778.9 — R W

R W — 192 — 782.94 — 18 — 778.4 — 8 — 778.7 — 563+00 780.0 — 778.7 — R W

R W — 85 — 782.70 — 20 — 778.2 — 9 — 778.5 — 562+00 780.0 — 778.5 — R W

R W — 84 — 782.46 — 23 — 778.0 — 7 — 778.3 — 561+00 779.9 — 778.3 — R W

Ch. 3-5-65 J.M.C.

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 561+00 to Sta. 564+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

37
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
	2,144
195	
	8,510

Sta. 564+00
Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

R W

216 ✓ 784.14 ✓
6 ✓ 779.2
4 ✓ 779.4
779.4
568+00
780.5

220 ✓ 783.90 ✓
7 ✓ 779.1
2 ✓ 779.3
779.3
567+00
779.9

170 ✓ 783.64 ✓
1 ✓ 779.0
2 ✓ 779.2
779.2
566+00
779.8

180 ✓ 783.42 ✓
8 ✓ 778.8
3 ✓ 779.1
779.1
565+00
779.9

Ckd. 3-30-65
J.M.C

END AREA		VOLUME	
CUT	FILL	CUT	FILL
✓ 12	✓ 216		
		✓ 39	✓ 807
✓ 9	✓ 220		
		✓ 33	✓ 722
✓ 9	✓ 170		
		✓ 41	✓ 648
✓ 13	✓ 180		
		✓ 70	✓ 574
✓ 25	✓ 130		

Sta. 564+00

Sta. 565+00 to Sta. 568+00

FED. HO. DIVISION	STATE	PROJECT	
2	OHIO		

38
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
	2,122
191	
	8,488

Sta. 568+00
Sheet Total

END AREA		VOLUME	
CUT	FILL	CUT	FILL
46	150		
		213	481
69	110		
		237	344
59	76		
		156	363
25	120		
		69	622
12	216		

Sta. 568+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

785.73
150
R/W
74
779.6
22
779.8
572+00
782.0
779.8
R/W

785.21
110
R/W
33
779.5
779.7
34
571+00
782.2
779.7
R/W

784.75
76
R/W
33
779.4
779.6
24
570+00
782.1
779.6
R/W

784.59
120
R/W
31
779.3
779.5
12
569+00
781.3
779.5
R/W

Chk. 3-8-65
J.M.C.

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

39
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
	6,366 Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

787.29

416

R/W

(5) 779.9

780.1 (3)

780.1

575+00
780.7

786.77

318

R/W

(10) 779.8

780.0 (6)

780.0

574+00
781.0

786.25

224

R/W

(18) 779.7

779.9 (16)

779.9

573+00
781.7

Chk. 3-8-65
J.M.C.

Sta. 572+00

Sta. 572+00 to Sta. 575+00

END AREA		VOLUME	
CUT	FILL	CUT	FILL
8	416		
		44	1,359
16	318		
		89	1,004
32	224		
		144	693
46	150		

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

40
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING	
END WIDTH	SQ. YDS.
191	
	2,122
191	
	2,122
191	
	2,122
191	
6,366	Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

788.85

242

R W

782.5

784.0

784.0

578+00
785.2

788.33

416

R W

780.5

781.0

781.0

577+00
782.1

787.81

446

R W

780.0

780.2

780.2

576+00
781.1

END AREA		VOLUME	
CUT	FILL	CUT	FILL
11	242		
		44	1,219
13	416		
		41	1,596
9	446		
		31	1,596
8	416		

Sta. 575+00

Chh. 3-8-65
J.M.C.

Sta. 575+00 to Sta. 578+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

41
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		V 58	V 140		
203					
	2,244			200	444
		V 50	V 100		
201					
	2,306				
	728A Corr. for U.S.R. 30				
	1,480 Corr. for Intersection				
214					
	2,250				
191	Sta. 578+00				
	12,604 Sheet Total				
				11	242
				226	1,266
					110
				9	9

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

788.81

140 V

R W

43 V 782.50

783.0 15 V

783.0

R/W

581+00
784.7

789.02

100 V

785.0 40 V

10 V 785.5

785.5

R/W

580+00
787.0

783.20

R W

786.0

Corr. for Intersection

Corr. for Fld. Dr.
Sta. 91+15 Rt. on
U.S.R. 30

AT GRADE CROSSING

579+00
789.0

CM. 3-8-65
J.M.C.

Sta. 578+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 579+00 to Sta. 581+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

42
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds
208		23	
	2,300		311
206		33	Ahead
	2,278		
204			
	2,261		
203			311 Sheet Total
	6,839	Sta. 581+00	Sheet Total

END AREA		VOLUME	
CUT	FILL	CUT	FILL
12	608		
		81	2,385
32	600		
		176	1,741
63	340		
		224	889
58	140		

788.97
608
2:1
776.5 (B)
776.5 (A)
776.5
R/W
103.6' Rt.
584+00
777.4

788.25
600
3:1
R/W
778 777.5
777.5
780 (A)
777.5
R/W
583+00
778.9

788.53
340
4:1
R/W
(C) 780.0
780.5 (D)
780.0
R/W
582+00
781.9

Chl. 3-8-65
J.M.C.

Sta. 581+00 to Sta. 584+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

43
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq. Yds.
217		29	
	2,900		311
215		27	
	2,318		294
213		26	
	2,339		272
		23	
		Sta. 584+00 Sheet Total	877
208		Sta. 584+00 Sheet Total	
	7,117		

END AREA		VOLUME	
CUT	FILL	CUT	FILL
51	742		
		174	3,778
43	758		
		131	3,844
28	778		
		74	3,715
12	688		
Sta. 584+00 to Sta. 587+00			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

787.19
742
R/W
39
7735
587+00
776.7
7742
13
7742
R/W
787.41
758
R/W
18
774.5
774.35
25
774.35
586+00
776.8
R/W
787.60
778
R/W
10
775.5
6"Rt. & Lt.
18
774.5
584+65 33' Rt.
1mi. Cl. 7730
6"x10"(F)
774.5
585+00
776.6
6"F.T.
6"F.T.

Chk. 3-9-65
J.M.C

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq. Yds.
214		33	
	2389		361
216		32	
	2405		344
217		30	
	2411		328
		29	
		1033	Sta. 587+00 Sheet Total
217			Sta. 587+00
	7205		Sheet Total

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

44
99

VAN WERT COUNTY
VAN-224-9.34

706.29

650 V

R/W

10"F.T.

771.3 (42) V

77375 (32) V

590+00
776.6

706.57

630 V

R/W

10"F.T.

771.4 (101)

773.9 (34) V

589+00
777.0

706.85

612 V

R/W

10"F.T.

10"x10"(F) ±90.96' Lt. Inv. El. 773.0±

772.5 (68) V

774.05 (32) V

588+00
777.0

END AREA		VOLUME	
CUT	FILL	CUT	FILL
114	650		
		461	2,317
135	630		
		435	2,300
100	612		
		280	2,507
51	742		

Sta. 587+00

Sta. 588+00 to Sta. 590+00

CHK. 3-8-65
J.M.C

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

45
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds.
215		31	
	2,333		344
205		31	
	2,272		344
204		31	
	1,824		350
204		Sta. 591+46 Ahead Back	
207	1,058		
207		32	
	2,339		361
214		33	
	9,226		1399

Sta. 590+00 Sheet Total

Sta. 590+00 Sheet Total

END AREA		VOLUME	
CUT	FILL	CUT	FILL
88	657		
		344	2,339
98	606		
		400	2,200
118	582		
		396	2,272
96	645		
		389	2,393
114	650		

Sta. 590+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 591+00 to Sta. 594+00

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds.
237		98	
		43	
	2,594		450
230		38	
			394
	2,511		
222		33	
			356
	2,450		
219		31	
			344
	2,411	31	
215		1544	Sta. 594+00 Sheet Total
	9,966		Sta. 594+00 Sheet Total

PRD RD. DIVISION	STATE	PROJECT	
2	OHIO		

46
99

VAN WERT COUNTY
VAN-224-9.34

END AREA		VOLUME	
CUT	FILL	CUT	FILL
52	1344	194	4369
53	1015	233	3416
73	854	287	2855
82	688	315	2491
88	657	Sta. 594+00 to Sta. 598+00	

Ahd. Bk.

R/W

3:1

10 FT.

598+00 774.1 — 787.97 — 1344 — 770.5 (15) — 772.55 (14) — 773.4

597+00 774.8 — 787.97 — 1015 — 770.6 (30) — 772.70 (15) — 773.6

596+00 774.9 — 786.28 — 854 — 770.7 (55) — 772.85 (18) — 772.85

595+00 775.2 — 785.35 — 688 — 770.8 (62) — 773.0 (20) — 773.0

Chk. 3-9-65 J.M.C

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

47
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq.Yds.
266		120	1278
	2,911		
258		110	1172
	2,833		
252		101	1067
	2,776		
247		91	1050
	2,689		
237		98	4567
	11,205	Sta. 598+00 Sheet Total	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
29	2,385		
		102	8,231
26	2,060		
		107	7,058
32	1,751		
		133	5,978
40	1,477		
		170	5,224
52	1,344		
Sta. 598+00			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

2385 ✓ 772.6 R W

20 ✓ 770.1 ℄ 10' F.T. 771.95 9 ✓

2060 ✓ 795.97 602+00 773.1

18 ✓ 770.2 ℄ 10' F.T. 772.1 10 ✓ 772.8

1751 ✓ 793.97 601+00 773.6

24 ✓ 770.3 10' F.T. 772.25 8 ✓ 773.0

1477 ✓ 791.97 600+00 773.7

2:1

30 ✓ 770.4 10' F.T. 772.4 10 ✓ 773.2

599+00 773.8

Chk. 3-9-65 J.M.C

Sta. 598+00 to Sta. 602+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds.
287	3,150	143	1572
280	3,078	140	1489
274	3,000	128	1378
266	9,228	120	4439

Sta. 602+00 Sheet Total

Sta. 602+00 Sheet Total

END AREA		VOLUME	
CUT	FILL	CUT	FILL
35	3332		
35	3020	130	1,762
32	2,710	124	10,611
29	2385	113	9,435

Sta. 602+00

802.33 3332 28 769.8 7715 7 772.0

605+00 772.8

3020 801.55 769.9 10'F.T. 28 10'x10'(F) +60 771.65 12 +60 +98 10'F.T. 772.2

604+00 773.0

2710 799.89 12 770.0 10'F.T. 771.8 10 772.4

603+00 773.0

Chk. 3-9-65 J.M.C.

Sta. 603+00 to Sta. 605+00

FED RD. DIVISION	STATE	PROJECT		49
2	OHIO			99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds
		151	
		340	
	3,561		1667
		149	
	3,305		
		150	
		148	
	3,228		1617
		143	4934
287		Sta. 605+00	
	10,094	Sheet Total	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	45		6059
		180	22128
		210	
	52		3890
		194	21482
	53		5710
		163	16745
	35		3332

Sta. 606+00 to Sta. 608+00

3014 — 805.41 — 3045

2970 — 804.86 — 2920

2820 — 804.03 — 2890

30"(A-B) 707.05, 12 Ga.

10'F.T.

10'x10'(F)

770.30 — 25 — ±00 134 ft. Inv. El. 769.5

608+00 773.2

607+00 773.6

606+00 773.5

±00 134 ft. Inv. El. 769.05 — 771.00 — Channel to 36 under R.R. 769.05

Typical Section of Channel to 36" pipe outlet under R.R. See line sheet.

Correction for Channel

36 — 769.6

16 — 771.15

769.7 — 45

8 — 771.35

R/W 200'

CM: 3-22-65
J.M.C

Seeding Width	Seeding S.Y.	Jute Matting Width	Jute Matting Sq.Yds.
298		154	
	2,276		1134
300		144	
	2,100		2100
395		148	
	2,117		938
340		151	
6,493		4172	

Sta. 608+00 Sheet total

Sta. 611+00

Sta. 610+31.49 Ahead

STRUCTURE OVER R.R.

Corr. For Abutments

Sta. 608+56.46 Back

Sta. 608+00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

805.47 805.59 805.60 805.63 805.65 805.43 805.55 805.51 805.56 805.59 805.65 805.67 805.60 805.37 805.47 805.43

3102 AH. 2997 BK. Ahead Back 10 3015 AH. 3010 BK. 3035 3042 3,565 2610 3510 AH. 3518 AH. Back Ahead 2609 13 2601 B

771.9 772.0 771.2 771.5 771.0 771.07

610+55.99 772.9 Sec. on skew distances Rt & L Sec. at end Appr. slab

610+31.49 773.0 Sec. on skew distances Rt & L back of Abut

608+56.46 772.8 Sec. on skew distances Rt & L Sec. back of Abut

608+31.96 773.0 Sec. on skew distances Rt & L Sec. at end Appr. slab

R/W 170' R/W 168' R/W 165' R/W 156'

VAN WERT COUNTY
VAN-224-9.34

50
99

Chk. 3-12-65 J.M.C.

	End Area Cut	End Area Fill	Volume Cut	Volume Fill
Sta. 611+00	44	6319	45	10,196
771.9 Ahead	11	6117		
Sta. 610+55.99				
Back	11	6007		
			10	5483
R/W				
	11	6077		
			12	4808
Sta. 609+71, Ahead	0	0		
Sta. 609+18, Back	0	0		
			20	7033
	18	6175		
			17	5574
Ahead	20	6111		
Sta. 608+31.96				
Back	20	6127		
			38	7221
Sta. 608+00	45	6059		

Sta. 608+31.96 to Sta. 610+55.99 (Structure over R.R.)

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

51/99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds.

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	R/W 44		6319

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

805.41 3156 3163

R/W 168' 298 154 769.0 42 771.8 2

611+00 772.5

805.68 805.68 ℄ Future Prop. Structure

805.68 805.68 ℄ Future Prop. Structure

610+00 773.2

Jute Matting and Seeding between Sta. 608+00 & Sta. 611+00 Shown on Sheet No. 50

Note: Earthwork between Sta. 608+00 & Sta. 611+00 Shown on Sheet No. 50

R/W 168' 1 772.5

609+00 772.6

R/W

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 609+00 to Sta. 611+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

52
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING		Jute Matting	
END WIDTH	SQ. YDS.	Width	Sq Yds
R W 311	147		
	3328	147	1661
R W 288	152		
	3222	152	1700
R W 292	154		
	3278	154	1711
	5072		
298			
9828	Sta. 611+00 Sheet Total		

END AREA		VOLUME	
CUT	FILL	CUT	FILL
R W 34	3360		
		131	12,750
R W 37	3525		
		161	17,850
R W 50	6115		
		174	23,027
44	6319		
Sta. 611+00			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

3360 — 802.93 — 768.4 — 29 — 770.9 — 5 — 770.9

614+00 771.7

3525 — 804.03 — 768.6 — 33 — 771.2 — 4 — 771.2

613+00 771.9

3045 — 804.86 — 768.8 — 74 — 3070 — 771.5 — 4

612+00 772.4

Sta. 611+00 Sheet Total

Sta. 611+00 Sheet Total

CM. 3-15-65 J.M.C.

Sta. 612+00 to Sta. 614+00

FED RD. DIVISION	STATE	PROJECT	
2	OHIO		

53
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING END WIDTH	SEEDING SQ. YDS.	Jute Matting Width	Jute Matting Sq Yds
144		R W	
		131	
			1494
	1,783		
		138	
		R W	
177			
272		Sta. 616+00 Ahead Back	
			1572
	3039		
		R W	
275		145	
			1622
	3256		
		147	
			9688
311		Sta. 614+00 Sheet Total	
	8078		

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	1,250		
		98	7713
53	2915		
		148	11,468
27	3,278		
		113	12,293
34	3360		

U.S. 30 (4.27) Built to here

1250 797.91 — 769.9 — 617+00 781.5

2915 799.89 — 768.0 — 770.3 — 616+00 771.3

3278 800.55 — 768.2 — 770.6 — 615+00 771.5

Chk. 3-18-65 J.M.C.

Sta. 614+00 Sheet Total

Sta. 614+00

Sta. 615+00 to Sta. 617+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

54
99

VAN WERT COUNTY
VAN-224-9.34

SEEDING END WIDTH	SEEDING SQ. YDS.	Jute Matting Width	Jute Matting Sq Yds.
0		Sta 619+38	
	43		
20			
	1006	108	1233
161		114	
	1604	131	1361
144			2594 Sta. 617+00 Sheet Total
	2743 Sta 617+00 Sheet Total		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

R W

Back

769.3

620+00
782.9

End Work and Project, Sta. 619+38

769.97

769.5

619+00
784.5

769.98

193

U.S. 30 (4.27) Built to here

769.7

618+00
786.4

Chd. 3-2465
J.M.C

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
Sta. 619+38 0	0		
		✓ 0	✓ 7
✓ 0	✓ 10		
		✓ 0	✓ 376
✓ 0	✓ 193		
		✓ 0	✓ 2672
✓ 0	✓ 1,250 Sta. 617+00		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 618+00 to Sta. 620+00

	End Area	Cu. Vol.
	Cut / Fill	Cut / Fill
Sta. 14+30	0 / 0	0 / 0
	340 / 367	340 / 0
Sta. 13+00	0 / 0	1,207 / 0
	947 / 285	947 / 0
Sta. 12+00	0 / 0	1,033 / 0
	1,024 / 321	1,024 / 0
Sta. 11+00	0 / 0	0 / 232
	805 / 22	805 / 22
Sta. 10+00	893 / 19	893 / 19
	89 / 246	89 / 246
Sta. 9+00	0 / 321	0 / 321
	0 / 0	0 / 0
Sta. 8+15	Sheet Total	4,438 / 41
Sta. 8+00		

FED. DIV.	STATE	PROJECT	
2	OHIO		

55
99

VAN WERT COUNTY
VAN-224-9.34

CHK - 2-23-65
J.M.C.

	Sta. 101+00	Sta. 100+00	Sta. 99+00	Sta. 98+00	Sta. 97+00	Sta. 96+50	Sta. 96+00	Sta. 95+00
End Area Cut	128	185	197	485	602	473	245	106
End Area Fill	0	0	0	0	0	0	169	0
Cu. Yd. Cut	543	670	1283	2013	995	665	650	49
Cu. Yd. Fill	0	0	0	0	0	156	313	0
Sheet Total Cut	671							1469
Sheet Total Fill	0							0

Sta. 99+82 Rt.
End Dumped Rock
Channel Prot.

Sta. 98+52 Rt.
Begin Dumped Rock
Channel Prot.

Sta. 95+00

Sta. 94+75

VAN WERT COUNTY
VAN-224-9.34

DES. SEC. DIVISION	STATE	PROJECT	
2	OHIO		

56
99

Okl. 2-23-65
J.M.O

Sta. 95+00 to Sta. 101+00 Channel Sections

End Area		Cu. Yd.	
Cut	Fill	Cut	Fill
0	0	0	0
0	163	0	201
0	131	135	128
82	135	487	0
0	128	1806	230
Sheet Totals		1806	230

DIST. DIVISION	STATE	PROJECT	
2	OHIO		

57
99

VAN WERT COUNTY
VAN-224-9.34

Sheet No.	Cut	Fill
55	#1,493	#1,493
56	4,585	460
57	1,806	230
Totals	9,628	7,137

Exist. Channel

P.T. = Sta. 103+50
Δ = 15° Lt.
D_c = 15°
L_c = 100
T = 50.29

101
102
103

Sta. 544+24.00 on U.S.R. 224
= Sta. 100+00 on Channel

60°

546 545 544 543 ℄ Alignment

98 97 96 95

P.I. = Sta. 96+80.29
Δ = 15°27'
D_c = 15°
L_c = 100
T = 50.29

Sta. 104+60

0 0 0 0 0 0 0 0 0 0

163 201 131 135 128

Sta. 104+00

7645 7644.5 7644.63 7644.7 7644.8

Sta. 103+50

Sta. 103+00

Sta. 102+00

Sta. 101+00

Sta. 102+00 to Sta. 104+00 ℄ Alignment, Channel Sections

Okh. 2-23-65
J.M.C

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

58
99

VAN WERT COUNTY
VAN-224-9.34

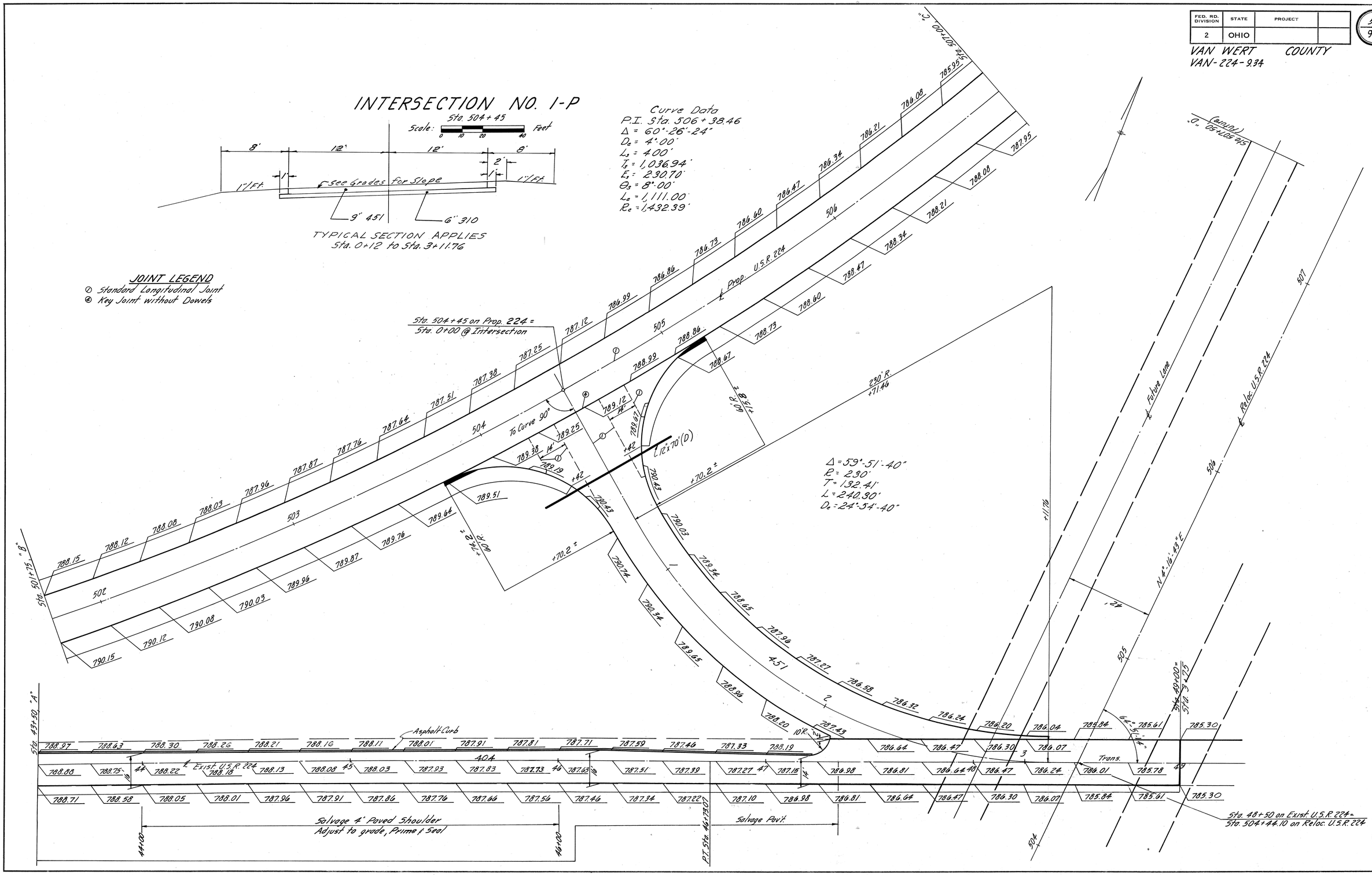
INTERSECTION NO. 1-P

Sta. 504+45
Scale: 0 10 20 40 feet

TYPICAL SECTION APPLIES
Sta. 0+12 to Sta. 3+11.76

Curve Data
P.I. Sta. 506+38.46
Δ = 60°-26'-24"
D_c = 4°-00'
L_s = 400'
T_s = 1,036.94'
E_s = 230.70'
Θ_s = 8°-00'
L_c = 1,111.00'
R_c = 1,432.39'

JOINT LEGEND
① Standard Longitudinal Joint
④ Key Joint without Dowels

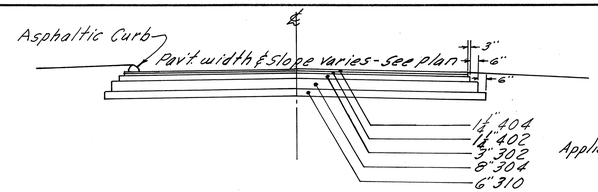


Intersection Detail No. 1-P (Sheet 1 of 2 Sheets)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

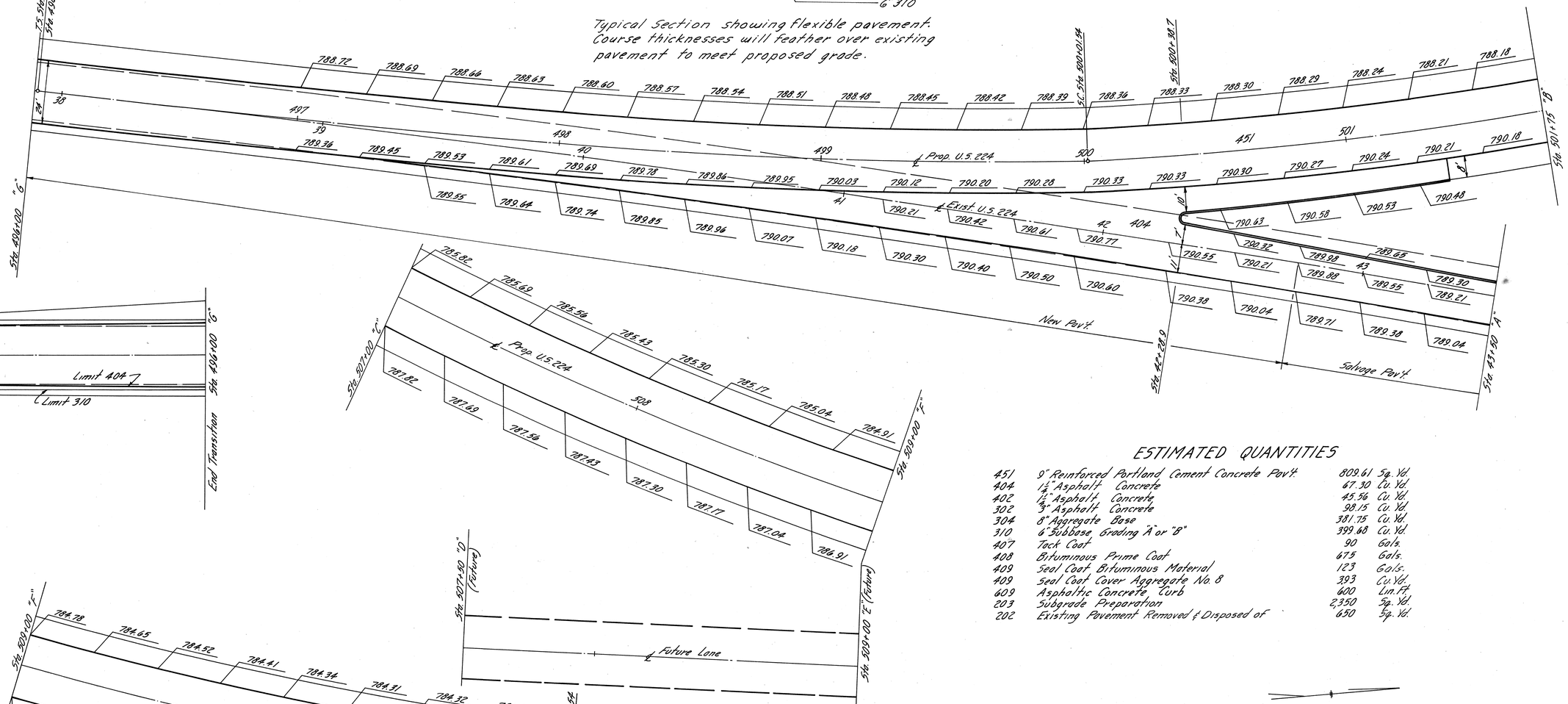
59
99

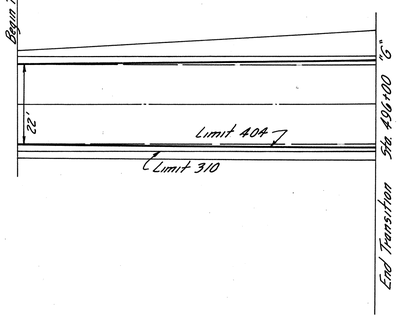
VAN WERT COUNTY
VAN-224-9.34

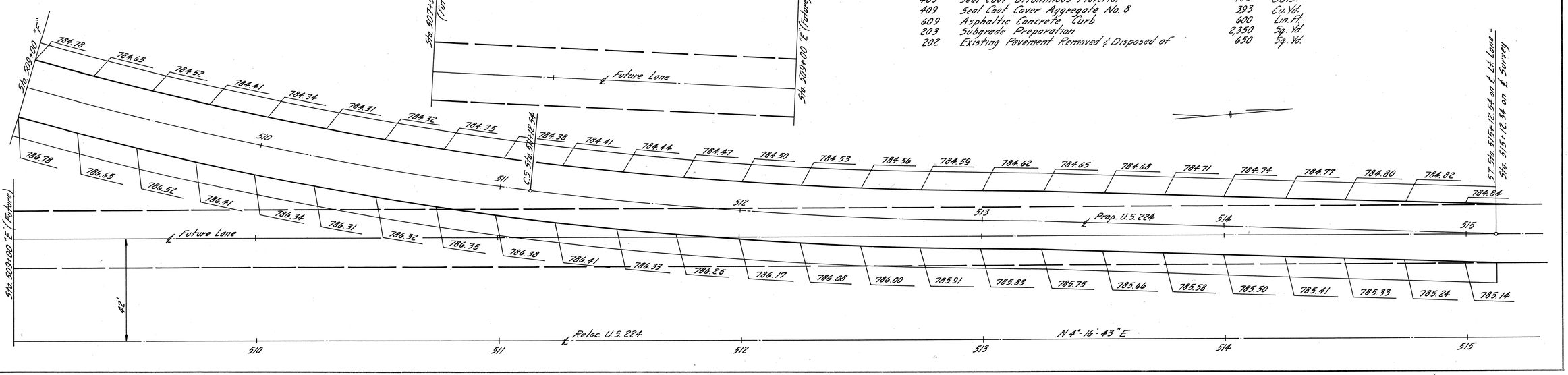


Applies, Exist. 224 to Sta. 49+00

Typical Section showing flexible pavement. Course thicknesses will feather over existing pavement to meet proposed grade.







ESTIMATED QUANTITIES

451	9" Reinforced Portland Cement Concrete Pavt.	809.61 Sq. Yd.
404	1½" Asphalt Concrete	67.30 Cu. Yd.
402	1½" Asphalt Concrete	45.56 Cu. Yd.
302	3" Asphalt Concrete	98.15 Cu. Yd.
304	8" Aggregate Base	381.75 Cu. Yd.
310	6" Subbase Grading "A" or "B"	399.68 Cu. Yd.
407	Tack Coat	90 Gals.
408	Bituminous Prime Coat	675 Gals.
409	Seal Coat Bituminous Material	123 Gals.
409	Seal Coat Cover Aggregate No. 8	393 Cu. Yd.
609	Asphaltic Concrete, Curb	600 Lin. Ft.
203	Subgrade Preparation	2350 Sq. Yd.
202	Existing Pavement Removed & Disposed of	650 Sq. Yd.

Intersection Detail No. 1-P (Sheet 2 of 2 Sheets)

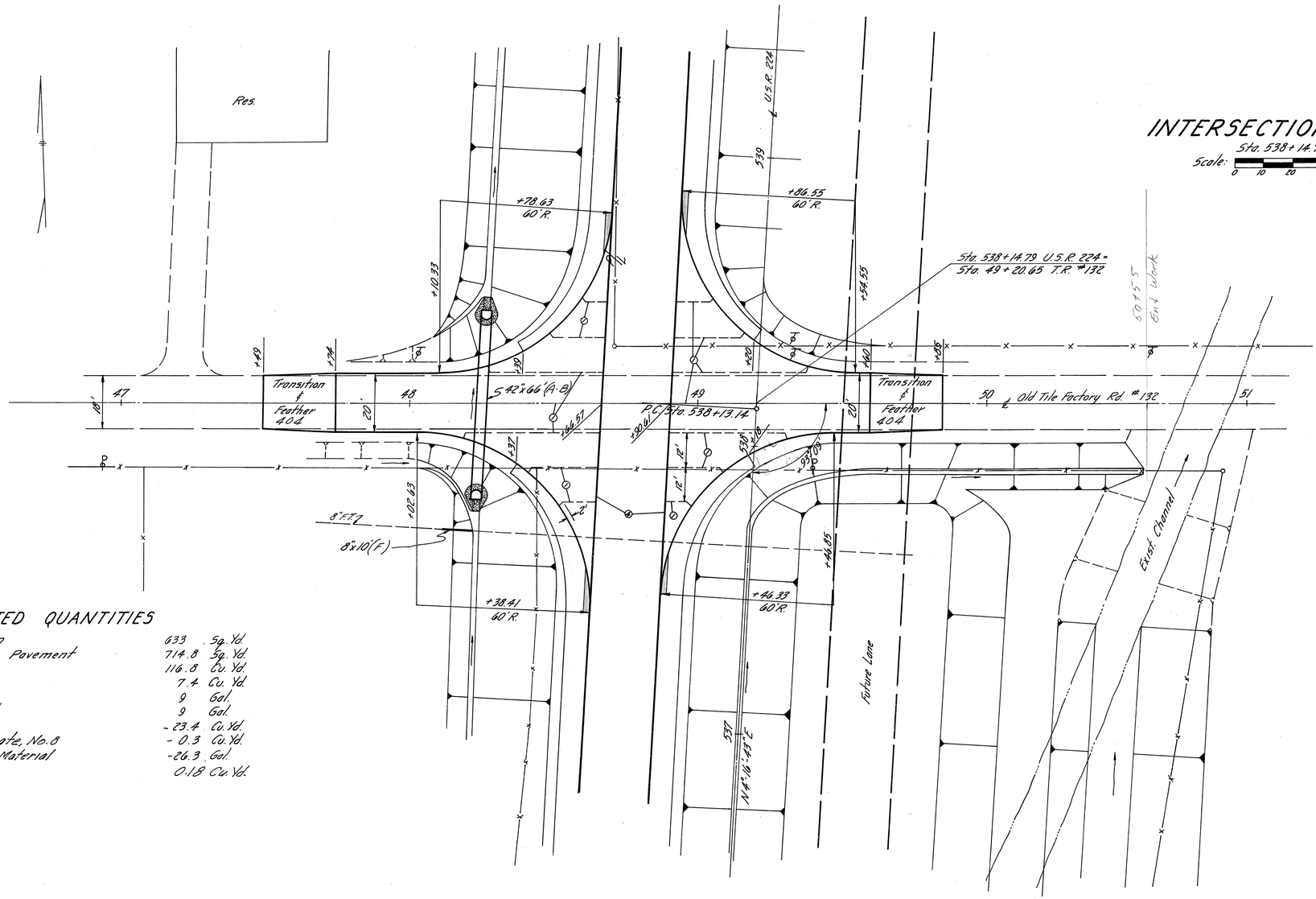
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

60
99

VAN WERT COUNTY
VAN-224-9.34

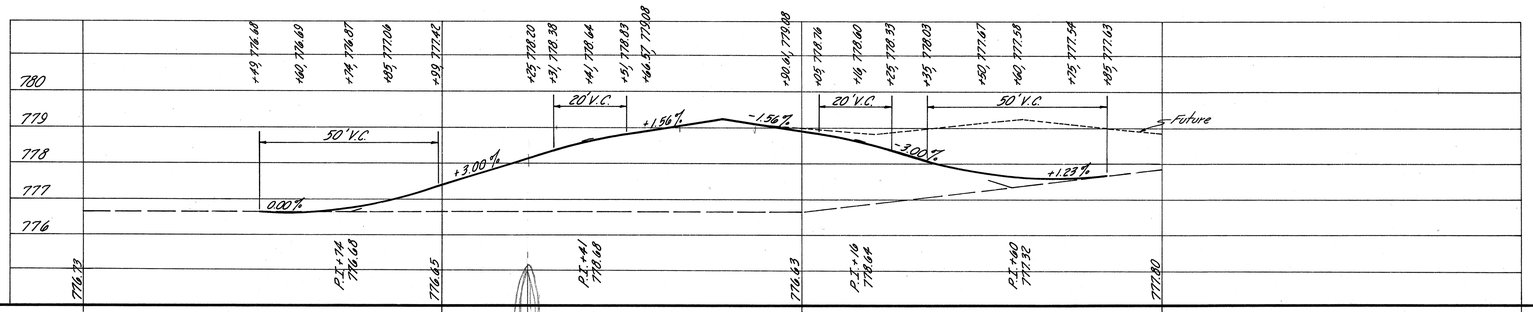
INTERSECTION NO-2-P

Sta. 538+14.79
Scale: 0 10 20 40 Feet



ESTIMATED QUANTITIES

203	Subgrade Preparation	633	Sq. Yd.
451	9" Reinforced Concrete Pavement	714.8	Sq. Yd.
310	6" Subbase	116.8	Cu. Yd.
404	Asphaltic Concrete	7.4	Cu. Yd.
407	Tack Coat	9	Gal.
408	Bituminous Prime Coat	9	Gal
* 304	8" Aggregate Base Course	- 23.4	Cu. Yd.
* 409	Seal Coat Cover Aggregate, No. 8	- 0.3	Cu. Yd.
* 409	Seal Coat Bituminous Material	-26.3	Gal.
* * 408	Cover Aggregate	0.18	Cu. Yd.



JOINT LEGEND
① Standard Longitudinal Joint
② Key Joint without Dowels

* * To be used at the direction of the Project Engineer.

* These Quantities are adjustments to Main Line Computations.

Intersection Detail No. 2 - P

OHIO

61
99

VAN WERT COUNTY
VAN-224-9.34

Sta. 41+00

10" Maple | 8" Maple | 8" Maple, 14" Willow | 6" Elm, 12" Maple | 10" Maple | 10" Maple | 15" Willow | 6" Birch, 10" Willow | 6" Birch | 10" Willow | 8" Willow | 10" Locust | 10" Willow | 1" Maple | 2" Maple | 3" Maple

19" Locust | 22" Maple | 24" Hackberry | 19" Locust | 4" Cherry | 4" Cherry | 8" Maple | Evergreen Clump | 8" Maple | 2-4" Evergreens | 4" Evergreen | 4" Maple

4" Evergreen | 6" Elm | 6" Maple | 4" Maple | 4" Maple | 4" Evergreen | 4" Evergreen | 8" Maple | 5" Birch | Sta. 57+50

Begun Sheet

24" Maple | 15" Maple | 15" Walnut | 12" Evergreen

20" Apple

Res. | Res. | Res. | Res | Res. | Res. | Barn | Hedge | Res. | Res. | Res. | Res.

10 Bl. Top Dr. +10 | 10 Bl. Top Dr. +14 | 10 Bl. Top Dr. +50 | 12" Elm Dr. +07 | 10" Gr. Dr. +17 | 16" Gr. Dr. +215 | 10" Gr. Dr. +88 | 10" Gr. Dr. +96 | 18" Ash Dr. +94 | 16" Ash Dr. +80

Ø Ø Ø

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

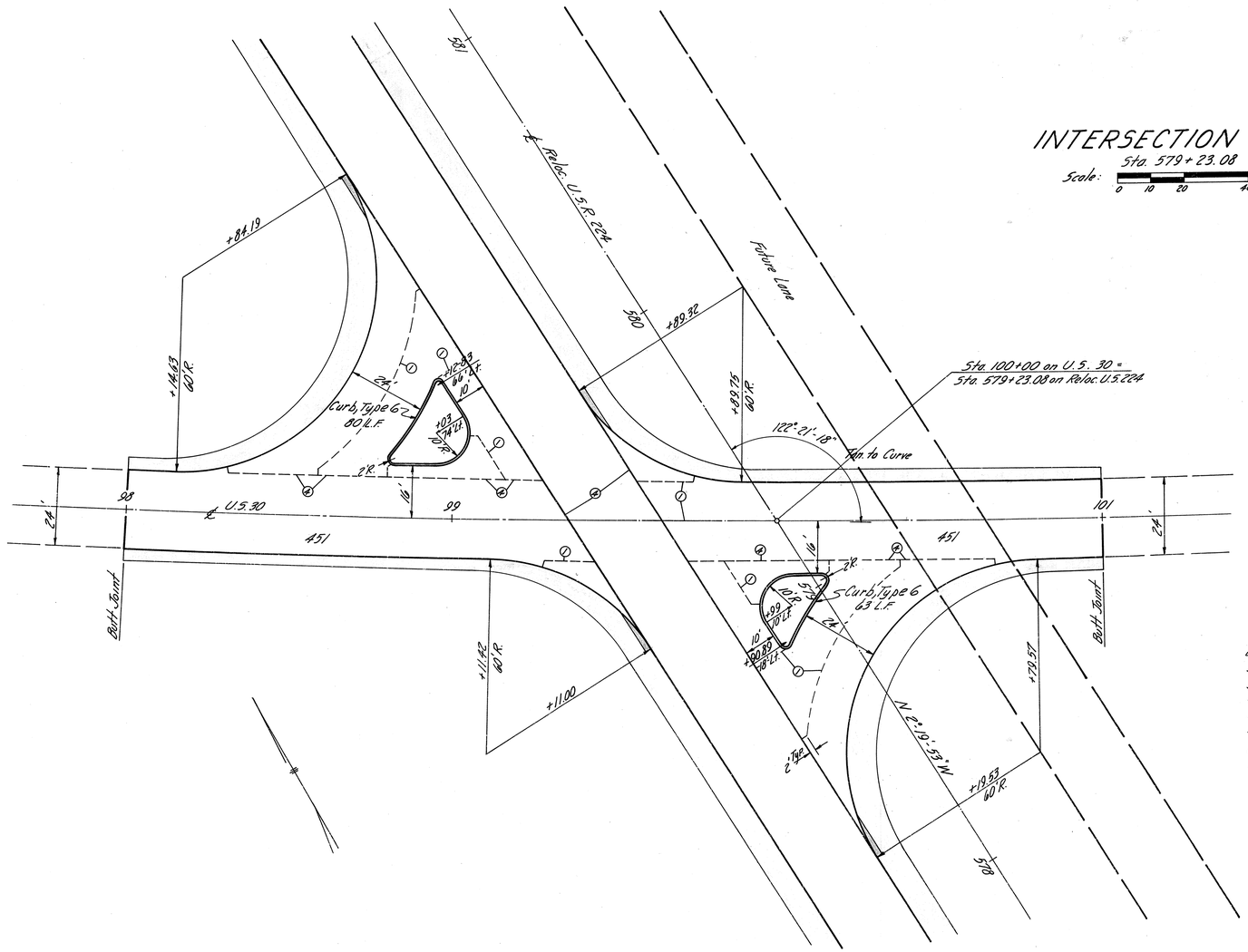
62
99

VAN WERT COUNTY
VAN-224-9.34

INTERSECTION NO. 3-P

Sta. 579+23.08

Scale: 0 10 20 40 Feet



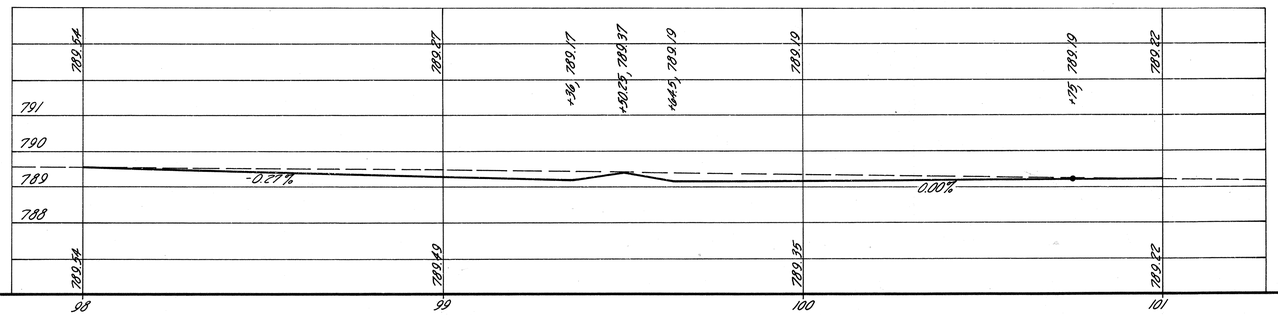
See Sheets no. 15 and 16 for temporary run-around road.

ESTIMATED QUANTITIES

203	Subgrade Preparation	1,481	Sq. Yd.
310	6" Subbase	228	Cu. Yd.
304	8" Aggregate Base Course	12	Cu. Yd.
451	9" Reinforced Concrete Pavement	1,302.0	Sq. Yd.
409	Seal Coat Cover Aggregate, No. 8	.4	Cu. Yd.
409	Seal Coat Bituminous Material	14	Gal.
609	Curb, Type 6	143	Lin. Ft.
202	Existing Pavement Removed & Disposed of	800	Sq. Yd.

JOINT LEGEND

① Standard Longitudinal Joint
② Key Joint without Dowels



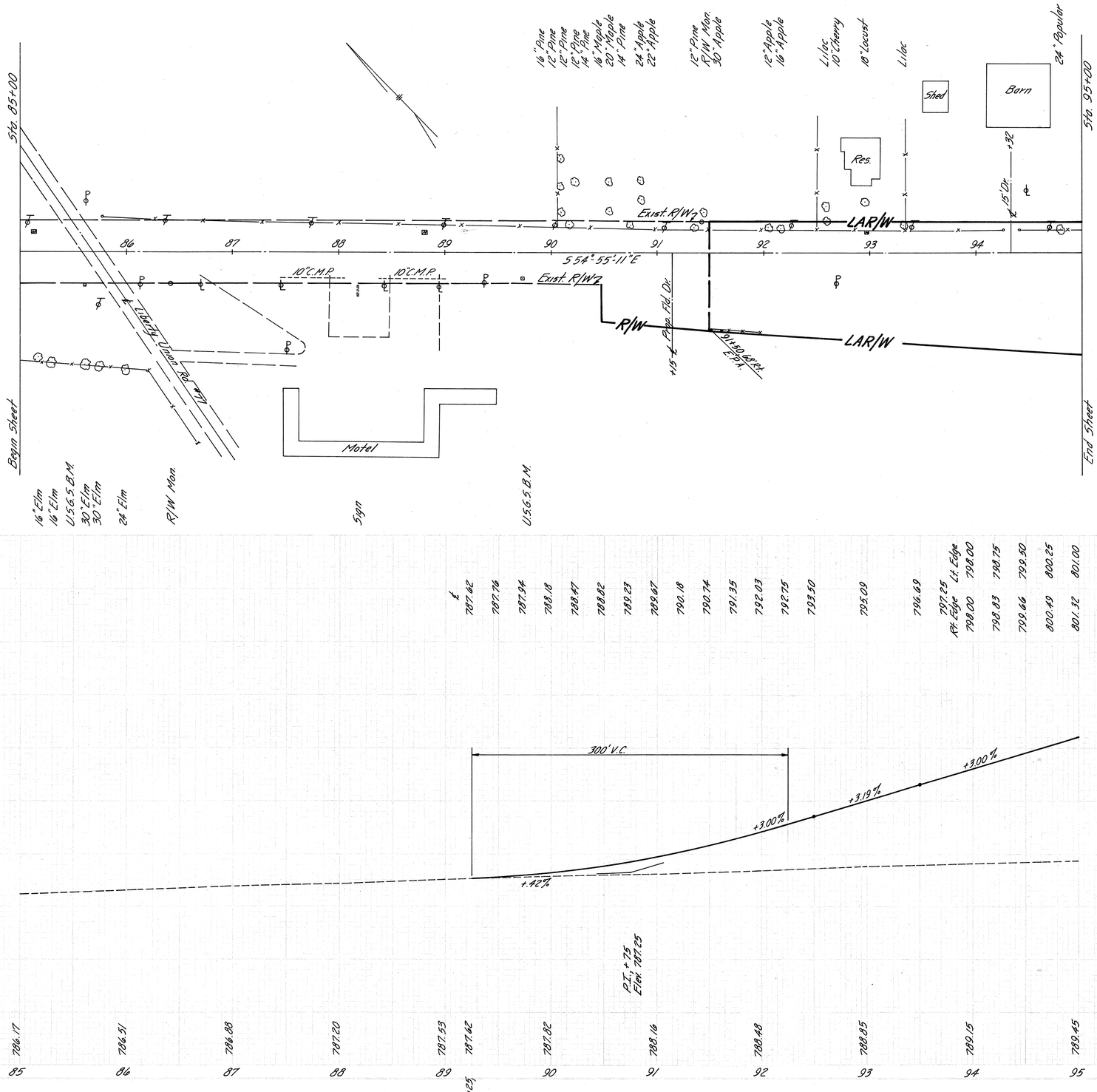
CURVE DATA Exist. U.S.R. 30

P.C. Sta. 95+68.53
Δ = 27°-46' Lt.
D = 1°-08'
R = 5055.51'
T = 1,249.55'
L = 2,450.00'

SHEET NO.	STATE	PROJECT	
2	OHIO		

63
99

VAN WERT COUNTY
VAN-224-9.34

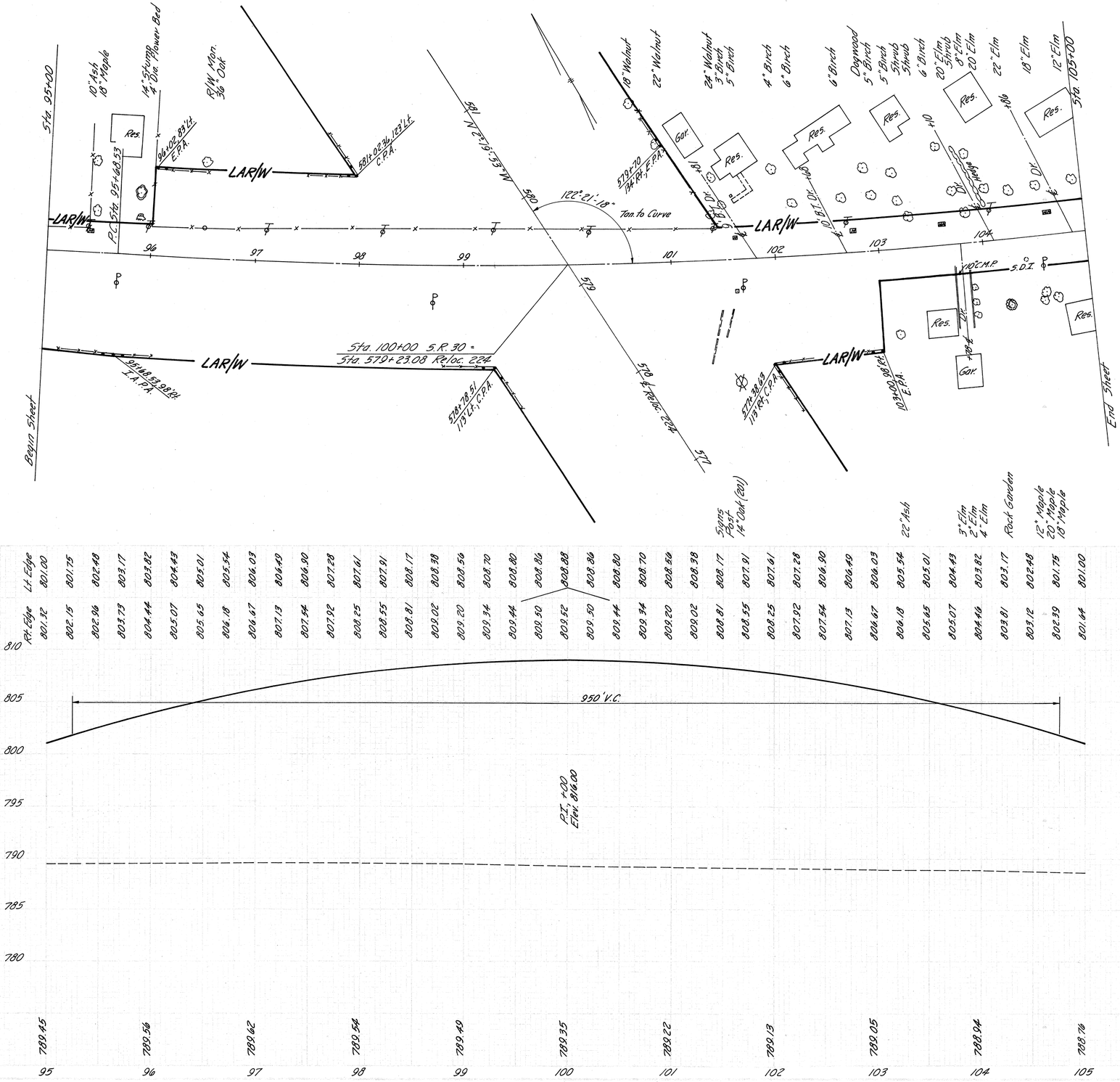


From Sta. 85+00 to Sta. 95+00 (Exist. U.S. 30 over Proposed U.S. 224)

FED. ROAD SYSTEM	STATE	PROJECT	
2	OHIO		

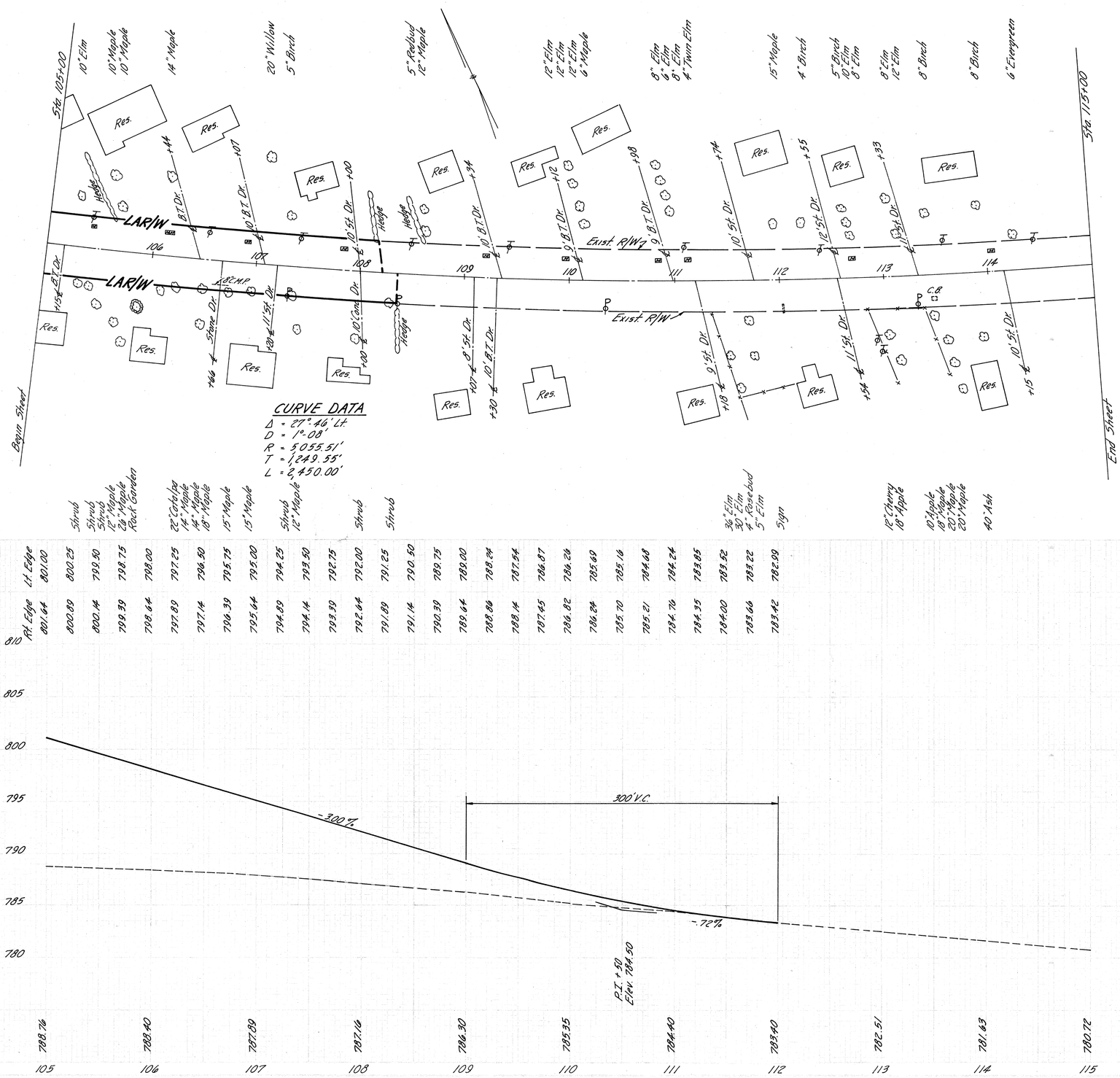
64
99

VAN WERT COUNTY
VAN-224-9.34



FUTURE PROPOSED WORK
From Sta. 95+00 to Sta. 105+00 (Exist U.S. 30 over Proposed U.S. 224)

VAN WERT COUNTY
VAN-224-9.34

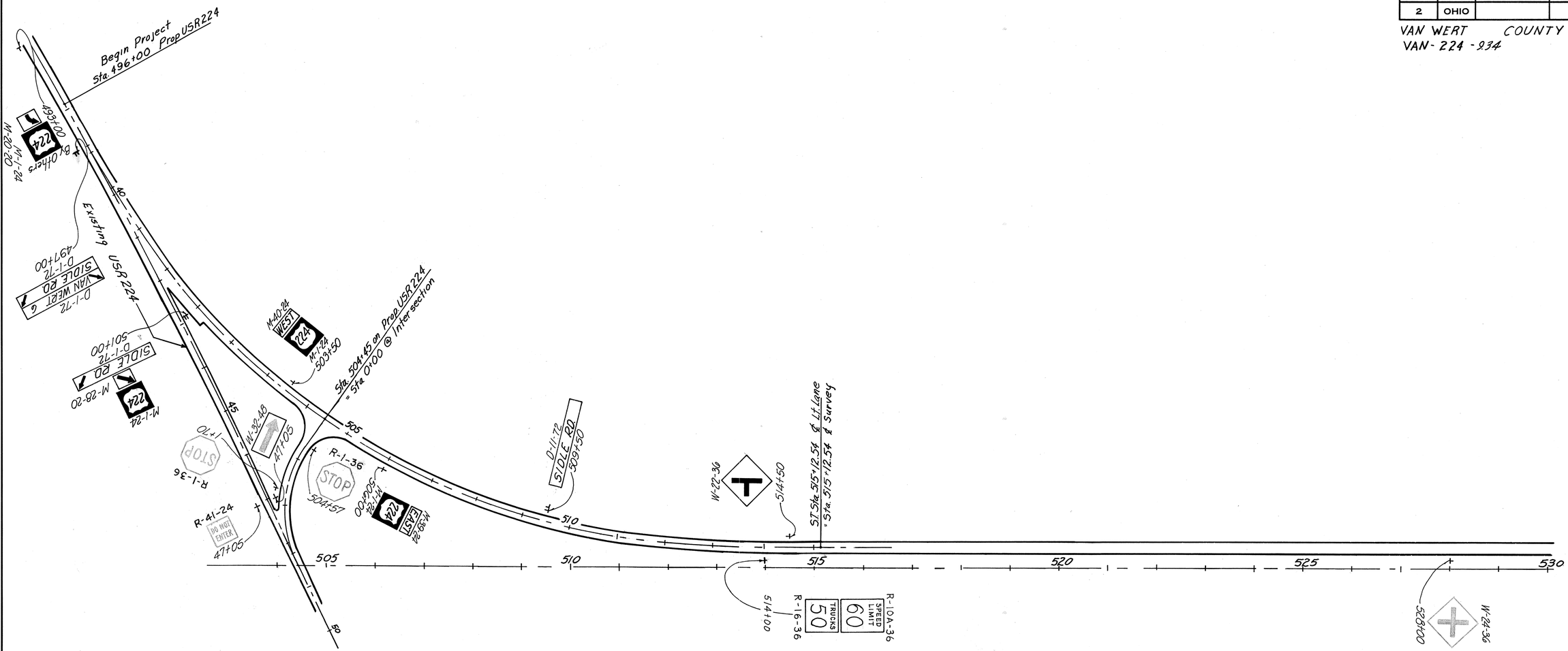


FUTURE PROPOSED WORK
From Sta. 105+00 to Sta. 115+00 (Exist. U.S. 30 over Proposed U.S. 224)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

66
99

VAN WERT COUNTY
VAN-224-9.34

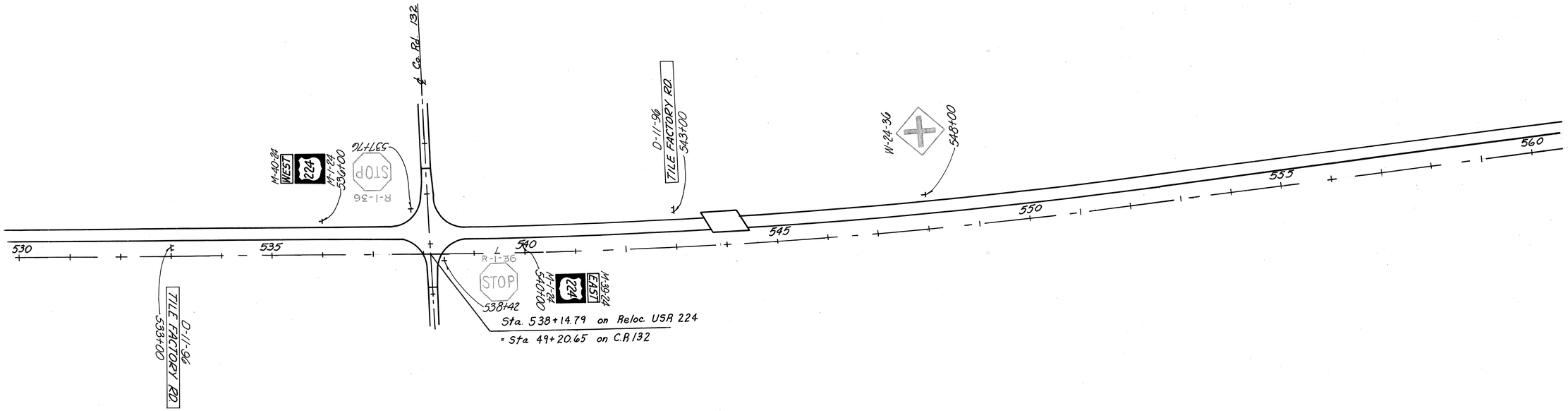


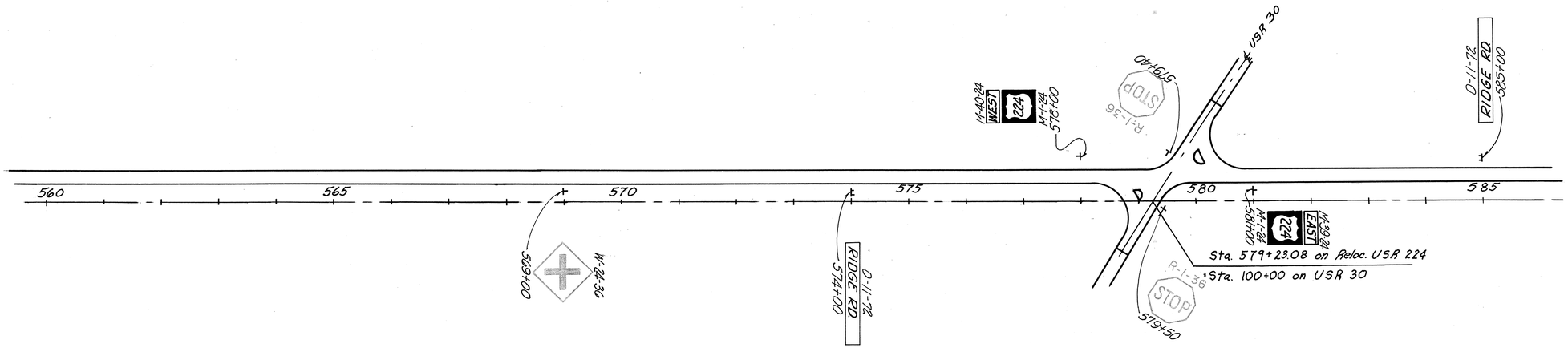
Sign Plan Layout Sta. 495+00 to Sta. 530+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

67
99

VAN WERT COUNTY
VAN-224-9.34



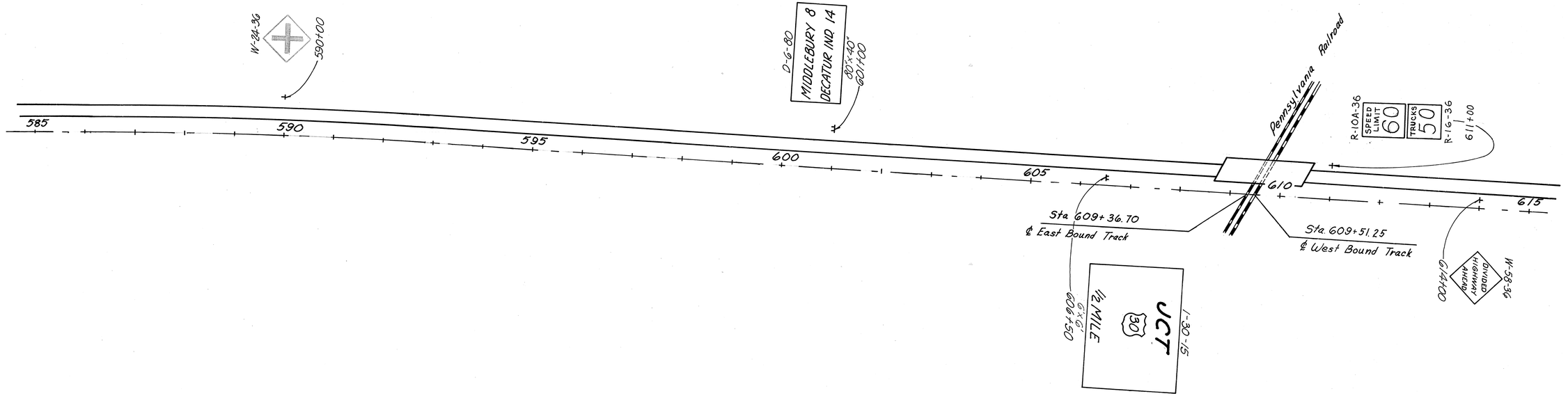


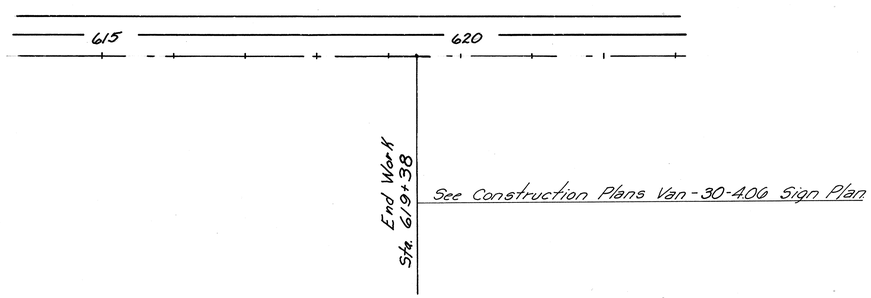
Sign Plan Layout Sta. 530+00 to Sta. 585+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

68
99

VAN WERT COUNTY
VAN-224-9.34





Sign Plan Layout Sta. 585+00 to Sta. 623+00

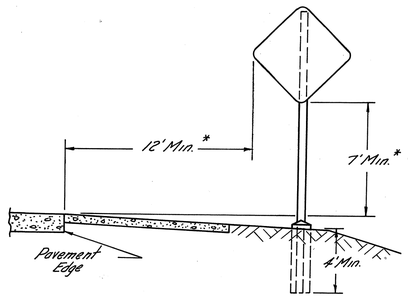
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

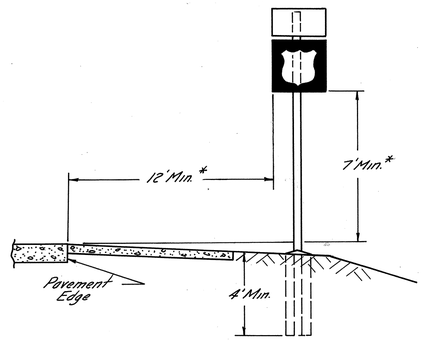
69
99

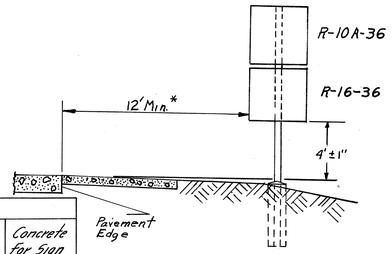
VAN WERT COUNTY
VAN-224-9.34

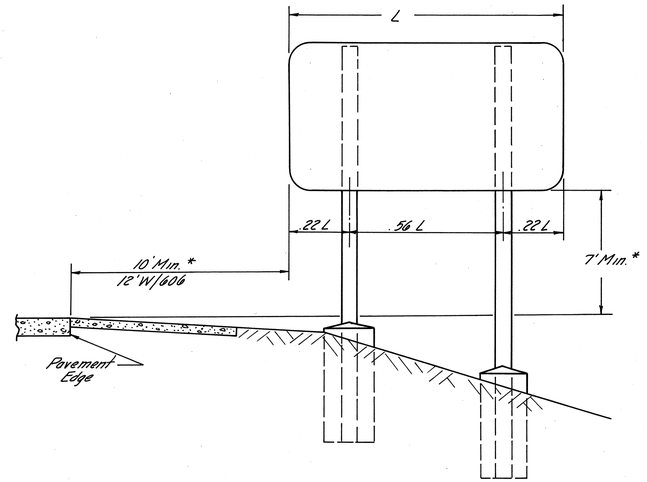
NOTES

1. Horizontal back bracing shall always be mounted on the front flange of the support except where signs are mounted back to back. Back bracing shall never extend above the top edge of uppermost sign plate and shall be attached to supports using 5/16 galvanized steel bolts.
2. Screws, Nuts and Washers for sign erection shall be aluminum except as above noted. 5/16 Truss head slotted machine screws with hexagon nuts shall be used. Washers shall be 1/2". Washers used on the sign face only. These items will be provided by others.
3. Sign installations shall be placed so that supports are not placed in drainage ditches.
4. Horizontal clearances shown pertain to non-curbed sections. Sections with an unmountable curb shall have a horizontal clearance of 2'-0" minimum, from the curb face, to the sign edge. All signs shall be erected behind existing guard rail unless otherwise specified on the plans or by the Engineer.
5. Vertical and Horizontal clearance between signs on one assembly shall be a maximum of 2".
6. Galvanized steel bearing plates, shall be included between all sheet aluminum signs, attached to vertical supports at each sign bolt location. Bearing plates will be provided by others.





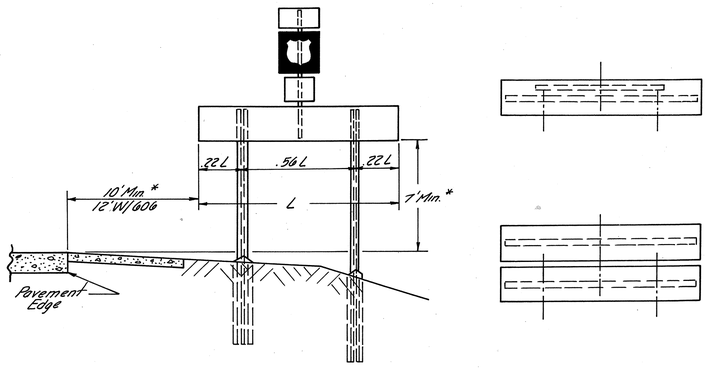


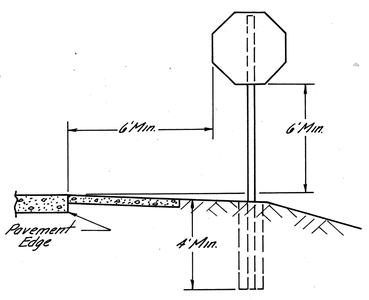


TRAFFIC SIGNING

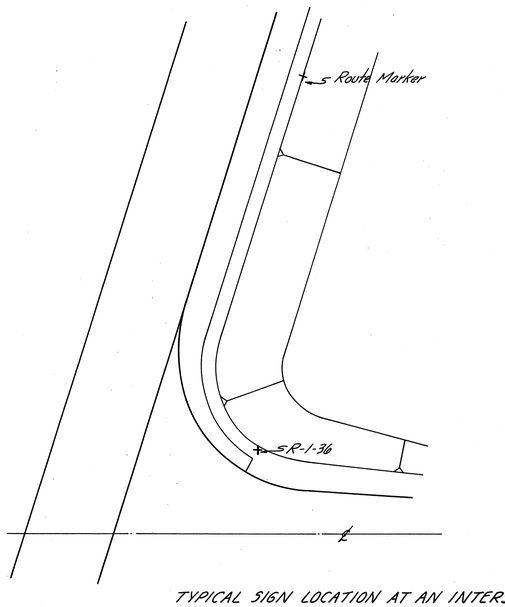
816

Station	Side	Area Sq. Ft. Plat	Area Sq. Ft. Extr.	Steel Dr. Post 2 lbs. Per Ft. Pcs.	Steel Dr. Post 2 lbs. Per Ft. Length	Steel Dr. Post 4 lbs. Per Ft. Pcs.	Steel Dr. Post 4 lbs. Per Ft. Length	Struct. Supports 4 lb. Beam As Per Plan Pcs.	Struct. Supports 4 lb. Beam As Per Plan Length	Struct. Supports St'l. Beam 10 B 11.5 As Per Plan Pcs.	Struct. Supports St'l. Beam 10 B 11.5 As Per Plan Length	Struct. Supports St'l. Beam 12 B 22 As Per Plan Pcs.	Struct. Supports St'l. Beam 12 B 22 As Per Plan Length	Diameter and Depth of Concrete Foundation for Sign Supports		Concrete for Sign Supports Foundation As Per Plan Cu. Yds.
1+70 ℄ Intr.	Rt.	9						1	14'-6					1'x 4'		.1
497+00	Rt.	12		2	5'-10"	1	13'-0" 13'-6"							1'x4'		.2
501+00	Rt.	12		1	4'-6" 5'-10"	2	12'-0"							1'x4'		.2
503+50	Lt.	6				1	14'-6"							1'x4'		.1
47+05	Rt.	4				1	13'-0"							1'x4'		.1
47+05	Lt.	8				1	13'-6"							1'x4'		.1
504+57	Rt.	9						1	14'-0"					1'x4'		.1
506+00	Rt.	6				1	14'-6"							1'x4'		.1
509+50	Lt.	6		1	5'-10"	1	12'-0" 12'-6"							1'x4'		.2
514+50	Lt.	9						1	15'-0"					1'x4'		.1
528+00	Rt.	9						1	15'-0"					1'x4'		.1
533+00	Lt.	12		1	7'-10"	1	13'-0"							1'x4'		.1
						1	14'-0"							1'x4'		.1
536+00	Lt.	6				1	14'-6"							1'x4'		.1
537+76 ±	Lt.	9						1	14'-0"					1'x4'		.1
538+42 ±	Rt.	9						1	14'-0"					1'x4'		.1
540+00	Lt.	6				1	14'-6"							1'x4'		.1
543+00	Lt.	12		1	7'-10"	1	13'-0"							1'x4'		.1
						1	14'-0"							1'x4'		.1
548+00	Lt.	9						1	15'-0"					1'x4'		.1
569+00	Lt.	9						1	15'-0"					1'x4'		.1
574+00	Lt.	9		1	5'-10"	1	12'-6"							1'x4'		.1
						1	13'-0"							1'x4'		.1
578+00	Lt.	6				1	14'-6"							1'x4'		.1
579+40	Rt.	9						1	14'-0"					1'x4'		.1
579+50	Lt.	9						1	14'-0"					1'x4'		.1
581+00	Lt.	6				1	14'-6"							1'x4'		.1
585+00	Lt.	9		1	5'-10"	1	12'-6"							1'x4'		.1
						1	13'-0"							1'x4'		.1
590+00	Lt.	9						1	15'-0"					1'x4'		.1
601+00	Lt.		22							1	15'-0"			1'x4'		.1
										1	16'-0"			1'x4'		.1
606+50	Rt.		36							1	17'-6"			1'x4'		.1
										1	18'-0"			1'x4'		.1
611+00	Lt.	21								1	15'-6"			1'x4'		.1
614+00	Lt.	9						1	14'-6"					1'x4'		.1
514+00	Rt.	21								1	15'-6"			1'x4'		.1
Totals		270	58		49'-4"		281'-6"		174'-0		97'-0"					4.0





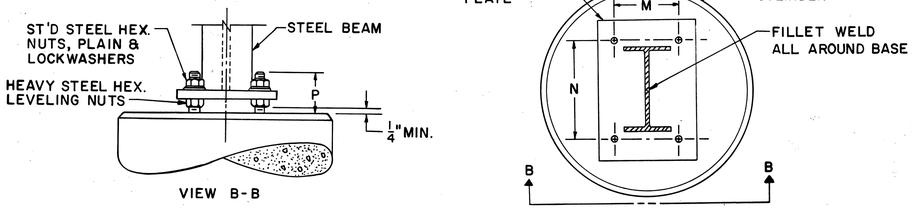
* This dimension to be 6 Ft. minimum on Ramps and Secondary Roads.



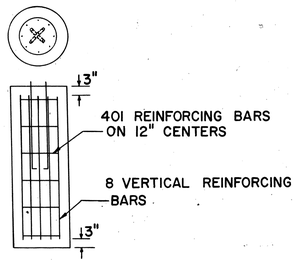
TYPICAL SIGN LOCATION AT AN INTERSECTION

TYPICAL ERECTION AND PLACEMENT OF SIGNS

BEAM SIZE	ANCHOR BOLTS DIA.	ANCHOR BOLTS LENGTH	BASE PLATE	HOLE SIZE	DIM. M	DIM. N	DIM. P	WELD SIZE	DIM. H	DIM. W	CU. YDS. FOR 2 POST	MARK	TYPE	NO.	LENGTH	WEIGHT FOR 1 POST
10 B 11.5	3/4"	3'-0"	7/8"x6"x18"	7/8"	3 1/2"	14"	3 1/2"	1/4"	5.25'	2'-6"	1.9	401	101	6	7'-6"	45
												402	STR.	8	5'-0"	
10 B 17	1"	3'-6"	7/8"x6"x18"	1 1/8"	3 3/4"	14"	4 1/4"	1/4"	6.0'	2'-6"	2.2	401	101	7	7'-6"	52
												403	STR.	8	5'-9"	
12 B 22	1"	4'-0"	1"x9"x19"	1 1/8"	5 1/2"	15"	4 1/4"	1/4"	6.75'	2'-6"	2.5	401	101	8	7'-6"	61
												404	STR.	8	7'-0"	
12 WF 27	1 1/4"	4'-0"	1"x9"x19"	1 3/8"	5 1/2"	15"	5 1/4"	1/4"	8.0'	2'-6"	2.9	401	101	9	7'-6"	94
												501	STR.	8	8'-0"	
14 WF 30	1 1/4"	4'-0"	1"x11"x20"	1 3/8"	7 1/2"	16"	5 1/4"	5/16"	8.25'	2'-6"	3.0	401	101	10	7'-6"	101
												502	STR.	8	8'-6"	
14 WF 34	1 1/4"	4'-0"	1"x12"x22"	1 3/8"	9"	18"	5 1/4"	5/16"	9.0'	2'-6"	3.3	401	101	10	7'-6"	103
												503	STR.	8	8'-9"	
16 WF 36	1 1/2"	5'-0"	1 1/4"x14"x23"	1 5/8"	10"	19"	6"	5/16"	9.75'	2'-6"	3.5	401	101	11	7'-6"	145
												601	STR.	8	9'-3"	
16 WF 40	1 1/2"	5'-6"	1 1/4"x14"x24"	1 5/8"	10"	20"	6"	5/16"	10.0'	2'-6"	3.6	401	101	11	7'-6"	148
												602	STR.	8	9'-6"	
16 WF 45	1 1/2"	6'-0"	1 1/4"x14"x24"	1 5/8"	10"	20"	6"	5/16"	10.5'	2'-6"	3.8	401	101	11	7'-6"	155
												603	STR.	8	10'-0"	
18 WF 50	1 3/4"	7'-6"	1 1/2"x14"x26"	1 7/8"	10"	22"	6 3/4"	5/16"	11.5'	2'-6"	4.2	401	101	12	7'-6"	164
												604	STR.	8	10'-6"	



ALTERNATE ANCHOR BASE DETAILS



REINFORCING FOR ALTERNATE ANCHOR BASE

BEAM SIZE	DIM. W	DIM. H	CU. YDS. CONC. 2 POST
4# POST	1'-0"	4.0'	0.2
4# BEAM	1'-0"	4.0'	0.2
8# BEAM	1'-0"	4.0'	0.2
6 B 8.5	1'-0"	4.0'	0.2
10 B 11.5	2'-6"	5.25'	1.9
10 B 17	2'-6"	6.0'	2.2
12 B 22	2'-6"	6.75'	2.5
12 WF 27	2'-6"	8.0'	2.9
14 WF 30	2'-6"	8.25'	3.0
14 WF 34	2'-6"	9.0'	3.3
16 WF 36	2'-6"	9.75'	3.5
16 WF 40	2'-6"	10.0'	3.6
16 WF 45	2'-6"	10.5'	3.8
18 WF 50	2'-6"	11.5'	4.2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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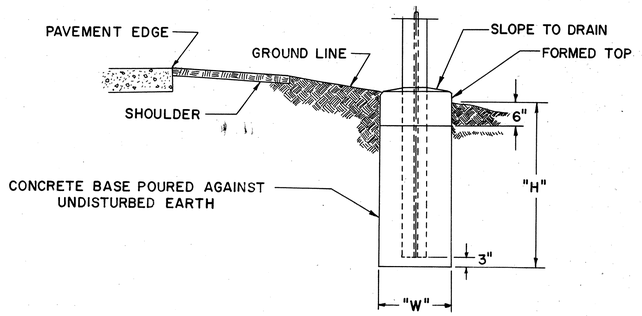
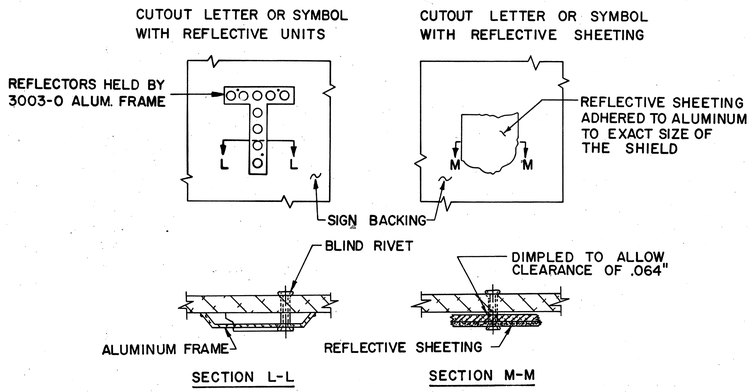
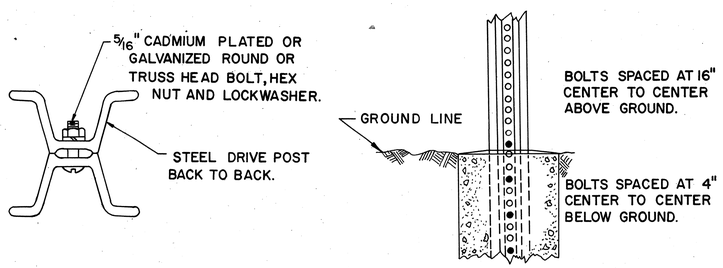
VAN WERT - COUNTY
VAN-224-934



FOUNDATION DETAILS FOR EMBEDDED POSTS AND BEAMS



DEMOUNTABLE LETTERS & SYMBOLS



4# AND 8# BEAM DETAILS

NOTES

PLAN QUANTITIES FOR POSTS AND STRUCTURAL SUPPORTS ARE BASED UPON THE "FOUNDATION DETAILS FOR EMBEDDED POSTS AND BEAMS".

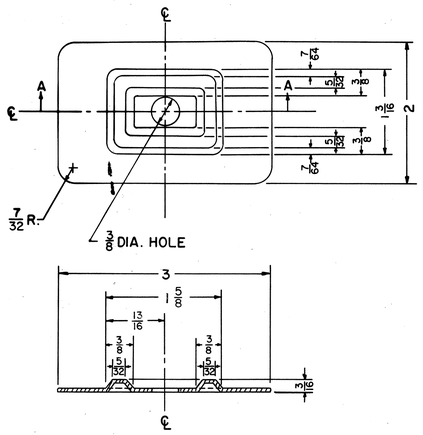
IF THE CONTRACTOR ELECTS TO USE THE METHOD SHOWN FOR "ALTERNATE ANCHOR BASE DETAILS", THE PLAN QUANTITY OF EMBEDDED BEAM ONLY WILL BE ALLOWED IN EXCHANGE AND FULL PAYMENT FOR THE BASE PLATE, ANCHOR BOLTS AND REINFORCING STEEL.

WHERE ANCHOR BASES ARE USED, THE BEAM SIZE SHALL DETERMINE THE ANCHOR BOLT AND BASE PLATE SIZE.

DEMOUNTABLE UNITS SHALL BE ATTACHED TO THE ALUMINUM PANELS WITH ALUMINUM BLIND RIVETS. CARE SHALL BE TAKEN TO INSURE THAT ALL SEGMENTS OF EACH LETTER OR SYMBOL ARE SECURELY AFFIXED TO THE BACKING. LETTERS CONTAINING REFLECTIVE UNITS SHALL BE FASTENED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

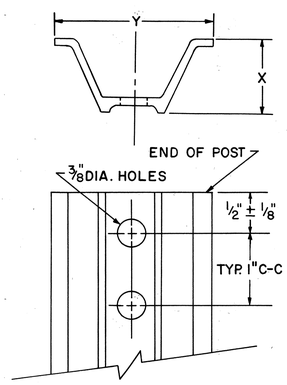
DEMOUNTABLE MARKERS OR SHIELDS SHALL BE SECURELY AFFIXED TO THE BACKING UTILIZING THE HOLES AS LOCATED ON SHEET ____.

IN LIEU OF THE .040" THICK FRAME SPECIFIED IN SUPPLEMENTAL SPECIFICATION 815, THE FRAMES FOR THE REFLECTIVE UNITS IN THE SIGN OUTLINES ONLY, MAY BE .032" THICK ALUMINUM. (A.S.T.M. B209GS11A-T6).



NOTE:
THE PLATE IS SYMMETRICAL ABOUT EITHER CENTERLINE.
METAL SHALL BE 16 GAUGE STEEL.
ALL DIMENSIONS ARE IN INCHES.

BEARING PLATE DETAIL



WEIGHT PER FOOT	X ± 3/32	Y ± 1/8
2.00 #	1 1/2"	3 1/8"
3.00 #	1 3/4"	3 1/2"
4.00 #	1 3/4"	3 1/2"

DRIVE POST DETAILS

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

MISCELLANEOUS SIGNING ITEMS | MS1 | DATE 10-29-63, 8-19-64

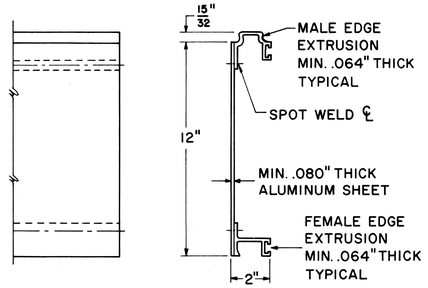
APPROVED _____ ENGINEER OF TRAFFIC

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

71/99

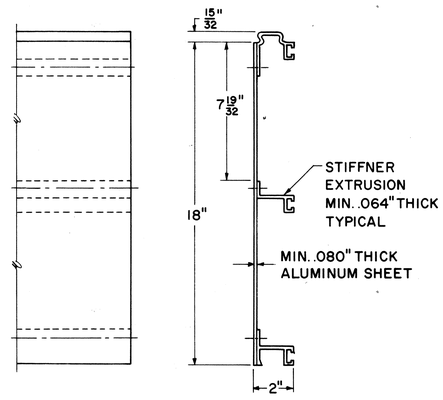
VAN WERT - COUNTY
VAN-224-9.34

12" EXTRUSHEET PANEL



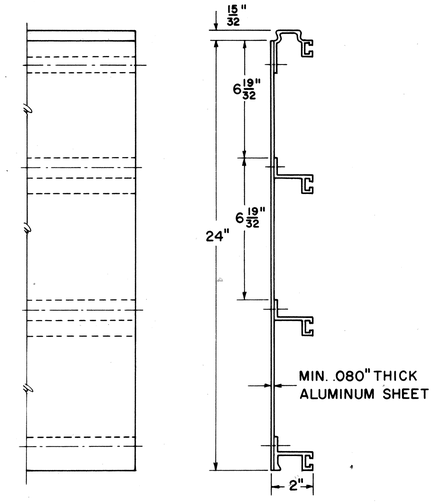
FRONT VIEW SIDE VIEW

18" EXTRUSHEET PANEL



FRONT VIEW SIDE VIEW

24" EXTRUSHEET PANEL



FRONT VIEW SIDE VIEW

NOTES:

EXTRUSHEET PANELS SHALL BE ALUMINUM; SPOT WELDING AND ALL MATERIALS SHALL CONFORM WITH SUPPLEMENTAL SPECIFICATION 8.15.

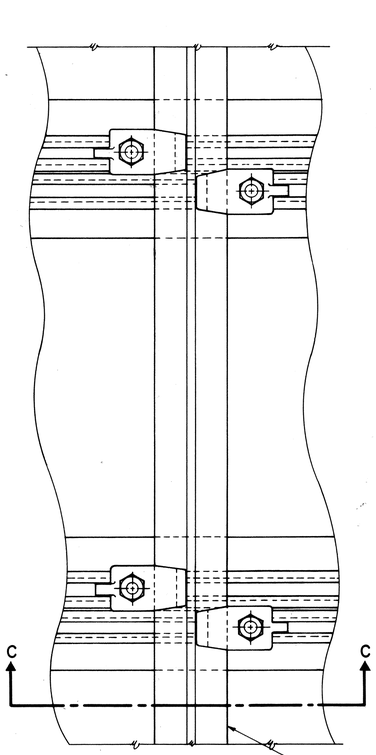
COMBINATIONS OF 12", 18", AND 24" PANELS ARE USED TO ATTAIN REQUIRED SIGN HEIGHT.

INDIVIDUAL PANELS SHALL BE THE SAME LENGTH AS THE HORIZONTAL LENGTH OF SIGN WITH NO SPLICES.

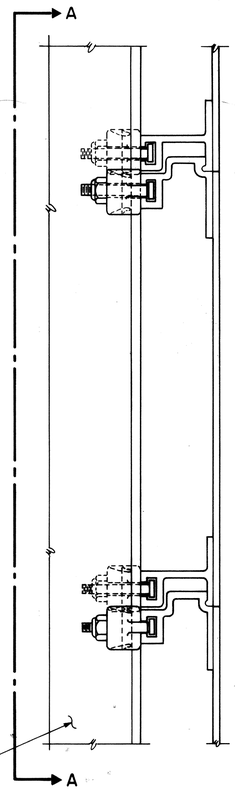
PANELS SHALL BE INTERLOCKED AND ERECTED WITH THE MALE EXTRUSION LOCATED AT THE TOP EDGE OF THE SIGN.

EXTRUSHEET PANELS SHALL BE FASTENED TO EACH VERTICAL SUPPORT MEMBER WITH MOUNTING CLIPS; ALTERNATELY AT EACH HORIZONTAL EXTRUSION; BOTH SIDES AT EACH JOINT, AND ON BOTH SIDES AT TOP AND BOTTOM EDGE OF SIGN.

THE PANELS SHALL BE DESIGNED TO WITHSTAND A WIND LOAD OF 35 POUNDS PER SQUARE FOOT.

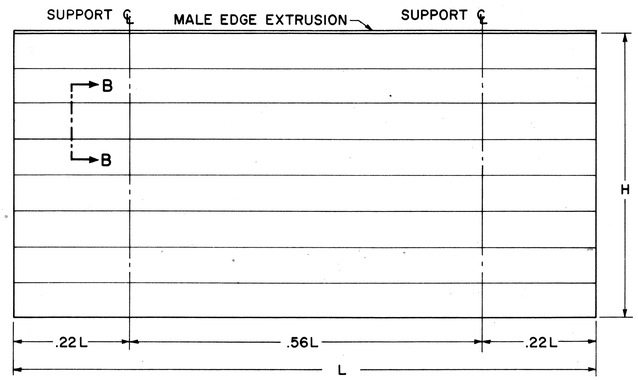


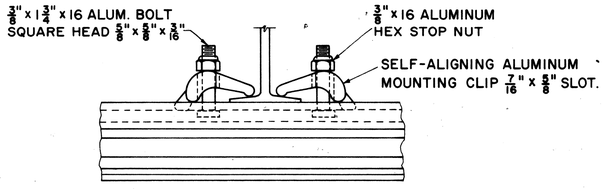
SECTION A-A



SECTION B-B

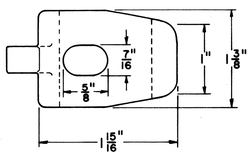
GENERAL ARRANGEMENT

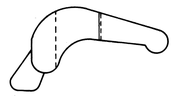




SECTION C-C

CLIP DETAIL





SPOT WELDS

PANEL SIZE	MAXIMUM SPOT WELD SPACING	
	CENTER TO CENTER	BETWN ROWS
12 INCH	4 INCH	10 INCH
18 & 24 INCH	4 INCH	8 INCH

BUREAU OF TRAFFIC
OHIO DEPARTMENT OF HIGHWAYS

ALUMINUM EXTRUSHEET PANEL SIGN

ECD

DATE 9-25-63

APPROVED _____
ENGINEER OF TRAFFIC

ALUMINUM EXTRUSHEET PANEL SIGN

MICROFILMED
MAY 6 1998

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

72
99

VAN WERT COUNTY
VAN-224- 9.34
1.3± Miles West of Van Wert

MADDOX CREEK & BALYEAT DITCH

DRAINAGE AREA = 6,400 Ac. + 1,900 Ac. = 8,300 Ac.
Q_{25} = 65 x .44 x 1 x 3,400 = 972 c.f.s.
Bull. 32 (OHIO) 25 yr. 900 c.f.s.
50 yr. 1,055 c.f.s.

UP STREAM STRUCTURES

MADDOX CREEK
TYPE: Steel Beam
SPAN: 36 Ft.
Waterway Area = 350 S.F.

BALYEAT DITCH
TYPE: 13'x8' Sec. Plate Arch
Waterway = 85 S.F.

DOWN STREAM STRUCTURE

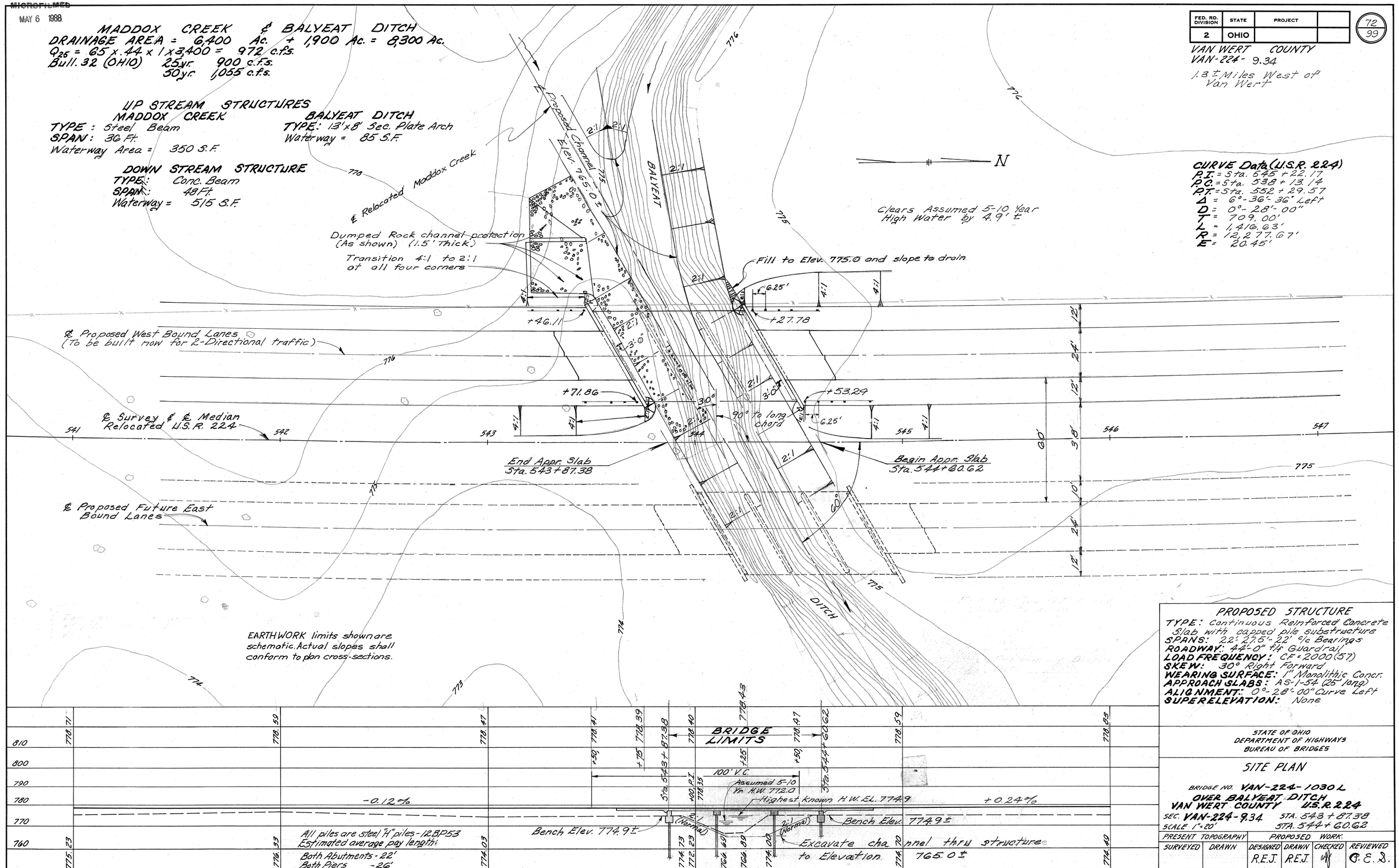
TYPE: Conc. Beam
SPAN: 48 Ft.
Waterway = 515 S.F.

N

Clears Assumed 5-10 Year High Water by 4.9' ±

CURVE Data (U.S.R. 224)

P.I. = Sta. 545 + 22.17
P.C. = Sta. 538 + 13.14
P.T. = Sta. 552 + 29.57
Δ = 6°-36'-36" Left
D = 0°-28'-00"
T = 709.00'
L = 1,416.63'
R = 12,277.67'
E = 20.45'



PROPOSED STRUCTURE

TYPE: Continuous Reinforced Concrete Slab with capped pile substructure
SPANS: 22'-27.5'-22' c/c Bearings
ROADWAY: 44'-0" t/t Guardrail
LOAD FREQUENCY: CF = 2000(57)
SKEW: 30° Right Forward
WEARING SURFACE: 1" Monolithic Concr.
APPROACH SLABS: AS-1-54 (25' long)
ALIGNMENT: 0°-28'-00" Curve Left
SUPERELEVATION: None

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. VAN-224-1030 L
OVER BALYEAT DITCH
VAN WERT COUNTY U.S.R. 224
SEC. VAN-224-9.34 STA. 543+87.38
SCALE 1"=20' STA. 544+60.62

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		R.E.J.	R.E.J.	[illegible]	C.E.D.

BFG G-7-65

MICROFILMED
MAY 6 1999

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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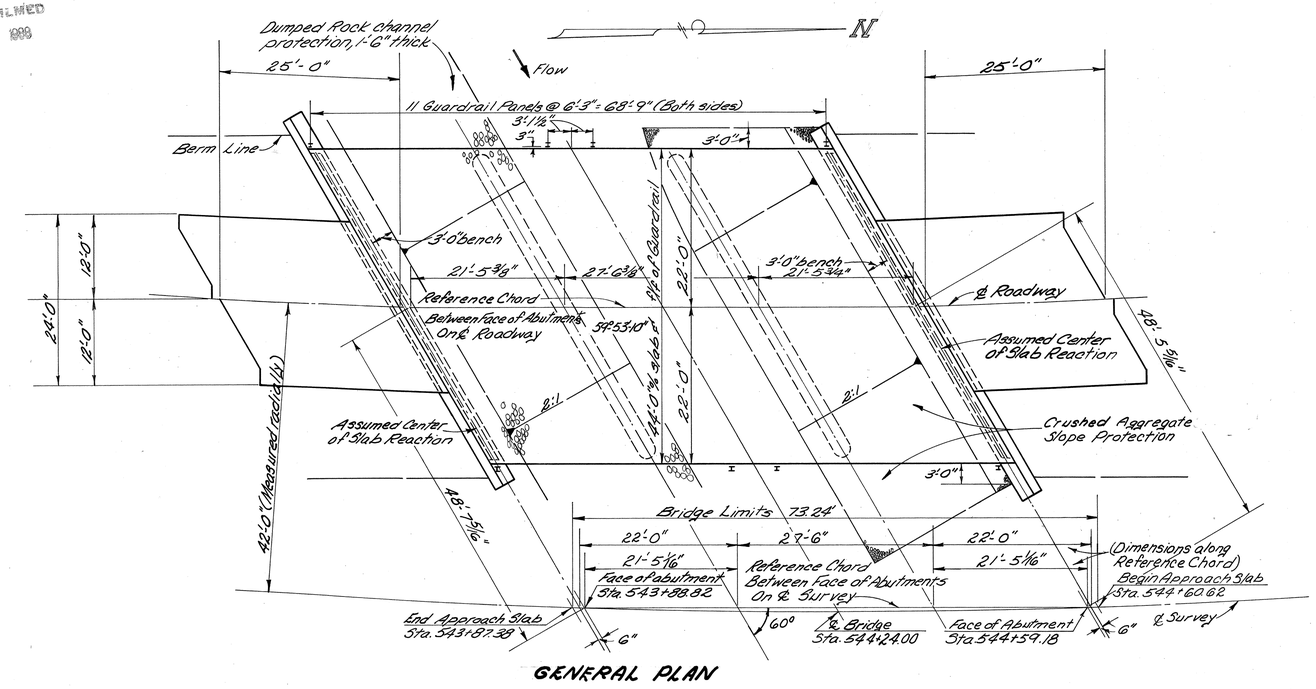
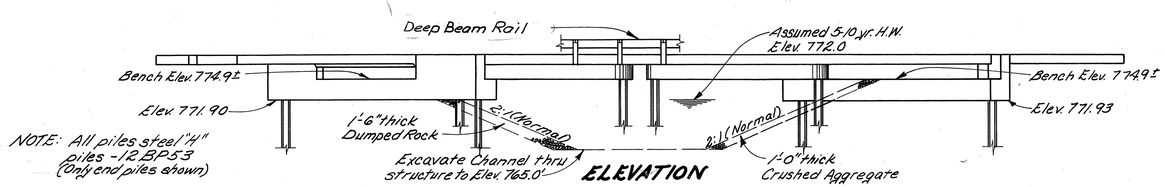
99

VAN-224-9.34



GENERAL PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings C3-1-65 dated 6-1-65, P-1-54 revised 11-8-65, A-1-54 revised 11-8-65, and to Supplemental Specifications No. 808 dated 2-7-66, and 825 dated 4-22-65.

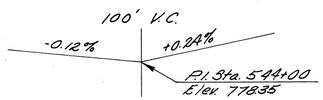
DESIGN DATA:
Design Loading - CF2000(57)
Concrete Class C - basic unit stress 1,333 p.s.i.
Concrete Class E - basic unit stress 1,133 p.s.i.
Reinforcing Steel - A.S.T.M. A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

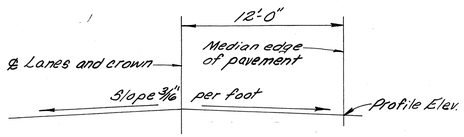
PILES shall be driven to a minimum bearing capacity of 23 tons per pile for the abutments and 30 tons per pile for the piers.

PIER PILE ENCASEMENT as shown on Std. Dwg. P-1-54 is not required. The painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, it shall extend to at least one foot below the proposed surface of the ground.

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super.	Abuts.	Piers	Genl.	As-Built	
503	68	Cu. Yds.	Unclassified excavation		68				
511	163	Cu. Yds.	Class "C" concrete, superstructure and						
			pier caps	146		17			
511	60	Cu. Yds.	Class "E" concrete, abutments		60				
509	47,739	Lbs.	Reinforcing steel	37,129	6,292	4,318			
517	146.48	Lin. Ft.	Railing (Deep beam rail with steel posts and bolts)	146.48					
505	Lump	Sum	First test pile				Lump		
507	770	Lin. Ft.	Steel piles, 12 BP 53		350	420			
518	19	Cu. Yds.	Porous backfill		19				
601	182	Sq. Yds.	Crushed Aggregate slope protection				182		
601	212	Cu. Yds.	Dumped rock channel protection				212		
808	163	Units	Water-reducing, set-retarding						
			admixture	146		17			
825	581	Sq. Yds.	Concrete Surface Treatment	562	19				





BRIDGE ROADWAY CROWN

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

GENERAL PLAN, ELEVATION, NOTES & ESTIMATED QUANTITIES
BRIDGE No. VAN-224-1030L
OVER BALYEAT DITCH
VAN WERT COUNTY STA 543+87.38 544+60.62

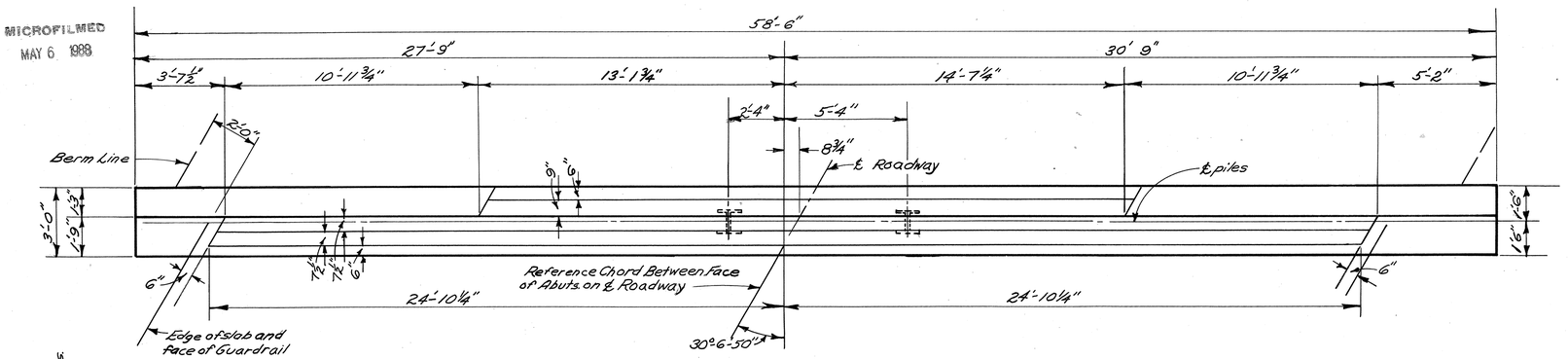
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JFS	JFS	JFS	CPD	BFG	6-7-65	

MICROFILMED
MAY 6 1988

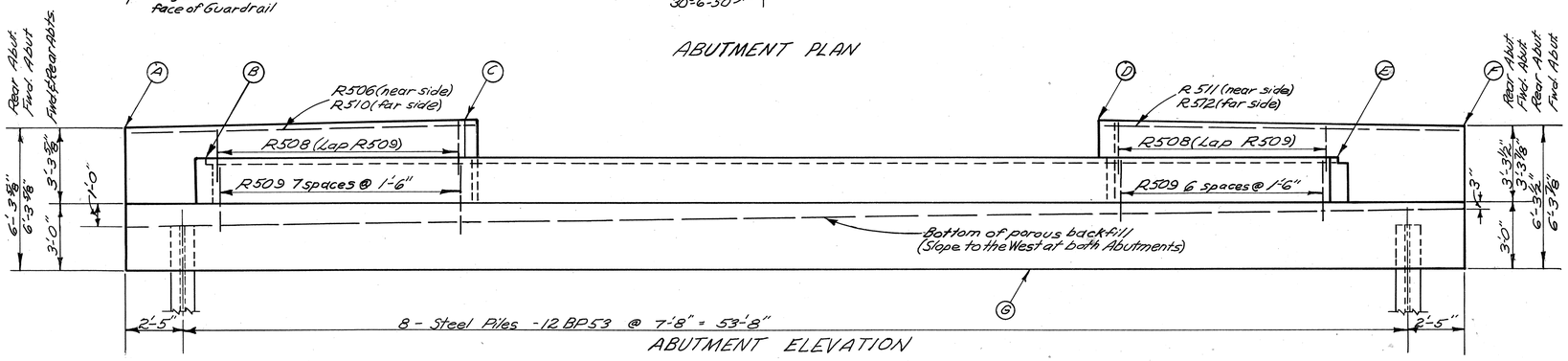
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

74
99

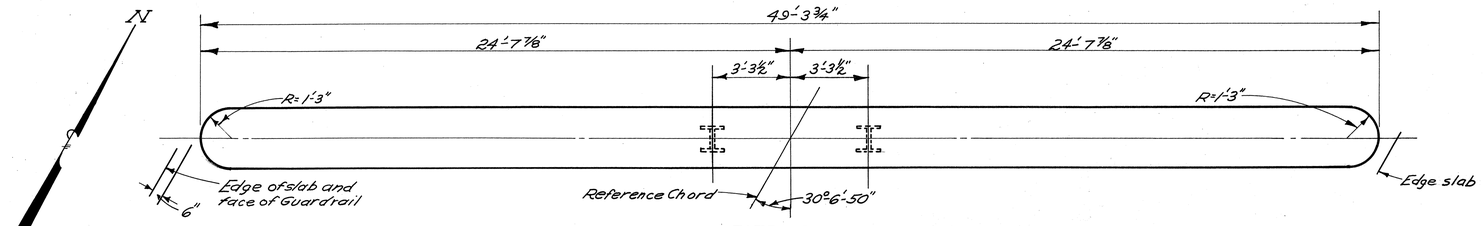
VAN-224-9.34



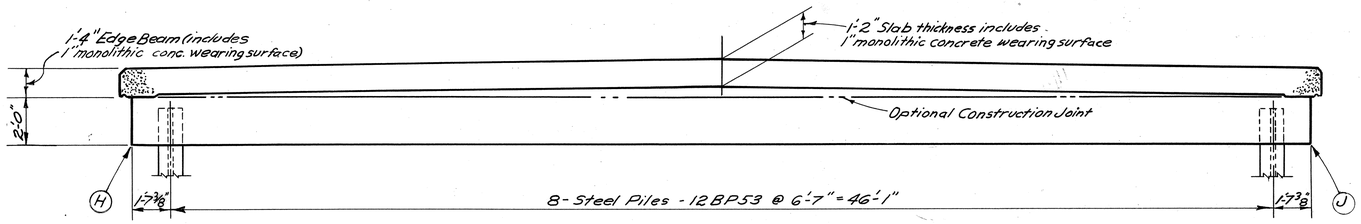
ABUTMENT PLAN



ABUTMENT ELEVATION

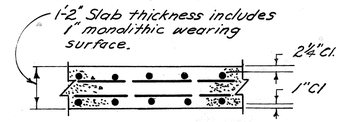


PIER PLAN



PIER ELEVATION

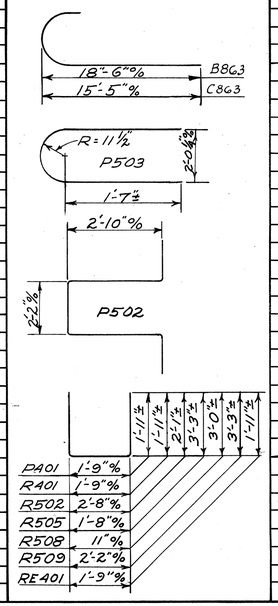
ELEVATIONS									
Location	A	B	C	D	E	F	G	H	J
Rear Abut & Pier	778.20	776.90	778.39	778.40	776.92	778.19	771.90	774.90	774.91
Fwd. Abut & Pier	778.23	776.93	778.43	778.46	776.98	778.25	771.93	774.91	774.93



TRANSVERSE SECTION THRU SLAB

REINFORCING STEEL LIST

MARK	No.	LENGTH	WEIGHT	SHP
Superstructure				
A863	129	25'-11"	8927	S
B863	42	19'-7"	2196	B
C863	42	16'-6"	1850	B
D863	21	14'-8"	822	S
E863	21	14'-4"	804	S
F963	82	26'-2"	7295	S
G963	40	19'-7"	1983	S
H963	40	12'-10"	1745	S
J601	42	12'-11"	815	S
K601	21	6'-10"	216	S
N601	100	26'-2"	3930	S
M701	122	26'-3"	6546	S
Piers				
P1001	16	26'-9"	1842	S
P901	16	24'-10"	1351	S
P501	8	24'-3"	202	S
P502	68	9'-0"	638	B
P503	8	6'-4"	53	B
P401	64	5'-5"	232	B
Abutments				
R1001	16	26'-6"	1825	S



MARK	No.	LENGTH	WEIGHT	SHP
Abutments (cont'd)				
R801	16	30'-4"	1296	S
R501	16	29'-10"	498	S
R502	156	6'-7"	1071	B
R503	8	25'-6"	213	S
R504	24	5'-4"	134	S
R505	38	7'-11"	314	B
R506	2	14'-4"	30	S
R507	16	6'-7"	110	S
R508	30	6'-8"	209	B
R509	30	8'-5	264	B
R510	2	14'-11"	31	S
R511	2	15'-8"	33	S
R512	2	15'-2"	32	S
RA01	64	5'-5"	232	B
Replacement bars				
RE1001	1	7'-2"	-	S
RE901	1	6'-10"	-	S
RE801	1	6'-6"	-	S
RE701	1	6'-2"	-	S
RE601	1	5'-11"	-	S
RE501	1	5'-7"	-	S
RE401	1	5'-5"	-	B

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ABUTMENT & PIER DETAILS & REINFORCING STEEL LIST

BRIDGE NO. VAN-224-1030L
OVER BALYEAT DITCH
VAN WERT COUNTY
STA 543+87.38
544+60.62

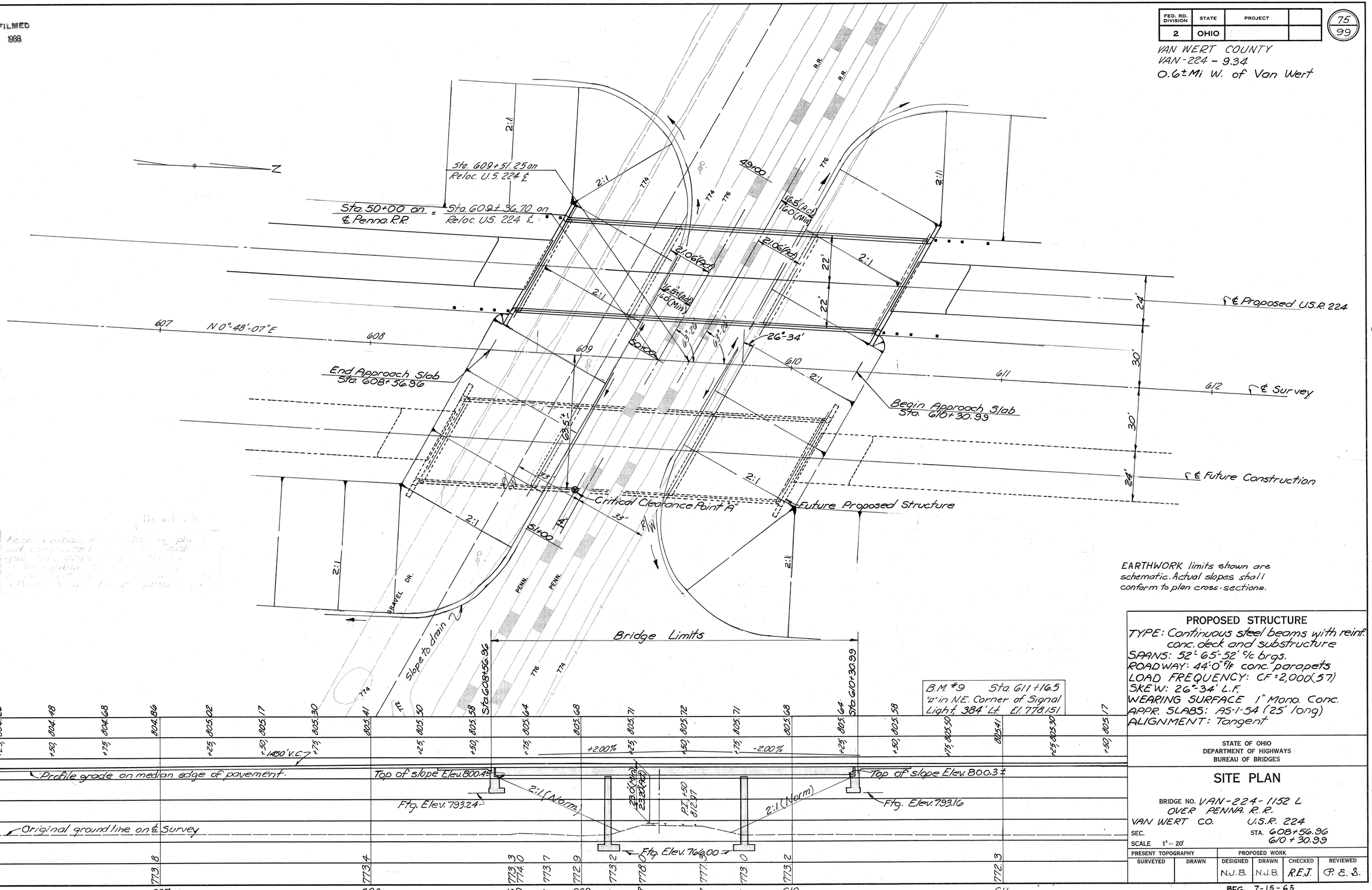
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JFS	JFS	JVA	CPD	BFG	6-7-65	

MICROFILMED
MAY 6 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

75/99

VAN WERT COUNTY
VAN-224 - 9.34
0.6± Mi W. of Van Wert



PROPOSED STRUCTURE

TYPE: Continuous steel beams with reinf. conc. deck and substructure
SPANS: 52'-65'-52' ℄ brgs.
ROADWAY: 44'-0" ℄ conc. parapets
LOAD FREQUENCY: CF=2,000(57)
SKEW: 26°-34' L.F.
WEARING SURFACE 1" Mono. Conc.
APPR. SLABS: AS-1-54 (25' long)
ALIGNMENT: Tangent

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. VAN-224-1152 L
OVER PENNA. R.R.
VAN WERT CO. U.S.R. 224
SEC. STA. 608+56.96 610+30.99
SCALE 1" = 20'

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		N.J.B.	N.J.B.	R.E.J.	G. E. S.

BFG 7-15-65

MICROFILMED
MAY 6 1999

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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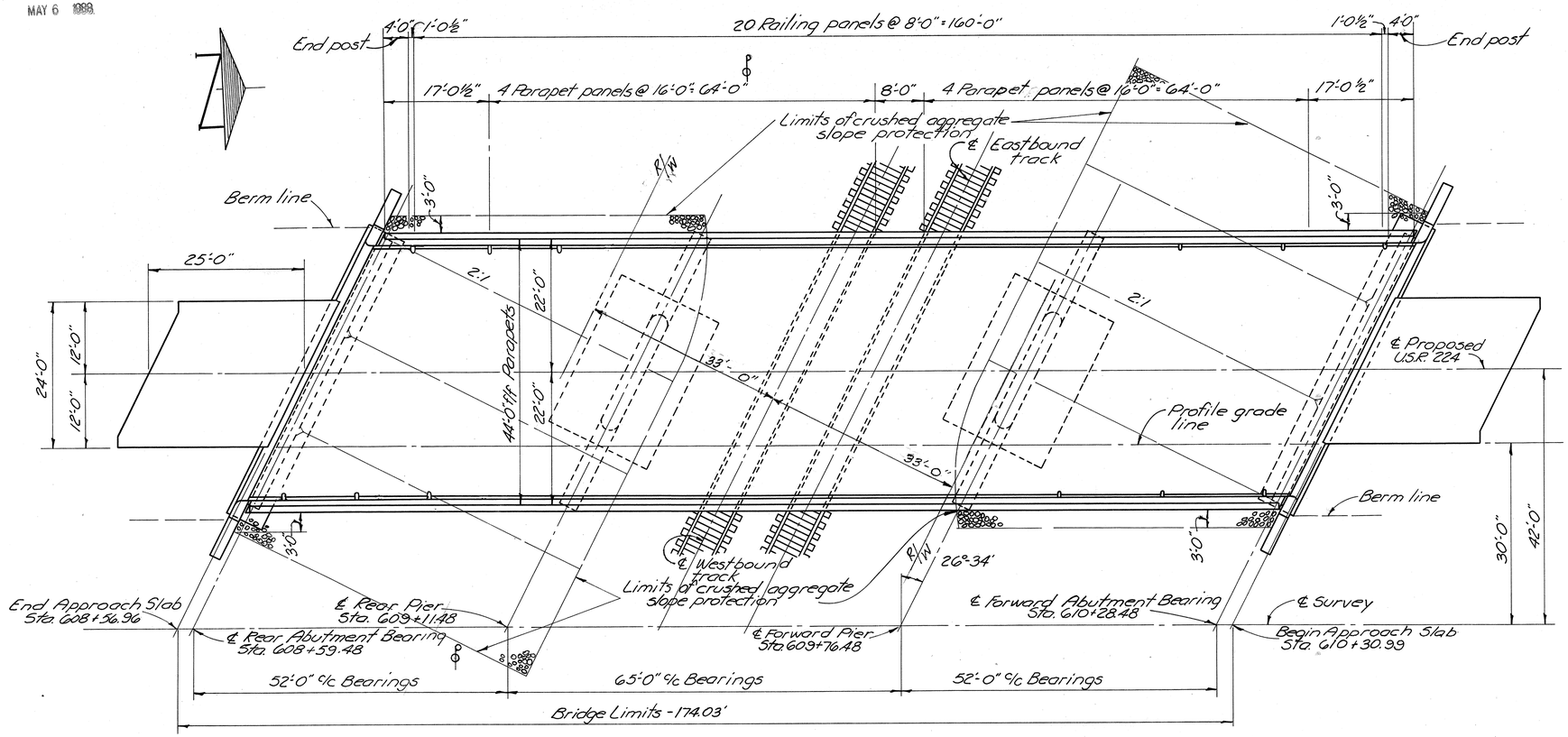
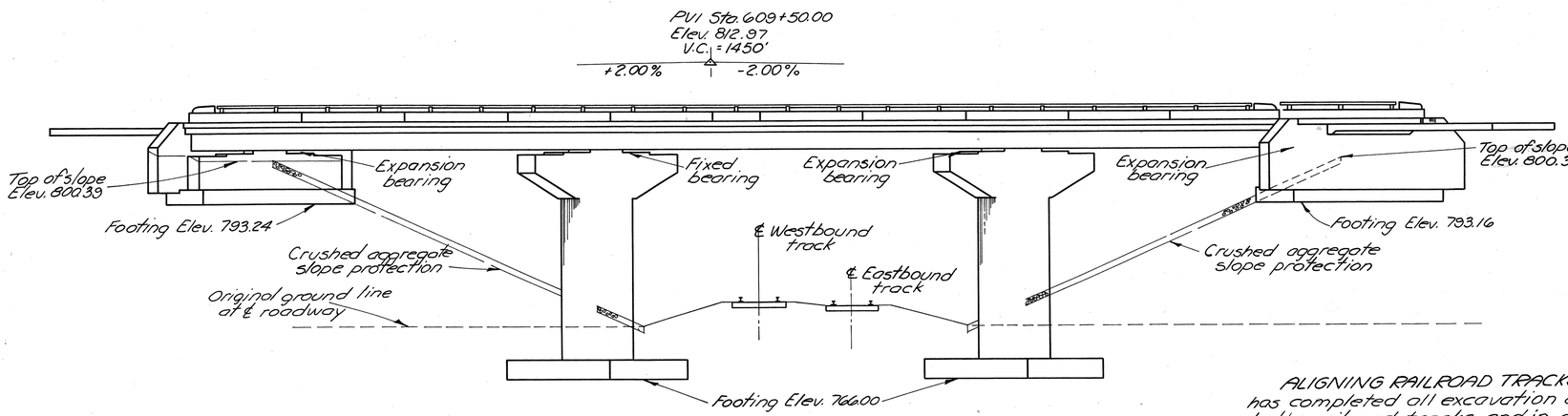
VAN-224-9.34



GENERAL PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings SD-1-63, Sheets 2 thru 4, dated 11-12-63; FSB-1-62, revised 1-15-63; SD-2-64 dated 11-25-64; BR-1-65, sheet 1 of 2 revised 11-24-66, and to Supplemental Specifications No. 808, dated 2-7-66, 811 dated 3-29-65, 825 dated 4-22-66, and 828 dated 3-21-66.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.

Design Loading - CF 2000 (57).

Concrete Class C - basic unit stress 1,333 p.s.i.

Concrete Class E - basic unit stress 1,133 p.s.i.

Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i. (ASTM A7 and A373 steel not permitted.)

Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments and piers.

FOUNDATION BEARING PRESSURE: Abutment and pier footings are designed for a maximum bearing pressure of 2.5 tons per sq. ft.

WELDING: Welds shown as field welds may, at the option of the Contractor, be made in the shop.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

MACHINE FINISH: At the Contractor's option, the concrete deck may be finished by the use of a finishing machine.

CONSTRUCTION CLEARANCE of 20 ft. vertically above the top of the railroad rails and 8 ft. horizontally from the center of tracks shall be maintained at all times.

SHEETING AND BRACING: Before construction is started nine sets of prints showing details of the sheeting and bracing to be used for excavation adjacent to the railroad tracks shall be submitted to the Director for approval by the Department of Highways and by the Railroad Company.

RAILROAD AERIAL LINES will be relocated by the railroad if necessary. The Contractor shall use all precautions necessary to see that the lines are not disturbed during the construction stage and shall cooperate with the railroad in the relocation of these lines. The cost of the relocation shall be included in the railroad force account work.

ALIGNING RAILROAD TRACKS: After the Contractor has completed all excavation and backfill adjacent to the railroad tracks and in compliance with Sec. 503.04 and 503.09 of the Construction and Material Specifications, subject to the Supervision of the Railroad Company, nothing in Sec. 503.04, 503.09 or 108.04 of the Specifications shall be construed to hold the Contractor liable for aligning and resurfacing the railroad tracks.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

GENERAL PLAN, ELEVATION AND GENERAL NOTES

BRIDGE NO. VAN-224-1152L
OVER PENNSYLVANIA R.R.
VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	H.C.	Innes	BFG	7-15-65	

MICROFILMED
MAY 6 1999

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super.	Abuts.	Piers	Gen'l.	As Built	
503	Lump	Sum	Cofferdams, cribs and sheeting				Lump		
503	612	Cu.Yd.	Unclassified excavation		284	328			
511	238	Cu.Yd.	Class "C" concrete, superstructure	238					
511	181	Cu.Yd.	Class "C" concrete, piers above footings			181			
511	134	Cu.Yd.	Class "E" concrete, abutments above footings		134				
511	115	Cu.Yd.	Class "E" concrete, footings		53	62			
509	104540	Lb.	Reinforcing steel	75108	8221	21211			
513	211,500	Lb.	Structural steel	211,500					
514	211,500	Lb.	Field painting of structural steel	211,500					
517	34017	Lin.Ft.	Railing (aluminum rail and supports, concrete	34017					
			parapet and end post						
518	56	Cu.Yd.	Porous backfill		56				
518	12	Each	Scuppers, including supports.	12					
601	962	Sq.Yd.	Crushed aggregate slope protection				962		
808	238	Units	Water-reducing, set-retarding admix-	238					
1,000			ture.						978
825	1359	Sq.Yd.	Concrete Surface Treatment	1322	36				22
518	106	Lin.Ft.	6" Perforated C.M.P. Sec 707.06, including specials		106				
518	96	Lin.Ft.	6" C.M.P., Sec 707.06, non-perforated		96				
828	188	Lin.Ft.	Joint Sealer (end dam)		188				

94 94

NOTES

PROCEDURE: The embankment shall be placed and compacted up to the finish spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which excavation shall be made for the abutments and piers.

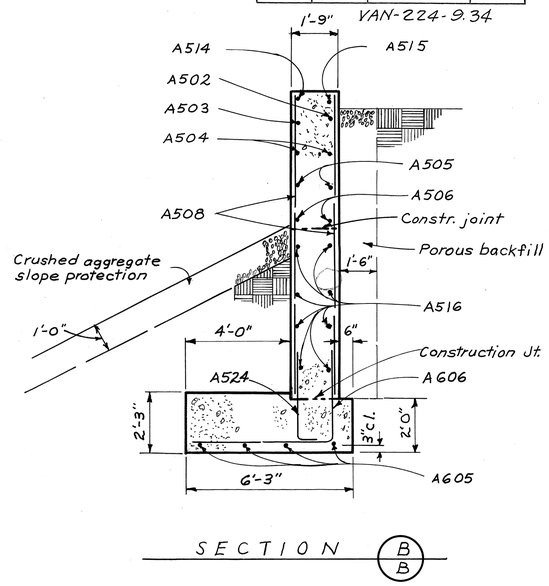
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar holes.

REINFORCING STEEL: The S601, S604, S701 and S702 bars may be furnished in pairs of equal length, lapped 30 diameters at the centerline of roadway, or they may be furnished in pairs of different length in order to place the lap beyond a longitudinal construction joint at the centerline of roadway, at the option of the contractor. Determination of the pay quantity will be according to the number and length of bars as shown hereon.

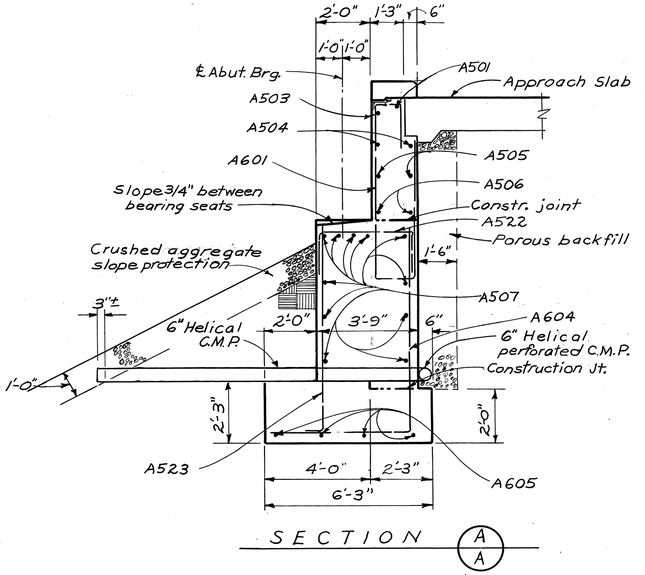
BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

RAILROAD FORCE ACCOUNT WORK:
1. Engineering and Inspection
2. Communications and Signals

Plans for this work may be seen at the Division Office in Lima, O., the Construction Bureau or Office of Contract Sales in Columbus, O.



SECTION B B



SECTION A A

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp
Superstructure				
S701	221	45'-8"	20629	St.
	2	45'-0"		
S702	series of	to	3168	St.
	31	5'-0"		
S703	6	5'-0"	61	St.
S601	221	45'8"	15,159	St.
S602	425	35'-7"	27,715	St.
S603	68	26'-0"	2656	St.
	2	45'-0"		
S604	series of	to	2,328	St.
	31	5'-0"		
S605	6	5'-0"	45	St.
S501	252	4'-11"	1,292	Bt.
S502	252	2'-6"	657	Bt.
S503	240	5'-7"	1398	Bt.
Railing				
R501	16	16'-8"	*	St.
R502	64	15'-8"	*	St.
R503	8	7'-8"	*	St.

varies by 1'-4"± increments

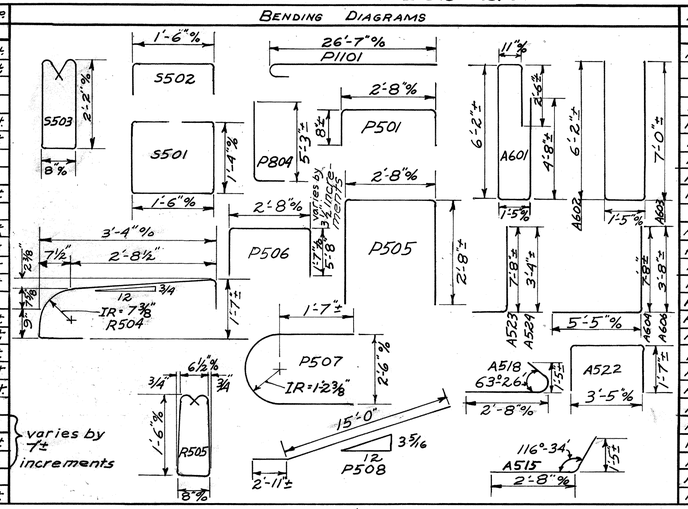
varies by 1'-4"± increments

Mark	No.	Length	Weight	Shp
Railing (Con't)				
R504	8	5'-4"	*	Bt.
R505	12	4'-2"	*	Bt.
Piers				
P1101	28	28'-2"	4190	Bt.
P1102	28	26'-7"	3955	St.
P901	46	11'-8"	1825	St.
P902	12	22'8"	925	St.
P801	22	32'-1"	1885	St.
P802	22	32'-4	1899	St.
P803	44	16'-0	1880	St.
P804	88	6'-2"	1449	Bt.
P501	40	4'-0"	167	Bt.
P502	8	25'-8"	214	St.
P503	4	36'-4"	152	St.
P504	56	18'-0"	1051	St.
P505	60	7'-9"	485	Bt.
	4	13'-9"		
P506	series of	to	605	Bt.
	15	5'-7"		
P507	52	7'-0"	380	Bt.

varies by 7"± increments

*Included with railing for payment.

BENDING DIAGRAMS



Mark	No.	Length	Weight	Shp
Piers (Con't)				
P508	8	17'-11	149	Bt.
Abutments				
A601	54	15'-0"	1,217	Bt.
A602	40	13'-5"	806	Bt.
A603	6	15'-1"	136	Bt.
A604	68	12'-11"	1319	Bt.
A605	16	27'-1"	651	St.
A606	2	8'-11"	27	Bt.
A501	2	28'-6"	60	St.
A502	4	15'-4"	64	St.
A503	4	30'-0"	125	St.
A504	8	31'-7"	263	St.
A505	8	33'-8	281	St.
A506	8	34'-6"	288	St.
A507	44	25'-7"	1174	St.
A508	4	10'-11"	46	St.
A509	8	10'-6"	88	St.
A510	8	9'-6"	79	St.
A511	8	8'-6"	71	St.
A512	4	6'-10"	29	St.
A513	4	7'-11"	33	St.
A514	2	3'-6"	7	St.
A515	2	4'-2"	9	Bt.
A516	16	11'-11"	199	St.

Mark	No.	Length	Weight	Shp
Abutments (Con't)				
A517	2	2'-9"	6	St.
A518	2	4'-0"	8	Bt.
A519	2	7'-6"	16	St.
A520	4	7'-1"	30	St.
A521	16	9'2"	153	St.
A522	68	6'-4"	449	Bt.
A523	68	8'-2"	579	Bt.
A524	2	3'-10"	8	Bt.
Replacement bars				
RE1101	1	7'-6"	-	St.
RE901	1	7'-2"	-	St.
RE801	1	6'-6"	-	St.
RE701	2	6'2"	-	St.
RE601	3	5'-11"	-	St.
RE501	1	5'-7"	-	St.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

REINFORCING STEEL LIST ESTIMATED QUANTITIES & ABUTMENT DETAILS

BRIDGE NO. YAN-224-1152L
OVER PENNSYLVANIA R.R.
VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	JVA	Innes	BFG	7-15-65	8-4-65

MICROFILMED
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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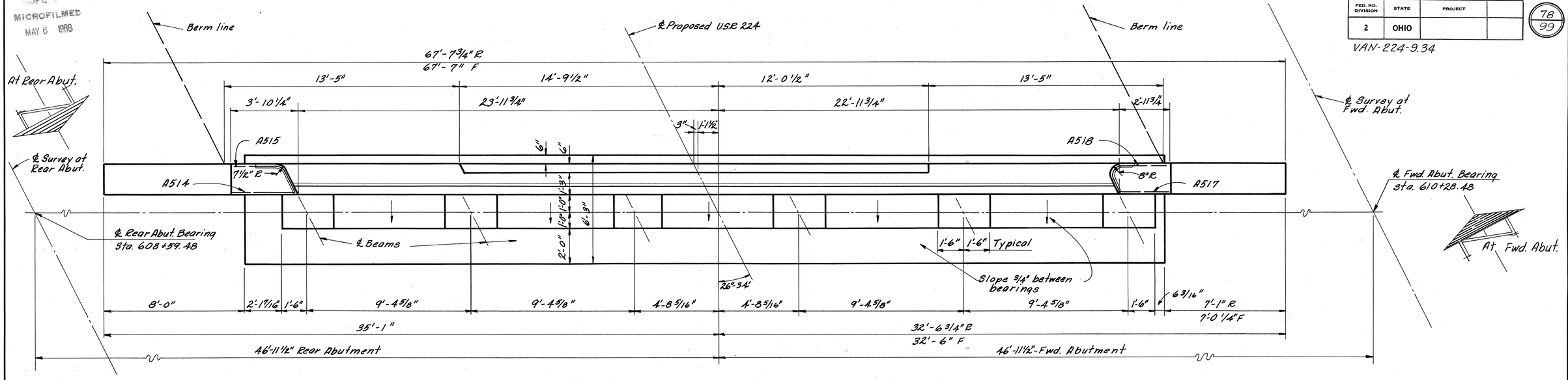
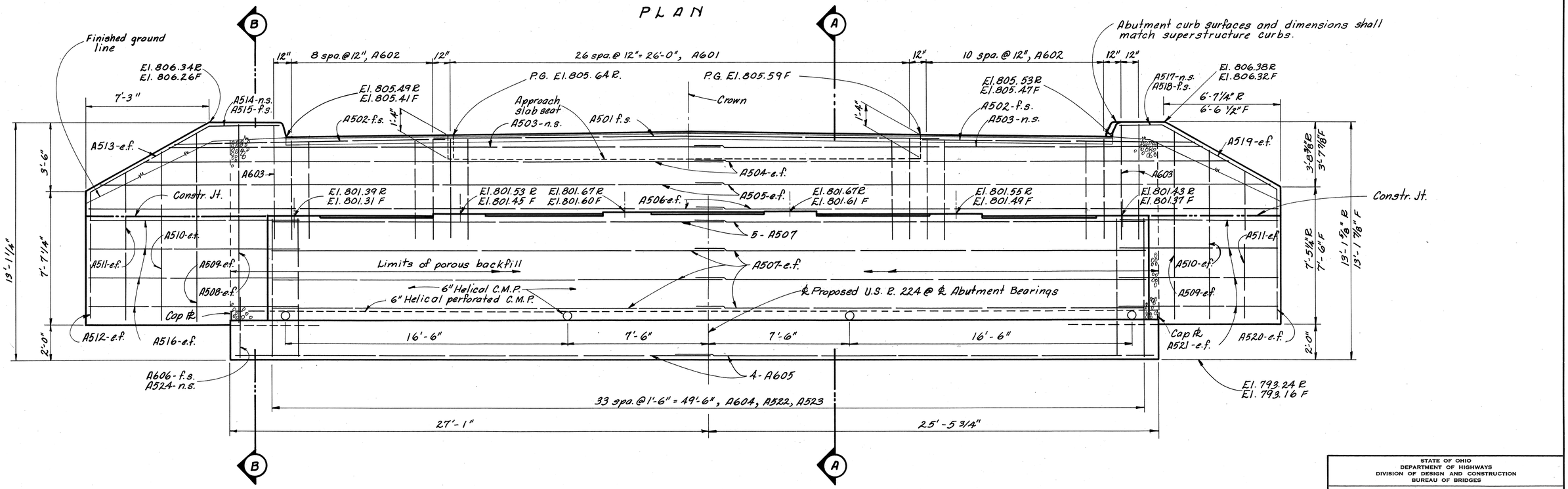
VAN-224-9.34



PLAN



ELEVATION

LEGEND: n.s. denotes near side, f.s. denotes far side and e.f. denotes each face. R indicates rear abutment and F indicates forward abutment.

ADDITIONAL NOTES: For additional notes see Sheet No. 77

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ABUTMENT DETAILS

BRIDGE NO. VAN-224-1152L
OVER PENNSYLVANIA R. R.
VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	Nancy	Innes	BFG	7-15-65	

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MAY 6 1998

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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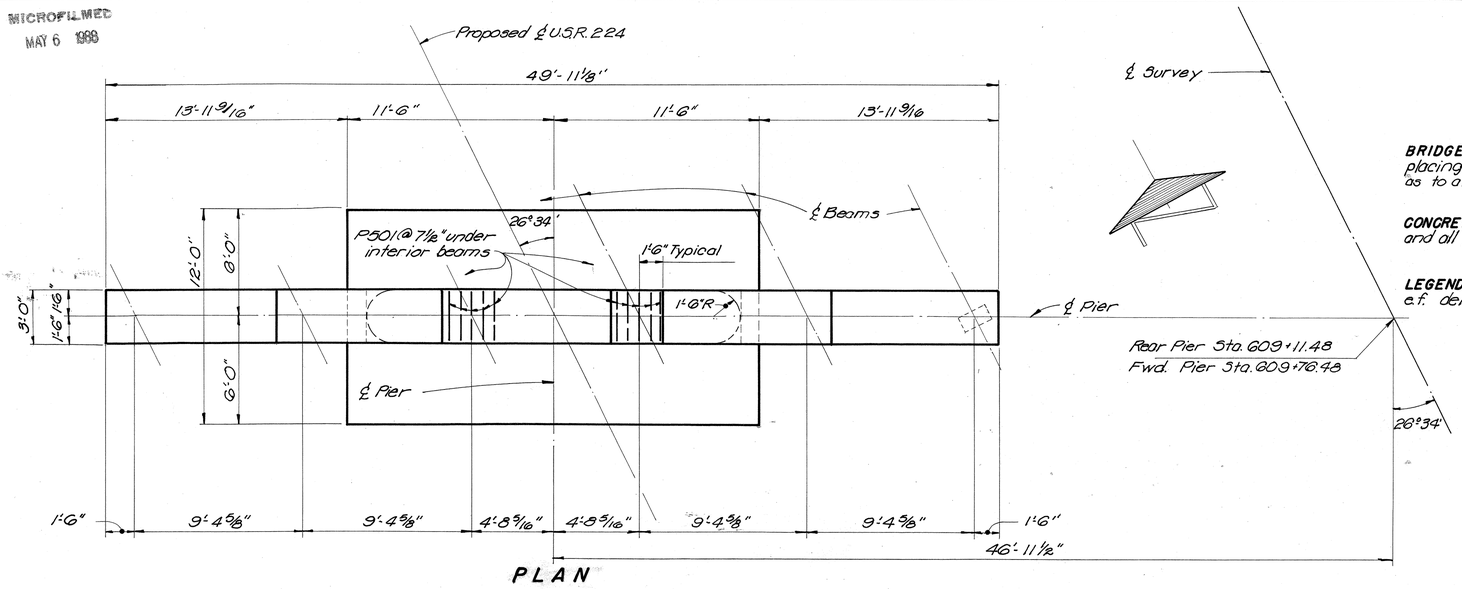


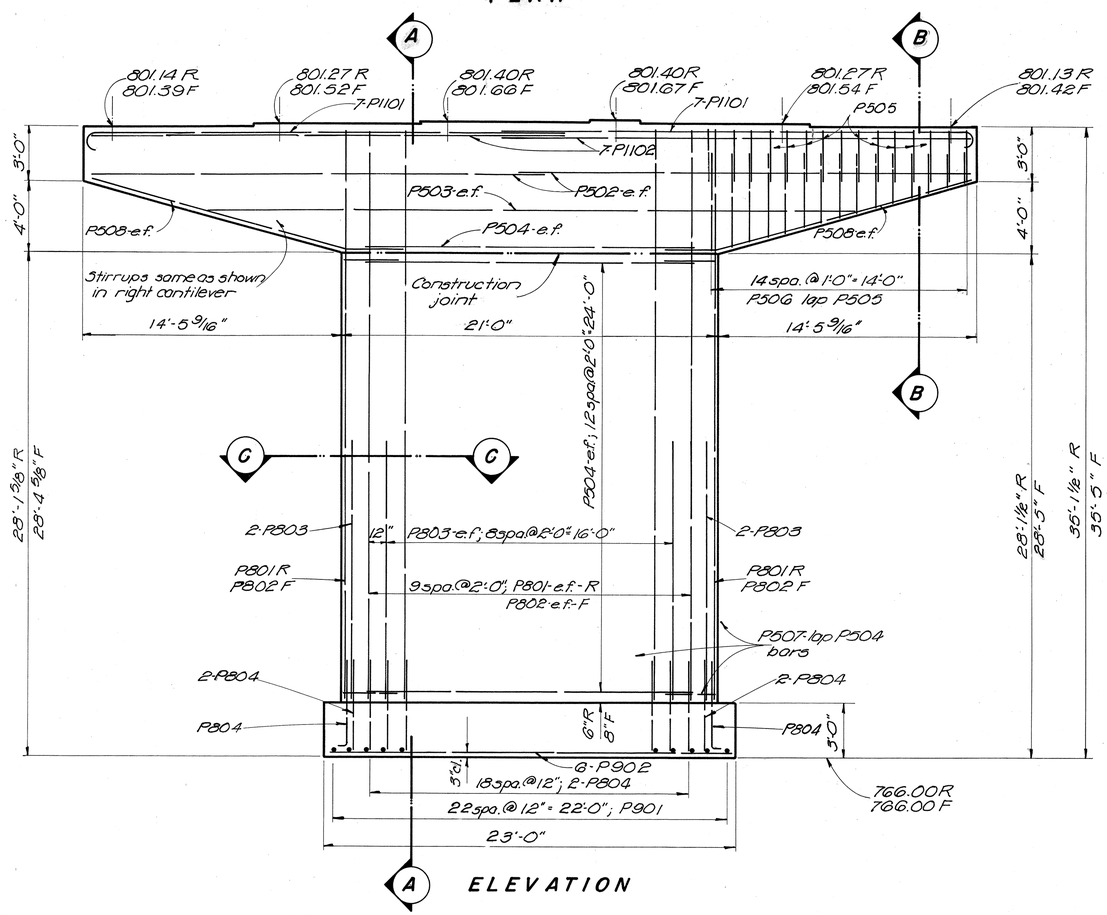
PLAN

NOTES

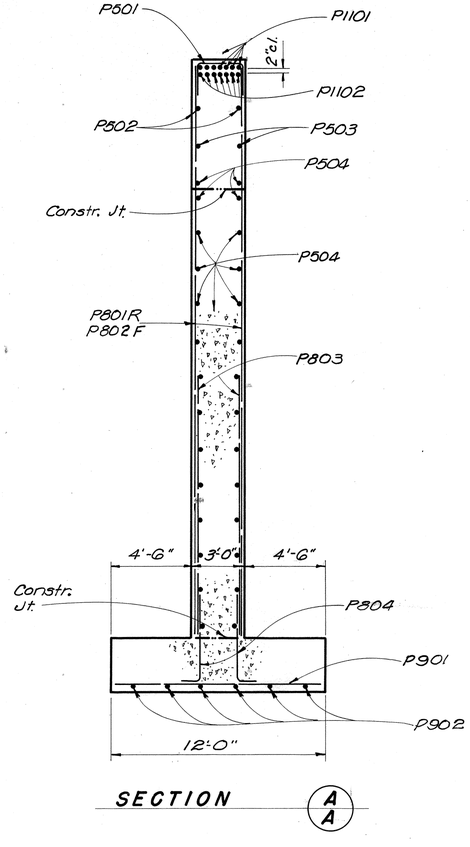
BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar holes.

CONCRETE: All concrete for pier footings shall be Class "E" and all pier concrete above the top of footings shall be Class "C".

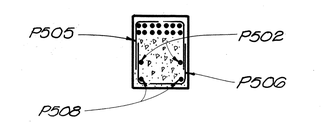
LEGEND: n.s. denotes near side, f.s. denotes far side and e.f. denotes each face. R denotes rear pier and F denotes forward pier.



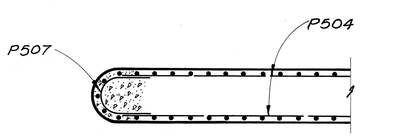
ELEVATION



SECTION A A



SECTION B B



SECTION C C

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

PIER DETAILS

BRIDGE NO. VAN-224-1152L
over PENNSYLVANIA R. R.
VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	C.A.M.	Innes	B.F.G.	7-15-65	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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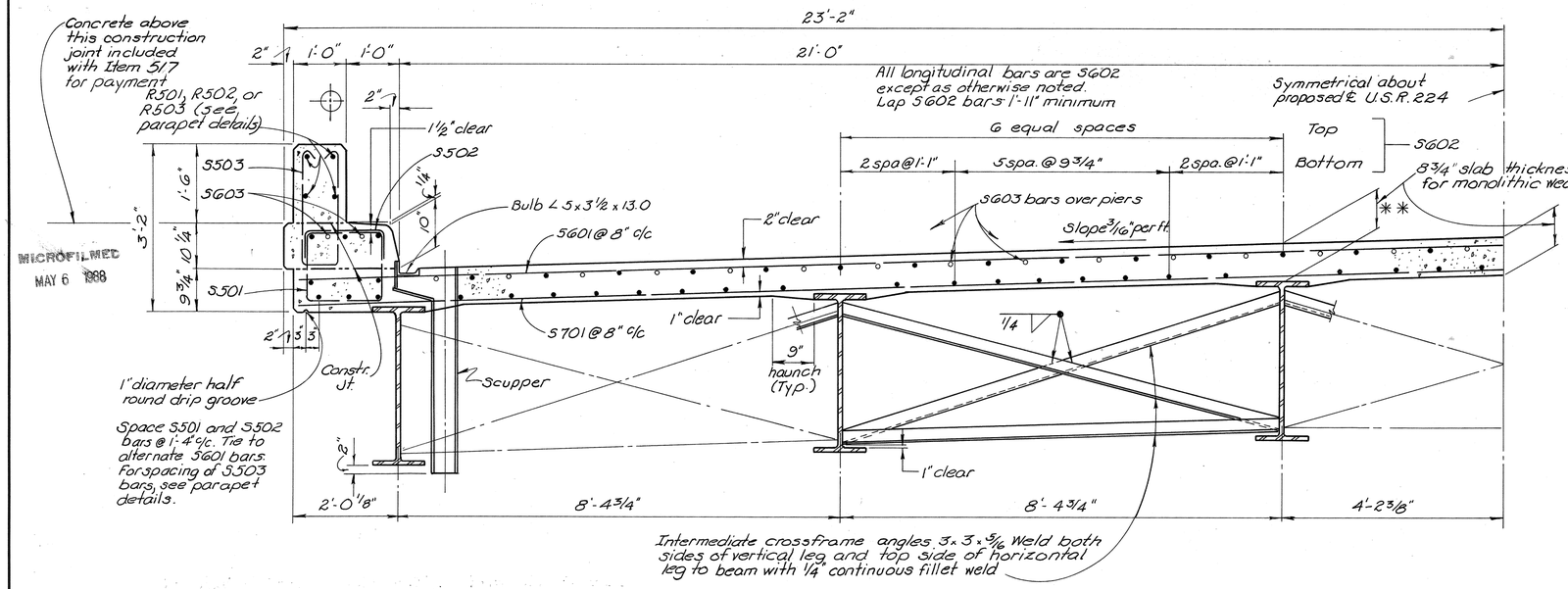
VAN-224-9.34



HALF TRANSVERSE SECTION

MICROFILMED MAY 6 1988

** This is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the beam may not have the exact camber or conformation required to place it parallel to finish grade.

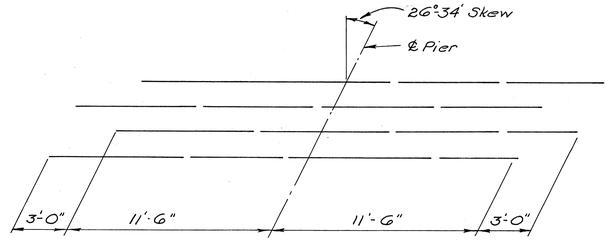
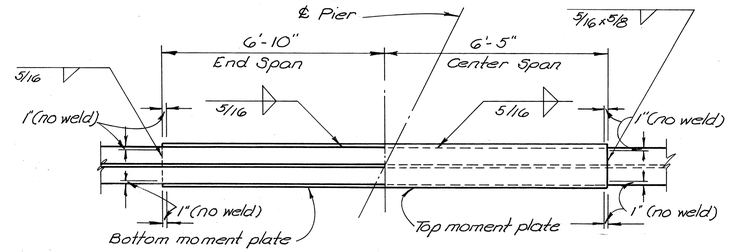
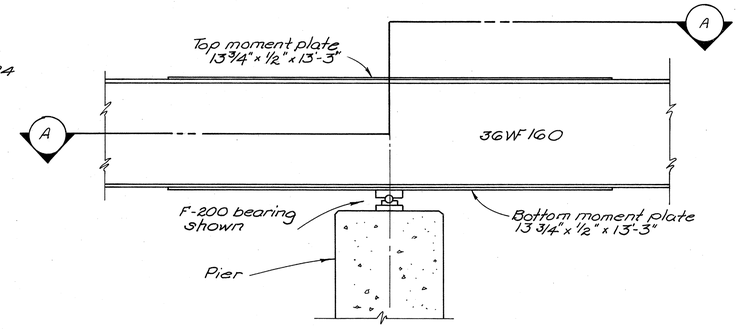


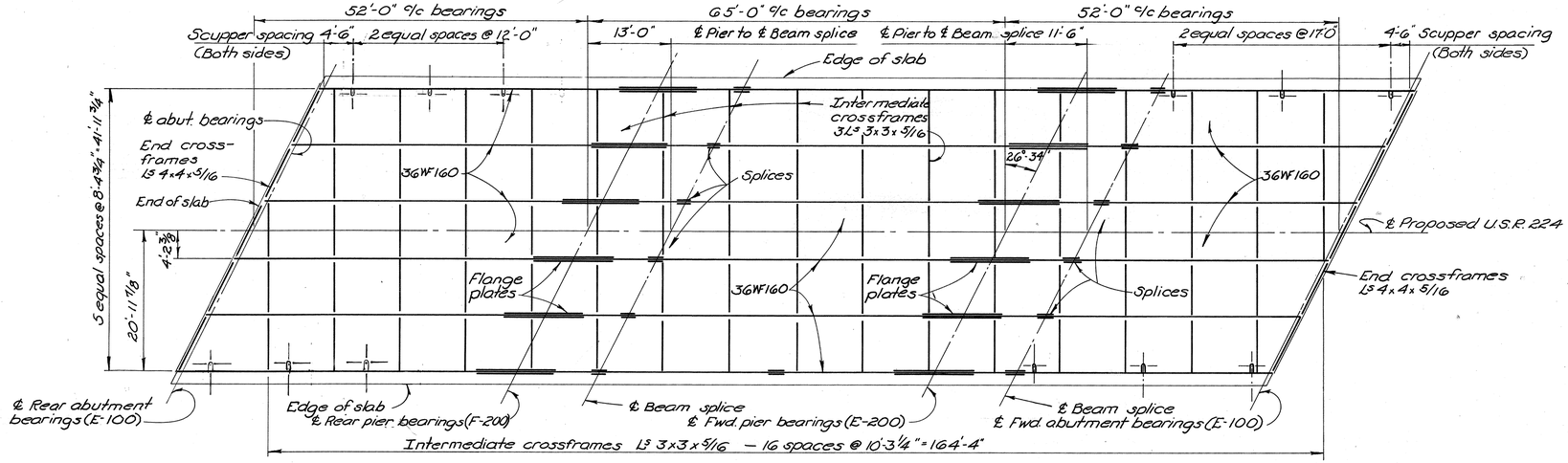
DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIERS



SECTION A A



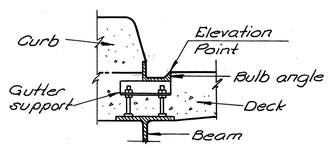
BEAM MOMENT PLATE DETAIL



FRAMING PLAN

BULB ANGLE GUTTER ELEVATIONS

LOCATION	REAR SPAN				CENTER SPAN				FORWARD SPAN				
	℄ Abut. Bearing	.25 Span	.50 Span	.75 Span	℄ Pier Bearing	.25 Span	.50 Span	.75 Span	℄ Pier Bearing	.25 Span	.50 Span	.75 Span	℄ Abut. Bearing
Left Bulb Angle	805.54	805.58	805.59	805.59	805.59	805.61	805.61	805.58	805.54	805.53	805.51	805.47	805.42
Right Bulb Angle	805.50	805.54	805.57	805.57	805.58	805.60	805.62	805.60	805.57	805.56	805.56	805.52	805.48



ADDITIONAL NOTES: For additional notes see Sheet No. 81

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE NO. VAN-224-1152L
OVER PENNSYLVANIA R.R.
VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	P.K.I.	Innes	BFG	7-15-65	

MICROFILMED
MAY 6 1998

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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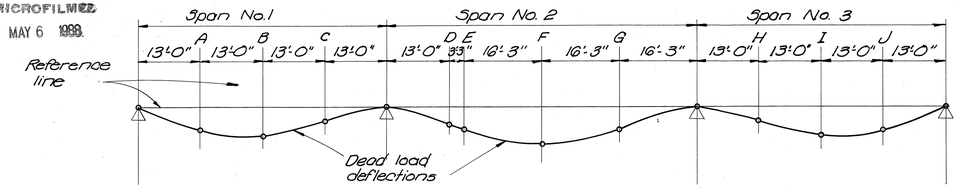
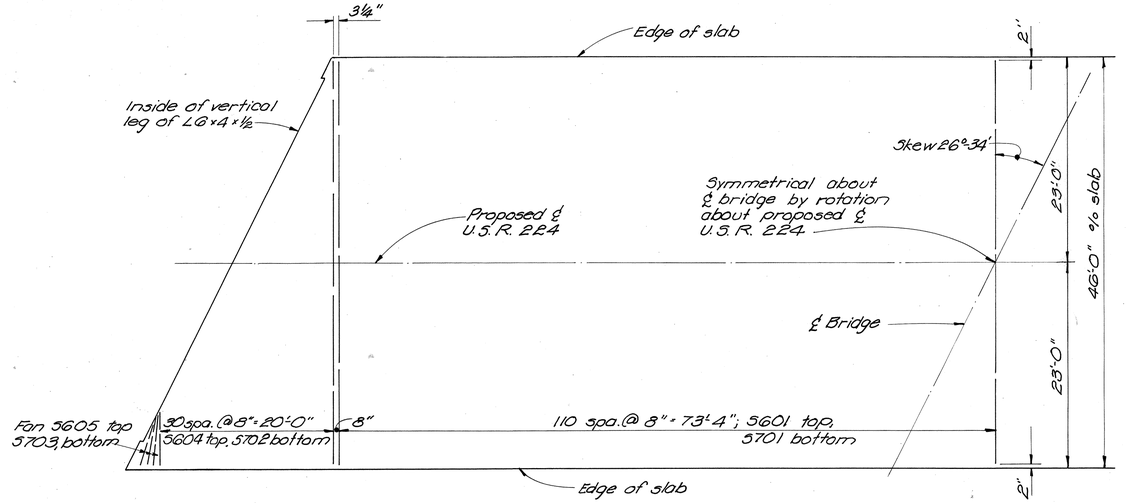
VAN-224-9.34



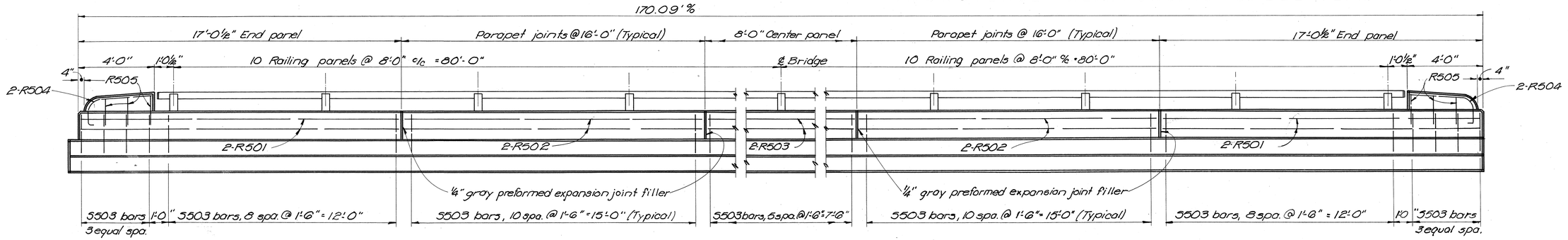
NOTE: Deflections and camber are shown with respect to Reference chords between adjacent bearings.

DEFLECTION AND CAMBER TABLE

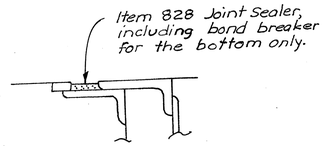
LOCATION	SPAN NO. 1			SPAN NO. 2				SPAN NO. 3		
EXTERIOR BEAM	1/4 Point A	1/2 Point B	3/4 Point C	Splice Pt. D	1/4 Point E	1/2 Point F	3/4 Point G	1/4 Point H	1/2 Point I	3/4 Point J
Deflection due to weight of steel	+ 1/16"	+ 1/16"	0	0	+ 1/16"	+ 1/16"	+ 1/16"	0	+ 1/16"	+ 1/16
Deflection due to remaining dead load	+ 1/8"	+ 3/16"	+ 1/8"	+ 1/8"	+ 1/8"	+ 1/4"	+ 1/8"	+ 1/8"	+ 3/16"	+ 1/8"
Adjustment required for vertical curve	+ 1/16"	+ 1/8"	+ 1/16"	+ 1/16"	+ 1/8"	+ 3/16"	+ 1/8"	+ 1/16"	+ 1/8"	+ 1/16"
Required shop camber	+ 1/4"	+ 3/8"	+ 3/16"	+ 3/16"	+ 5/16	+ 1/2"	+ 5/16"	+ 3/16"	+ 3/8"	+ 1/4"
INTERIOR BEAM	1/4 Point A	1/2 Point B	3/4 Point C	Splice Pt. D	1/4 Point E	1/2 Point F	3/4 Point G	1/4 Point H	1/2 Point I	3/4 Point J
Deflection due to weight of steel	+ 1/16"	+ 1/16"	0	0	+ 1/16"	+ 1/16"	+ 1/16"	0	+ 1/16"	+ 1/16"
Deflection due to remaining dead load	+ 3/16"	+ 1/4"	+ 1/8"	+ 1/8"	+ 3/16"	+ 5/16"	+ 3/16"	+ 1/8"	+ 1/4"	+ 3/16"
Adjustment required for vertical curve	+ 1/16"	+ 1/8"	+ 1/16	+ 1/16"	+ 1/8"	+ 3/16"	+ 1/8"	+ 1/16"	+ 1/8"	+ 1/16"
Required shop camber	+ 5/16	+ 7/16	+ 3/16"	+ 3/16"	+ 3/8"	+ 9/16"	+ 3/8"	+ 3/16"	+ 7/16"	+ 5/16"



TRANSVERSE REINFORCING STEEL PLAN



RAILING AND PARAPET DETAILS



NOTES

DECK SLAB HAUNCH: The haunch in the deck slab adjacent to the top of steel beams, which is shown as 9" wide, may vary from this dimension between the limits of 6" and 12", except that the maximum slope shall not exceed 3" inches per foot. Payment for deck slab concrete shall be based on the 9" width.

REFER TO STANDARD DRAWING SD-1-63 for the following
1. Curb plate details
2. Scuppers, gutters and supports.
3. End crossframes and end dam details.

REFER TO STANDARD DRAWING BR-1-65 for railing and parapet details not shown.

REFER TO STANDARD DRAWING SD-2-64 for beam field splice details.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE NO. VAN-224-1152 L
over PENNSYLVANIA RR

VAN WERT COUNTY STA. 608+56.96
STA. 610+30.99

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.N.	H.E.N.	CAM	Innes	BFG	7-15-65	