ACI-1103(16)

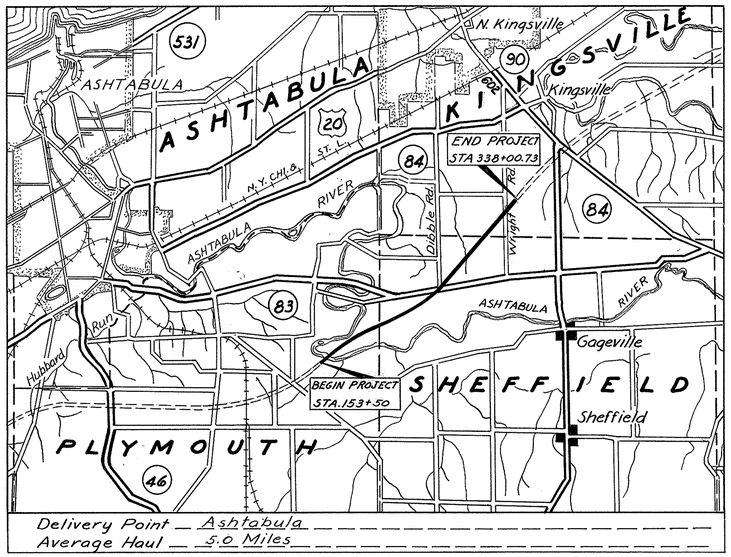
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	ACI-1103(16)	

1 / 202

ATB-1-15.73
ASHTABULA COUNTY

NOTE: Federal Project Number I-1103(16) appearing throughout these plans shall be considered to read ACI-1103(16).

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
ATB-1-15.73
ASHTABULA COUNTY
PLYMOUTH, SHEFFIELD & KINGSVILLE TOWNSHIPS



Delivery Point — Ashtabula
Average Haul — 5.0 Miles

LOCATION MAP

0 1 2 3
Scale in Miles

Portion to be improved
State Highways
Other Roads

AUG 23 1961
GROUND PHOTOLAB

CONVENTIONAL SIGNS

County Line	
Township Line	
Lot Line	
Corporation Line	
Center Line	
Fence Line	
Railroad	
Power & Telephone Pole Lines	
Guard Rail	
Pipe Lines	
Underground Cable	

INDEX OF SHEETS

Title Sheet	1
Schematic Plan	2
Typical Sections	3-5
General Notes	6-7
Summary of Quantities	8-9
General Summary	10
Typical Details	11-12
Plan and Profile	23-91
Cross Sections	92-102
Intersecting Roads & Special Details	103-122
Weigh Stations & Roadside Rests	123-139
Cross Section Extensions	140-160
Sta. 198+50 to Sta. 241+00	
Sta. 275+00 to Sta. 317+00	
Structure 20' and Under	161-168
Structure over 20'	169-189
Right-of-Way	190-202
Soil Profile	
Utility Force Account Work	R/W Sheet No. 7

Line Data	Work	Project
Begin	152+50	153+50
End	338+30	338+00.73
Gross Length	18,580 Lin. Ft.	18,450.73 Lin. Ft.
Deduct (Equations)	104.20 Lin. Ft.	104.20 Lin. Ft.
Sta. 190+52.43 Back	Sta. 190+76.77 Ahead	
Sta. 267+46.10 Back	Sta. 268+25.96 Ahead	
Additions (Local Roads)	4,425.42 Lin. Ft.	
Net Length	22,901.22 Lin. Ft. or 4.337 Miles	18,346.53 Lin. Ft. or 3.474 Miles

LIMITED ACCESS

This improvement 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, revised code of Ohio, and is especially designed for through traffic.

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

The Right-of-Way necessary for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be set forth on the plans and estimates.

Approved: R. J. Thomas
Date 1-13-57 Chief Engineer, Interstate Projects

Approved: C. H. Mahnen
Date 11-22-57 Deputy Director, Planning & Programming

Approved: P. E. Masheter
Date 11-14-57 Deputy Director, Design & Construction

Approved: _____
Date _____ First Assistant Director

Approved: George J. Thomas
Date 11/22/57 Acting Director of Highways

Sh. 177 Revised 1-8-58
Sh. 177, 178 and 184 Revised 2-28-58
Sh. 177, 179 and 186 Revised 3-24-58
Sh. 191, 192, 194, 195, 197, 198, 199, 200, 201 Revised 3-29-58
Sheet 174 Revised 6-26-58.
Sheets, 171 & 173 Revised 10-29-58
Sheet 173a - added 10-29-58
Sheet 174 Revised 10-29-58
Sheet 173b Added 11-12-58
Sheet 174 revised, 174a Added 11-14-58
Sheet 173a superseded 11-12-58 by 173b.
Sheet 173b superseded by 173c, 3-13-59
Sheet 173c added 3-13-59
Sheet 173 revised 3-13-59

Plans Prepared By
SHAFFER, PARRETT & ASSOCIATES
and
BROOKHART & TYO
Consulting Engineers
Mansfield, Ohio

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

_____ _____
Division Engineer Date

Approved: K. E. Schuster
Date 11/14/57 Traffic Engineer

498

File No. _____
Ashtabula County
ATB-1-15.73
Date of Letting _____
Contract No. _____

Supplemental Specifications	
Number	Date
E-101	1-1-57
B-119	Rev. 8-11-57
No. 5	6-8-55
No. 18	Rev. 2-6-57
No. I-127	Rev. 9-18-57
No. I-125	Rev. 11-6-57
S-114	Rev. 8-1-57

Standard Construction Drawings

Drawing No.	Date	Drawing No.	Date	Drawing No.	Date	Drawing No.	Date	Drawing No.	Date
HW-A&B	7-15-57	I-15 No. 3	12-1-54	DR-1	1-3-55	L-3	4-1-50	CSB-2-56	
HW-C	7-15-57		4-1-50	I-8 CB 2-2A&B	8-1-56	L-3A	4-1-50	Sheets 2&3 of 6	12-3-56
BT-50-70-71E No1	10-1-47		4-1-50	I-8 C.B. 4	6-1-57	RP No 1	7-2-56	AR-1-57	4-9-57
BT-71-R	3-2-53	L-J No. 1	7-1-55	I-8 C.B. 5	6-1-57	RP No 2	9-19-56	RB-1-55	3-1-55
6-7.07	6-1-56	RJ No. 1	1-3-55	I-8 M.H. No1	5-1-52	RP No 3	9-19-56	AS-1-54	R-12-1-54
I-1, 2, 3, 4 & 5	2-20-45	S-27 P.C.-3	2-20-45	I-8 M.H. No1-A	1-3-55	RP No 9-A	7-1-57	I-8 C.B. No. 6	5-1-52
I-146	1-22-52	S-27 P.C.-4	1-4-54	I-8 C.B. 3	5-1-52	RP No 9-B	7-1-57		
I-15 No. 2	6-1-57	T-35	1-2-56	I-21-23	8-1-56	RP No 9-C	7-1-57		
I-15 No. 2A	6-1-57	T-J	5-1-56	L-1	9-1-50	I-12	7-1-57		
I-15 No. 2B	6-1-57	F-1	4-1-57	L-2	9-1-50				

Revised 3-28-58

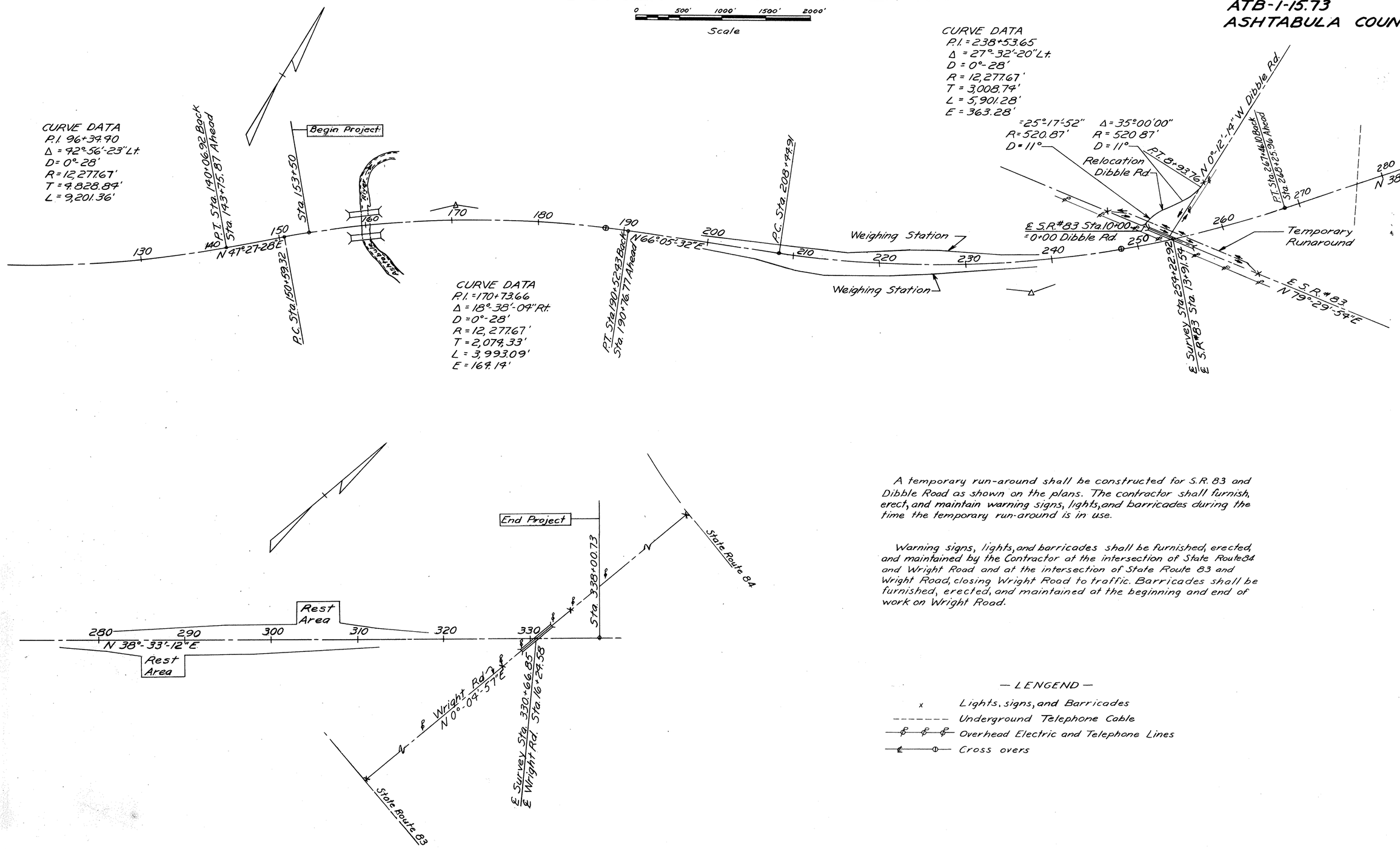
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

2
202

ATB-1-15.73
ASHTABULA COUNTY

SCHEMATIC PLAN

0 500' 1000' 1500' 2000'
Scale



A temporary run-around shall be constructed for S.R. 83 and Dibble Road as shown on the plans. The contractor shall furnish, erect, and maintain warning signs, lights, and barricades during the time the temporary run-around is in use.

Warning signs, lights, and barricades shall be furnished, erected, and maintained by the Contractor at the intersection of State Route 84 and Wright Road and at the intersection of State Route 83 and Wright Road, closing Wright Road to traffic. Barricades shall be furnished, erected, and maintained at the beginning and end of work on Wright Road.

— LENGEND —

- x — Lights, signs, and Barricades
- ------- Underground Telephone Cable
- —℄—℄—℄— Overhead Electric and Telephone Lines
- —℄—o— Cross overs

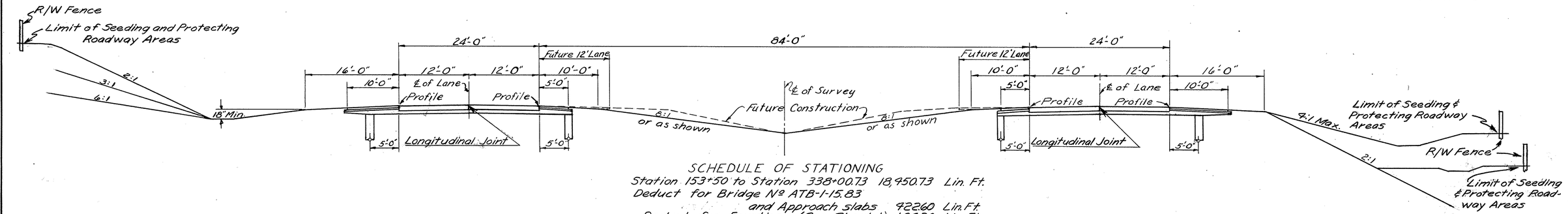
SCHEMATIC PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

3
202

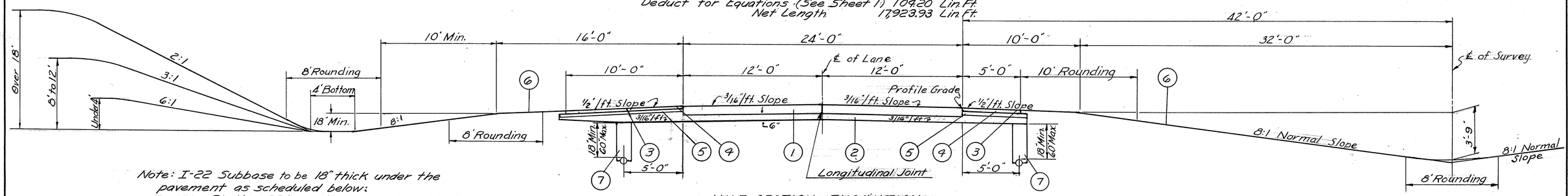
TYPICAL SECTIONS
T-71
NORMAL SECTION

ATB-1-15.73
ASHTABULA COUNTY



SCHEDULE OF STATIONING

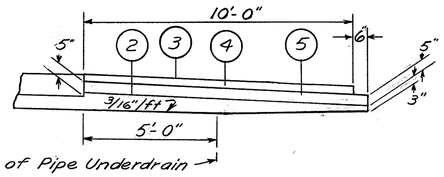
Station 153+50 to Station 338+00.73	18,450.73	Lin. Ft.
Deduct for Bridge No. ATB-1-15.83 and Approach slabs	922.60	Lin. Ft.
Deduct for Equations (See Sheet 1)	104.20	Lin. Ft.
Net Length	17,923.93	Lin. Ft.



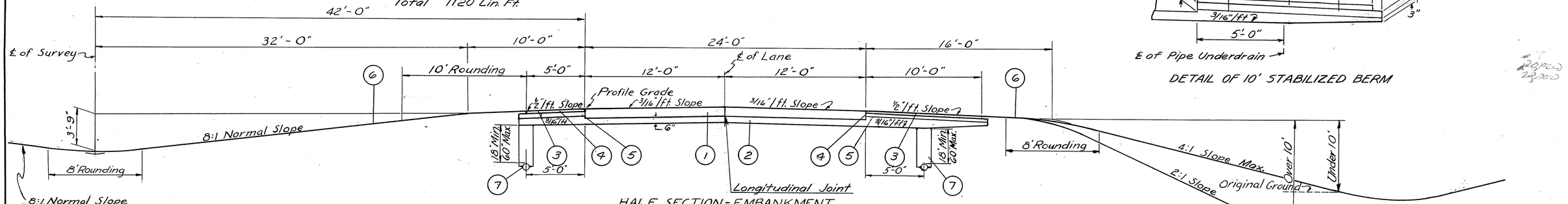
Note: I-22 Subbase to be 18" thick under the pavement as scheduled below:

Station 220+00 to Station 223+00	= 300	Lin. Ft.
Station 233+00 to Station 235+00	= 200	Lin. Ft.
Station 247+00 to Station 251+00	= 900	Lin. Ft.
Station 269+00 to Station 266+20	= 220	Lin. Ft.
Total	1120	Lin. Ft.

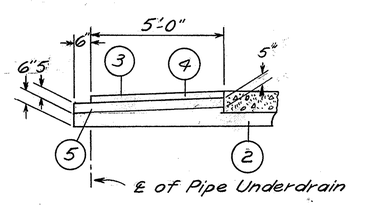
HALF SECTION - EXCAVATION



DETAIL OF 10' STABILIZED BERM

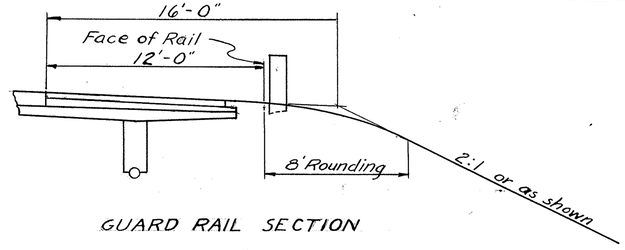


HALF SECTION - EMBANKMENT



DETAIL OF 5' STABILIZED BERM

1. T-71 10" Reinfored Portland Cement Concrete Pavement
2. I-22 Subbase (variable thickness)
3. T-31 Bituminous Surface Treatment (See Proposal Note)
4. B-33 3" Bituminous Macadam Base Course
5. I-18 5" Stabilized Crushed Aggregate Shoulders and Approaches
6. L-9 Seeding and Protecting Roadway Areas
7. I-4 Pipe Underdrains



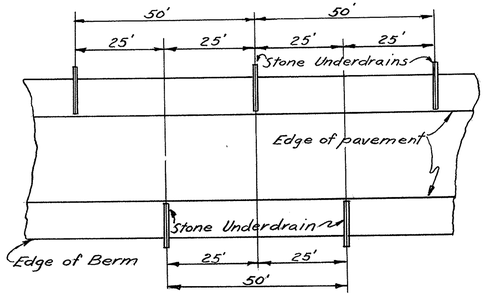
GUARD RAIL SECTION

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

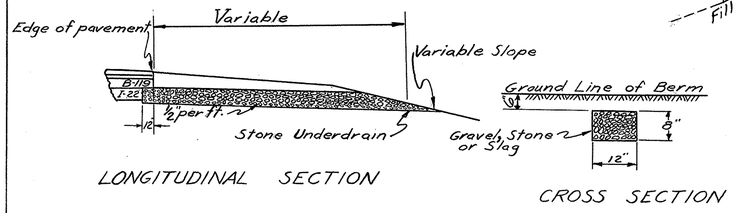
4
202

ATB-1-15.73
ASHTABULA COUNTY

TYPICAL SECTIONS
LOCAL ROADS



PLAN

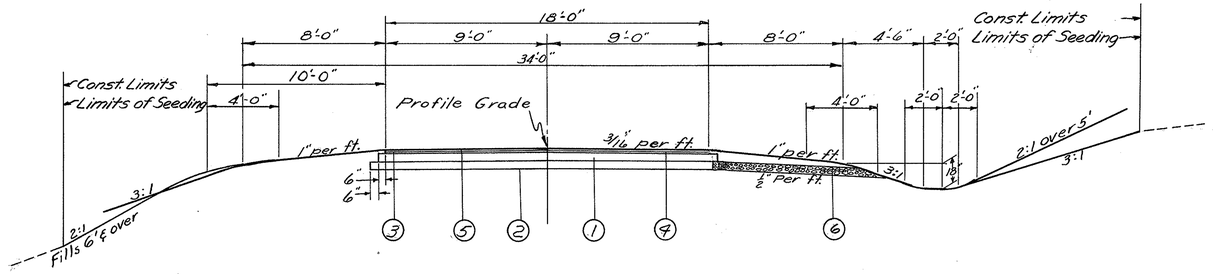


LONGITUDINAL SECTION

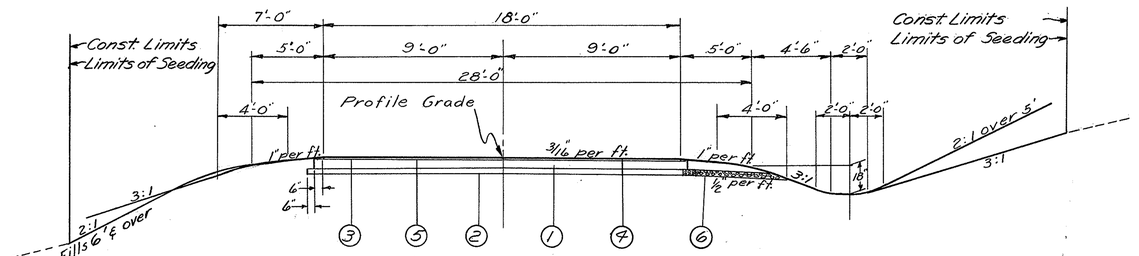
CROSS SECTION

Note:
Stone Underdrains shall be staggered on alternate sides and spaced on 50' centers in normal sections. The stone underdrains shall be omitted on the high side and spaced at 25' centers on the low side of superelevated sections. The location and number are subject to change or revision during construction to fit ground conditions at the direction of the Engineer.

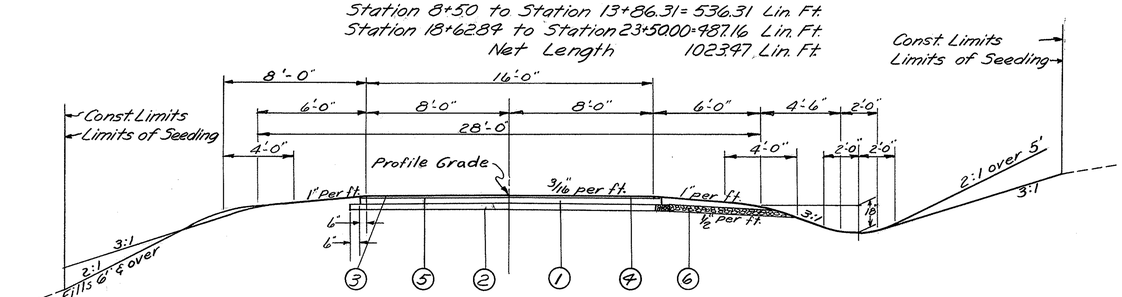
I-9 STONE UNDERDRAIN NO. 2 AS PER PLAN



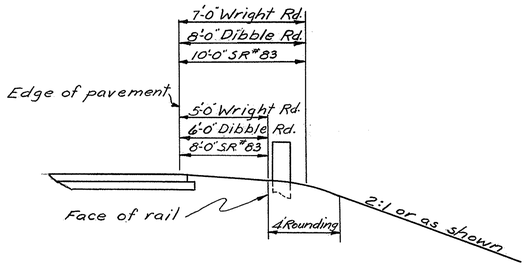
STATE ROUTE #83
Station 7+00.00 to Station 11+31.68 = 931.68 Lin. Ft.
Station 16+51.90 to Station 23+00+00 = 698.60 Lin. Ft.
Net Length 1080.28 Lin. Ft.



WRIGHT ROAD
Station 8+50 to Station 13+86.31 = 536.31 Lin. Ft.
Station 18+62.89 to Station 23+50.00 = 987.16 Lin. Ft.
Net Length 1023.47 Lin. Ft.



DIBBLE ROAD
Station 0+62.97 to Station 9+00 = 837.53 Lin. Ft.



GUARD RAIL SECTION

NOTE: For details not shown, reference shall be made to Standard Drawings T-35 & RI-1

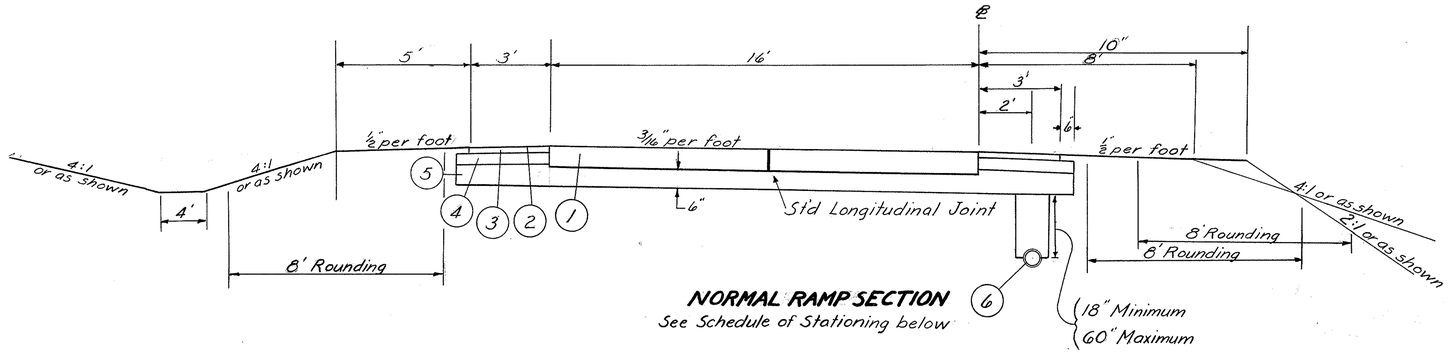
① Item B-119 5" Crushed Aggregate Base Course
② Item I-22 4" Subbase
③ Item T-32 Bituminous Road Mix Method "B" or "C" using 0.056 cu. yd. No. 96 Aggregate per sq. yd. and 0.9 gal. MC 9 or 5 Sec. M-5.3; RT 8 or 9, Sec. M-5.7; per sq. yd.
④ Item T-32 Bituminous Choke and Seal Coat, using 0.004 cu. yd. No. 6 or 9 Aggregate per sq. yd. for Choke, 0.008 cu. yd. No. 6 Aggregate per sq. yd. and 0.25 gal. Sec. M-5.3, MC-9 or 5, or Sec. M-5.7 RT. 9 or 10 per sq. yd. for seal.
⑤ Item T-30 Bituminous Prime Coat using 0.35 gal. M-5.3, MC-0 or MC-1, or M-5.7, RT-2 or RT-3 per sq. yd.
⑥ Item I-9 Stone Underdrain No. 2

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

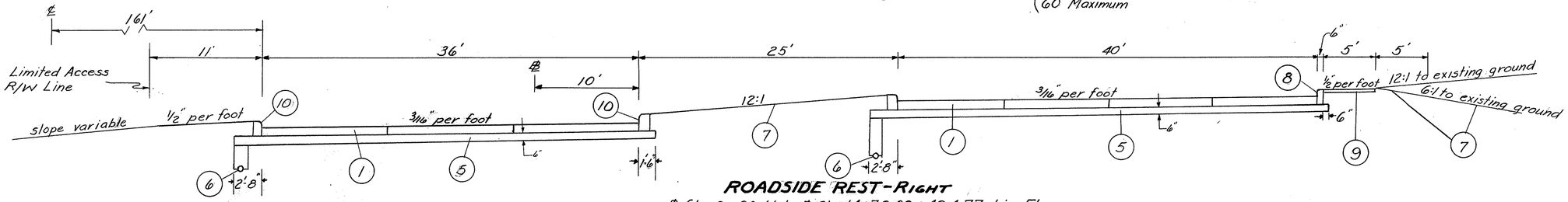
5
202

ATB-1-15.73
ASHTABULA COUNTY

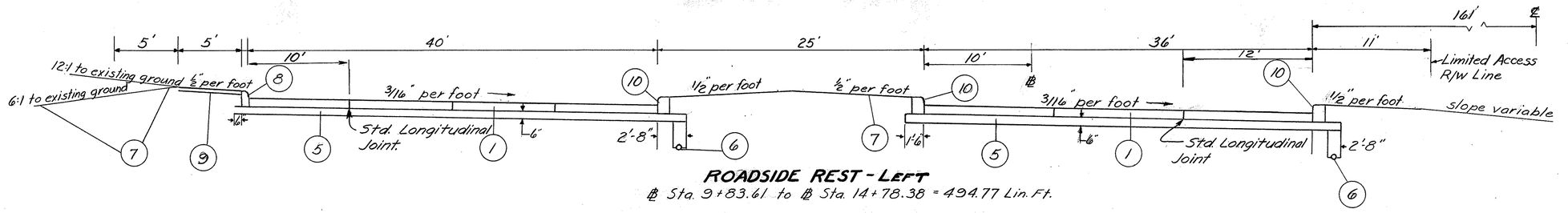
TYPICAL SECTIONS
ROADSIDE REST AND WEIGH STATIONS



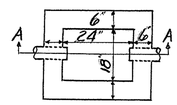
NORMAL RAMP SECTION
See Schedule of Stationing below

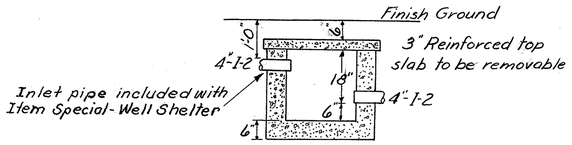


ROADSIDE REST - RIGHT
℄ Sta. 9+83.61 to ℄ Sta. 14+78.38 = 494.77 Lin. Ft.



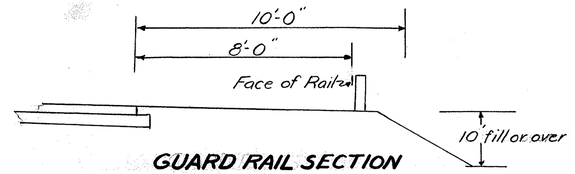
ROADSIDE REST - LEFT
℄ Sta. 9+83.61 to ℄ Sta. 14+78.38 = 494.77 Lin. Ft.





TYPE "A" CATCH BASIN

1. T-71 Reinforced Portland Cement Concrete Pavement 10"
2. T-31 Bituminous Surface Treatment
3. B-33 Bituminous Macadam Base Course, 3"
4. I-18 5" Stabilized Crushed Aggregate Shoulders and Approaches
5. I-22 Subbase (Variable Depth)
6. I-4 6" Pipe Underdrain
7. L-9 Seeding and Protecting Roadway Areas
8. I-12 Portland Cement Concrete Curb Type 6
9. I-13 Portland Cement Concrete Sidewalk 4"
10. I-12 Special Portland Cement Concrete Curb



GUARD RAIL SECTION

SCHEDULE OF STATIONS FOR RAMPS.

Ramp A	8+32.68	11+00	267.32
	16+10.00	20+69.48	459.48
Ramp B	7+87.01	11+27.79	340.78
	16+10.00	20+30.90	420.90
Ramp C	5+53.07	9+83.61	430.54
	15+02.78	21+02.78	600.00
Ramp D	5+53.07	9+83.61	430.54
	15+02.78	21+02.78	600.00
		Net Total	3,549.56

TYPICAL SECTION REST AREAS AND WEIGH STA.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

6
202

ATB-1-15.73
ASHTABULA COUNTY

GENERAL NOTES

ROAD NAME: SIGNS: All County, Township, City or Village road or street name signs that will be disturbed by the construction shall be carefully removed and stored by the Contractor for disposal by their respective owners. Payment for this operation shall be included in the unit price bid for Roadway Excavation.

FIELD OFFICE: The contractor shall provide a suitable Field Office for the exclusive use of the State Employees, in accordance with Sec. S-O.01 (b), having a minimum of 500 square feet of floor space. The Contractor shall have a telephone installed and maintained in the Field Office during the construction of this project. Contractor shall also install wiring and outlets suitable for connecting to office equipment, and provide 110 volt alternating current during the construction of this project.

UTILITIES: The Contractor shall notify at least 48 hours before breaking ground all Public Service Corporations having wire, poles, pipe, conduits, manholes or other structures that may be affected by this operation, including all structures which are affected and shown on these plans. Any and 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.

Cleveland Electric Illuminating Company
Ashtabula, Ohio

Kingsville Telephone Company
Kingsville, Ohio

American Telephone & Telegraph Company
Room 1538, Union Commerce Building
Cleveland 14, Ohio

ELEVATION DATUM: All elevations are based on U.S.G.S. Datum.

LOCATION AND SIZE OF PIPES: The location, type, depth and size of all existing pipes are shown as near exact as the available information will permit. The State will not be responsible for any variations found during construction.

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.

FLARING GUARD RAIL AT BRIDGES: Guard rail on cross roads shall be flared to meet the bridge railing in such a manner that the change in alignment of the guard rail shall not exceed 1:20.

I-22 SUBBASE GRADING "A" & "B" AS PER PLAN: Material for this item shall meet the requirements for Item 1-22 grading A or B, except that for both gradings the percent passing the No. 200 sieve shall not exceed ten.

SPECIAL DITCHES: For special ditch grades, see Cross Sections.

TILE FOR SUBGRADE DRAINAGE: 10 lin. ft. of 8" Corrugated Metal Pipe, Sec. M.6.4.(a), shall be furnished and placed by the contractor, in manholes, catch basins and inlets for each subgrade drain, where, as directed by the Engineer. Payment for each shall be made at the price bid per lineal foot of Pipe Underdrain Outlets.

PIPE: When bell and spigot pipe is used, any necessary pipe cut-offs will be made at the spigot end of the length of pipe adjacent to the end length. When tongue and groove pipe is used the length of pipe next to the end length shall be cut and butt joint formed with a collar 12" larger than

PIPE (Cont'd.) - the outside diameter and 12" in length. The cost of the joint and collar shall be included in the Contract Unit Price bid for the pertinent pipe item.

STONE UNDERDRAIN No. 2: No. 2 Stone Underdrain has been estimated for cross road drainage at 50 feet intervals on each side where I-9 drainage is not provided. They shall be placed not over 50 feet apart. This quantity is to be used in its entirety.

PIPE CONNECTIONS: Longitudinal pipe lines, where connected to pipe culverts, shall be joined to culvert pipe specials, Item I-5. The pipe special spur and the initial eight foot length of longitudinal pipe shall be of the same kind and class of pipe as used in the pipe culvert and shall be joined by means of 6"x 24" concrete collar or metal band. The initial 8 feet of longitudinal pipe shall be manufactured as a single unit, with the exception of rigid pipes 18 inches in diameter and smaller, in which case two 4 foot lengths may be shop joined by means of a reinforced concrete collar strong enough to resist separation of the joint because of backfill loading. All additional cost of providing the culvert pipe and collars in the initial section of the longitudinal pipe shall be included in the unit price bid for the pipe special.

PLUGGING PIPE ENDS: The upstream ends of pipe lines or tile lines intercepted by earthwork operations shall be effectively blocked and covered. Broken pieces and portions of pipe or tile shall be removed until a whole length is encountered, which shall be blocked with concrete, flat stone or brick laid in mortar, precast clay or concrete stopper. Payment for the above work shall be included in the price bid for Roadway Excavation.

GUARD RAIL REMOVAL: The removal of any guard rail or guard rail posts lying within the limits of roadway excavation or embankment (and not specifically paid for under a separate Item) is included in the Contract unit price bid for Roadway Excavation. All resulting materials shall become the property of the contractor and shall be disposed of by him at no extra cost to the State, except that the steel rail on all existing steel beam type or steel cable on steel cable type guard rails shall be stored on the right-of-way for disposal by the owner.

HEAVY EQUIPMENT: The Contractor shall exercise care in the use of heavy equipment over finished work and will be required to remove and replace any completed work destroyed thereby. Culverts shall be backfilled to a height of four feet before loaded earth-moving equipment is permitted to cross the trench. Heavy equipment shall not be operated over any completed layer of embankment, compacted subgrade or sub-base, if such operation tends to destroy the soil structure or pipe underdrains; however if such operation cannot be avoided, the contractor will be required to reduce the size of loads to an extent that damage does not occur.

SUBGRADE COMPACTION FOR DRIVES & MAIL BOX TURNOUTS: The subgrade under B-119 or T-70 Material used on drives and mail box turnouts shall be compacted for a depth of 6 inches to the density requirements of Table III in Item E-1. Payment for subgrade compaction as specified above, shall be included in the unit price bid for Roadway Excavation.

EXCAVATION FOR ITEM B-119: Excavation for B-119 material used on Side Road Approaches, Mail Box Turnouts and Drives has been included in Earthwork Quantities when same is in "Cut." Where side approaches, mail box turnouts, and drives are in "Fill," excavation for B-119 material shall be made by the contractor at his own expense if he builds the embankment up to finish grade before placing the B-119 material.

SUBGRADE COMPACTION: The area of compacted subgrade to be paid for includes the main pavements, paved shoulders and hard surfaced cross road pavements.

DRAINAGE OF SUBBASE MATERIAL: Where the subbase material is drained by I-9 Stone Underdrain or by extensions thru the shoulders to the fill slope or the ditch line, the Contractor shall finish, seed and mulch the slopes so as not to impede drainage of the subbase material. The actual area of the outcrop of the subbase material or I-9 Underdrain shall not be seeded.

PART WIDTH CONSTRUCTION: Because of the necessity of building certain cross roads under traffic and constructing the pavement part at a time, extreme care shall be taken to prevent the construction of a butt joint on centerline in the base and subbase courses. This shall be accomplished by building the base and subbase courses placed with the first portion of the pavement built, at least 18 inches beyond the centerline and by surfacing no closer than 18 inches to the edge of the above courses. When the second portion of the pavement is built, at least 12 inches of these projecting courses shall be broken down and thoroughly keyed in with the newly placed corresponding courses in the second portion of the pavement. Payment for this operation shall be included in the unit prices bid for the pertinent pavement items.

EXISTING FLEXIBLE PAVEMENT: Within the limits of construction where the existing flexible pavement will have less than 6 inches of fill placed upon it, the pavement shall be thoroughly scarified for its full depth, mixed with sufficient soil and properly recompacted to insure the elimination of any plane of separation between it and the embankment placed thereon. Outside the limits of construction the existing flexible pavement shall be thoroughly scarified, mixed with sufficient soil and shaped to fit the surrounding terrain in such a manner as to insure the growth of seed planted thereon. Payment for all the above shall be included in the unit price bid for Roadway Excavation.

NON-RIGID PAVEMENT REMOVAL: Cost of removing non-rigid pavement is to be included with the price bid for Roadway Excavation.

GUARD RAIL POST ANCHORS: At locations where pier footings interfere with installation of full length guard rail posts, short posts shall be provided and shall be anchored in accordance with the detail shown elsewhere in the plans. Cost of providing and installing necessary anchors shall be included in the unit price bid per lineal foot for guard rail.

GUARD RAIL PARAPET ANCHOR: Cost of providing and installing anchor for connecting deep steel beam guard rail to bridge parapet is included in the bridge quantities for payment. Contractor shall provide one additional guard rail post in the center of the first panel of deep steel beam guard rail where anchored to the parapet, cost of which shall be included in the unit price bid per lineal foot of guard rail.

EROSION CONTROL AT BRIDGES: Sodded channels shall be provided at ends of bridges where required by the plans. Cost of all work necessary to complete the item shall be included in the unit price bid per square yard for "Item L-10, Sodding for Special Berm and Slope Protection."

ITEMS L-10 SODDING, I-10 RIP-RAP & I-14 PAVED GUTTER: These items are provided on the plans for erosion control. The Engineer shall check and make adjustments in location and quantities for these Items where indicated by field conditions during Construction.

L-9 COMMERCIAL FERTILIZER: All areas to be seeded under Item L-9 or sodded under Item L-10 shall have commercial fertilizer 12-12-12, applied at the rate of 20 pounds per 1,000 sq. feet.

SEEDING AND PROTECTING: Quantities provided for seeding the main facility are calculated for all soil areas between right-of-way fence lines. On Local roads or other unfenced areas, seeding has been calculated for all soil areas located between the work limits.
Seed shall be sown at the rate of 3 pounds per 1000 square feet except as otherwise noted in the plans.

65% Kentucky 31 Fescue
25% Kentucky Bluegrass
5% Redtop
5% Alsike Clover

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

7
202

ATB-1-15.73
ASHTABULA COUNTY

GENERAL NOTES

EXISTING WATER WELLS, CISTERN & BASEMENT: Dug wells encountered within the work limits shall be filled with rock or granular material. Drilled well casing shall be removed to an elevation approximately three feet below finished grade and covered with a pre-cast concrete slab or a large rock. Prior to construction of embankment, contractor shall remove any masonry surrounding a well, within three feet of finished grade. Pumps and other appurtenances shall become the property of the contractor and shall be disposed of by him. All abandoned basements, septic tanks appearing wholly or partly within the right of way limits shall be filled full width to the elevation of the surrounding ground or proposed grade in accordance with Section E-101.05 except compaction requirements will be waived where the abandoned facilities are entirely outside the new excavation or embankment areas. Payment for filling or capping of wells and the filling of basements and septic tanks shall be included in the unit price bid per cubic yard of Roadway Excavation, Item E-101.

CENTERLINE REFERENCE MONUMENTS: Monuments shall be constructed of Class 'C' Concrete, cast-in-place in a circular hole, eight inches in diameter and forty-four inches in depth. Top of concrete shall be finished to a depth of two inches below ground level and the upper six inch portion of the concrete shall be formed. A 16d nail shall be embedded in the wet concrete as directed by the engineer to mark centerline and station.

PIPE SPECIALS: All pipe specials shall be of the same material and quality, as specified for the pipe, of which this pipe special becomes a part.
Ends of any pipe specials not connected shall be plugged with approved stopper.

DESIGN SPEED: The geometrics for this project have been planned for a design speed of 70 miles per hour.

SIDE DITCHES: Elevations for all side ditches are shown on cross sections. Excavation quantities for side ditches are included in cross section quantities

ROUNDING OF CORNERS ON CROSS SECTIONS: The rounded corners shown on Standard Drawing R1-1, apply to all Local Road cross section even though otherwise shown on these plans for cross roads.

R/W MONUMENTS, FEDERAL PROJECT MARKERS AND SECTION MARKERS: Existing R/W Monuments, Bench Marks, Federal Project Markers and Section Markers that will be removed by construction, shall be protected by the Contractor as per Section G-7.09 until they can be witnessed, referenced and reset by the Construction Crew.

FARM TILE: Farm tile encountered during construction, which is intercepted by the roadway ditches shall be outlet 1'-0" above the flow line of the proposed road ditches. The Erosion Control Pad for outlet pipe underdrains shall be placed at the outlet of farm tile.

For the purpose of outletting farm tile or downspout drain of building encountered during construction the following quantities are included in the Summary of Quantities to be used at the direction of the Engineer.

Item I-3 4" Pipe for Roadway Drainage	200 Lin. Ft.
Item I-3 6" Pipe for Roadway Drainage	200 Lin. Ft.
Item I-3 8" Outlet Pipe for Roadway Drainage	150 Lin. Ft.
Item 5-29 2" Aggregate for Erosion Control Pad	5 Cu. Yds.

When used, these items shall be made a matter of record to be submitted in the final estimate.

COOPERATION: The contractor shall give consideration to the probability that contracts will be awarded for the construction of other projects adjacent to this project and shall cooperate to the fullest extent with contractors on adjacent projects in a manner that will result in a minimum amount of interference with the other contractors.

Special attention shall be given to the operation schedule of the Roadway Excavation from Station 152+50 to Station 158+00 in order that this phase of the work is completed prior to the excavation of the adjacent area of Project I-1103 (23)

The contractor shall also cooperate to the fullest extent with public and private utility companies who must make adjustments or relocations to their lines on this project.

The contractor shall cooperate with adjacent property owners who have severed portions of their land under cultivation by permitting access to the severed portions across the area under construction; provided such crossing does not create damage to work already completed.

TRAFFIC: Two-way traffic shall be maintained on the existing State Highway System throughout the entire project and shall be maintained as herein described.
State Route 83
Two-way traffic shall be maintained by means of temporary lanes from Station 6+00 to Station 23+25, until the new pavement and structures are available for traffic. The proposed temporary lanes are as shown on the cross-sections.
Township Road 357 (Dibble Road)
Two-way traffic shall be maintained on existing Township Road 357 and the temporary lanes for State Route 83. When the embankment is placed for the junction of the new portion of Township Road 357 with State Route 83, traffic on Township Road 357 will be routed east on the above mentioned temporary lanes to State Route 83.
Wright Road
Wright Road shall be closed to traffic during construction of proposed Wright Road.

Lights, signs, and barricades shall be provided and maintained at each location indicated on the schematic plan. Barricades shall meet the requirements for the movable gate detailed on Standard Construction Drawing No. G-7.07. Lights shall meet the requirements of Sec. G-7.07 of the Specifications. Standard ROAD CLOSED signs shall be 40"x24" size. Contractor shall furnish, erect, maintain, and remove barricades, lights, and signs, cost of which shall be included in the lump sum bid for Maintaining Traffic.

Every effort shall be made to avoid tearing up existing surfaces far in advance of actual work on the respective pavement or on the separation structures. The contractor shall notify residents and place warning signs at the crossroads nearest construction before beginning work. The work shall be expedited in a manner which will insure a minimum of inconvenience to normal users.

The methods of handling traffic described herein may be varied if the Engineer so directs, provided there is no additional inconvenience to the traveling public, and no additional cost to the State.

Traffic compacted surface course, Item T-10, and calcium chloride, Item M-10, shall be applied on temporary roadways where directed and in the amounts requested by the Engineer (See General Summary of Quantities)

When the temporary lanes are no longer needed, the contractor shall remove the embankment, except such portions of the embankment as are indicated on the Plans to be a part of the new roadway embankment, fill the temporary ditches, harrow, seed, and mulch the disturbed area in accordance with requirements of Item L-9, Seeding and Protecting Roadway Areas and shall leave the area in a neat condition.

Payment for temporary culverts as shown on the plans shall be included in the lump sum bid for Maintaining Traffic.

TRAFFIC (con't)

Payment for all of the above, including construction, maintenance and subsequent removal, where required, of temporary roadways, except furnishing Traffic Compacted Surface Course, Item T-10, and Calcium Chloride, Item M-10, is included in the lump sum bid for Maintaining Traffic.

In addition to the above, Sec. G-4.05 Maintenance of Local Traffic and Sec. G-7.07 Barricades, Danger and Warning Signs shall be in force during the entire life of the contract.

E-9 TREE AND STUMP REMOVAL: All trees and stumps within the right-of-way of the entire length of this project, and length of work on local roads as shown in the plans, shall be removed except those marked to be preserved by the Engineer during construction.

The estimated number of trees and stumps to be removed, listed below, was arrived at by diligent effort but the State does not guarantee the accuracy thereof.

Sizes	12"to18"	18"to24"	24"to30"	30"to36"	36"to42"	42"to48"
Trees	692	238	167	58	30	5
Stumps	17	20	8			

L-10 SODDING: Areas to be sodded shall be loosened to a depth not less than two inches just prior to laying sod. Cost shall be included for payment in the price bid per square yard of sodding.

PRIVATE DRIVES: The location of Residence & Field Drives on Local Roads may be changed during construction at the direction of the Engineer, providing there is no additional cost to the State. Quantities of compacted surface course, Item T-10, and calcium chloride, Item M-10 have been included in the General Summary for maintaining traffic.

ROUNDING OF CORNERS ON CROSS SECTIONS: The rounded corners shown on the Typical Section, Sheet No. 3 shall apply to all cross sections on the main roadway except as otherwise indicated.

L-9 AGRICULTURAL LIMING MATERIAL: The location and need for agricultural liming materials will be determined by laboratory tests after rough grading operations have been performed. Quantities of agricultural liming materials as shown on the plans are sufficient for treating the entire project and may be partially non-performed because of areas where tests indicate liming material is not needed. Where used, agricultural liming material shall be applied at the rate of 100 pounds per thousand square feet.

E-101 EMBANKMENT: In addition to the requirements of Section E-101.08(f) the moisture content of all embankment materials that display pronounced elasticity or deformation under the action of construction equipment shall not exceed optimum at the time of compaction.

SUMMARY OF TABLES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

8/202

ATB-1-15.73
ASHTABULA COUNTY

(1)

Carried from Sheet No.	E-101 Roadway Excavation Cu. Yds.	Embankment + Cu. Yds.	Embankment +25 Cu. Yds.	L-9 Seeding and Protecting Roadway Area Sq. Yds.	I-15 Guard Rail Lin. Ft. + Steel Beam Deep	I-15 Guard Rail Lin. Ft. + Wire Cable	I-15 Barrier Rail Steel Beam (deep) Lin. Ft.	I-7 Reinforce Concrete Approach Slab Sq. Yd T=13	I-7 Reinforce Concrete Approach Slab Sq. Yd T=10	I-21 Portland Cement Conc. Traffic Island Pavt. Sq. Yds.	I-12 Concrete Curb-Lin. Ft. Std. #6	I-12 Concrete Curb-Lin. Ft. As per plan	I-12 Concrete Curb-Lin. Ft. Mod. as per plan	I-2 8" Class A Storm Underpavement Lin. Ft.	I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe for Underdrain Lin. Ft.	I-5 Pipe Special, Each: Underdrains 60°-6 Bends	90°-6 Bends	6x6 Wye	6x6x6 Tee	Class A Storm Sewer 8x8x6 Tee	6x8 In-creaser	I-5 Pipe Special, Each: Other	S-29 Aggregate for Erosion Pad Cu. Yds.	I-10 Dumped Rock Channel Protection Cu. Yds.	I-14 Paved Gutter Lin. Ft. Type A	I-14 Paved Gutter Lin. Ft. Type B	Special Berm & Slope Protection (Type 3-sod) Sq. Yds.	L-10 Sodding Sq. Yds. Type 1	L-10 Sodding Sq. Yds. Type 2	E-12 Pipe Removed 15" & Under	E-12 Pipe Removed Over 15"	B-119 Crushed Aggregate Base Course Sq. Yds. 5"	B-119 Crushed Aggregate Base Course Sq. Yds. 6"	I-1 Pipe for Driveways 12" Lin. Ft.	I-13 4" Sidewalk Sq. Ft.	
23	120,022	0		14,138			233[S]								1,000																				
24	18,216	153,839	192,299	23,497	1862[S]		257								3,116	80	6	4		8				0.9	72	25			582								
25	83,898	11,570	14,463	32,177	350		84[S]							56	4,465	30	2	1		1	1	1		0.3		558			430	125							
26	48,004	8,628	10,785	28,930	500										4,778	90	9			5				1.5					854								
27	25,259	21,346	26,683	28,608	600										4,465	40	4			2				0.6					88								
28	5,481	45,562	56,953	36,697										70	4,691	50	4	1		2	1	1		0.9					74								
29	13,196	20,305	25,381	43,432											3,989					2									558								
30	62,071	9	11	43,558										58	4,231	46	3	2			1	1							8								
31	6,367	44,525	55,656	29,584	912[S]										4,713	80	2		5	2				1.5					100								
32	44,149	9,923	12,404	28,577	443		50								4,567	40	4			2				0.6	19				1527	200							
33	29,256	883	1,104	28,703	82										4,476	20	2			1									54								
34	29,283	19,741	24,676	29,962	587[S]										4,243	40	4			2				0.6					54								
35	19,146	59,342	74,178	46,914	450										4,660	40	4			5				0.6					1154								
36	36,591	13,215	16,519	49,946											4,720	40	4			5				0.6					974	100							
37	33,394	22,333	27,916	45,509	125									52	4,72	40	3	1		5	1	1		0.6					102								
38	6,067	22,322	27,903	45,757	475										4,618	50	4		1	2				0.9					609								
39	3,744	31,589	39,486	27,947	559[S]		50								4,604	80	8							1.2					377								
40	3,277	8,324	10,405	21,088	78										2,550	40	4			2				0.6					108		20						
103	201	4,165	5,206	4,140		352																							54								
104	397	12,671	15,839	7,850		869		192																													
105	259	84	105	353																								150	13		32		192			
110	822	5,677	7,096	9,760																																	
115	638	3,295	4,119	3,958		320																												107		38	
116	721	26,673	33,341	10,322		1072		142																				241			15		100		34	
117	29	62	77	317																																	
124					4125[S]				90	22	205				906	20			2					0.3													
125												697		20	1,158			1			1																
126									40	22	205				1,112	10	1																				
127												711			1,248	10	1							0.3													
130					362[S]					22	589		1515		1,382	40	3							0.3					316								
131												663			1,050														245								
132					25					22	591		1511		1,542	30	2												176								
133					237[S]							662			1,022	10	1							0.3					200								
Total from Table 2																																					
																									280			141			26					
	590488	596,083	682,605	671727	8062[S]	2608	675	284	80	88	1590	2733	3026	256	84033	926	75	10	8	46	4	5		12.6	371	583		391	8798	925	67	26	192	207	72		
																	Total 139																				

(2) STRUCTURES 20' SPAN & UNDER

Structure No.	Station	Type	Size Inches	Length Feet	Excavation Cu. Yds Item E-2 Structure	Excavation Cu. Yds Item E-3 Channel	S-1 Concrete for Structure-Cu. Yds Class C	S-1 Concrete for Structure-Cu. Yds Class E	S-4 Reinforcing Steel Lbs.	Item-S-27 Pipe for Roadway Culvert-Lin. Ft. M-6.6(b) or M-6.8(b) 18"	24"	36"	M-6.6(b) 42"	54"	60"	M-6.6(c) 24"	42"	I-5 Pipe Special Each 15"x36" Tee	I-10 Riprap Type A Sq. Yds.	I-10 Dumped Rock Channel Protection Cu. Yds.	L-10 Sodding Type I Sq. Yds.	E-12 Pipe Removed Over 15" Lin. Ft.	S-24 Removal of Existing Structure Lump	Carried from Sheet No.
1	239+00	Pipe	54	242	136	12	31.5		1,445					242						12	9			161
2	276+35	Pipe	24	232	62	4	7.3		288		232									11	4			161
3	284+74[S]	Pipe	42	368	404	48	18.0		836								368			28	16			162
4	293+94	Pipe	42	298	181	46	15.0		768				298						10		19			162
5	302+12[SS]	Pipe	42	338	150	74	19.8		932								338		25		8			163
6	313+31	Pipe	54	248	216	60	30.4		1406					248					27	14	16			164
7	324+00	Pipe	36	206	85	8	16.0		778			202						1		25	8			165
8	330+25[SS]	Pipe	60	196	92		43.2		1,748						196					46	10			166
9	SR 84 & 307+43	Pipe	18	92	15	5		0.6		92												26		109
10	Dibble Rd. 0+85	Pipe	18	76	16			0.6		76														119
11	Wright Rd. 141+65	Pipe	24	130	49	16	3.6	0.4	126							130			12		6		Lump	167
Channel Relocation																								
	160+45					4,325																		168
	330+25.88					1,128																		166
From	Sheet 1A						83.8		3670											130	45			
Total					1906	5726	268.6	1.6	11,997	168	232	202	298	490	196	130	706	1	74	280*	141*	26*	Lump	

* Carried to Table 1

CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	1-1103 (16)	

9 / 202

ATB-1-15.73
ASHTABULA COUNTY

Line No.	Description			Quantities	Unit
	T-71 10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT				
1	Station 153+50.00 to Station 338+00.73 = 18450.73 Lin. Ft. (See Sheet No. 3)				
2	Deduct for Structure No. ATB-1-1583 and Approach Slabs = 422.60 Lin. Ft.				
3	Deduct for Station Equations = 104.20 Lin. Ft. (See Sheet No.1)				
4	Line 1 less lines 2 & 3 = 17923.93 Lin. Ft.	17923.93 x 24 ÷ 9 x 2	= 95594.29 Sq. Yds.		
5	Ramps = 3549.56 Lin. Ft. (See Sheet No. 5)	3549.56 x 16 ÷ 9	= 6310.33 Sq. Yds.		
6	Add for Ramps, See Sheet No. 123		= 194.00 Sq. Yds.		
7	Add for Roadside Rest Parking Areas, See Sheets Nos. 134 & 135	3698 Sq. Yds x 2	= 7,396.00 Sq. Yds.		
8	Add for Weigh Station Pit Area, See Sheet No. 128	204 Sq. Yds x 2	= 408.00 Sq. Yds.		
9	Sum of Lines 4, 5, 6, 7, 8			129,127	Sq. Yd.
	T-31 BITUMINOUS SURFACE TREATMENT-BITUMINOUS MATERIAL				
10	Deduct Ramps Exit & Entrance				
11	Stations 197+50.00 to Station 206+81.61 = 931.61 Lin. Ft.				
12	Stations 198+50.35 to Station 216+39.40 = 1789.05 Lin. Ft.				
13	Stations 221+02.80 to Station 238+31.00 = 1728.20 Lin. Ft.				
14	Stations 231+39.00 to Station 240+30.00 = 891.00 Lin. Ft.				
15	Stations 274+14.68 to Station 280+69.41 = 654.73 Lin. Ft.				
16	Stations 280+43.43 to Station 296+93.03 = 1649.60 Lin. Ft.				
17	Stations 296+06.97 to Station 312+56.57 = 1649.60 Lin. Ft.				
18	Stations 312+30.59 to Station 318+85.32 = 654.73 Lin. Ft.				
19	Sum of Lines 11, 12, 13, 14, 15, 16, 17, 18 = 9948.52 Lin. Ft.				
20	Line 4, (17923.93 +50) x 2 = 35947.86 Less Line 19 = 25999.34 Lin. Ft.	25999.34 x 10 ÷ 9	= 28888.13 Sq. Yds.		
21	Line 4, 17923.93 +50 (App. Slabs)	17973.93 x 5 ÷ 9 x 2	= 19971.00 Sq. Yds.		
22	Line 5	3549.56 x 6 ÷ 9	= 2366.37 Sq. Yds.		
23	Ramps, See Sheet No. 123		= 14273.00 Sq. Yds.		
24	Weigh Station Pit Area, See Sheet No. 128	223 x 2	= 446.00 Sq. Yds.		
25	Cross Over, See Sheets Nos. 26 & 32	461 x 2	= 922.00 Sq. Yds.		
26	Sum of Lines 20, 21, 22, 23, 24, 25		= 66,866.50 Sq. Yds.		
27	Line 26, 66866.50 Sq. Yds. x 0.25 Gal. per Sq. Yd. = 16716.62 x 2 Applications		= 33,433.24 Gals.	33,433	Gals.
	T-31 BITUMINOUS SURFACE TREATMENT-AGGREGATE				
28	Line 26, 66866.50 Sq. Yds. x 0.008 Cu. Yds. per Sq. Yd. = 534.93 Cu. Yds. No. 46 Aggregate		=	535	Cu. Yds.
29	Line 26, 66866.50 Sq. Yds x 0.008 Cu. Yds. per Sq. Yd. = 534.93 Cu. Yds. No. 6 Aggregate		=	535	Cu. Yds.
	B-33 BITUMINOUS MACADAM BASE COURSE				
30	Line 26		= 66866.50 Sq. Yds.	66,867	Sq. Yds.
	I-18 5" STABILIZED CRUSHED AGGREGATE SHOULDERS & APPROACHES				
31	Line 20 = 25999.34 Lin. Ft.	25999.34 x 10.5 ÷ 9	= 30332.56 Sq. Yds.		
32	Line 21 = 17973.93 Lin. Ft.	17973.93 x 5.5 ÷ 9 x 2	= 21968.13 Sq. Yds.		
33	Line 5 = 3549.56 Lin. Ft.	3549.56 (3.5+3.5) x 9	= 2760.77 Sq. Yds.		
34	Sum Lines 31, 32, 33		= 55061.46 Sq. Yds.		
35	Line 34	55061.46 x 5 ÷ 36	= 7647.42 Cu. Yds.		
36	Ramps, See Sheet No. 123		= 2079.00 Cu. Yds.		
37	Weigh Station Pit Area See Sheet No 128	33 Cu. Yds. x 2	= 66.00 Cu. Yds.		
38	Sum of Lines 35, 36, 37		= 9792.42 Cu. Yds.	9,792	Cu. Yds.
	T-32 BITUMINOUS ROAD MIX SURFACE COURSE				
	T-32 ROAD MIX BITUMINOUS MATERIAL				
39	SR 83 Station 6+00.00 to Station 11+31.68 = 531.68 Lin. Ft.				
40	" " Station 16+51.40 to Station 24+00.00 = 748.60 Lin. Ft.				
41	Wright Rd. Station 7+65.00 to Station 13+86.31 = 621.31 Lin. Ft.				
42	" " Station 18+62.84 to Station 24+00.00 = 537.16 Lin. Ft.				
43	Sum of Lines 39, 40, 41, 42 = 2438.75 Lin. Ft.				
44	Line 43	2438.75 x 18 x 9	= 4877.50 Sq. Yds.		
45	Res. Drive & M. Box Approach, See Sheet No. 104		= 192.00 Sq. Yds.		
46	Intersection Dibble Rd. & S.R. 83 Sta. 0+09.58 to Sta. 0+62.47		= 169.92 Sq. Yds.		
47	Dibble Rd. Sta. 0+62.47 to Sta. 10+00.00 = 937.53 Lin. Ft. 937.53 x 16 x 9		= 1666.72 Sq. Yds.		
48	Sum of Lines 44, 45, 46, 47		= 6906.14 Sq. Yds.		
49	Line 48	6906.14 x 0.9 gal. per Sq. Yds.	= 6215.53 Gals.	6,216	Gals.
	T-32 SEAL COAT BITUMINOUS MATERIAL				
50	Line 48	6906.14 x 0.25 gal. per Sq. Yds.	= 1726.53 Gals	1,727	Gals.
	T-32 AGGREGATE FOR ROAD MIX No. 46				
51	Line 48	6906.14 x .056 Cu. Yd per Sq. Yds.	= 386.74 Cu. Yds.	387	Cu. Yds.
	T-32 AGGREGATE FOR CHOKE No. 6 or No. 9				
52	Line 48	6906.14 x .004 Cu. Yd per Sq. Yds.	= 27.62 Cu. Yds.	28	Cu. Yds.
	T-32 AGGREGATE FOR SEAL COAT				
53	Line 48	6906.14 x .008 Cu. Yd per Sq. Yds.	= 55.24 Cu. Yds.	56	Cu. Yds.

Line No.	Description			Quantities	Unit
	B-119 CRUSHED AGGREGATE BASE				
54	Sheet 4 (1,080.28' + 1,023.47') x 19 ÷ 9		= 4,441.25 Sq. Yds.		
55	Intersection Dibble Road & 83		= 172.57 Sq. Yds.		
56	Sheet 4 (Dibble Road) 837.53' x 17 ÷ 9		= 1,582.00 Sq. Yds.		
57	Sheet 8 (5")		= 192.00 Sq. Yds.		
58			= 6,387.82 Sq. Yds x 5" x 36 = 887.2 Cu. Yds.		
59	Sheet 8 (6")		= 207.00 Sq. Yds.		
60	Sheets 26 & 32 Cross Over	470 x 2	= 940.00 Sq. Yds.		
61	Sum of Lines 59 and 60		= 1147.00 Sq. Yds x 6 ÷ 36 = 191.2 Cu. Yds.		
62	Sum of Lines 58 and 61		= 1078.4 Cu. Yds.	1078	Cu. Yds.
	I-22 SUBBASE (Variable depth)				
63	Line 1 [18,450.78 - 372.45 (Str. ATB-1-1583)] x 48 x 9 =		96,417.60 Sq. Yd.		
64	Line 34 (6" Av.)		55,061.46 Sq. Yd.		
65	Sum of Lines 63 and 64		151,479.06 Sq. Yd. x 6 ÷ 36 = 25,246.51 Cu. Yds.		
66	Lines 54+55+56		6,195.82 Sq. Yd. x 4 ÷ 36 = 688.42 Cu. Yds		
67	Sheet 123 (Ramps)		= 4970.00 Cu. Yds.		
68	Sheets 128+134+135 = (74x2) + 678 + 678		= 1,504.00 Cu. Yds.		
69	Sheet 3 (Additional Thickness 12") 1120 x 40 x 2 ÷ 9 =		9,955.56 Sq. Yds. x 12 ÷ 36 = 3,318.52 Cu. Yds.		
70	Sheets 26 & 32 Cross Over	480 x 2	960.00 Sq. Yds x 6 ÷ 36 = 160.00 Cu. Yds.		
71	Sum of Lines 65, 66, 67, 68, 69, 70		= 35,887.45 Cu. Yds.	35,887	Cu. Yds.
	L-9 COMMERCIAL FERTILIZER (12-12-12)				
72	Sheet 8 [641,724 (Seeding) + 9,223 (sodding Total)] = (650,947 Sq. Yd. x 9 ÷ 1000) x 20 ÷ 2000 = 58.58 Tons				
73	Sheets 134+135		1.01+1.01 = 2.02 Tons		
74	Sum of Lines 72 and 73		= 60.60 Tons	60.6	Tons
	L-9 AGRICULTURAL LIMING MATERIAL				
75	Line 72	(650,947 x 9 ÷ 1000) x 100 ÷ 2000 =	292.92 Tons		
76	Sheets 134+135	5.05 + 5.05 =	10.10 Tons		
77	Sum of Lines 75 and 76		= 303.02 Tons	303.0	Tons
	E-4 BORROW				
78	Sheet 8 682,605 - 590,488			92,117	Cu. Yds.
	E-11 WATER				
79	Sheet 8		546,083 Cu. Yds. Embankment		
80	Lines 38+62+71 = 9,792 + 1,078 + 35,887		= 46,757 Cu. Yds.		
81	Sum of Lines 79 and 80		= 592,840 x 5 ÷ 1000	2,964	M. Gal.
	T-30 BITUMINOUS PRIME COAT				
82	Line 58 6,387.82 Sq. Yds. x 0.35 gal. per Sq. Yd.			2,236	Gals.
	I-125 PAVEMENT MARKING				
83	Center Line Line 1 [(18,450.73 x 1/5280) ÷ 5280] x 2			2.62	Miles
84	Edge Line = [(18,450.73 x 4) + 1000' Exit & Entrance Terminal + 4000' Parking Line ÷ 5280			14.93	Miles
	I-127 DELINEATORS				
85	Standard Delineators Line 20 25,999.34 ÷ 130 = 200			200	Each
86	Bridge Delineators Line 2 372.60 x 2 ÷ 130 = 6			6	Each
	E-101 COMPACTED SUBGRADE				
87	Line 9 129,127 Sq. Yds.				
88	Line 30 66,867 Sq. Yds.				
89	Line 48 6,906 Sq. Yds.				
90	Lines 57 & 59 399 Sq. Yds.				
91	Sum Lines 87, 88, 89, 90 = 203,299 Sq. Yds.			203,299	Sq. Yds.
	I-9 STONE UNDERDRAINS, No. 2				
92	Line 54 Plus Line 56 = (1080.28 + 1023.47 + 837.53) + Dibble Rd. Sta. 0+09.58 to Sta. 0+62.47 = 2994.17 Lin. Ft. 2994.17 ÷ 50 = 60+1 = 61 x 2 = 122				
93	Sheets 26 & 32 = 4 @ 14' = 56 Lin. Ft. (Plus Line 54) = 122 @ 10' Avg. = 1220 Lin. Ft.			1276	Lin. Ft.

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

10/202

ATB-1-15.73
ASHTABULA COUNTY

Item		Quantities	Unit	Description	Sheet	Table	Line
				ROADWAY			
E-101		590,488	Cu.Yd.	Roadway Excavation	8	1	
E-101		203,299	Sq.Yd.	Compacted Subgrade	9		91
E-4		92,117	Cu.Yds.	Borrow	9		78
E-8		2,390	Sq.Yd.	Removal and Disposal of Existing Pavement, as per plan.	110		
E-9		Lump	Lump	Removal of Trees and Stumps	7		
E-11		2964	M.Gal.	Water	9		81
E-12		67	Lin.Ft.	Pipe Removed 15" and Under	8	1	
E-12		26	Lin.Ft.	Pipe Removed Over 15"	8	2	
I-13		9782	Sq.Ft.	9" Sidewalk	139/135		
I-15		8062.5	Lin.Ft	Guard Rail, steel beam type (deep) in accordance with Drawing I-15 No. 2-B.	8	1	
I-15		675	Lin.Ft.	Barrier Rail, steel beam type (deep) in accordance with Drawing I-15 No. 2-B.	8	1	
I-15		2,608	Lin.Ft.	Guard Rail, wire cable type, 3 cables; or guard rail, woven wire type, 3 tapes, standard strength.	8	1	
L-9		641,724	Sq.Yds.	Seeding and Protecting	8	1	
					129		
L-9		60.6	Tons	Commercial Fertilizer (12-12-12)	9		74
L-9		303.0	Tons	Agricultural Liming Material	9		77
T-10		70	Cu Yd	Traffic Compacted Surface Course			
M-10		1.4	Tons	Calcium Chloride or Calcium Magnesium Chloride			
SS-18		32,702	Lin.Ft.	Fence Type A			
I-127		200	Each	Standard Delineators	9		85
I-127		6	Each	Bridge Delineators	9		86
				ROADSIDE REST AREA			
				Quantities carried on Summary of Roadside Rest Area Sheet No.129			
				DRAINAGE			
E-2		1,406	Cu.Yd.	Excavation for Structures	8	2	
E-3		5,726	Cu.Yd.	Channel Excavation	8	2	
I-1		72	Lin.Ft.	12" Pipe for Driveways, Sec. M-6.4(a)	8	1	
					134		
I-2		1894	Lin.Ft.	15" Class A Storm Sewer M-6.5(a) or M-6.8(a)	13		
I-2		1248	Lin.Ft.	15" Class A Storm Sewer	13		
I-2		1894	Lin.Ft.	18" Class A Storm Sewer M-6.5(a) or M-6.8(a)	13		
I-2		1,252	Lin.Ft.	21" Class A Storm Sewer M-6.5(a) or M-6.8(a)	13		
I-2		478	Lin.Ft.	24" Class A Storm Sewer	13		
I-2		898	Lin.Ft.	6" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	135/124		
I-2		256	Lin.Ft.	8" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	8		
I-2		2852	Lin.Ft.	15" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	13		
					13		
I-2		394	Lin.Ft.	18" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	13		
					13		
I-2		104	Lin.Ft.	21" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	13		
I-2		172	Lin.Ft.	24" Class A Storm Sewer under Pavement or Approaches M-6.5(b) or M-6.8(b)	13		
I-2		150	Lin.Ft.	15" Class A Storm Sewer M-6.4(c)	13		
I-2		38	Lin.Ft.	18" Class A Storm Sewer M-6.4(c)	13		
I-2		118	Lin.Ft.	24" Class A Storm Sewer M-6.4(c)	13		
I-3		200	Lin.Ft.	4" Pipe for Roadway Drainage	7		
I-3		200	Lin.Ft.	6" Pipe for Roadway Drainage	7		
I-3		120	Lin.Ft.	12" Pipe for Roadway Drainage	104		
I-3		150	Lin.Ft.	8" Outlet Pipe for Roadway Drainage, Sec. M-6.4(a)	7		
I-4		89033	Lin.Ft.	6" Pipe for Underdrains	8	1	
I-4		926	Lin.Ft.	8" Outlet Pipe for Underdrains M-6.4(a)	8	1	
I-5		1	Each	36" Pipe Special for Culvert Sec. M-6.6(b) or Sec. M-6.8(b)			
I-5		4	Each	24" Pipe Special for Storm Sewer M6.4(c)	13		
I-5		139	Each	6" Pipe Special for Underdrains	8	1	
I-5		4	Each	15" Pipe Special for Storm Sewer M-6.4(c)	14		
I-5		2	Each	18" Pipe Special for Storm Sewer M-6.4(c)	14		

Item		Quantities	Unit	Description	Sheet	Table	Line
I-5		9	Each	8" Pipe Special for Storm Sewer Sec. M-6.5(b) or Sec M-6.8(b)			
I-8		1	Each	Catch Basin Standard No. 2-2A	109		
I-8		5	Each	Catch Basin Standard No. 3	14		
I-8		23	Each	Catch Basin Standard No. 4	14		
I-8		6	Each	Catch Basin Standard No. 5	14		
I-8		2	Each	Manhole Standard No. 1	14		
I-8		10	Each	Catch Basin Standard No 6	14		
I-9		1276	Lin.Ft.	Stone Underdrain No. 2	9	93	
I-10		371	Cu.Yd.	Dumped Rock Channel Protection	8	1	
I-10		74	Sq.Yd.	Riprap Type A	8	2	
I-14		583	Lin.Ft.	Paved Gutter as per plan, Type "A"	8	1	
L-10		8798	Sq.Yd.	Sodding Type 1, as per plan	8	1	
L-10		425	Sq.Yd.	Sodding Type 2, as per plan	8	1	
L-10		391	Sq.Yd.	Special Berm & Slope Protection	8	1	
S-1		268.6	Cu.Yd.	Concrete for Structure, Class "C"	8	2	
S-1		1.6	Cu.Yd.	Concrete for Structure, Class "E"	8	2	
S-4		11,947	Lbs.	Reinforcing Steel	8	2	
S-24	*✓	Lump	Lump	Removal of Existing Structure (Parcel 12-8 LA 1½ Story Frame Residence)			
S-24	*✓	Lump	Lump	Removal of Existing Structure (Parcel 12-8 LA Frame Farm Building)			
S-24		Lump	Lump	Removal of Existing Structure	167		
S-27	✓	168	Lin.Ft.	18" Pipe for Roadway Culvert M-6.6(b) or M-6.8(b)	8	2	
S-27	✓	232	Lin.Ft.	24" Pipe for Roadway Culvert M-6.6(b) or M-6.8(b)	8	2	
S-27	✓	130	Lin.Ft.	24" Pipe for Roadway Culvert M-6.6(c)	8	2	
S-27	✓	202	Lin.Ft.	36" Pipe for Roadway Culvert M-6.6(b) or M-6.8(b)	8	2	
S-27	✓	298	Lin.Ft.	42" Pipe for Roadway Culvert M-6.6(b)	8	2	
S-27	✓	706	Lin.Ft.	42" Pipe for Roadway Culvert M-6.6(c)	8	2	
S-27	✓	490	Lin.Ft.	54" Pipe for Roadway Culvert M-6.6(b)	8	2	
S-27	✓	196	Lin.Ft.	60" Pipe for Roadway Culvert M-6.6(b)	8	2	
S-29	✓	123	Cu.Yd.	Drainage of Structures, as per plan	8	1	
				PAVEMENT			
T-71	✓	129,127	Sq.Yd.	10" Reinforced Portland Cement Concrete Pavement	9		9
T-31	✓	33,433	Gal.	Bituminous Surface Treatment, Bituminous Material (See Proposal Note)	9		27
T-31	✓	531	Cu.Yd.	Bituminous Surface Treatment, No.46 Aggregate	9		28
T-31	✓	531	Cu.Yd.	Bituminous Surface Treatment, No. 6 Aggregate	9		29
B-33		64,867	Sq.Yd.	3" Bituminous Macadam Base Course	9		30
B-119		1,078	Cu.Yd.	Crushed Aggregate Base Course	9		62
I-7		80	Sq.Yd.	Reinforced Concrete Approach Slabs T=10"	8	1	
I-7		282	Sq.Yd.	Reinforced Concrete Approach Slabs T=13"	8	1	
I-12	✓	1590	Lin.Ft.	Concrete Curb Type 6	8	1	
I-12		2733	Lin.Ft.	Concrete Curb Special, as per plan	8	1	
I-12		3,026	Lin.Ft.	Concrete Curb Special, modified, as per plan			
I-18		9,792	Cu.Yd.	Stabilized Crushed Aggregate Shoulders and Approaches	9		38
I-21		88	Sq.Yd.	Portland Cement Concrete Traffic Island Pavement	8	1	
I-22		35,887	Cu.Yd.	Subbase, Grading A or B, as per plan	9		71
T-30		22,36	Gal	Bituminous Prime Coat Sec. M-5.3 or M-5.7 MC 0 or 1; RT 2 or 3	9		82
*I-125	*✓	14.93	Miles	Edge Lines and Parking Lines	9		84
*I-125	*✓	2.62	Miles	Center Lines 6" wide	9		83
*I-125	*✓	Lump	Lump	Curb and Island Marking			
*I-8	*	2	Each	Weigh Pit, as per plan	128		
T-32		6216	Gal.	Road Mix Bituminous Material Sec. M-5.3, M-5.7, MC 9 or 5; RT. 8 or 9	9		49
T-32		1727	Gal.	Seal Coat Bituminous Material M-5.3, M-5.7, MC 9 or 5; RT. 9 or 10	9		50
T-32		387	Cu.Yd.	Aggregate for Road Mix (№ 96)	9		51
T-32		28	Cu.Yd.	Aggregate for Choke (№ 6)	9		52
T-32		56	Cu.Yd.	Aggregate for Seal Coat (№ 6)	9		53
				STRUCTURE OVER 20' SPAN			
				Structure No. ATB-1-1583			
				Structure No. ATB-1-1764			
				Structure No. ATB-1-1905			
				Quantities Listed on Sheet Nos.			
				American Telephone & Telegraph Co. Force Account Work, R/W Sheet No. 7			

*Roadway Items

TYPICAL DETAILS

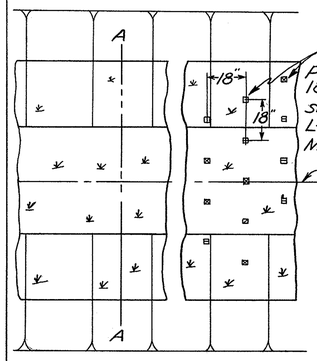
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

11
202

ATB-1-15.73
ASHTABULA COUNTY

TYPE 1 SODDING

TYPE 2 SODDING



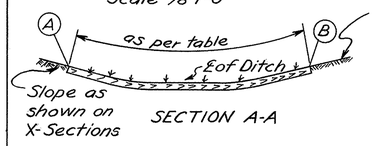
Stakes are to be staggered and placed on 18" ctrs. and in rows 18" apart. They shall be of the size described under item L-10.07 of the Construction and Material Specifications

℄ of Ditch

PLAN
Scale 3/8"=1'-0"

SOD WIDTH	
Bot. Width of Ditch	Width of Sod
2'	6'
9'	9'

Ditch widths are shown on X- sections

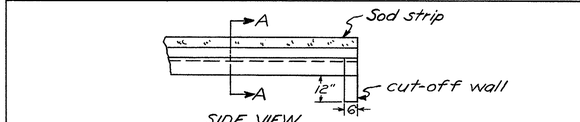


Slopes as shown on X- Sections

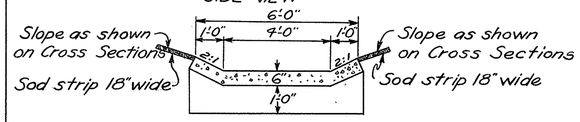
SECTION A-A

Note: Points A and B as show in Section A-A shall be the same elevation. Type 2 Sodding is used in areas of high velocity, as called for on plan and profile Sheets.

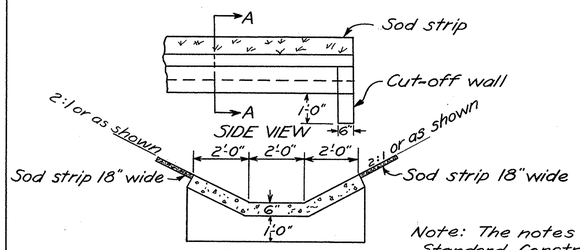
SOD DITCH



SIDE VIEW



SECTION A-A
TYPE A



SIDE VIEW

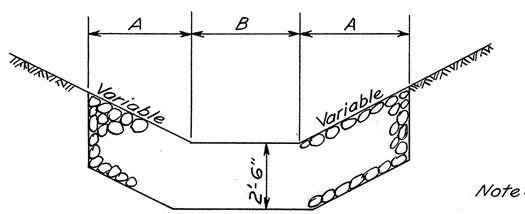
SECTION A-A
TYPE B

PAVED GUTTER WITH SOD STRIP
TYPE A or B

Note: The notes Shown on Standard Construction Drawing I-146. apply

Scale 3/8"=1'-0"

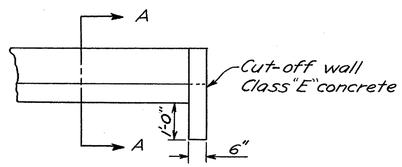
Station	Lin. FT. A	Lin. FT. B
156+70	2	4
158+75	2	4
161+65	2	4
239+00	2	4
276+35	1.75	2
289+74.45	4	2
302+12.5	2	2
313+31	4	4
252+50	2	4
330+25.85	4	4



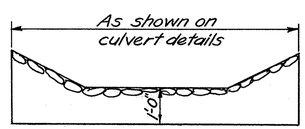
DUMPED ROCK PROTECTION
DITCH & CHANNEL
Scale 3/8"=1'-0"

Note: Length of dumped rock protection shall be as shown on plan & profile or culvert detail sheets.

I-10.06 DUMPED ROCK CHANNEL PROTECTION



SIDE VIEW
Scale 1/2"=1'



SECTION A-A

Note: Concrete cut-off wall to be constructed at the upstream end of Riprap-Type "A" Modified. Cost of cut-off walls to be included in unit price bid of Item I-10 Riprap-Type "A"

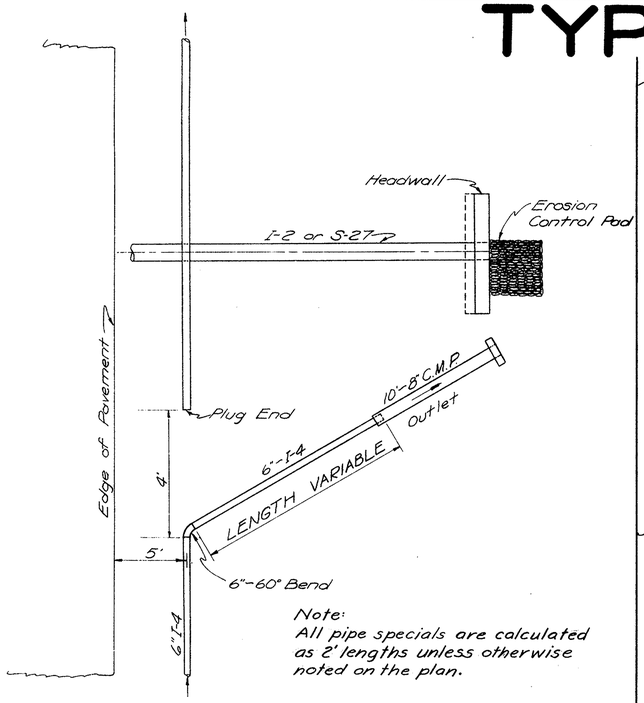
RIPRAP- TYPE "A"

TYPICAL DETAILS I-4 & I-2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

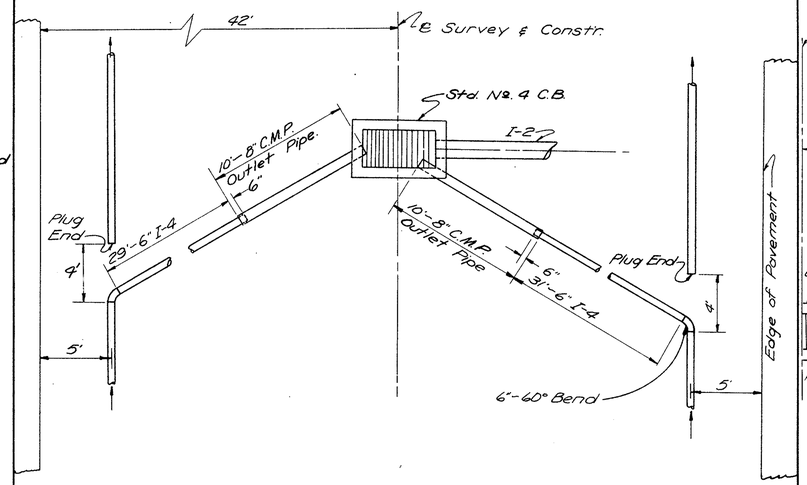
12/202

ATB-1-15.73
ASHTABULA COUNTY

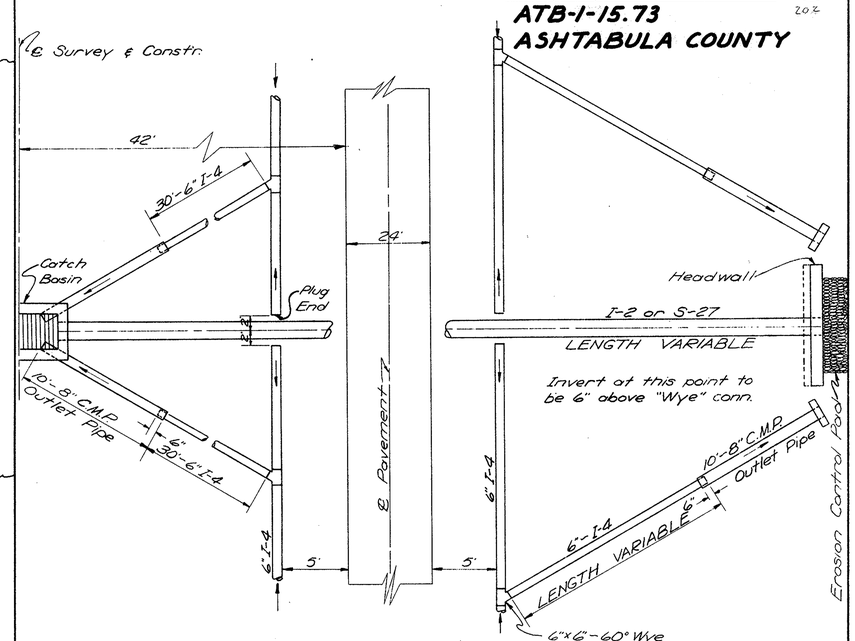


Note:
All pipe specials are calculated as 2' lengths unless otherwise noted on the plan.

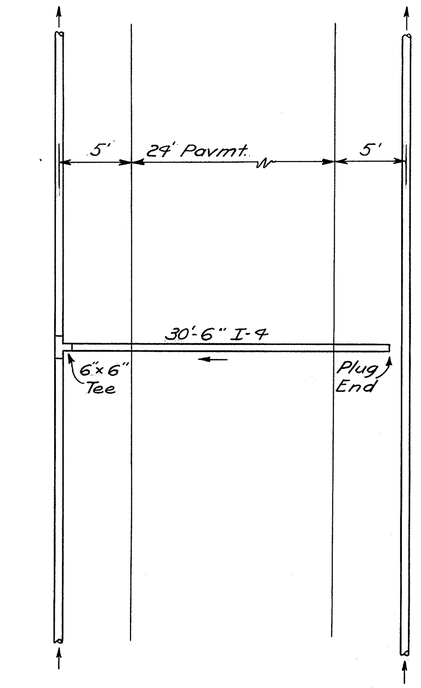
UNDERDRAIN OUTLET DETAIL "A"



UNDERDRAIN OUTLET DETAIL "B"

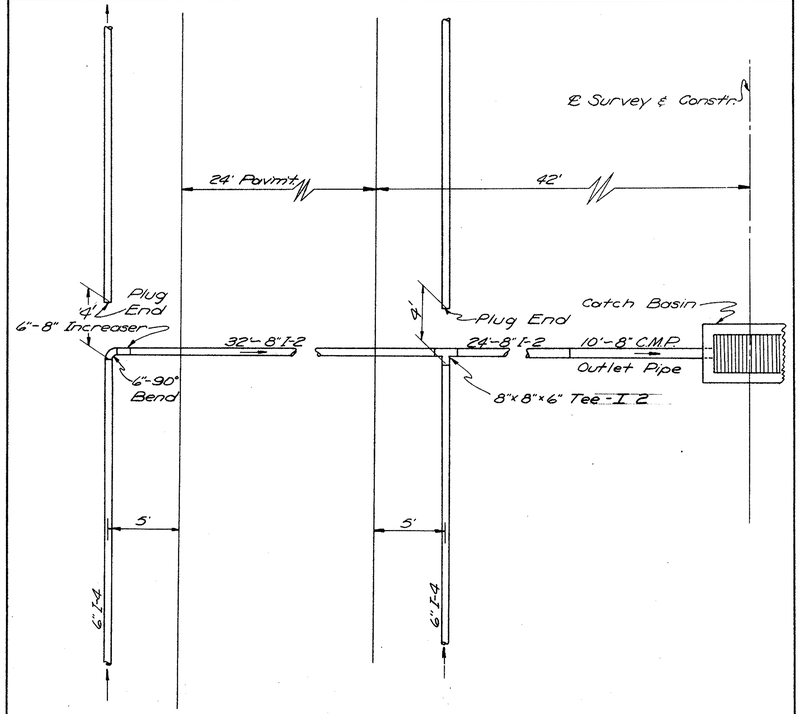


UNDERDRAIN OUTLET DETAIL "C"

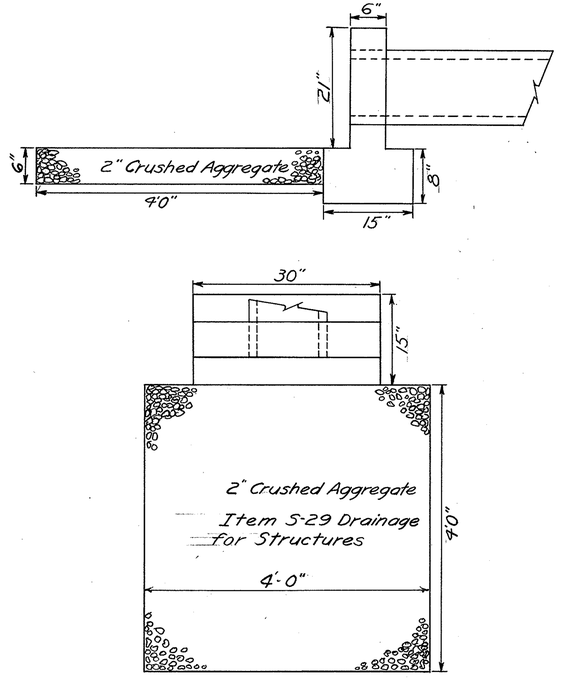


Note:
The Location of these pipes which are noted on the Plan and Profile Sheets, are approximate. This section of I-4 is to be located at the point where the I-22 intersects the existing ground.

TRANSVERSE OUTLET DETAIL "D"



UNDERDRAIN OUTLET DETAIL "E"



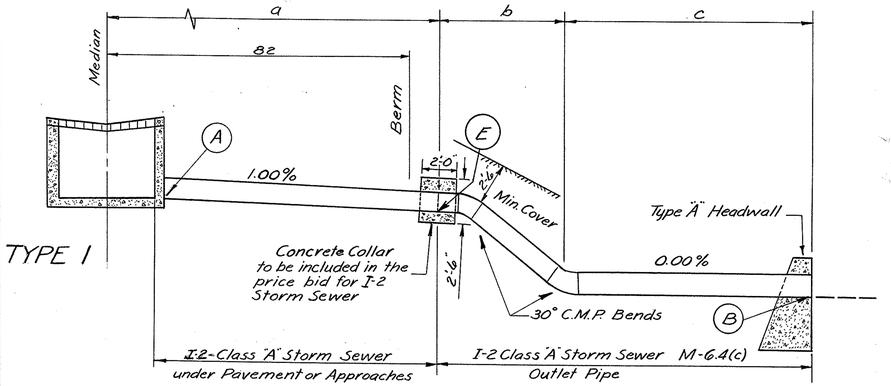
UNDERDRAIN OUTLET EROSION CONTROL PAD

STORM SEWER DETAILS

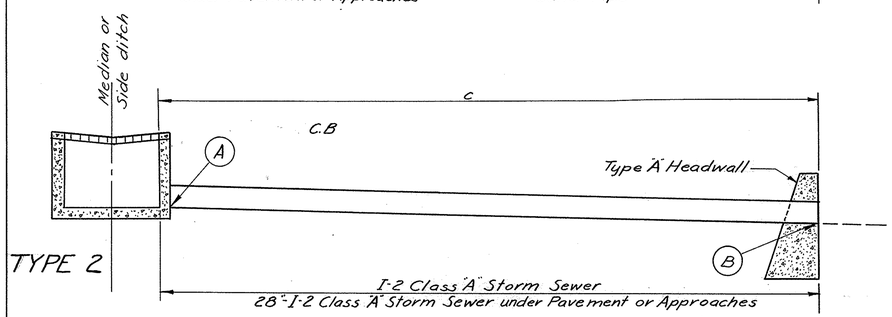
FED. RD. DIVISION	STATE	PROJECT	TYPE, FUNDS
2	OHIO	I-1103(16)	

13 / 202

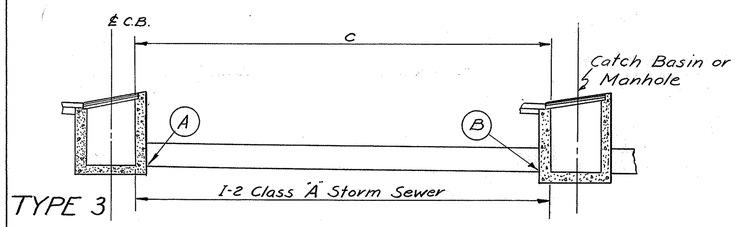
ATB-1-15.73
ASHTABULA COUNTY



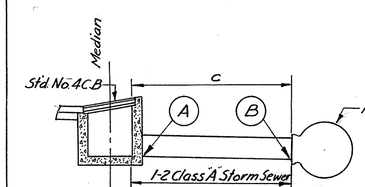
TYPE 1



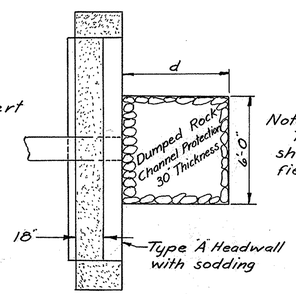
TYPE 2



TYPE 3



TYPE 4



EROSION CONTROL PAD
for storm sewer outlet

Note: The erosion control pad shall be shaped to fit field condition.

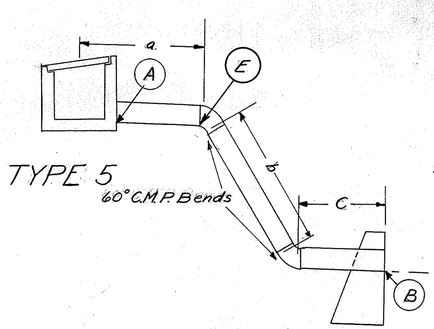
STORM SEWERS

Mark	Type	Station From	Station To	F.L. Elev. A	F.L. Elev. B	Length Feet a	Length Feet b	Length Feet c	I-2 Class "A" Storm Sewers Lin. Ft. M-6.5 (a) M-6.8 (a) 15"	18"	21"	15"	24"	I-2 Class "A" Storm Sewer Under Pavement - Lin. Ft. M-6.5 (b) M-6.8 (b) 15"	18"	21"	24"	15"	18"	24"	I-2 Class "A" Storm Sewer = Lin. Ft. M-6.4 (c) 15"	18"	24"	I-5 Pipe Special - Each M-6.4 (c) 60° Bend 15"	18"	24"	I-10 Dumped Rock Channel Protection Width (Ft) d	Cu. Yds.	Headwalls Type	S-4 Reinf. Steel Lbs.	S-1 Cl. "C" Conc. Cu. Yds.	L-10 Sodding Type I Sq. Yds.	T-8 Catch Basin Unit #4	#5	#3	T-8 Manhole Unit #1
1-SS	3	153+50	158+28	807.21	801.00			478					478																							
2-SS	1	158+28		800.50	765.00	86	73	19								86						88					2	8	4	A	218	5.4	3	1			
3-SS	1	163+17		802.50	795.00	86	22	11								86						30					2	12	7	A	218	5.4	3	1			
4-SS	5	165+75	164+97	809.00	778.00	36	82	8														122			2			8	4	B	123	2.8	2		1		
5-SS	3	170+00	163+17	816.48	803.50			680			680																						1			
6-SS	3	179+00	170+00	833.94	816.75			898		898																							1			
7-SS	3	188+00	179+00	851.40	833.94			898				898																					1			
8-SS	1	198+00		870.31	855.00	84	33	8							84							38			2			8	4	A	146	3.3	2	1			
9-SS	3	203+74	198+00	879.50	870.51			572	572																								1			
10-SS	3	223+75	230+00	880.25	872.41			623	624																								1			
11-SS	3	233+00	236+50	868.00	863.80			348			348																						1			
12-SS	3	236+50	238+75	863.30	861.10			223			224																						1			
13-SS	2	238+75		861.10	858.00			104									104											12	7	A	193	4.4	3	1			
14-SS	2	242+00		864.68	860.00			100							100													20	11	A	146	3.3		1			
15-SS	3	249+00	242+00	870.00	864.77			698		698																							1			
16-SS	3	254+23	249+00	874.16	870.25			522	522																												1
17-SS	3	256+00	254+23	875.50	874.16			175	176																								1			
18-SS	2	272+75	273+75	870.48	868.00			144							144													8	4	B	145	3.6	2	1			
19-SS	2	282+50		856.54	856.00			100						100														12	7	A	146	3.3	2	1			
20-SS	2	293+82		837.50	836.50			130						130														10	6	A	146	3.3	2	1			
21-SS	3	303+00		821.80	818.00			116						116																			1			
22-SS	2	313+00		814.15	813.00			146						146														8	4	A	146	3.3	2	1			
23-SS	4	323+85	323+97	810.91	810.40			12				12																					1			
24-SS	2	328+90		809.38	808.65			106						106														10	6	A	146	3.3	2	1			
25-SS	2	334+40		809.32	808.75			108						108														6	3	A	146	3.3	2	1			
26-SS	2	303+00		817.50	816.21			88						88														12	7	A	146	3.3	2		1		
27-SS	2	311+00		816.50	816.00			66							66													12	7	A	146	3.3	2		1		
28-SS	2	285+00		846.00	843.50			114						114														8	4	A	146	3.3	2		1		
29-SS	2	17+50*		841.75	841.50			52						52														8	4	A	146	3.2	2		1		
30-SS	2	212+00		876.22	875.20			108						108														8	4	A	146	3.2	2		1		
31-SS	3	230+00		873.60	872.60			88						88																							1
32-SS	3	13+88*	14+44	853.50	850.75			86						86																						1	
33-SS	2	14+44*	15+92	850.75	848.00			154						154														8	4	A	146	3.2	2			1	
34-SS	3	10+67+	10+25	820.14	818.75			72						72																					1	
35-SS	3	10+25+	6+80	818.75	816.75			338				338																							1	
36-SS	3	230+00	233+00	872.40	868.25			298		298																							1			
		Sub-total (Carried to Sheet 14)							1894	1897	1252	1248	478	1738	394	104	172					122	38	118	2	2	4		97		2795	64.2	37	23	6	4	2

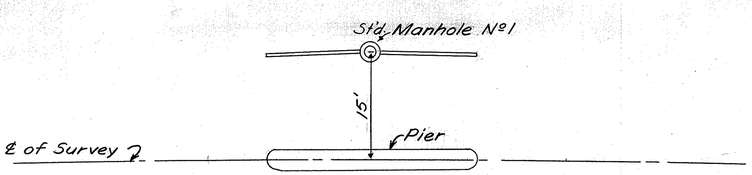
* Station on ℄ Ramp "C"

+ Station on ℄ Ramp "D"

Notes:
Stations are recorded in direction of flow.



TYPE 5
60° C.M.P. Bends



Note: Where manhole castings are placed in slope areas the casting shall be built to conform to the plane of the finished slope.

Mark	Station	Elevation at Point E
2-SS	158+28	799.50
3-SS	163+17	801.500
4-SS	165+39	808.97
8-SS	198+00	869.50
42-SS	295+00	838.52

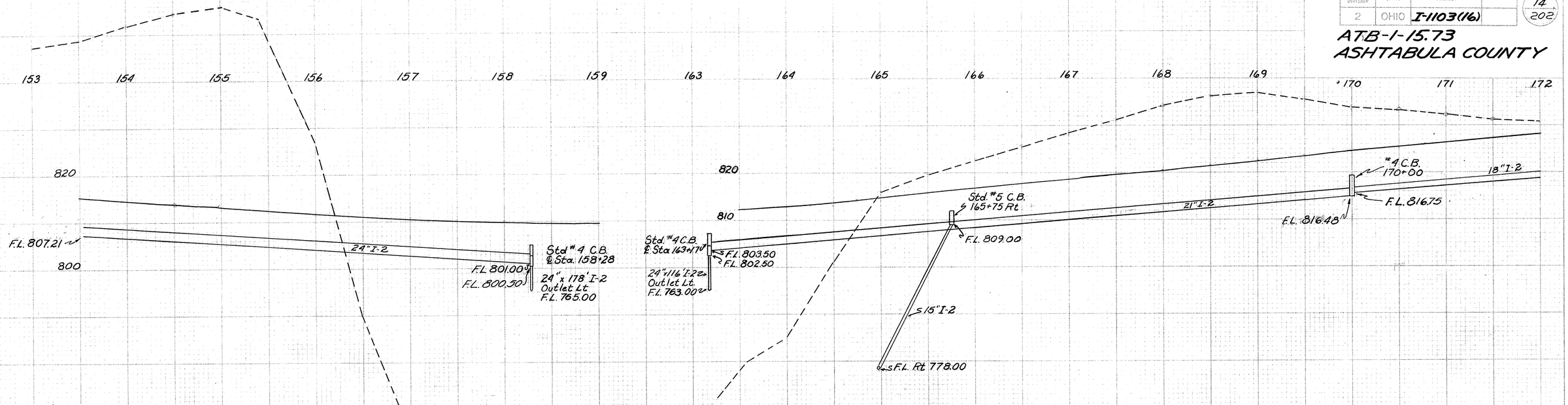
LOCATION OF MANHOLE - STATION 254+23

STORM SEWER DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

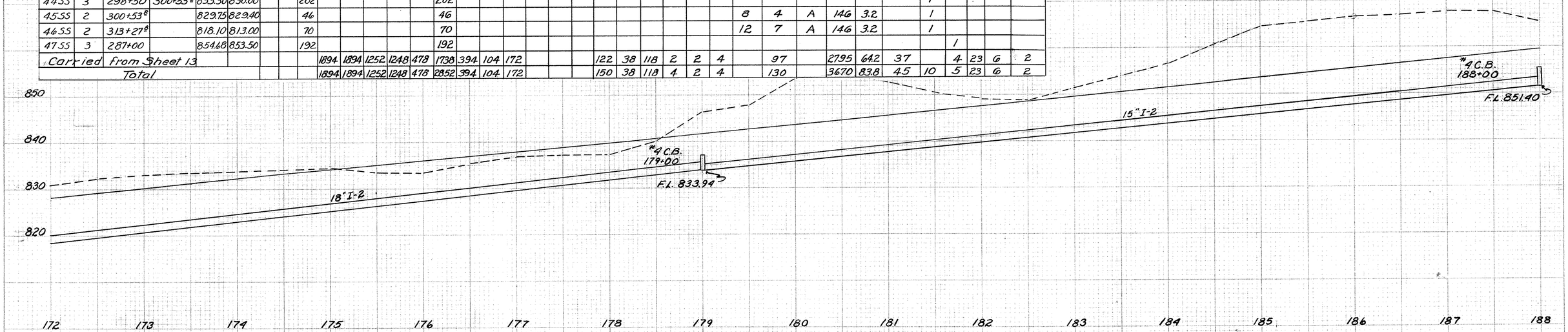
14
202

ATB-1-15.73
ASHTABULA COUNTY



STORM SEWER (Continued from Sheet 13)

Mark	Type	Station From	Station To	F.L. Elev. A	F.L. Elev. B	Length Feet a	Length Feet b	Length Feet c	I-2 Class "A" Storm Sewer Lin. Ft. M-6.5 (a) M-6.8 (a) 15"	18"	21"	24"	I-2 Class "A" Storm Sewer Under Pavement Lin. Ft. M-6.5 (b) M-6.8 (b) 15"	18"	21"	24"	I-2 Class "A" Storm Sewer Lin. Ft. M-6.4 (c) 15"	18"	24"	I-5 Pipe Special Each M-6.7 (c) 60°-30° Bend 15"	18"	24"	H-10 Dumped Rock Channel Protection Tons/Ft. d	Cu. Yds.	Headwalls Type	S-7 Reinf. Steel Lbs.	S-1 Cl "C" Conc. Cu. Yds.	L-10 Sodding Type 1 Sq. Yds.	I-8 Catch Basins Each #6	#3	#4	#5	I-8 Manhole Each #1
37 SS	2	205+84.9		883.80	878.00			80					80												12	7	A	146	3.2	2	1				
38 SS	2	211+77.8		888.40	887.84			56					56												8	4	A	146	3.2	2	1				
39 SS	3	223+75		881.00	880.25			74					74																	1				
40 SS	3	225+77	223+75	882.15	881.00			200					200																	1				
41 SS	3	232+36		871.40	868.40			98					98																	1				
42 SS	1	295+00		839.08	832.50	36	24	6					36								28			2			12	7	A	146	3.2	2	1				
43 SS	2	296+90		836.07	835.77			60					60												8	4	B	145	3.6	2	1				
44 SS	3	298+50	300+53.8	833.30	830.00			202					202																	1				
45 SS	2	300+53.8		829.75	829.40			46					46												8	4	A	146	3.2		1				
46 SS	2	313+27.8		818.10	813.00			70					70												12	7	A	146	3.2		1				
47 SS	3	287+00		854.68	853.50			192					192																		1			
Carried from Sheet 13									1894	1894	1252	1248	478	1738	394	104	172				122	38	118	2	2	4		97		2795	64.2	37		4	23	6	2
Total									1894	1894	1252	1248	478	2852	394	104	172				150	38	118	4	2	4		130		3670	83.8	45	10	5	23	6	2

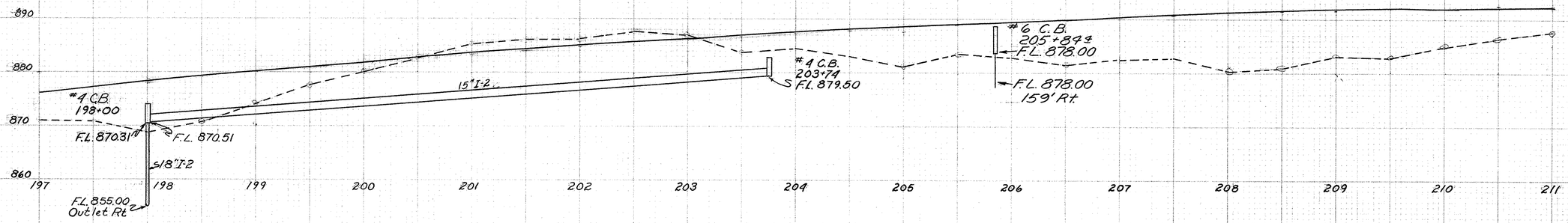


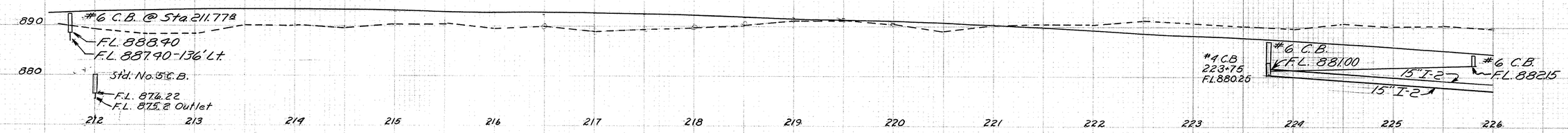
STORM SEWER PROFILE

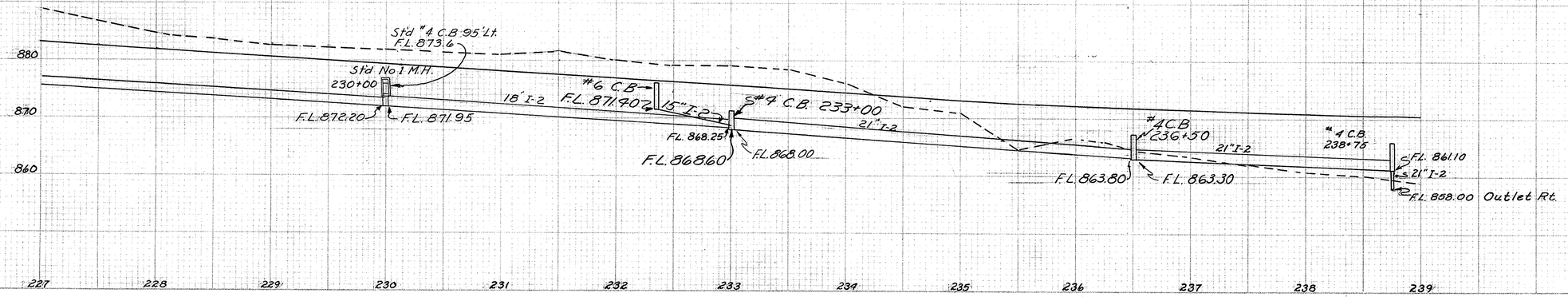
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

15
202

ATB-1-15.73
ASHTABULA COUNTY





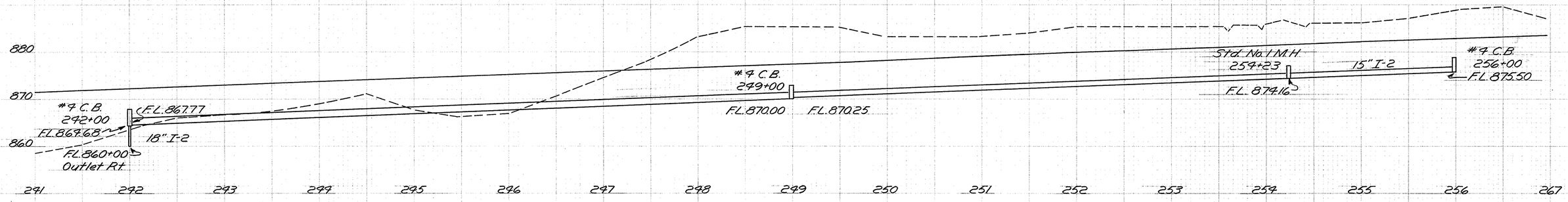


STORM SEWER PROFILE

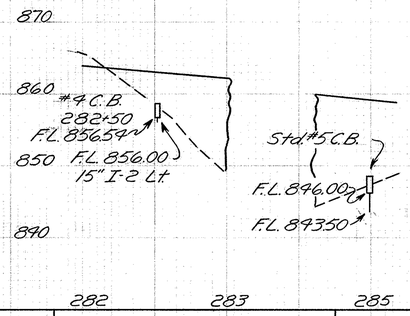
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

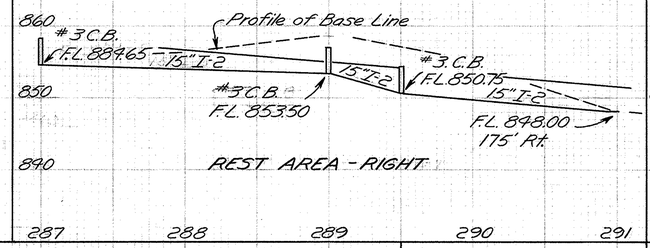
16
202

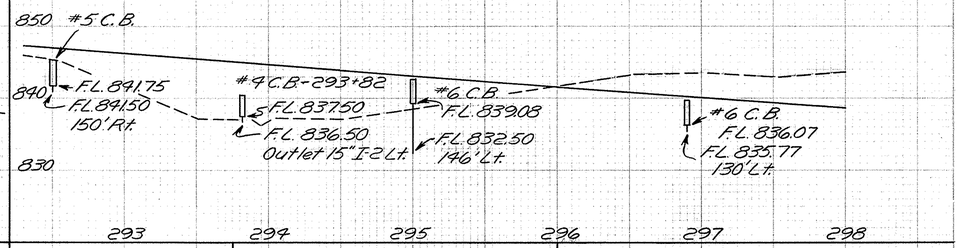
ATB-1-15.73
ASHTABULA COUNTY

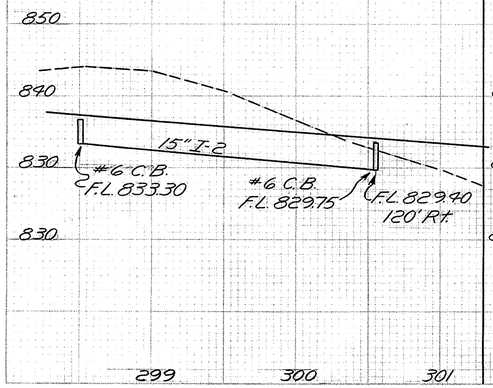


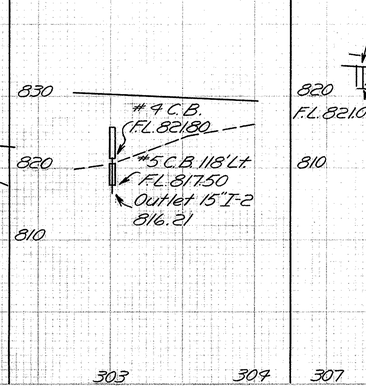


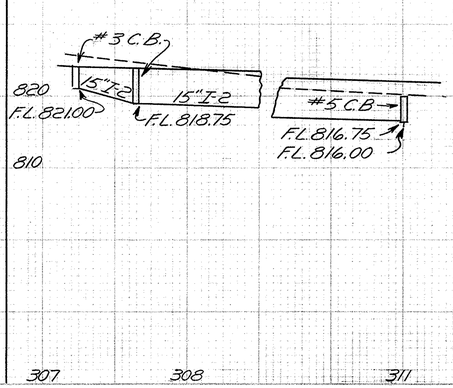


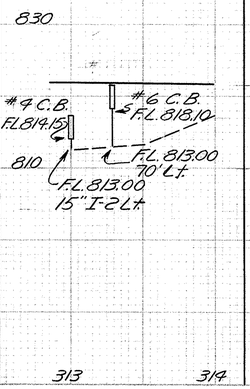


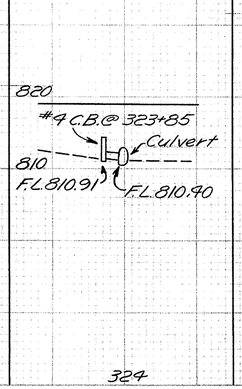


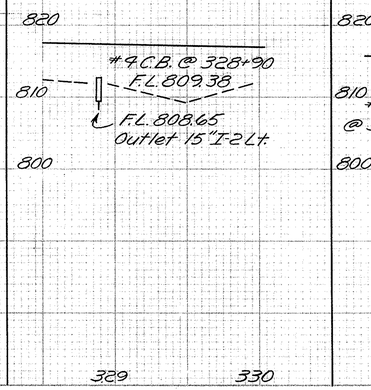


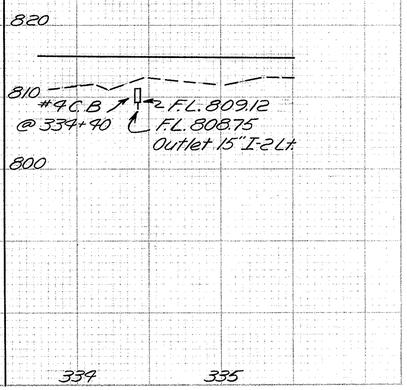












STORM SEWER PROFILE

HEADWALL - TYPE B

FED. RD. DIVISION	STATE	PROJECT	TYPE PROJECT
2	OHIO	I-1103(16)	

17
202

ATB-1-15.73
ASHTABULA COUNTY

HEADWALL DIMENSIONS

Station	Skew	Pipe Size	Type	H	W	A	B	C	D	E
239+00 Lt.	26°35'	54"	B	5'-9"	4'-6"	1'-3½"	10'-6"	11'-5"	6'-6"	1'-5"
239+00 Rt.	26°35'	54"	"	5'-9"	4'-6"	1'-3½"	10'-6"	9'-11"	5'-0"	2'-2"
284+74.15	9°06'	42"	"	4'-7"	4'-0"	1'-1"	7'-1"	7'-4"	3'-6"	1'-9"
293+94	18°44'	36"	"	4'-0"	3'-6"	0'-10½"	6'-2"	7'-4"	4'-0"	0'-11"
302+12.50	15°30'	42"	"	4'-7"	4'-0"	1'-1"	7'-3"	8'-7"	4'-9"	1'-2½"
313+31	12°13'	54"	"	5'-9"	4'-6"	1'-3½"	9'-6"	11'-2"	6'-3"	1'-9"
330+25.85	15°23'	60"	"	6'-9"	5'-3"	1'-8"	11'-9"	13'-2"	7'-8"	2'-4"

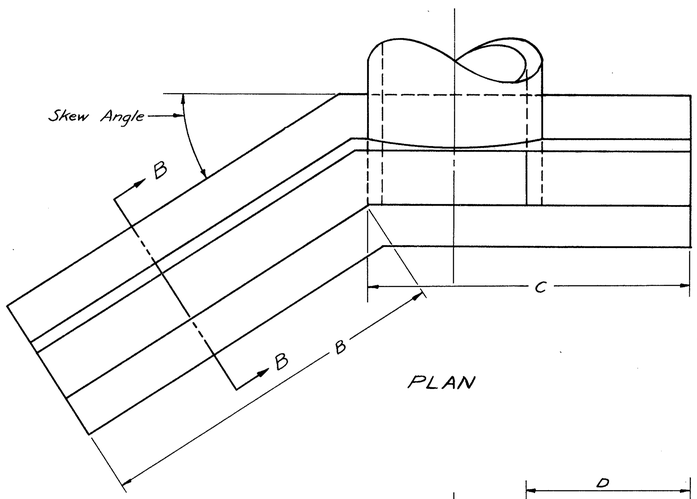
REINFORCEMENT BAR SCHEDULE

	a-1		a-2		a-3		a-4		a-5		c-1		c-2		c-3		c-4		c-5		c-6		c-7		d		e		f		h		k		m	
Station	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
239+00 Lt.	4	21'-1"	2	21'-8"	2	22'-5"	2	22'-5"	2	22'-11"	2	11'-1"	6	10'-2"	2	11'-0"	2	5'-4"			6	5'-7"	2	6'-5"	5	7'-9"	3	6'-4" to 7'-7"	8	4'-1"	8	10'-3"	5	6'-10" to 10'-1"	8	4'-1"
239+00 Rt.	4	19'-7"	2	20'-2"	2	20'-11"	2	20'-7"	2	21'-1"	2	11'-1"	6	10'-2"	2	11'-0"	2	2'-10"	2	3'-10"	4	4'-8"	2	5'-6"	5	7'-9"	3	5'-7" to 6'-10"	8	4'-1"	8	10'-3"	4	8'-11" to 10'-1"	8	4'-1"
284+74.15	4	13'-11"	2	14'-1"	2	14'-4"	2	14'-6"	2	14'-8"	2	7'-2"	4	6'-9"	2	7'-3"	2	2'-1"			4	2'-8"	2	3'-3"	3	6'-7"	2	4'-10" to 6'-3"	6	4'-1"	6	8'-9"	3	7'-6" to 8'-2"	6	3'-7"
293+94	4	12'-11"	2	13'-3"	2	13'-8"	2	13'-9"	2	13'-9"	2	6'-2"	4	5'-10"	2	6'-4"	2	4'-8"			4	3'-3"	2	3'-9"	3	6'-0"	2	5'-1" to 6'-10"	6	4'-1"	5	7'-11"	3	7'-0" to 7'-8"	6	3'-1"
302+12.50	4	15'-3"	2	15'-7"	2	15'-11"	2	15'-9"	2	16'-1"	2	7'-5"	4	6'-11"	2	7'-6"	2	4'-4"			4	3'-11"	2	4'-6"	3	6'-7"	3	5'-4" to 6'-5"	6	4'-1"	6	8'-9"	4	7'-6" to 8'-2"	6	3'-7"
313+31	4	19'-10"	2	20'-4"	2	20'-8"	2	20'-7"	2	20'-10"	2	10'-0"	6	9'-2"	2	9'-11"	2	4'-3"			6	5'-5"	2	6'-3"	4	7'-9"	3	6'-5" to 7'-7"	8	4'-1"	8	10'-3"	5	8'-6" to 10'-1"	8	4'-1"
330+25.85	4	24'-2"	2	24'-8"	2	25'-1"	2	25'-0"	2	25'-4"	2	13'-2"	6	11'-5"	2	12'-4"	2	4'-9"	2	5'-0"	4	6'-9"	2	7'-8"	5	8'-9"	3	6'-3" to 8'-6"	9	4'-1"	9	11'-8"	6	9'-4" to 11'-5"	9	4'-10"

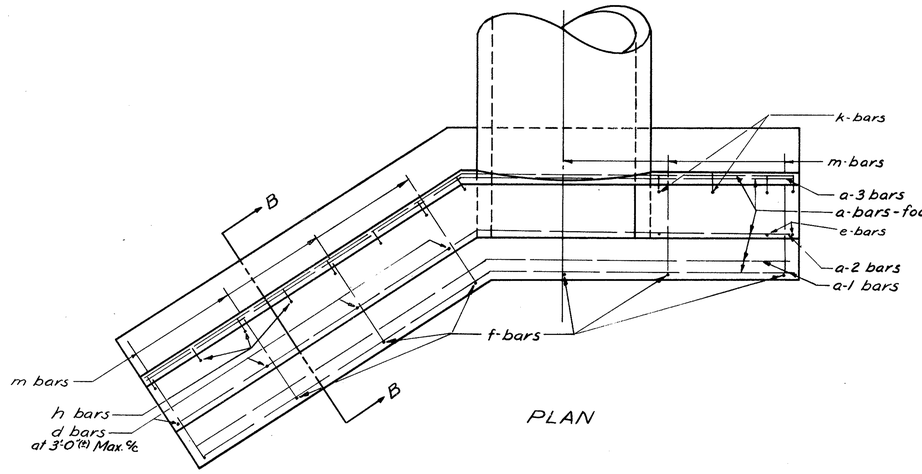
NOTE: All quantities are for one headwall
All reinforcing bars are #5 except h & k bars which are the size specified in Standard Construction Drawing HW-C
An 18" wide strip of sod shall be placed along the back and both ends of each headwall.

QUANTITIES

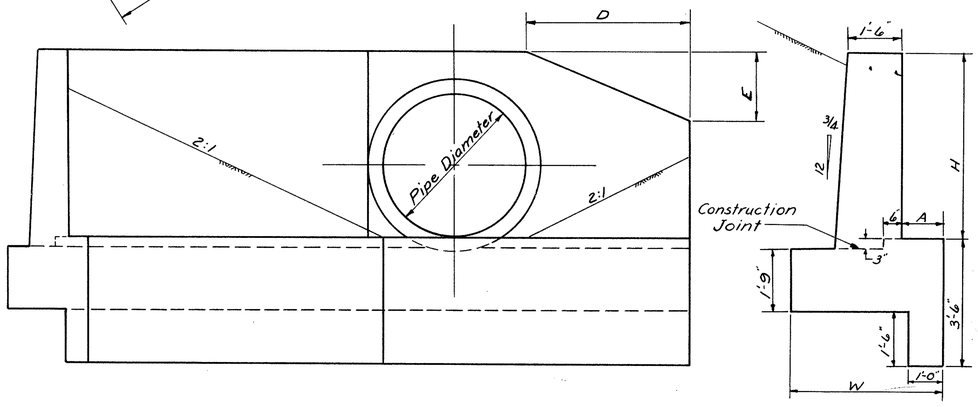
Station	Reinf. St. Lbs.	Concrete Cu. Yds.	Sodding Sq. Yds.
239+00 Lt.	747	16.3	5
239+00 Rt.	698	15.2	4
284+74.15	418	9.0	3
293+94	384	7.5	3
302+12.50	466	9.9	4
313+31	703	15.2	4
330+25.85	874	21.6	5



PLAN

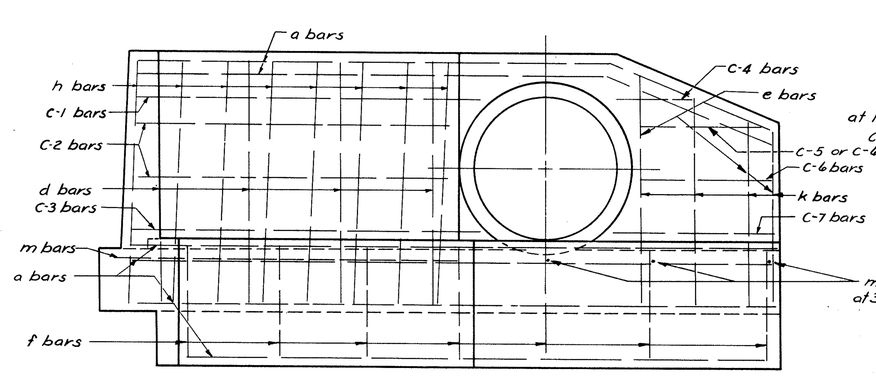


PLAN

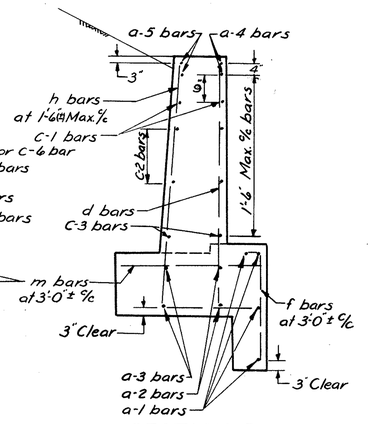


ELEVATION

SECTION B-B



ELEVATION



SECTION B-B

HEADWALL - TYPE "B"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

18
202

ATB-1-15.73
ASHTABULA COUNTY

HEADWALL-TYPE B

HEADWALL DIMENSIONS

Station	Skew	Pipe Size	Type	H	A	B	C	D	E
Wright Road 19+16.5	7°09'	24"	B	5'-11"	1'-0"	4'-2"	4'-4"	2'-1"	1'-0⅝"
276+35 Lt.	17°11'	24"	B	5'-11"	1'-0"	4'-4"	4'-5"	2'-2"	1'-0"
276+35 Rt.	17°11'	24"	B	5'-11"	1'-0"	4'-4"	5'-1"	2'-10"	0'-8"
272+00 Lt.	44°46'	18"	B	5'-5"	1'-0"	4'-6"	4'-0"	2'-4"	0'-5"
164+97 Rt.	30°	15"	B	5'-5"	1'-0"	3'-1"	2'-10"	1'-5"	0'-7"
296+90 Lt.	45°	15"	B	5'-5"	1'-0"	4'-6"	4'-0"	2'-4"	0'-5"

REINFORCEMENT BAR SCHEDULE

Station	a No.	a Length	b No.	b Length	c No.	c Length	d No.	d Length	e No.	e Length	f No.	f Length	g No.	g Length	h No.	h Length	i No.	i Length	j No.	j Length	j-1 No.	j-1 Length	k No.	k Length	k-1 No.	k-1 Length	No.	Length
Wright Road 19+16.5	4	8'-5"	1	3'-10"	1	3'-11"	1	1'-5"	1	1'-5"	1	8'-2"	1	8'-5"	1	8'-2"	1	8'-5"	3	5'-6"	2	4'-6 to 5'-3	3	5'-10"	2	4'-10 to 5'-7"		
276+35 Lt.	4	8'-8"	1	4'-0"	1	4'-2"	1	1'-6"	1	1'-6"	1	8'-5"	1	9'-0"	1	8'-5"	1	9'-0"	3	5'-6"	2	4'-6 to 5'-3	3	5'-10"	2	4'-10 to 5'-7"		
276+35 Rt.	4	9'-2"	1	4'-0"	1	4'-2"	1	2'-2"	1	2'-2"	1	9'-1"	1	9'-8"	1	9'-1"	1	9'-8"	3	5'-6"	2	4'-10 to 5'-8"	3	5'-10"	2	5'-8" to 5'-10"		
272+00 Lt.	4	8'-6"	1	4'-2"	1	4'-9"	1	1'-9"	1	1'-9"	1	8'-2"	1	9'-10"	1	8'-2"	1	9'-10"	3	5'-0"	2	4'-7 to 4'-11"	4	5'-3"	2	4'-10 to 5'-2"		
164+97 Rt.	4	6'-6"	1	2'-9"	1	3'-4"	1	0'-11"	1	0'-11"	1	5'-3"	1	5'-10"	1	5'-3"	1	5'-10"	3	5'-0"	2	4'-7" to 4'-11"	4	5'-3"	2	4'-10" to 5'-2"		
296+90 Lt.	4	8'-6"	1	4'-2"	1	4'-9"	1	1'-9"	1	1'-9"	1	8'-2"	1	9'-10"	1	8'-2"	1	9'-10"	3	5'-0"	2	4'-7" to 4'-11"	4	5'-3"	2	4'-10" to 5'-2"		

QUANTITIES

Station	Reinf. Steel Lbs.	Concrete Cu. Yds.	Sodding Sq. Yds.
Wright Road 19+16.5	126	3.6	2
276+35 Lt.	140	3.7	2
276+35 Rt.	148	4.0	2
272+00 Lt.	145	3.4	2
164+97 Rt.	123	2.8	2
296+90 Lt.	145	3.6	2

HEADWALL-TYPE C

HEADWALL DIMENSIONS

Station	Pipe Size	Type	A	H	L	W
324+00	36"	C	1'-0"	4'-0"	16'-6"	3'-6"

REINFORCEMENT BAR SCHEDULE

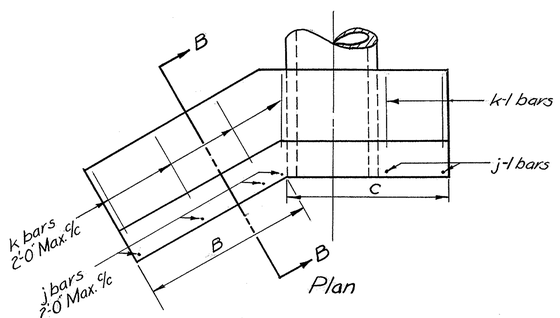
Station	a No.	a Length	b No.	b Length	c No.	c Length	d No.	d Length	f No.	f Length	h No.	h Length
324+00	10	16'-2"			12	6'-1"	6	6'-1"	6	4'-1"	10	7'-8"

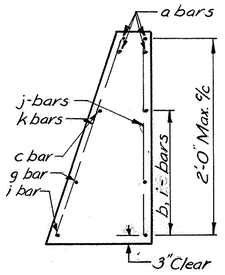
QUANTITIES

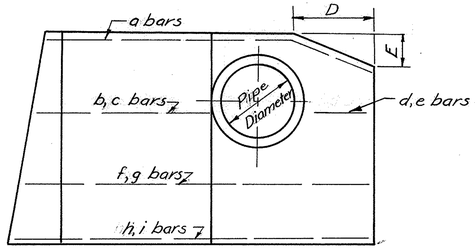
Station	Reinf. Steel Lbs.	Concrete Cu. Yds.	Sodding Sq. Yds.
324+00	389	8	4

NOTE: All quantities are for one headwall.
All reinforcing bars are #5 except "h" bars in the Type C Headwall which are the size specified in Standard Construction Drawing HW-C.
An 18" wide strip of sod shall be placed along the back and both ends of each headwall.
All quantities are carried to storm sewer and culvert detail sheets.

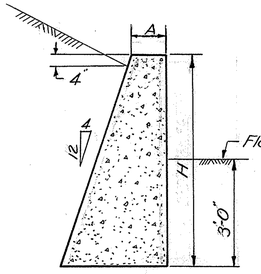
HEADWALL - TYPE B





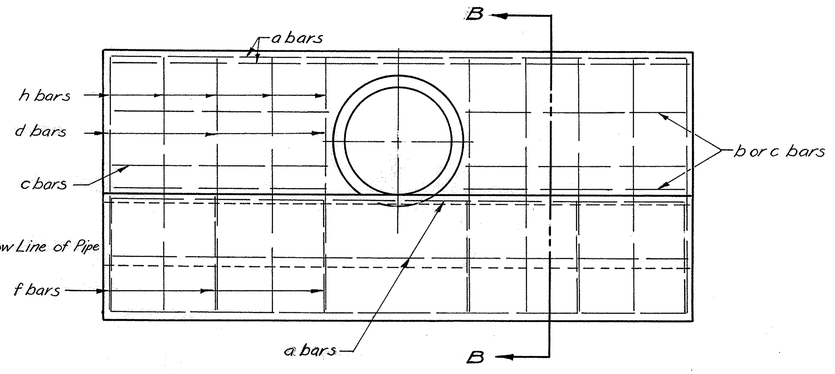


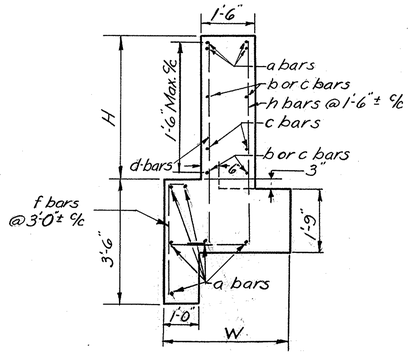
Elevation



Section "B-B"

HEADWALL - TYPE C





Section "B-B"

HEADWALL TYPE B & C

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

19
202

ATB-1-15.73
ASHTABULA COUNTY

TYPE 3 - SODDING SPECIAL BERM & 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.

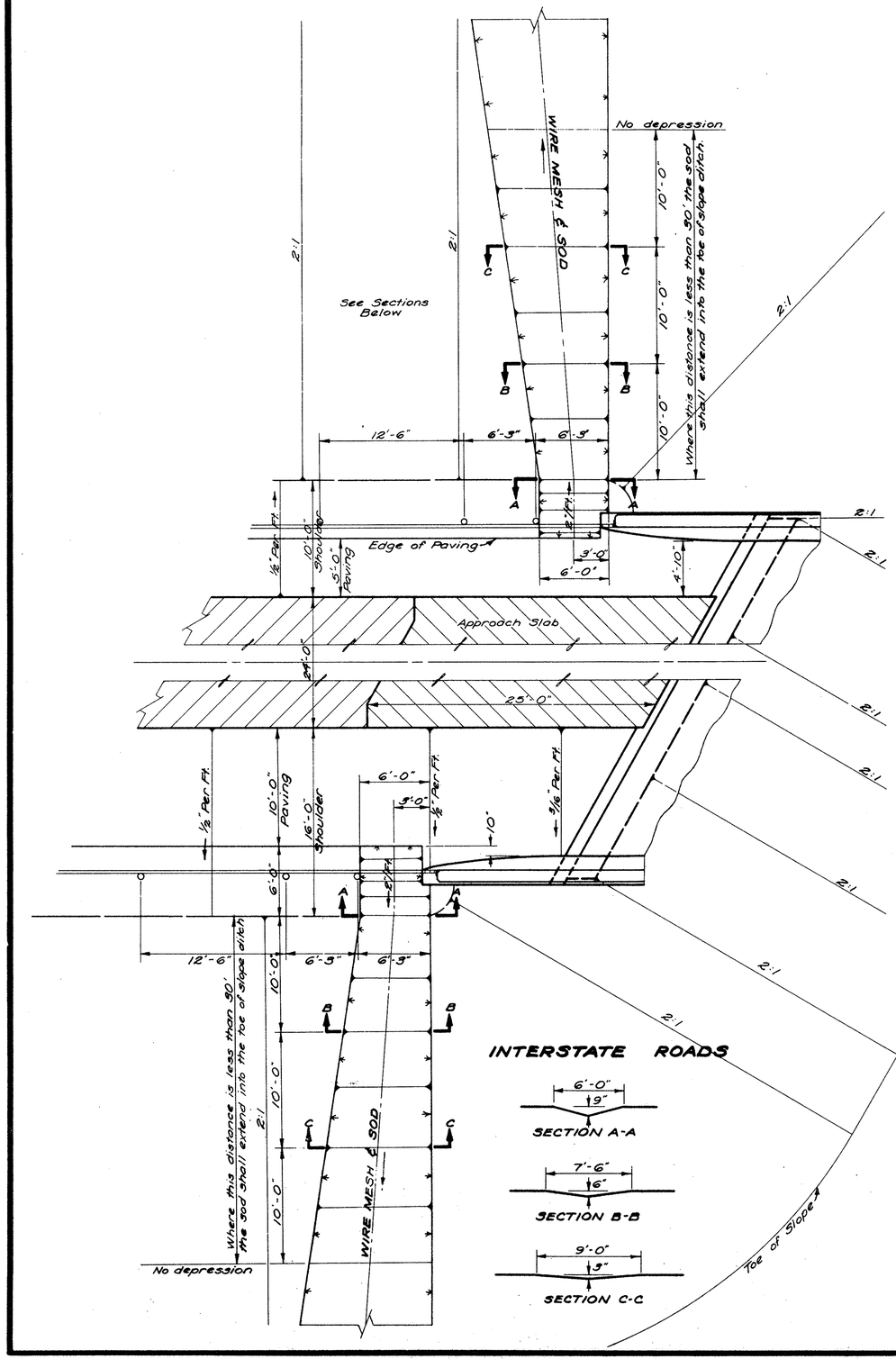
Stakes shall be 1"x 1"x 8" wood stakes and shall be perpendicular to the ground and flush with the finished grade.

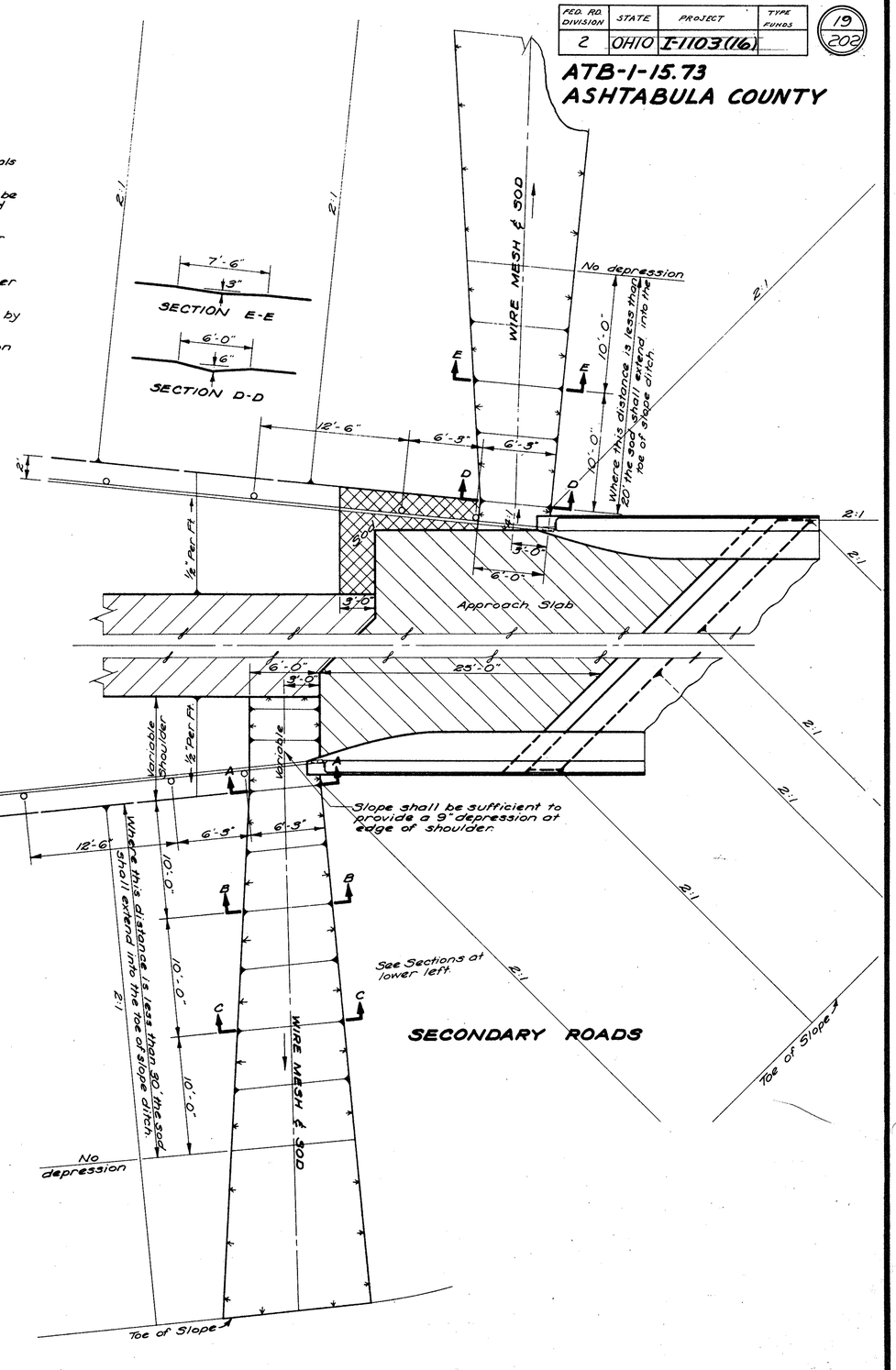
The fence shall be Straight Line Poultry Fence or equivalent with strand width of four feet, having a two inch mesh and all wires No. 20 Gauge.

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 Section L-10.07.





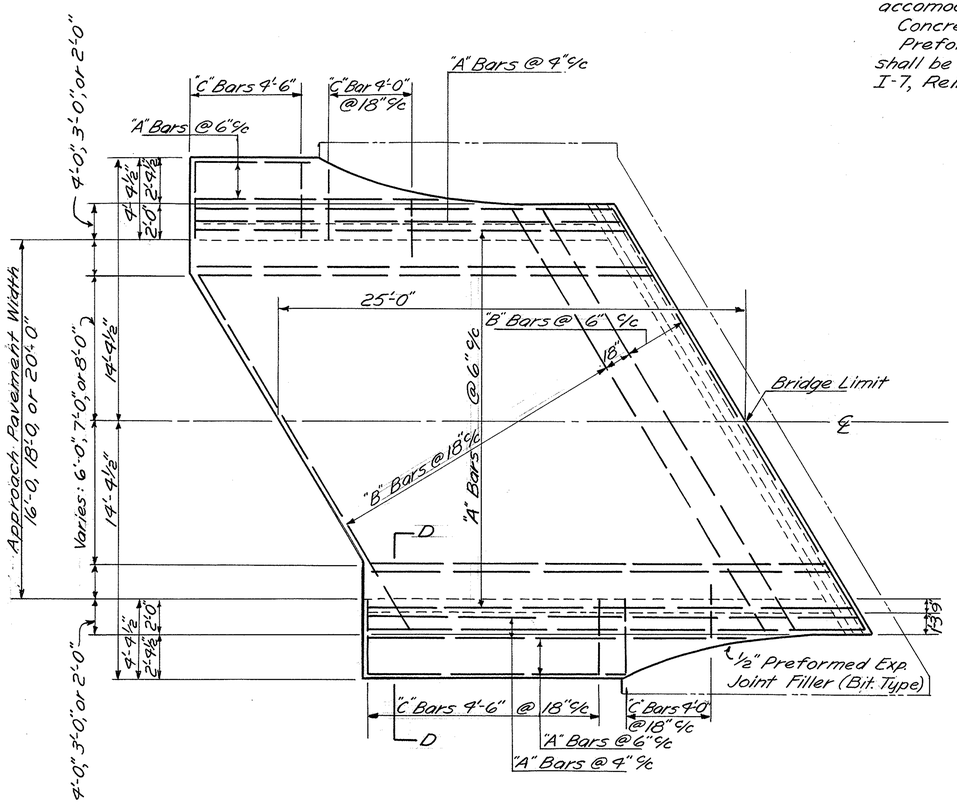
SPECIAL BERM & SLOPE PROTECTION

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

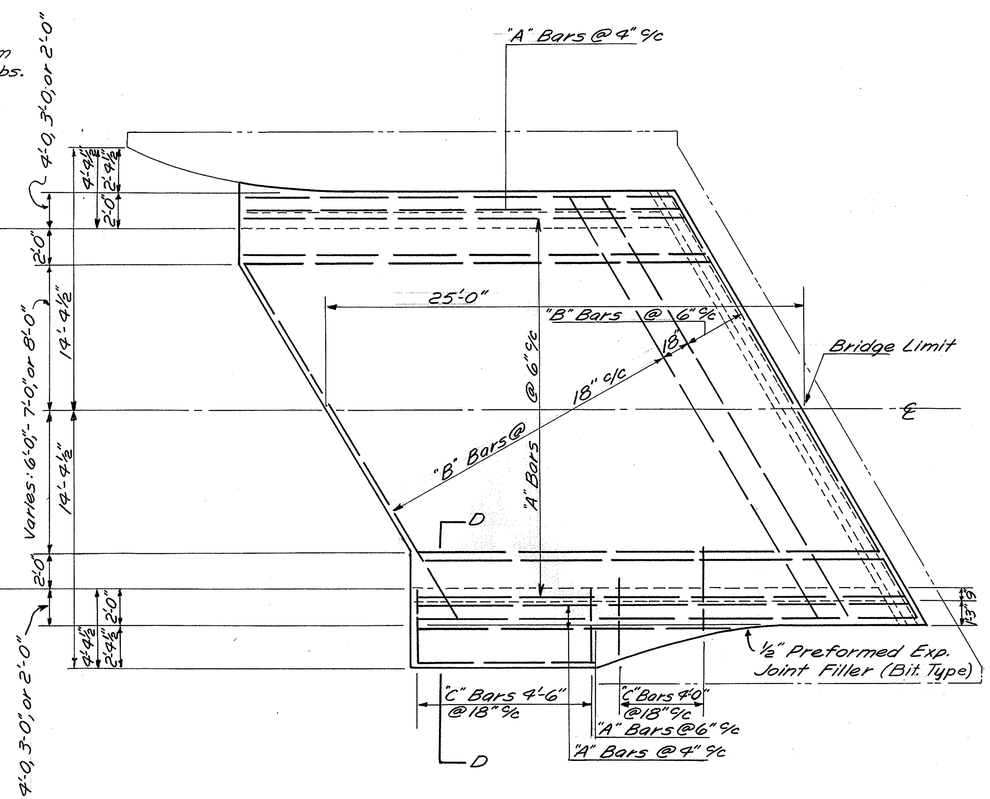
20
202

ATB-1-15.73
ASHTABULA COUNTY

NOTE: Refer to Standard Drawing AS-1-54 dated 7-1-54, revised 12-1-54 for typical sections and details of Approach Slab Standard to be modified as necessary to accomodate reinforcing plan as shown.
Concrete to be Class "C"
Preformed Exp. Joint Filler shall be included in the price bid for Item I-7, Reinforced Concrete Approach Slabs.

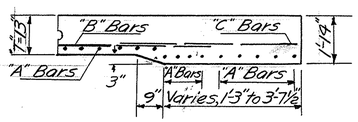


APPROACH SLAB DETAIL A



APPROACH SLAB DETAIL B

NOTE:
"A" Bars = #8
"B" Bars = #5
"C" Bars = #5
"C" Bars shall be placed normal to the centerline of roadway



SECTION D-D

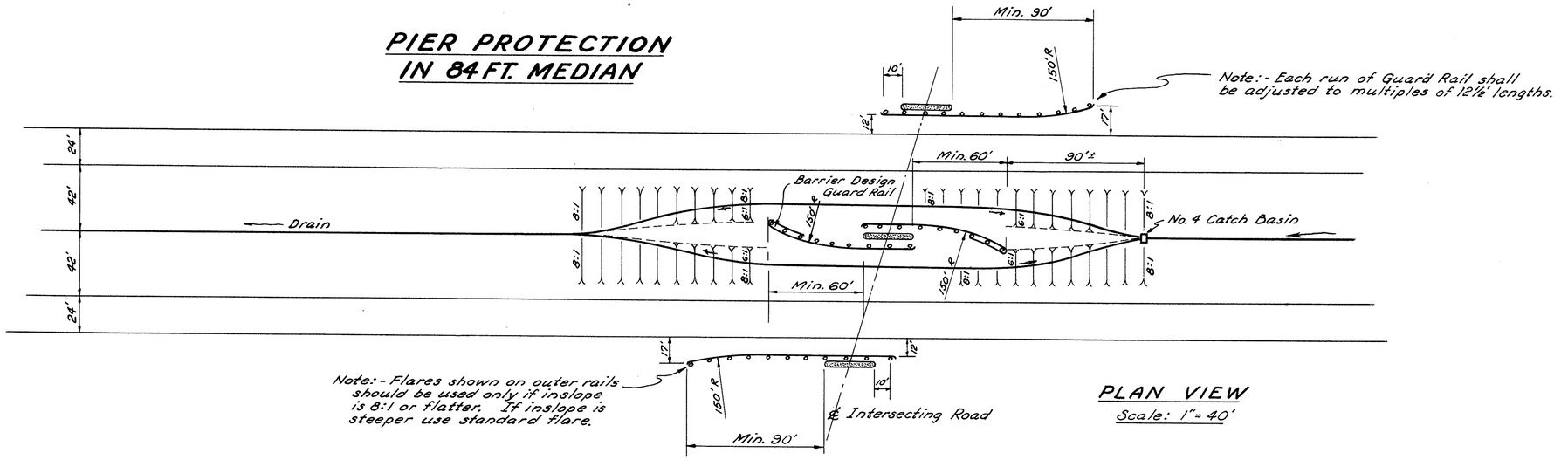
TYPICAL APPROACH SLAB DETAILS FOR CROSS ROAD BRIDGES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(116)	

21
202

ATB-1-15.73
ASHTABULA COUNTY

PIER PROTECTION IN 84 FT. MEDIAN

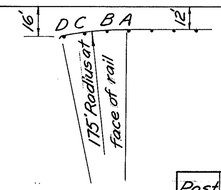


PLAN VIEW
Scale: 1" = 40'

CROSS SECTION AT PIERS
Scale: ⅛" = 1'-0"

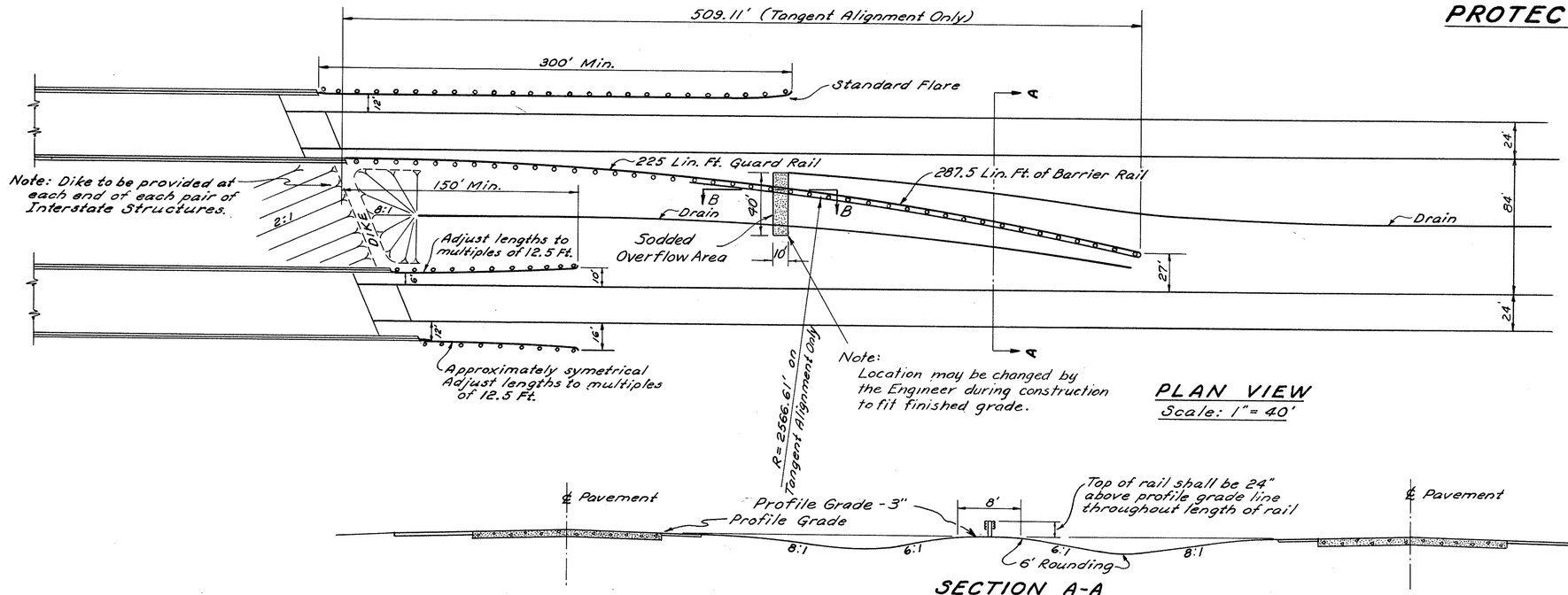
STANDARD FLARE GUARD RAIL DETAIL

℄ Survey



Post	Offset
A	12'
B	12.45'
C	13.78
D	16'

PROTECTION AT TWIN STRUCTURES 84 FT. MEDIAN

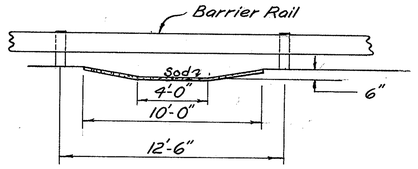


PLAN VIEW
Scale: 1" = 40'

SECTION A-A
Scale: ⅛" = 1'-0"

Post Offset
Distance Between edge of Pavement and Face of Guard Rail

Post Number and offset					
½	6.01	14	11.96	28	29.79
1	6.03	15	12.84	29	31.52
2	6.12	16	13.77	30	33.31
3	6.27	17	14.77	31	35.16
4	6.49	18	15.85	32	37.07
5	6.76	19	16.98	33	39.05
6	7.09	20	18.14	34	41.08
7	7.49	21	19.38	35	43.17
8	7.94	22	20.69	36	45.33
9	8.46	23	22.09	37	47.54
10	9.04	24	23.49	38	49.82
11	9.67	25	25.00	39	52.15
12	10.38	26	26.52	40	54.55
13	11.13	27	28.12	41	57.01



SECTION B-B
Scale ¼" = 1'-0

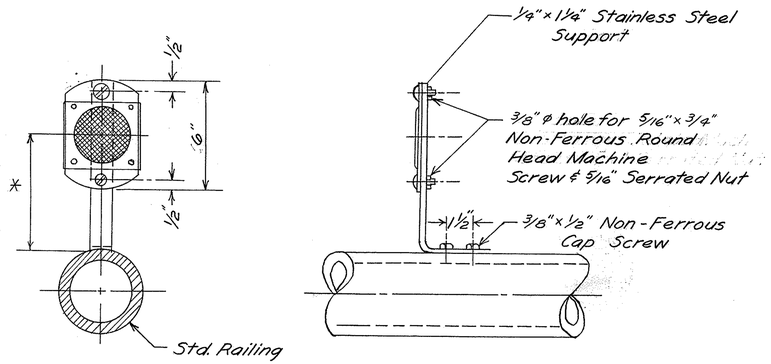
GUARD RAIL

TYPICAL DETAIL

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	F-1103(16)	

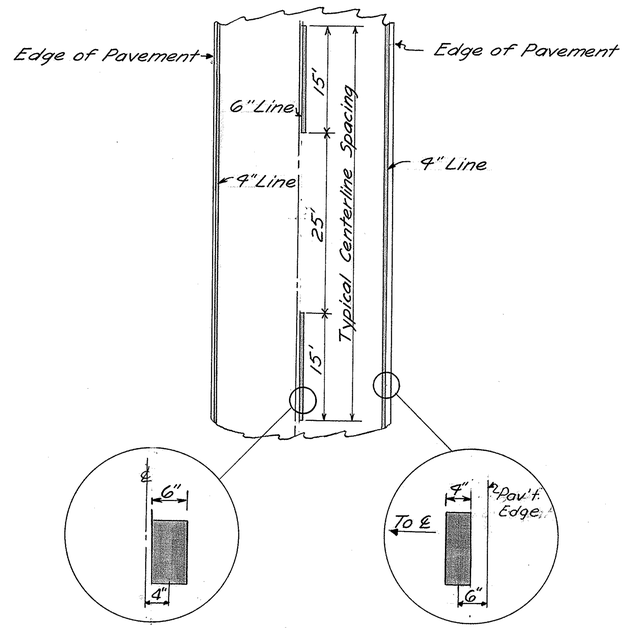
22
202

ATB-1-15.73
ASHTABULA COUNTY



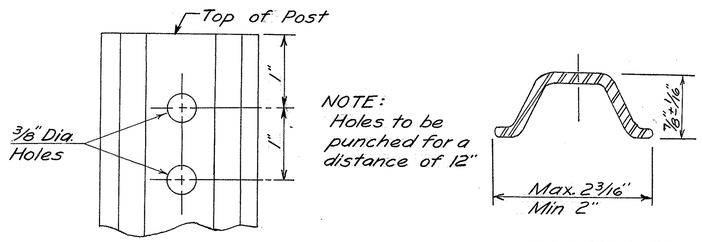
* Length of Steel Support Shall be such that the center of the delineator will be 98" above the elevation of a point in the bridge deck located 12' from the face of the parapet.

DELINEATOR AND BRIDGE RAIL BRACKET



Scale 1"=10

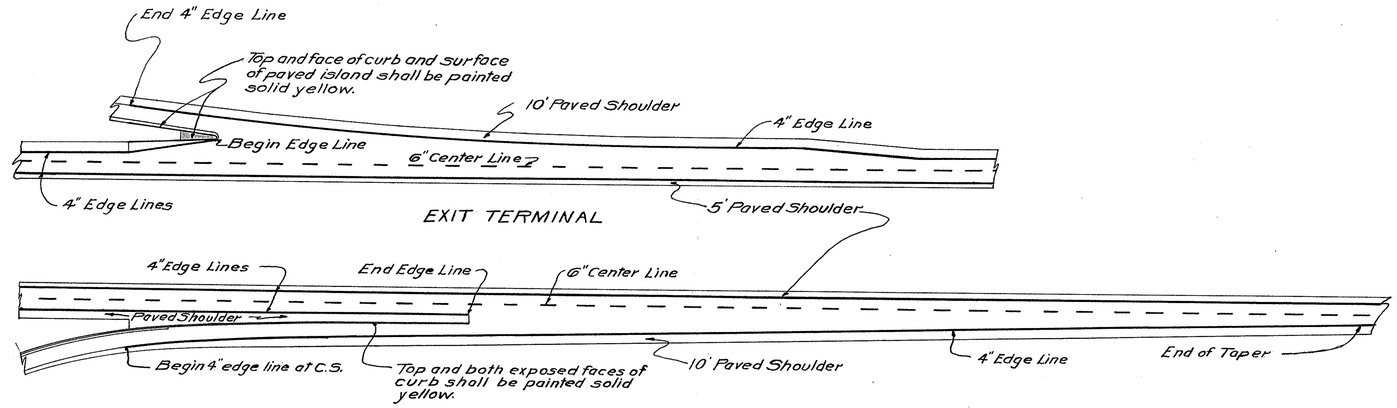
PAVEMENT MARKING DETAILS



SECTION VIEW

Length of Post 7'-6" ± 1/4"
No. Holes - 12 per post
Weight - 1.12 lbs. per foot

STEEL DRIVE POST FOR DELINEATOR



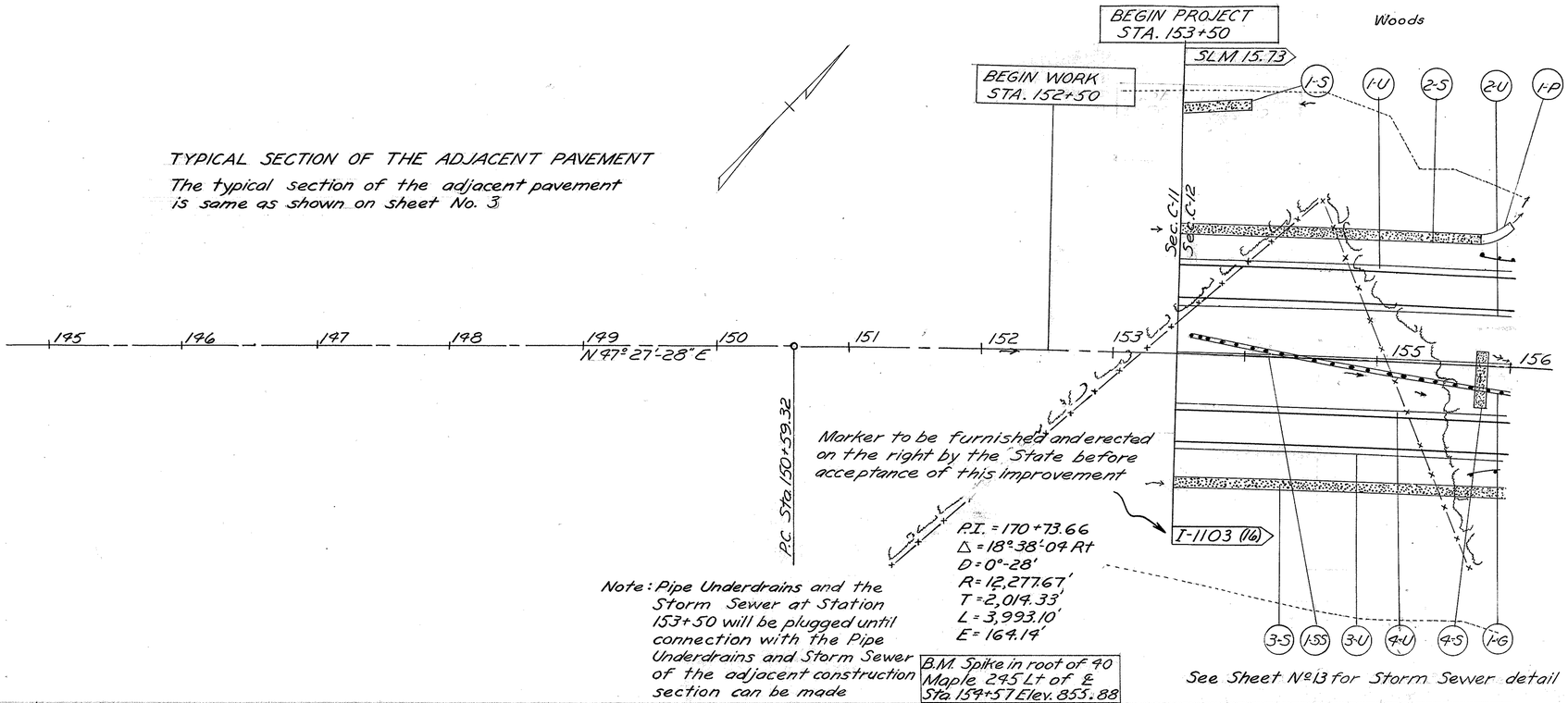
TERMINAL STRIPING DETAILS

FED. RD. DIV. NO.	STATE	PROJECT		23
2	OHIO	I-1103 (16)		202

ATB-1-15.73
ASHTABULA COUNTY

TYPICAL SECTION OF THE ADJACENT PAVEMENT

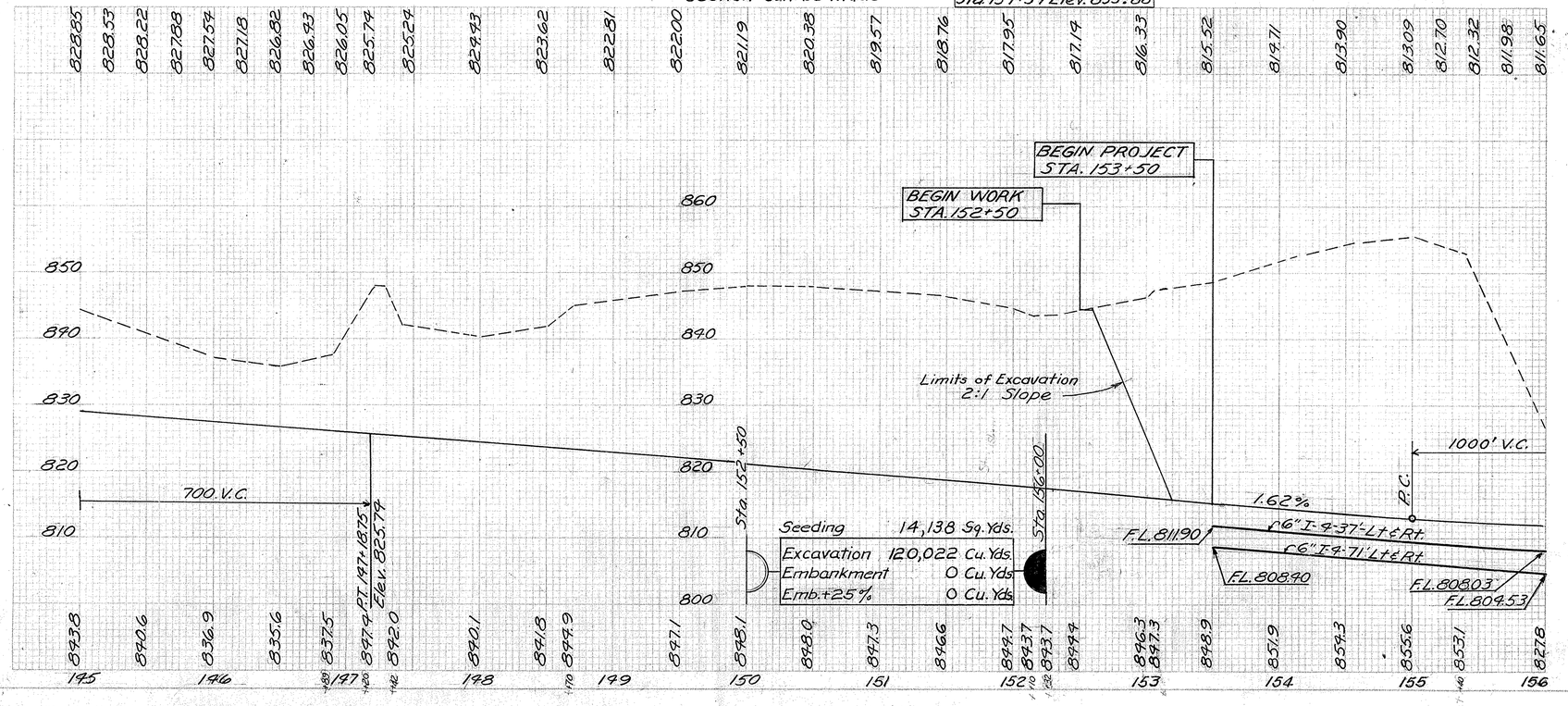
The typical section of the adjacent pavement is same as shown on sheet No. 3



Note: Pipe Underdrains and the Storm Sewer at Station 153+50 will be plugged until connection with the Pipe Underdrains and Storm Sewer of the adjacent construction section can be made

B.M. Spike in root of 40 Maple 245 Lt of & Sta. 154+57 Elev. 855.88

See Sheet No 13 for Storm Sewer detail



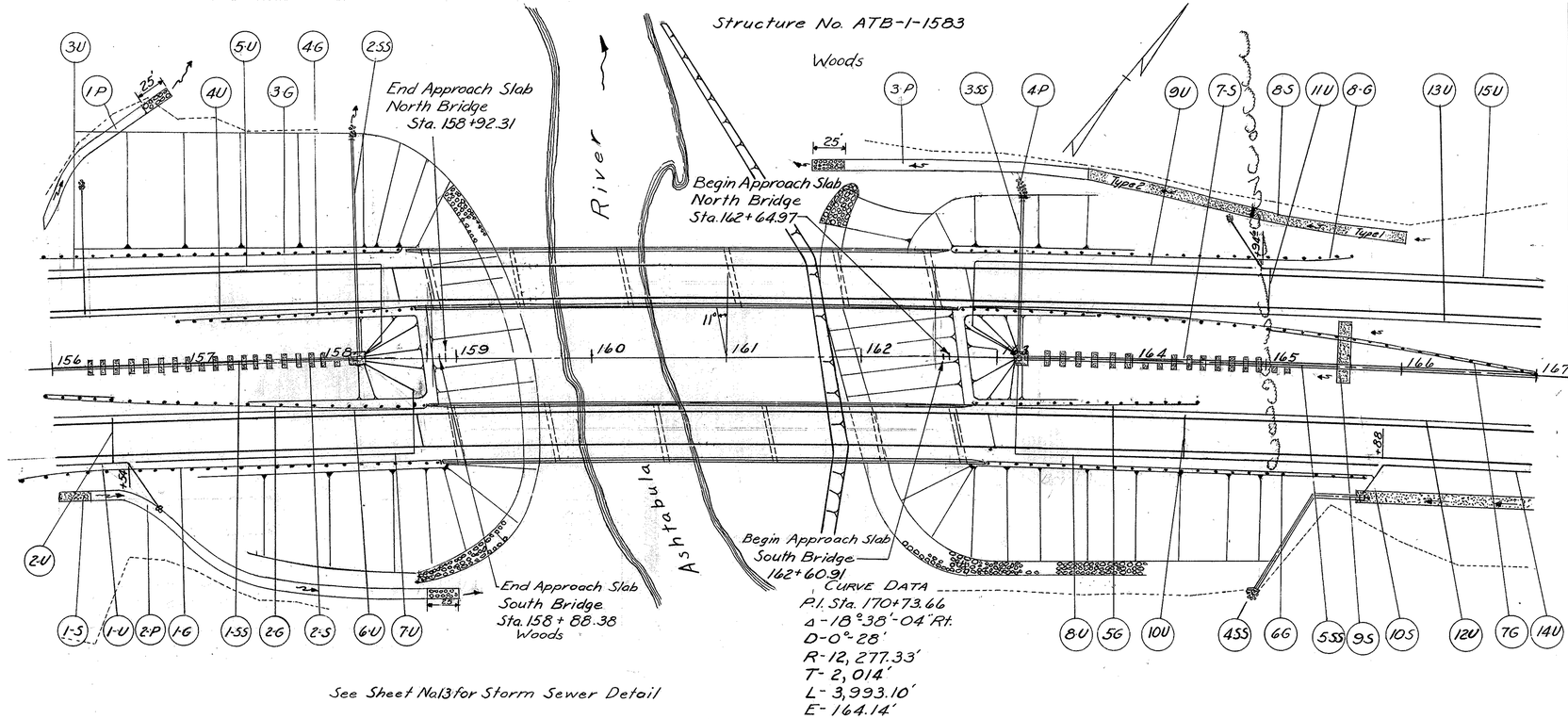
DRAINAGE

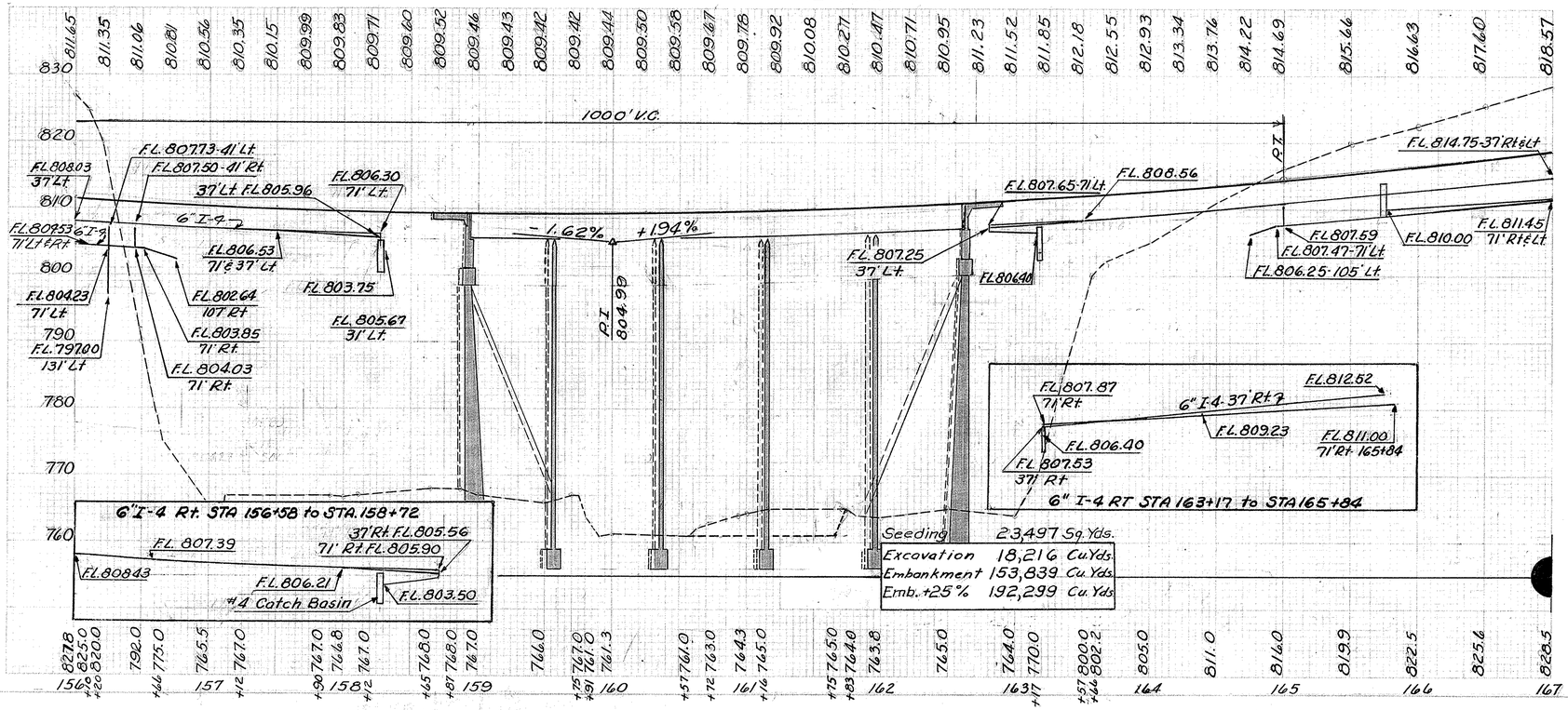
Mark	Station	I-4 6" Pipe Under-drains	I-10 Sodding Type I	I-14 Paved Gutter Type A			
		Lin. Ft.	Sq. Yds.	Lin. Ft.			
1-U	153+50 - 156+00	250					
2-U	153+50 - 156+00	250					
3-U	153+50 - 156+00	250					
4-U	153+50 - 156+00	250					
1-S	153+50 - 154+00		50				
2-S	153+50 - 155+75		225				
3-S	153+50 - 156+00		250				
4-S	155+88		49				
1-P	155+75 - 156+00		8	25			
	Total	1000	582	25			

ROADWAY

		I-15 Barrier Rail Lin. Ft.					
1-G	153+66.5 156+00	233.5					
	Total	233.5					

Sta. 152+50 to Sta. 156+00





PROPOSED STRUCTURE

TYPE: Continuous steel beam with reinf. concrete deck and substructure
SPANS: 64'-3@80'-64' ℄ bearings
ROADWAY: 42' f/f parapets with 1'-0" curbs
LOAD FREQUENCY: C.F. 2000 Adequate for AASHO alternate loading
SKEW: 8° North Br.; 14°-15' South Br.
WEARING SURFACE: 1" Monolithic concrete
APPROACH SLAB: AS-1-54 (25' long)
ALIGNMENT: 0°-28' curve
SUPERELEVATION: None

FED. AID DIVISION	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
2	OHIO	I-1103(16)	24	202

ATB-1-15.73
ASHTABULA COUNTY

DRAINAGE

Mark	Station	I-4 6" Pipe Underdrain Lin. Ft.	I-4 8" Outlet Pipe Underdrain Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend	6"x6" Tee	6"-90° Bend	S-29 Aggregate Erosion Pad Cu. Yds.	L-10 Sodding Type 1 Sq. Yds.	Type 2 Sq. Yds.	Type 3 Sq. Yds.
1U	156+00 - 156+75	82	10	1	1		0.3			
2U	156+45	30								
3U	156+00 - 156+25	102	10		1		0.3			
4U	156+00 - 158+45	244								
5U	156+29 - 158+45	278	10	1	1	1				
6U	156+00 - 158+68	267								
7U	156+58 - 158+68	277	10	1	1	1				
8U	163+17 - 165+84	319	10		2	1				
9U	162+82 - 164+91	287	10	1	1	1				
10U	164+40	30								
11U	165+00	30								
12U	163+17 - 167+00	382								
13U	162+82 - 167+00	417								
14U	165+75 - 167+00	127	10	1						
15U	164+75 - 167+00	297	10	1	1		0.3			
1-S	156+00 - 156+25							25		
2-S	156+20 - 158+33							54		
7-S	163+12 - 165+22							54		
8-S	163+65 - 166+00							117	125	
9-S	165+57							50		
10-S	165+70 - 167+00							130		
	Total	3116	80	6	8	4	0.9	430	125	

DRAINAGE & ROADWAY

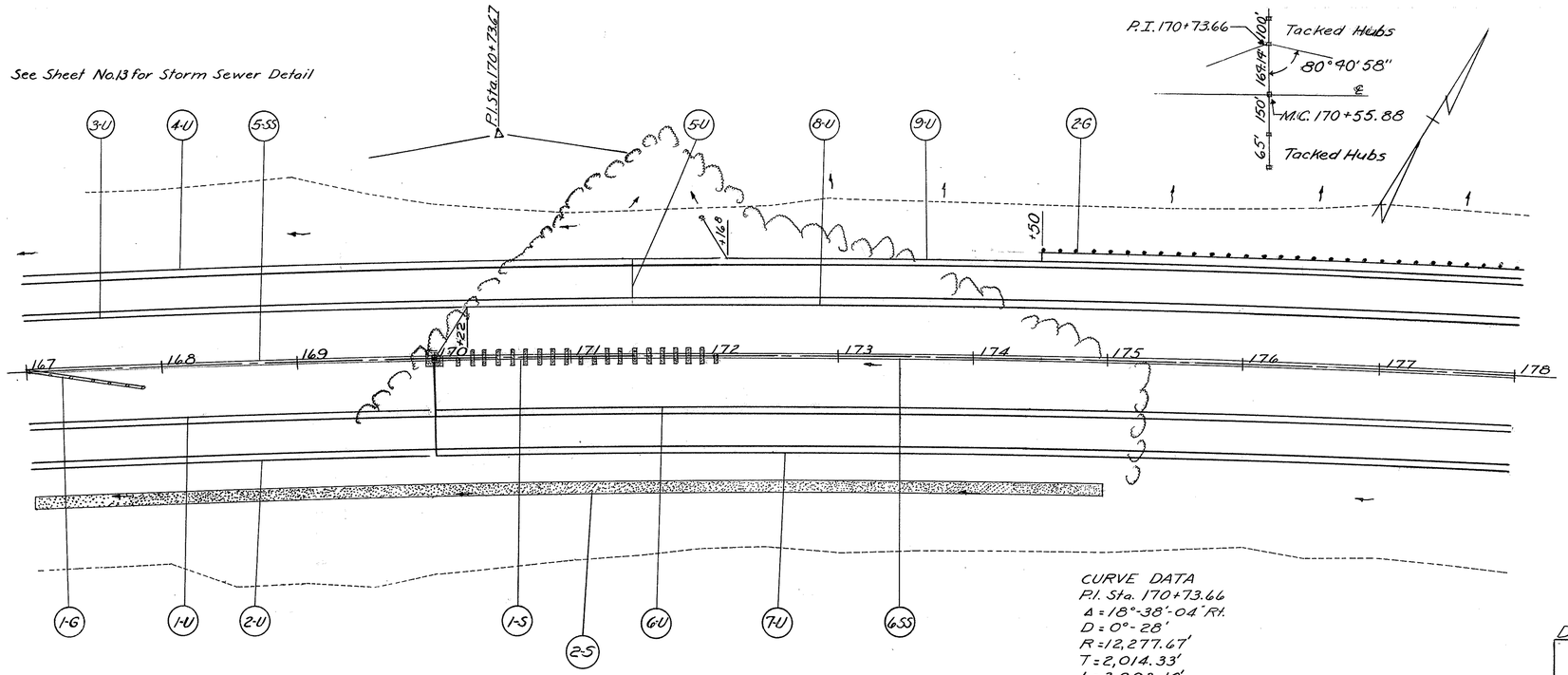
Mark	Station	I-15 Guard Rail Lin. Ft.	I-15 Barrier Rail Lin. Ft.		L-10 Sodding Type 1 Sq. Yd.	I-14 Paved Gutter Type A Lin. Ft.	I-14 Paved Gutter Type B Lin. Ft.	I-10 Dumped Rock Chan. Protection Cu. Yds.
1-P	156+00 - 156+95				36	108		19
2-P	156+25 - 159+00				92	275		19
3-P	161+65 - 163+65				65	175		19
4-P	163+17				7			15
1-G	155+83 - 158+83	300						
2-G	156+00 - 158+79	225	54					
3-G	155+73.5 - 158+61	287.5						
4-G	156+83 - 158+68	175						
5-G	162+84 - 164+46.5	162.5						
6-G	162+95 - 164+82.5	187.5						
7-G	162+72 - 167+00	225	203					
8-G	162+65 - 165+65	300						
	Total	1862.5	257		200	558		72

Sta. 156+00 to Sta. 167+00

FED. ROAD DIVISION	STATE	PROJECT		25
2	OHIO	I-1103(16)		202

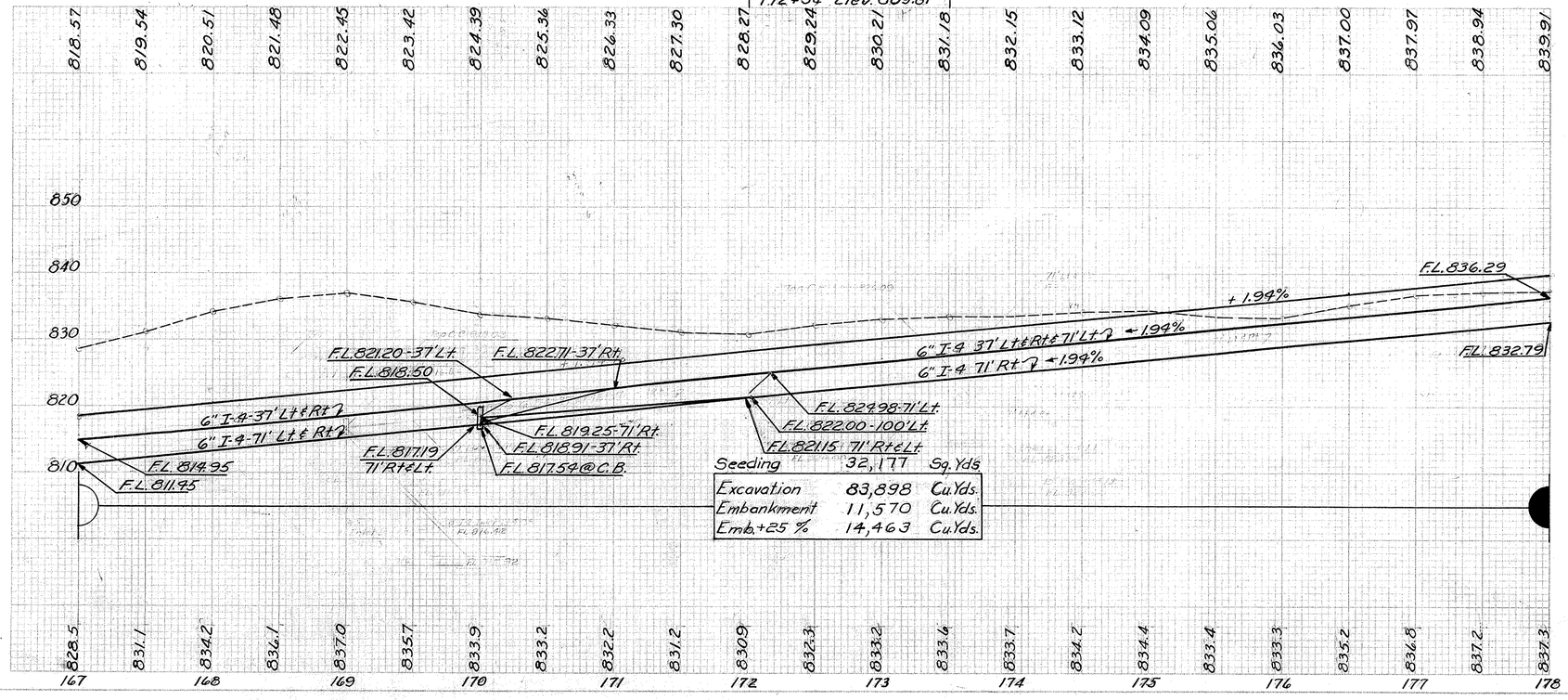
ATB-1-15.73
ASHTABULA COUNTY

See Sheet No.13 for Storm Sewer Detail



CURVE DATA
P.I. Sta. 170+73.66
Δ = 18°-38'-04" Rt.
D = 0°-28'
R = 12,277.67'
T = 2,014.33'
L = 3,993.10'
E = 164.14'

B. M. Spike in Root 24"
Elm. 298' Lt. of ℄ Sta.
172+54 Elev. 809.81



Seeding	32,177	Sq. Yds.
Excavation	83,898	Cu. Yds.
Embankment	11,570	Cu. Yds.
Emb. +25 %	14,463	Cu. Yds.

DRAINAGE

Mark	Station	I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-2 8" Storm Sewer Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend	6"-90° Bend	6"x6" Tee	8"x6" Tee	6"x8" Increaser	S-29 Aggregate for Erosion Pad Cu. Yds.
1-U	167+00-169+96	296								
2-U	167+00-169+96	296								
3-U	167+00-170+18	318								
4-U	167+00-172+13	512					1			
5-U	171+50	30								
6-U	170+00-178+00	800								
7-U	170+00-178+00	799	10	56		1		1	1	
8-U	170+00-178+00	808	10		1					
9-U	172+00-178+00	606	10		1					0.3
	Total	4465	30	56	2	1	1	1	1	0.3

ROADWAY & DRAINAGE

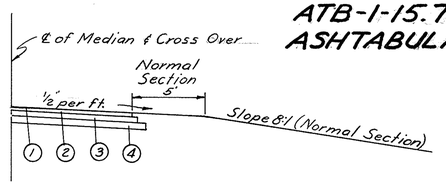
Mark	Station	I-15 Guard Rail Lin. Ft.	I-15 Barrier Rail Lin. Ft.			L-10 Sodding Type I Sq. Yds.		
1-G	167+00-167+84		84℄					
2-G	174+50-178+00	350						
1-S	169+95 172+08					54		
2-S	167+00 175+00					800		
	Total	350	84℄			854		

Sta. 167+00 to Sta. 178+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

26
202

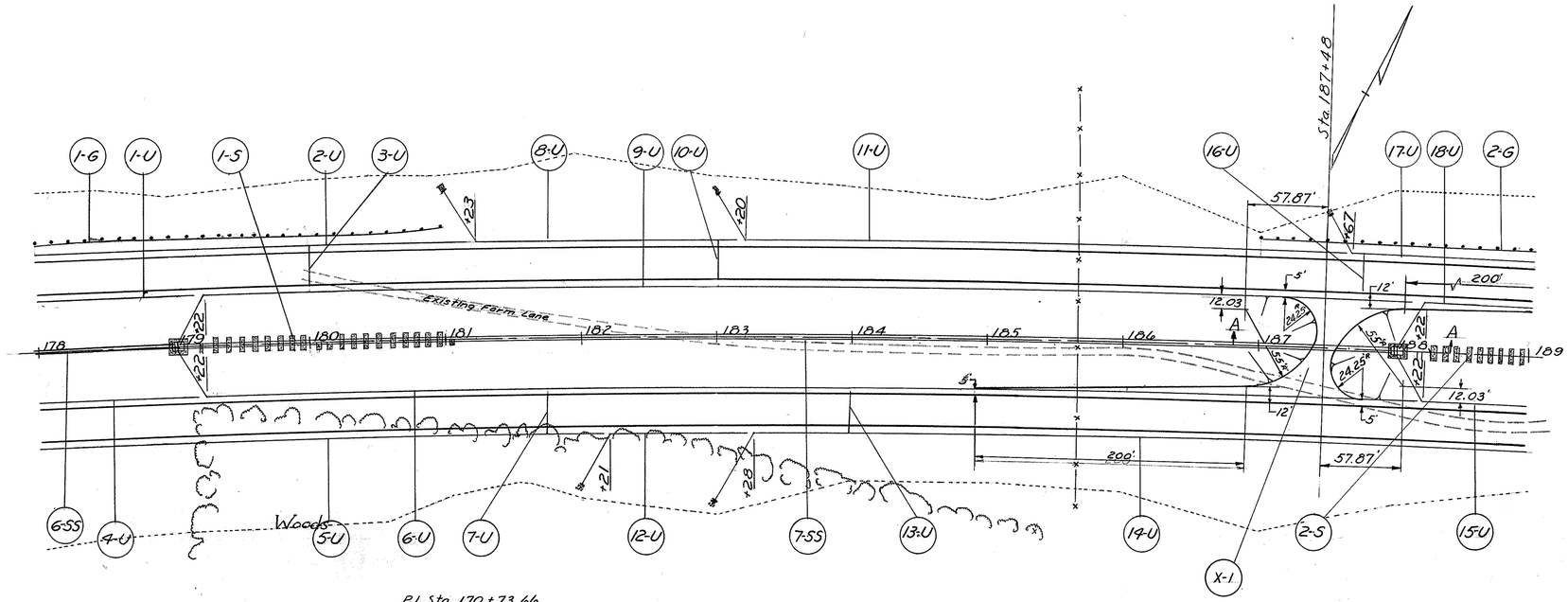
ATB-1-15.73
ASHTABULA COUNTY



HALF SECTION "A-A" THROUGH CROSS OVER AT STA. 187+48

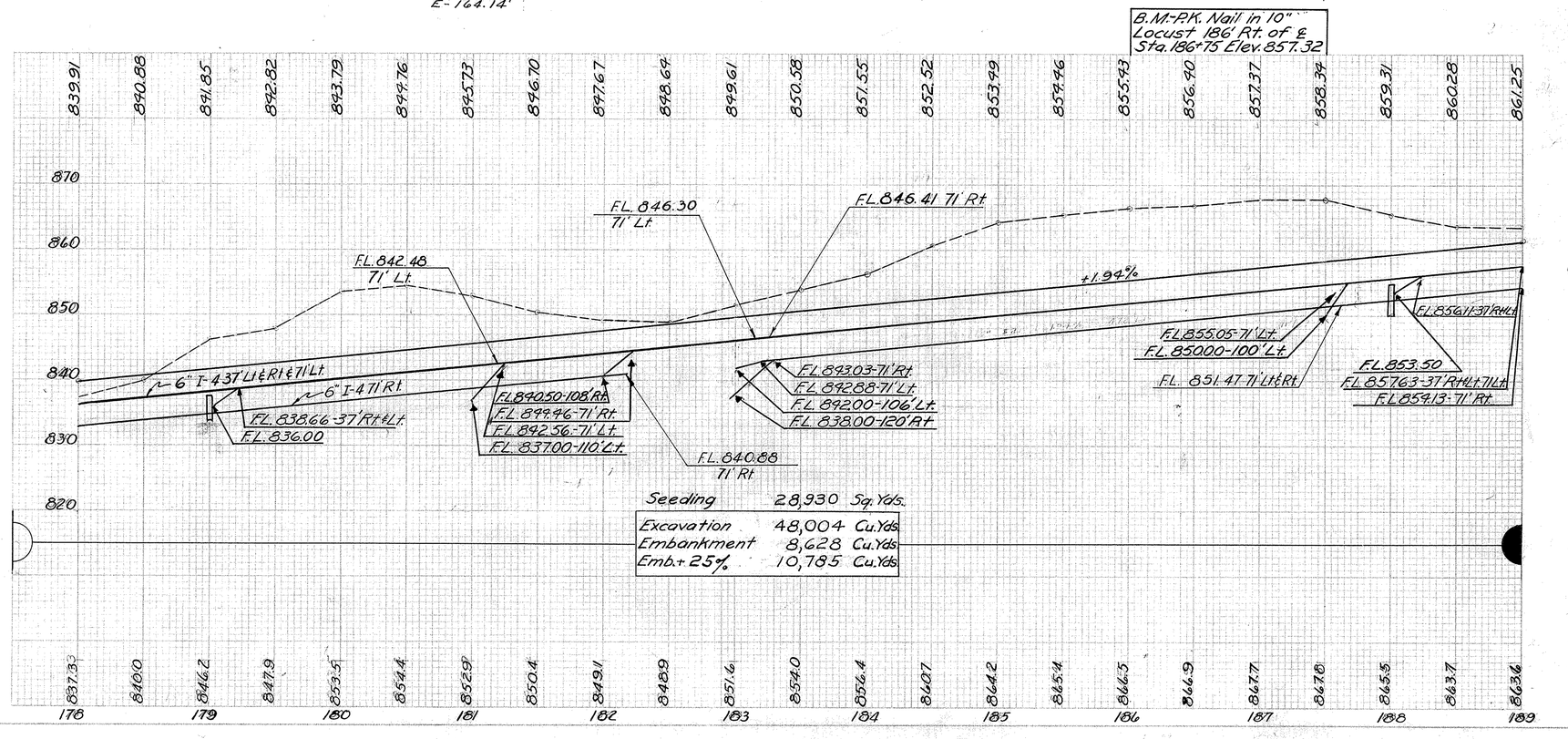
Scale in feet 0 1 2 3 4 5 10

1 T-31 Bituminous Surface Treatment (See Proposal Note)
2 B-33 3" Bituminous Macadam Base Course
3 B-119 6" Crushed Aggregate Base
4 I-22 6" Subbase



P.I. Sta. 170+73.66
Δ-18°38'-04" Rt.
D-0°-28'
R-12,277.67'
T-2,014.33'
L-3,993.10'
E-164.14'

Note: See Sheet No 13. for Storm Sewer detail



Seeding	28,930	Sq. Yds.
Excavation	48,004	Cu. Yds
Embankment	8,628	Cu. Yds
Emb. + 25%	10,785	Cu. Yds

CROSS OVER

Mark	B-33 3" Bit. Macadam Base Course Sq. Yds.	T-31 Bit. Surface Treatment Sq. Yds.	B-119 6" Crushed Aggregate Base Sq. Yds.	I-22 6" Subbase Sq. Yds.	I-9 Stone Underdrain Lin. Ft.
1-X	461	461	470	480	24

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drain Lin. Ft.	I-4 8" Out-let Pipe Lin. Ft.		I-5 Pipe Special 6"-60° Bend Each	I-5 Pipe Special 6"×6" Tee Each	I-5.29 Aggregate Erosion Pad Cu. Yds.	I-10 Sodding Type I Sq. Yds.
1-U	178+00 179+18	1.18						
2-U	178+00 181+19	3.18				1		
3-U	180+00	30						
4-U	178+00 179+18	1.18						
5-U	178+00 182+17	4.16				1		
6-U	179+00 188+18	9.29	10		1			
7-U	181+75	30						
8-U	181+00 183+16	2.22	10		1	1	0.3	
9-U	179+00 188+18	9.29	10		1			
10-U	183+00	30						
11-U	183+00 187+63	4.72	10		1		0.3	
12-U	182+00 183+24	1.36	10		1		0.3	
13-U	184	30						
14-U	183+00 189+00	6.18	10		1	1	0.3	
15-U	188+00 189+00	1.06	10		1			
16-U	187+75	30						
17-U	187+50 189+00	1.50	10		1	1	0.3	
18-U	188+00 189+00	1.06	10		1			
1-S	178+95 181+08							54
2-S	187+95 189+00							34
	Total	47.78	90		9	5	1.5	88

ROADWAY

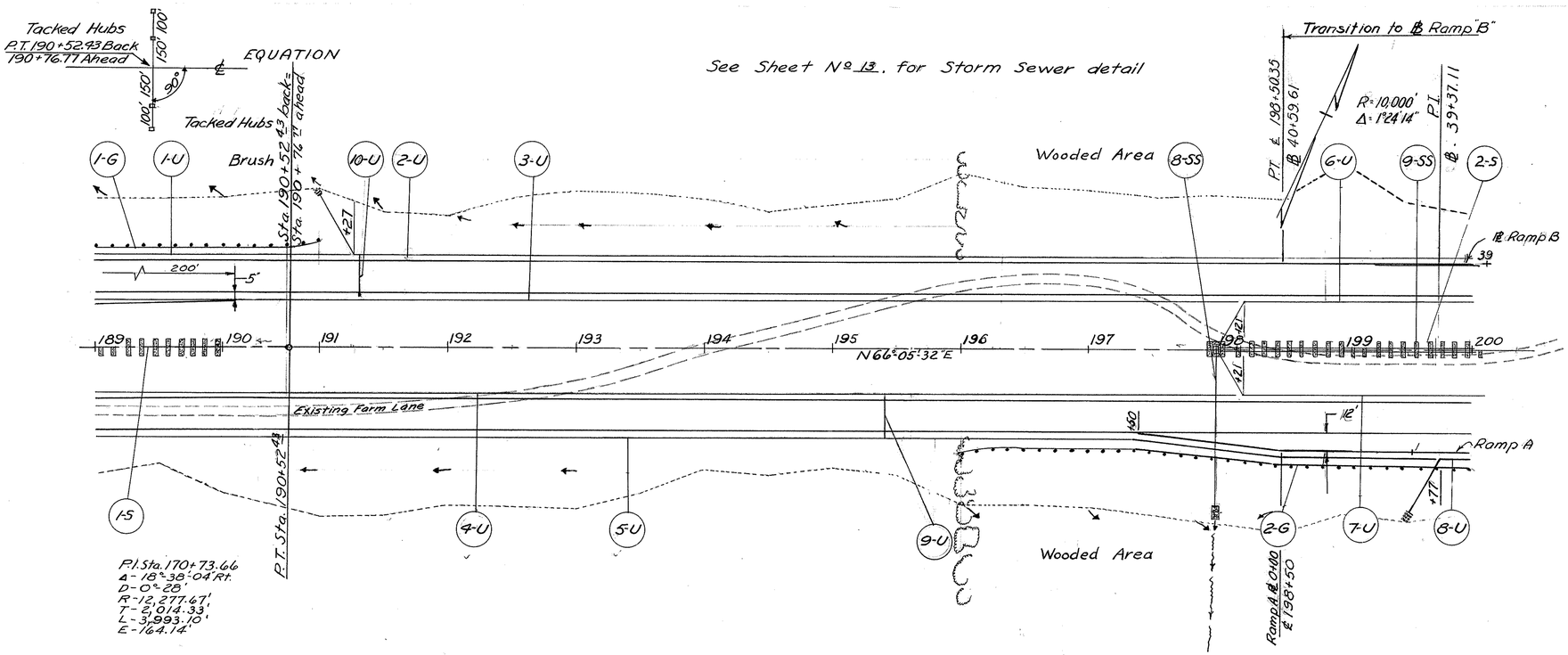
Mark	Station	I-15 Guard Rail Lin. Ft.					
1-G	178+00 181+00	300					
2-G	187+00 189+00	200					
	Total	500					

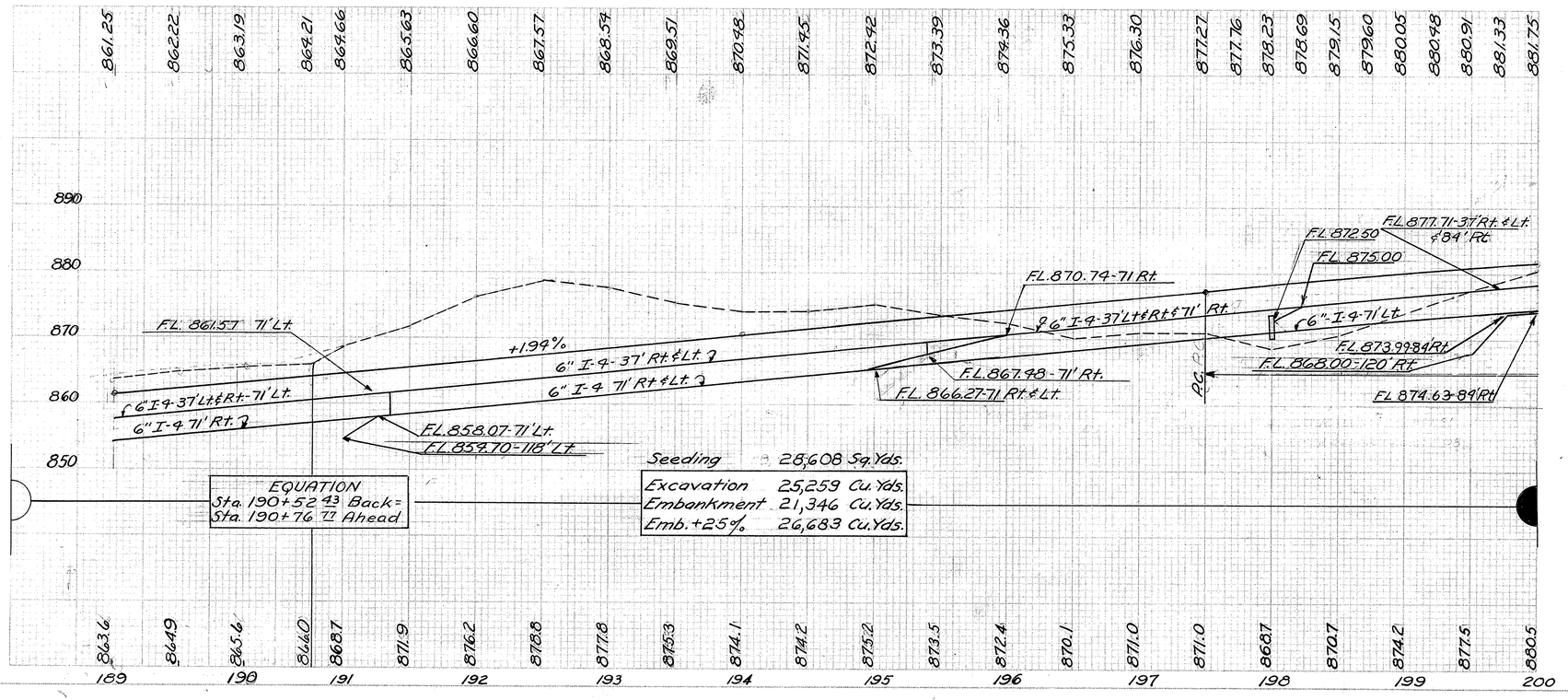
Sta. 178+00 to Sta. 189+00

SHEET NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	

27
202

ATB-1-15.73
ASHTABULA COUNTY





DRAINAGE

Mark	Station	I-7 6" Pipe Underdrain Lin. Ft.	I-7 8" Outlet Pipe Lin. Ft.		I-5 Pipe Special 6"×60° Bend Each	I-5 Pipe Special 6"×6" Tee Each	S-29 Aggregate Erosion Pad Cu. Yds.	L-10 Sodding Type 1 Sq. Yds.
1-U	189+00 191+23	199						
2-U	191+00 200+00	91.6	10		1	1	0.3	
3-U	189+00 198+17	917						
4-U	189+00 198+17	917						
5-U	189+00 199+73	1038				1		
6-U	198+00 200+00	209	10		1			
7-U	198+00 200+00	209	10		1			
8-U	199+50 200+00		10		1		0.3	
9-U	195+40	30						
10-U	195+35	30						
1-S	189+00 190+08							20
2-S	197+95 200+08							54
	Total	4465	40		4	2	0.6	74

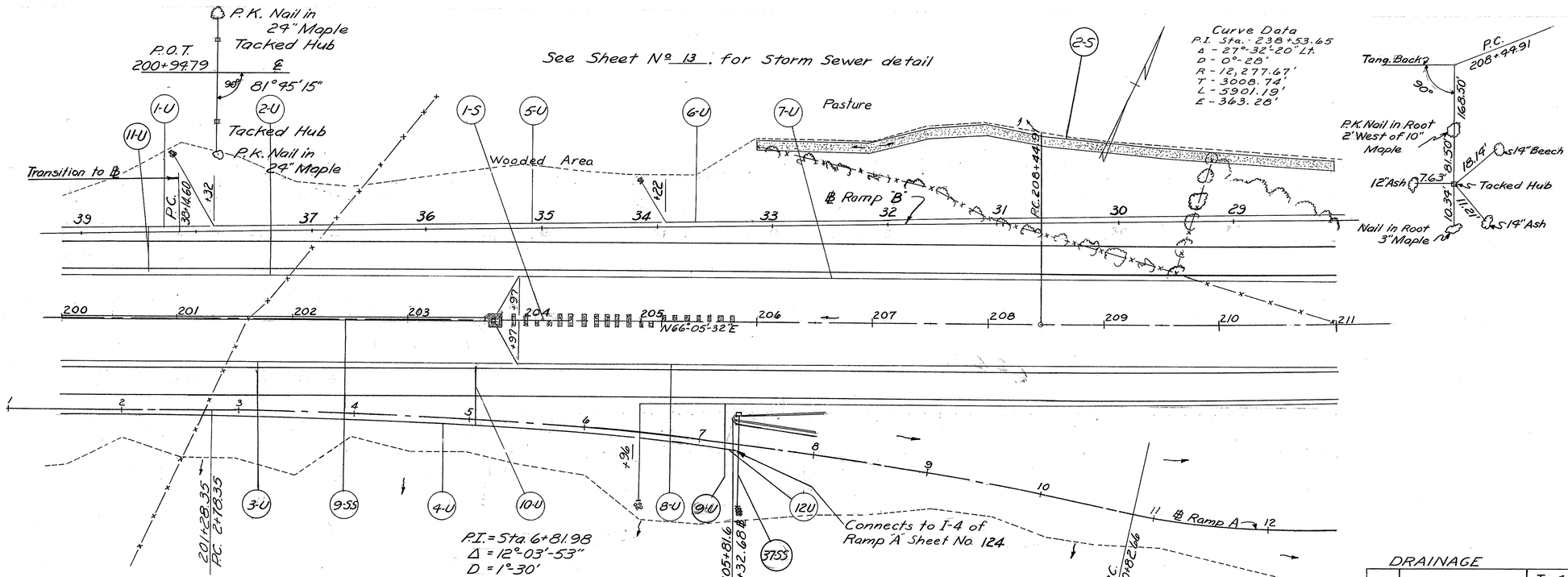
ROADWAY

		I-15 Guard Rail Lin. Ft.					
1-G	189+00 191+00	200					
2-G	196+00 200+00	400					
	Total	600					

Sta. 189+00 to Sta. 200+00

FED. NO. DIVISION	STATE	PROJECT		28
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY



Seeding	36,697	Sq. Yds.
Excavation	5,481	Cu. Yds.
Embankment	45,562	Cu. Yds.
Emb. +25%	56,953	Cu. Yds.

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drains	I-4 8"-Out-let Pipe	I-5 Pipe Special Each					I-2 8" Class A SS Under Pav't.	S-29 Aggregate Erosion Pad
		Lin. Ft.	Lin. Ft.	6"-60° Bend	6"x6" Tee	6"-90° Bend	6"x8" Increaser	8"x8"x6" Tee	Lin. Ft.	Cu. Yds.
1-U	200+00 201+28	126			1					
2-U	200+00 203+93	393								
3-U	200+00 203+93	393								
4-U	200+00 204+96	494			1					
5-U	201+00 205+1.	496	10	1						0.3
6-U	205+00 211+00	608	10	1						0.3
7-U	203+75 211+00	730	10	1						
8-U	203+75 211+00	730	10	1						
9-U	205+00 211+00	599	10			1	1	1	70	0.3
10-U	203+60	50								
11-U	200+75	40								
12-U	205+00 205+81.6	82								
	Total	4691	50	4	2	1	1	1	70	0.9

ROADWAY & DRAINAGE

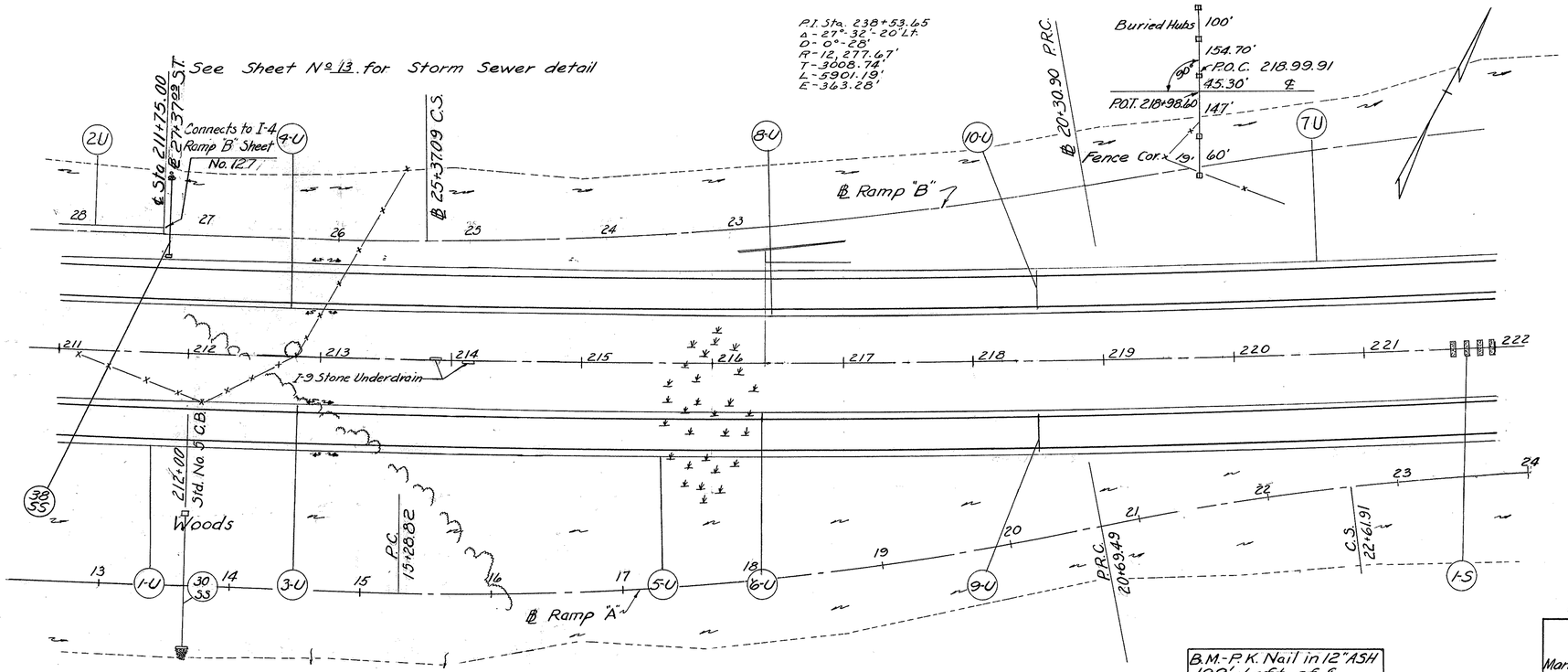
			L-10 Sodding Type I Sq. Yds.				
1-S	203+70 205+83		54				
2-S	206+00 211+00		504				
	Total		558				

Sta. 200+00 to Sta. 211+00

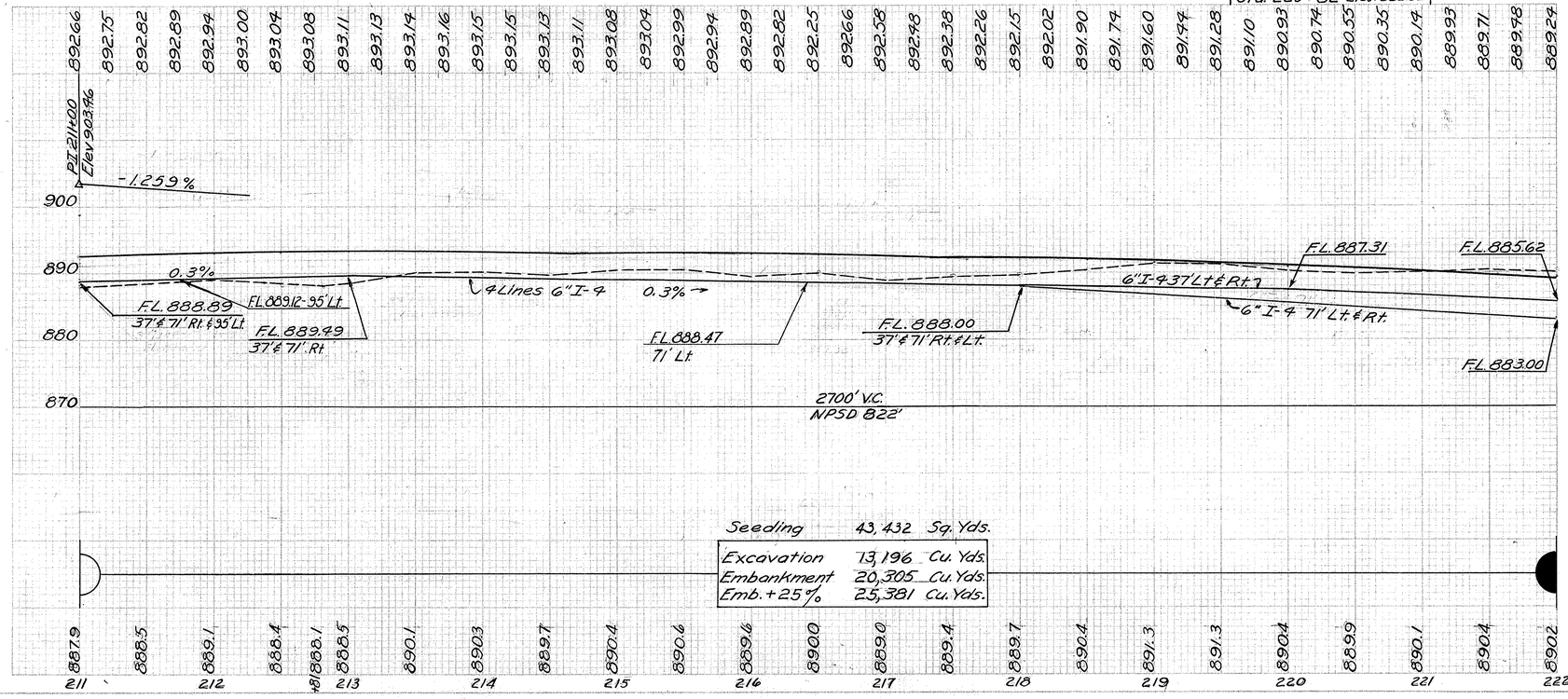
FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

29
202

ATB-1-15.73
ASHTABULA COUNTY



B.M.-P.K. Nail in 12" ASH
199' Left of ℄
Sta. 220+82 Elev. 882.92



Seeding 43,432 Sq. Yds.

Excavation	13,196	Cu. Yds.
Embankment	20,305	Cu. Yds.
Emb. +25%	25,381	Cu. Yds.

DRAINAGE

Mark	Station		I-4 6" Pipe Under-drain Lin. Ft.	I-5 Pipe Special 6"×6" Tee Each		L-10 Sodding Type I Sq. Yds.	
1-U	211+00	213+00	200				
2-U	211+00	211+75	75				
3-U	211+00	213+00	200				
4-U	211+00	213+00	200				
5-U	213+00	222+00	898	1			
6-U	213+00	222+00	900				
7-U	216+42	222+00	556	1			
8-U	213+00	222+00	900				
9-U	218+50		30				
10-U	218+50		30				
1-S	221+67	222+00				8	
	Total		3989	2		8	

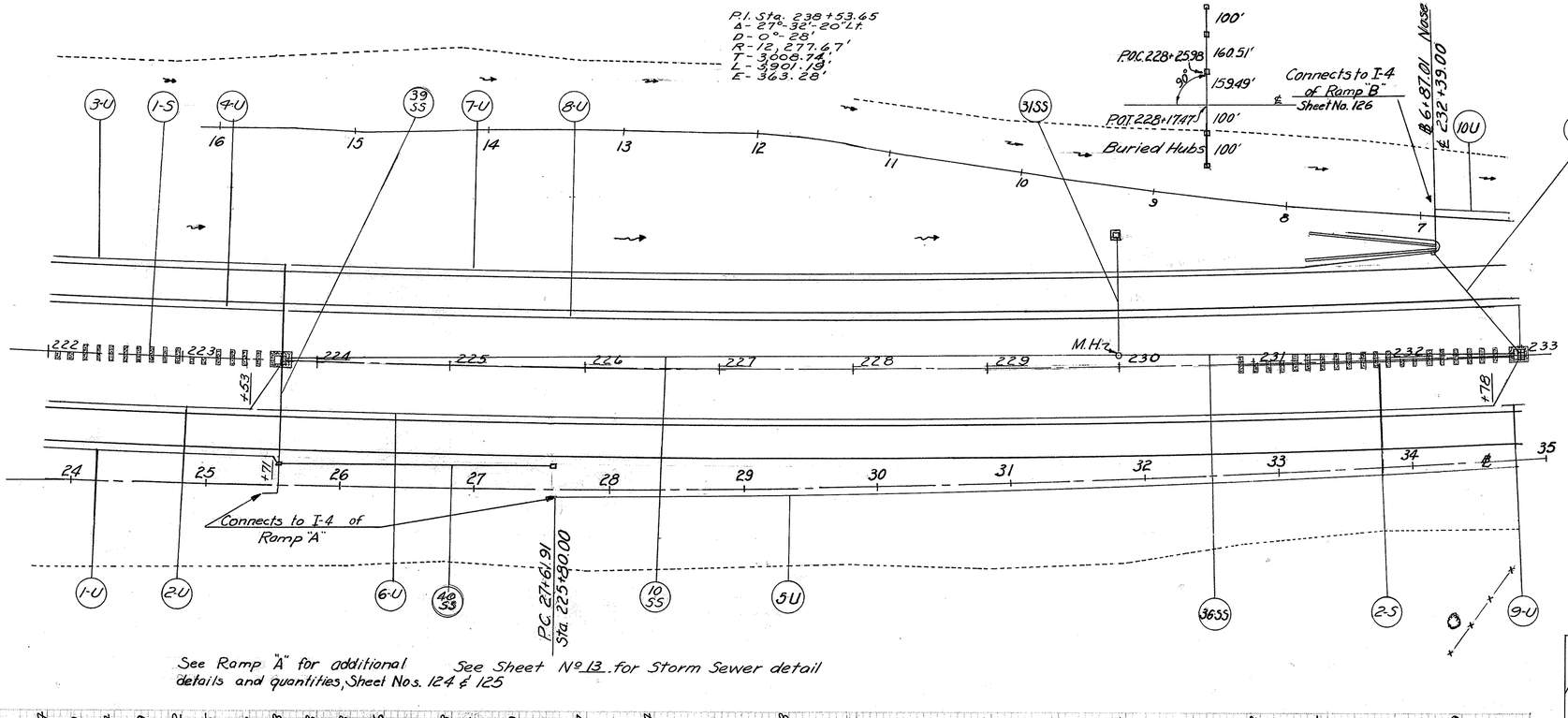
ROADWAY

Sta. 211+00 to Sta. 222+00

FED. ROAD DIV. NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	

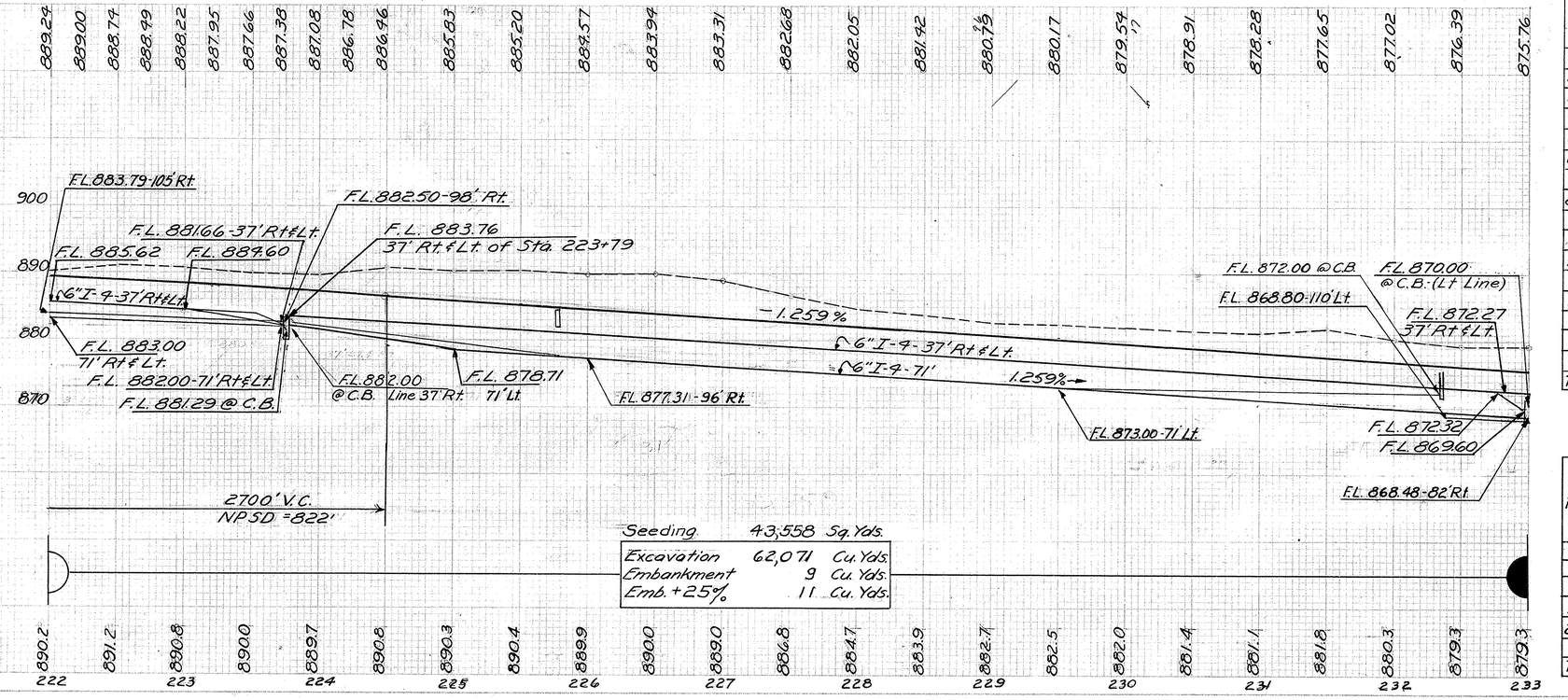
30
202

ATB-1-15.73
ASHTABULA COUNTY



See Ramp "A" for additional details and quantities, Sheet Nos. 124 & 125

See Sheet No 13 for Storm Sewer detail



Seeding	43,558	Sq. Yds.
Excavation	62,071	Cu. Yds.
Embankment	9	Cu. Yds.
Emb. +25%	11	Cu. Yds.

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drain Lin. Ft	I-4 8" Outlet Pipe M-64.1(a) Lin. Ft.	I-2 8" Class A Storm Sewer Under Pavt Lin. Ft.	I-5 Pipe Special Each 6"-90° Bend	6"×6" Tee	6"×8" In-creaser	6"-60° Bend	8"×8"×6" Tee
1-U	222+00 223+75	170	6					1	
2-U	222+00 223+75	184	10					1	
3-U	222+00 223+75	174	10	58	1		1		1
4-U	222+00 223+75	174							
5-U	225+80 233+00	720							
6-U	223+79 233+00	944	10					1	
7-U	223+79 232+35	850	10						
8-U	223+79 233+00	946	10		1				
9-U	232+82 233+00	18							
10-U	232+39 - 233+00	61							
Total		4231	46	58	2		1	3	1

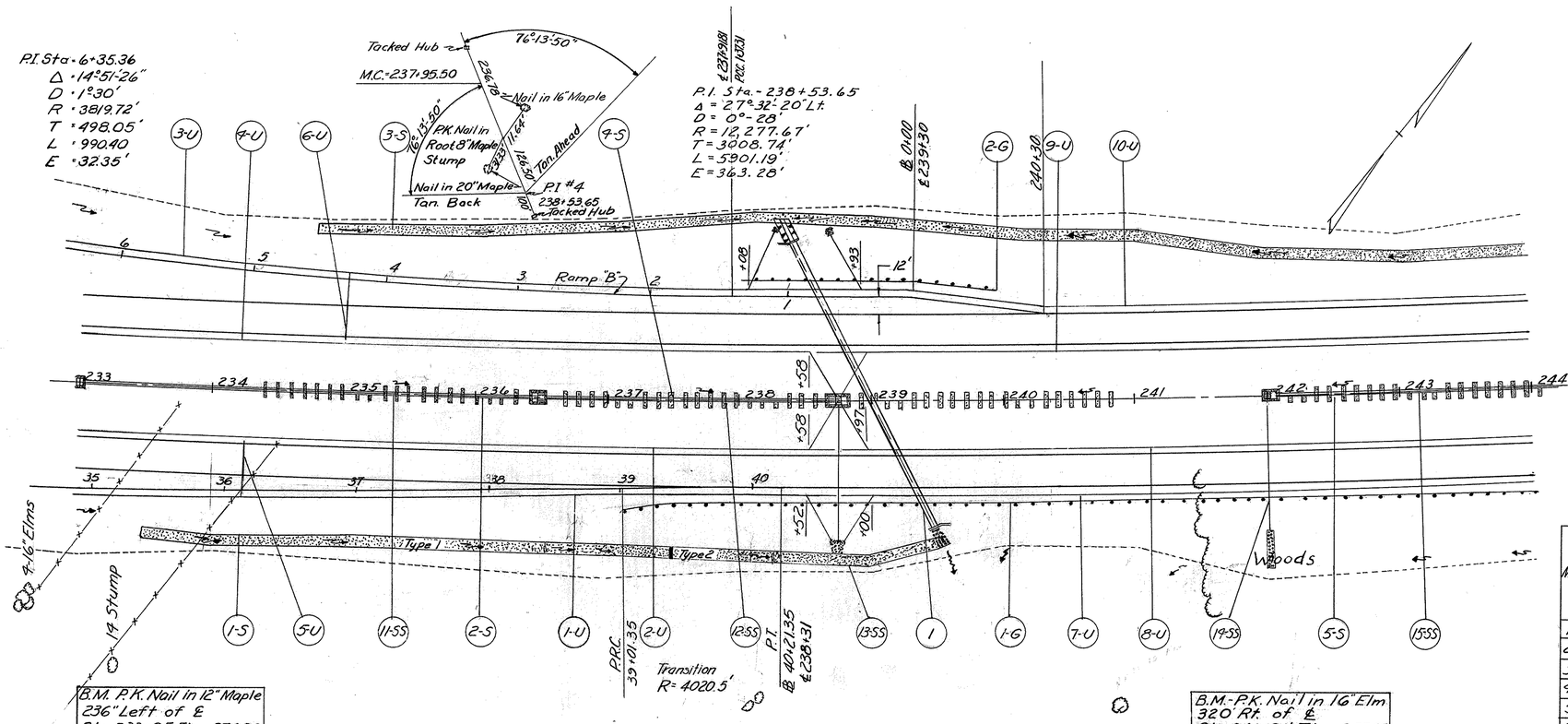
ROADWAY

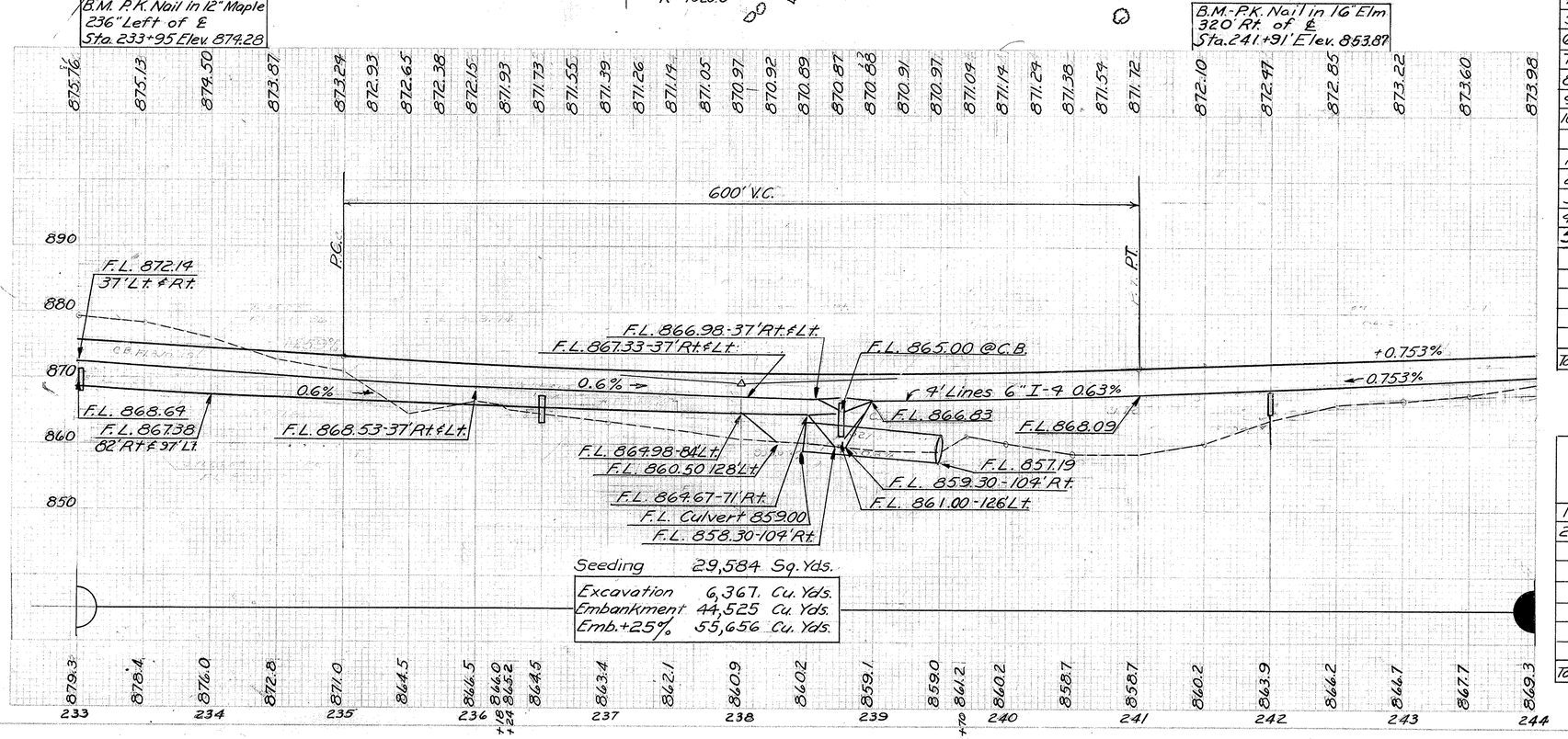
Mark	Station	I-10 Sodding Type 1 Sq. Yd.
1-S	222+00 223+81	46
2-S	230+92 233+06	54
Total		100

Sta. 222+00 to Sta. 233+00

FED. RD. DIVISION	STATE	PROJECT		31
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY





Mark	Station	Proposed			Detail on Sheet
		Type	Size	Lgth	
1	239+00	Pipe	54"	242'	161

DRAINAGE

Mark	Station	I-9 6" Pipe Under-drains	I-9 8" Outlet Pipe for Under-drains M-6.9	S-29 Aggregate Erosion Pad	I-5 Pipe Special 6"-60° Bend	6"x6" Wye	6"x6" Tee		L-10 Sodding Type 1	Type 2
		Lin. Ft.	Lin. Ft.	Cu. Yd	Each	Each	Each		Sq. Yd	Sq. Yds.
1-U	233+00 238+73	597	10	0.3		1	1			
2-U	233+00 238+74	601	10			1				
3-U	233+00 238+28	543	10	0.3	1		1			
4-U	233+00 238+74	588	10		1					
5-U	234+25	42								
6-U	235+00	50								
7-U	238+79 244+00	552	10	0.3		1				
8-U	238+76 244+00	548	10			1				
9-U	238+04 244+00	567	10	0.3						
10-U	238+62 244+00	625	10	0.3		1				
1-S	233+50 239+44								405	200
2-S	239+98 236+55								54	
3-S	239+80 244+00								920	
4-S	236+67 240+83								94	
5-S	241+95 244+08								54	
Total		4713	80	1.5	2	5	2		1527	200

ROADWAY

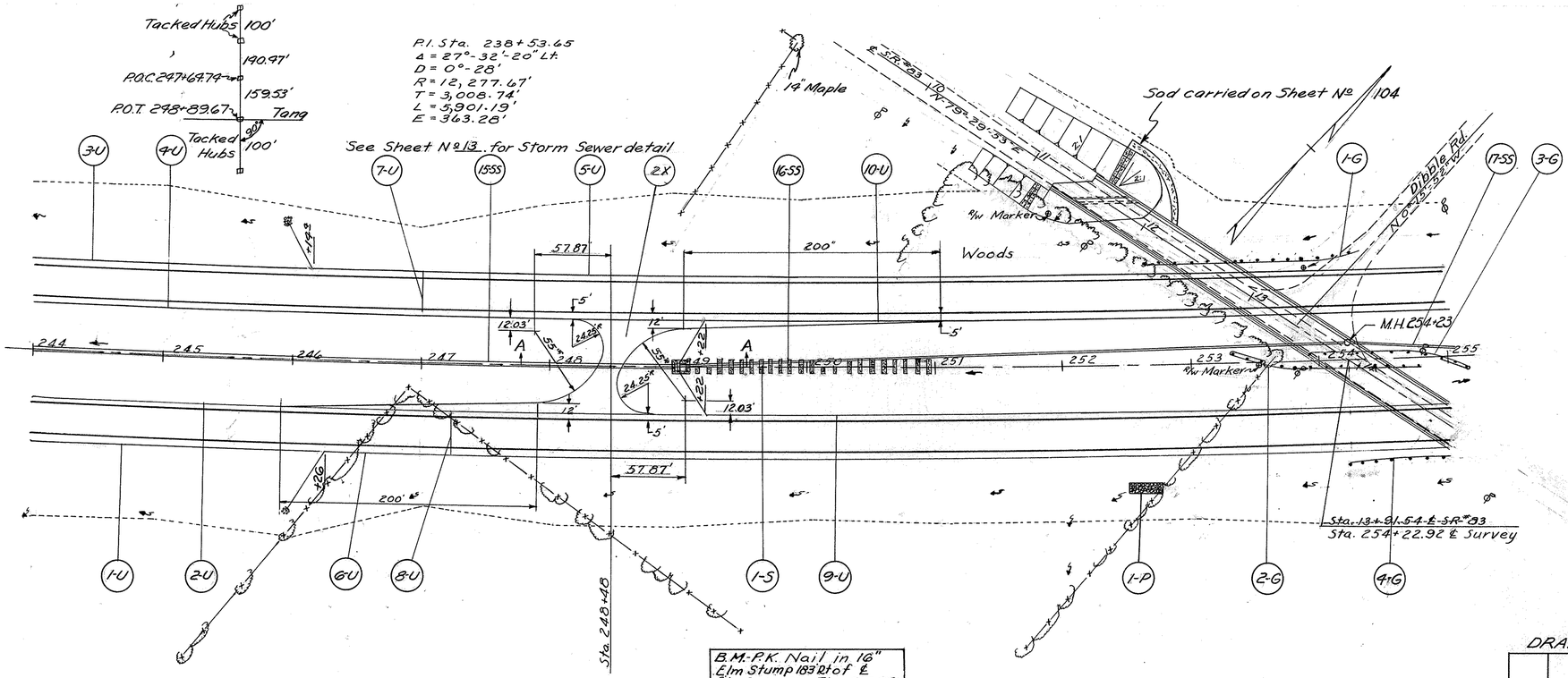
		I-15 Guard Rail Lin. Ft.						
1-G	237+00 244+00	700						
2-G	238+00 290+12.5	212.5						
Total		912.5						

Sta. 233+00 to Sta. 244+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

32
202

ATB-1-15.73
ASHTABULA COUNTY



For typical section of Cross Over see Sheet No. 26

CROSS OVER

Mark	B-33 3" Bit. Macadam Base Course Sq. Yds.	T-31 Bit. Surface Treatment Sq. Yds.	B-119 6" Crushed Aggregate Base Sq. Yds.	I-22 6" Subbase Sq. Yds.	I-9 Stone Underdrain Lin. Ft.
2-X	461	461	470	480	24

PROPOSED STRUCTURE

STRUCTURE Nº ATB-1-1764

TYPE: Continuous steel girder with reinforced concrete deck and substructure

SPAN: 86'-7"-144'-9"-144'-9"-86'-7"

ROADWAY: 29'-0" f/f 2'-0" Safety Curbs.

LOAD FREQUENCY: C.F.130 (51)

SKEW: 55°-13'-47" L.F.

WEARING SURFACE: 3/4" Monolithic Concrete.

APPROACH SLABS: 25'-0" Long

ALIGNMENT: Tangent

AVERAGE DAILY TRAFFIC (1975) 980

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drain Lin. Ft.	I-4 8" Out-let Pipe Lin. Ft.		I-5 Pipe Special 6"-60° Bend Each	I-5 Pipe Special 6"x6" Tee Each	S-29 Aggregate Erosion Pad Cu. Yds.	L-10 Sodding Type 1 Sq. Yds.
1-U	244+00 246+22	222						
2-U	244+00 249+18	518						
3-U	244+00 246+10	210						
4-U	244+00 249+18	518						
5-U	246+00 255+00	911	10		1	1	0.3	
6-U	246+00 255+00	912	10		1	1	0.3	
7-U	247+00	30						
8-U	247+25	30						
9-U	249+00 255+00	608	10		1			
10-U	249+00 255+00	608	10		1			
1-S	248+95 251+08							54
	Total	4567	40		4	2	0.6	54

ROADWAY & DRAINAGE

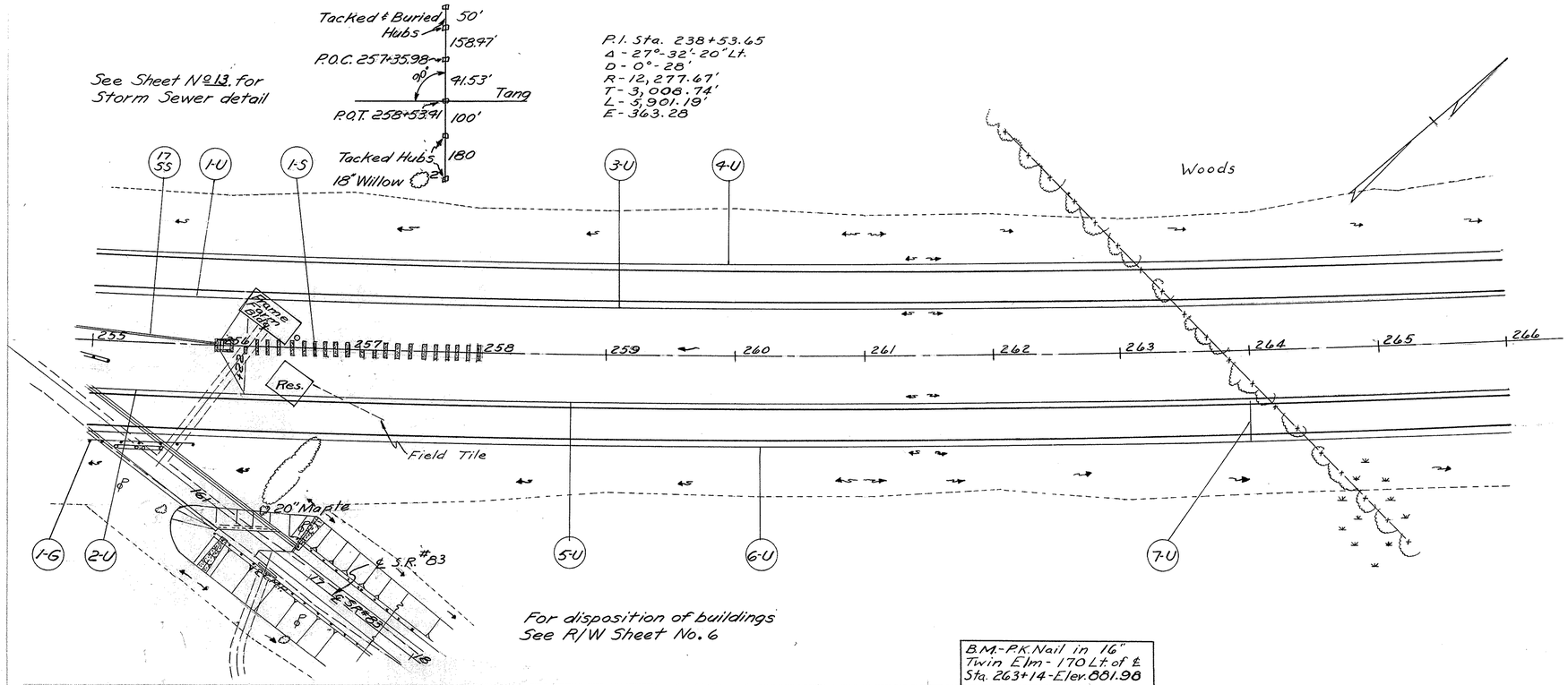
Mark	Station	I-15 Guard Rail Lin. Ft.	I-15 Barrier Rail Lin. Ft.	I-10 Dumped Rock Channel Cu. Yd.			
1-G	252+64 254+26 ℄	162 ℄					
2-G	253+32 254+54 ℄	100	25				
3-G	253+91 ℄ 255+14	100	25				
4-G	254+20 ℄ 255+00	80 ℄					
1-P	252+50 252+75			19			
	Total	443	50	19			

Seeding	28,577	Sq. Yds.
Excavation	44,149	Cu. Yds.
Embankment	9,923	Cu. Yds.
Emb. +25%	12,404	Cu. Yds.

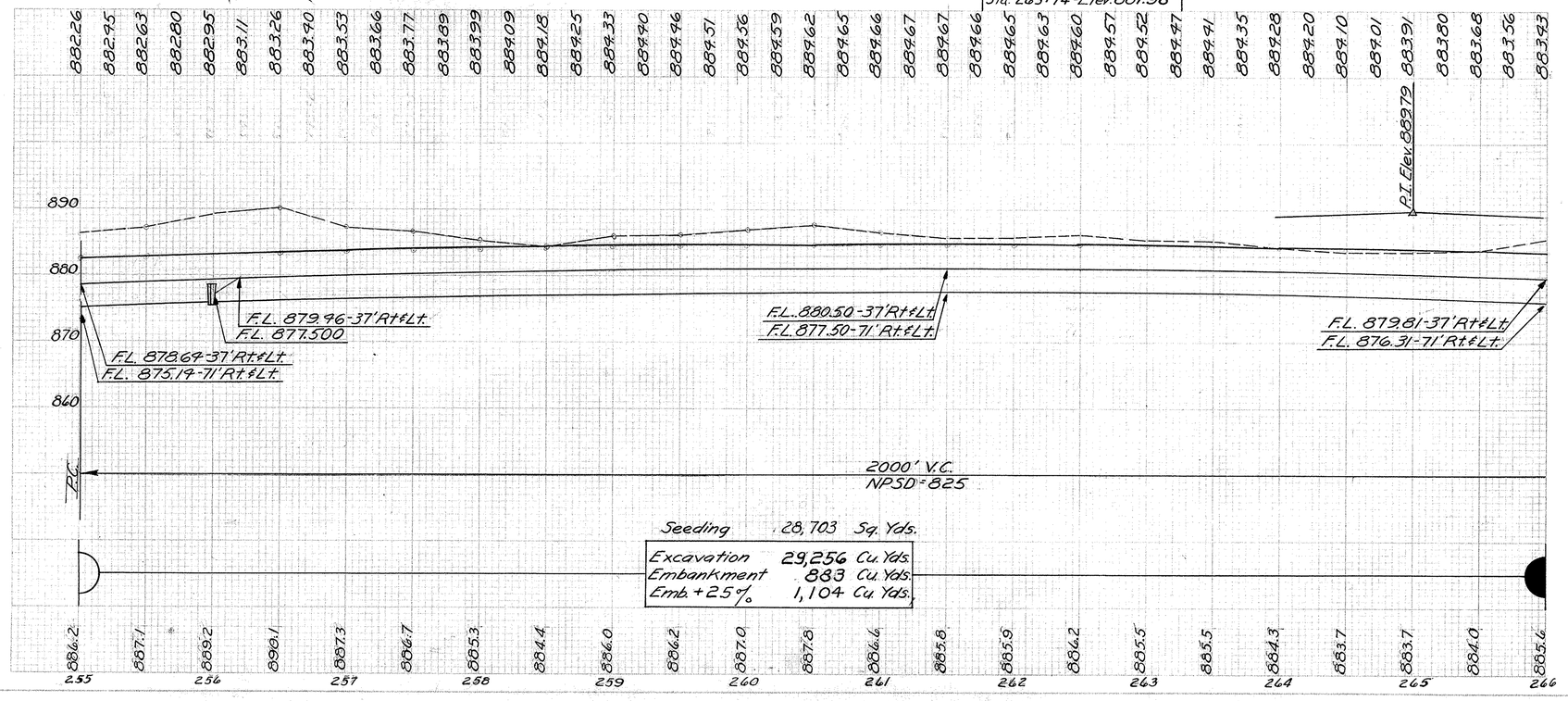
Sta. 244+00 to Sta. 255+00

FED. HWY. DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO	I-1103(16)		33	202

ATB-1-15.73
ASHTABULA COUNTY



B.M.-P.K. Nail in 16" Twin Elm - 170 Lt. of ℄ Sta. 263+14 - Elev. 881.98



Seeding 28,703 Sq. Yds.

Excavation	29,256	Cu. Yds.
Embankment	883	Cu. Yds.
Emb. +25%	1,104	Cu. Yds.

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.		I-5 Pipe Special 6"-60° Bend Each	I-5 Pipe Special 6"x6" Tee Each		L-10 Sodding Type 1 Sq. Yds.
1-U	255+00 256+18	118						
2-U	255+00 256+18	118						
3-U	256+00 266+00	1006	10		1			
4-U	255+00 266+00	1100						
5-U	256+00 266+00	1006	10		1			
6-U	255+00 266+00	1098				1		
7-U	269+00	30						
1-S	255+95 258+08							54
	Total	4476	20		2	1		54

ROADWAY

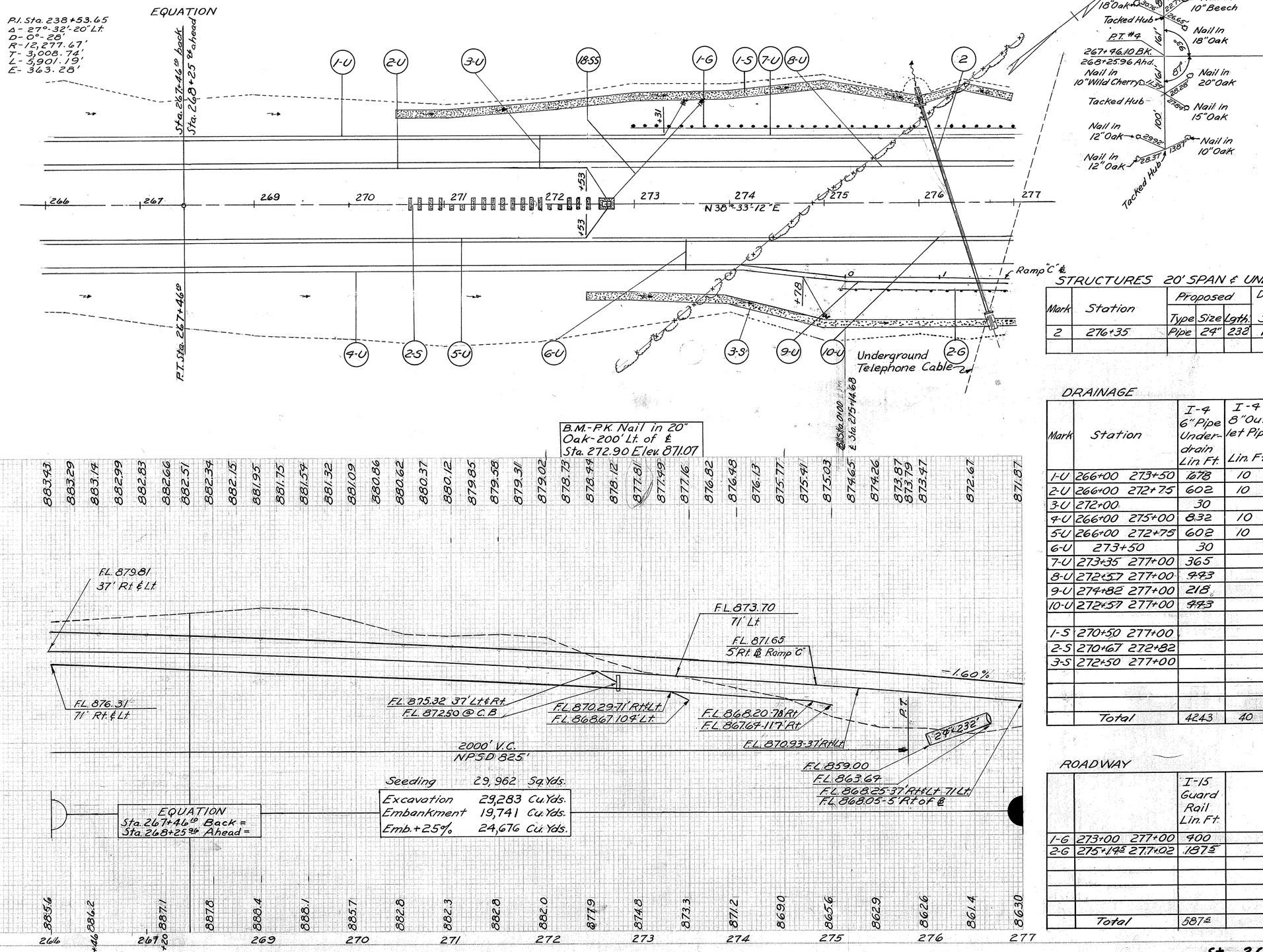
Mark	Station	I-15 Guard Rail Lin. Ft.					
1-G	255+00 255+82	82					
	Total	82					

Sta. 255+00 to Sta. 266+00

FED. RD. DIVISION	STATE	PROJECT		34
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY

See Sheet No 13. for Storm Sewer detail



B.M.-P.K. Nail in 20" Oak-200' Lt. of ℄ Sta. 272.90 Elev. 871.07

Basis of ℄ Sta. 275+14.68

EQUATION
Sta. 267+46.0 Back =
Sta. 268+25.25 Ahead =

Seeding	29,962	Sq. Yds.
Excavation	29,283	Cu. Yds.
Embankment	19,741	Cu. Yds.
Emb. + 25%	24,676	Cu. Yds.

STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed			Detail on Sheet
		Type	Size	Lgth.	
2	276+35	Pipe	24"	232'	161

DRAINAGE

Mark	Station	I-4 6" Pipe Underdrain Lin. Ft.	I-9 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each		S-29 Aggregate Erosion Pad Cu. Yds.	L-10 Sodding Sq. Yds.		
				6"×60° Bend	6"×6" Tee		Type I		
1-U	266+00 273+50	678	10	1	1	0.3			
2-U	266+00 272+75	602	10	1					
3-U	272+00	30							
4-U	266+00 275+00	832	10	1	1	0.3			
5-U	266+00 272+75	602	10	1					
6-U	273+50	30							
7-U	273+35 277+00	365							
8-U	272+57 277+00	443							
9-U	274+82 277+00	218							
10-U	272+57 277+00	443							
1-S	270+50 277+00						650		
2-S	270+67 272+82						54		
3-S	272+50 277+00						450		
	Total	4243	40	4	2	0.6	1154		

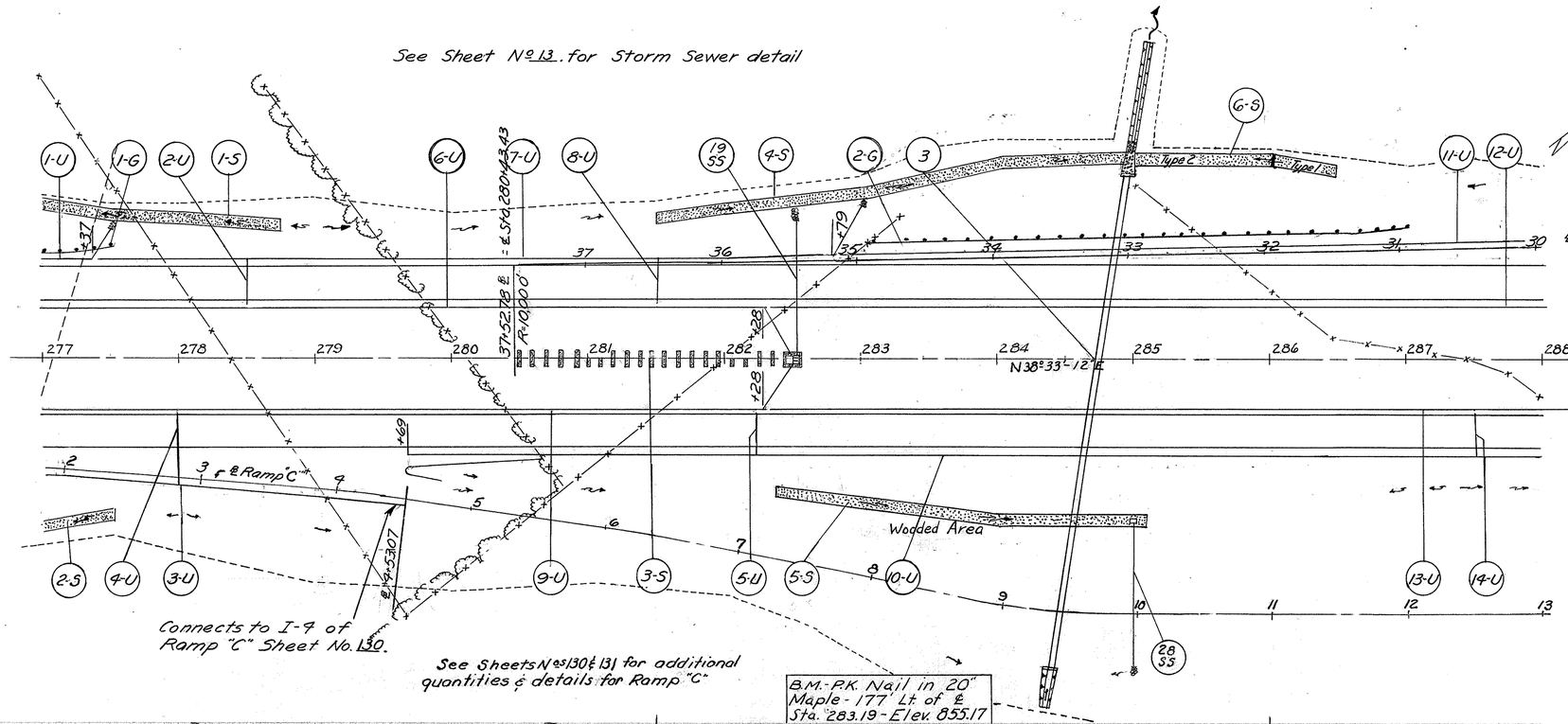
ROADWAY

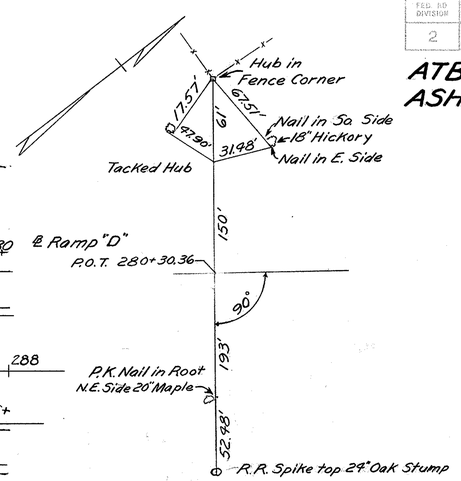
		I-15 Guard Rail Lin. Ft.					
1-G	273+00 277+00	400					
2-G	275+14.68 277+02	187.32					
	Total	587.32					

Sta. 266+00 to Sta. 277+00

FED. HD DIVISION	STATE	PROJECT		35 / 202
2	OHIO	I-1103 (16)		

ATB-1-15.73
ASHTABULA COUNTY





STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed			Detail on Sheet
		Type	Size	Lgth.	
3	284+79.15	Pipe	92"	368	162

DRAINAGE

Mark	Station	I-4 6" Pipe Under-drain	I-4 8" Inlet Pipe	S-29 Aggregate Erosion Pad	I-5 Pipe Special Each		L-10 Sodding Sq. Yds.		
		Lin. Ft.	Lin. Ft.	Cu. Yds.	6"-60° Bend	6"x6" Tee	Type 1	Type 2	
1-U	277+00 277+50	55	10	0.3	1				
2-U	278+50	30							
3-U	277+00 279+69	268				1			
4-U	278+00	52							
5-U	282+25	30							
6-U	277+00 282+50	558	10		1				
7-U	277+41 283+00	568	10	0.3	1	2			
8-U	281+50	30							
9-U	277+00 282+50	558	10		1				
10-U	279+69 288+00	828				2			
11-U	282+83 288+00	517							
12-U	282+32 288+00	568							
13-U	282+32 288+00	568							
14-U	287+50	30							
1-S	277+00 278+75						175		
2-S	277+00 278+60						160		
3-S	280+92 282+55						54		
4-S	281+50 284+10						260		
5-S	282+90 285+10						275		
6-S	285+00 286+50						50	100	
	Total	4660	40	0.6	4	5	974	100	

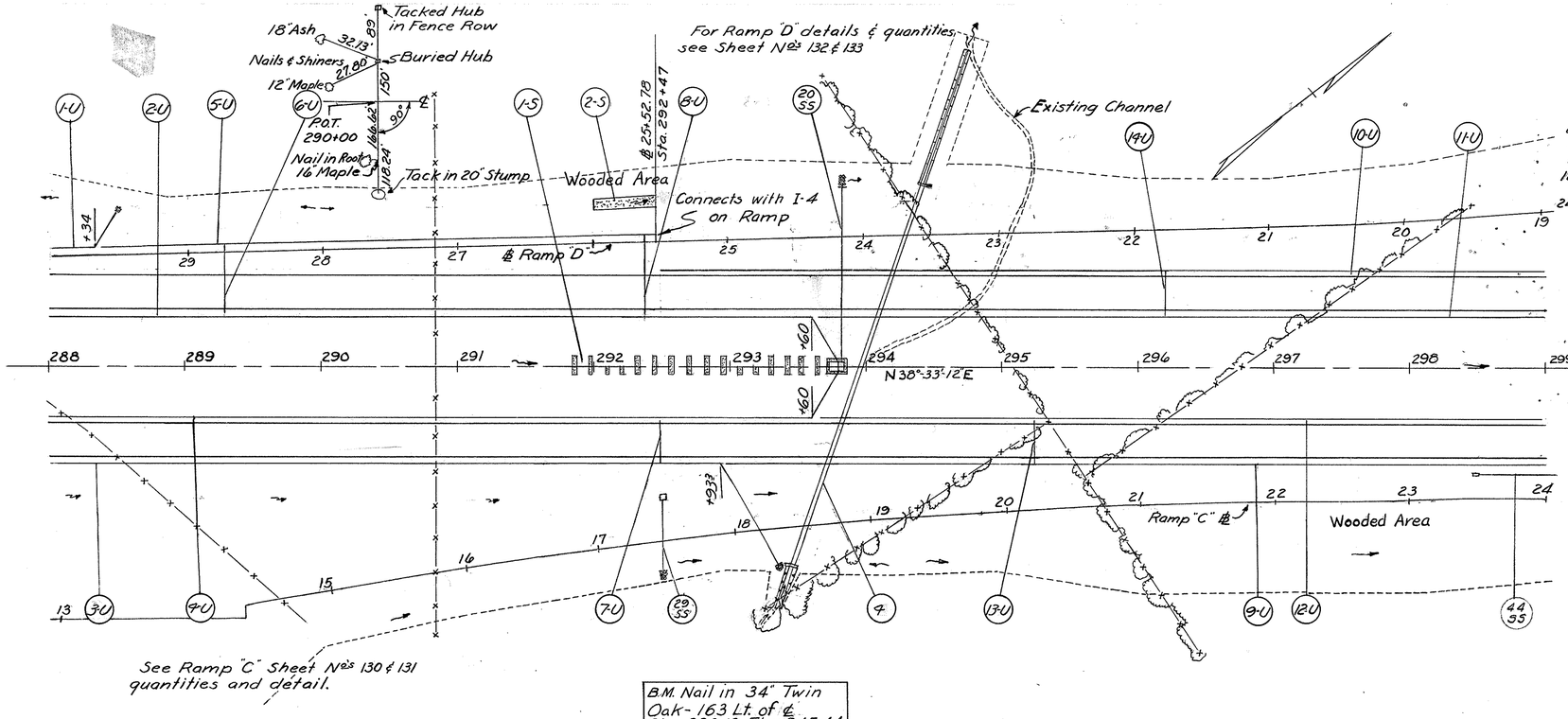
Seeding	46,914	Sq. Yds.
Excavation	19,146	Cu. Yds.
Embankment	59,344	Cu. Yds.
Emb. +2.5%	74,178	Cu. Yds.

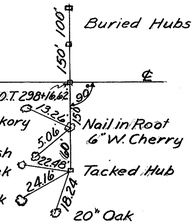
ROADWAY & DRAINAGE

		I-15 Guard Rail Lin. Ft.						
1-G	277+00 277+50	50						
2-G	283+00 287+00	400						
	Total	450						

Sta. 277+00 to Sta. 288+00

ATB-1-15.73
ASHTABULA COUNTY





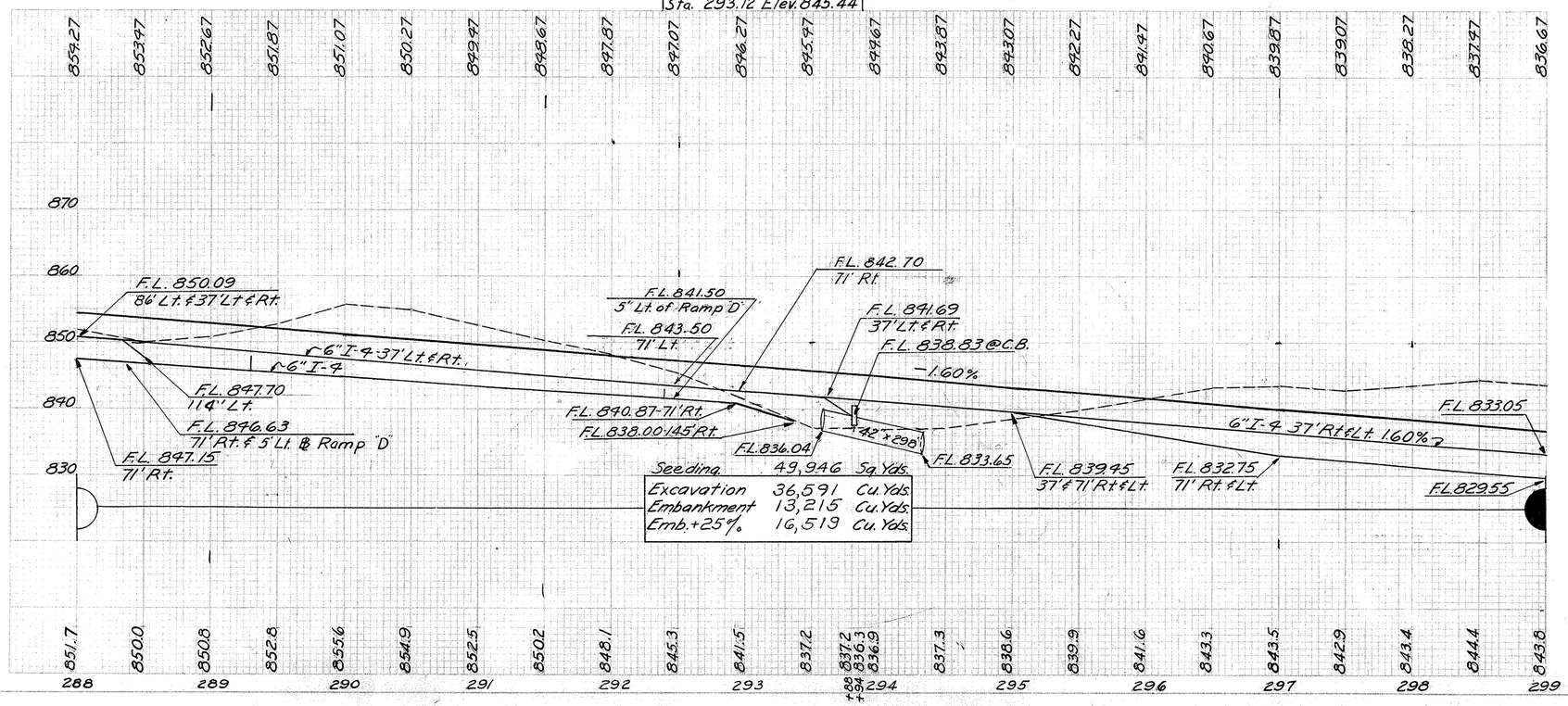
STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed Type	Size	L'gth.	Detail on Sheet
4	293+94	Pipe	42"	298'	162

DRAINAGE

Mark	Station		I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6'-60° Bend	I-5 Pipe Special Each 6"×6" Tee	S-29 Aggregate Erosion Pad Cu. Yds.			L-10 Sodding Type I Sq. Yds.
1-U	288+00	288+50	54	10	1		0.3			
2-U	288+00	293+82	586	10	1					
3-U	288+00	293+36	566	10	1	1	0.3			
4-U	288+00	293+82	586	10	1					
5-U	288+38	292+47	406			2				
6-U	289+30		50							
7-U	292+50		30							
8-U	292+39		58							
9-U	292+98	299+00	600			1				
10-U	292+47	299+00	652			1				
11-U	293+64	299+00	536							
12-U	293+64	299+00	536							
13-U	295+25		30							
14-U	296+20		30							
1-S	291+74	293+87								54
2-S	292+00	292+47								48
	Total		4720	40	4	5	0.6			102

ROADWAY

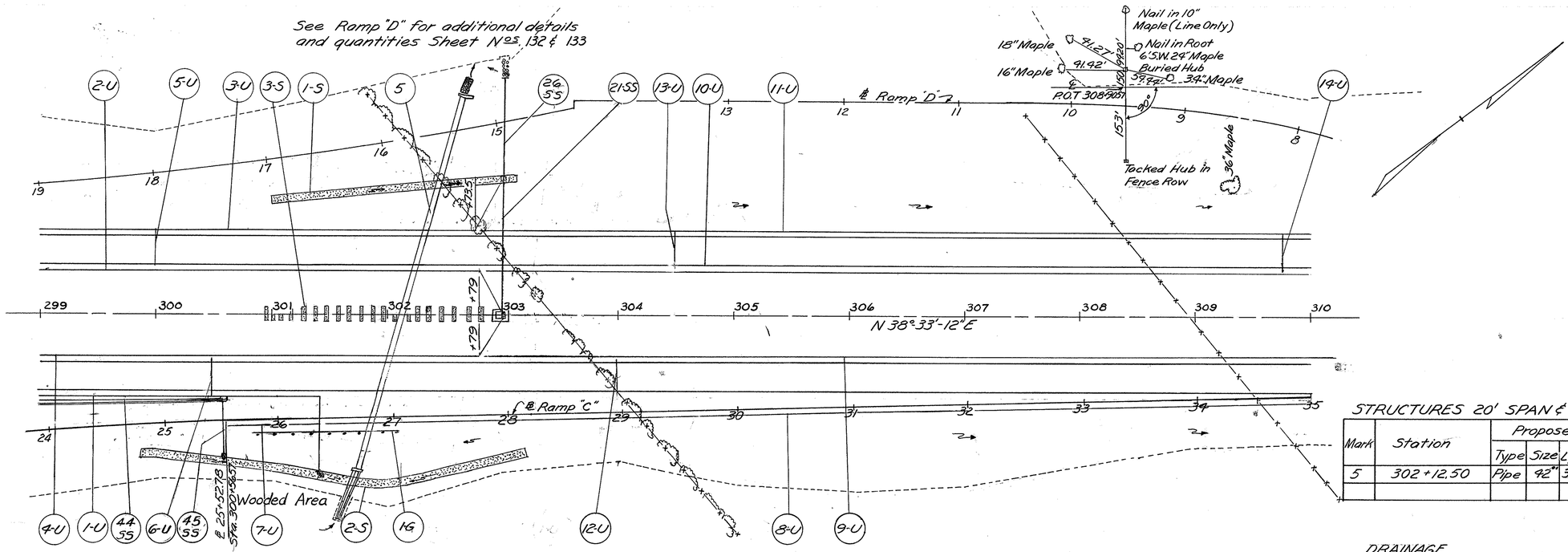


Seeding	49,946	Sq. Yds.
Excavation	36,591	Cu. Yds.
Embankment	13,215	Cu. Yds.
Emb. +25%	16,519	Cu. Yds.

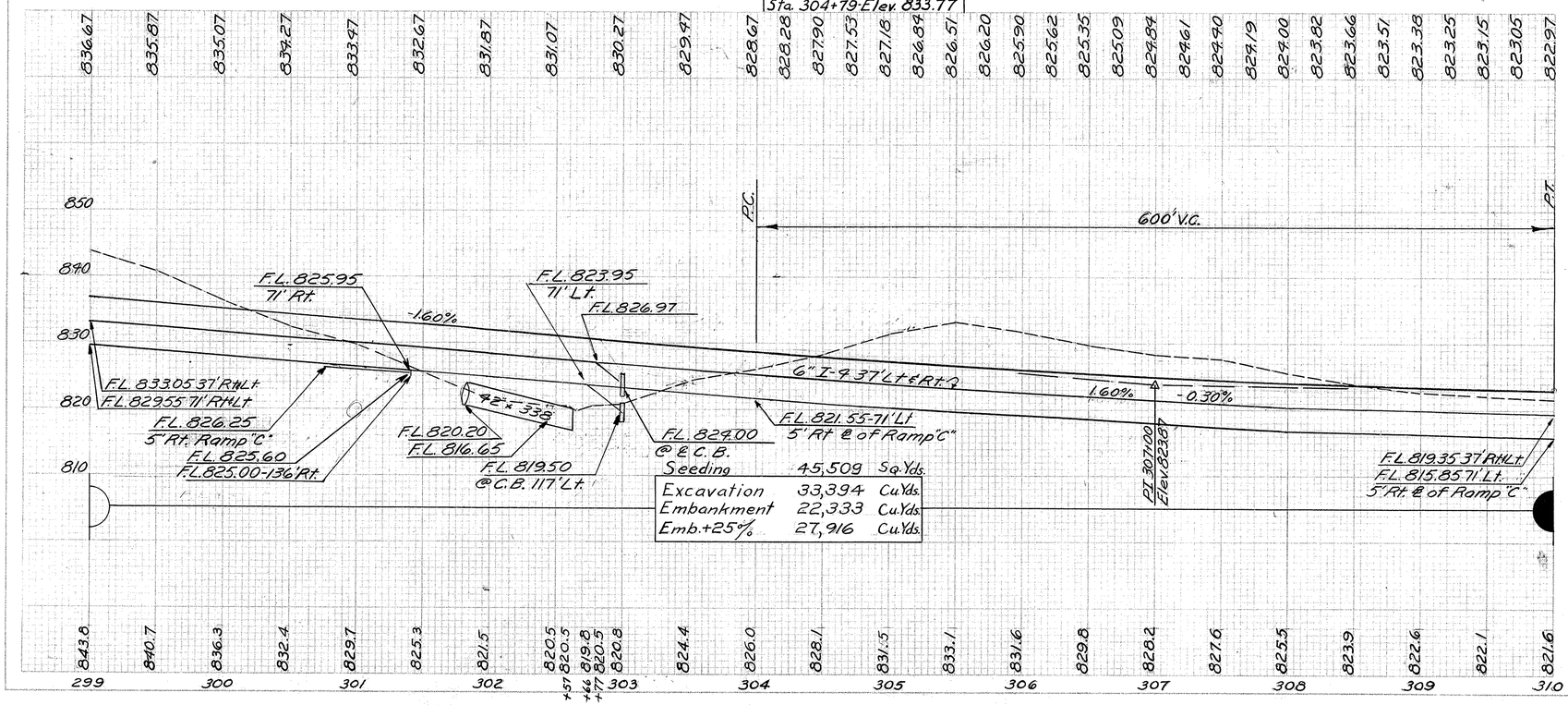
Sta. 288+00 to Sta. 299+00

FED. AID DIVISION	STATE	PROJECT		37
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY



B.M.-P.K. Nail in 18" Oak
279' Rt of ℄
Sta. 304+79-Elev. 833.77



Seeding	45,509	Sq. Yds.
Excavation	33,394	Cu. Yds.
Embankment	22,333	Cu. Yds.
Emb. +25%	27,916	Cu. Yds.

STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed			Detail on Sheet
		Type	Size	Lgth.	
5	302+12.50	Pipe	42"	338'	163

DRAINAGE

Mark	Station	I-7 6" Pipe Under-drains Lin. Ft.	I-9 8" Out-let Pipe Lin. Ft.	I-5 Pipe Special Each					I-2 8" Class A Storm Under Pav't Lin. Ft.	5-29 Aggregate For Erosion Pad Cu. Yds.
				6"-60° Bend	6"x6" Tee	6"-90° Bend	6"x8" Tee	8" In-creaser		
1-U	299+00 301+92	240	10		1	1	1	1	52	0.3
2-U	299+00 303+00	908	10	1						
3-U	299+00 303+00	910	10	1	1					0.3
4-U	299+00 303+00	908	10	1						
5-U	300+00	30								
6-U	300+50	30								
7-U	300+56.57 301+92	86								
8-U	301+96 310+00	852			1					
9-U	302+83 310+00	717								
10-U	302+83 310+00	717								
11-U	302+775 310+00	719			2					
12-U	309+00	50								
13-U	309+50	30								
14-U	309+75	30								
	Total	4727	40	3	5	1	1	1	52	0.6

ROADWAY

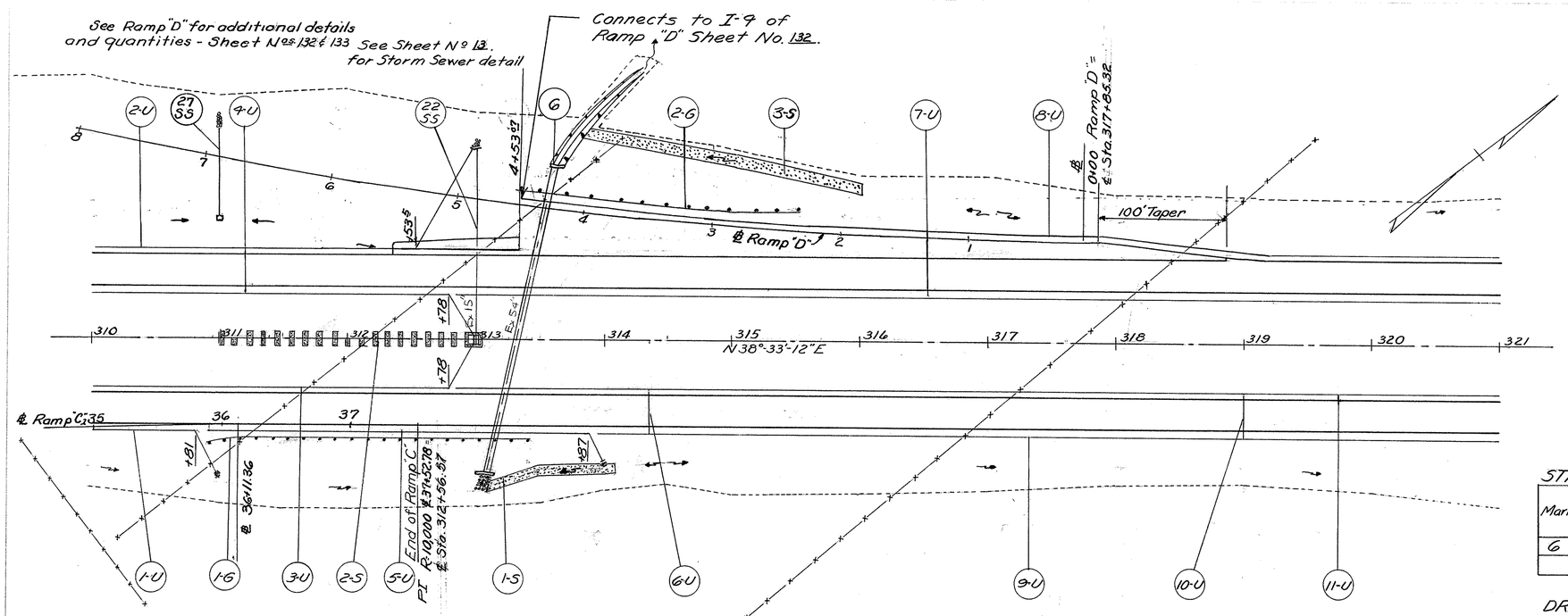
Mark	Station	L-10 Sodding Type I Sq. Yds.	I-15 Guard Rail Lin. Ft.
1-S	301+00 303+10	215	
2-S	299+10 303+25	390	
3-S	300+92 302+05	54	
1-G	300+83 302+08		125
	Total	609	125

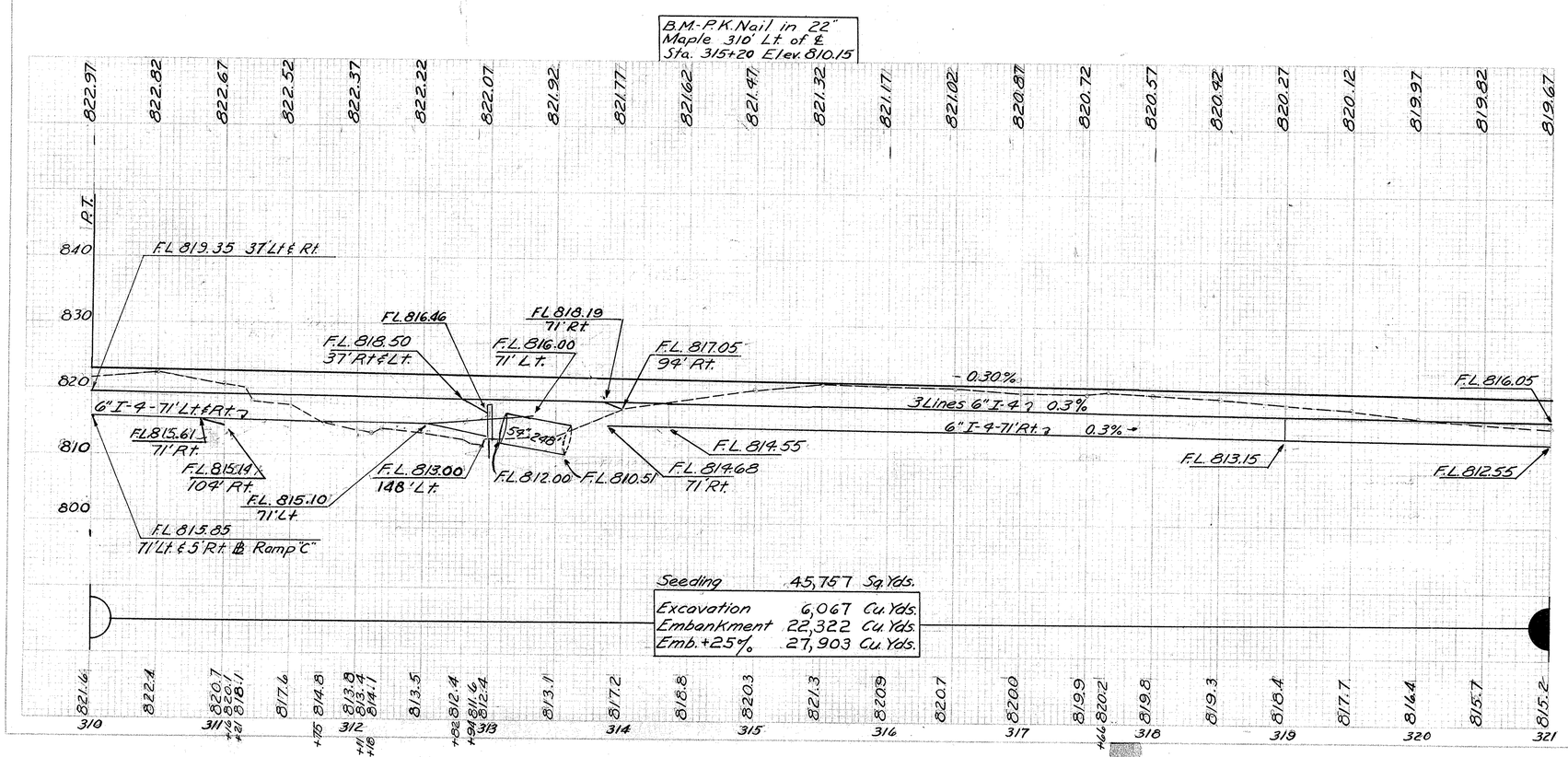
Sta. 299+00 to Sta. 310+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

38
202

ATB-1-15.73
ASHTABULA COUNTY





STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed			Detail on Sheet
		Type	Size	Lgth.	
6	313+31	Pipe	54"	248	164

DRAINAGE

Mark	Station		I-9 6" Pipe Underdrain Lin. Ft.	I-9 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"x60" Bend	I-5 Pipe Special Each 6"x6" Tee	I-5 Pipe Special Each 6"x6 Wye		L-10 Sodding Sq. Yds. Type I	L-10 Sodding Sq. Yds. Type	S-29 Aggregate Erosion Pad Cu. Yds.
1-U	310+00	311+00	108	10	1						0.3
2-U	310+00	313+32	410	10			1				0.3
3-U	310+00	312+99	306	10	1						
4-U	310+00	312+99	306	10	1						
5-U	310+85	314+00	316	10	1						0.3
6-U	314+35		30								
7-U	312+82	321+00	818								
8-U	313+32	321+00	770								
9-U	313+91	321+00	706			2					
10-U	319+00		30								
11-U	312+82	321+00	818								
1-S	313+10	314+10							100		
2-S	310+93	313+05							54		
3-S	313+85	316+00							223		
	Total		4618	50	4	2	1		377		0.9

ROADWAY

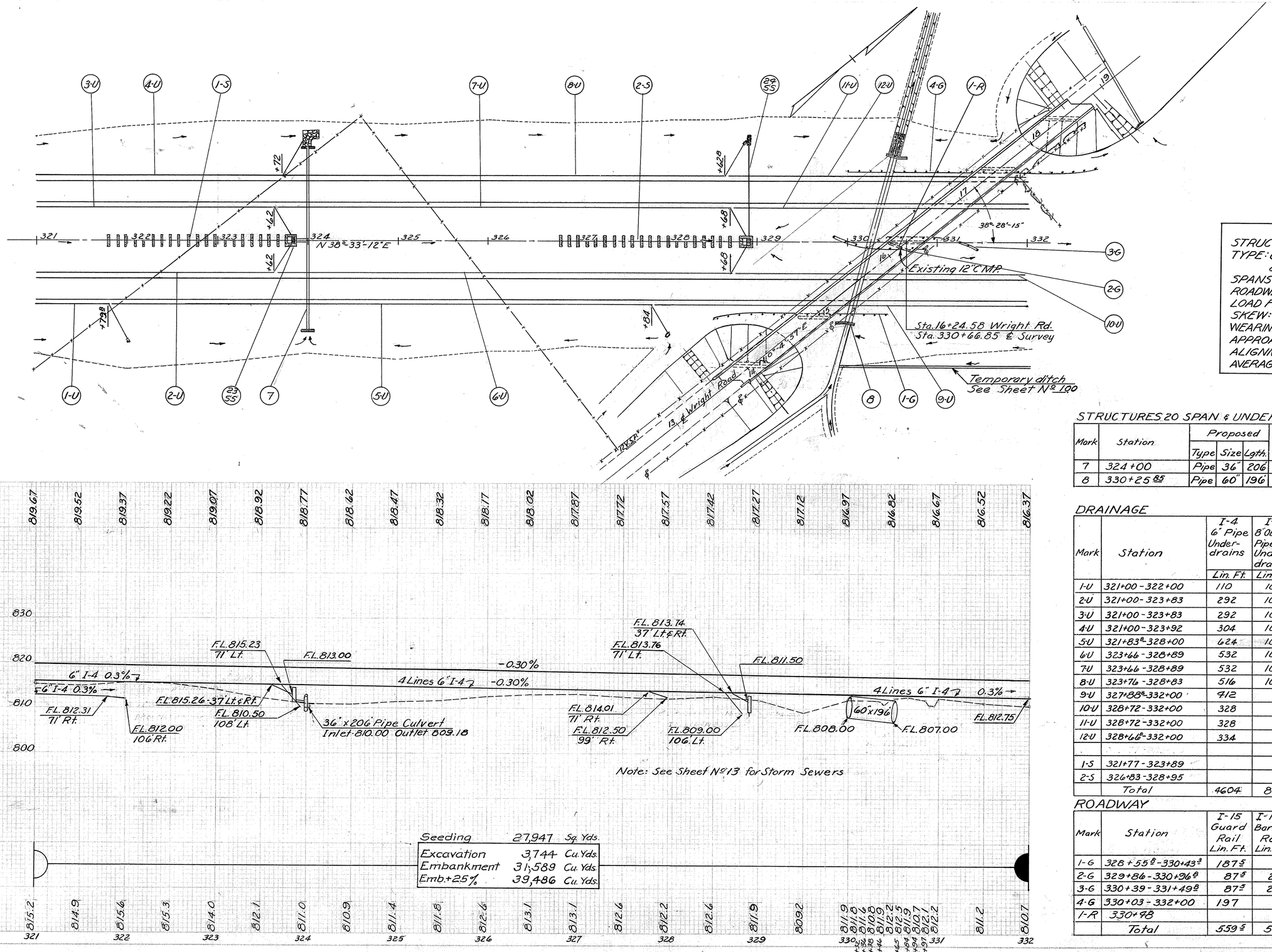
			I-15 Guard Rail Lin. Ft.					
1-G	310+97	313+44	250					
2-G	313+30	315+53	225					
	Total		475					

Seeding	45,757 Sq. Yds.
Excavation	6,067 Cu. Yds.
Embankment	22,322 Cu. Yds.
Emb. +25%	27,903 Cu. Yds.

Sta. 310+00 to Sta. 321+00

FED. RD DIVISION	STATE	PROJECT		39
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY


3-U
4-U
1-S
7-U
8-U
2-S
23 55
11-U
12-U
4-G
1-R
+72
+62
+62
+62

FED. AID DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO	I-1103(16)		40	202

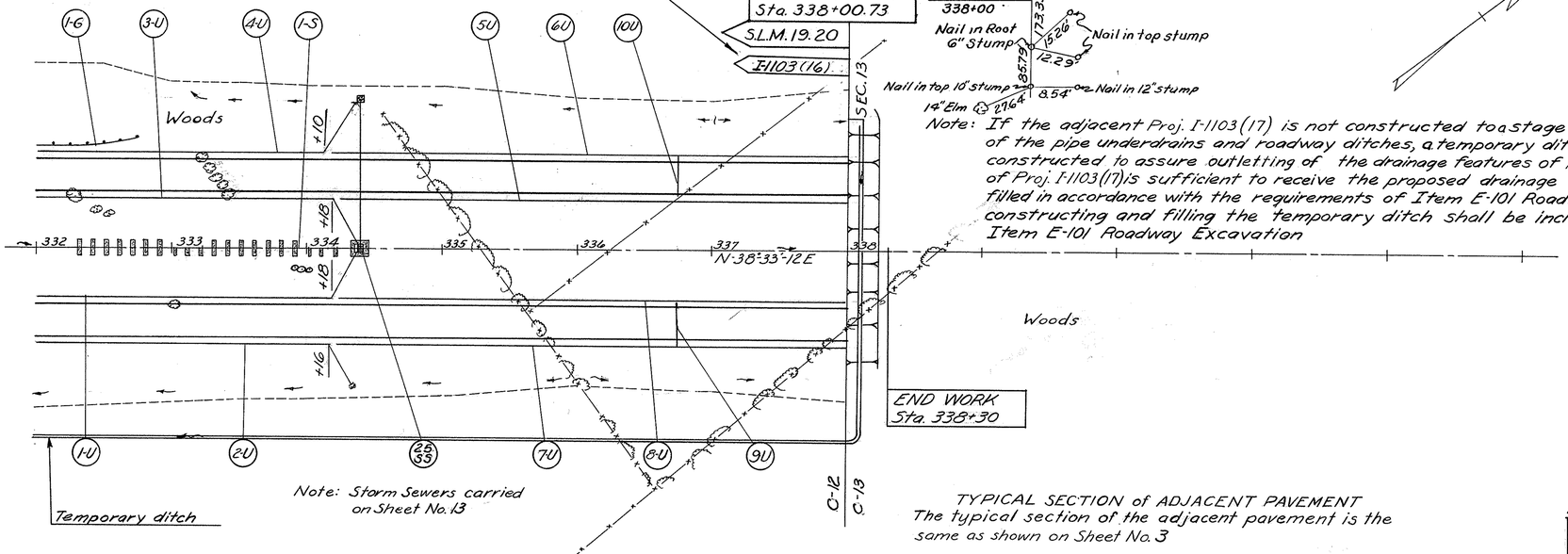
ATB-1-15.73
ASHTABULA COUNTY

Marker to be furnished and erected on the left by the State before acceptance of this improvement

END PROJECT
Sta. 338+00.73
S.L.M. 19.20
I-1103(16)

S.W. Corner — Conc. block house
19.77'
Tacked hub — S.E. Corner
10.14'
80.10'
Buried Hub
Measurements to house corners taken @ top of 4 Th. block
P.O.T. 338+00
150'
173.33'
Nail in Root 6" Stump
5.26'
Nail in top stump
12.29'
35.79'
Nail in top 10" stump
8.54'
Nail in 12" stump
14" Elm
27.64'

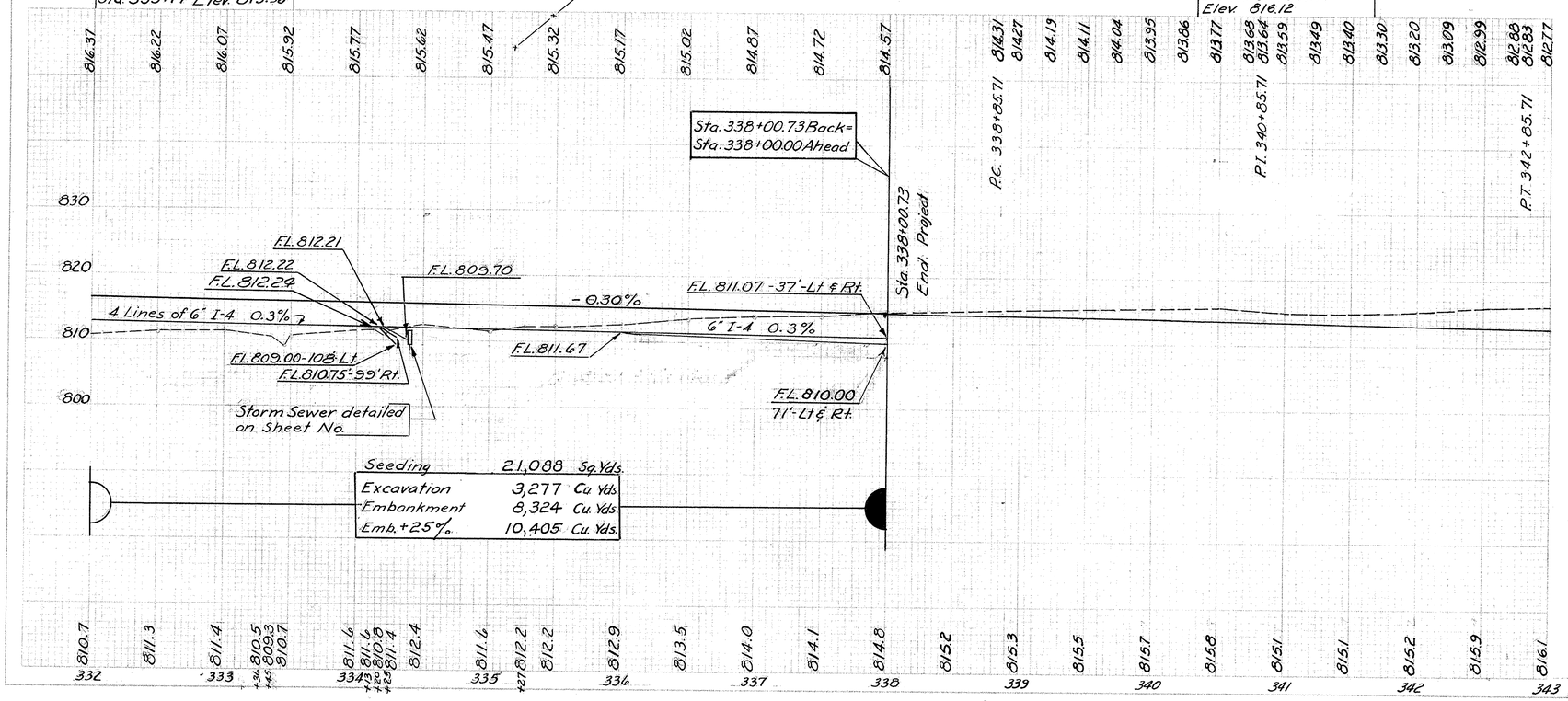
Note: If the adjacent Proj. I-1103(17) is not constructed to a stage to permit proper draining of the pipe underdrains and roadway ditches, a temporary ditch as shown will be constructed to assure outletting of the drainage features of Proj. I-1103(16) When construction of Proj. I-1103(17) is sufficient to receive the proposed drainage the temporary ditch is to be filled in accordance with the requirements of Item E-101 Roadway Excavation. Cost of constructing and filling the temporary ditch shall be included in price per unit bid for Item E-101 Roadway Excavation



TYPICAL SECTION of ADJACENT PAVEMENT
The typical section of the adjacent pavement is the same as shown on Sheet No. 3

B.M.-P.K. Nail in 20" Elm 289' Rt of ℄ Sta. 335+17 Elev. 813.50

B.M. P.K. Nail in 18" Oak 200' Rt. Sta. 341+77 Elev. 816.12



Seeding	21,088	Sq. Yds.
Excavation	3,277	Cu. Yds.
Embankment	8,324	Cu. Yds.
Emb. +25%	10,405	Cu. Yds.

DRAINAGE

Mark	Station	I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"x60" Bend	I-5 Pipe Special Each 6"x6" Tee	S-29 Aggregate Erosion Pad Cu. Yd	L-10 Sodding Type I Sq. Yds.
1-U	332+00 334+39	296	10	1			
2-U	332+00 334+32	238	10	1		0.3	
3-U	332+00 334+39	296	10	1			
4-U	332+00 334+32	292	10	1		0.3	
5-U	339+22 338+00	378					
6-U	339+19 338+00	384			1		
7-U	339+20 338+00	378			1		
8-U	339+22 338+00	378					
9-U	336+75 Rt.	30					
10-U	336+75 Lt.	30					
1-S	332+32 334+05						54
	Total	2550	40	4	2	0.6	54

ROADWAY

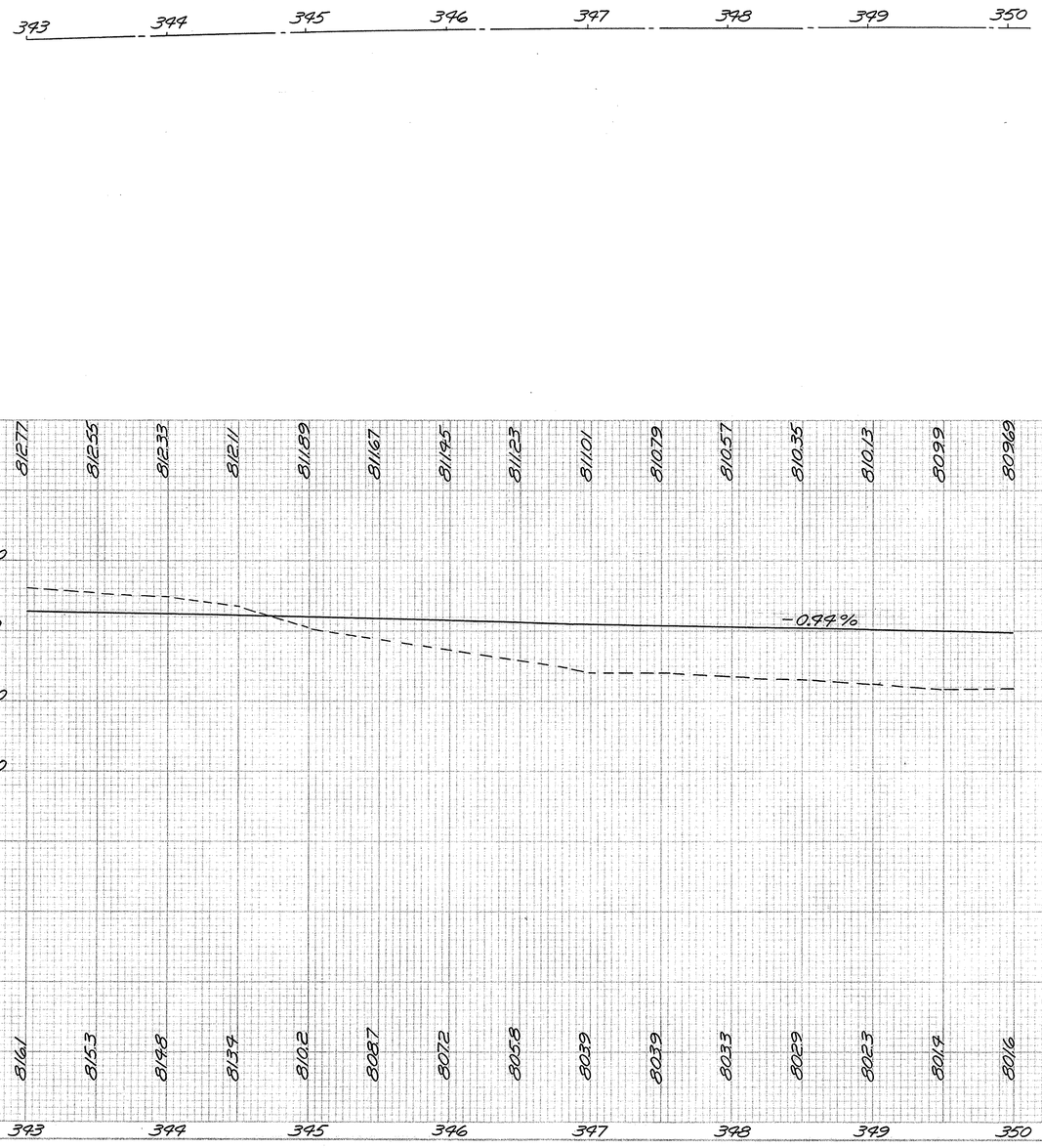
Mark	Station	I-15 Guard Rail Lin. Ft.
1-G	332+00 332+78	78
	Total	78

Sta. 332+00 to Sta. 338+00.73

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(116)	

41
202

ATB-1-15.75
ASHTABULA COUNTY



SUPPLEMENTAL ALIGNMENT

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

42
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-9010

Match Line 2:1

C-13 850.0

2:1 C-122

815.52
153+50 Begin Project
848.9

2:1 Match Line

C-93

150 160 170 180 190 200

200 190 180 170 160 150

C-5870

2:1

Finish Grade of Excavation of Section C-12
826.01

Match Line

816.33
153+00
846.3

C-13 849.0

2:1 C-89

2:1 Match Line

2:1 C-18

200 190 180 170 160 150

150 160 170 180 190 200

152+50 Begin Work

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

End Area		Cubic Yds	
Cut	Fill	Cut	Fill
9238	0		
		13814	0
5990	0		
		5546	0
0	0		

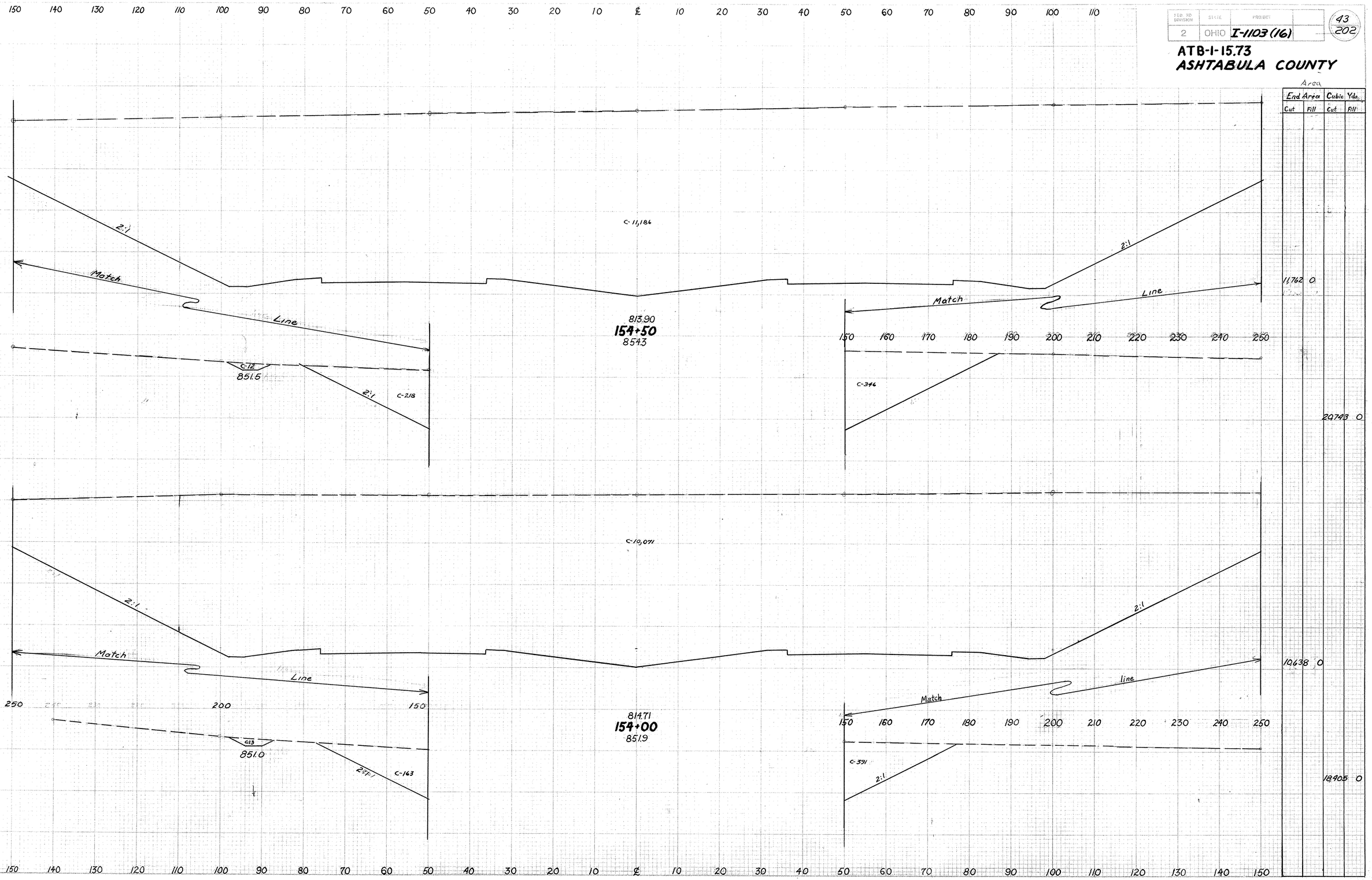
Seeding	
Temp'l	
Drainage	
Areas	

Sta. 153+00 to Sta. 153+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

43
202

ATB-I-15.73
ASHTABULA COUNTY



Area End Area		Cubic Yds.	
Cut	Fill	Cut	Fill
11,762	0		
		20,743	0
10638	0		
		18,905	0

Sta. 154.00 to Sta. 154+50

2 OHIO I-1103(16)

ATB-1-15.73
ASHTABULA COUNTY

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

C-11,687

2:1

Match line

2:1

Match line

81309
155+00
855.6

250 240 230 220 210 200 190 180 170 160 150

C-264

2:1

150 160 170 180 190 200 210 220 230 240 250

C-359

2:1

End Area		Cubic Yds.	
Cut	Fill	Cut	Fill
12,310	0		
22291	0		

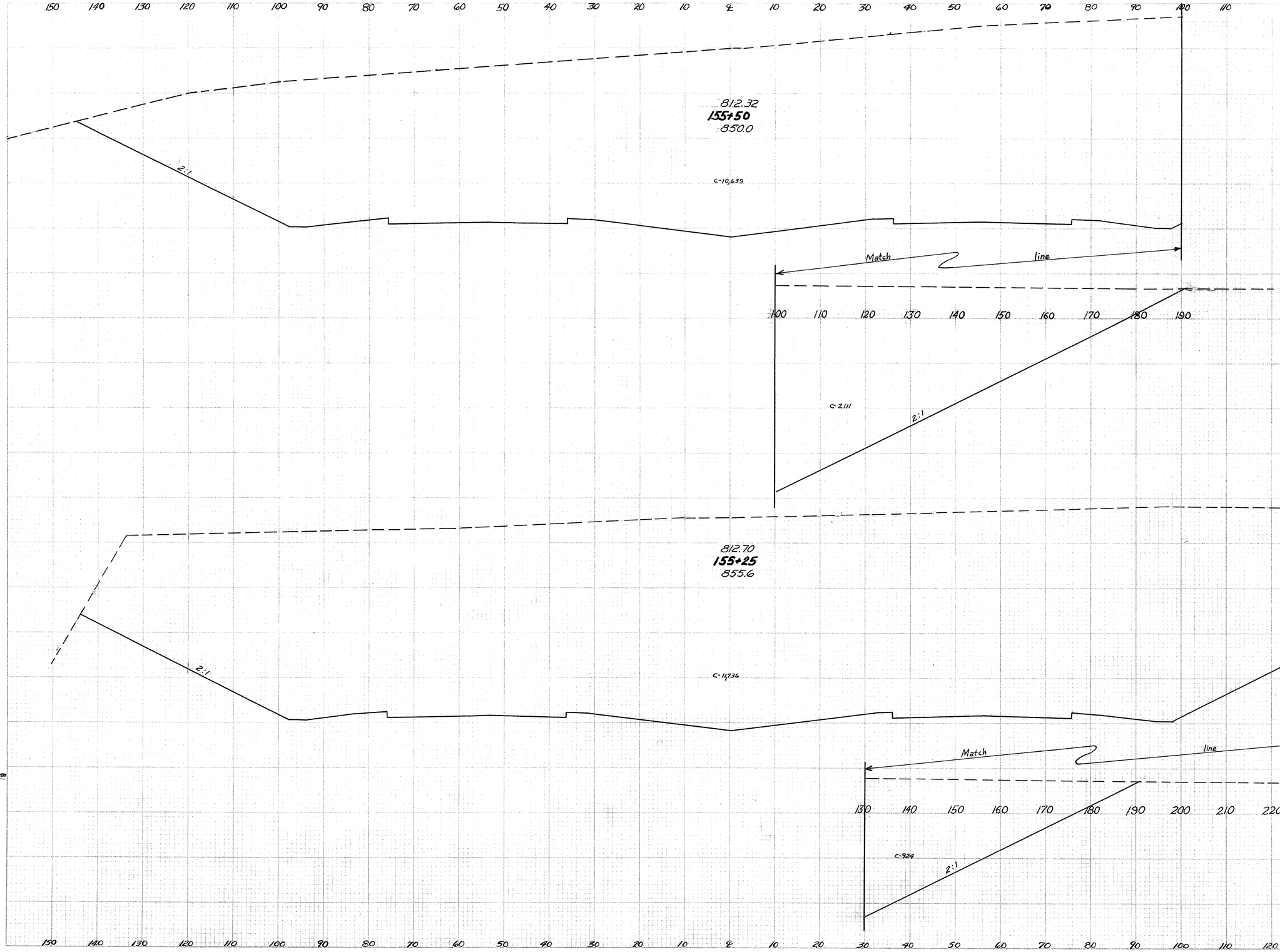
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 155+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

45
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cubic Yds	
Cut	Fill	Cut	Fill
12,780	0		
		11765	0
12,660	0		
		11,561	0

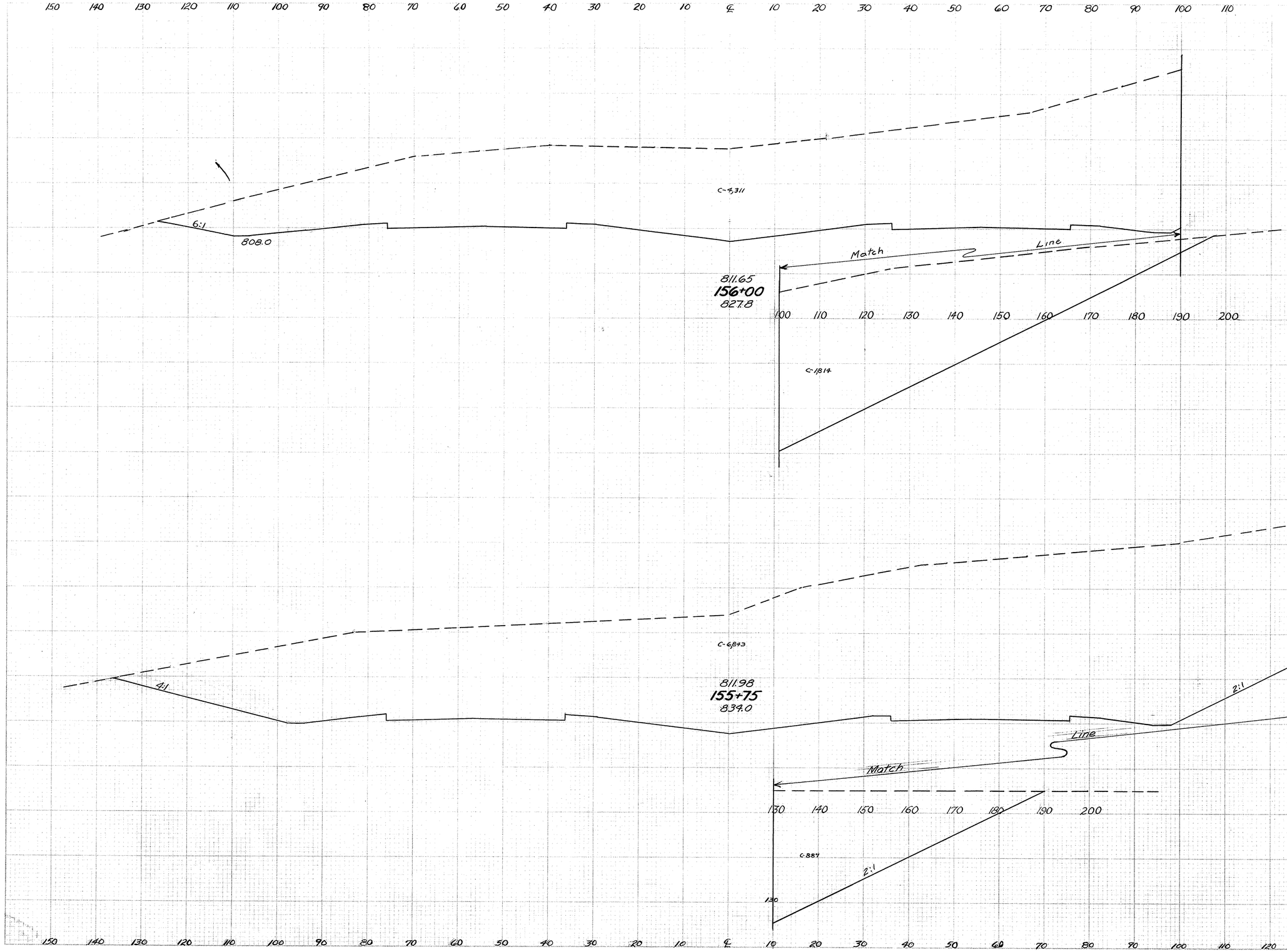
Seeding	Template	Drainage Areas

Sta. 155+25 to Sta. 155+50

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

46
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cubic Yds	
Cut	Fill	Cut	Fill
6,125	0		
		6415	0

FED. AID DIVISION	STATE	PROJECT	47 / 202
2	OHIO	I-1103(16)	

ATB-1-15.73
ASHTABULA COUNTY

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

2:1 F-142 ET 762.0 line Match 2:1

F-8.953 4:1 C-34 801.64

810.81
156+75
770.0

F-3.976 2:1

C-135 6:1

811.06
156+50
792.0

Match line

200 190 180 170 160 150 F-9 C-22 770.0 150

C-18.03

4:1 F-146 C-11

811.35
156+25
820.0

Match line C-25 792.0

170 160 150

Match line C-44.2

120 130 140 150 160 170 180 190 200

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

End Area		Cubic Yds	
Cut	Fill	Cut	Fill
41	9,095		
		93	6056
161	3985		
		1131	1913
2,281	146		
		3892	67

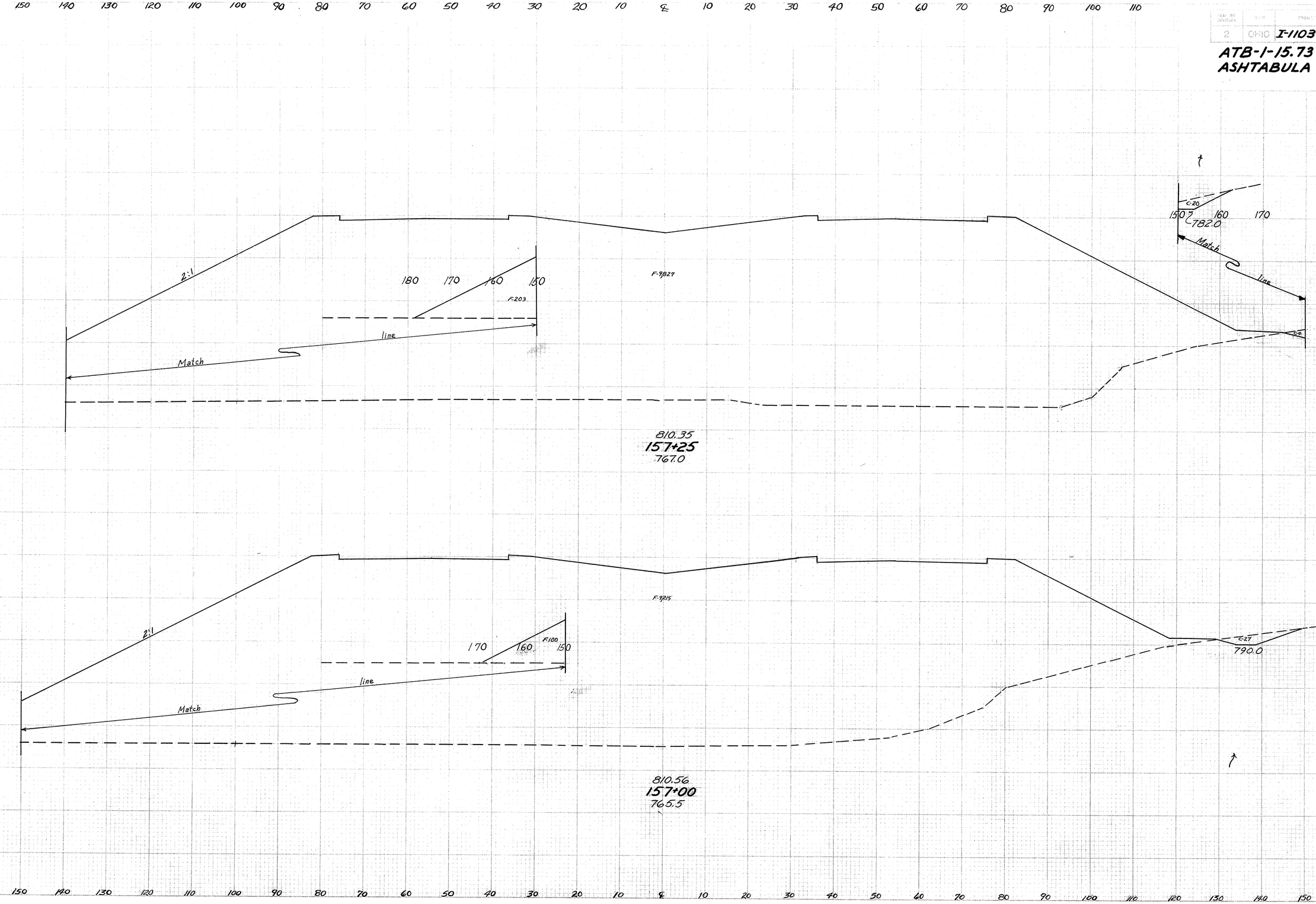
Seeding
Pavement
Drainage
Areas

Sta 154+25 to Sta 157+75

FED. AID DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

48
202

ATB-1-15.73
ASHTABULA COUNTY



	End Area		Cubic Yds	
	Cut	Fill	Cut	Fill
24			10,030	
28			8957	
27			9315	
32			8534	

Seeding
reaplate
Drainage
Areas

Sta. 157+00 to Sta. 157+25

FED. RD. DIVISION	STATE	PROJECT	49
2	OHIO	I-1103(16)	202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
	29		10367

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

50
202

ATB-1-15.73
ASHTABULA COUNTY

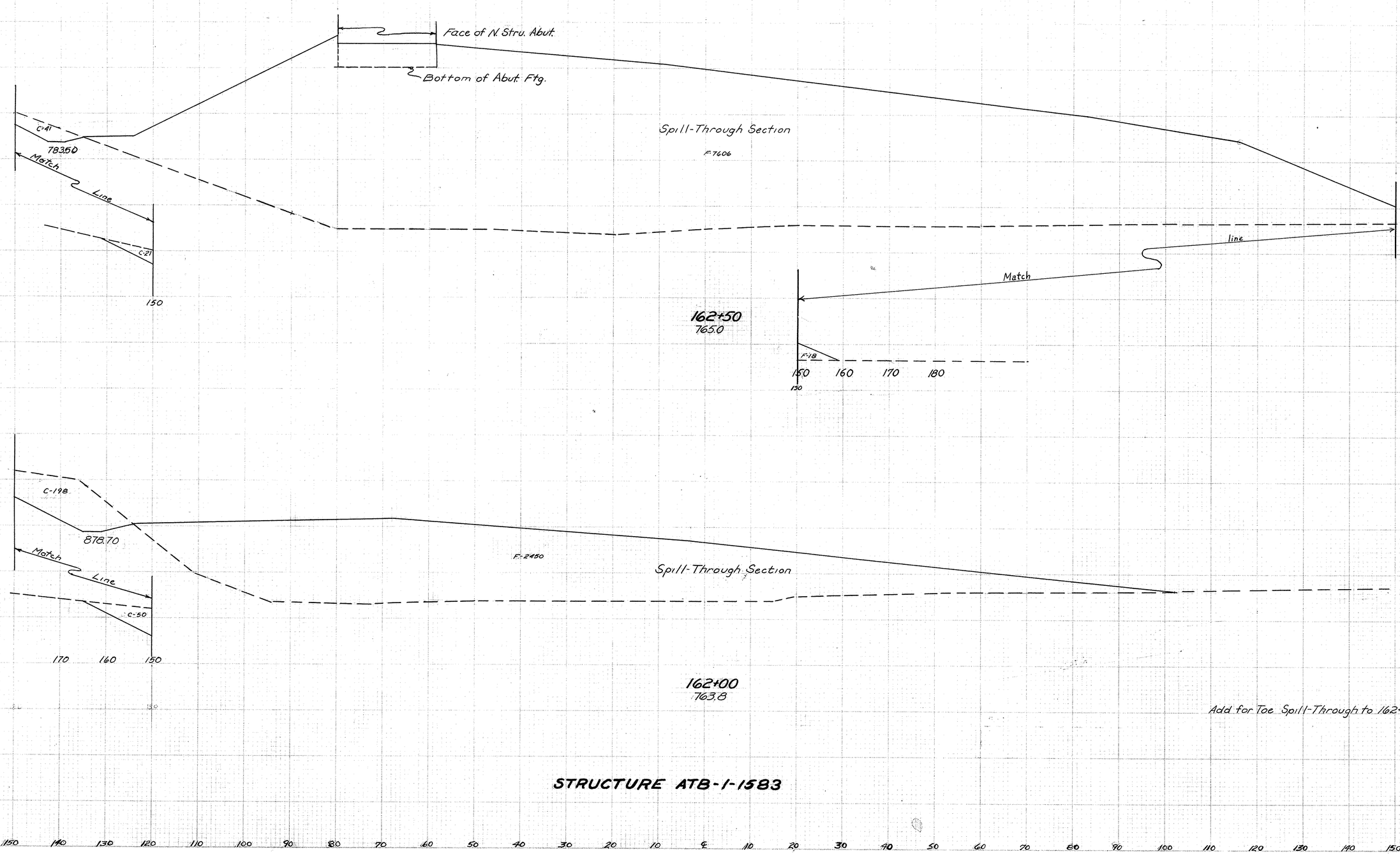
End Area		Cu Yds.	
Cut	Fill	Cut	Fill
Add for Spillthrough		0	20006

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

51
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
	62		7624
	287		9329
	248		2450
	285		1478



STRUCTURE ATB-1-1583

Sta. 162+00 to Sta. 162+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

52
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
		23	5968
13	5363		
		46	16971
25	8522		
		81	14951

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

812.42
163+66
802.2

811.52
163+00
764.0

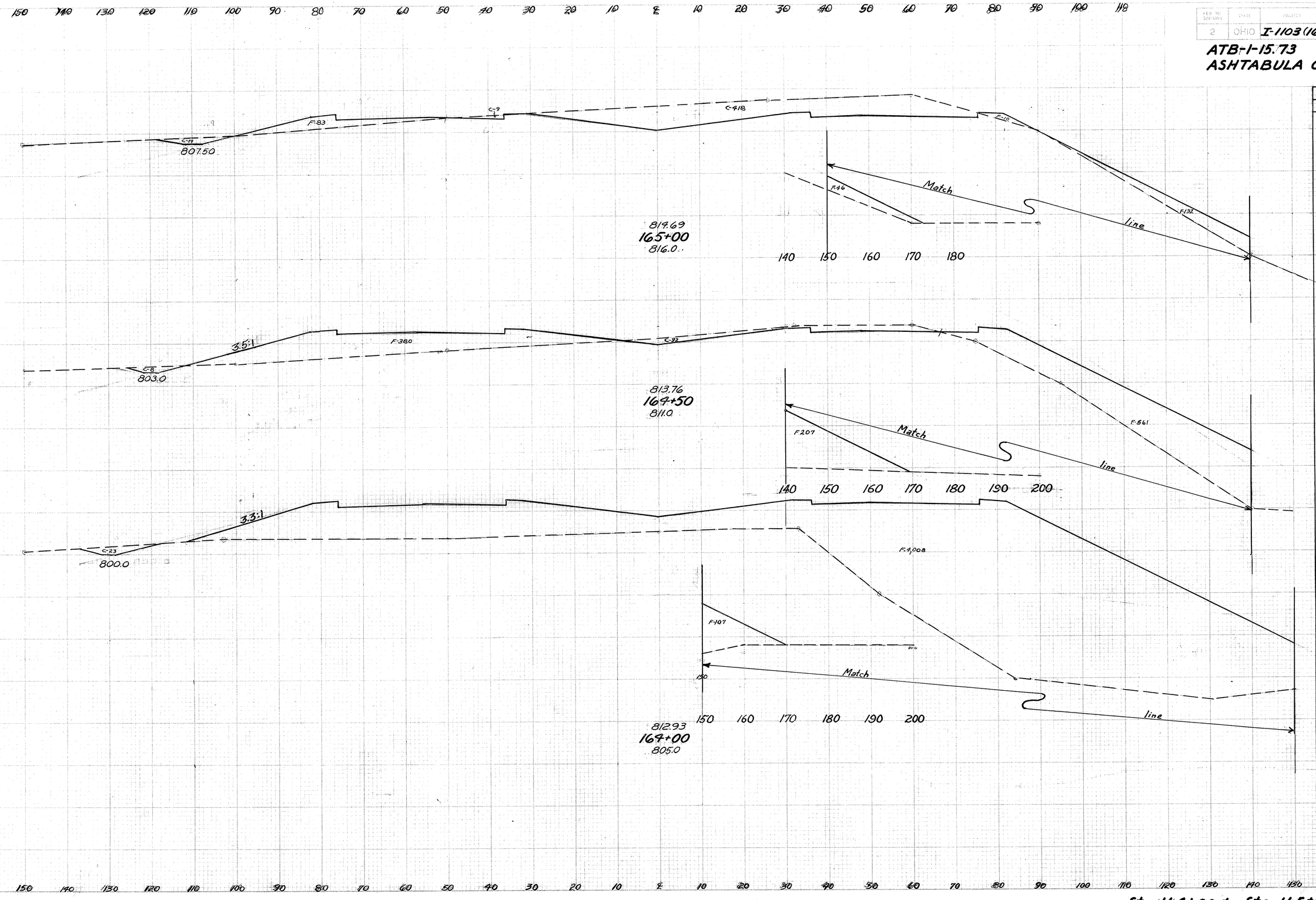
Sta. 163+00 to Sta. 163+66

FED. RD. DIV. NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	

53
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu. Yds	
Cut	Fill	Cut	Fill
446	271		
		505	1314
100	1148		
		114	1874
23	4,115		
		23	5968



Plotted	Seeding	Template	Drainage	Areas

Sta. 164+00 to Sta. 165+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

54
202

ATB-1-15.73
ASHTABULA COUNTY

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

c-2332

6:1 8:1 2.25:1

818.57
167+00
828.5

c-2249

8:1 3:1

817.60
166+50
825.6

c-1650

8:1 4:1

816.63
166+00
822.5

No 5 C.B.
Rt- ℄ Sta. 165+75
Outlet F.L. 809.00

c-972

6:1 8:1

812.8'

815.66
165+50
819.9

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

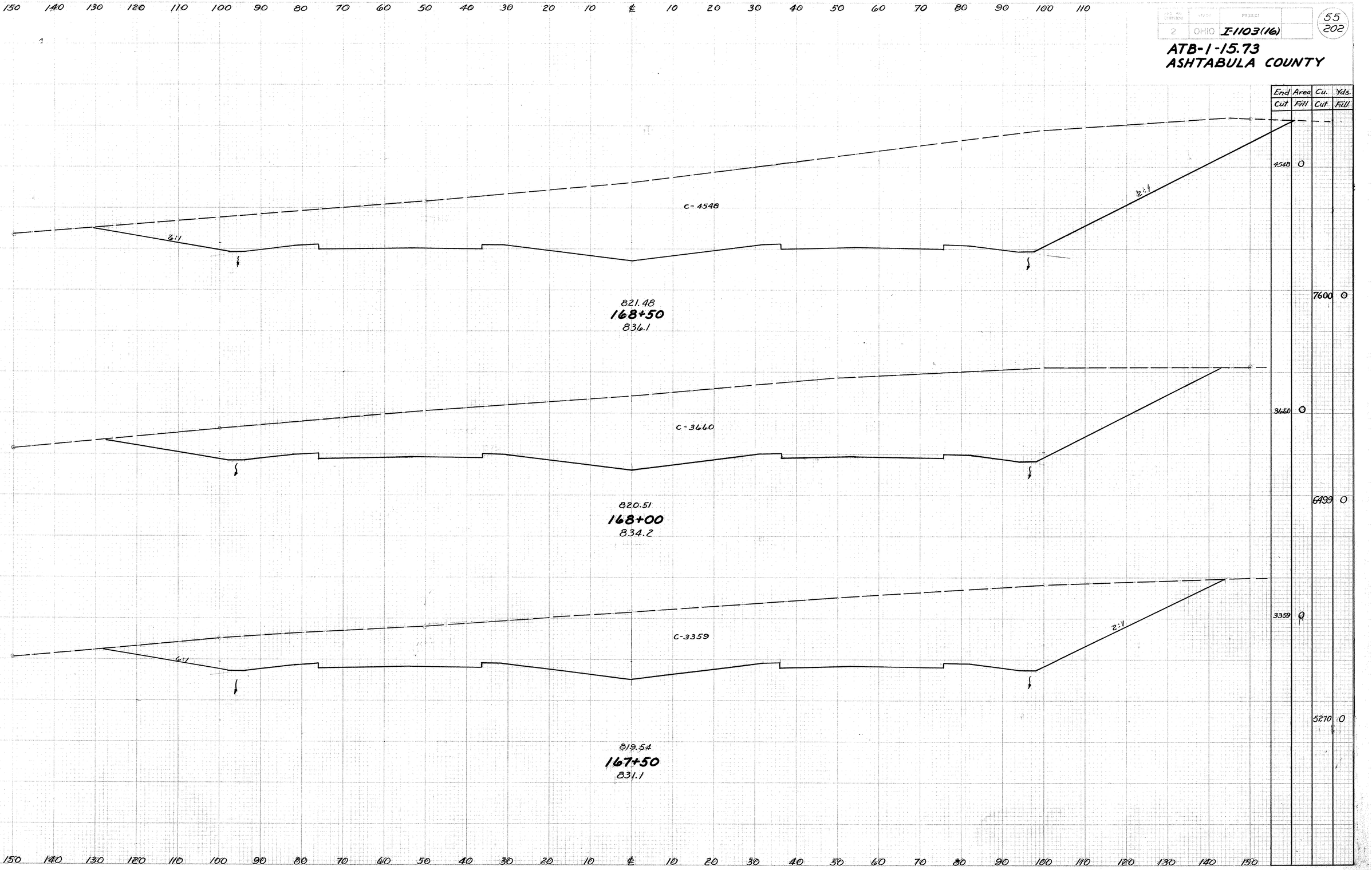
End Area		Cubic Yds	
Cut	Fill	Cut	Fill
2332	0		
		4242	0
2249	0		
		3611	0
1650	0		
		2428	0
972	0		
		1313	251

Sta. 165+50 to Sta. 167+00

DIST. NO. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

55
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
4548	0		
		7600	0
3660	0		
		6499	0
3359	0		
		5270	0

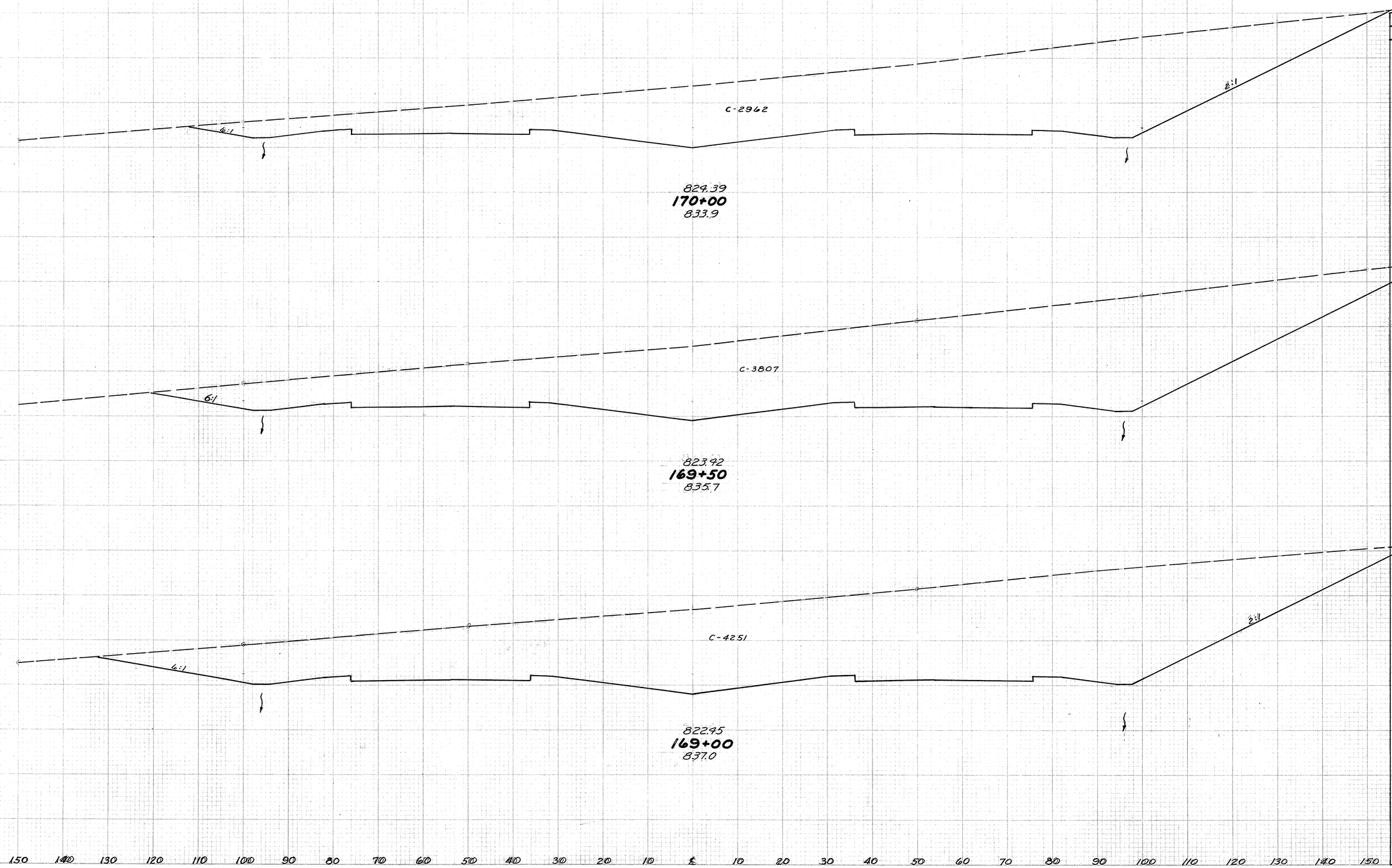
Sta. 167+50 to Sta. 168+50

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

56
202

ATB-1-15.73
ASHTABULA COUNTY

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



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
2962	0		
		6268	0
3807	0		
		7461	0
4251	0		
		8148	0

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. 169+00 to Sta. 170+00

U.S. RT. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

57
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu Yds.	
Cut	Fill	Cut	Fill
1437	57		
		3232	53
2054	0		
		4200	0
2482	0		
		5041	0

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

6:1 F-57 C-1437 2:1

827.30
171+50
831.2

C-2054

826.33
171+00
832.3

C-2482 2:1

825.34
170+50
833.2

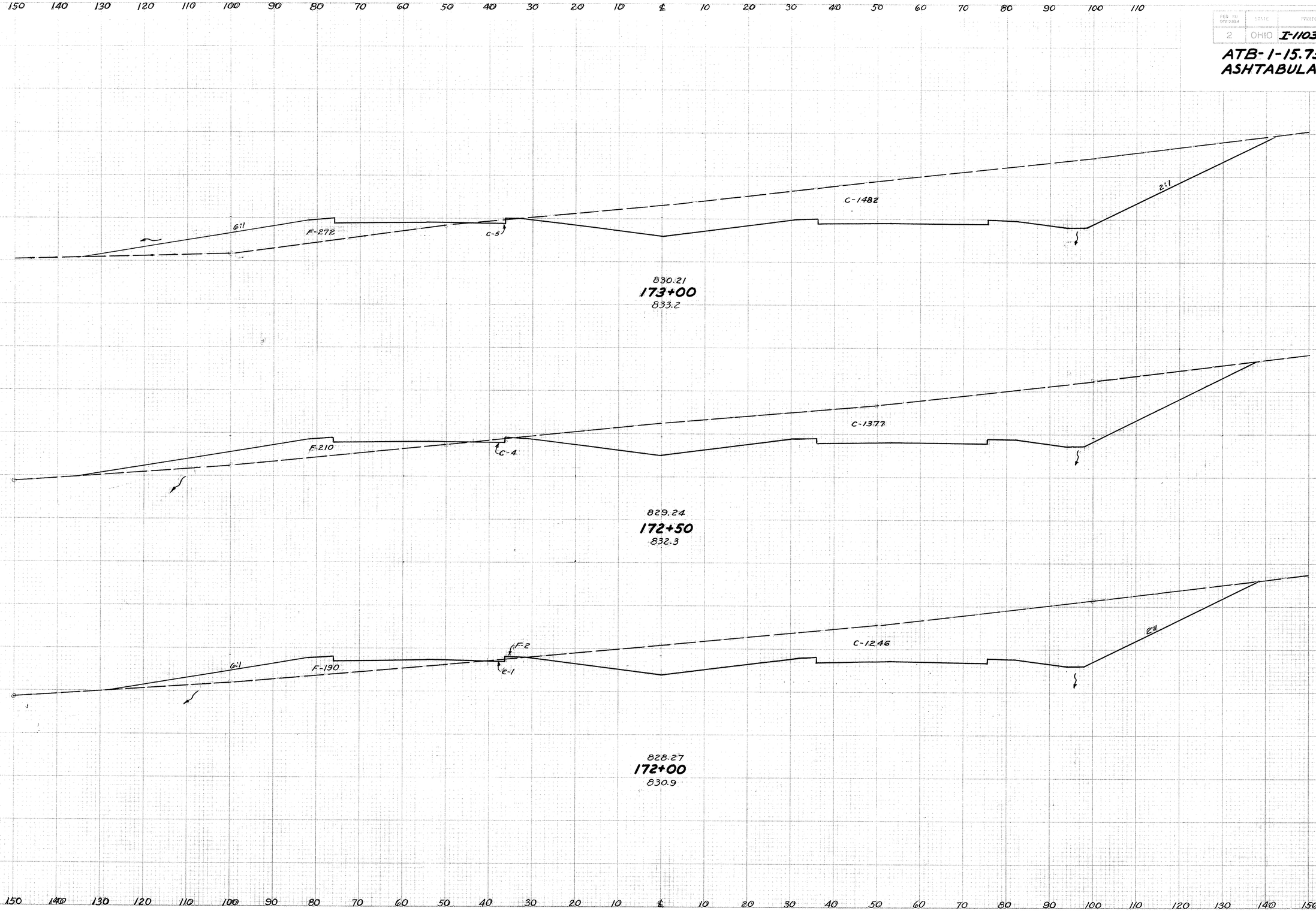
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 170+50 to Sta. 171+50

FED. RD. DIV. SIGN #	STATE	PROJECT	
2	OHIO	I-1103(16)	

58
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
1487	272		
		2655	447
1381	210		
		2434	372
1247	192		
		2486	230

Sta. 172+00 to Sta. 173+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

59
202

ATB-1-15.73
ASHTABULA COUNTY

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

4:1
F-369
C-1248
2:1
833.12
174+50
834.2

6:1
F-302
C-1269
2:1
832.15
174+00
833.7

6:1
F-316
C-1390
2:1
831.18
173+50
833.6

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

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
1248	369		
		2330	621
1269	302		
		2462	572
1390	316		
		2664	544

Sta. 173+50 to Sta. 174+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

60
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
896	682		
		1681	1225
920	641		
		1949	1066
1185	511		
		2253	815

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

C-896

F-682

2:1

2:1

836.03
176+00
833.3

C-920

F-641

2:1

835.06
175+50
833.4

C-1185

F-511

3:1

2:1

834.09
175+00
834.4

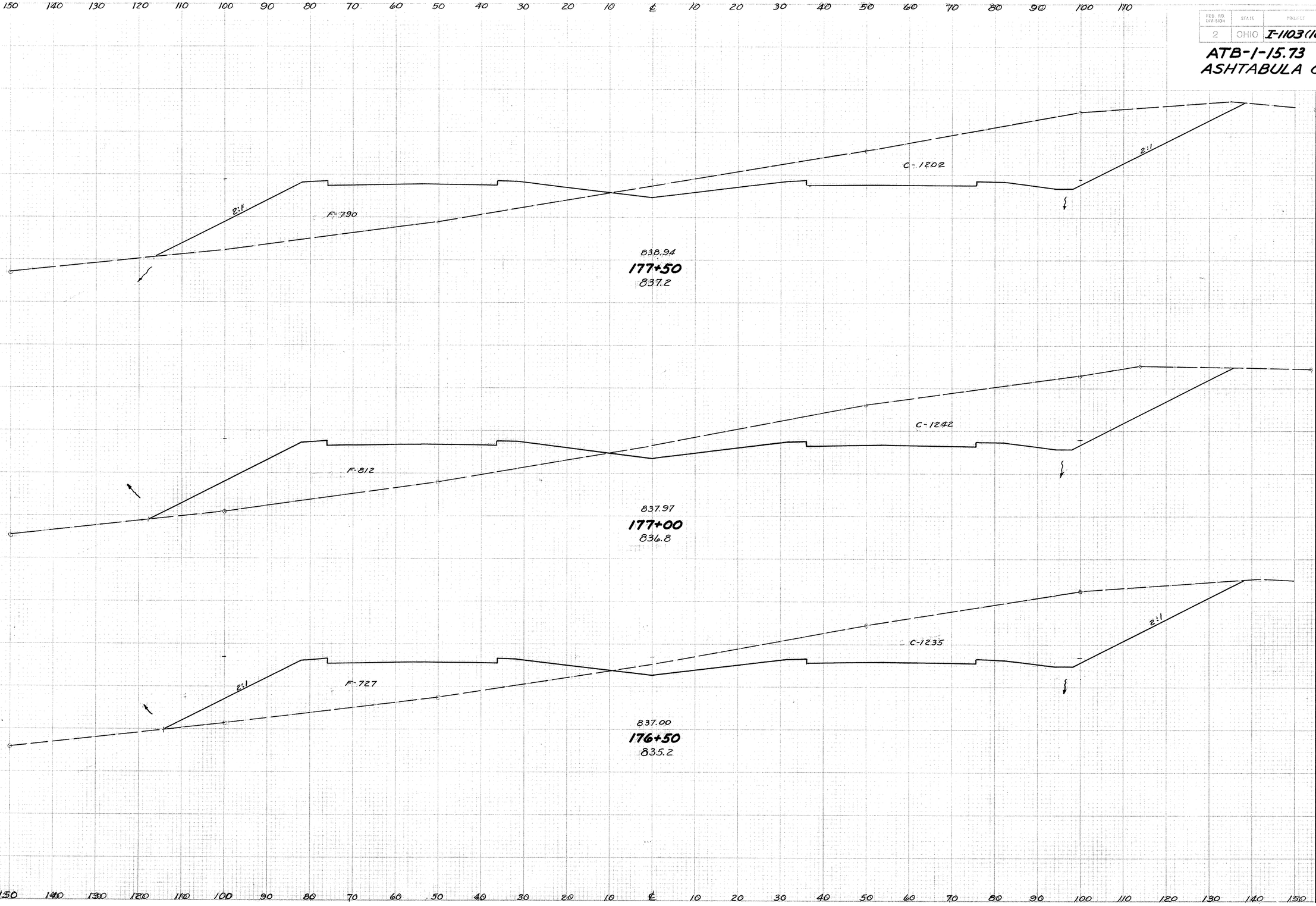
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Sta. 175+00 to Sta. 176+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

61
202

ATB-1-15.73
ASHTABULA COUNTY



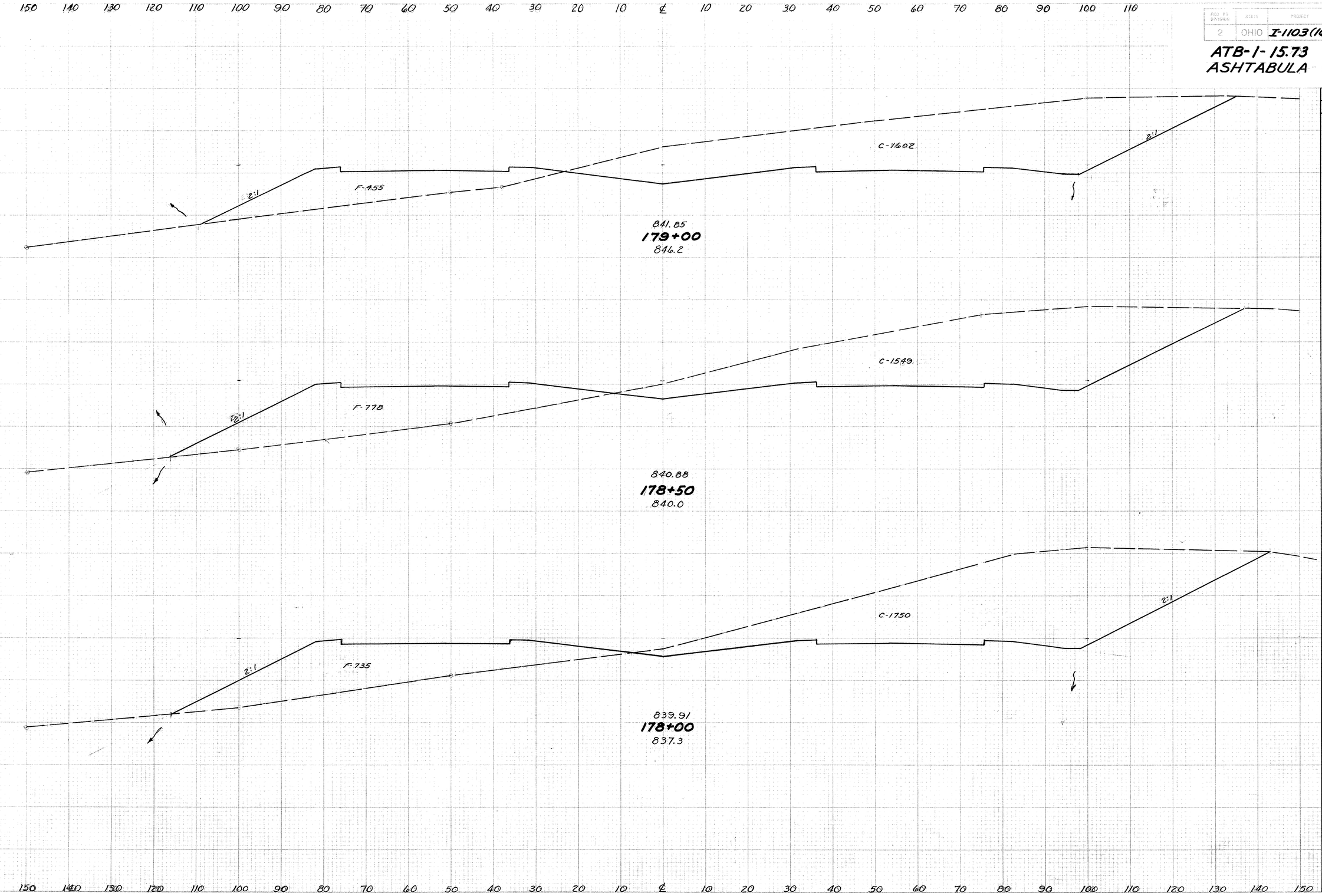
End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
1202	790		
		2263	1484
1242	812		
		2294	1425
1235	727		
		1974	1304

Sta. 176+50 to Sta. 177+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

62
202

ATB-1-15.73
ASHTABULA COUNTY



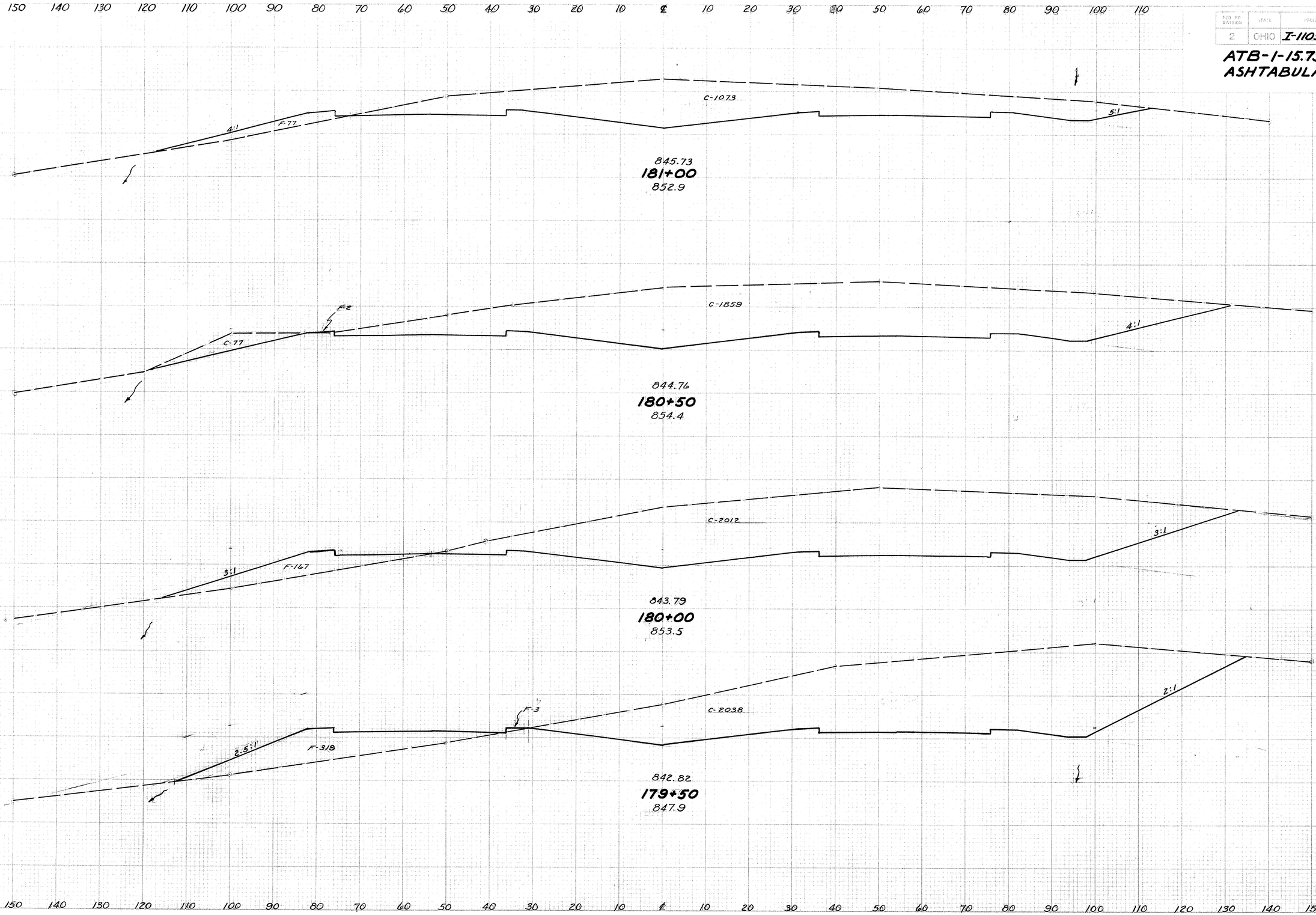
End Area		(Cu. Yds.)	
Cut	Fill	Cut	Fill
1602	455		
		2918	1142
1549	778		
		3055	1401
1750	735		
		2734	1412

Sta. 178+00 to Sta. 179+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

63
202

ATB-1-15.73
ASHTABULA COUNTY



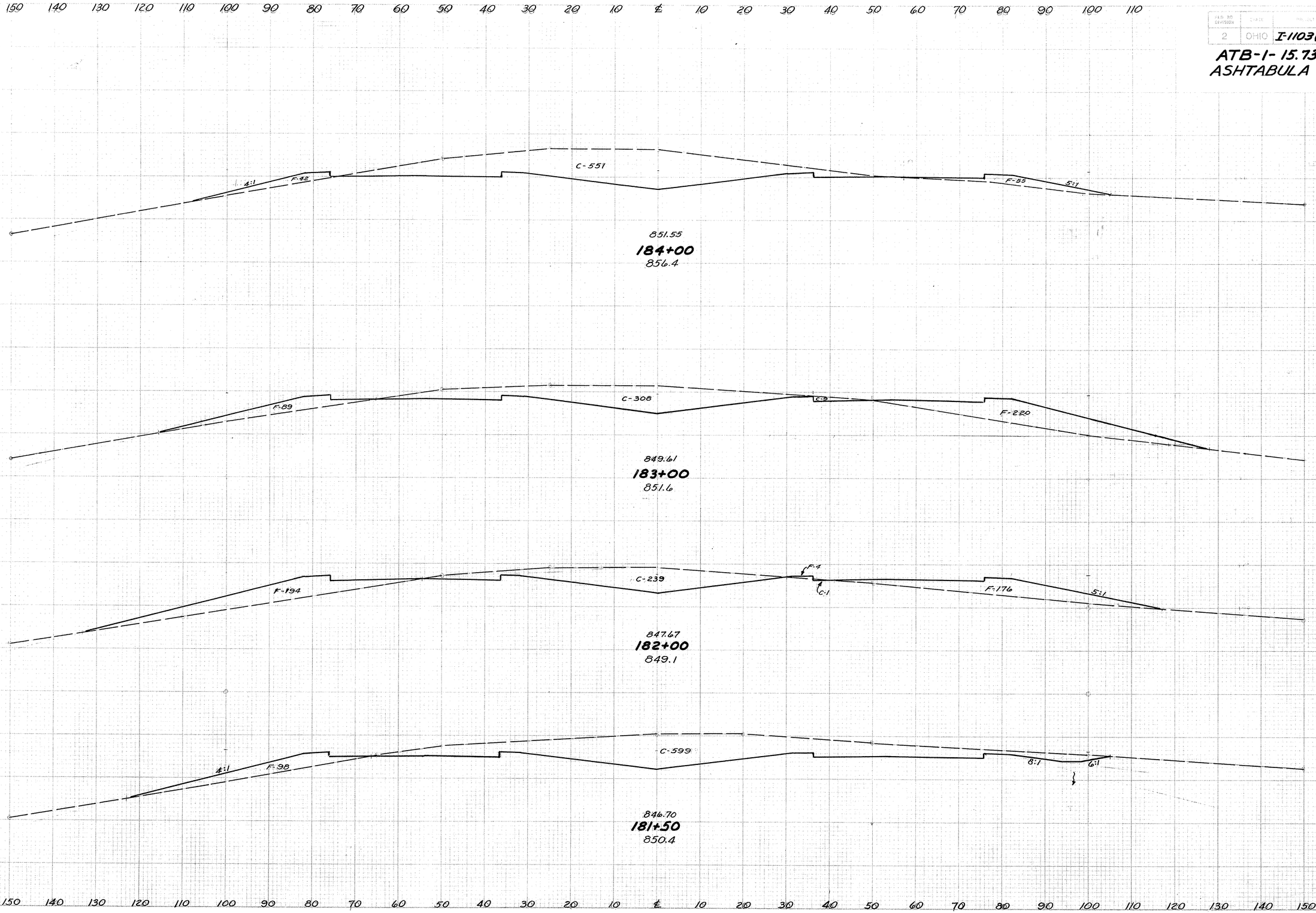
End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
1073	77		
		2787	73
1936	2		
		3656	157
2012	147		
		3750	453
2038	322		
		3370	719

Sta. 179+50 to Sta. 181+00

FED. RD. DIVISION	STATE	JOB NO.	
2	OHIO	I-1103(16)	

64
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	cut	Fill
551	97		
		1607	752
317	309		
		1031	1265
240	374		
		777	437
599	98		
		1548	162

Sta. 181+50 to Sta. 184+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

65
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-846

2:1

F-290

859.31
188+00
865.5

C-1740

857.37
187+00
867.7

C-2038

855.43
186+00
866.5

Gully Flow Right

C-1304

F-9

853.49
185+00
864.2

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

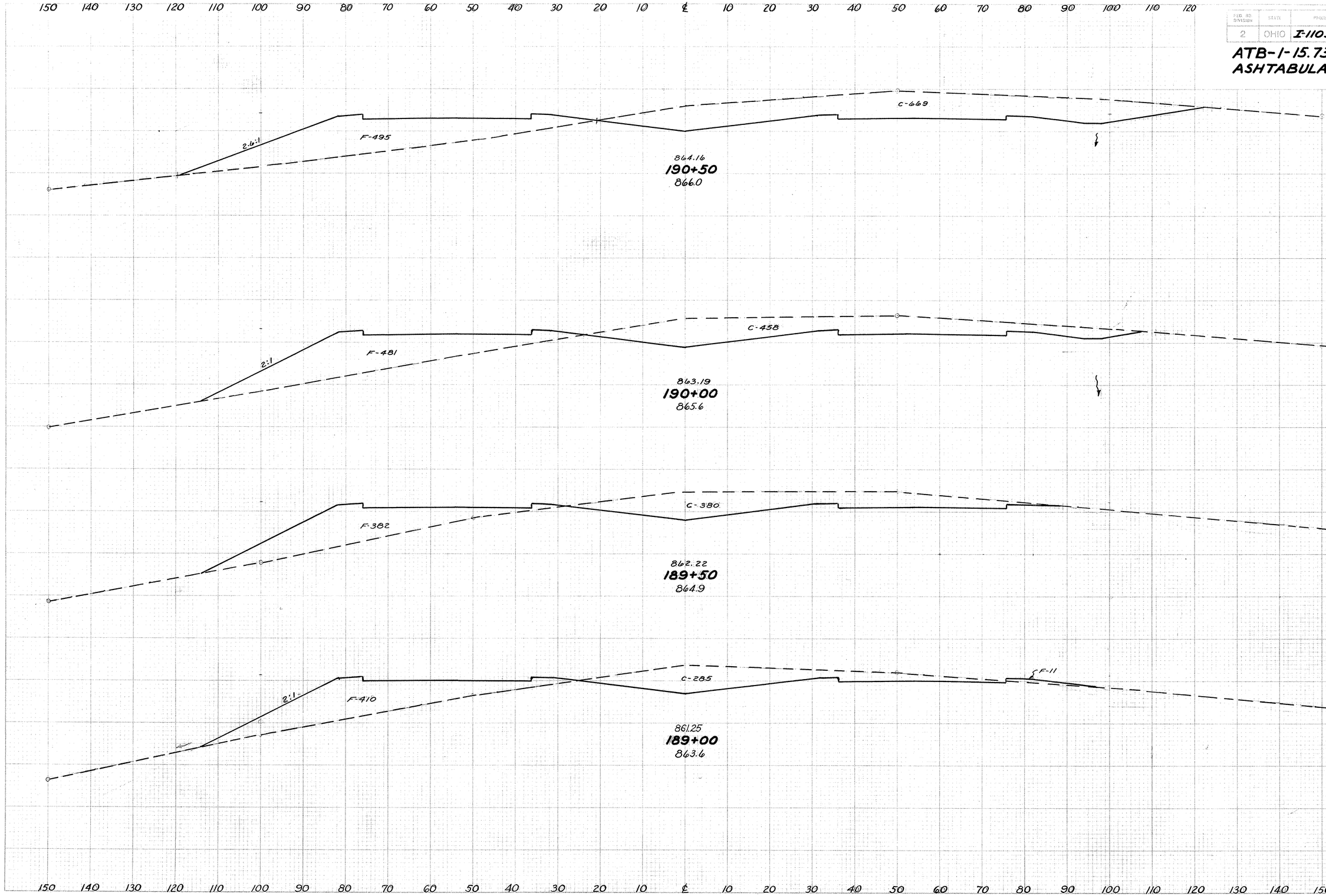
Station	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	846	290		
			4789	537
	1740	0		
			6997	0
	2038	0		
			6189	17
	1304	9		
			3435	196

Sta. 185+00 to Sta. 188+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

66
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
669	495		
		1044	904
458	481		
		776	799
380	382		
		615	744
285	421		
		2095	1317

Sta. 189+00 to Sta. 190+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

67
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-1947

867.57
192+50
878.8

C-1684

866.60
192+00
876.2

F-45 C-1428 6:1

865.63
191+50
871.9

F-2 C-1 4:1 F-228 C-1118 6:1

864.66
191+00
868.7

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

End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
1947	0		
		3363	0
1684	0		
		2881	42
1428	45		
		2359	254
1119	230		
		850	345

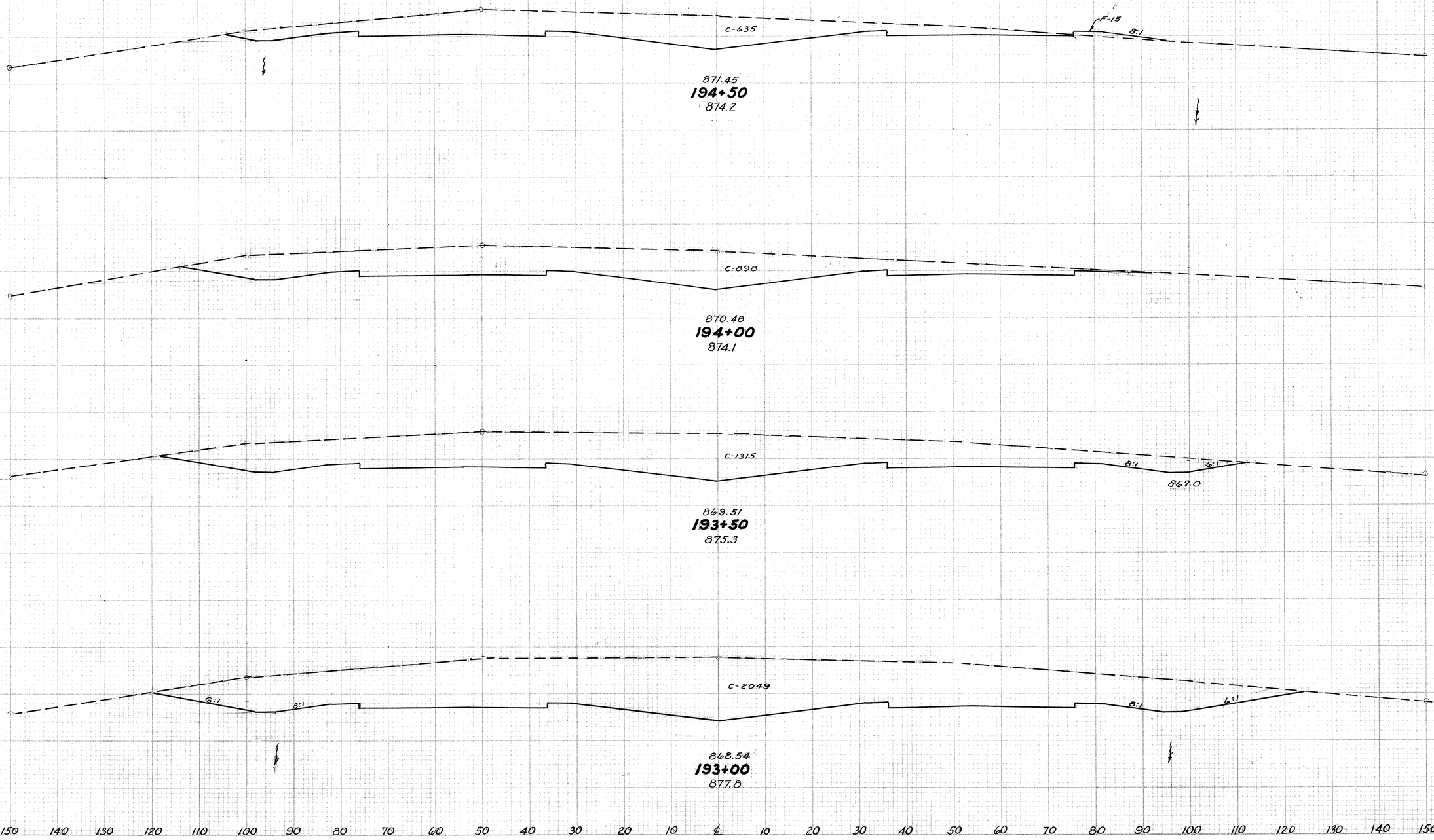
Sta. 191+00 to Sta. 192+50

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

68
202

ATB-1-15.73
ASHTABULA COUNTY

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



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
635	15		
		1419	14
898	0		
		2049	0
1315	0		
		3115	0
2049	0		
		3700	0

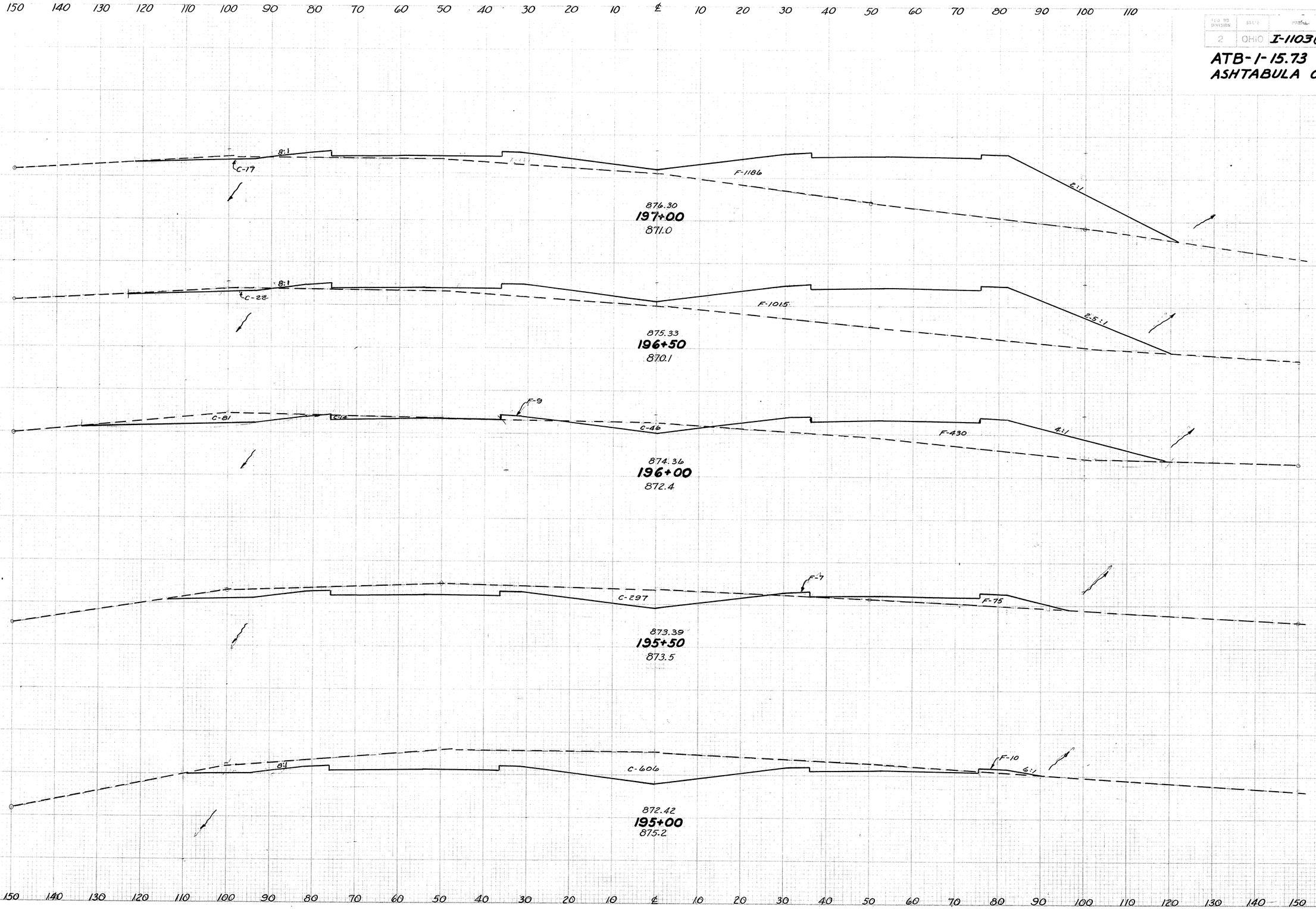
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Sta. 193+00 to Sta. 194+50

FED. HWY. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

69
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
17	1186		
		36	2038
22	1015		
		151	1347
141	439		
		406	483
297	82		
		836	85
606	10		
		1149	23

Plotted	
Seeding	
Temp.	
Drainage	
Areas	

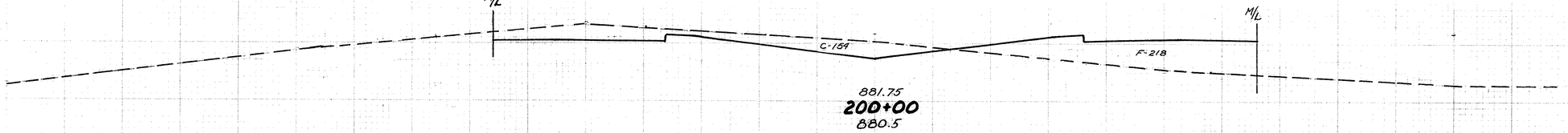
Sta. 195+00 to Sta. 197+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

70
202

ATB-1-15.73
ASHTABULA COUNTY

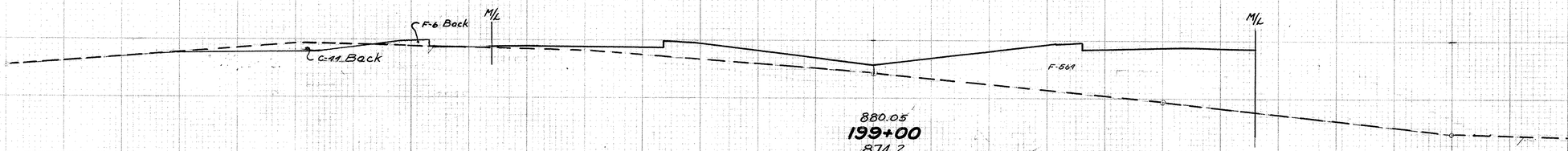
150 140 130 120 110 100 90 80 70 M/L 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110



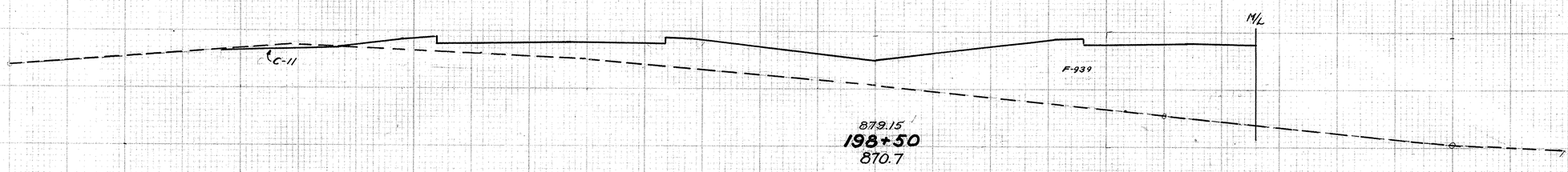
881.75
200+00
880.5



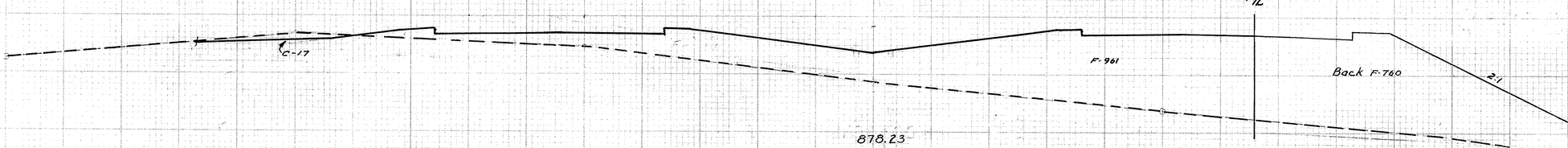
880.91
199+50
877.5



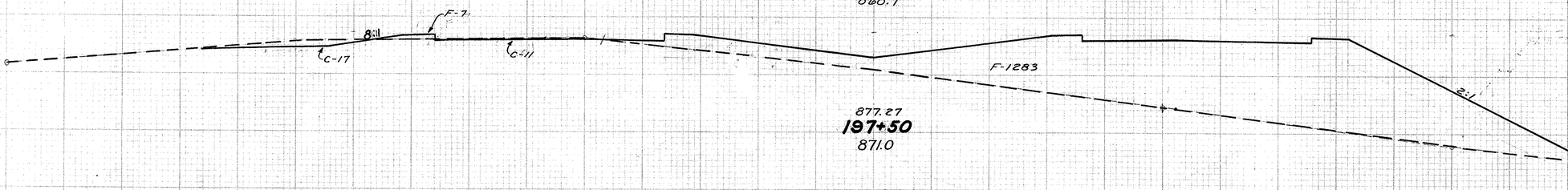
880.05
199+00
874.2



879.15
198+50
870.7



878.23
198+00
868.7



877.27
197+50
871.0

	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
	154	218		
			181	562
	42	378		
			39	872
Ahead	0	564		
Back	44	570		
			51	1398
	11	939		
			26	1759
Ahead	17	961		
Back	17	1727		
			41	2794
	28	1290		
			42	2292

For extensions to cross sections Sta 198+50 to Sta 291.00 see Sheet Nos. 190 to 199

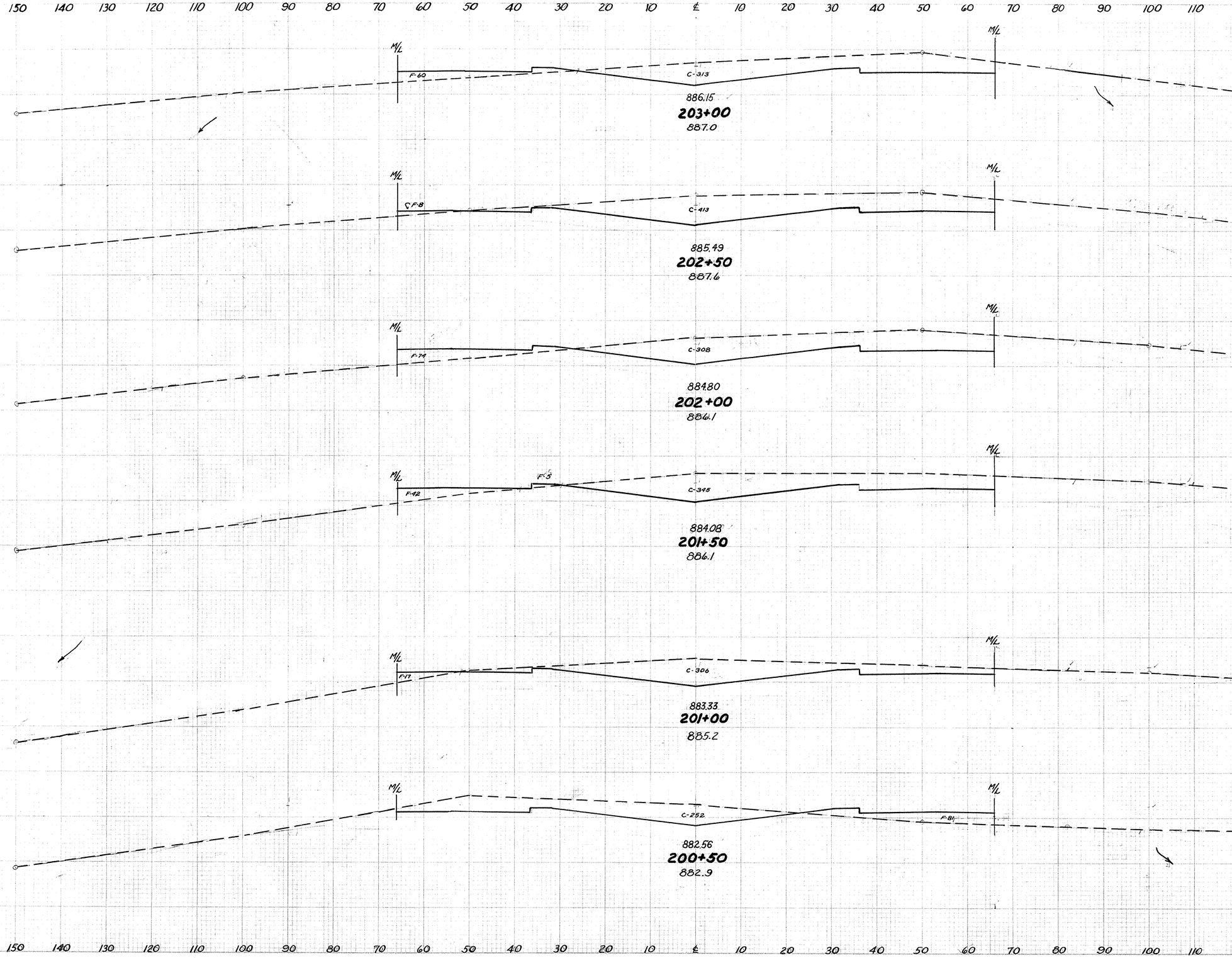
Seeding			
Template			
Drainage			
Areas			

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. 197+50 to Sta. 200+00

FED. RD. DIVISION	STATE	PROJECT		71
2	OHIO	I-1103(16)		202

ATB-1-15.73
ASHTABULA COUNTY



End Area Cut	End Area Fill	Cubic Yards Cut	Cubic Yards Fill
313	60		
		672	63
413	8		
		668	76
308	74		
		604	112
395	47		
		603	59
306	17		
		517	90
252	81		
		376	277

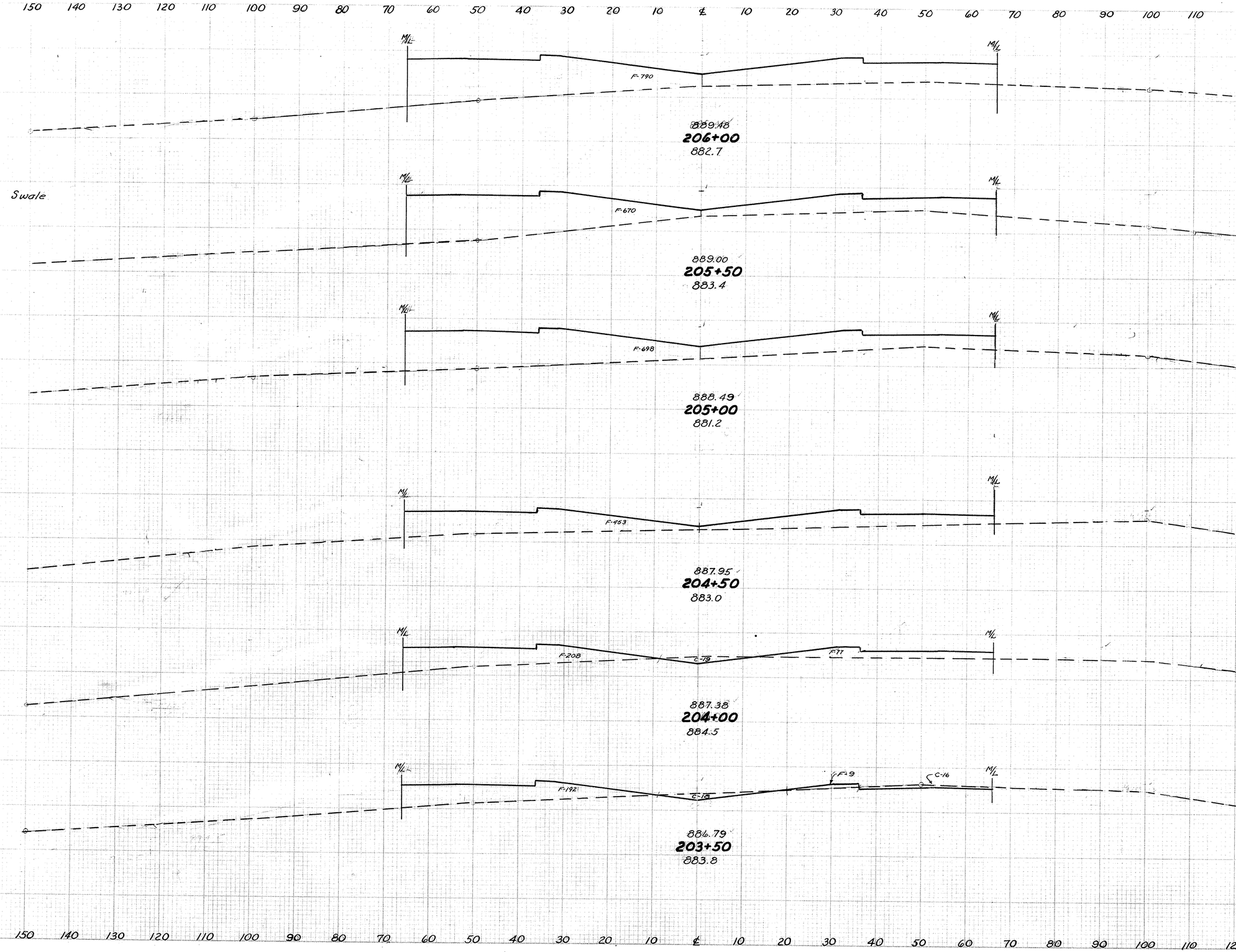
Plotted				
Sounding				
Template				
Drainage				
Areas				

Sta. 200+50 to Sta. 203+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

72
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	790		
		0	1352
0	670		
		0	1266
0	698		
		0	1066
0	453		
		18	684
19	285		
		49	450
34	201		
		321	241

Plotted	
Seeding	
Tempos.	
Drainage	
Areas	

Sta. 203+50 to Sta. 206+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

73
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — F-1213 — M/L

891.44
208+50
881.0

M/L — F-1210 — M/L

891.11
208+00
880.1

M/L — F-937 — M/L

890.75
207+50
882.7

M/L — F-818 — M/L

890.36
207+00
882.6

M/L — F-863 — M/L

889.93
206+50
884.6

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

Plotted	Sheeting	Template	Drainage

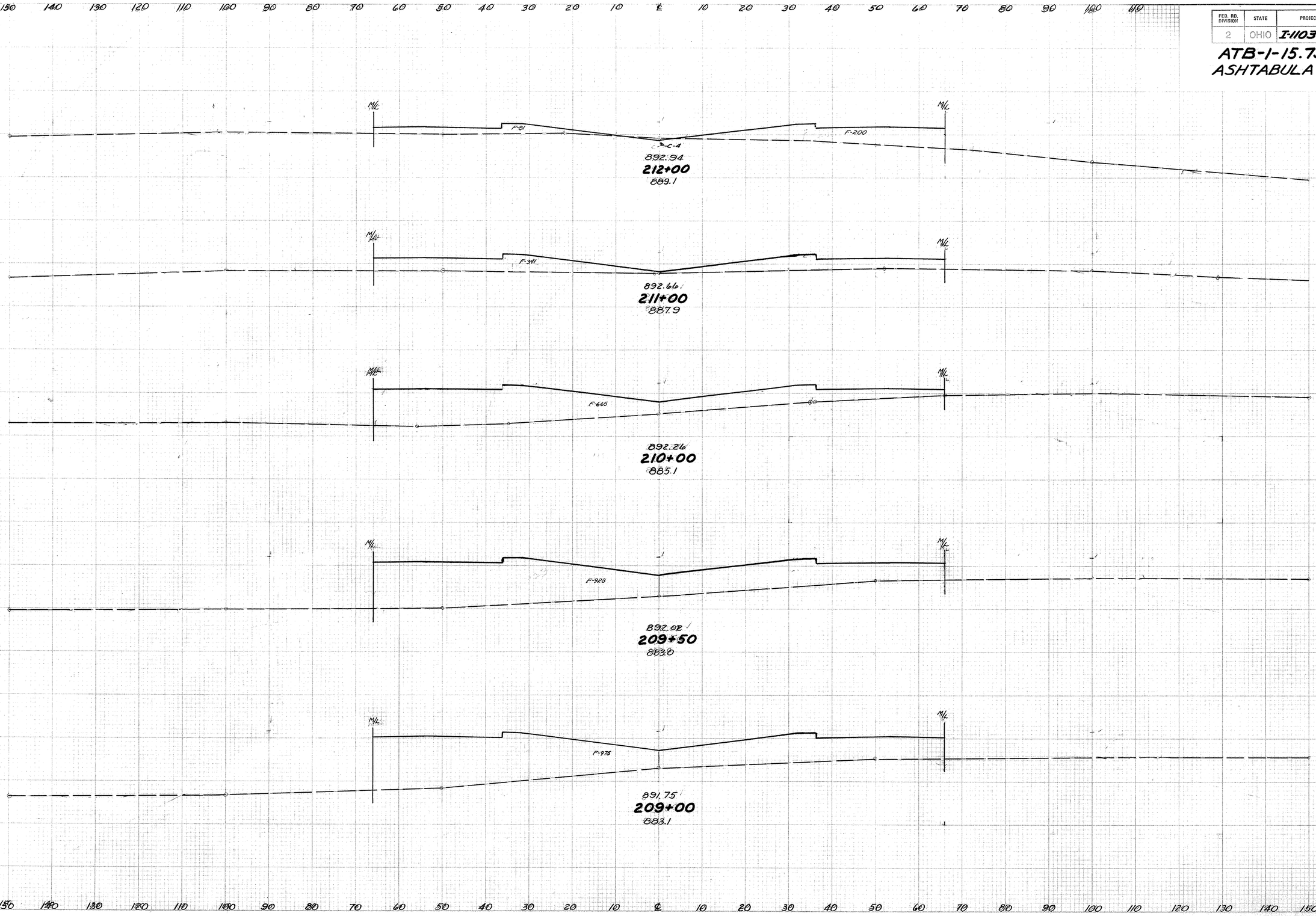
End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	1213		
		0	2244
0	1210		
		0	1988
0	937		
		0	1625
0	818		
		0	1557
0	863		
		0	1530

Sta. 206+50 to Sta. 208+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

74
202

ATB-1-15.73
ASHTABULA COUNTY



End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
4	281		
		7	1152
0	341		
		0	931
0	665		
		0	1470
0	923		
		0	1758
0	975		
		0	2028

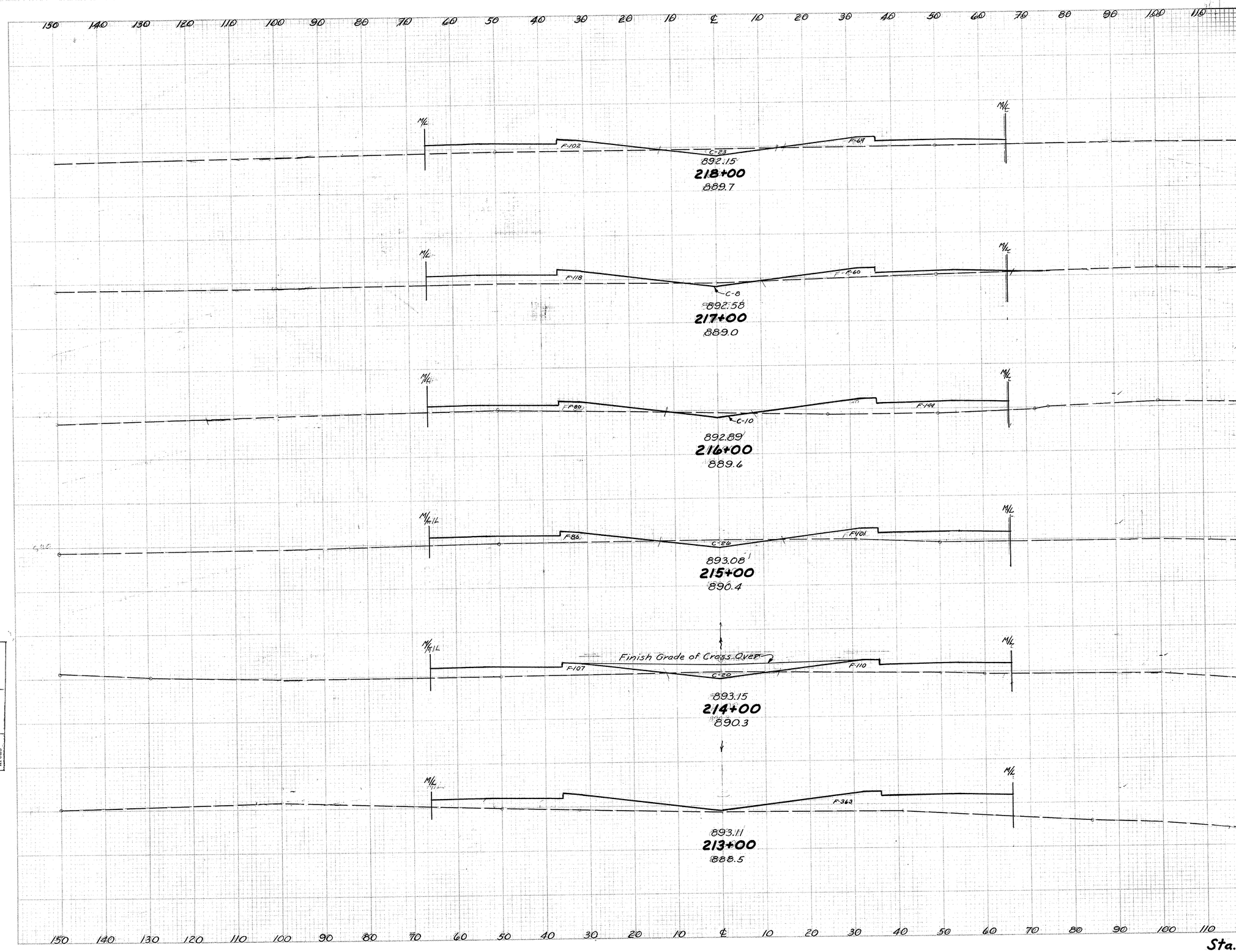
Plotted
Seeding
Template
Drainage Areas

Sta. 209+00 to Sta. 212+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

75
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yd	
Cut	Fill	Cut	Fill
23	166		
		57	637
8	178		
		33	744
10	224		
		67	761
26	187		
		85	748
20	217		
		37	1074
0	363		
		7	1193

Plotted	
Seeding	
Template	
Drainage	
Areas	

Sta. 213+00 to Sta. 218+00

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

76
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — C-620 — 887.08 — **224+00** — 889.7

M/L — C-535 — 888.22 — **223+00** — 890.8

M/L — C-401 — 889.24 — **222+00** — 890.2

M/L — F-5 — C-18 — C-248 — 890.14 — **221+00** — 890.1

M/L — F-2 — C-11 — C-62 Ahead — C-215 Back — C-266 Ahead — Extended I-22 — 890.93 — **220+00** — 890.4

M/L — C-18 — C-218 — 891.60 — **219+00** — 891.3

	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	620	0		
			2139	0
Ahead	535	0		
Back	637	0		
			2111	0
	503	0		
			1519	9
	317	5		
			1194	13
Ahead	328	2		
Back	226	2		
			856	4
	236	0		
			480	307

NOTE:
I-22 Subbase shall be extended to a depth of 18" below pavement between Station 220+00 and Station 223+00.

Planting			
Seeding			
Temp. Str.			
Drainage			
Areas			

Sta. 219+00 to Sta. 224+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

77
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-652
879.54
230+00
882.0

C-595
880.79
229+00
882.7

C-640
882.05
228+00
884.7

C-940
883.31
227+00
889.0

C-892
884.57
226+00
889.9

C-870
885.83
225+00
890.3

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

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
652	0		
		2309	0
595	0		
		2287	0
690	0		
		2926	0
940	0		
		3393	0
892	0		
		3263	0
870	0		
		59	
		27	0

Sta. 225+00 to 230+00

Planted	
Seeding	
Retained	
Drainage Areas	

FED. HWY. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

78
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L

F-492

872.15
236+00
866.5

M/L

M/L

F-30

C-32

C-28 Back

F-16 Back

873.24
235+00
871.0

F-165 Ahead
F-114 Back

M/L

M/L

C-416

874.50
234+00
876.0

M/L

M/L

C-760 Ahead
C-658 Back

875.76
233+00
879.3

Extended I-22

M/L

M/L

C-632

877.02
232+00
880.3

M/L

M/L

C-563

878.28
231+00
881.1

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

	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
	0	492		
			59	1272
Ahead	32	195		
Back	60	130		
			881	241
	416	0		
			2178	0
Ahead	760	0		
		0		
Back	658	0		
			2389	0
	632	0		
			2213	0
	563	0		
			2250	0

NOTE:
I-22 Subbase shall be extended to a depth of 18" below pavement between Station 233+00 and Station 235+00.

Plotted	Seeding	Template	Drainage	Areas

Sta. 231+00 to Sta. 236+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

79
202

ATB-1-15.73
ASHTABULA COUNTY

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

6:1 4:1 C-21 863.6 F-2131. 2:1

871.72
241+00
858.7

M/L 4:1 Ahead C-18 860.5 F-312 Ahead F-1606

871.14
240+00
860.2

54" Pipe Culvert
238+40.04
119.83' Lt.
FL. 859.13

M/L F-1632 2:1 SC-10 857.34 4:1

870.88
239+00
859.1

M/L F-1324 3.5:1 C-17 860.9

870.97
238+00
860.9

M/L F-783 M/L F-142 Ahead 4:1 C-57 863.4 4:1

871.39
237+00
863.4

54" Pipe Culvert
96.58' Lt. Sta 339+
F.L. 857.19

	End Area Cut	End Area Fill	Cu Yds. Cut	Cu Yds. Fill
	21	2131		
			72	7499
Ahead	18	1918		
Back	0	1066		
			19	4997
	10	1632		
			50	5478
	17	1326		
			137	4169
Ahead	57	925		
Back	0	783		
			0	2361

Printed Seeding	Plate	Drainage	Areas

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. 237+00 to 241+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

80
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cubic Yards	
Cut	Fill	Cut	Fill
4.5	12.71		
		463	3974
205	87.5		
		628	2708
134	58.7		
75	84.1		
		100	3780
135	120.0		
		289	6169

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

6:1 4:1 C-27 868.98 F 12.71 4:1 C-18 4:1 864.0
875.48
246+00
867.2

Swale

F-7 C-200 868.68 F 86.8 C-5 862.0
874.73
245+00
868.1

4:1 C-122 868.38 F-58.7 4:1 C-18 863.8
873.98
244+00
869.3

6:1 4:1 C-57 868.08 F-84.1 3:1 C-18 862.0
873.22
243+00
866.7

6:1 4:1 C-111 865.85 F-120.0 2:1 18" I-2 Outlet ℄ Sta. 242+00 F.L. 860.00 Rt. 1"/ft. 4:1 C-24 4:1 858.0
872.47
242+00
863.9

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

Seeding
Template
Drainage
Areas

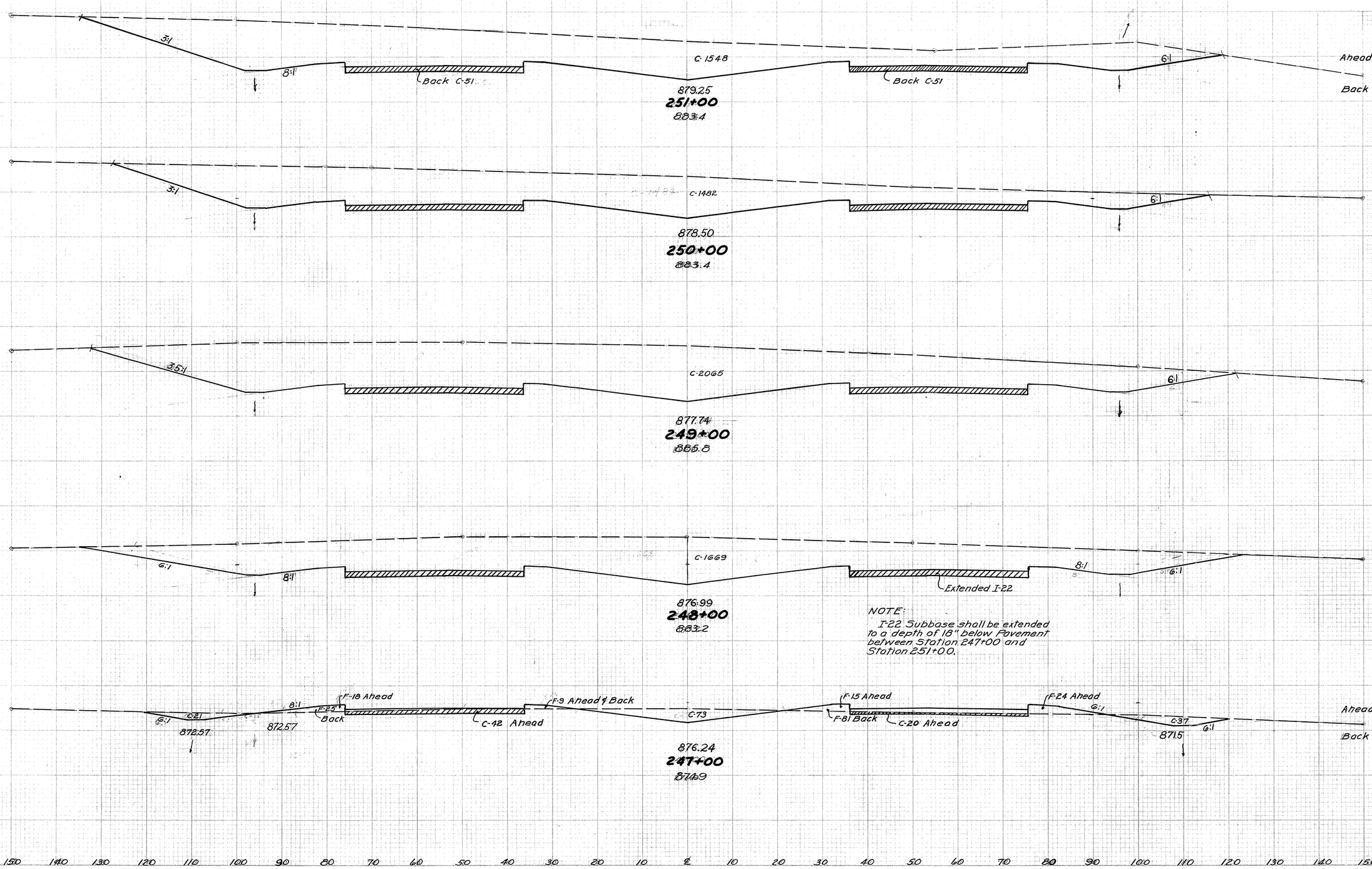
Sta. 242+00 to Sta. 246+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

81
202

ATB-1-15.73
ASHTABULA COUNTY

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



NOTE:
I-22 Subbase shall be extended to a depth of 18" below Pavement between Station 247+00 and Station 251+00.

	End Area Cut	End Area Fill	Cubic Yards Cut	Cubic Yards Fill
Ahead	1548	0		
Back	1749	0		
			5984	0
	1482	0		
			6569	0
	2065	0		
			6915	0
	1669	0		
			3448	122
Ahead	193	66		
Back	131	115		
			326	2567

Plotted	Seeding	mplete	Drainage	Areas

Sta. 247+00 to Sta. 251+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

82
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-1634
G:1
8:1
8:1
6:1
882.95
256+00
889.2
880.78

C-1286
880.59
880.59
8:1
882.26
255+00
886.2
880.09

C-1249
G:1
879.74
879.74
881.51
254+00
885.4

C-1335
3:1
877.44
877.44
880.75
253+00
885.7
8:1
6:1

C-1349
3:1
F-149
4:1
Swale
880.00
252+00
885.5

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

End Area		Cubic Yards	
Cut	Fill	Cut	Fill
1634	0		
		5408	0
1286	0		
		4695	0
1249	0		
		4785	0
1335	0		
		4971	276
1349	149		
		5365	276

Plotted				
Seeding				
Templets				
Drainage				
Areas				

Sta. 252+00 to Sta. 256+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

83
202

ATB-1-15.73
ASHTABULA COUNTY

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

C-519

6:1 8:1 8:1 6:1

884.66
261+00
886.6

882.49

C-704

6:1

884.56
260+00
887.0

882.20

C-529

F-4 E-12 6:1

884.33
259+00
886.0

881.92

C-523

F-3 E-11 6:1

883.99
258+00
885.3

881.64

C-1480

6:1 8:1 8:1 6:1

883.53
257+00
887.3

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

End Area		Cu. Yds.	
Cut.	Fill	Cut.	Fill
519	0		
		2265	0
704	0		
		2296	7
536	4		
		1982	13
534	3		
		3730	6
1480	0		
		5767	0

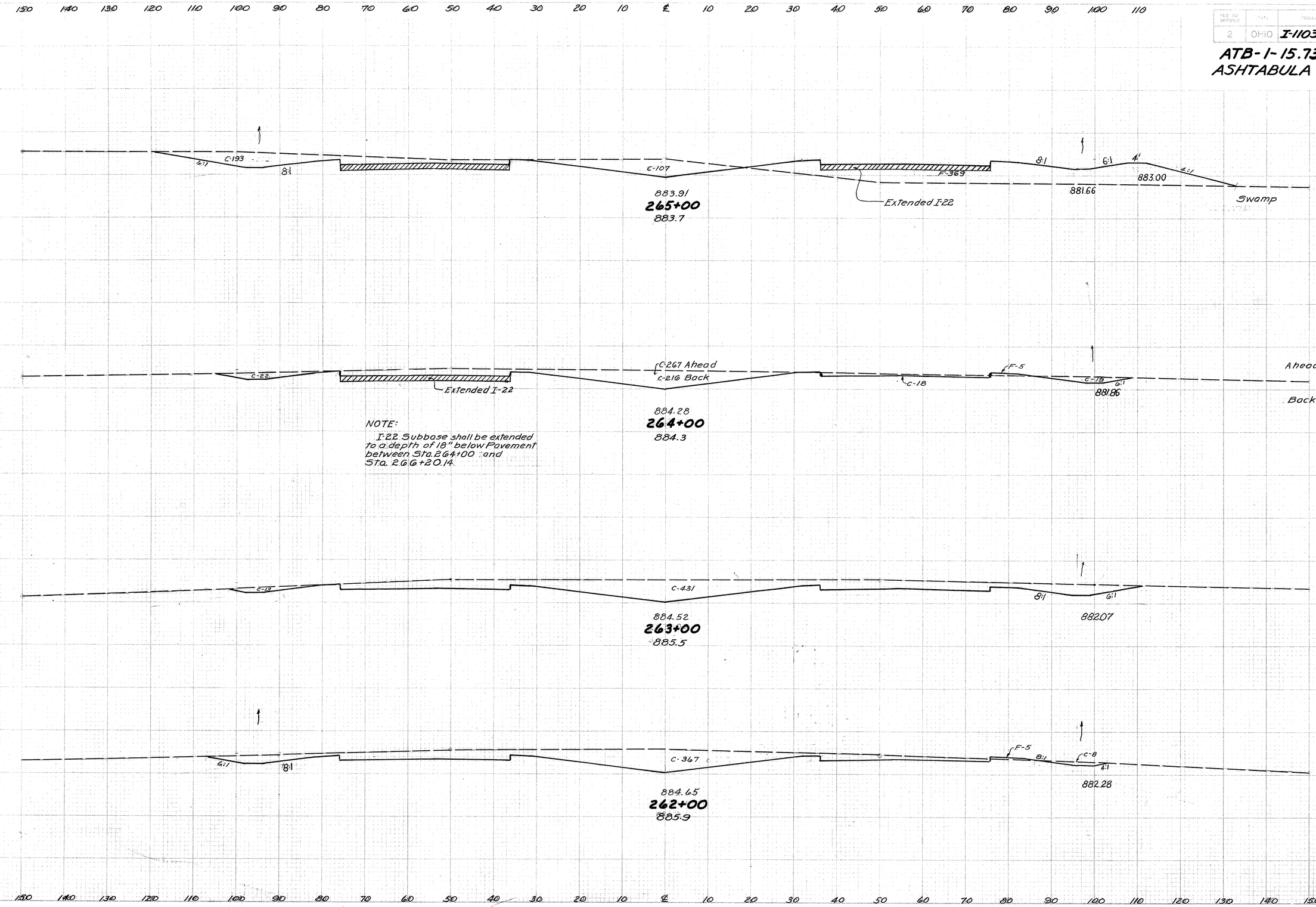
Plotted				
Seeding				
Duplicate				
Drainage				
Areas				

Sta. 257+00 to Sta. 261+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

84
202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
300	369		
		1159	693
Ahead 326	5		
Back 275	5		
		1331	9
444	0		
		1517	9
375	5		
		1656	9

Plotted	
Seeding	
Template	
Drainage	
Areas	

Sta. 262+00 to Sta. 265+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

85
202

ATB-1-15.73
ASHTABULA COUNTY

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

c-1588

6:1 8:1 8:1 3:1

881.69
270+00
885.7

c-1966

3:1

881.95
269+00
888.4

c-1134

6:1

882.69
267+20.14
887.1

c-839 Back
c-737 Ahead

883.32
266+20.14
885.7

End Extended I-22 Sta 266+20.14

c-177 c-139 c-88 c-22

6:1 8:1 8:1 6:1

883.82
265+20.14
883.6

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

	End Area		Cut Yds.	
	Cut	Fill	Cut	Fill
1588	0			
			6582	0
1966	0			
			5741	0
1134	0			
			3465	0
Ahead	737	0		
Back	839	0		
			2346	0
428	0			
			271	137

Sta. 265+20.14 to Sta. 270+00

DIV. NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	

86
202

ATB-1-15.73
ASHTABULA COUNTY

24" Pipe Culvert
103.18' Lt. Sta. 276+03.09
F.L. 859.00

NOTE: For Ahead Sections to Right of M/L, see Sheets Nos. 150 to 155

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

M/L
F-1630
2:1
873.47
276+00
862.6

M/L
Back & Ahead F-1341
Back F-310
4:1
C-36
Back
4:1
866.64
Back & Ahead
C-20
4:1
4:1
1' per ft.
2:1
861.50

875.03
275+00
865.6

F-766
3:1
C-21
865.62
6:1
C-28
871.64

876.48
274+00
871.2

15" I.2 Outlet
℄ Sta. 273+75
F.L. 868.00 Lt.

F-217
4:1
C-43
4:1
869.73
C-19
F-4
8:1
C-225
4:1

877.84
273+00
874.8

F-40
C-1007
3:1
5:1
C-12
C-12
873.84

879.02
272+00
882.0

C-15
C-1256
3:1
8:1
6:1

880.12
271+00
882.3

For extensions to cross sections Sta. 275+00 to Sta. 317+00 see Sheet Nos. 150 to 160

	End Area Cut	End Area Fill	Cubic Yards Cut	Cubic Yards Fill
	0	1630		
			37	3502
Ahead	20	1341		
Back	56	1651		
			194	4476
	49	766		
			622	1828
	287	221		
			2419	193
	1019	40		
			4241	74
	1271	0		
			5295	0

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. 271+00 to Sta. 276+00

Plotted	
Reading	
Template	
Drainage	
Areas	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

87
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L

C-924
867.07
280+00
872.5

6:1 8:1

M/L

C-574
868.67
279+00
870.1

866.50

M/L

C-20 6:1 F-127 C-22 F-17 C2

866.0

870.27
278+00
867.9

M/L

C-23 F-545
864.5

871.07
277+50
865.6

M/L

C-18 F-1037
862.5

871.87
277+00
863.0

Elev. 860

Proposed Cable and Pipe

Connect to Existing at 218' Lt ℄

Connect to Existing at 242' Rt ℄

M/L

3:1 C-9 F-1456
860.14

872.67
276+50
861.4

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

	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
924		0		
			2774	0
574		0		
			1144	267
44		144		
			62	638
23		545		
			38	1465
18		1037		
			30	2309
9		1456		
			8	2858

Plotted	
Seeding	
Terrace	
Drainage	
Areas	

Sta. 276+50 to 280+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

88
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L

F-2620

861.53
283+46
840.1

F-1520

862.27
283+00
848.9

15" I-2 Outlet
℄ Sta. 282+50
F.L. 856.00 L.T.

F-397

863.07
282+50
858.4

F-1 C-3 F-18 C-309

863.87
282+00
865.5

F-13 C-571

864.67
281+50
868.5

F-12 C-24 6:1 C-42 6:1 Back Ahead & Back C-836

865.47
281+00
870.4

NOTE:
For Ahead Sections To Left
of M/L, see Sheets Nos. 156 to 160

	End Areas		Cubic Yards	
	Cut	Fill	Cut	Fill
	0	2620		
			0	3527
	0	1520		
			0	1775
	0	397		
			289	385
	312	19		
			818	30
	571	13		
			1303	12
Ahead	836	0		
Back	902	12		
			3382	22

Plotted	
Seeding	
Template	
Progress	
Areas	

Sta. 281+00 to Sta. 283+46

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

89
202

ATB-1-15.73
ASHTABULA COUNTY

	Plotted
	Seeding
	Template
	Drainage Areas

	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
	8	207		
			15	1846
	0	790		
			0	4219
	0	1488		
			0	3513
	0	2305		
			0	4428
	0	2477		
			0	5038

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

M/L — F-120 — C-8 — F-87 — M/L

855.87
287+00
852.5

M/L — F-790 — M/L

857.47
286+00
849.7

M/L — F-1488 — M/L

859.07
285+00
847.2

M/L — F-2305 — M/L

859.87
284+50
839.9

M/L — F-2477 — M/L

860.67
284+00
839.9

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

Sta. 284+00 to Sta. 287+00

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

90
202

ATB-1-15.73
ASHTABULA COUNTY

	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
	658	0		
			2641	0
	768	0		
			1544	257
	66	139		
			65	347
	5	236		
			23	378
	20	173		
			58	278
	43	127		
			47	309

M/L — C-658 — 849.47 — **291+00** — 852.5

M/L — C-768 — 851.07 — **290+00** — 855.6

M/L — F-86 — C-66 — F-53 — 852.67 — **289+00** — 850.8

M/L — F-177 — C-5 — F-59 — 853.47 — **288+50** — 850.0

M/L — F-121 — C-20 — F-52 — 854.27 — **288+00** — 851.7

M/L — F-70 — C-43 — F-57 — 855.07 — **287+50** — 853.1

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

Plotted	Seeding	Duplicate	Drainage Areas

Sta. 287+50 to Sta. 291+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

91
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — F-426 — M/L

843.07
295+00
838.6

M/L — F-745 — M/L

844.67
294+00
836.9

M/L — F-842 — M/L

15" I2 Outlet
℄ Sta. 293+82
F.L. 836.50 Lt.

844.86
293+88
837.2

M/L — F-341 — M/L

846.27
293+00
841.5

M/L — C-344 — M/L

847.87
292+00
848.1

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

End Area		Cubic Yds	
Cut	Fill	Cut	Fill
0	426		
		0	2169
0	745		
		0	351
0	842		
		0	1928
0	341		
		637	681
344	0		
		1856	0

Plotted
Seeding
Template
Drainage
Areas

Sta. 292+00 to Sta. 295+00

FED. AID DIVISION	STATE	PROJECT	92
2	OHIO	I-1103(16)	202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — C-1100 — M/L

836.67
299+00
843.8

M/L — C-1061 — M/L

837.47
298+50
844.4

M/L — C-866 — M/L

838.27
298+00
843.4

M/L — C-698 — M/L

839.87
297+00
843.5

M/L — F-6 — C-281 — M/L

M/L — F-17

841.47
296+00
841.6

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

	End Area		Cubic Yds.	
	Cut	Fill	Cut	Fill
	1100	0		
			2001	0
	1061	0		
			1784	0
	866	0		
			2896	0
	698	0		
			1813	43
	281	23		
			520	831

Planting	Seeding	Mulching	Drainage	Areas

Sta. 296+00 to Sta. 299+00

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

93
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — F-141 — C-14 — F-20 — C3 — M/L

828.67
304+00
826.0

M/L — F-980 — M/L

15" I-2 Outlet
℄ Sta. 303+00
F.L. 818.00 Lt.

830.27
303+00
820.8

M/L — F-1172 — M/L

831.87
302+00
821.5

M/L — F-212 — C-2 — F-173 — M/L

833.47
301+00
829.7

M/L — C-24 — C-307 — M/L

835.07
300+00
836.3

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

	End Area		Cubic Yds.	
	Cut	Fill	Cut	Fill
	17	161		
			31	2113
	0	980		
			0	3985
	0	1172		
			4	2883
	2	385		
			617	713
	331	0		
			2650	0

Plotted	Seeding	Temp. Str.	Drainage	Areas

Sta. 300+00 to Sta. 304+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

94
202

ATB-1-15.73
ASHTABULA COUNTY

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

M/L — C-15 — F-4 — C-100 — F-4 — C-14 — M/L

823.38
309+00
822.6

M/L — C-452 — M/L

66'

824.00
308+00
825.5

M/L — C-690 — M/L

16'

824.84
307+00
828.2

M/L — C-945 — M/L

825.90
306+00
831.6

M/L — C-1088 — M/L

826.51
305+50
833.1

M/L — C-735 — M/L

827.18
305+00
831.5

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

	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
	129	8		
			1076	15
	452	0		
			2115	0
	690	0		
			3028	0
	945	0		
			1883	0
	1088	0		
			1688	0
	735	0		
			1393	298

Plotted	
Seeding	
Template	
Drainage Areas	

Sta. 305+00 to Sta. 309+00

FED. AID DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

95
202

ATB-1-15.73
ASHTABULA COUNTY

5'4" Pipe Culvert
103.60' Rt. Sta. 313+08.57
F.L. 812.00

15" I-2 Outlet
℄ Sta. 313+00
F.L. 813.00 Lt.

M/L

F-1222

822.07
313+00
812.4

4:1
C-15
4:1
812.70

M/L

F-1056

822.37
312+00
813.8

C-30
813.12

M/L

F-492

822.52
311+50
817.6

M/L
F-198
4:1
Ahead
C-32
4:1
813.33

M/L

F-76
C-42
F-126

822.67
311+00
820.7

M/L

F-39
C-69
F-8
F-127

822.97
310+00
821.6

	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
	15	1222		
			83	4219
	30	1056		
			58	1616
Ahead	32	690		
Back	0	492		
			39	637
	42	196		
			206	467
	69	56		
			367	119

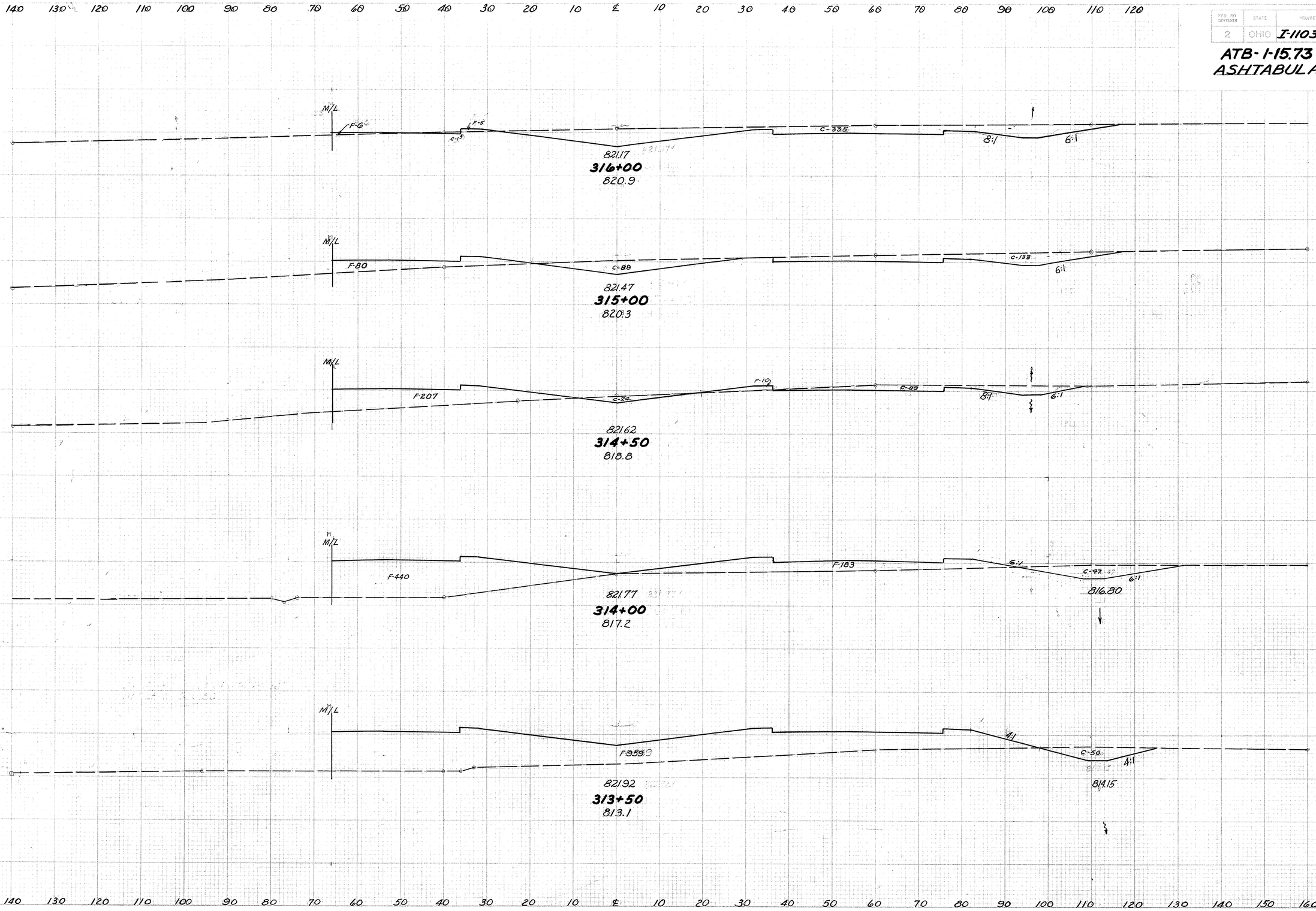
Profiles
Seeding
Template
Drainage
Areas

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	I-1103(16)	

96
202

ATB-1-15.73
ASHTABULA COUNTY



End Area Cut	End Area Fill	Cubic Yds Cut	Cubic Yds Fill
336	11		
		1031	169
221	80		
		309	275
113	217		
		148	778
47	623		
		90	1465
50	959		
		60	2019

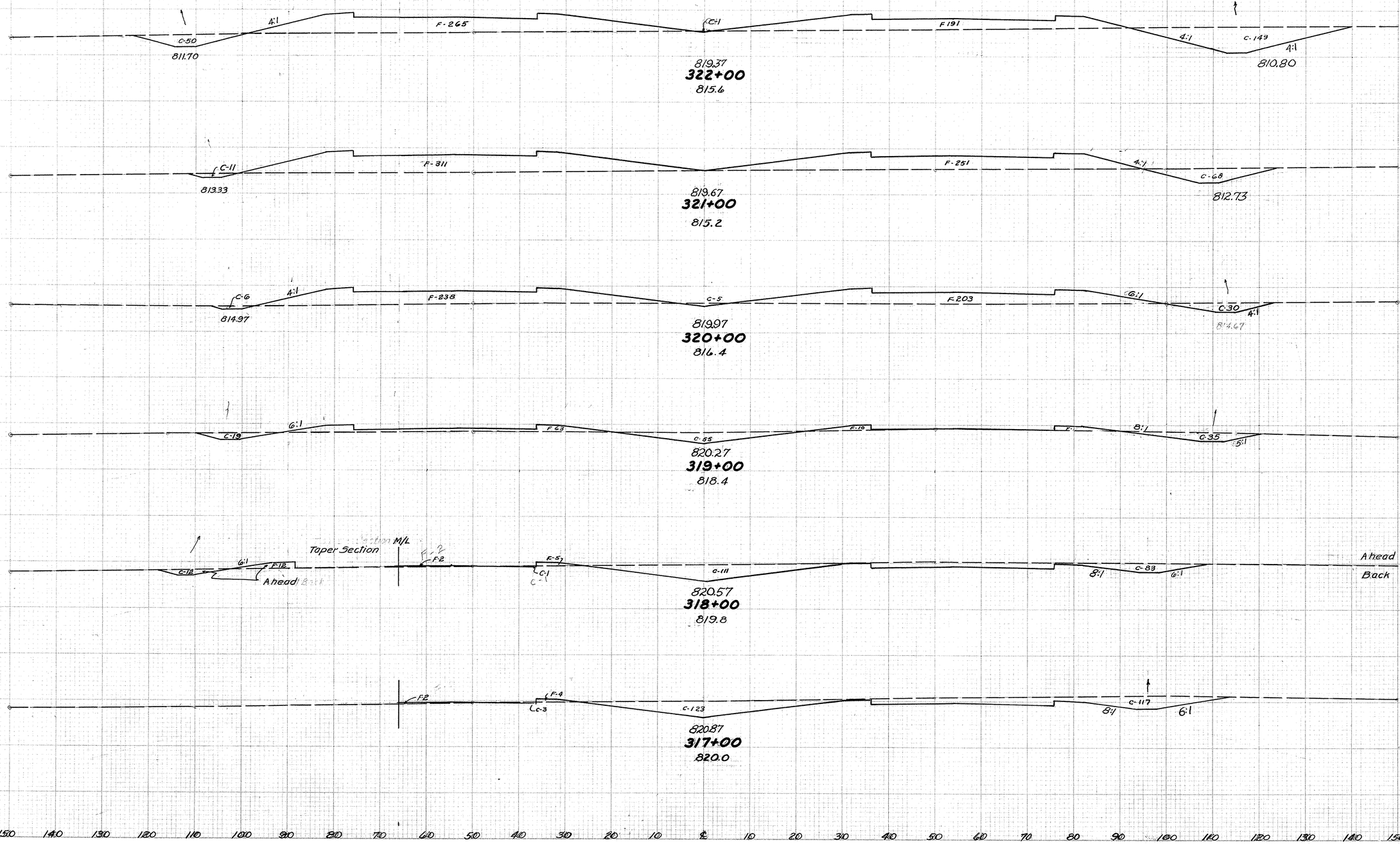
Sta. 313+50 to Sta. 316+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

97
202

ATB-1-15.73
ASHTABULA COUNTY

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



	End Area		Cubic Yards	
	Cut	Fill	Cut	Fill
	200	456		
			517	1885
	79	562		
			222	1857
	41	441		
			278	972
	109	84		
			585	191
Ahead	207	19		
Back	194	7		
			809	24
	243	6		
			1072	31

Plotted
Seeding
Plate
Drainage
Areas

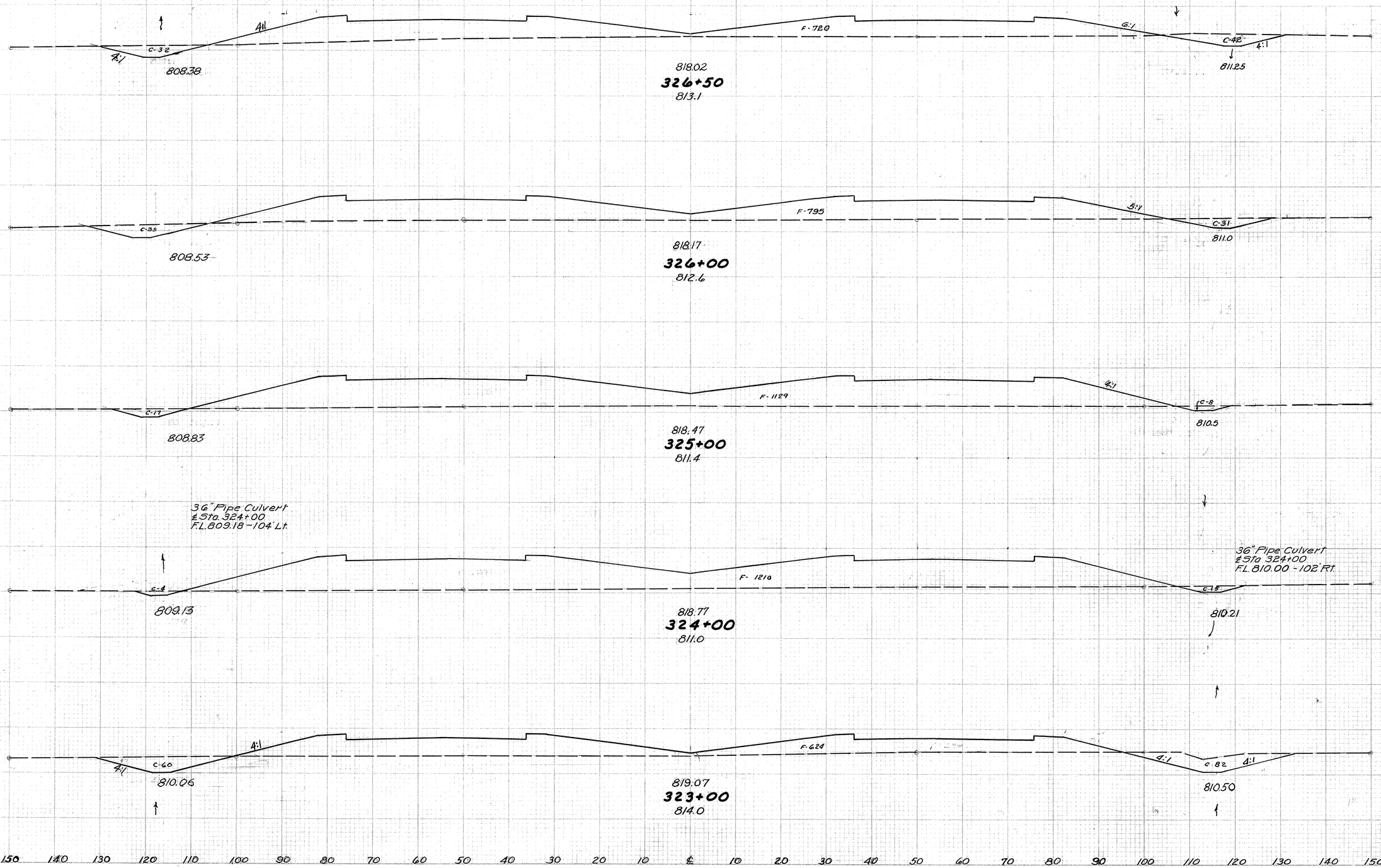
Sta. 317+00 to Sta. 322+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

98
202

ATB-1-15.73
ASHTABULA COUNTY

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



End Areas		Cubic Yards	
Cut	Fill	Cut	Fill
74	720		
		129	1403
66	795		
		185	3563
25	1129		
		81	4332
19	1210		
		298	3396
142	624		
		633	2000

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. 323+00 to Sta. 326+50

REG. FOR DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

99
202

ATB-1-15.73
ASHTABULA COUNTY

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

807.63
4:1
4:1
C-82
15"I-2 Outlet
℄ Sta. 328+90
F.L. 808.65 Lt.

817.27
329+00
811.9
F-666
6:1
C-2
F-1
812.5
C-6
6:1

807.78
C-85

817.42
328+50
812.6
F-727
C-16
812.2

807.93
C-40

817.57
328+00
812.2
F-754
C-20
812.0

808.08
C-37

817.72
327+50
812.6
F-698
C-30
811.75

808.23
4:1
4:1
C-33

817.87
327+00
813.1
F-681
6:1
C-40
6:1
811.50

End Area Cut	End Area Fill	Cubic Yds Cut	Cubic Yds Fill
90	667		
		149	1291
71	727		
		122	1371
60	754		
		118	1344
67	698		
		129	1277
73	681		
		136	1297

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

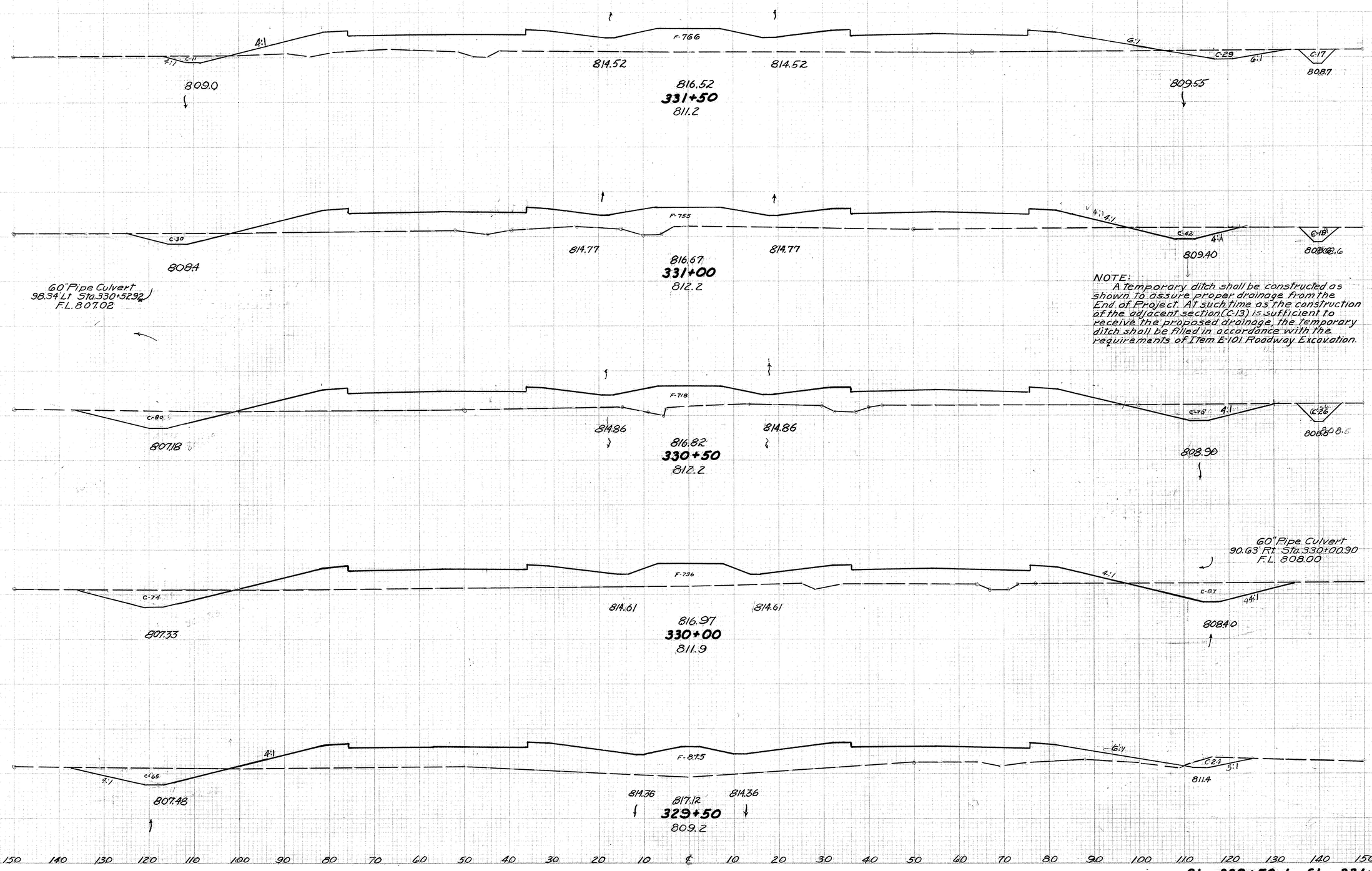
Sta. 327+00 to Sta. 329+00

FED. AID DIV. STATE	STATE	PROJECT	
2	OHIO	I-1103(16)	

100
202

ATB-1-15.73
ASHTABULA COUNTY

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



End Area		Cubic Yards	
Cut	Fill	Cut	Fill
57	766		
		137	1409
91	755		
		247	1364
176	718		
		312	1341
161	736		
		231	1491
89	875		
		166	1428

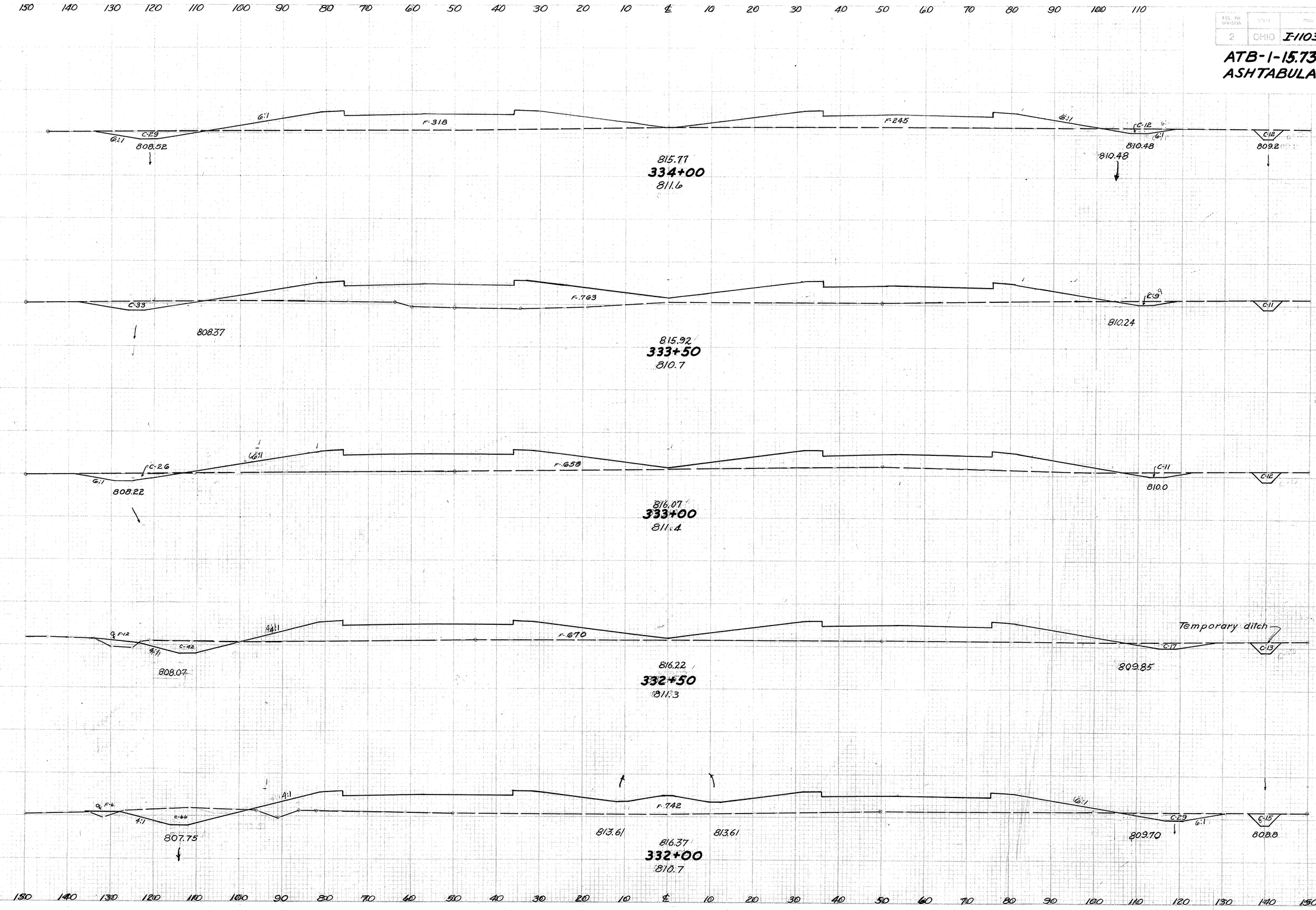
NOTE:
A Temporary ditch shall be constructed as shown to assure proper drainage from the End of Project. At such time as the construction of the adjacent section (C-13) is sufficient to receive the proposed drainage, the Temporary ditch shall be filled in accordance with the requirements of Item E-101, Roadway Excavation.

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. 329+50 to Sta. 331+50

FED. RD. DIVISION	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
2	OHIO	I-1103(16)	101	202

ATB-1-15.73
ASHTABULA COUNTY



End Area		Cubic Yds.	
Cut	Fill	Cut	Fill
53	563		
		98	1228
53	763		
		94	1316
49	658		
		112	1230
72	670		
		169	1308
110	742		
		154	1397

Sta. 332+00 to Sta. 334+00

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

102
202

ATB-1-15.73
ASHTABULA COUNTY

End Area		Cubic Yards	
Cut	Fill	Cut	Fill
		261	0
489	0		
		1371	7
246	4		
		620	372
89	197		
		309	1093
78	393		
		243	1770

Add for Temporary Ditch
Ahead Sta. 338+00.73

Temporary ditch

6:1 8:1 C-458 8:1 6:1 C-31

810.0

814.57
338+00.73
814.8

C-33 F-1 C-19 F-3 C-110 C-35 C-20 8:1 C-29

814.87
337+00
814.0

C-39 8:1 F-95 C-29 F-102 C-21

810.76

815.17
336+00
812.9

6:1 C-43 6:1 F-226 C-1 F-147 6:1 C-18 6:1 C-16

808.82 810.96 809.4

815.47
335+00
811.6

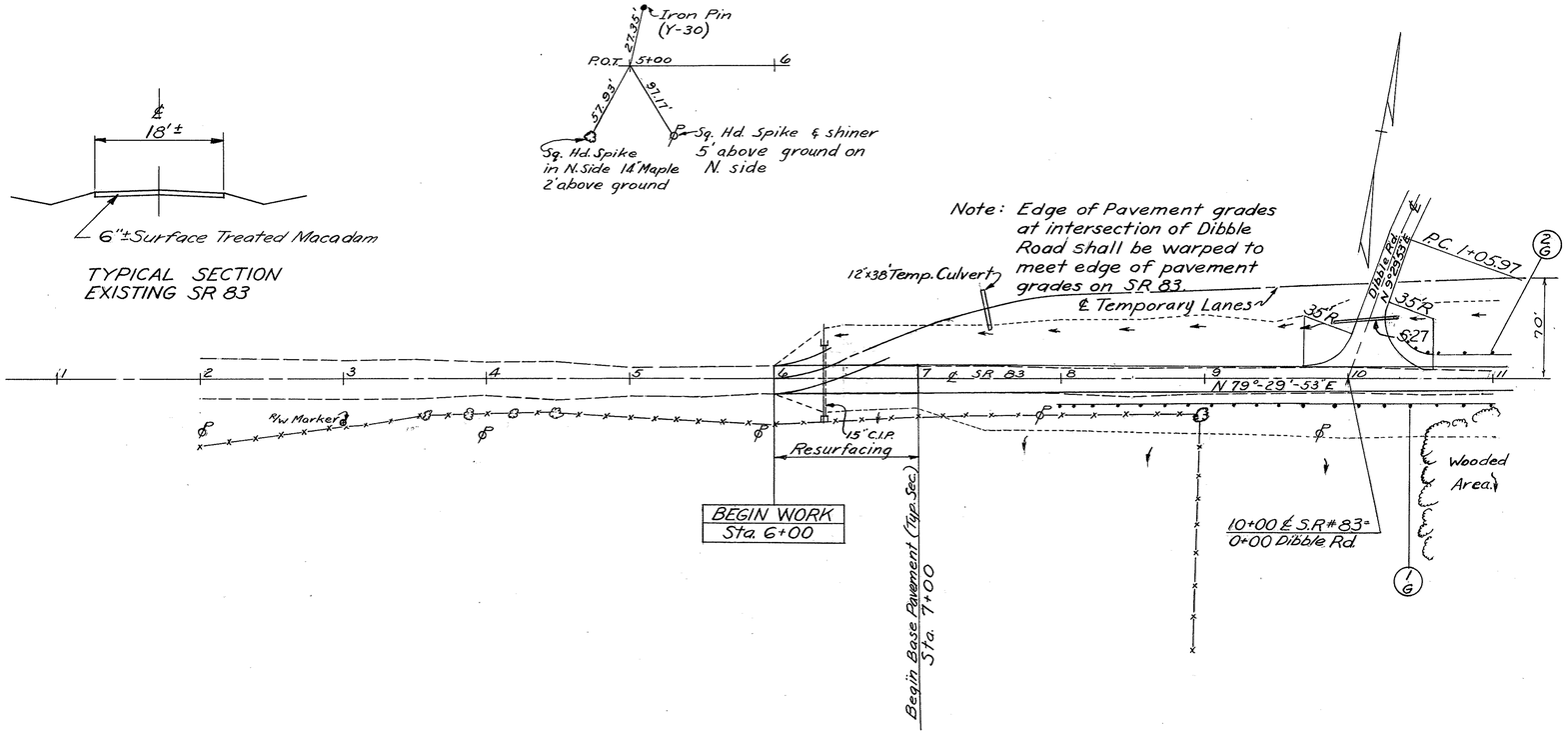
15" I-2 Outlet
℄ Sta. 334+40
F.L. 808.75 Lt.

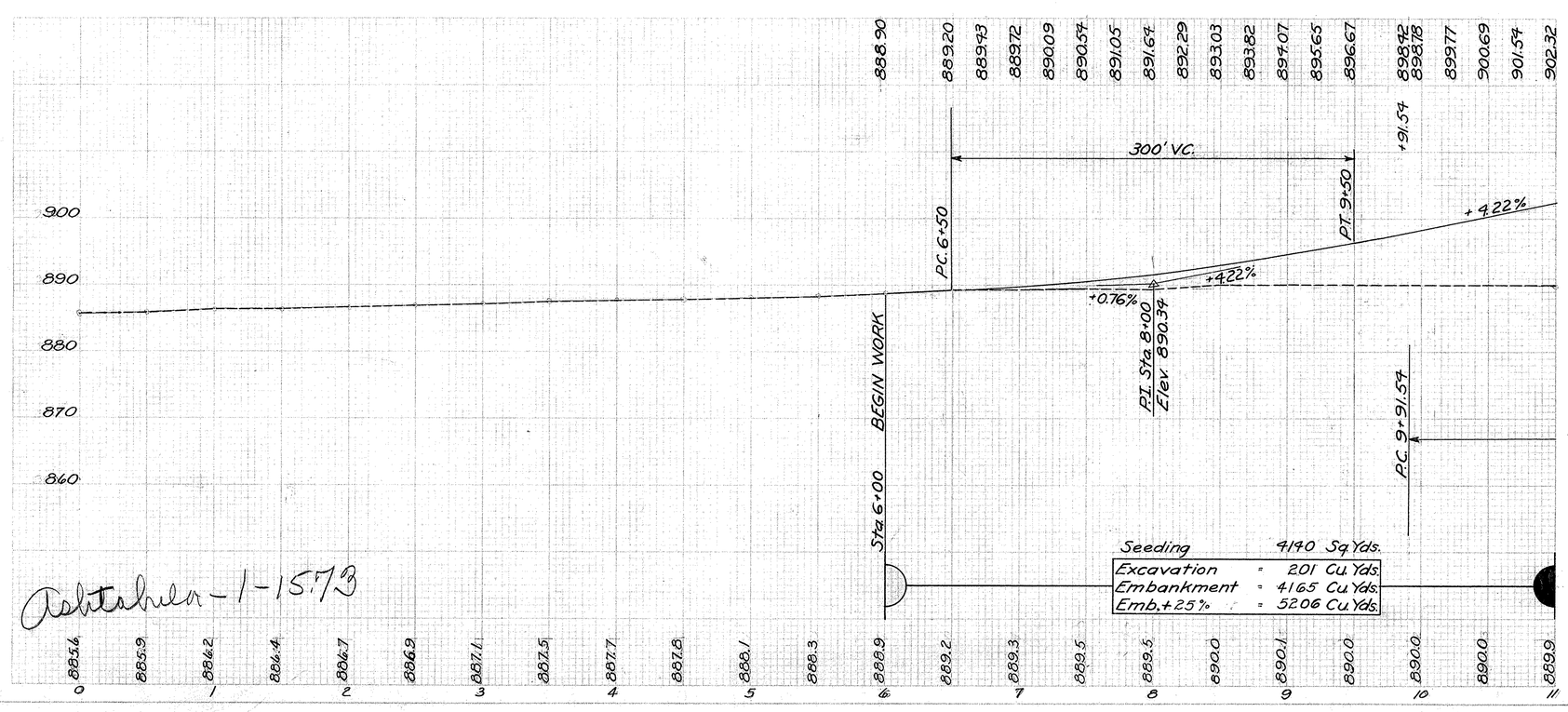
Sta. 335+00 to Sta. 338+00.73

2	OHIO	I-1103(16)	103 / 202

ATB-1-15.73
ASHTABULA COUNTY

488





Ashtabula-1-15.73

ROADWAY

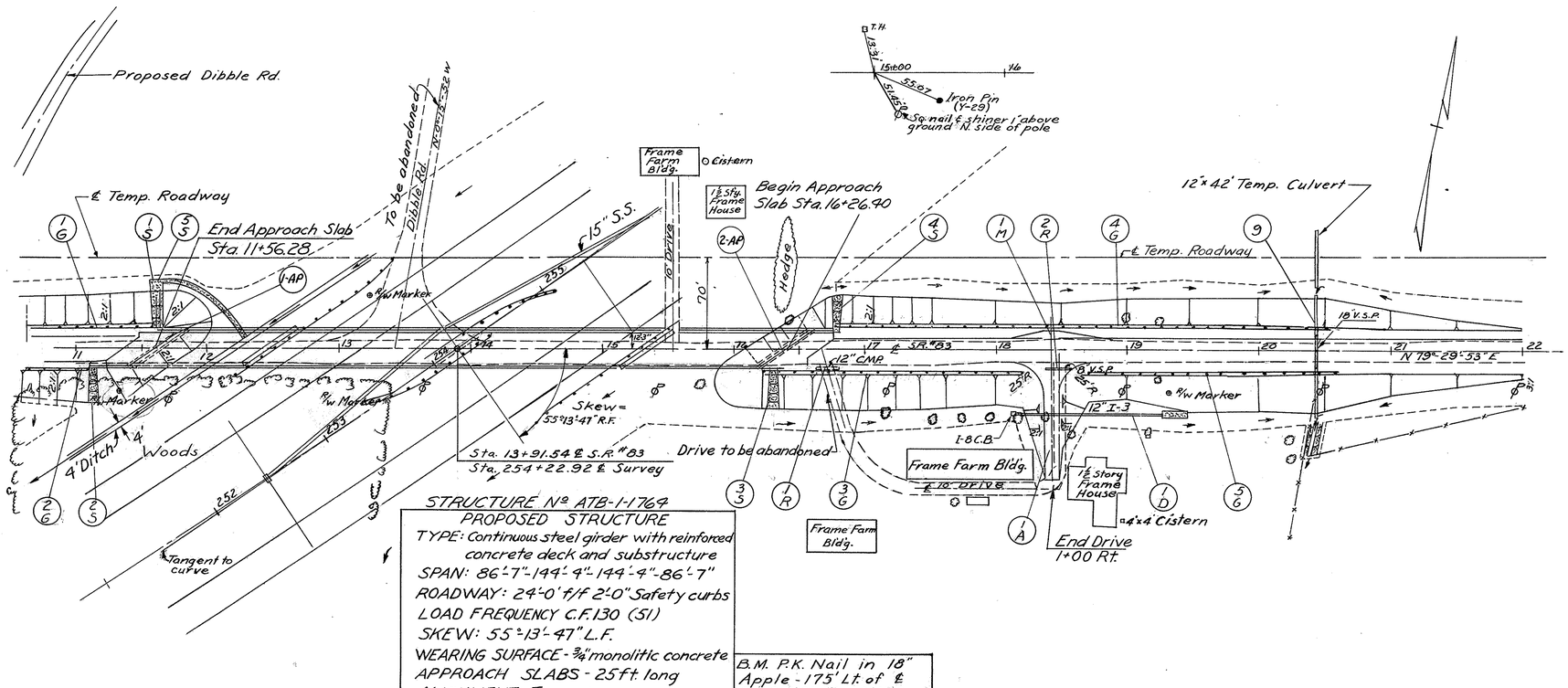
MARK	Station		I-15 Guard Rail 3 Tapes or 3 Cables			
			Lin. Ft.			
1-G	8+00	10+88	288			
2-G	10+33	10+97	64			
	Total		352			

SR #83 Sta. 0+00 to 11+00

DIST.	STATE	PROJECT		
2	OHIO	I-1103(16)		

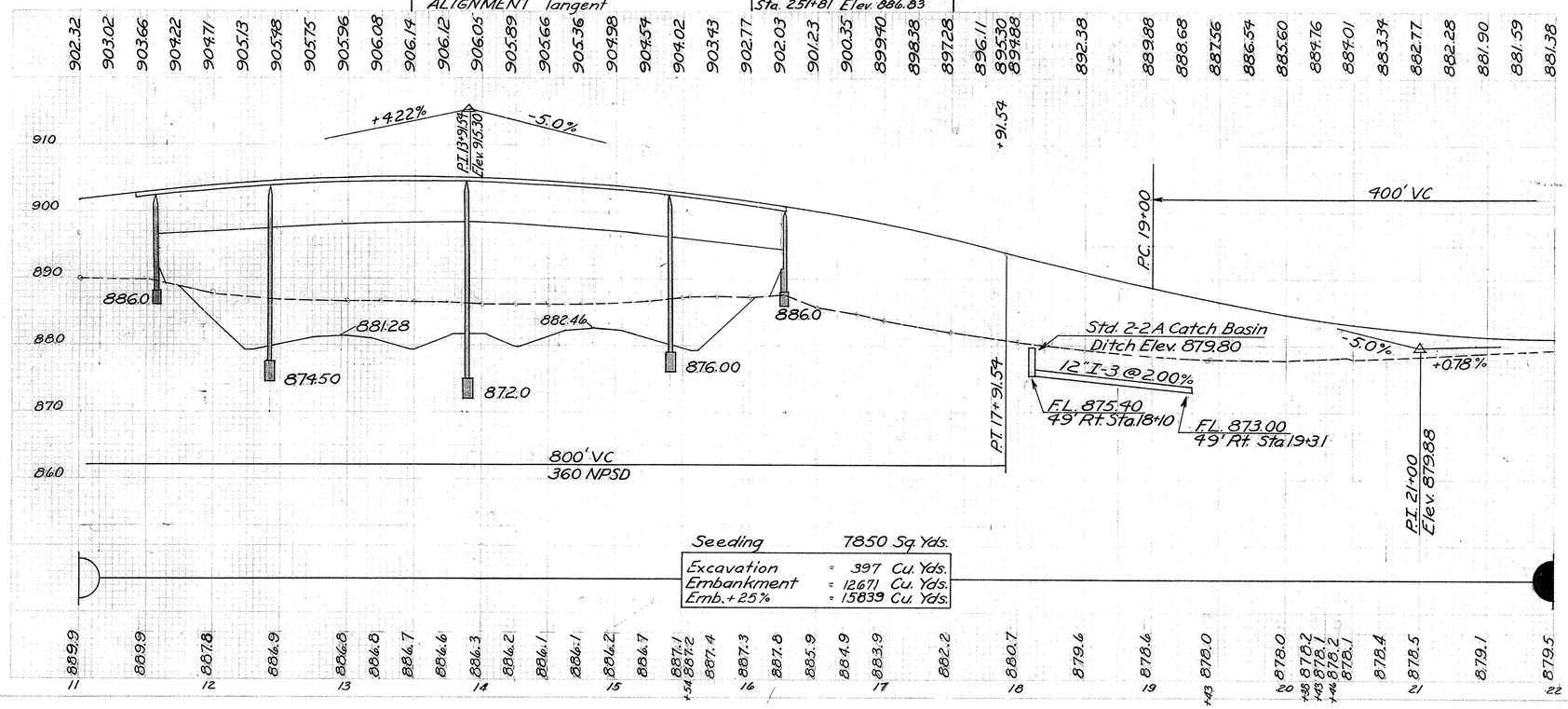
104
202

ATB-1-15.73
ASHTABULA COUNTY



STRUCTURE Nº ATB-1-1764
PROPOSED STRUCTURE
TYPE: Continuous steel girder with reinforced concrete deck and substructure
SPAN: 86'-7"-144'-4"-144'-4"-86'-7"
ROADWAY: 24'-0" f/f 2'-0" Safety curbs
LOAD FREQUENCY C.F.130 (51)
SKEW: 55°-13'-47" L.F.
WEARING SURFACE - ¾" monolitic concrete
APPROACH SLABS - 25ft. long
ALIGNMENT Tangent

B.M. P.K. Nail in 18" Apple - 175' Lt. of ℄ Sta. 251+81 Elev. 886.83



Seeding	7850 Sq. Yds.
Excavation	= 397 Cu. Yds.
Embankment	= 12671 Cu. Yds.
Emb. + 25%	= 15839 Cu. Yds.

STRUCTURE 20' SPAN & UNDER

Mark	Station	Existing			Proposed			Detail on Sheet No.
		Type	Size	Length	Type	Size	Length	
9	20+43	Pipe	18"	26'	Pipe	18"	92'	109

DRAINAGE & ROADWAY

Mark	Station	I-3 Roadway Drainage 12" Pipe	I-7 Rein. Conc. Approach Slab 13"	I-8 Catch Basin 2-2A	L-10 Sodding Type 1	L-10 Sodding Type 3		
		Lin. Ft.	Sq. Yds	Unit	Sq. Yds.	Sq. Yds.		
1-S	11+60					23		
2-S	11+01					20		
3-S	16+19					23		
4-S	16+78					24		
5-S	11+60 · 12+20					60		
1-D		120		1	13			
1-AP	11+31.68 11+56.68		71					
2-AP	16+26.40 16+51.40		71					
	Total	120	142	1	13	150		

ROADWAY

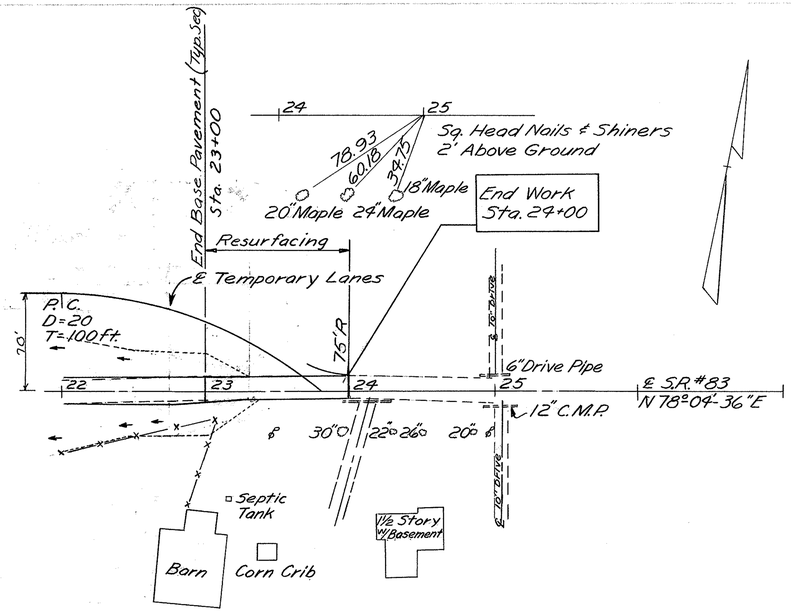
Mark	Station	I-15 Guard Rail 3 Tapes or 3 Cables	E-12 Pipe Removed 15" and under	E-12 Pipe Removed over 15'	B-119 5" Crushed Agg. Base		T-32 Bituminous Surface Treatment
		Lin. Ft.	Lin. Ft	Lin. Ft.	Sq. Yds.		Sq. Yds.
1-G	10+97 · 11+61	64					
2-G	10+88 · 11+04	16					
3-G	16+16.5 18+24.5	208					
4-G	16+75.5 20+59.5	384					
5-G	18+67.5 20+59.5	192					
1-A	18+92				157		157
1-M	18+92				35		35
1-R	16+63 16+79		16				
2-R	18+38 18+54		16				
	Total	864	32		192		192

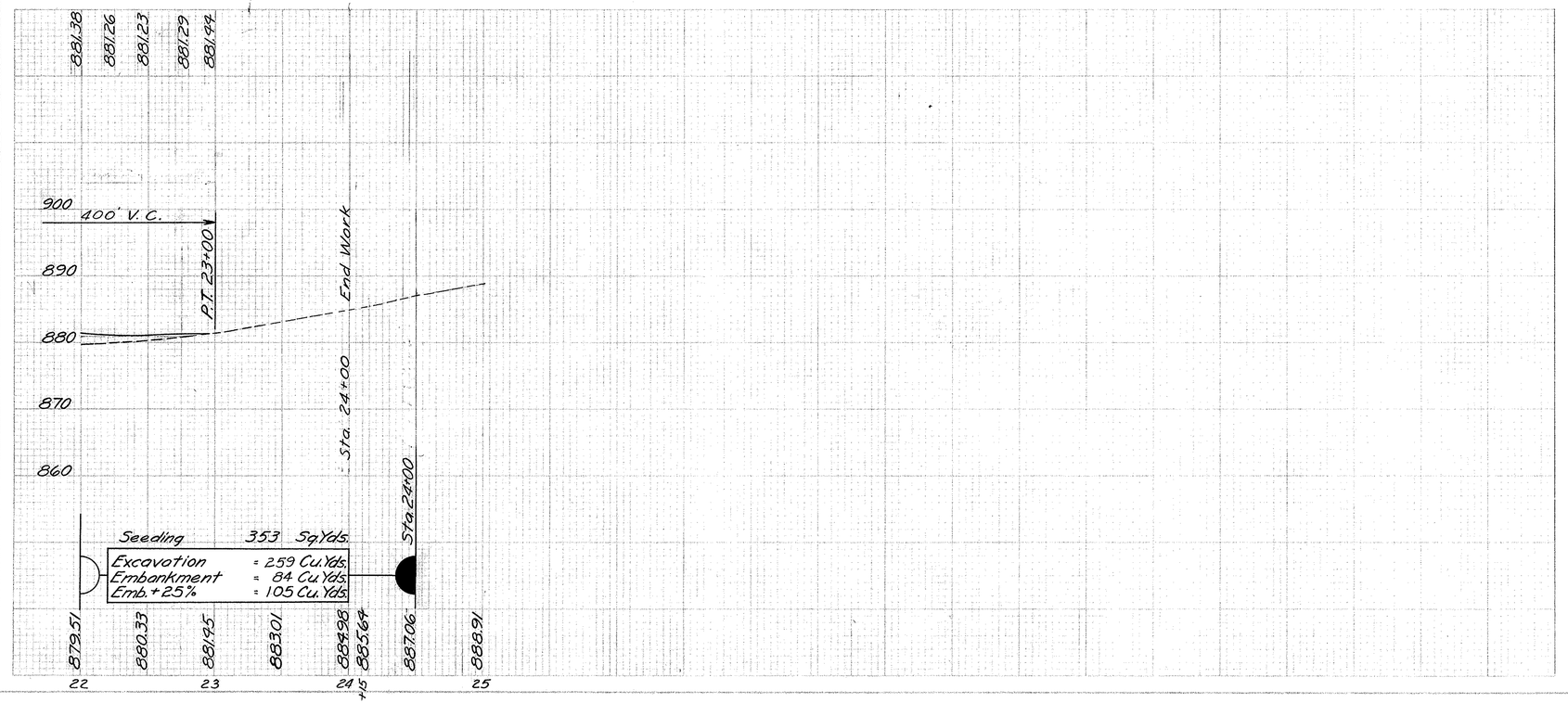
S.R. #83 - Sta. 11+00 to Sta. 22+00

FED. AID PROJECT NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	

105
202

ATB-1-15.73
ASHTABULA COUNTY





SR#83 STA. 22+00 to STA. 25+00

End Area	Cu. Yds.
Cut / Fill	Cut / Fill
8 / 307	24 / 499
18 / 232	27 / 354
11 / 138	20 / 196
11 / 73	15 / 117
6 / 53	19 / 65
14 / 18	16 / 22
4 / 6	4 / 6
0 / 0	

Sta. 9+50

Sta. 6+00

F-232 — 894.70 — **9+00** — 890.1

F-138 — 893.03 — **8+50** — 890.0

F-73 — 891.64 — **8+00** — 889.8

F-27 — 890.54 — **7+50** — 889.5

F-14 — 889.72 — **7+00** — 889.3

F-5 — 889.20 — **6+50** — 889.20

888.87 — **6+00** — 888.87

C-8 — 888.0

C-11 — 886.0

C-6 — 885.0

C-10 — 889.6

C-4 — 884.6

C-4 — 884.3

2:1 · 2:1 · 2.5:1 · 3:1

26' Temporary Roadway
20' Traffic Lanes
℄ of Temporary Lanes

℄ of Temporary Lanes

℄ of Temporary Lanes

26' Temporary Roadway
20' Traffic Lanes
℄ of Temporary Lanes
12"-36' Temporary Culvert Pipe

20' ℄ Temporary Lanes 33.5'

3' 20' Temporary Lanes 3'

Begin Base Pavement

BEGIN WORK STA. 6+00

Existing Culvert
Sta. 6+36

895.00
885.00

Match Line 11+50

Match Line 16+50

TEMPORARY RUNAROUND PROFILE

6 7 8 9 11+50 16+50 19 20 21 22 23 24 24+51

S.R. #83 Sta. 6+00 to Sta. 9+00

FED. AID DIVISION | STATE | | | 106 202

2 | OHIO | I-1103(16)

ATB-1-15.73
ASHTABULA COUNTY

498

Protected
Seeding
Temporary
Drainage
Lime

498

Ashtabula-1-15.73

Seeding	
Mulching	
Drainage	
Areas	

100 90 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. 17+50	14	894		
			29	1659
	17	898		
			16	785
	17	798		
			64	0
			0	978
			21	0
	6	0		
			16	1018
	12	696		
			25	1184
	15	582		
			29	994
	16	492		
			22	740
	8	307		

26' Temporary Roadway
20' Traffic Lanes
℄ of Temporary Lanes
C-7 17/Ft
2:1
F-898
2:1
17/Ft
C-10
885.5
882.0
899.40
17+00
883.9

F-798
℄ of Temporary Lanes
C-6
17/Ft
C-11
887.0
883.5
900.35
16+75
884.9

Add for ditch Lt & Rt

Earthwork between Station 16+00 to 16+75 is calculated to conform to the slope shown on the site plan of Structure NO. ATB-1-1764.

LIMITS OF STRUCTURE STA. 11+56.28 TO STA 16+26.40

to Interstate ditch
℄ of Temporary Lanes
C-6
889.3
11+50
888.9

Add for ditch Lt

Earthwork between Station 11+00 to 12+00 is calculated to conform to the slope shown on the site plan of Structure NO. ATB-1-1764.

℄ of Temporary Lanes
F-696
C-12
889.15
902.32
11+00
889.9

℄ of Temporary Lanes
2:1
F-582
2:1
17/Ft
C-15
889.0
900.69
10+50
890.0

Proposed Dibble Rd.
℄ of Temporary Lanes
2:1
F-492
C-16
888.85
898.78
10+00
890.0

26' Temp. Roadway
20' Traffic Lanes
℄ of Temporary Lanes
17/ft
2.5:1
F-307
2:1
C-8
888.70
896.67
9+50
890.0

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90

S.R. #83 Sta. 9+50 to Sta. 17+00

ATB-1-15.73
ASHTABULA COUNTY

OHIO | F-1103(16) | 2 | 202 | 10

% Tot.		
Seeding		
Template		
Drainage		
Areas		

	End Area		Cu. Yds.	
	Cut.	Fill	Cut	Fill
Sta 21+50	25	119		
			43	332
	21	240		
			36	572
	18	377		
			27	790
	11	476		
			25	1109
	13	574		
			16	957
	9	628		
			13	1209
	10	677		
			0	247
			20	1323
	11	752		
			23	1524
	14	894		

F-240
3:1
2.5:1
1'/ft.
C-13
C-8
874.8
882.77
21+00
878.5
873.8

26'
Temp. Roadway
20'
Traffic Lanes
℄ Temporary Lanes
F-377
2.5:1
1'/ft.
C-12
C-8
873.7
889.01
20+50
878.2
872.3

Culvert Sta. 20+43
F.L. 873.50

Culvert Sta. 20+43
F.L. 872.0

℄ of Temporary Lanes
F-476
2:1
2:1
C-5
C-8
875.4
885.60
20+00
878.0
872.4

Drive
℄ of Temporary Lanes
F-574
2:1
2:1
1'/ft.
1'/ft.
C-5
C-8
876.0
887.84
19+43
878.0
872.6

℄ of Temporary Lanes
F-628
2:1
2:1
C-4
877.0
889.88
19+00
878.6
12"I-3
Res.

80 90 100
1+00 Rt.
End of Drive
Drive Profile
13.16%
Match Line
℄ of Temporary Lanes
F-677
C-10
880.0
892.38
18+50
879.6
12"I-3
20'-0"
12'-0"
Residence Drive 18+92
2:1
2:1
T-32
8"B-119
Top of C.B 879.80
F.L. ditch
Std. #1-2 A C.B.
F.L. 875.90
DRIVE SECTION 49' Rt of ℄
12"I-3@200%
See Sheet No. 104

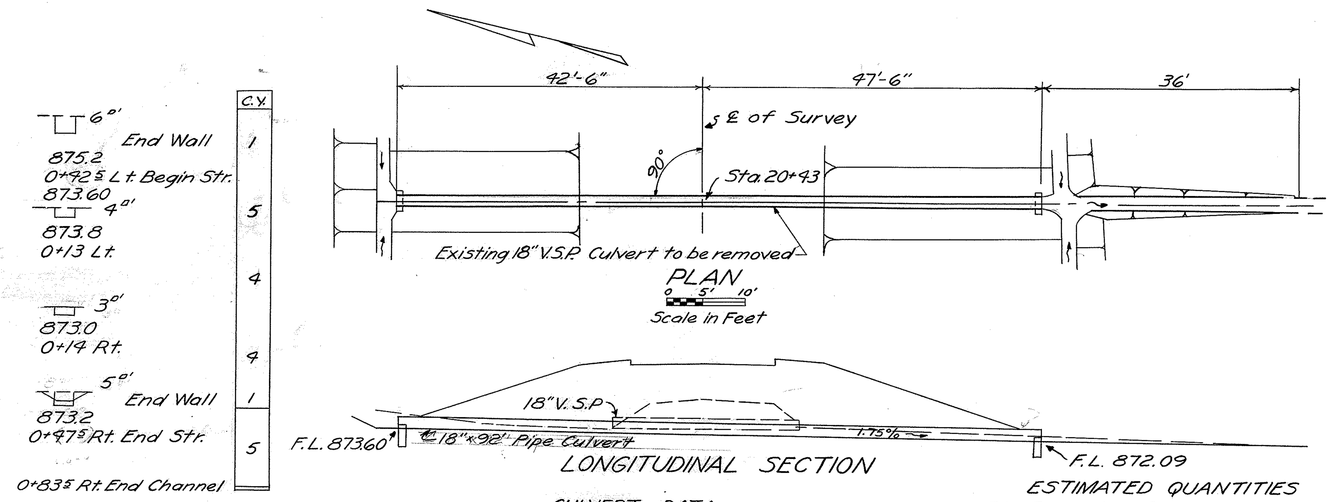
℄ of Temporary Lanes
F-752
C-3
C-8
882.0
880.0
894.88
18+00
880.7

26'
Temp. Roadway
20'
Traffic Lanes
℄ of Temporary Lanes
F-894
2:1
2:1
1'/ft.
1'/ft.
C-9
C-5
883.0
880.2
897.28
17+50
882.2

S.R. #83 Sta. 17+50 to Sta. 21+00

ATB-1-15.73
ASHTABULA COUNTY
OHIO
2
I-1103(16)

Plotted		
Seeding		
Template		
Drainage		
Areas		



LONGITUDINAL SECTION

CULVERT DATA

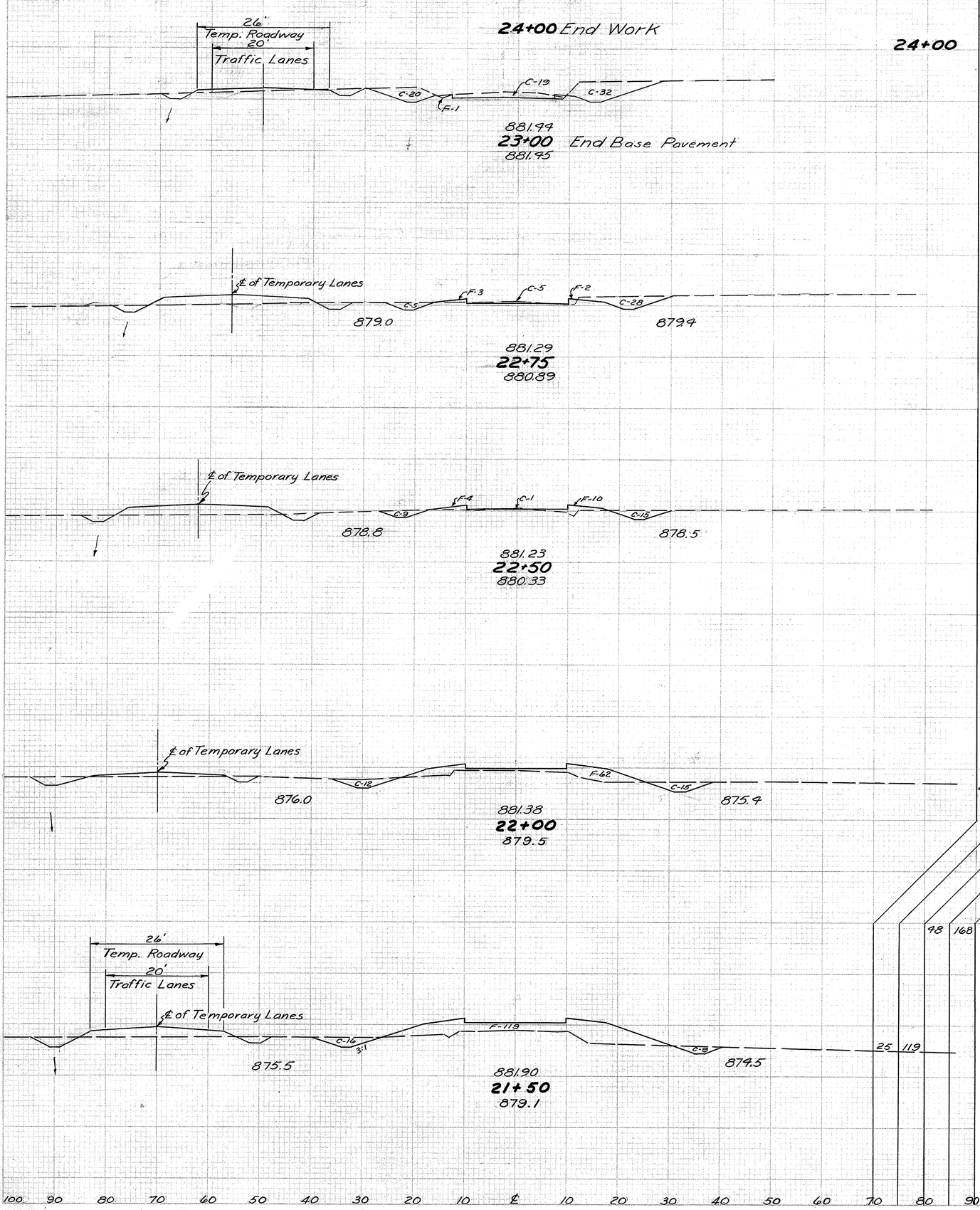
TYPE: Pipe Culvert-Std. Drwgs. S-27 P.C. 3 ℄ 4
SIZE: 18"×92' H.W. 876.7 V=7.5'/sec.
WORK REQUIRED: Remove existing 18"×26' V.S.P. culvert and construct new culvert as per plan

ESTIMATED QUANTITIES

E-2 Excavation for Structures	15	Cu. Yds.
E-3 Channel Excavation	5	Cu. Yds.
E-12 Pipe Removed, Over 15"	26	Lin. Ft.
S-1 Concrete for End Walls, Class "E"	0.6	Cu. Yds.
S-27 18" Pipe for Roadway Culverts, Sec. M-6.6 (b) or M6.8 (b)	92	Lin. Ft.

Drainage Area = 6 Ac. Q 25 = 15 c.f.s.

9	S.R. 83 Sta. 20+93	P.C. 18"×92'	ATB-83



Sta.	End Area Cut.	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
24+00	0	0		
	71	1	131	2
			51	3
	38	5		
			29	9
	25	19		
			48	70
	27	62		
			98	168
	25	119		

ATB-1-15.73
ASHTABULA COUNTY

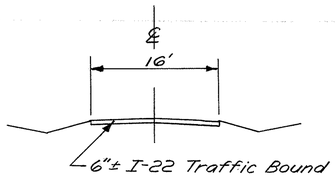
FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

109
202

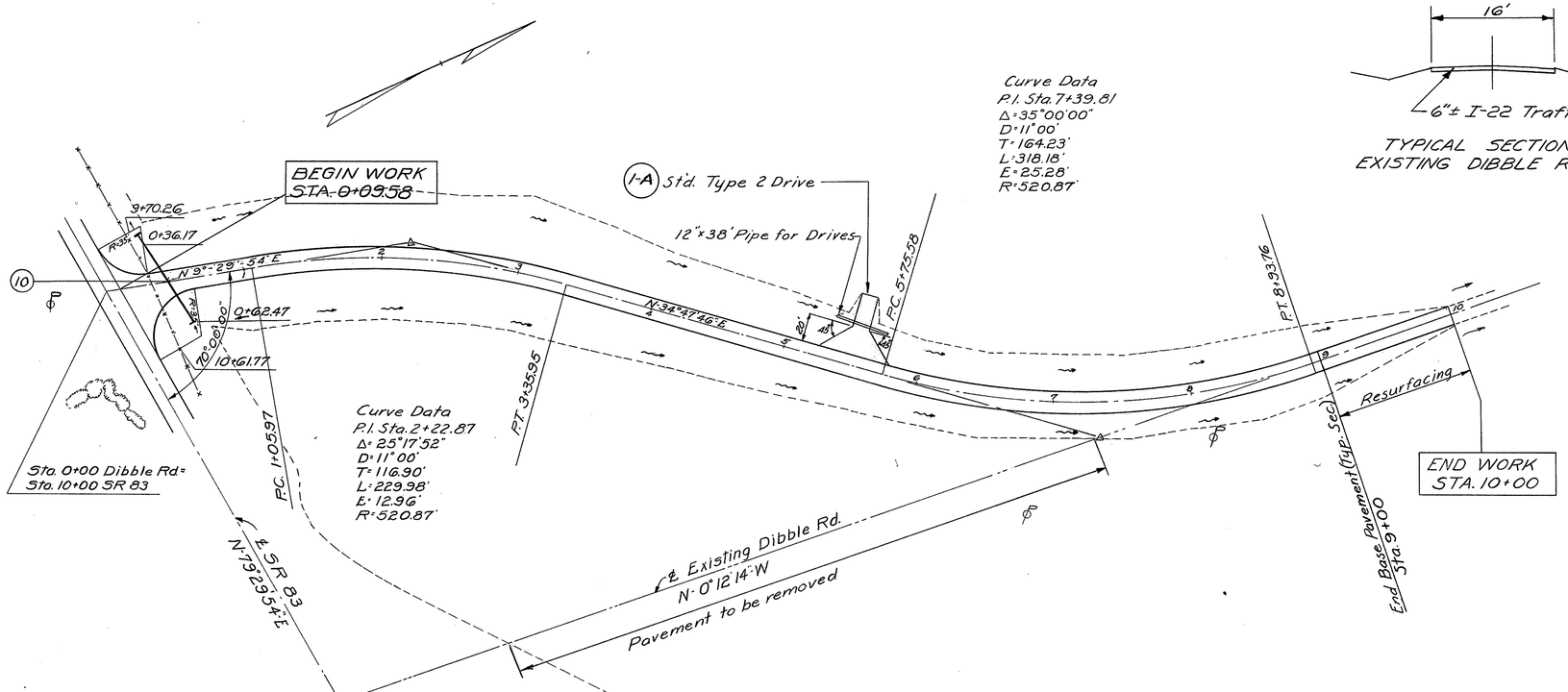
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

110
202

ATB-1-15.73
ASHTABULA COUNTY



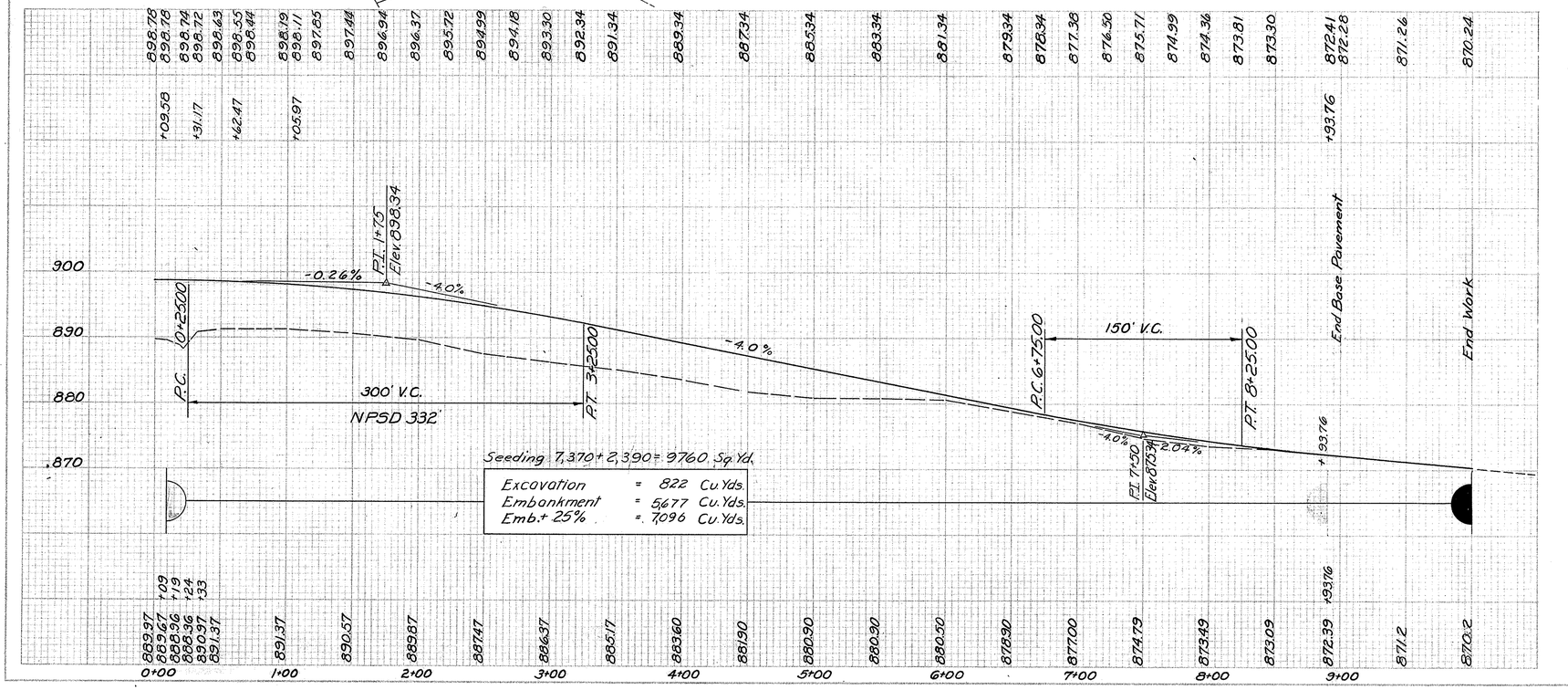
TYPICAL SECTION
EXISTING DIBBLE RD.



Note

Existing pavement on Dibble Road designated to be removed shall be scarified and graded to conform with the adjacent area and shall be seeded in accordance with Item L-9, Seeding and Protecting. Cost of scarifying and grading this area shall be included in the unit price bid per square yard for E-8, Removal and Disposal of Existing Pavement, as per plan.

E-8 Removal and Disposal of Existing Pavement - 2,390 Sq. Yds.
L-9 Seeding and Protecting 2,390 Sq. Yds.



Seeding 7,370 + 2,390 = 9760 Sq. Yd.

Excavation	=	822 Cu. Yds.
Embonkment	=	5,677 Cu. Yds.
Emb. + 25%	=	7,096 Cu. Yds.

STRUCTURES 20' SPAN & UNDER

Mark	Station	Proposed			Detail on Sheet
		Type	Size	Leng.	
10	0+36.17	Pipe	18"	76'	114

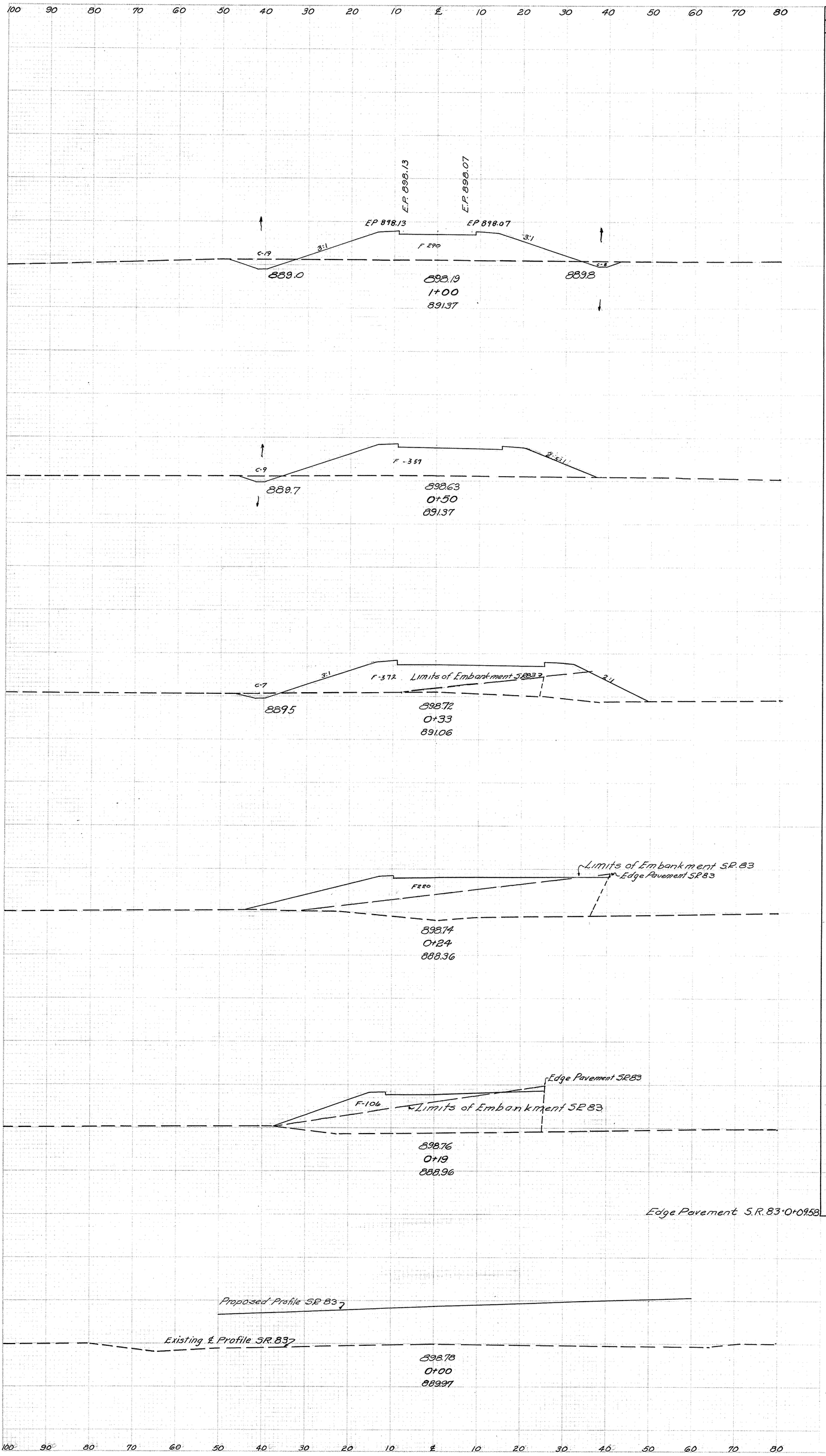
ROADWAY

Mark	Station	I-1 Pipe for Driveways 12"	B-119 6" Crushed Aggregate Base Course
		Lin. Ft	Sq. Yd
1-A	5+50	38	107

Drainage
Const. Limits
Quantities
Checked

Typo
Computations

DIBBLE RD. STA. 0+00 TO STA. 8+93.76



End Areas		Cu Yds	
Cut	Fill	Cut	Fill
		42	560
27	290		
		34	599
9	357		
		5	230
7	372		
		1	99
0	220		
		0	30
0	106		
		0	17
0	0		

DIBBLE RD. STA. 0+00 TO STA. 1+00

ATB-/-/5.73
ASHTABULA COUNTY

2	OHIO	F-1103(16)	
DIVISION	STATE	PROJECT	

111
202

End Area	Cu. Yds.
Cut / Fill	Cut / Fill
16 / 217	30 / 365
23 / 232	36 / 416
24 / 260	44 / 456
16 / 321	37 / 538
18 / 348	32 / 620
29 / 299	44 / 569
18 / 315	44 / 569

DIV. NO.	STATE	PROJECT	
2	OHIO	I-1103(16)	112 / 202

ATB-1-15.73
ASHTABULA COUNTY

Normal Crown

EP 887.22 | EP 889.22 | EP 891.01 | EP 892.64 | EP 894.47 | EP 896.04 | EP 897.32

EP 887.22 | EP 889.46 | EP 891.73 | EP 893.96 | EP 895.65 | EP 896.76 | EP 897.56

C-7 881.8 — F 217 — 880.6 C-9

C-10 883.1 — F 232 — 882.0 C-13

C-11 883.4 — F 260 — 883.5 C-13

C-8 885.7 — F 321 — 884.8 C-8

C-8 885.0 — F 348 — 886.0 C-10

C-12 888.3 — F 299 — 887.0 C-17

C-8 889.6 — F 315 — 888.0 C-18

	3+50	4+00	4+50	1+50	2+00	2+50	3+00
	883.34	884.34	885.17	886.37	886.97	887.47	888.30

DIBBLE RD. STA. 1+50 TO STA. 4+50

	End Area	Cu. Yds.
	Cut / Fill	Cut / Fill
	30.22	54 14
	42 31	67 49
	51 15	86 43
	34 9	79 22
	31 20	60 27
	17 84	45 97
	16 177	31 242

PID NO	STATE	PROJECT	
2	OHIO	I-1103(16)	113 / 202

ATB-1-15.73
ASHTABULA COUNTY

Add for Drive Left

E.P. 875.02 — F-18 — C-4 — 872.5 — 87436 — 8+00 — 87349 — E.P. 873.70 — F-4 — C-1 — C-25 — 872.0

E.P. 876.37 — F-31 — C-7 — 873.7 — 875.11 — 7+50 — 874.19 — E.P. 876.05 — C-2 — C-33 — 872.5

E.P. 876.04 — F-18 — C-7 — 875.6 — 877.38 — 7+00 — 877.00 — E.P. 876.75 — C-37 — 874.0

E.P. 879.73 — F-6 — C-15 — 877.1 — 879.34 — 6+50 — 878.9 — E.P. 879.01 — F-3 — C-18 — 876.5

E.P. 881.46 — C-7 — 880.0 — 883.34 — 5+50 — 880.9 — E.P. 881.22 — F-20 — C-16 — 878.6 — 881.34 — 6+00 — 880.5 — C-15 — 878.0

Normal Crown — F-84 — 10% — C-10 — 878.4 — 12"I-1 — Profile of Drive

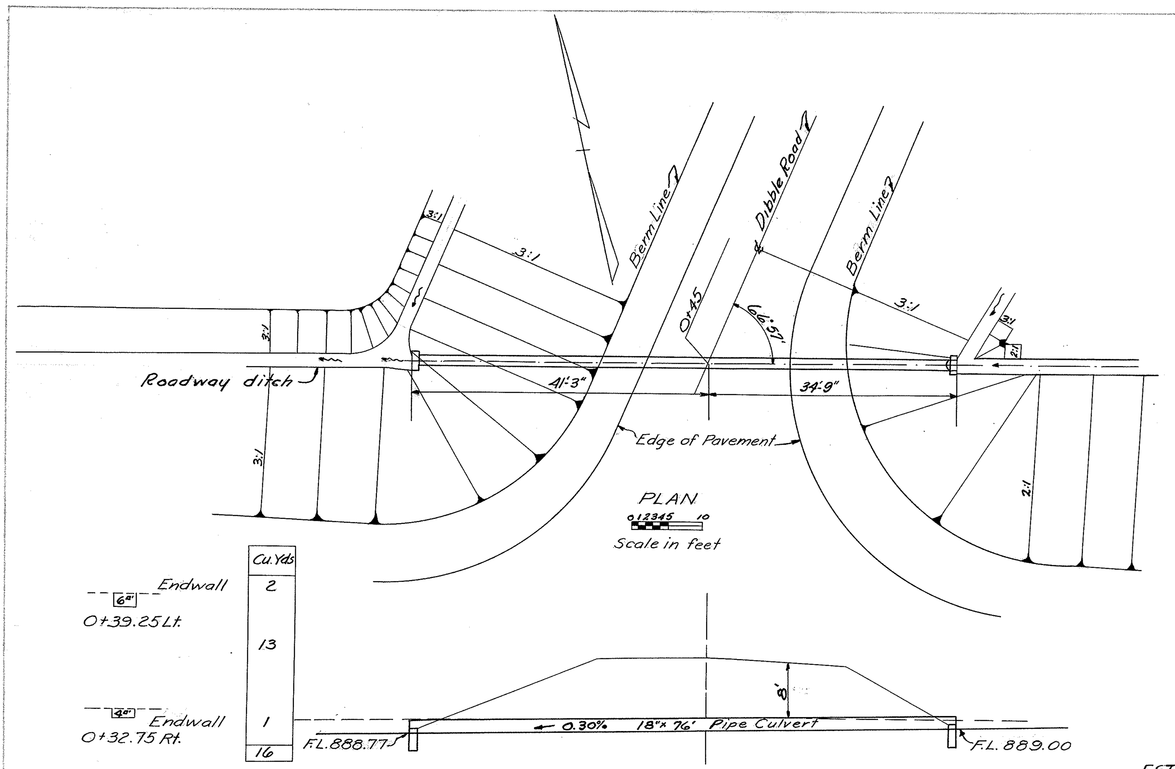
20'-0" — 12'-0" — 4"PP — 1"PP — 3% — 24'-8"±0 — 3% — FL. 878.2 — 12"x38 I-1 Pipe for Drives — FL. 878.7

C-6 — 88.0 — Normal Crown — F-177 — 883.34 — 5+00 — 880.9 — C-10 — 879.0 — Field Drive Sta. 5+50

DIBBLE RD. STA. 5+00 TO STA. 8+00

Plotted	
Recorded	
Computed	
Drainage Areas	

Seeding		
Template		
Drainage		
Areas		



	Cu. Yds.
6" Endwall 0+39.25 Lt.	2
	13
36" Endwall 0+32.75 Rt.	1
	16

LONGITUDINAL SECTION

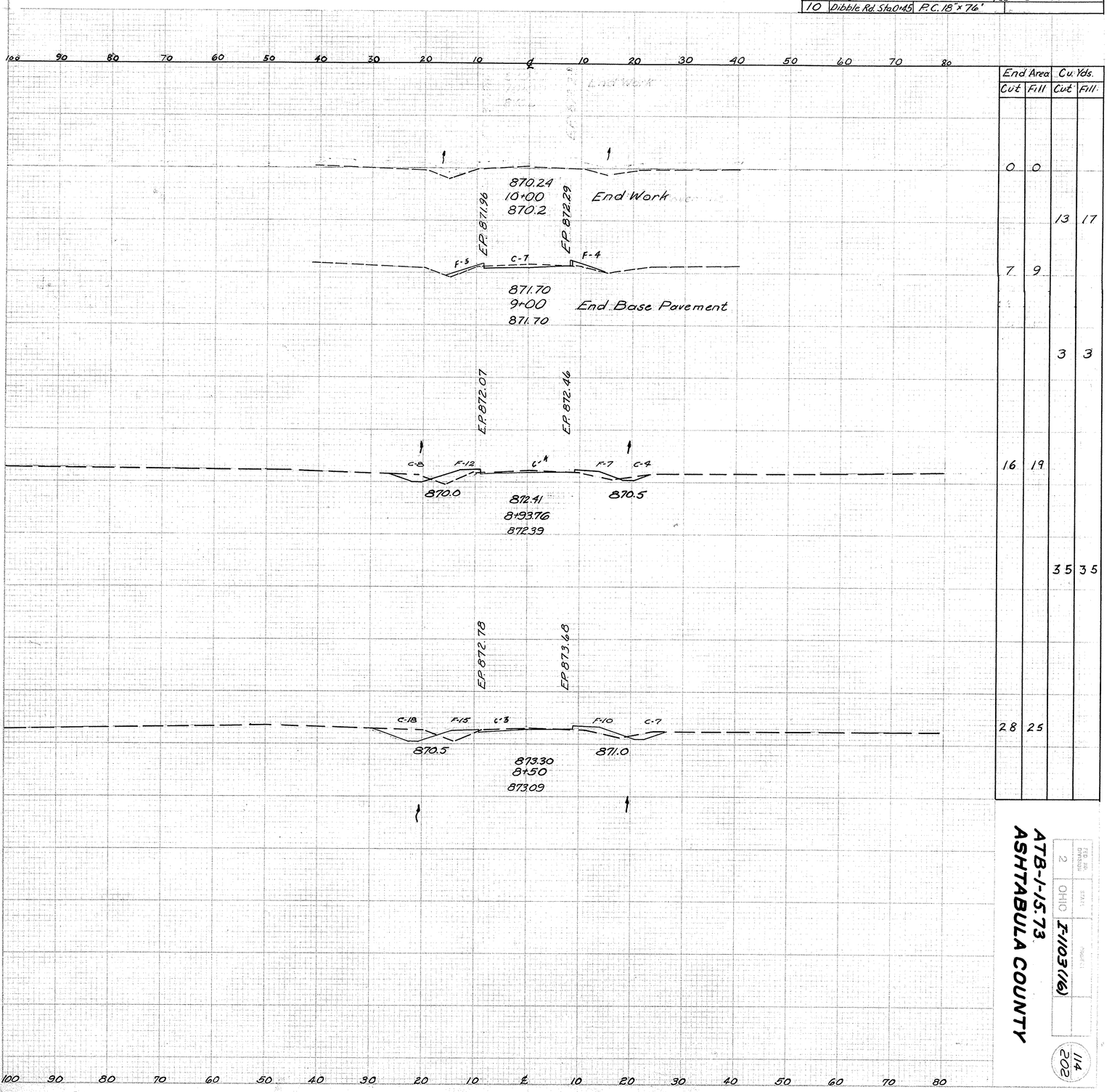
CULVERT DATA

TYPE: Pipe Culvert,- Std. Drawing S27 PC 3 & 4
SIZE: 18" x 76'
WORK REQUIRED: Construct culvert as per plan.

ESTIMATED QUANTITIES

E-2 Excavation for Structures	16 Cu. Yds.
S-1 Concrete for End Walls, Class "E"	0.6 Cu. Yds.
S-27 18" Pipe for Roadway Culverts Sec. M-6.6(b) or M-6.8(b)	76 Lin. Ft.

Drainage Area 1 Ac.	Q_{25} = 3 c.f.s.
10 | Dibble Rd. Sta 0+45 | P.C. 18" x 76'	



	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
0	0			
			13	17
7	9			
			3	3
16	19			
			35	35
28	25			

DIBBLE RD. STA. 8+50 TO STA. 8+93.76

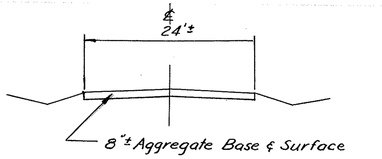
ATB-1-15.73
ASHTABULA COUNTY

FED. ROAD DIV.	STATE	PROJECT	
2	OHIO	F-1103(16)	

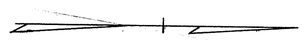
114
202

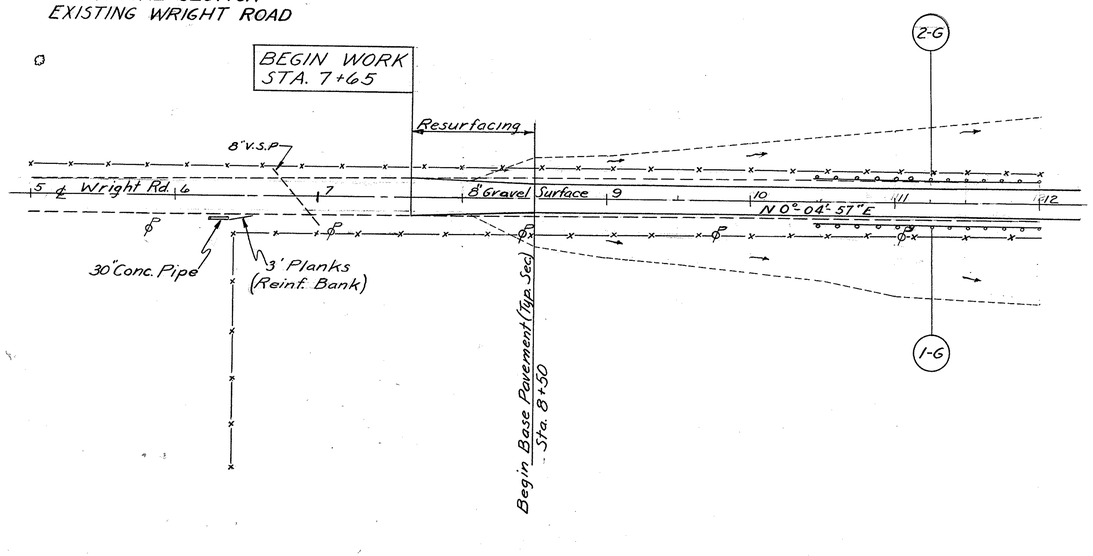
FED. RD. DIVISION	STATE	PROJECT		115
2	OHIO	I-1103(16)		202

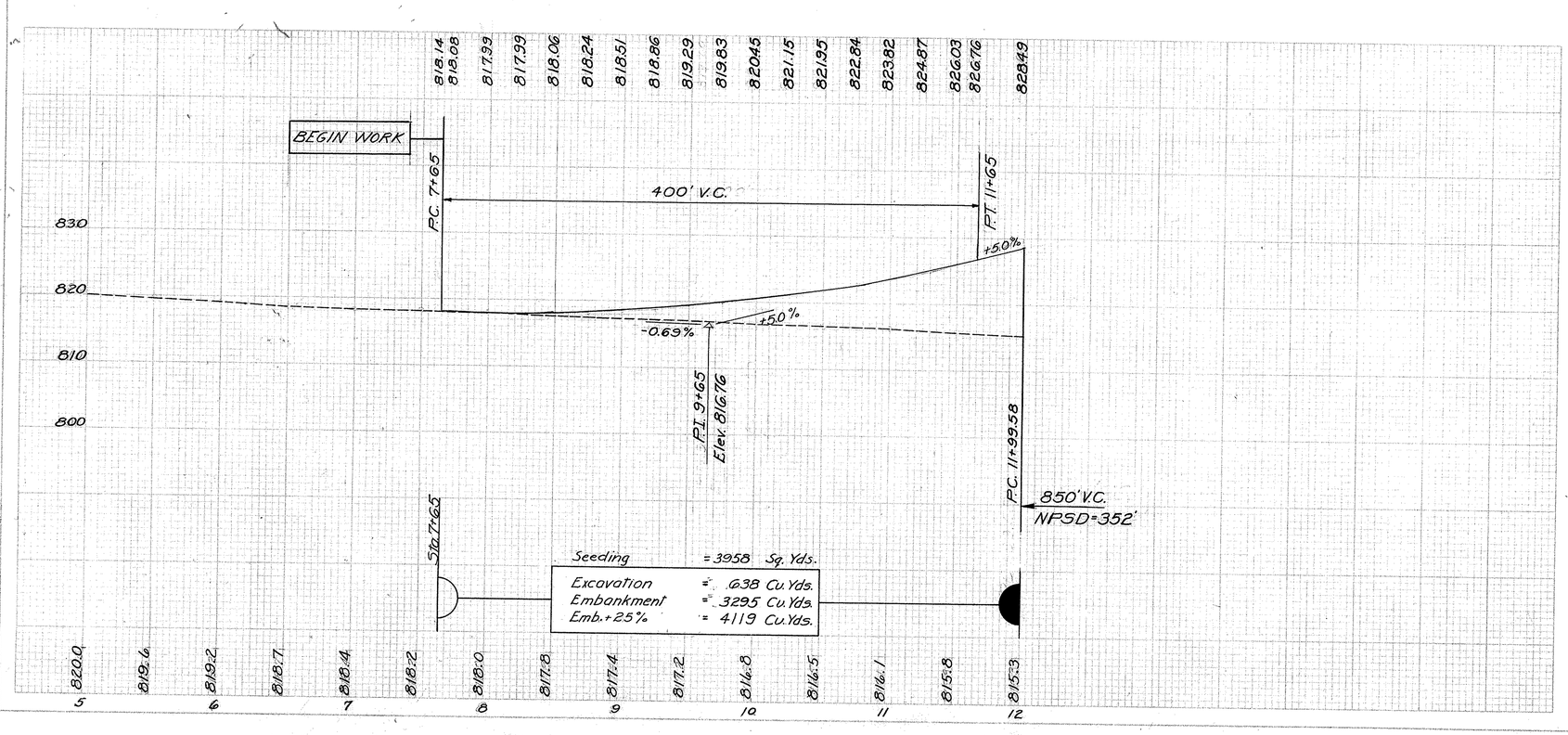
ATB-1-15.73
ASHTABULA COUNTY



TYPICAL SECTION
EXISTING WRIGHT ROAD







ROADWAY

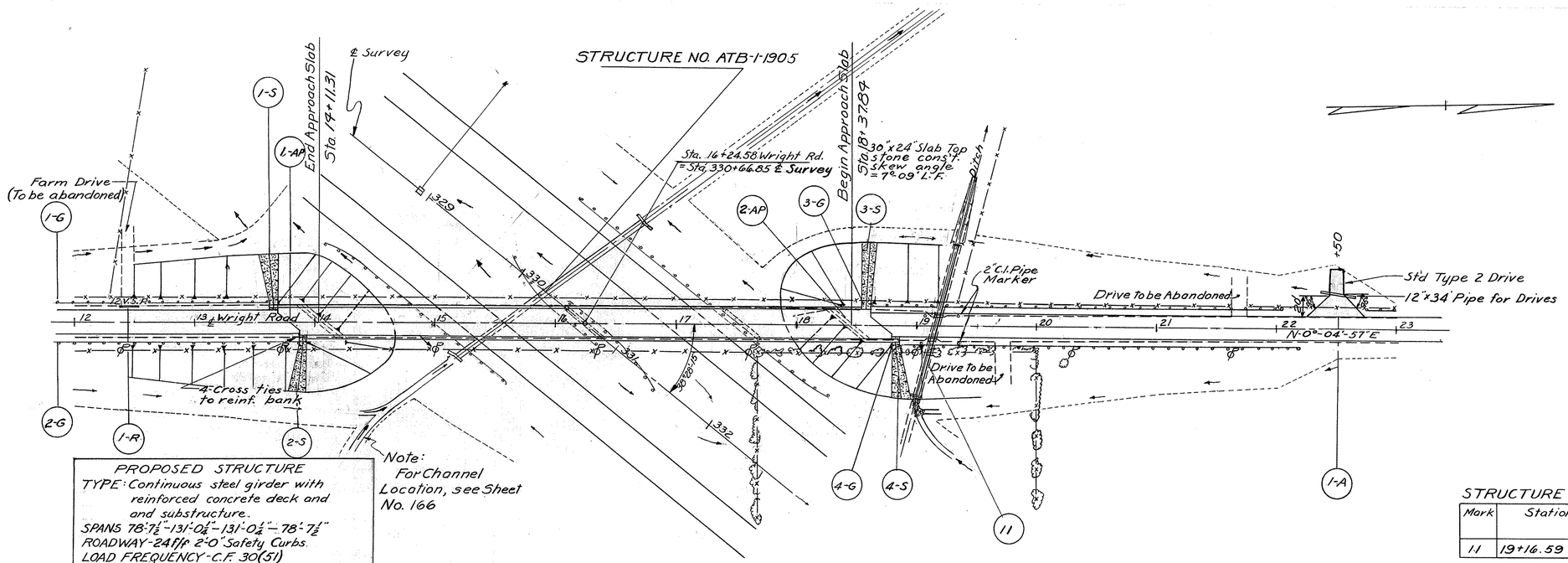
Mark	Station		I-15 Guard Rail 3 Tapes or 3 Cable	
			Lin. Ft.	
1-G	10+96.5	12+06.5	160	
2-G	10+97.5	12+07.5	160	
Totals			320	

WRIGHT RD. Sta. 5+00 to Sta. 12+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

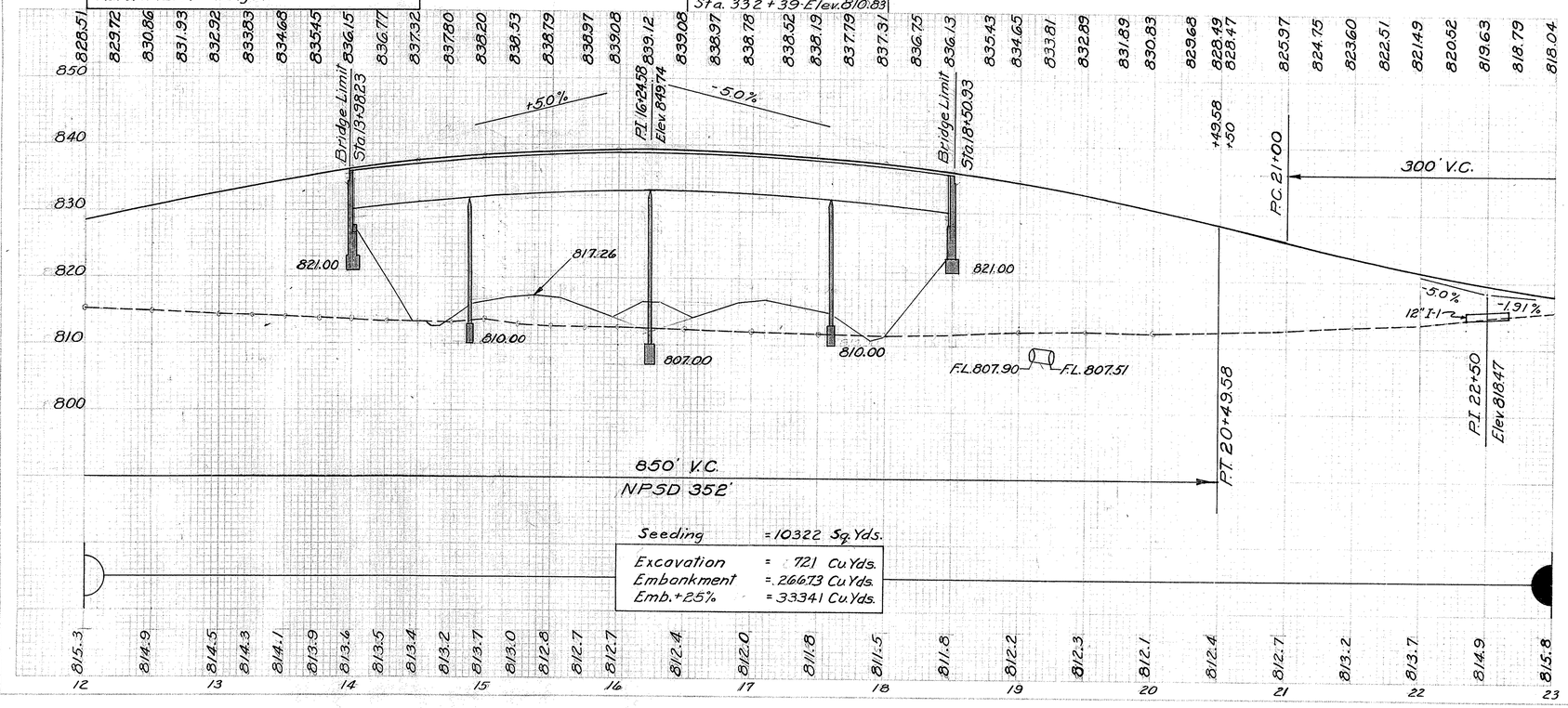
116
202

ATB-1-15.73
ASHTABULA COUNTY



PROPOSED STRUCTURE
TYPE: Continuous steel girder with reinforced concrete deck and and substructure.
SPANS 78'-7½"-131'-0½"-131'-0½"-78'-7½"
ROADWAY-24 f/f p 2'-0" Safety Curbs.
LOAD FREQUENCY-C.F. 30(51)
SKEW: 51°31'45" R.F.
WEARING SURFACE - ½ monolithic concrete
APPROACH SLABS: 25' long
ALIGNMENT - Tangent

B.M. P.K. Nail in 12" Elm 71' Lt of ℄ Sta. 332+39 Elev. 810.83



Seeding = 10322 Sq. Yds.

Excavation	=	721 Cu. Yds.
Embonkment	=	26673 Cu. Yds.
Emb. +25%	=	33341 Cu. Yds.

STRUCTURE 20' SPAN & UNDER

Mark	Station	Existing			Proposed			Details on Sheet
		Type	Size	Length	Type	Size	Length	
11	19+16.59	Slab Top	30"x48"	24'	Pipe	24"	130'	167

DRAINAGE

Mark	Station	E-12 Pipe Removed 15" & Under Lin. Ft.	L-10 Sodding Type 3 Sq. Yds.		
1-S	13+65		54		
2-S	14+13		60		
3-S	18+38		67		
4-S	18+85		60		
1-R	12+38 to 12+53	15			
	Totals	15	241		

ROADWAY

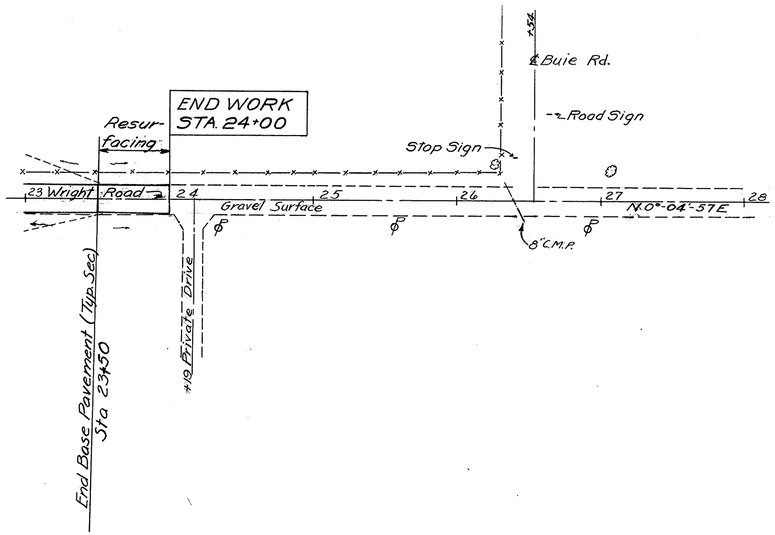
Mark	Station	I-1 Pipe for Driveways 12" Lin. Ft.	I-15 Guard Rail, 3 Tapes or 3 Cables Lin. Ft.	I-7 Reinforced Concrete Approach Slabs 13" Sq. Yds.	B-119 6" Crushed Aggregate Base Sq. Yds.		
1-6	12+07.5 13+67.5		160				
2-6	12+06.5 14+14.5		208				
3-6	18+36 22+04		368				
4-6	18+83 22+19		336				
1-A	22+50	34			100		
1-AP	13+73.23 to 13+98.23			71			
2-AP	18+50.93 to 18+75.93			71			
	Totals	34	1072	142	100		

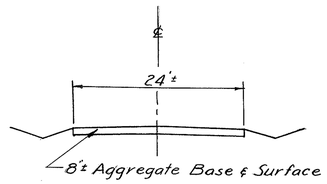
WRIGHT RD. - Sta. 12+00 to Sta. 23+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

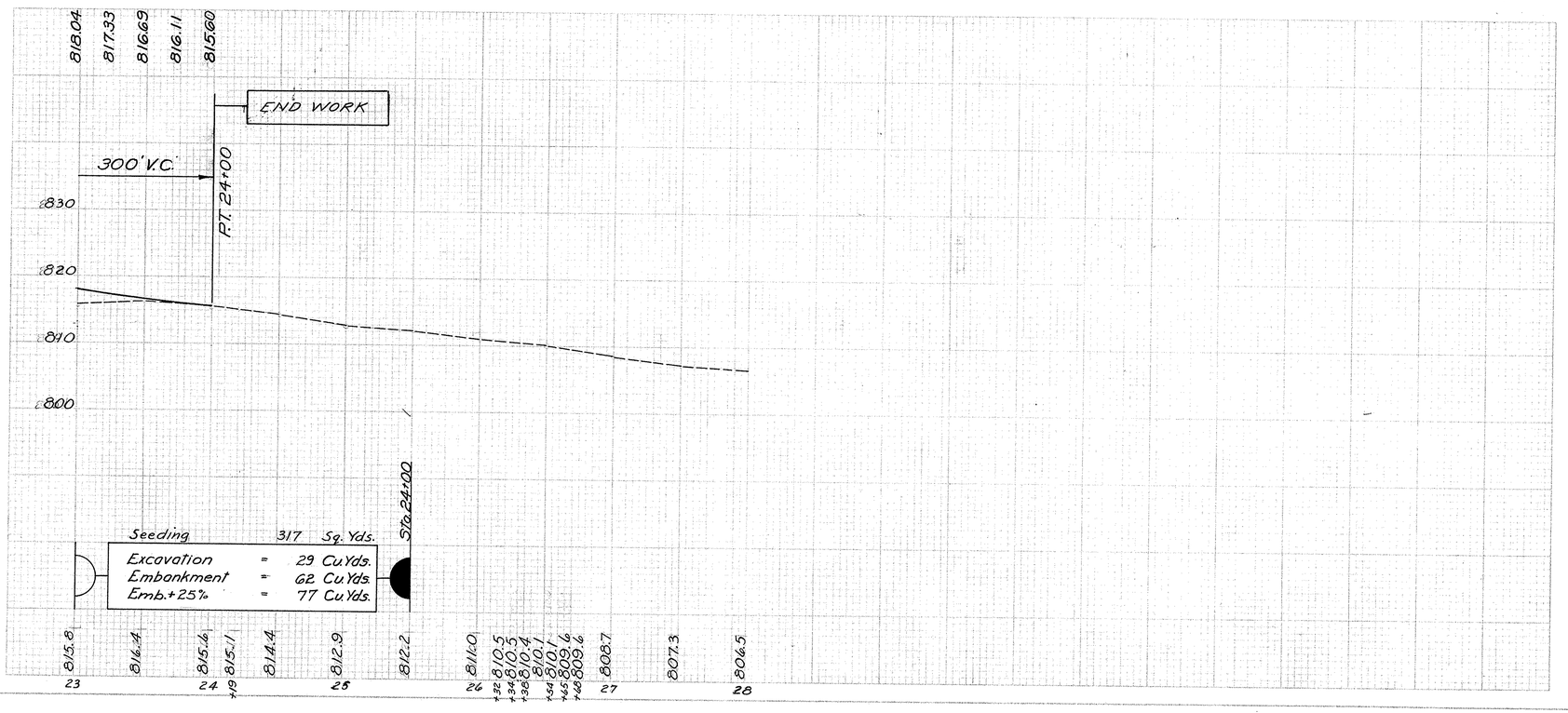
117
202

ATB-1-15.73
ASHTABULA COUNTY





TYPICAL SECTION
EXISTING WRIGHT ROAD



WRIGHT RD. Sta 23+00 to Sta 28+00

End Area	Cu Yds.
Cut / Fill	Cut / Fill
41 / 49	73 / 66
32 / 23	30 / 21
0 / 0	0 / 0
0 / 0	0 / 0

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

118
202

ATB-1-15.73
ASHTABULA COUNTY

Sta 9+00

BEGIN WORK STA. 7+65

8+50 818.06 817.8 — Begin Base Pavement — 8.50

8+00 817.99 818.0

7+50 818.2

7+00 818.4

6+50 818.7

6+00 819.2

5+50 819.6

5+00 820.0

F15 C24 S1 C2 F8 S1 C6 816.0

Seeding
Template
Drainage
Areas

WRIGHT ROAD Sta. 5+00 to Sta. 8+50

FED. NO. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

119
202

ATB-1-15.73
ASHTABULA COUNTY

End Area	Cu. Yds.
Cut / Fill	Cut / Fill
57 / 830	104 / 1248
56 / 517	88 / 803
39 / 350	72 / 509
39 / 200	84 / 324
52 / 150	96 / 209
52 / 76	91 / 115
47 / 49	

Sta 12+00

Sta 9+00

F-517 2:1 C-46 812.0 C-10 813.6

82603
11+50
815.8

F-350 2:1 C-34 812.5 C-5 814.0

82382
11+00
816.1

F-200 2.5:1 C-34 813.0 C-5 814.4

821.95
10+50
816.5

F-150 3:1 C-39 813.5 C-19 814.8

820.45
10+00
816.8

F-176 3:1 C-44 814.0 C-8 815.2

819.29
9+50
817.2

F-249 3:1 C-37 814.5 C-10 815.6

818.51
9+00
817.4

Plotted
Seeding
Template
Drainage
Areas

WRIGHT ROAD Sta. 9+00 to Sta. 11+50

Plotted		
Seeding		
Template		
Drainage		
Areas		

90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

STRUCTURE NO. ATB-1-1905

STRUCTURE STA. 14+11.31 TO STA. 18+37.84

	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
			156	0
	56	0		
			0	7623
			44	0
	58	1498		
			49	1336
	47	1387		
			42	1241
	43	1293		
			93	2140
	57	1018		
			106	1711
Sta. 12+00	57	830		

Ditch Excavation to Channel
For Channel Location and Quantities
see Sheet No. 166

C-56
809.8

13+75
813.9

Embankment between Station 13+50 and Station 19+00 is calculated to conform to the slopes shown on the Site Plan of Structure No. ATB1-1905

Add for Ditch Rt.

Ditch to Channel

to Ditch Sta. 328+00

2:1 F-1498 2:1

1'/ft. 1'/ft.

6:1 C-18
812.0

C-40
810.0

834.68
13+50
814.1

F-1387

C-4
812.2

C-43
810.2

833.83
13+25
814.3

F-1293

C-5
812.4

C-38
810.5

832.92
13+00
814.5

F-1018

C-11
812.8

C-46
811.0

830.86
12+50
814.9

F-830

2:1 2:1

1'/ft. 1'/ft.

C-12
813.2

C-45
811.5

828.51
12+00
815.3

90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90

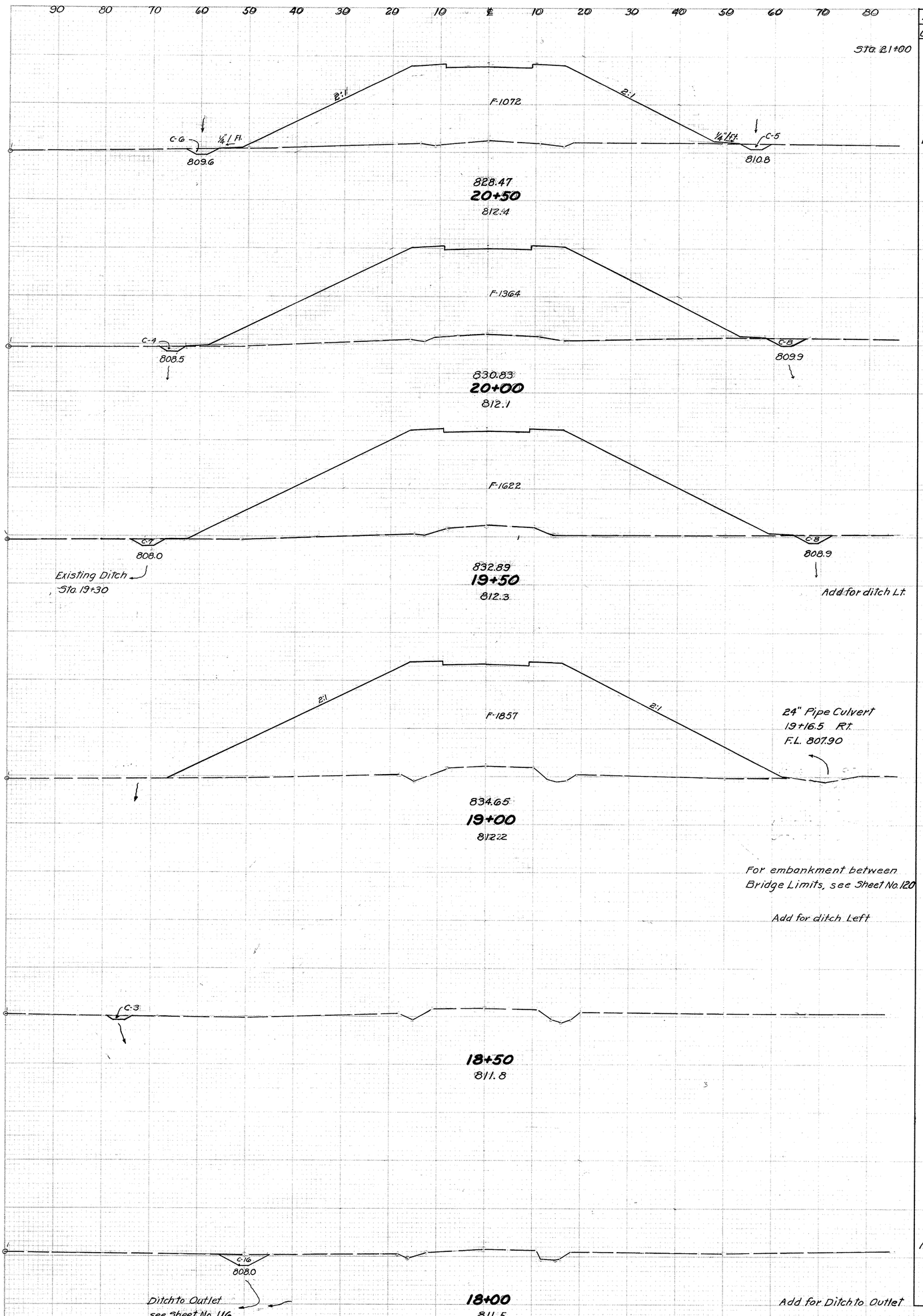
WRIGHT ROAD - Sta. 12+00 to Sta. 17+00

ATB-1-15.73
ASHTABULA COUNTY

2	OHIO	1-1103(16)	

120
202

Plotted		
Seeding		
Template		
Drainage		
Areas		



	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
Sta. 21+00	12	772		
			21	1708
	11	1072		
			21	2255
	12	1364		
			25	2765
	15	1622		
			2	0
			14	3221
	0	1857		
			3	0
	3	0		
			18	0
	16	0		
			21	0

STRUCTURE STA. 14+11.31 TO STA. 18+37.84

WRIGHT ROAD-Sta. 17+50 to Sta. 20+50

ATB-1-15.73
ASHTABULA COUNTY

		SHEET NO.	TOTAL SHEETS
		2	
	OHIO	F-1103(16)	

121
202

Plotted		
Seeding		
Template		
Drainage		
Areas		

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80

	End Area		Cu. Yds.	
	Cut	Fill	Cut	Fill
END WORK STA. 24+00	0	0		
			9	0
	9	0		
			20	62
	12	67		
			22	222
	12	173	1	44
			26	455
	16	318		
			30	766
	17	509		
			27	1186
Sta. 21+00	12	772		

24+50
814.4

END WORK STA. 24+00

815.60
24+00 End Work
815.4

C-9

816.69
23+50 End Base Pavement
816.4

C-8 815.4 F-67 C-4 815.4

818.04
23+00
815.8

Profile of Drive 10% 3:1 12'-0" C-6 814.5 F-173 3:1 C-6 813.9 Add for Drive Left

819.63
22+50
814.9

2'-0" 12'-0" 1/2"/Ft. 1"/Ft. 3:1 3:1 6"-B-112 F.L. 814.2 12"x34' Fl. Pipe for Drives F.L. 814.8

Field Drive Sta. 22+50

C-5 812.7 1"/Ft. 2.5:1 F-318 2.5:1 1"/Ft. C-7 812.9

821.49
22+00
813.7

2:1 F-509 2:1 C-5 811.7 C-12 812.0

823.60
21+50
813.2

F-772 2:1 2:1 1"/Ft. 1"/Ft. C-6 C-6 810.6 811.8

825.97
21+00
812.7

100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90

WRIGHT ROAD - Sta. 21+00 to Sta. 24+50

ATB-1-15.73
ASHTABULA COUNTY

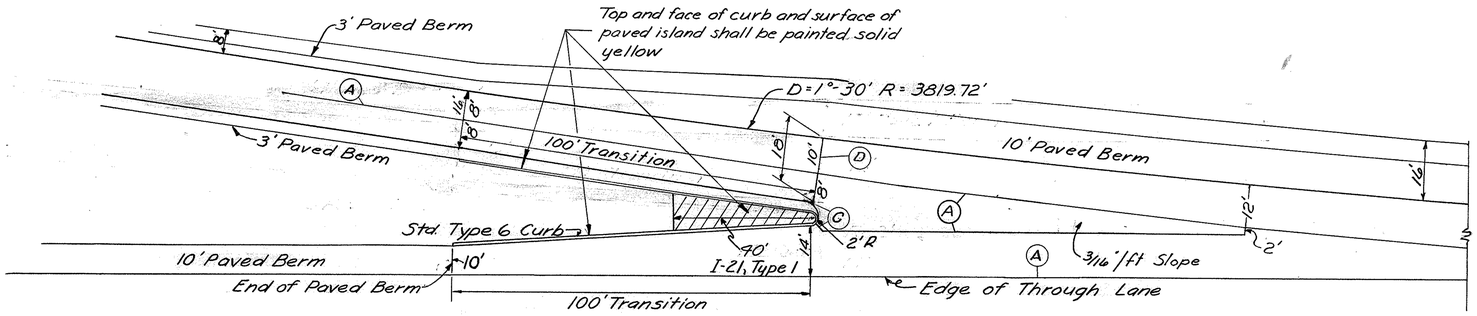
2 OHIO 1-1103(16)

122
202

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

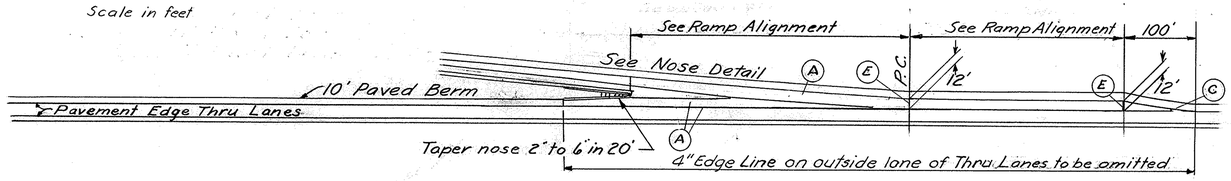
123
202

ATB-1-15.73
ASHTABULA COUNTY



NOSE DETAIL EXIT TERMINAL

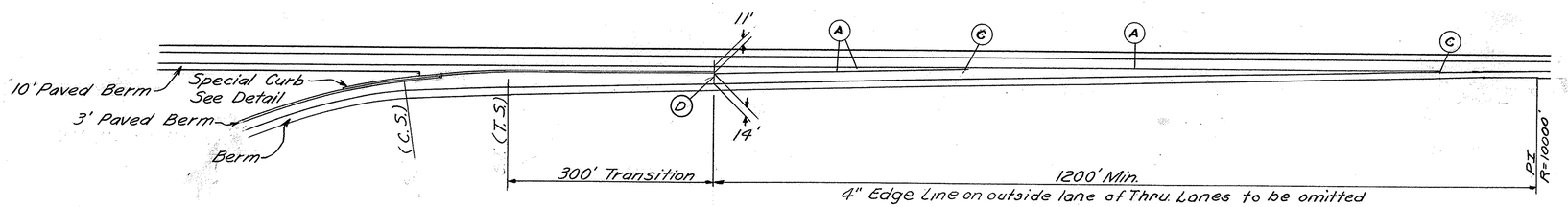
Scale in feet



EXIT TERMINAL

Scale in feet

Note: Ramp pavement is not to be paint lined.



ENTRANCE TERMINAL

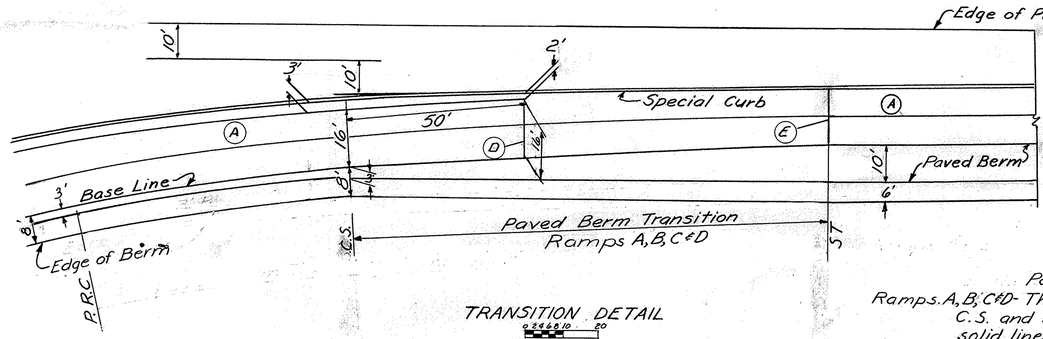
Scale in feet

ESTIMATED QUANTITIES

Ramp	Station		T-71 10" Reinf. Portland Cement Conc. Pvt. Sq. Yds.	T-31 Bituminous Surface Treatment Sq. Yds.	B-33 Bituminous Macadam Base Course Sq. Yds.	I-18 5" Stabilized Crushed Aggregate Shoulder Cu. Yds	I-22 Sub-base Cu. Yds.
A	0+00	8+32.68	1805	1032	1032	151	372
A	20+69.48	40+21.35	3511	2632	2632	380	815
B	0+00	7+87.01	1916	980	980	144	377
B	20+30.90	40+51.69	3146	2267	2267	331	719
C	0+00	5+53.07	1444	688	688	101	350
C	21+02.78	35+52.78	2433	2538	2538	366	804
D	0+00	5+53.07	1444	688	688	101	350
D	21+02.78	35+52.78	2433	2538	2538	366	804
A	11+00	14+11.51	554	409	409	62	166
A	15+46.13	16+10.00	114	61	61	10	30
B	11+27.79	14+05.25	493	370	370	56	149
B	15+39.89	16+10.00	125	70	70	11	34
	Total		19418	14273	14273	2079	4970

(A) Standard Longitudinal Joint
(B) Standard Key Joint Without Tie Bars
(C) Expansion Joint Without Dowels
(D) Standard Expansion Joint
(E) Standard Contraction Joint

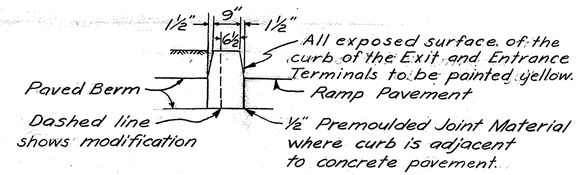
Note:
Calculations include the 100' Taper back of Base Line Station 0+00. Estimated quantities are for transition areas at Exit & Entrance Terminals and 3' to 10' paved berm transition areas.



TRANSITION DETAIL

Scale in feet

Paved Berm Transition
Ramps A, B, C & D - The paved berm is 3' wide at the C.S. and 10' wide at the S.T. as shown by solid line.



SPECIAL PORTLAND CEMENT CONCRETE CURB DETAIL

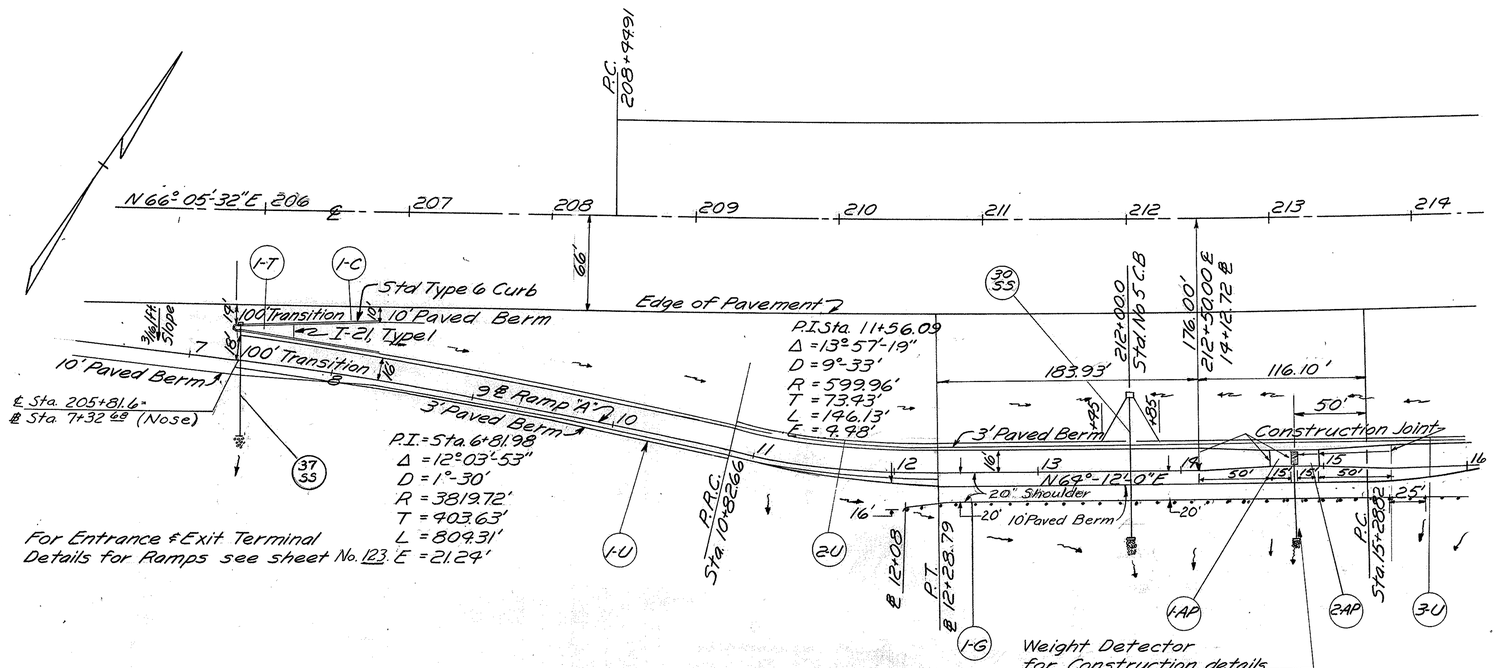
Scale in feet

ENTRANCE & EXIT TERMINAL DETAILS FOR RAMPS A, B, C & D

FED. RD. DIVISION	STATE	PROJECT	
2.	OHIO	I-1103 (16)	

124
202

ATB-1-15.73
ASHTABULA COUNTY

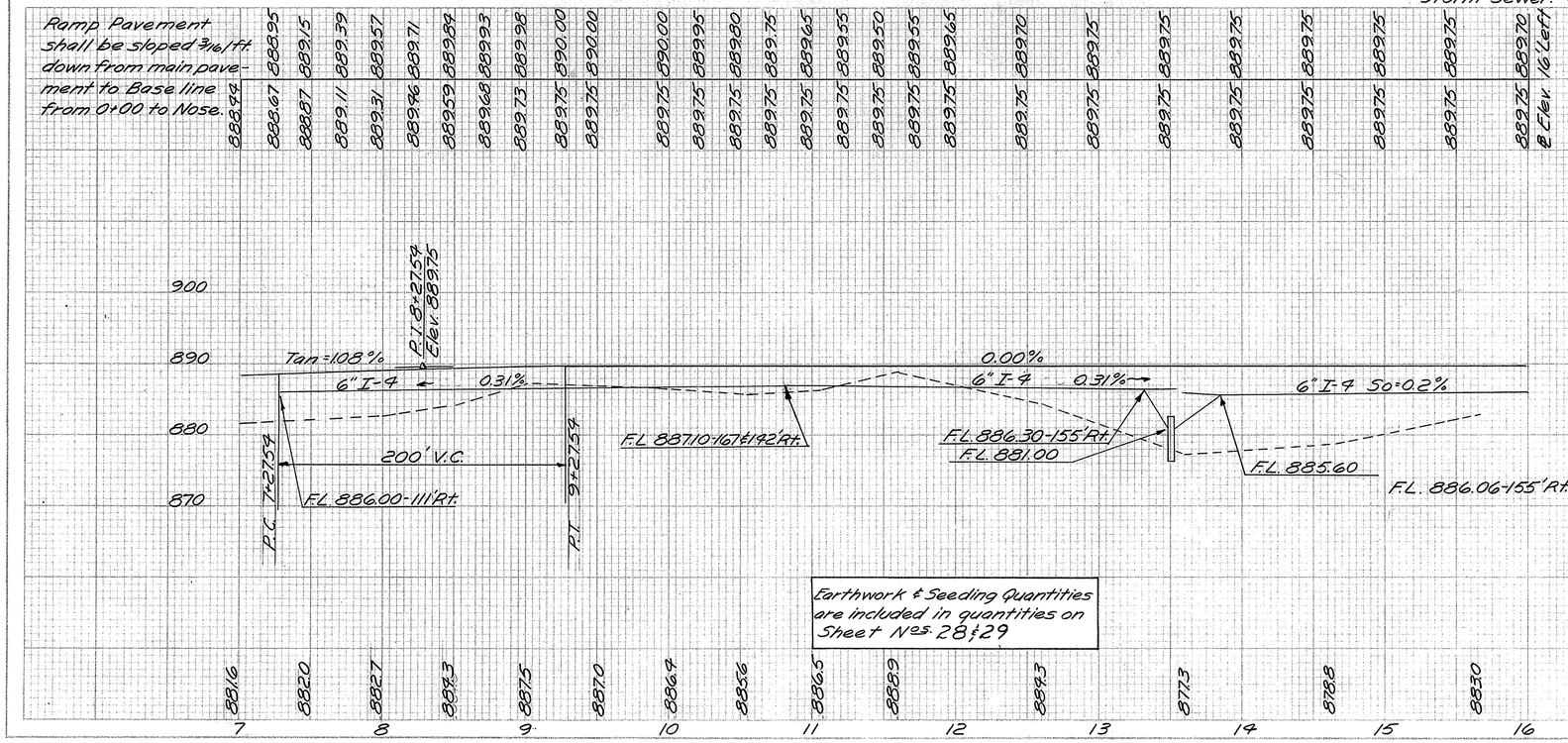


Weight Detector for Construction details of scale pit see sheet No. 128

See Sheet Nº 13 for Storm Sewer detail

Mark	Station		I-7 Concrete Approach Slab Sq. Yds.	I-9 6" Pipe Underdrains Lin. ft.	I-9 8" Outlet Pipe for Underdrains Lin. Ft.	I-5 Pipe Special Each 6"×6" Wye		I-12 Concrete Curb Type 6 Lin. Ft.	I-21 Concrete Traffic Island Pavt Sq. Yds.	I-15 Guard Rail Lin. Ft.
1-U	7+32 18	10+82 66		350						
2-U	10+82 66	13+65		302	10	1				
3-U	13+65	16+00		254	10	1				
1-AP	14+61 93	14+76 93	20							
2-AP	14+81 11	14+96 11	20							
1-G	12+08	15+95 5								387 5
1-C	7+32 68	8+32 68						205		
1-T	7+32 18	7+72 18							22	
Total			90	906	20	2		205	22	387 5

64'-6" I-2 Class A Storm Sewer - Headwall to be the same as used at outlet of I-9 Underdrains and shall be included in price per unit bid for Item I-2 Class A Storm Sewer. 0.3 Cu. Yds. S-29 Aggregate for Erosion Pad.



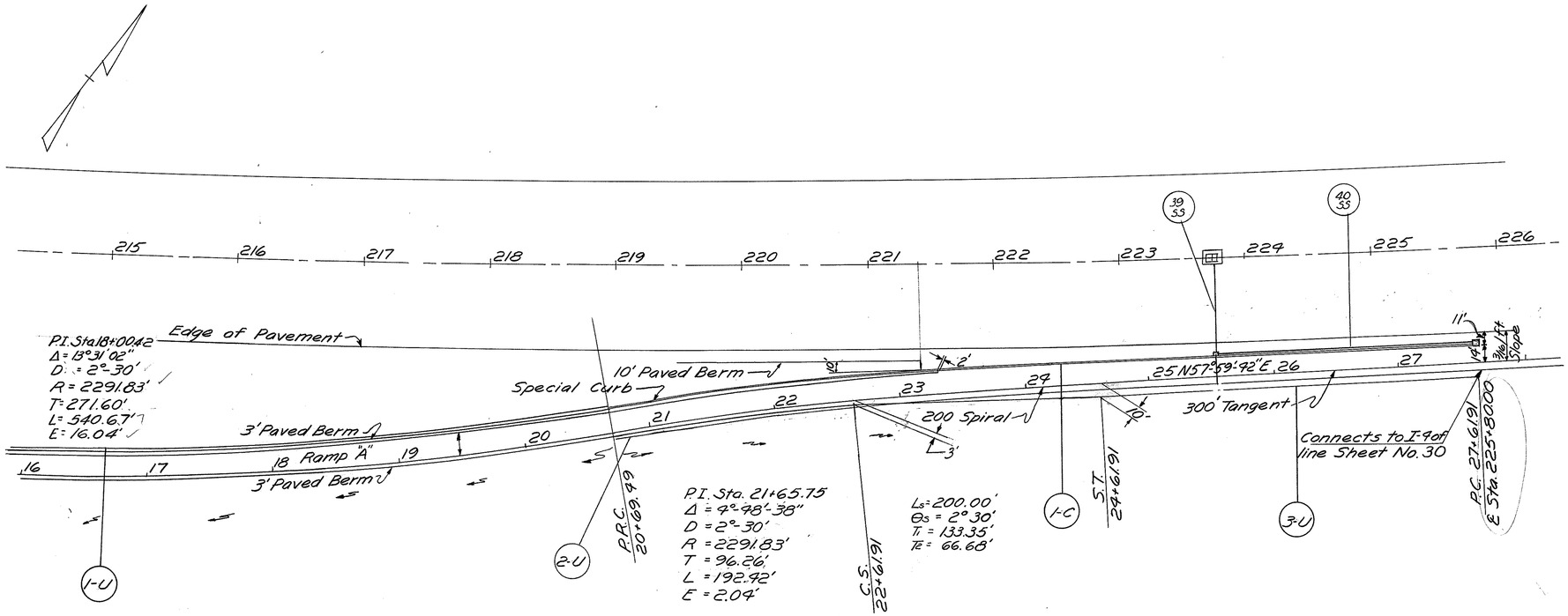
Earthwork & Seeding Quantities are included in quantities on Sheet Nos. 28 & 29

RAMP A RT WEIGH STATION STA. 7+00 TO STA. 16+00

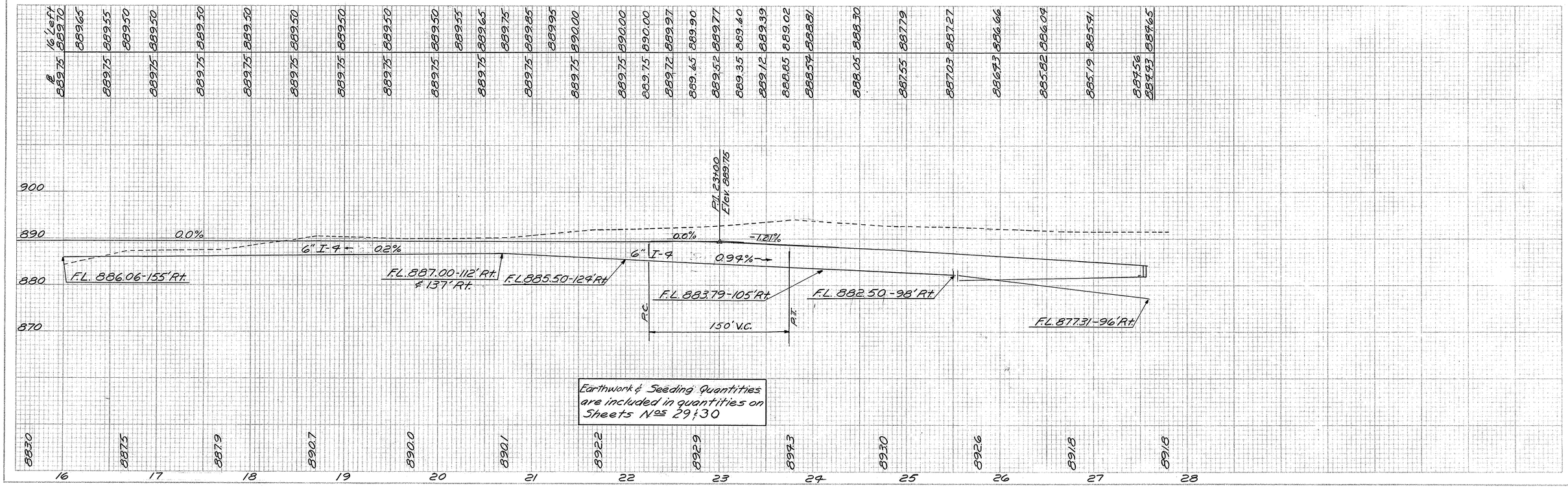
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

125/202

ATB-1-15.73
ASHTABULA COUNTY



Mark	Station	I-4 6" Pipe Underdrains Lin. Ft.	I-2 8" Class A Storm Sewer Under Revt. Lin. Ft.	I-5 Pipe Special Each 6" 90° Bend	I-5 Pipe Special Each 8"x6" Increaser	I-12 Conc. Curb as per plan Lin. Ft.
1-U	16+00 20+69.98	470				
2-U	20+69.98 25+54	484	20	1	1	
3-U	25+58 27+61.91	204				
1-C	20+69.98 27+61.91					697
	Total	1158	20	1	1	697



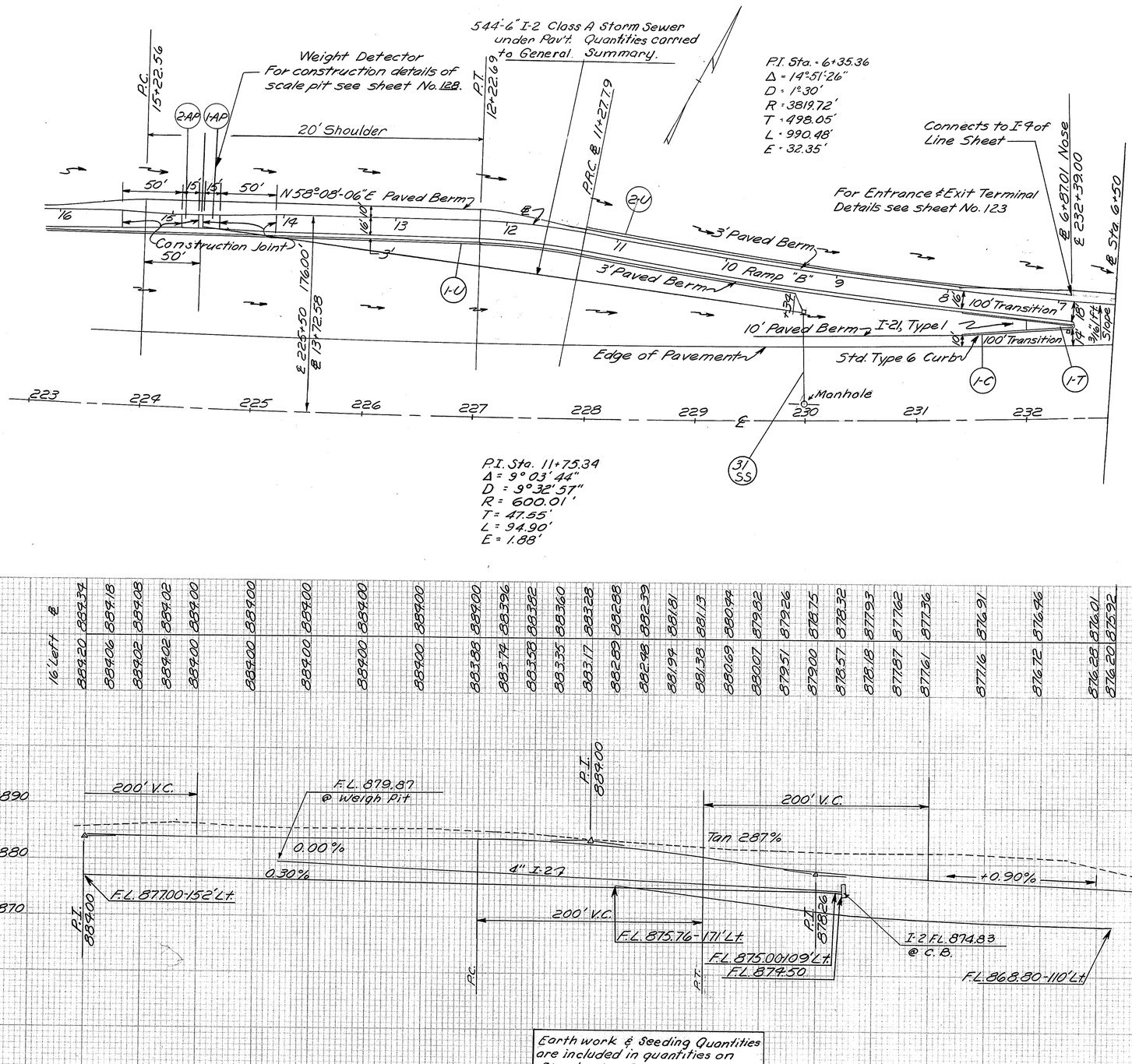
Earthwork & Seeding Quantities are included in quantities on Sheets Nos 29 & 30

RAMP A — RT. WEIGH STATION — STA. 16+00 TO STA. 27+61.91

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

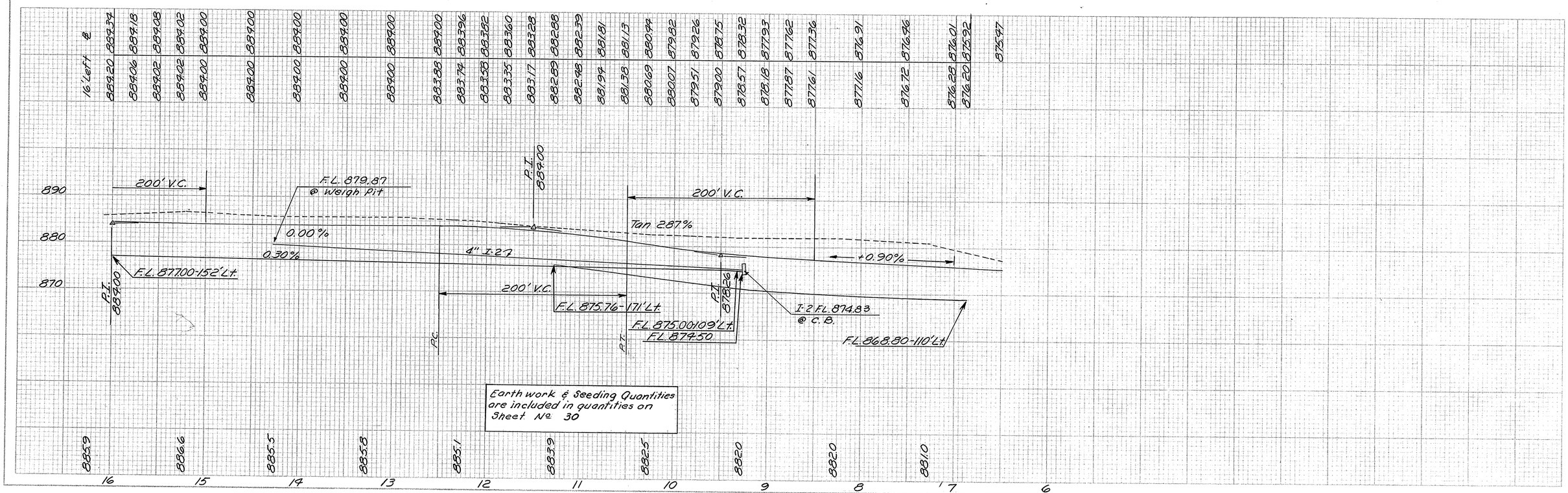
126
202

ATB-1-15.73
ASHTABULA COUNTY



P.I. Sta. 11+75.34
Δ = 9°03'44"
D = 9°32'57"
R = 600.01'
T = 47.55'
L = 94.90'
E = 1.88'

Mark	Station		I-7 Concrete Approach Slab Sq. Yds	I-9 6" Pipe Under drains Lin. Ft.	I-9 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend		S-29 Aggregate Erosion Pad Cu. Yds	I-12 Concrete Curb Type 6 Lin. Ft.	I-21 Concrete Island Pave't Sq. Yds.
1-U	9+25	16+00		672	10	1				
2-U	6+89	11+27.68		440						
1-AP	14+55.27	14+70.27	20							
2-AP	14+74.89	14+89.89	20							
1-T	6+87.51	7+27.51								22
1-C	6+87	7+87							205	
	Total		40	1112	10	1			205	22



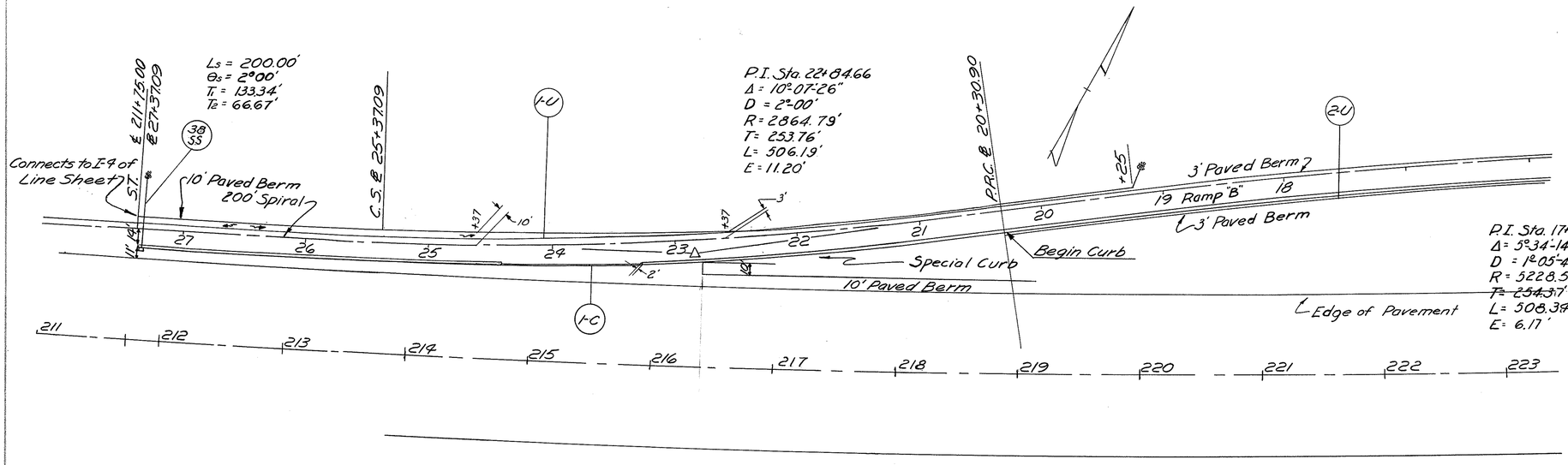
Earth work & Seeding Quantities are included in quantities on Sheet No. 30

RAMP B - LT. WEIGH STATION STA 6+50 TO STA 16+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

127
202

ATB-1-15.73
ASHTABULA COUNTY



Mark	Station		I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend	S-29 Aggregate Erosion Pad Cu. Yds.
1-U.	19+15	27+37.09	816	10	1	0.3
2-U	16+00	20+30.90	432			
	Total		1248	10	1	0.3

Mark	Station		I-12 Concrete Curb as per plan Lin. Ft.			
1-C	20+30.90	27+37.09	711			
	Total		711			

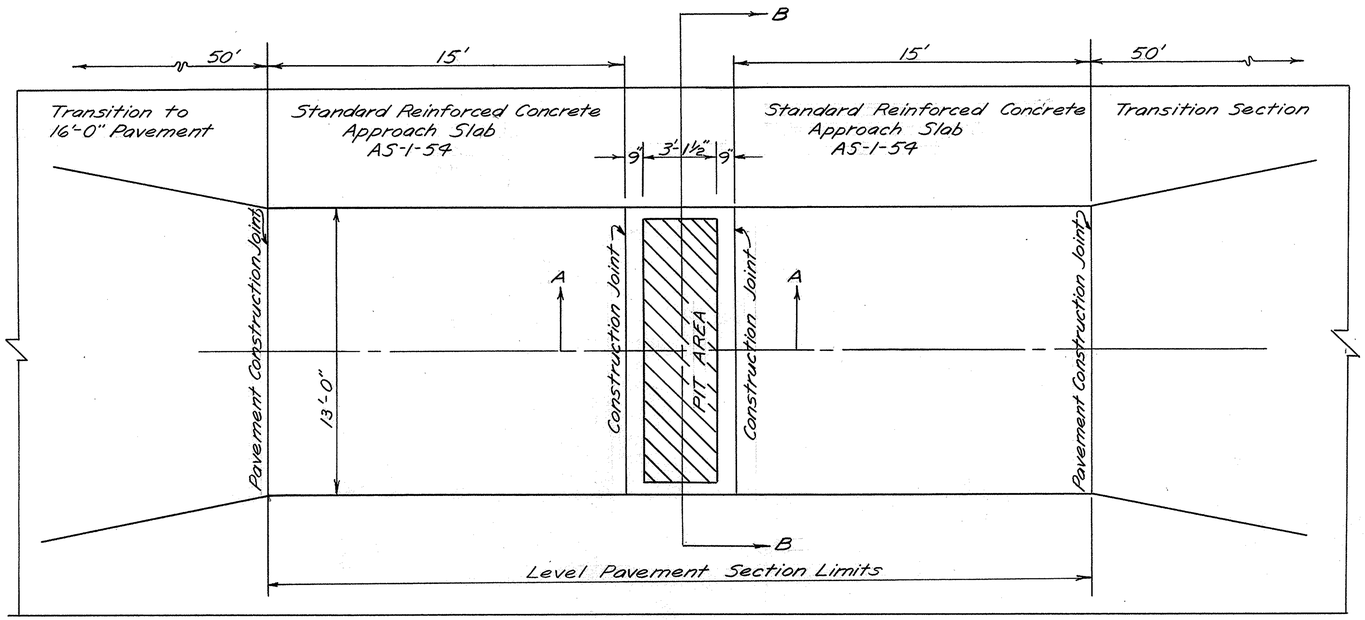
Earthwork & Seeding Quantities are included in quantities on Sheet Nos. 29 & 30

RAMP B - LT. WEIGH STATION STA. 16+00 TO 27+37.09

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

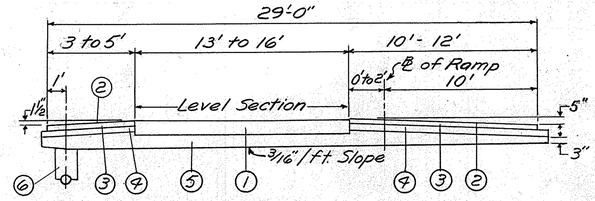
128
202

ATB-1-15.73
ASHTABULA COUNTY



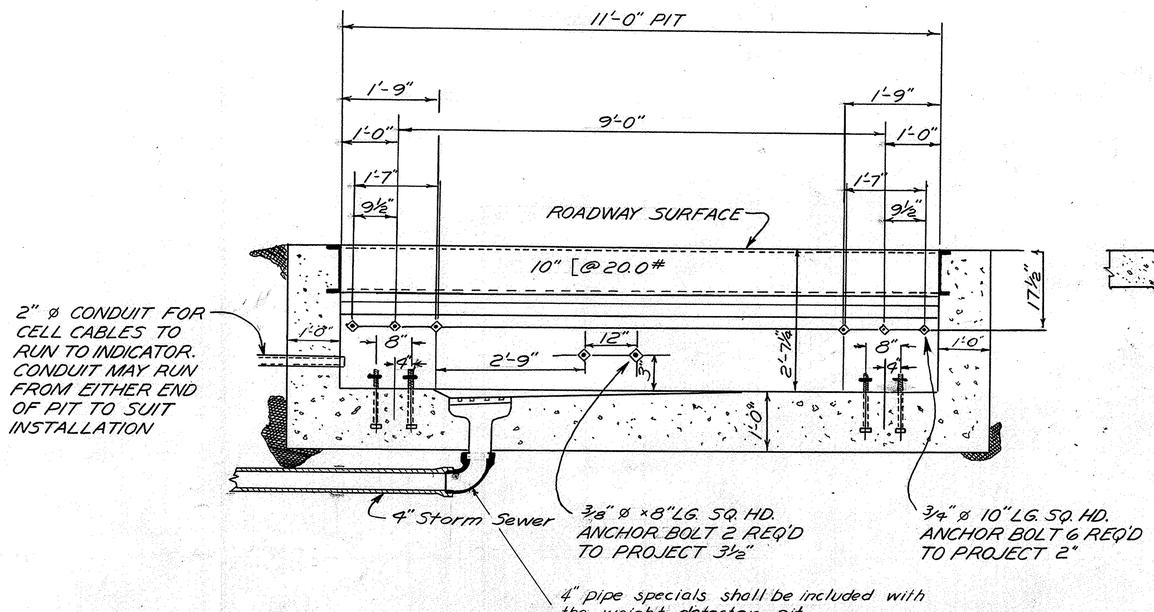
LOCATION PLAN
Scale 1"=30'

NOTES: Transverse slope of pavement and pavement crown shall be removed within the transition & scale sections in order to provide a level pavement section adjacent to the weight detectors.
Concrete for pits shall be class "C." Concrete for approach pavements shall be class "D".
ITEM SPECIAL -WEIGHT DETECTOR PIT AS PER PLAN in the general summary shall include all of the labor, materials and equipment necessary for the weight detector pits.
The scales will be furnished by the State of Ohio.

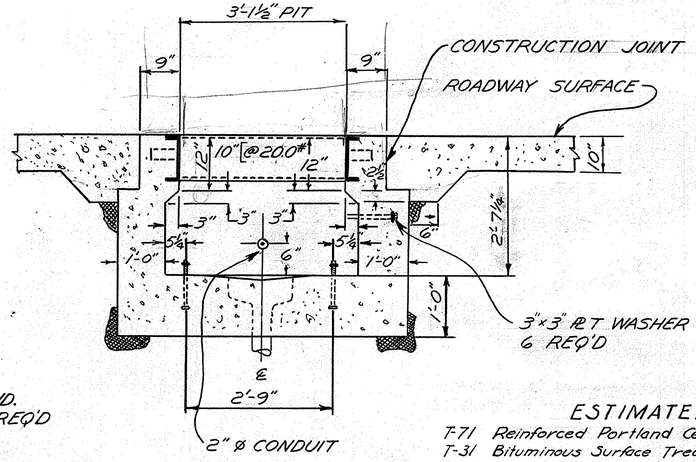


See Typical Sheet for key to reference
TYPICAL SECTION of TRANSITION

SECTION B-B



SECTION A-A



ESTIMATED PAVING QUANTITIES

T-71	Reinforced Portland Cement Concrete Pavement-10"	204 Sq.Yd.
T-31	Bituminous Surface Treatment	223 Sq.Yd.
B-33	Bituminous Macadam Base Course	223 Sq.Yd.
I-16	Stabilized Crushed Aggregate Shoulders & Approaches-5"	33 Cu.Yd.
I-22	Subbase	74 Cu.Yd.

WEIGHT DETECTOR PIT

ROADSIDE REST AREA NOTES

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

129
202

ATB-1-15.73
ASHTABULA COUNTY

ITEM SPECIAL-DRILLED WELLS
(See Notes in Proposal)

ITEM SPECIAL - Price per unit bid items, Special Well Shelter, Park Tables, Bulletin Board, and Privy and Storage Shed shall include all materials, labor, tools, equipment and incidentals necessary to complete the item as detailed on the plan or as shown on the pertinent Standard Construction Drawings.

SEEDING AND PROTECTING- Seeding shall conform to Specification L-9, except that the areas to be seeded shall be thoroughly loosened to a depth of at least 2 inches and harrowed before seeding. All rough, uneven areas including fence rows shall be graded to eliminate humps or depressions that would interfere with future mowing of the grass with a hand propelled power mower. All stone and debris larger than 2" in any dimension shall be removed from the surface before mulching.

Seed Mixture Shall Be As Follows
45% Poa Pratensis (Kentucky Blue Grass)
35% Festuca Rubra Var. (Illahee Fescue)
20% Agrostis alba (Red Top)

Rest areas, other than the parking lot, shall not be used for storage of materials, parking of equipment, vehicles or for the location of buildings of any kind during construction by the Contractor.

Areas to be seeded are estimated for the entire rest area. Portions of this area may be non-performed at the direction of the Engineer

ITEM L-13

Areas indicated on plans for this item shall be prepared as beds excavated to a depth of 18 inches and backfilled with topsoil.

TOPSOIL FOR L-ITEMS

This shall be obtained from stock piles provided for by E-101.03(a)

ITEM E-9 REMOVAL OF TREES AND STUMPS

Within the Rest Areas only those trees indicated by the Engineer shall be removed. Care shall be exercised by the Contractor in performance of this work so that no damage is done to trees indicated by Engineer to be saved.

The Rest Areas shall be cleared and grubbed in accordance with Section E-101.03

Areas under this item are considered to be all rest areas outside of the limited access Right-of-Way.

The average size of trees and stumps and approx. percentage to be removed are shown. The State of Ohio will not be responsible for any variation found during construction. The lump sum bid for Item E-9 Removal of Trees and Stumps, shall constitute full payment for this item and no additional compensation will be allowed.

ITEM L-17 PRUNING EXISTING TREES

All trees within the Rest Areas that are indicated to be saved by the Engineer, shall be pruned in accordance with Item L-17 of the Construction and Material Specifications. In addition to the work specified above, low limbs shall be removed to obtain seven (7) foot clearance above the ground as directed. Rest Areas are considered to be all areas outside of the limited access Right-of-Way.

The number and size of trees to be pruned may be estimated from information shown relative to existing trees and the percentage to be removed. The State of Ohio will not be responsible for any variations found during construction. The lump sum bid for Item L-17 Pruning Existing Trees shall constitute full payment for this item and no additional compensation will be allowed.

ITEM L-15

Acer saccharum, 1¾" to 2", B&B 22" are trees to be collected from within the roadside rest areas and replanted within the areas as directed by the Engineer.

ROADSIDE REST AREA SUMMARY

Item	Mark	Quantities Left	Quantities Med'n.	Quantities Right	Total	Unit	Description
I-8		1		1	2		Unit Catch Basin Type A
L-9		11,229		11,229	22,458	Sq. Yds.	Seeding and Protecting Rest Area, as per plan
L-12	1	50		50	100	Each	Vinca minor - Myrtle 2yrs.
L-13	2		3332		3332	"	Rosa Multiflora Japanese Rose 2' to 3'
L-13	3	30	260	30	320	"	Cornus Racemosa - Gray Dogwood 2' to 3' B&B 12"
L-13						"	
L-13	4	130		130	260	"	Ligustrum regelianum - Regel Privet 2½' to 3' B&B 12"
L-14	5	9		5	14	"	Acer Saccharum - Sugar Maple 1½" to 1¾" B&B 20"
L-14	6	9		9	18	"	Gleditsia Triacanthos Inermis - Thornless Honeylocust 1½" to 1¾" B&B 20"
L-14	7	1		1	2	"	Aesculus Glabra - Ohio Buckeye 1½" to 1¾" B&B 20"
L-14	8	7		4	11	"	Quercus Palustris - Pin Oak 1½" to 1¾" B&B 20"
L-14	9		10		10	"	Amelanchier Canadensis - Downy Shad blow 4' to 5' B&B 16"
L-14	10		15		15	"	Cornus Florida - White Flowering Dogwood 4' to 5' B&B 16"
L-14	11		24		24	"	Malus Coronaria - Wild Sweet Crab 4' to 5' B&B 16"
L-15		10		10	20	"	Acer Saccharum - Sugar Maple 1¾" to 2" (Place as directed) B&B 22"
L-17					Lump	Lump	Pruning Existing Trees
Special	12	70		70	140	Lin. Ft.	Drilled Well (See Note in Proposal)
Special	12	1		1	2	Each	Well Shelter
Special	13	1		1	2	"	Toilet and Storage Shed
Special		14		14	28	"	Park Table
Special		6		6	12		Charcoal Grill and Serving Table
Special	14	1		1	2		Bulletin Board
SS18		958		829	1,787	Lin. Ft.	Rest Area Fence

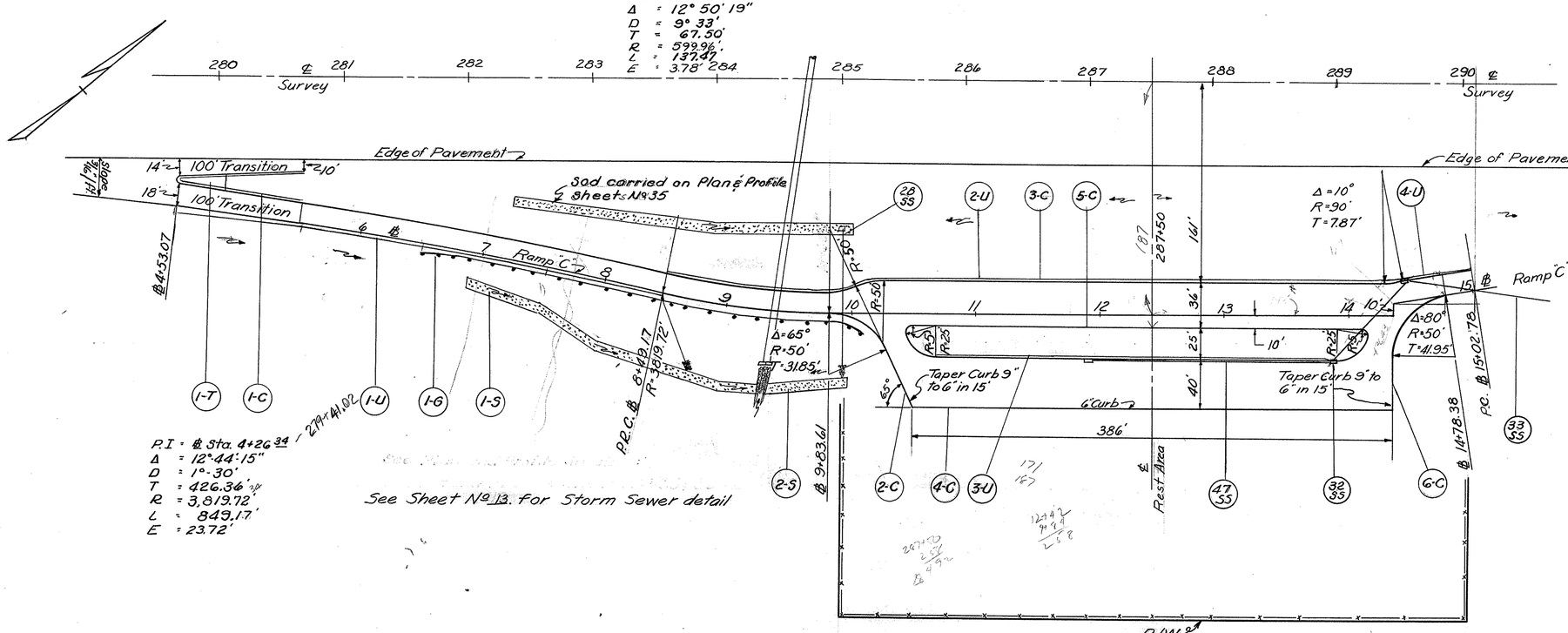
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

130
202

ATB-1-15.73
ASHTABULA COUNTY

P.I. = ℄ Sta. 9+16.67
Δ = 12° 50' 19"
D = 9° 33'
T = 67.50'
R = 599.96'
L = 137.49'
E = 3.78'

P.I = ℄ Sta. 4+26.34
Δ = 12°-44'-15"
D = 1°-30'
T = 426.36'
R = 3,819.72'
L = 849.17'
E = 23.72'



DRAINAGE

Mark	Station	I-4 6" Pipe Underdrain Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend	I-5 Pipe Special Each 6"x6" Tee	5-29 Aggregate Erosion Pad Cu. Yds.
1-U	4+53.07 8+68	442	10	1		0.3
2-U	8+50 14+43	584	10	1		
3-U	10+66 13+86	310	10	1		
4-U	14+47 15+03	46	10			
	Total	1382	40	3		0.3

Ramp Pavement shall be sloped 3/16" per ft. away from main Pavement between Sta. 0+00 and Sta. 4+50 and to include 100' taper section.

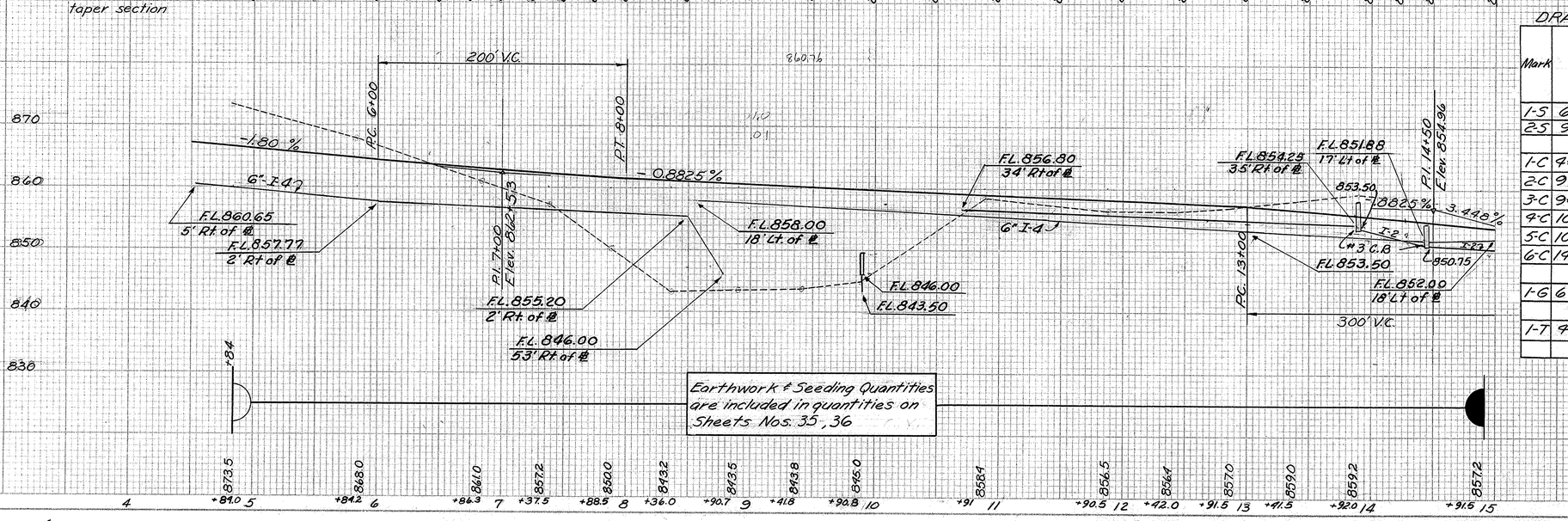
Variable Width Pavement Transition.

16' Left

℄ Elev. 863.07, 863.02, 862.12, 861.22, 864.77, 863.88, 863.47, 863.10, 862.75, 862.43, 862.13, 861.87, 861.64, 861.53, 861.21, 860.76, 860.32, 859.88, 859.44, 859.00, 858.56, 858.12, 857.68, 857.23, 856.68, 855.93, 855.47, 854.96, 853.77, 854.12

Parking Area

See Rest Area Typicals to determine Pavement Grades Except as shown on Cross Sections



Earthwork & Seeding Quantities are included in quantities on Sheets Nos. 35, 36

4 +89.0 5 +84.2 6 +86.3 7 +37.5 +88.5 8 +36.0 +90.7 9 +41.8 +90.8 10 +91 11 +90.5 12 +42.0 +91.5 13 +41.5 +92.0 14 +91.5 15

DRAINAGE & ROADWAY

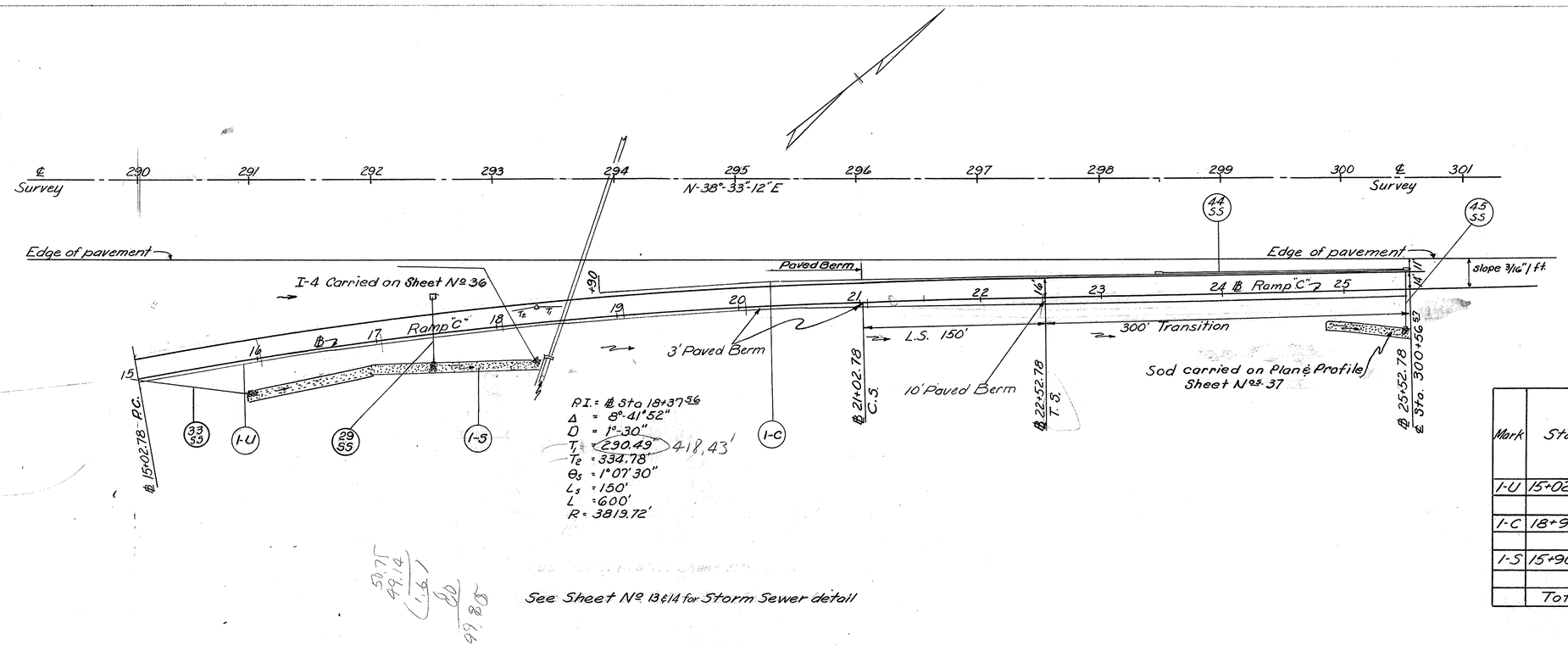
Mark	Station	L-10 Sodding Type I Sq. Yds.	I-15 Guard Rail Lin. Ft.	I-12 Concrete Curb Type 6 Lin. Ft.	I-12 Conc. Curb Mod. as per plan Lin. Ft.	I-21 Concrete Traffic Island Pavt. Sq. Yds.
1-S	6+90 9+32	250				
2-S	9+90 10+00	66				
1-C	4+53.07 5+53.07			203		
2-C	9+83.61 10+50.78				106.	
3-C	9+83.61 15+02.78				512.	
4-C	10+50.78 14+36.78			386		
5-C	10+94.78 14+15.78				761.	
6-C	14+36.78 15+02.78				136.	
1-G	6+50 10+08		362 L.F.			
1-T	4+54 4+94					22
	Total	316	362 L.F.	589	1515.	22

ROADSIDE REST AREA RIGHT - RAMP "C" STA. 4+53.07 TO STA. 15+02.78

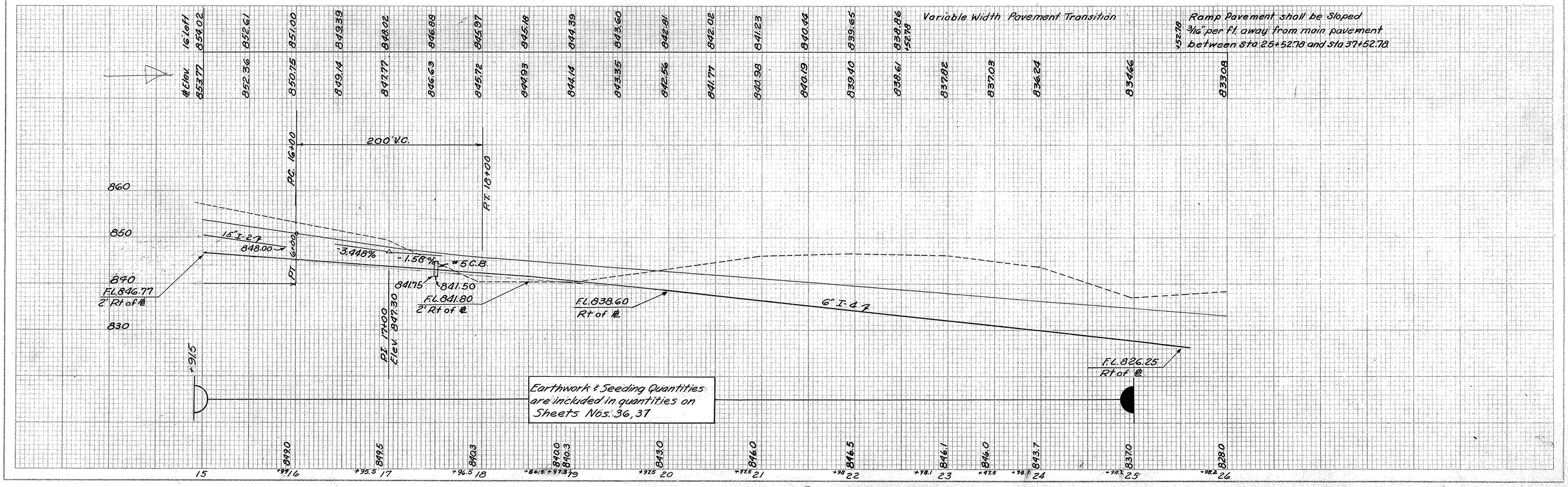
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

131
202

ATB-1-15.73
ASHTABULA COUNTY



Mark	Station	I-4 6" Pipe Underdrains Lin. Ft.	I-12 Concrete Curb as per plan Lin. Ft.	L-10 Sodding Type I Sq. Yds.	
I-U	15+02.78 - 25+52.78	1050			
I-C	18+93 - 25+52.78		663		
I-S	15+90 18+35			245	
	Total	1050	663	245	

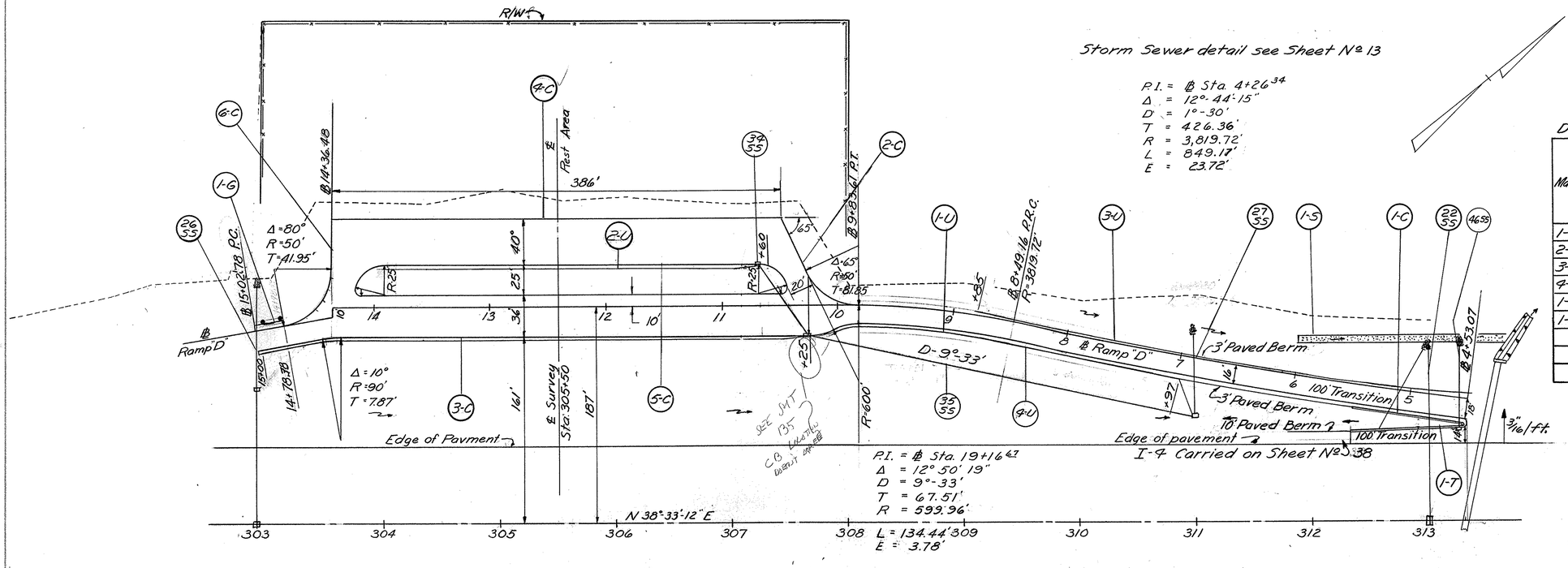


ROADSIDE REST AREA RT. - RAMP C. STA. 15+00 TO STA. 25+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

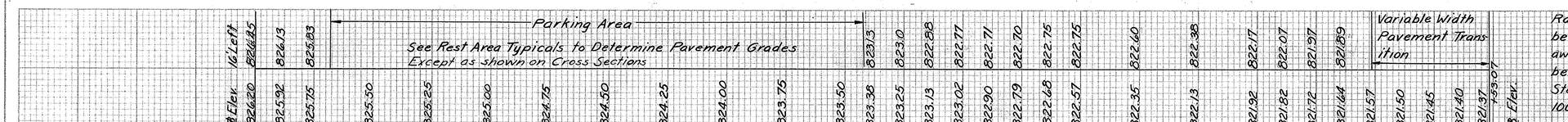
132
202

ATB-1-15.73
ASHTABULA COUNTY



DRAINAGE

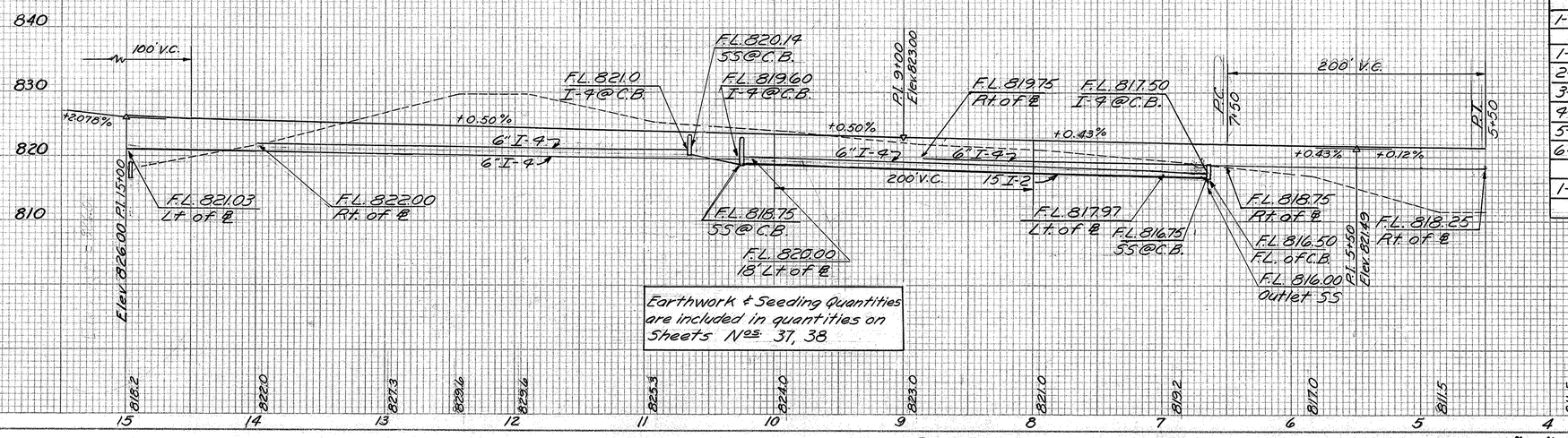
Mark	Station		I-4 6" Pipe Underdrains Lin. Ft.	I-4 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special Each 6"-60° Bend		I-10 Sodding Type 1 Sq. Yds.
1-U	10+27	15+00	469	10	1		
2-U	10+66	13+86	310	10			
3-U	9+53.07	8+75	422				
4-U	10+20	6+80	346	10	1		
1-S	9+30	6+05					176
1-S	9+30	6+05					-
	Total		1592	30	2		176



Ramp pavement shall be sloped 3/16 per ft. away from main pavement between Sta. 0+00 and Sta. 4+50 and to include 100' taper section.

ROADWAY

Mark	Station		I-15 Guard Rail Lin. Ft.	I-12 Conc. Curb Type 6 Lin. Ft.	I-12 Conc. Curb Mod. as per plan Lin. Ft.	I-21 Conc. Traffic Island Pav't Sq. Yds.
1-G	14+78	15+02.78	25			
1-C	4+53.07	5+53.07		205		
2-C	9+83.61	10+50.98			106	
3-C	9+83.61	15+02.78			511	
4-C	10+50.98	14+36.98		386		
5-C	10+94.98	14+15.98			758	
6-C	14+36.98	15+02.78			136	
1-T	9+59	9+94				22
	Total		25	591	1511	22



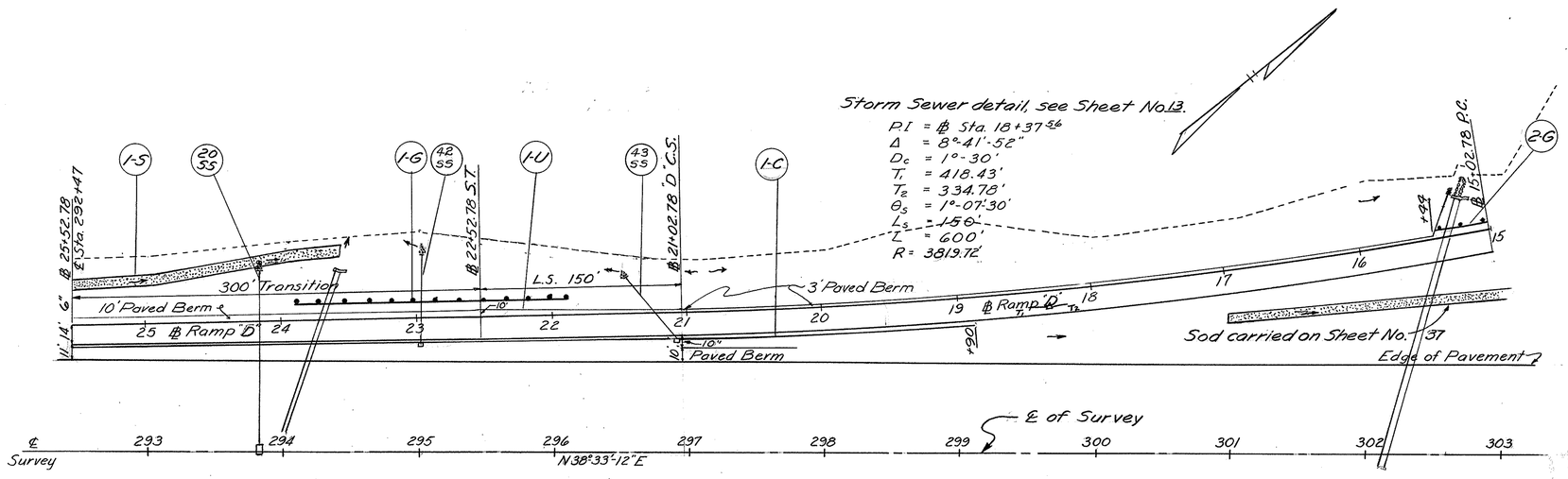
Earthwork & Seeding Quantities are included in quantities on Sheets Nos. 37, 38

ROADSIDE REST AREA LEFT RAMP "D" STA. 4+53.07 TO STA. 15+02.78

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

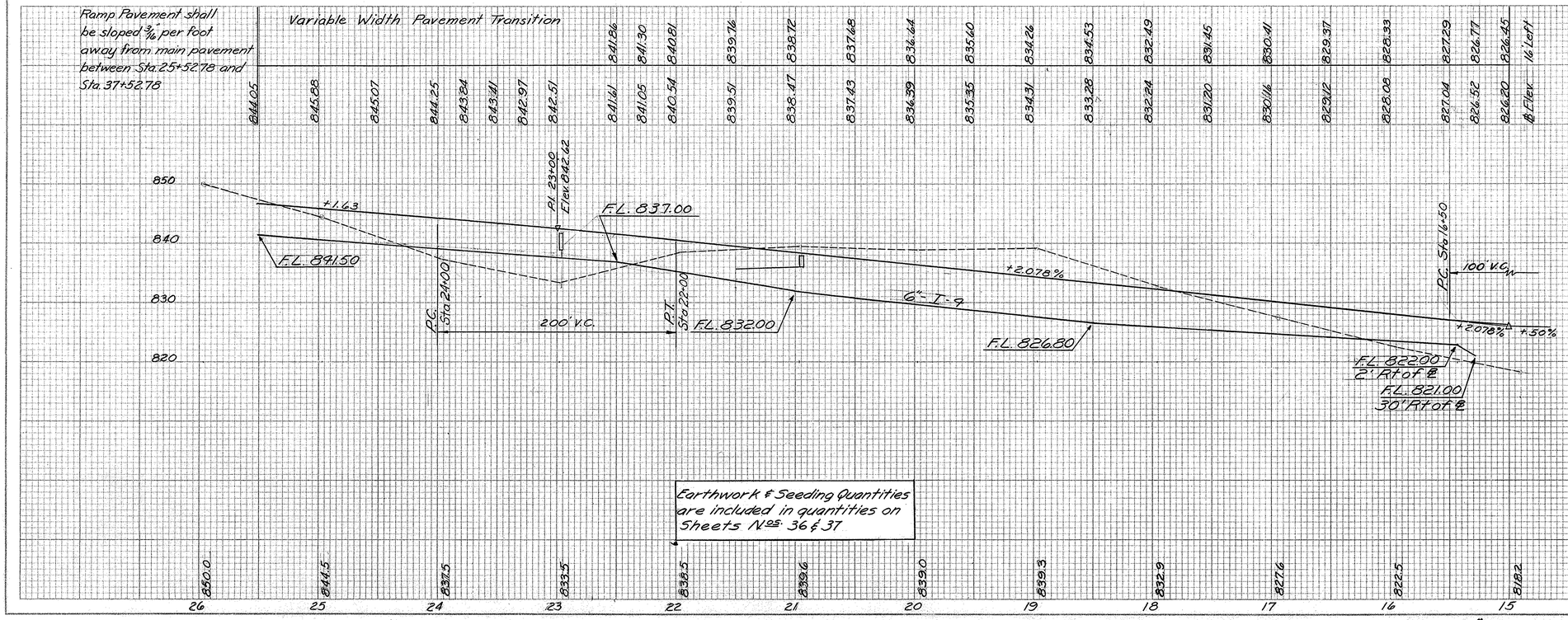
133
202

ATB-1-15.73
ASHTABULA COUNTY



Mark	Station		I-7 6" Pipe Underdrains Lin. Ft.	I-7 8" Outlet Pipe Lin. Ft.	I-5 Pipe Special 6"-60° Bend		S-29 Aggregate Erosion Pad Cu. Yds.
1-U	15+28	25+52.78	1022	10	1		0.3
			1022				
	Total		1022	10	1		0.3

Ramp Pavement shall be sloped 3/16" per foot away from main pavement between Sta. 25+52.78 and Sta. 37+52.78



Mark	Station		L-10 Sodding Type I Sq. Yds.	I-12 Conc. Curb as per plan Lin. Ft.	I-15 Guard Rail Lin. Ft.	
1-S	24+50	25+52.78	200			
1-C	18+90.78	25+52.78		662		
1-G	22+08	24+08			200	
2-G	15+02.78	15+90.28			37.5	
	Total		200	662	237.5	

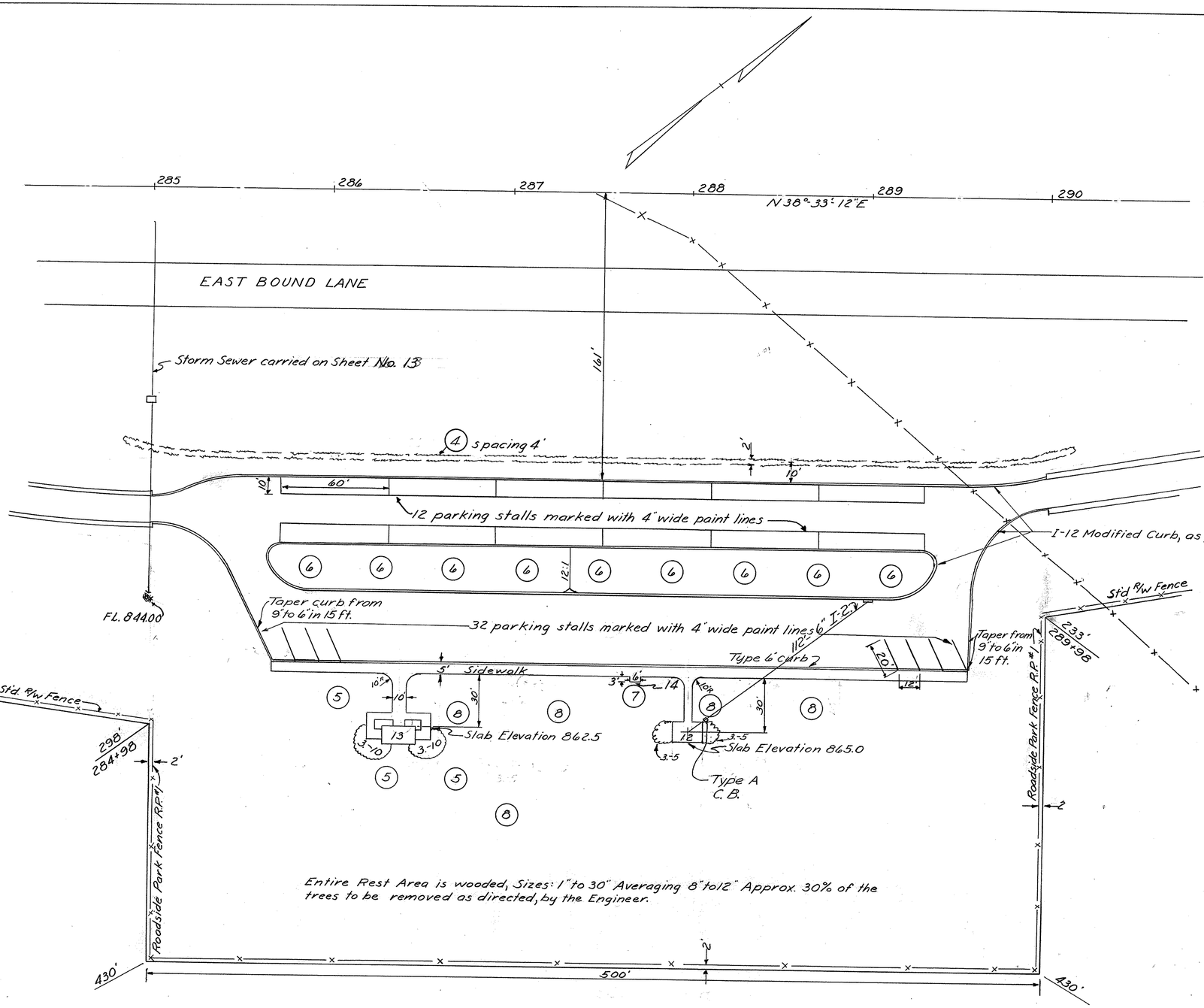
Earthwork & Seeding Quantities are included in quantities on Sheets Nos. 36 & 37

ROADSIDE REST AREA LEFT RAMP "D" STA. 15+00 TO STA. 26+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

134
202

ATB-1-15.73
ASHTABULA COUNTY



Note:
For pavement joint detail of Parking Area See Sheet No. 135
For quantities See Sheet No. 129
Roadside Tables, Charcoal Grills & Bulletin Board will be located at the direction of the Engineer.
For figures in circles reference is made to table on Sheet No. 129 under "Mark" column.

Entire Rest Area is wooded, Sizes: 1" to 30" Averaging 8" to 12" Approx. 30% of the trees to be removed as directed, by the Engineer.

ESTIMATED QUANTITIES
(Included with Roadway Quantities)

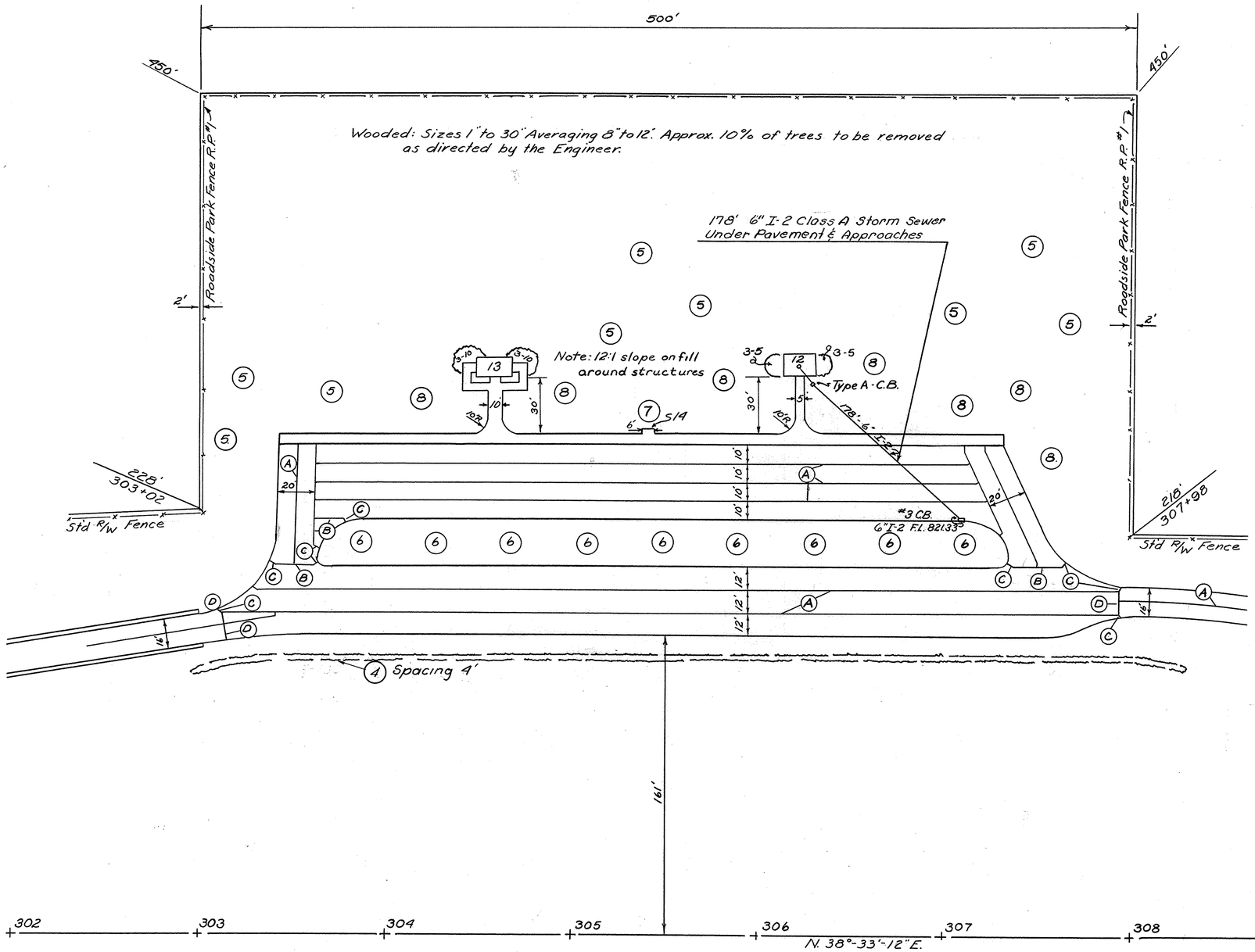
I-13 2,391 Sq. Ft. 4" Sidewalk
L-9 1.01 Tons Commercial Fertilizer (12-12-12)
L-9 5.05 Tons Agricultural Liming Material
E-9 Lump Removal of Trees & Stumps
I-2 112 Lin. Ft. 6" Class A Storm Sewer M-6.5(b) or M-6.8(b).
T-71 3698 Sq Yds. Reinforced Portland Cement Concrete Pavement
I-22 678 Cu. Yds Subbase

ROADSIDE REST AREA - PLAN

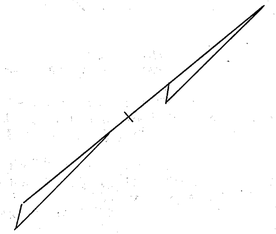
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

135
202

ATB-1-15.73
ASHTABULA COUNTY



Note:
For pavement marking detail of parking area see Sheet No. 134.
For quantities see Sheet No. 129
Roadside Tables, Charcoal Grills & Bulletin Board will be located at the direction of the Engineer.
For figures in circles reference is made to table on Sheet No. 129 under 'Mark' column.



(A) Standard Longitudinal Joint
(B) Standard key Joint Without Tie Bars
(C) Expansion Joint Without Dowels
(D) Standard Expansion Joint
(E) Standard Contraction Joint

Scale 1" = 30 feet

ESTIMATED QUANTITIES
(Included with Roadway Quantities)

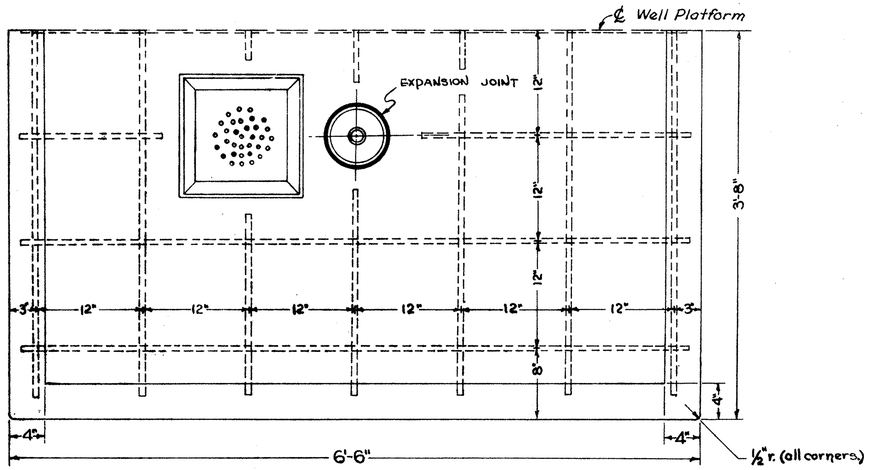
T-71	3698 Sq. Yds. Reinforced Portland Cement Concrete Pavement
I-22	678 Cu. Yds. Subbase
I-13	2391 Sq. Ft. 9" Sidewalk
L-9	1.01 Tons Commercial Fertilizer (12-12-12)
L-9	5.05 Tons Agricultural Liming Material
E-9	Lump Removal of Trees & Stumps
I-2	178 Lin. Ft. 6" Class A Storm Sewer under Pavement & Approach M-6.5(b) or M-6.8(b).

ROADSIDE REST AREA-LEFT

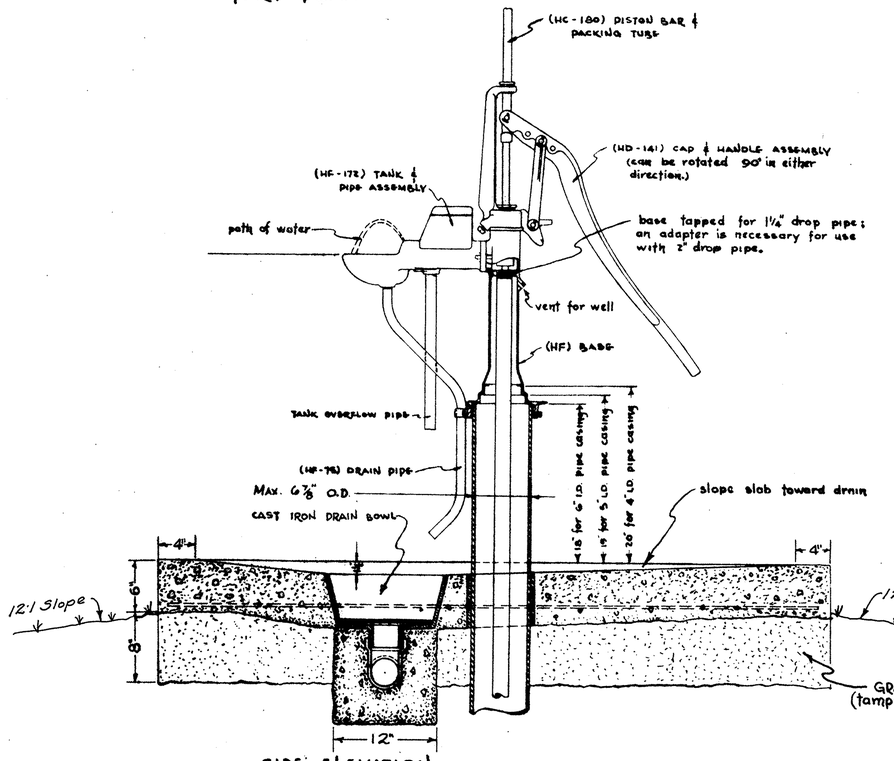
FED. RD. DIV. NO.	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

136
202

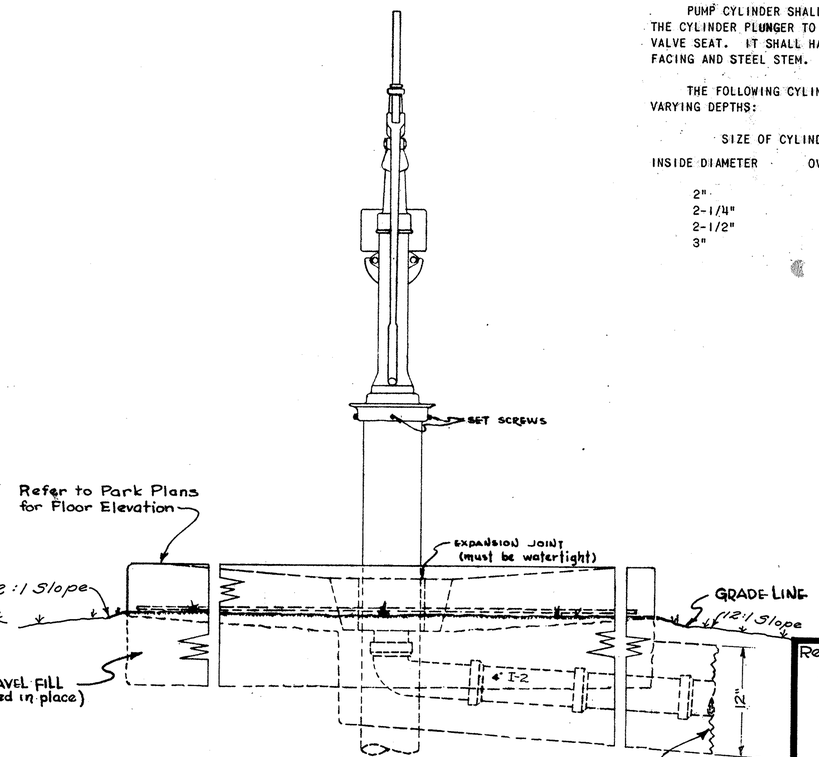
ATB-1-15.73
ASHTABULA COUNTY



PART-PLAN



SIDE ELEVATION



REAR ELEVATION

Tile to be encased in concrete to 6" beyond well shelter. Cost of encasement shall be included in cost of 4" Storm Sewer, Item I-2.

PAYMENT INCLUDED IN UNIT PRICE BID FOR "ITEM SPECIAL WELL SHELTER".

BILL OF MATERIAL

1	HAND DRINKING FOUNTAIN TYPE PUMP (INCLUDING PUMP CYLINDER).
1	CU. YD. CLASS "C" CONCRETE AGGREGATE SHALL CONFORM TO I-22 GRADING "C" OR "D".
1	12" X 12" X 6" CAST IRON DRAIN
2	3/4" ϕ X 1' 9" REINFORCING STEEL
2	3/4" ϕ X 4' 0" REINFORCING STEEL
5	3/4" ϕ X 6' 0" REINFORCING STEEL
3	3/4" ϕ X 6' 10" REINFORCING STEEL

NOTES

THE LOCATION OF 4" STORM SEWER SHALL BE FURNISHED ON REST AREA PLAN.

FLOOR SLAB MAY BE POURED INTEGRAL WITH THE WELL SHELTER FOOTER. (SEE DETAILED DRAWING OF WELL SHELTER.)

HAND DRINKING FOUNTAIN TYPE PUMP SHALL BE MODEL 1-HF AS MANUFACTURED BY BAKER MANUFACTURING COMPANY, EVANSVILLE, WISCONSIN OR AN APPROVED EQUAL.

PUMP CYLINDER SHALL BE BRASS BODY CYLINDER OR BRASS LINED. THE CYLINDER PLUNGER TO HAVE CAST IRON CAGE, BRASS FOLLOWER AND VALVE SEAT. IT SHALL HAVE BRASS POPPET WING VALVE WITH RUBBER FACING AND STEEL STEM.

THE FOLLOWING CYLINDER SIZES ARE RECOMMENDED FOR WELLS OF VARYING DEPTHS:

SIZE OF CYLINDER		MAXIMUM DEPTH OF SETTING
INSIDE DIAMETER	OVER-ALL LENGTH	RECOMMENDED FOR SIZE OF CYLINDER
2"	10"	200'
2-1/4"	10"	175'
2-1/2"	10"	150'
3"	10"	75'

Revised

STATE OF OHIO DEPARTMENT OF HIGHWAYS

PUMP & WELL PLATFORM

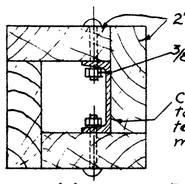
ROADSIDE REST AREA

DESIGNED	TRACED	APPROVED

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

137
202

ATB-1-15.73
ASHTABULA COUNTY



PLAN VIEW OF POST CONSTRUCTION
Scale 3"=1'-0"

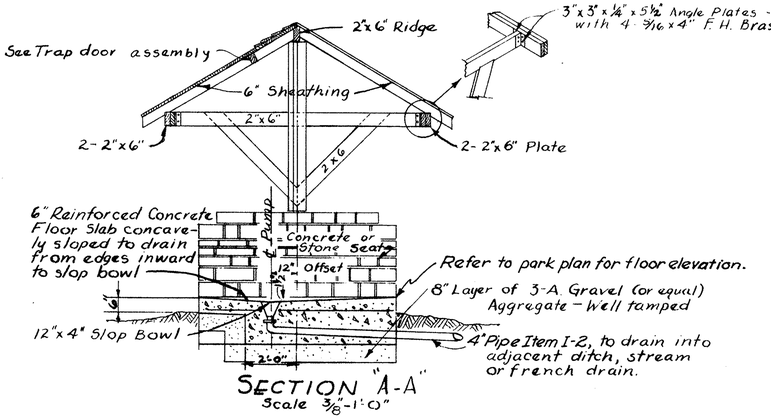
BILL OF MATERIALS

4 pcs.	2"x6"x 10'	Cross members for roof and angular supports
5 "	2"x6"x14'	Ridge & plate for roof
8 "	2"x4"x14'	Roof rafters
4 "	2"x6"x16'	Boxing around channel iron, for column supports
2 "	6"x6"x10'	Wood posts (alternate column supports)
2 "	5½"-7"O.D x11'-	Used well casing (alt. column supports)
28 "	1"x6"x14'	Roof sheathing
2 "	1"x3"x14'	Facia boards
10 bundles	-16"	Random width wood shingles, grade xxxxx cedar.

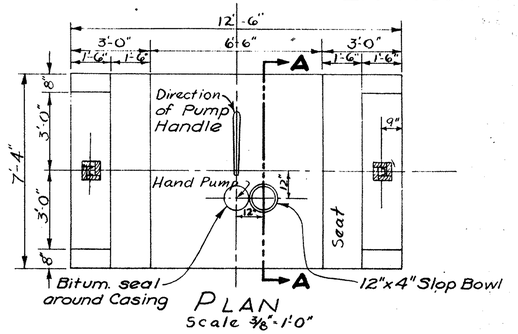
Hardware

24 each	3/8"x 3"	Carriage bolts in column supports
4 "	½"x 11"	C-Bolts, column & braces
1 "	½"x 9"	C-Bolts, column & cross-arms
1 "	½"x 5"	C-Bolts, braces & cross-arms

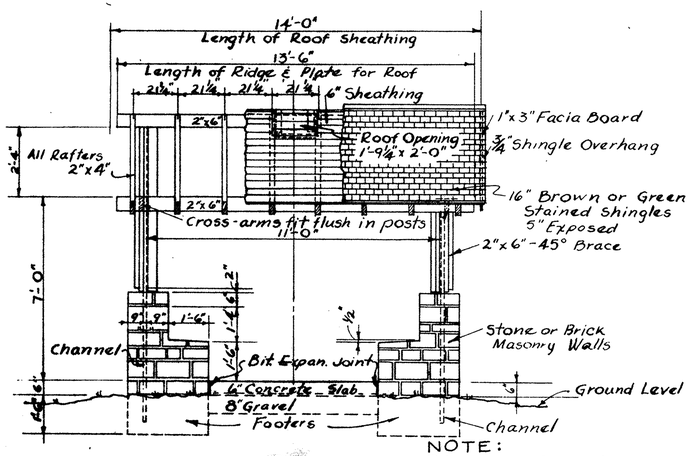
2pcs (11 lin.ft each)	Channel iron
8ea.	3"x3"x¼x5½" - Angle plates
46 "	5/16"x4" - F.H. brass wood screws
2 "	2½"- Screen door hooks-complete
4 "	½"x15" (2"spread)- U-Bolts, alternate with used well casing posts



SECTION "A-A"
Scale 3/8"-1'-0"

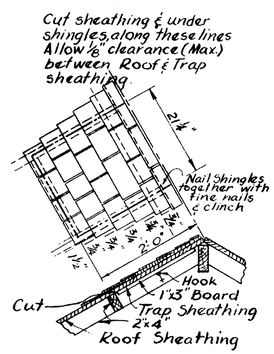


PLAN
Scale 3/8"-1'-0"

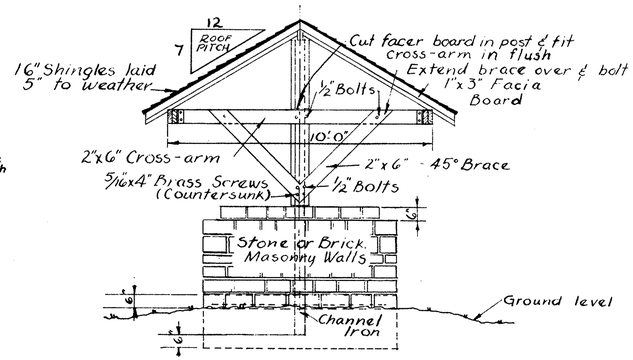


ELEVATION
Scale 3/8"-1'-0"

NOTE:
Bituminous Expansion Joint will not be necessary if concrete well slab is placed integral with footers for Well Shelter.



DETAIL OF TRAP DOOR
Scale ¾"-1'-0"



ELEVATION
Scale 3/8"-1'-0"

NOTES

All outside vertical surface joints shall be raked to a depth of ¼" to ½".

All stone masonary shall comply with specification for Item 5-20. No masonary, stone or brick shall be painted.

Brick shall be size number 3 or 4, made from clay and comply with specification for Item I-8.

The posts constructed from 2"x6" boards shall be fastened with suitable nails, also 5/16"x4" brass screws at 24" intervals.

All lumber shall be S4S, Std., KD., #1 common and better, Southern Yellow Pine or Douglas Fir.

All lumber and shingles be treated in accordance with the requirements for "Pentachlorophenol Treatment," Sec. M-8.6.

Concrete shall be Class "C" and constructed in accordance with the requirements of Item 5-1 of the Specifications.

Reinforcing steel in 6" reinforced concrete floor slab shall be ¾" steel rods spaced 12" apart O.C. both ends. Reinforcing steel not required in footers, nor in 8" walls or 4" floor slab of compartment.

Large sized washers shall be used with all bolts, one at each end; a lock washer shall also be used at the nut end. Bolts shall be cut off ¼" beyond the nut & then hammered. All bolt holes shall be soaked with 5% Pentachlorophenol Solution, thoroughly before inserting bolts.

Bolts shall be good quality Hot , galvanized, or copper bearing.

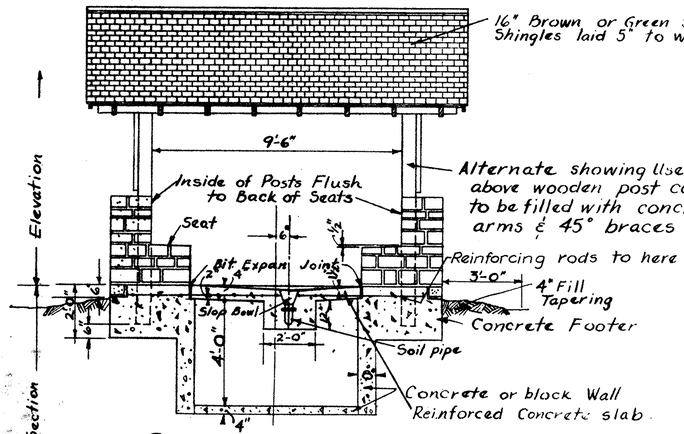
In all shelters containing a well & pump these are offset from center of 6" concrete slab, and trap door is built into roof of shelter as shown, all to allow for drawing of pump and/or casing, in the event repairs have to be made.

Should local conditions warrent, drainage of excess ground water from compartment beneath fountain; it shall be carried off either by gravity flow or sump drains as required, by topography of the individual park area affected.

Aggregate subbase for concrete slab shall meet the requirements of Item I-22 Subbase, Grading "C" or "D."

This Wall Shelter Design is the "TRADE MARK" of the Roadside Parks in Ohio. It will be erected as standard.

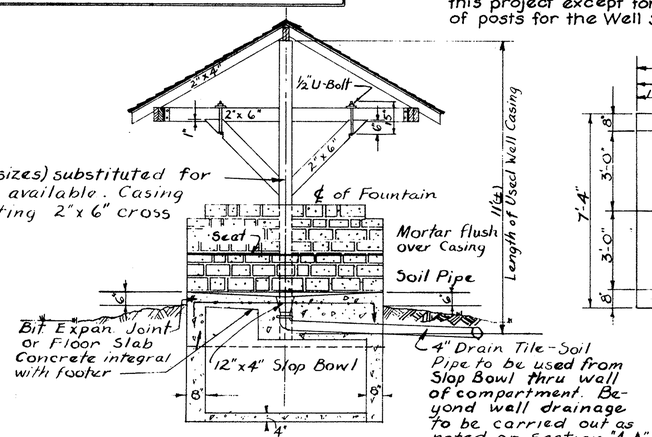
NOTE: Details below this line do not apply to this project except for alternate design of posts for the Well Shelter.



Alternate showing Used Well Casing (5½" - 7" O.D. sizes) substituted for above wooden post construction where readily available. Casing to be filled with concrete after ½" bolts supporting 2"x6" cross arms & 45° braces are in place.

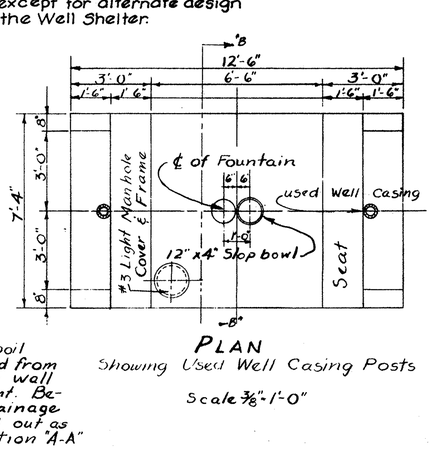
Reinforcing rods to here if pour is integral

SECTION - ELEVATION 3/8"-1'-0"
Compartment Under Slab & Fountain Where City Water is Used To Allow Repairing



4" Drain Tile - Soil Pipe to be used from Slop Bowl thru wall of compartment. Beyond well drainage to be carried out as noted on Section "A-A"

SECTION "B-B"
3/8"-1'-0"



PLAN
Showing Used Well Casing Posts
Scale 3/8"-1'-0"

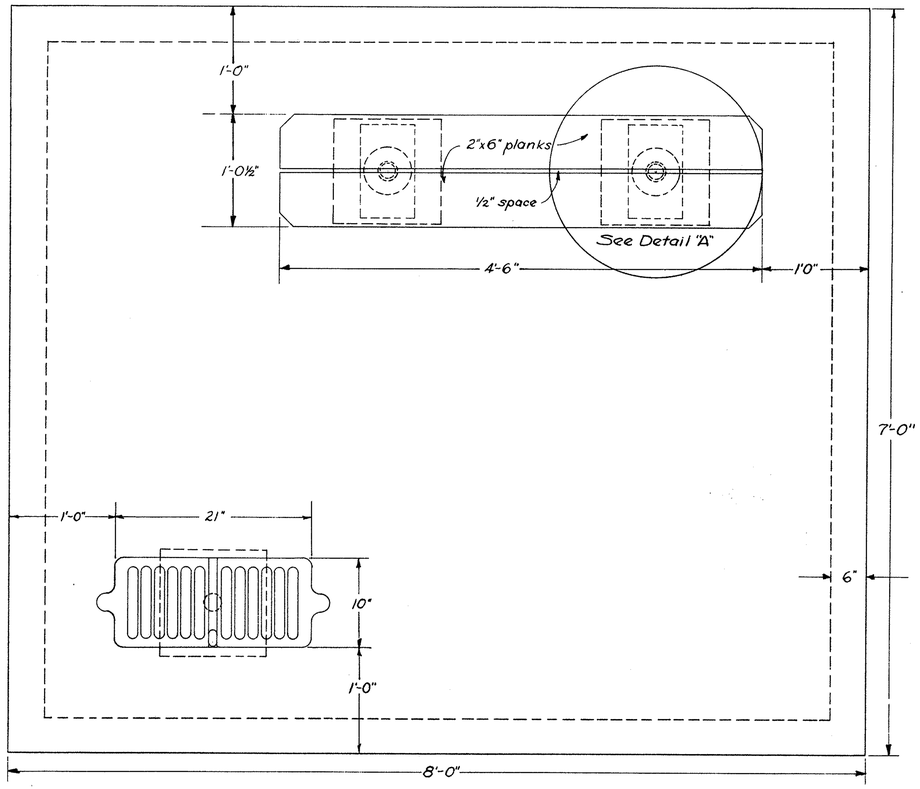
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
WELL SHELTER
ROADSIDE PARKS

DESIGNED	TRACED	APPROVED
C.A.W.	R.C.B.	M.J.G.

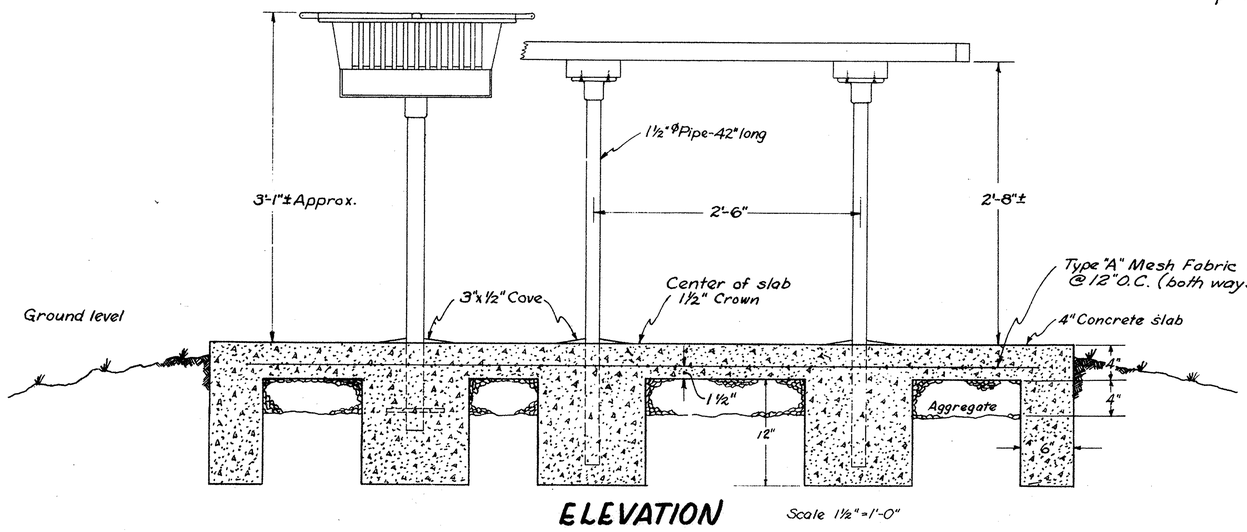
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

138
202

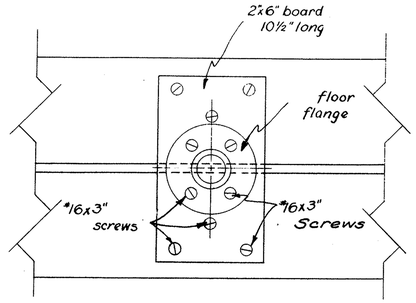
ATB-1-15.73
ASHTABULA COUNTY



PLAN Scale 1½"=1'-0"



ELEVATION Scale 1½"=1'-0"



DETAIL "A"
Method of Attaching Pipe to Table Top

Scale – 3"=1'-0"

Item Special - Charcoal Grill and Serving Table
Method of Measurement.

The Charcoal grill and serving table shall be considered as one unit. The number of units to be paid for shall be the number of each unit, listed and estimated separately, complete and accepted.

Basis of Payment.

The work included in this item shall be paid for at the contract unit price bid for each "Item Special Charcoal Grill and Serving Table" completed and accepted, which price and payment shall constitute full compensation for all excavation and backfill, and for furnishing, hauling and placing all materials, and for all labor, equipment, tools and incidentals necessary to complete this item.

BILL of MATERIALS

1 - Charcoal Grill
2 - 1½" I.D. x 3'-6" Galvanized Pipe
2 - 2"x6"x10½" Boards for serving table.
2 - 1½" Floor flanges.
2 - 2"x6"x4'-6" Planks for table top.
20 - "16x3" Cadmium plated screws.

Concrete for Structures Class "C" reinforced with Type "A" Mesh Fabric, or ¾" ϕ Bars. Std. Drawing B-T-71.R.

NOTES

All lumber shall be S4S, Std., K.D., "1 common and better, Southern Yellow Pine, Item M-8 Specifications for lumber.
All lumber shall be treated in accordance with the requirements for "Pentachlorophenol Treatment," Sec. M-8.3.
All screws shall be Brass.
Concrete slab shall be finished so that water will drain from top of slab.

Concrete shall be class "C" and constructed in accordance with the requirements of Item S-1 of the Specifications.
Aggregate subbase for concrete slab shall meet the requirements of Item I-22 Subbase Grading "C" or "D."
The pipe supports for the Serving Table shall meet the requirements of Sec. M-6.9 and shall be galvonized in accordance with Sec. M-7.4(d) of the Specifications. Galvanizing may be done prior to cutting of pipe.

The necessary excavation shall be performed in accordance with the requirements of Item E-2 of the Specifications.

The charcoal grill shall be Model P manufactured by Modern Products Company Tiffin, Ohio or an approved equal.

Revisions

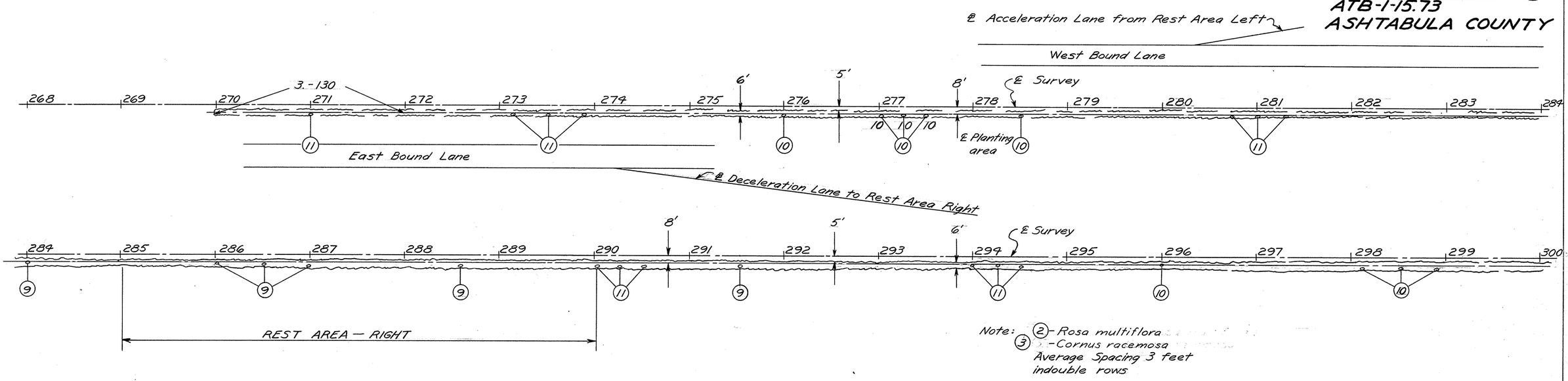
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
CHARCOAL GRILL & SERVING TABLE
ROADSIDE REST AREA

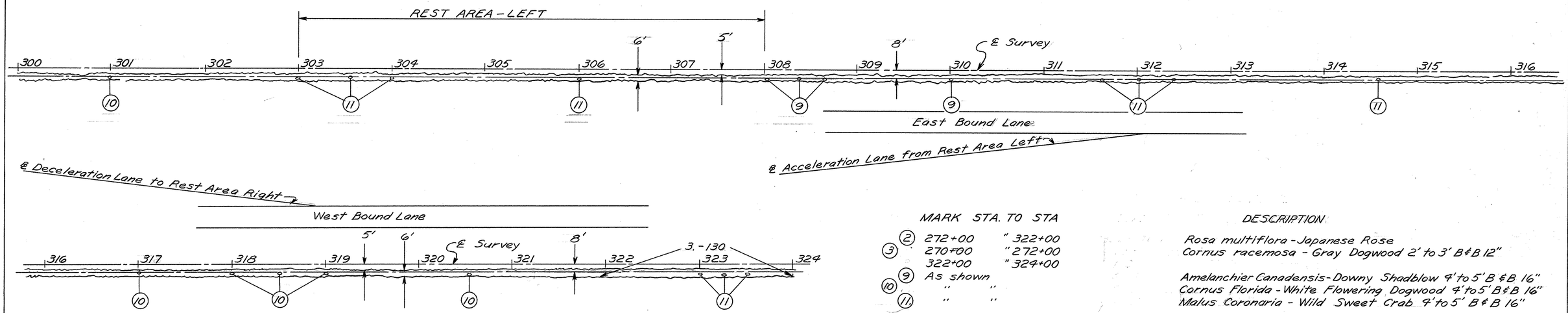
DESIGNED	TRACED	APPROVED

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

139
202

ATB-1-15.73
ASHTABULA COUNTY





Note: ② - Rosa multiflora
③ - Cornus racemosa
Average Spacing 3 feet indouble rows

MARK	STA. TO STA
②	272+00 " 322+00
③	270+00 " 272+00
	322+00 " 324+00
⑨	As shown
⑩	" "
⑪	" "

DESCRIPTION

Rosa multiflora - Japanese Rose
Cornus racemosa - Gray Dogwood 2' to 3' B&B 12"

Amelanchier Canadensis - Downy Shadblow 4' to 5' B & B 16"
Cornus Florida - White Flowering Dogwood 4' to 5' B & B 16"
Malus Coronaria - Wild Sweet Crab 4' to 5' B & B 16"

Note:
For figures in circles reference is made to tables on Sheet No. 129 under 'Mark' column.

ROADSIDE REST AREAS - MEDIAN PLANTING

End Area	Cut	32		0		0		0		0		0	
	Fill	1		123		307		530		592		820	760
Cu Yd	Cut		30		0		0		0		0		0
	Fill		115		398		775		1039		1308		1963

ATB-1-15.75
ASHTABULA COUNTY

WEIGH STATION RIGHT STA. 198+50 to STA. 201+00

| | | |

End Area	Cu Yd.
Cut / Fill	Cut / Fill
300 / 33	780 / 289
121 / 123	333 / 963
59 / 397	119 / 2563
5 / 987	9 / 3930
0 / 1199	89 / 2712
48 / 385	404 / 652
170 / 37	194 / 231
40 / 212	40 / 513
3 / 342	6 / 591
3 / 274	5 / 412
2 / 171	5 / 238
3 / 86	3 / 107
0 / 354	0 / 112

FED. AID DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

142
202

ATB-1-15.73
ASHTABULA COUNTY

WEIGH STATION RIGHT STA 207+00 to STA 216+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

143
202

ATB-1-15.73
ASHTABULA COUNTY

End Area	Cu Yd																							
Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	
436	0	1591	0	423	0	1731	0	512	0	2059	0	595	0	2268	0	630	0	2145	0	528	0	1939	0	
546	0	2021	0	545	0	2029	0	538	0	1689	0	362	0	1213	0	291	0	776	0	128	3	467	50	
																				124	24	743	72	
																				304	15	1119	89	

WEIGH STATION RIGHT STA. 217+00 to STA 230+00

End Area		Cu Yds.	
Cut	Fill	Cut	Fill
57	142	202	430
52	90	130	309
32	77	111	156
28	7	463	13
		222	0
		580	0
		430	0
		1069	0
		91	0
		141	0

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

144
202

ATB-1-15.73
ASHTABULA COUNTY

WEIGH STATION RIGHT STA. 231+00 to STA. 241+00

End Area		Cu Yds.	
Cut	Fill	Cut	Fill
0	290	0	361
0	100	11	102
12	101	50	10
42	0	80	6
44	6		

℄ M/L

3/4" per ft

38+11
879 M/L

201+00

F-290

℄

200+50

39+61
881.3

A:1

F-100

℄ M/L

200+00

39+11
881.9

C-12

F-10

6:1

3/4" per ft

199+50

Taper Section

8:1

C-12

199+00
See Main Cross-Sections

C-56

C-12

WEIGH STATION LEFT STA. 199+00 to STA. 201+00

FED. RD. DIVISION: 2 | STATE: OHIO | PROJECT: I-1103(16)

145
202

ATB-1-15.73
ASHTABULA COUNTY

End Area	Cu Yds.
Cut / Fill	Cut / Fill
8 / 575	20 / 1009
13 / 514	26 / 1023
15 / 590	14 / 1028
0 / 520	0 / 861
0 / 410	0 / 648
0 / 290	0 / 585
0 / 345	0 / 593
0 / 295	0 / 394
0 / 130	0 / 209
0 / 95	0 / 242
0 / 165	0 / 394
0 / 242	0 / 511

2	OHIO	I-1103(16)										

146
202

ATB-1-15.73
ASHTABULA COUNTY

207+00 | 32+10 877.0 | F-575 | 2:1 | ¾" per ft | C-8 872.0 | 872.0 | 810
206+50 | 32+60 877.6 | F-514 | 2:1 | C-13 870.0 | 870.0 | 815
206+00 | 33+10 878.0 | F-390 | 2:1 | C-18 869.5 | 869.5 | 810
205+50 | 33+60 875.9 | F-620 | 2:1 | | | 810
205+00 | 34+10 877.7 | F-410 | 2.3:1 | | | 810
204+50 | 34+60 880.0 | F-290 | 2.1:1 | | | 815
204+00 | 35+10 879.6 | F-345 | 3.3:1 | | | 810
203+50 | 35+60 879.5 | F-295 | 3.3:1 | | | 810
202+50 | 36+10 882.1 | F-130 | 4:1 | | | 810
202+00 | 36+61 882.5 | F-95 | | | | 810
201+50 | 37+11 879.7 | F-165 | | | | 810
201+00 | 37+61 879.0 | F-242 | ¾" per ft | | | 810

WEIGH STATION LEFT STA. 201+50 to STA. 207+00

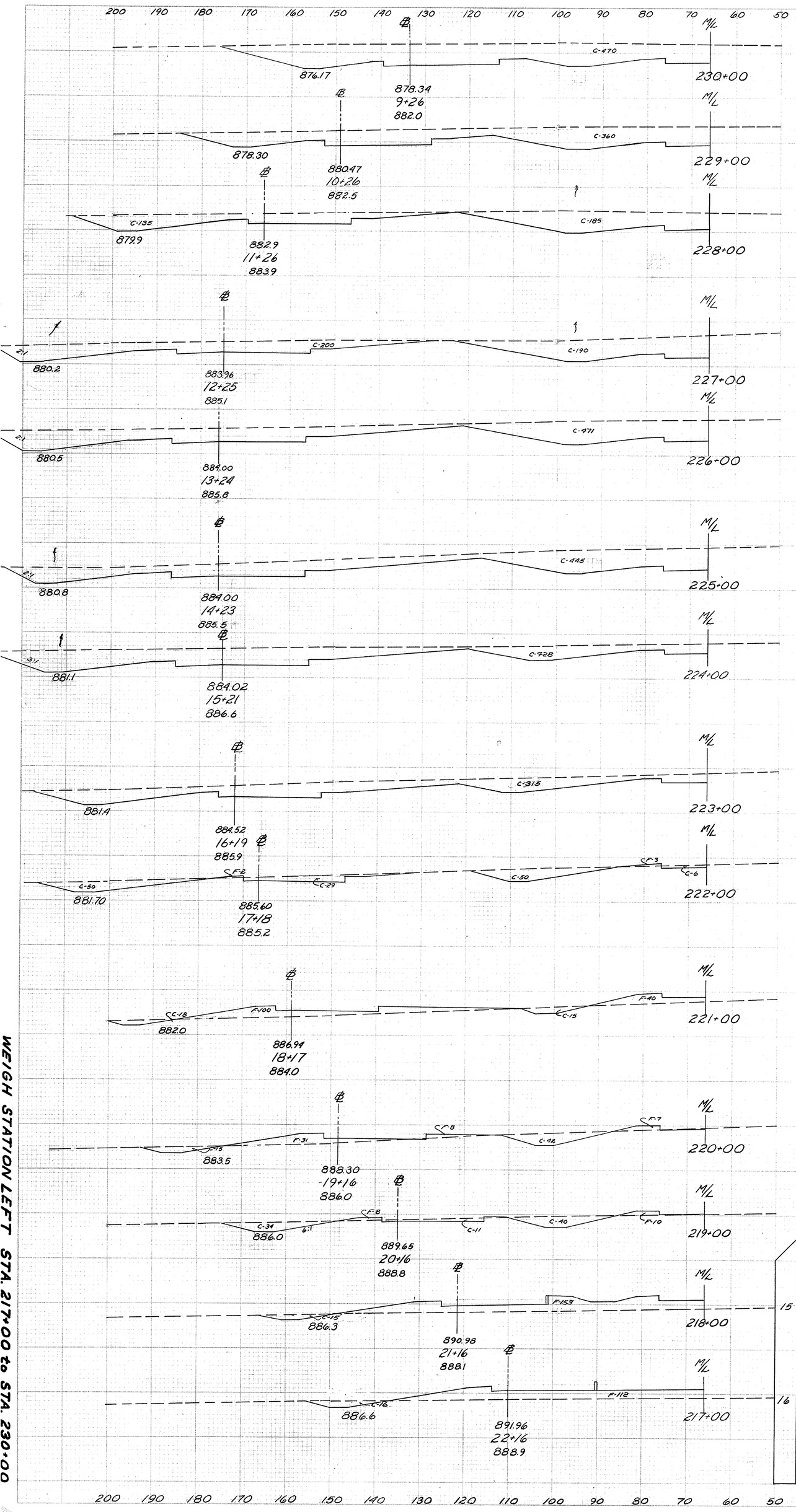
End Area		Cu Yds.	
Cut	Fill	Cut	Fill
19	97		57
		59	457
10	150		93
		93	444
40	90		119
		119	220
24	29		81
		81	133
20	43		74
		74	311
20	125		67
		67	972
16	400		26
		26	889
12	560		24
		24	1161
14	657		30
		30	1336
18	785		32
		32	1621
16	965		31
		31	1760
17	935		23
		23	1395

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

147
202

ATB-1-15.73
ASHTABULA COUNTY

WEIGH STATION LEFT STA. 207+50 to STA. 216+00



End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
470	0		
		1531	0
360	0		
		1259	0
320	0		
		1315	0
390	0		
		1594	0
971	0		
		1696	0
445	0		
		1598	0
928	0		
		1376	0
315	0		
		831	9
134	5		
		309	269
33	140		
		167	344
57	46		
		263	119
85	18		
		185	317
15	153		
		57	491
16	112		
		65	387

WEIGH STATION LEFT STA. 217+00 to STA. 230+00

ATB-1-15.73
ASHTABULA COUNTY

OHIO F-1103(16)

148
202

End Area	Cu Yds
Cut / Fill	Cut / Fill
18 / 312	59 / 1346
14 / 415	43 / 1498
9 / 394	61 / 1174
24 / 240	70 / 707
14 / 142	67 / 272
22 / 5	185 / 9
78 / 0	515 / 0
200 / 0	241 / 0
	1803 / 0
	470 / 0
	1803 / 0
	525 / 0

SEC. NO. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

149
202

ATB-1-15.73
ASHTABULA COUNTY

240+00 M/L
F-312
C-18 860.5

239+00 M/L
0+30 8600
4% per/ft
F-415
C-14 860.0

238+00 M/L
1+30 8610
F-394
C-9 859.5

237+00 M/L
2+29 8640
F-240
C-24 862.6

236+00 M/L
3+28 867.5
F-142
C-14 864.5

235+00 M/L
4+28 8718
F-6
C-3
C-11 869.5

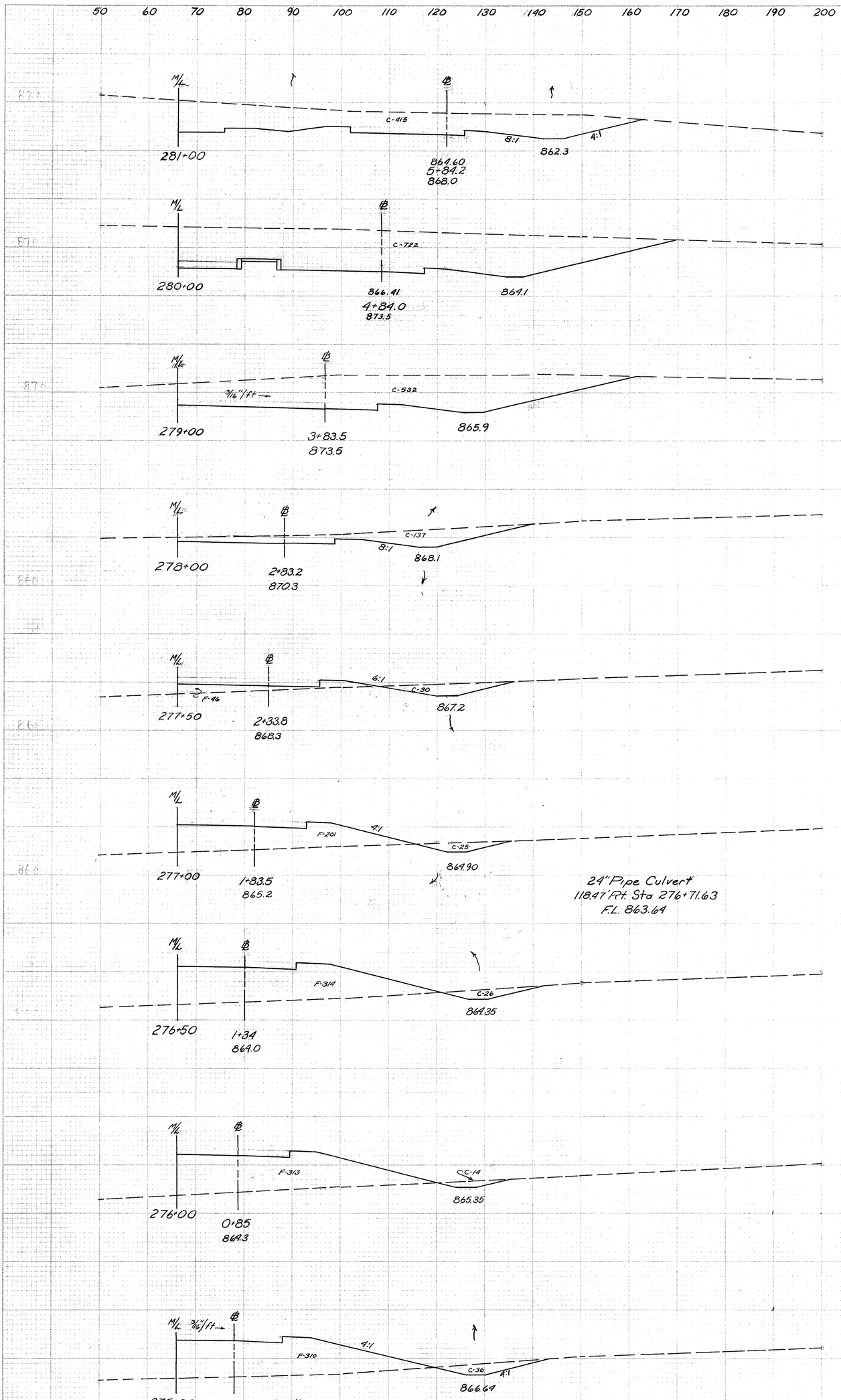
M/L
5+28 874.2
C-29 871.89

233+00 M/L
3½% per/ft
6+27 876.7
C-200 873.02

232+00 M/L
876.25
7+27 881.0
C-470 874.08

231+00 M/L
877.14
8+26 882.0
C-525 874.97

WEIGH STATION LEFT STA. 231+00 to STA. 241+00



End Area		Cu Yd	
Cut	Fill	Cut	Fill
415	0		
		2106	0
722	0		
		2322	0
532	0		
		1239	0
137	0		
		154	43
30	46		
		51	229
25	201		
		47	477
26	314		
		37	580
14	313		
		93	1154
36	310		

ROADSIDE REST RIGHT STA. 275+00 to STA. 281+00

ATB-1-15.73
ASHTABULA COUNTY

SHEET NO.	SHEETS	STATE	PROJECT
2		OHIO	I-1103 (16)

150
202

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	I-1103 (16)

151
202

ATB-1-15.73
ASHTABULA COUNTY

	Cu. Yd.	
End Area	Fill	Cut	Fill
		100	
	32		
1415		426	
16	97		74
2160		930	
41			
2146	18	420	
16			40
4306	87		
57			
3042			
49			
3948			
45			
3322			
46			
2118			
33			
1974			
16			

42" Pipe Culvert
227.11' Rt Sta. 285+37.77
F.L. 842.06

Match Line

Match Line

Sta. 285+00 — Sta. 284+50 — Sta. 284+00 — Sta. 283+46 — Sta. 283+00 — Sta. 282+50 — Sta. 282+00

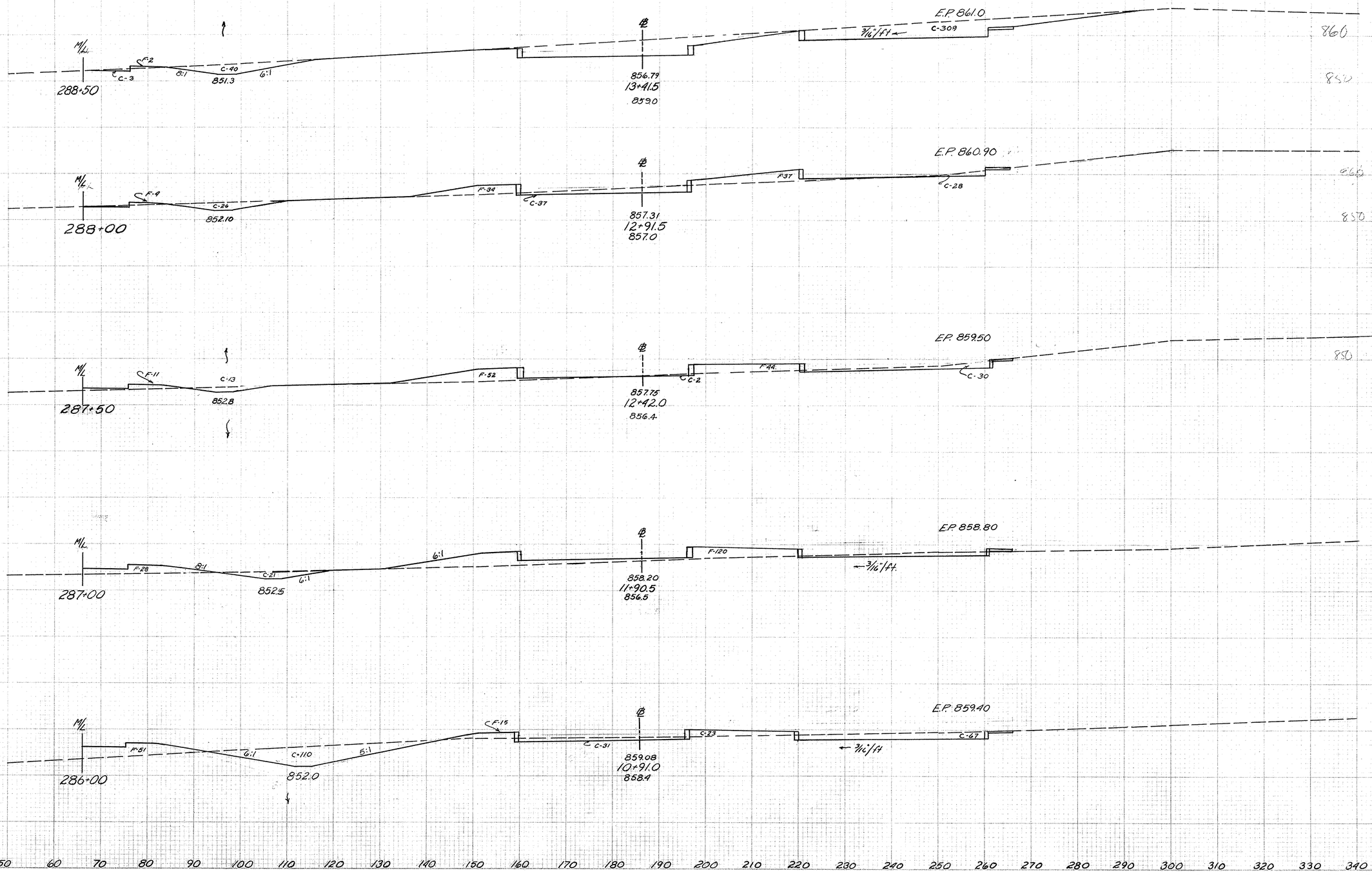
ROADSIDE REST RIGHT STA 282+00 to STA 285+00

SD ID DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

152
202

ATB-1-15.73
ASHTABULA COUNTY

50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300



End Area		Cu. Yd	
Cut	Fill	Cut	Fill
352	2		
		410	71
91	75		
		126	168
45	107		
		81	236
42	148		
		463	439
208	89		
		415	2860

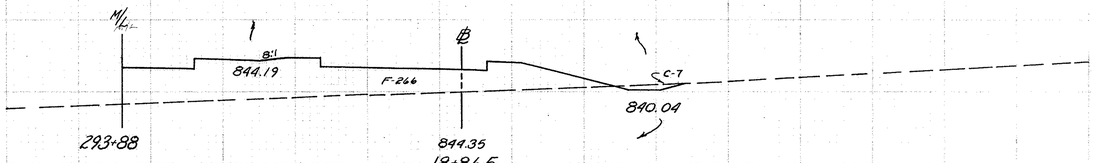
50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350

ROADSIDE REST RIGHT STA. 286+00 to STA. 288+50

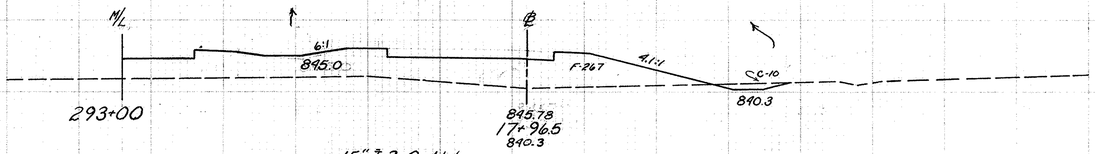
50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

NO. OF SHEETS	STATE	FED. PROJECT NO.	SHEET NO.
2	OHIO	I-1103(16)	153 202

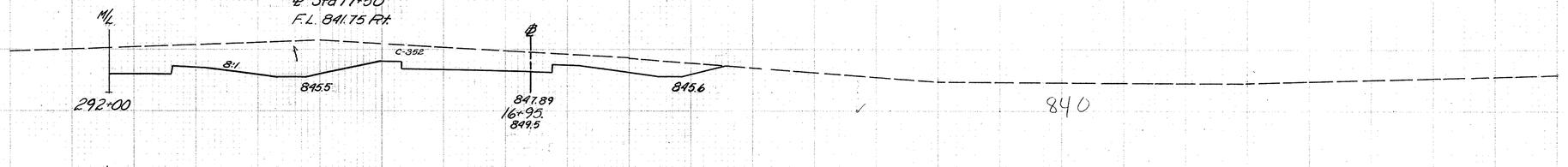
ATB-1-15.73
ASHTABULA COUNTY



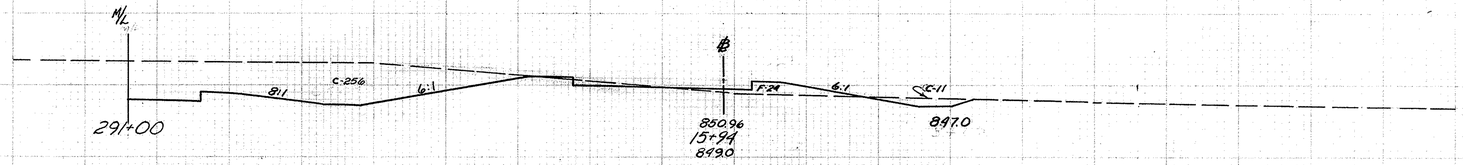
42" Pipe Culvert
146.79' Rt. Sta 293+44.22
F.L. 836.04



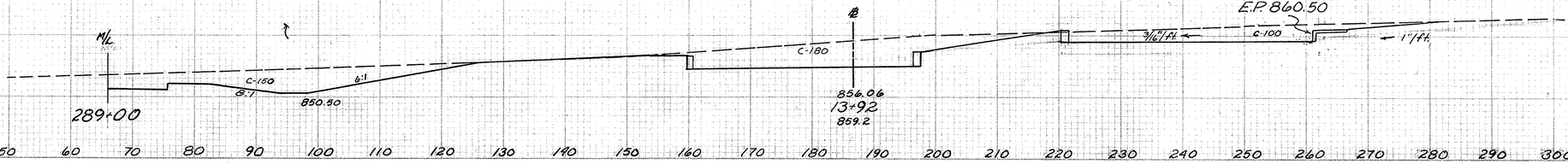
15" I-2 Outlet
℄ Sta 17+50
F.L. 841.75 Rt.



840



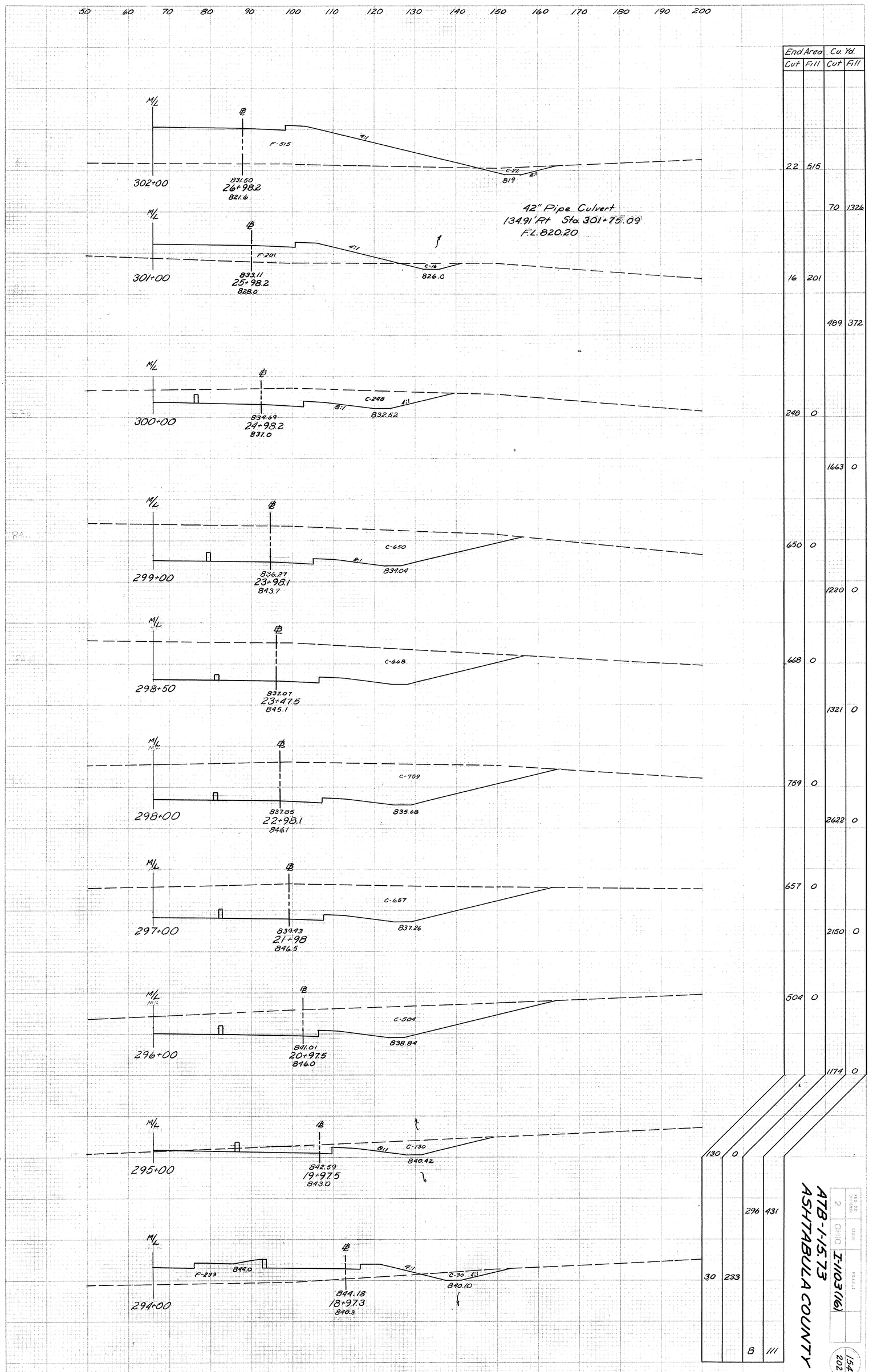




End Area		Cu. Yd.	
Cut	Fill	Cut	Fill
7	266		
		27	869
10	267		
		670	494
352	0		
		1196	44
267	24		
		1633	44
615	0		
		1935	0
430	0		
		724	2

50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350

ROADSIDE REST RIGHT STA. 289+00 to STA. 293+88



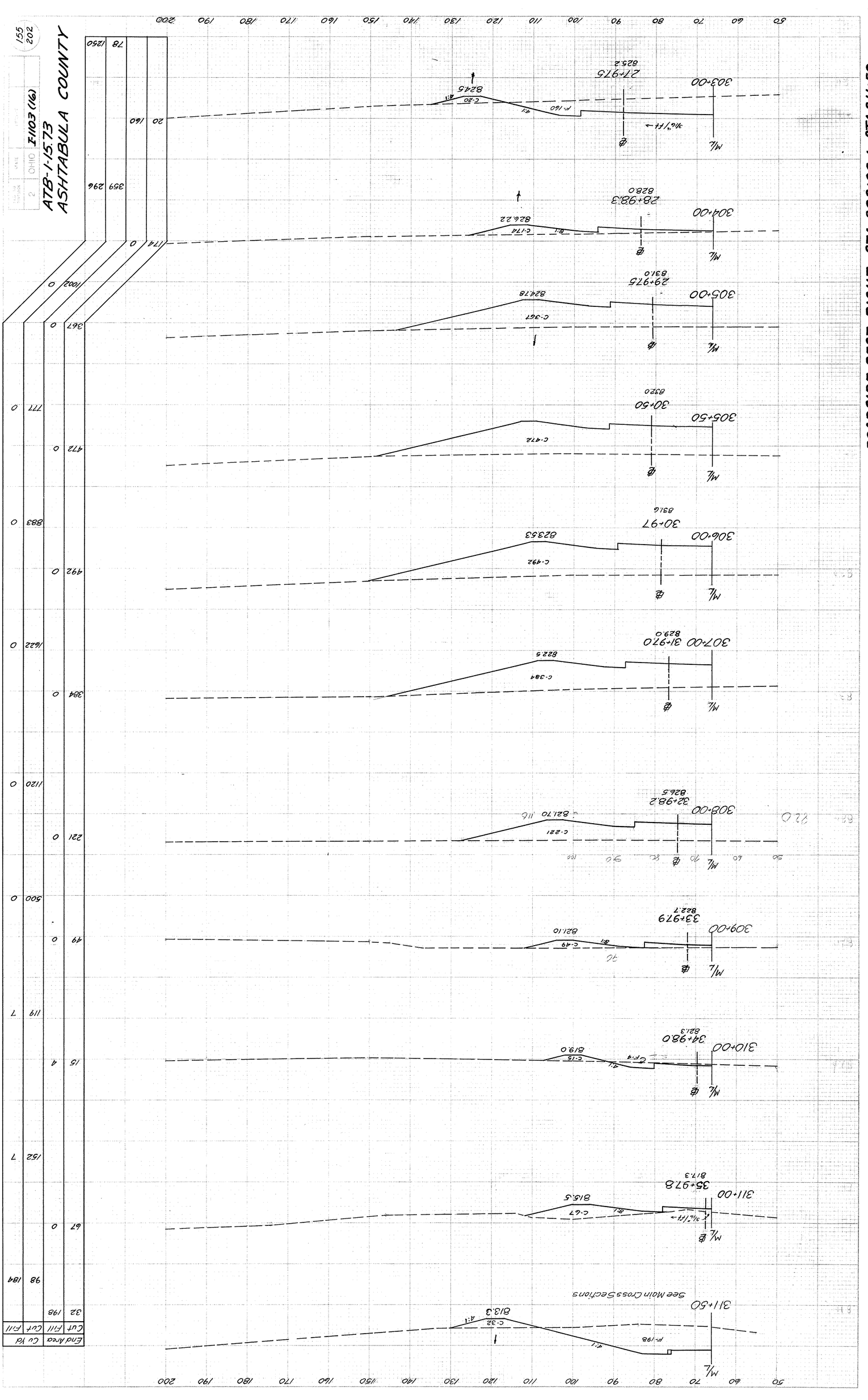
End Area		Cu. Yd.	
Cut	Fill	Cut	Fill
22	515		
		70	1326
16	201		
		489	372
248	0		
		1663	0
650	0		
		1220	0
648	0		
		1321	0
759	0		
		2622	0
657	0		
		2150	0
504	0		
		1174	0
130	0		
		296	431
30	233		
		8	111

ROADSIDE REST RIGHT STA. 294+00 to STA. 302+00

ATB-1-15.73
ASHTABULA COUNTY

FED. ROAD DIV. NO.	STATE	PROJECT
2	OHIO	I-1103(16)

154
202



| End Area | Cu Yd | | |

End Area	Cu Yd
Cut / Fill	Cut / Fill
7 828	22 1669
16 967	90 1709
81 897	90 1711
9 892	49 957
48 231	101 294
61 86	80 151
26 77	78 94
58 24	115 34
66 12	

FED. RD. DIVISION: 2 | STATE: OHIO | PROJECT: I-1103(16)

156
202

ATB-1-15.73
ASHTABULA COUNTY

285+00
32+98
841.7
F-828
2:1
3/4 per ft.
1"/ft.
C-12
833.45

284+50
33+50
838.0
F-967
C-16
836.0

284+00
33+979
839.0
F-897

283+46
34+531
841.5
F-892
2:1
1"/ft.
C-9
839.0

283+00
34+98
844.0
F-231
4:1
C-48
853.0
C-81
838.5

282+50
35+50
849.3
F-86
C-61
4:1
855.0

282+00
35+978
841.1
F-77
C-28
5:1
856.0

281+50
35.47
842.8
F-24
3/4 per ft.
C-08
5:1
858.0

281+00
C-32
4:1
C-12
860.0
See Main Cross Sections

ROADSIDE REST LEFT STA 281+00 to STA 285+00

| | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-1103(16)	158 / 202

ATB-1-15.73
ASHTABULA COUNTY

End Area	Cu Yds.
Cut / Fill	Cut / Fill
23 553	91 1431
26 220	278 417
124 5	1193 9
520 0	548 0
432 0	650 0
270 0	783 0
153 0	339 119
30 64	78 1089
12 524	44 1643
12 347	6 156
13 355	84 612
21 513 39	0 811 0
0 238	0 772 0
0 200	0

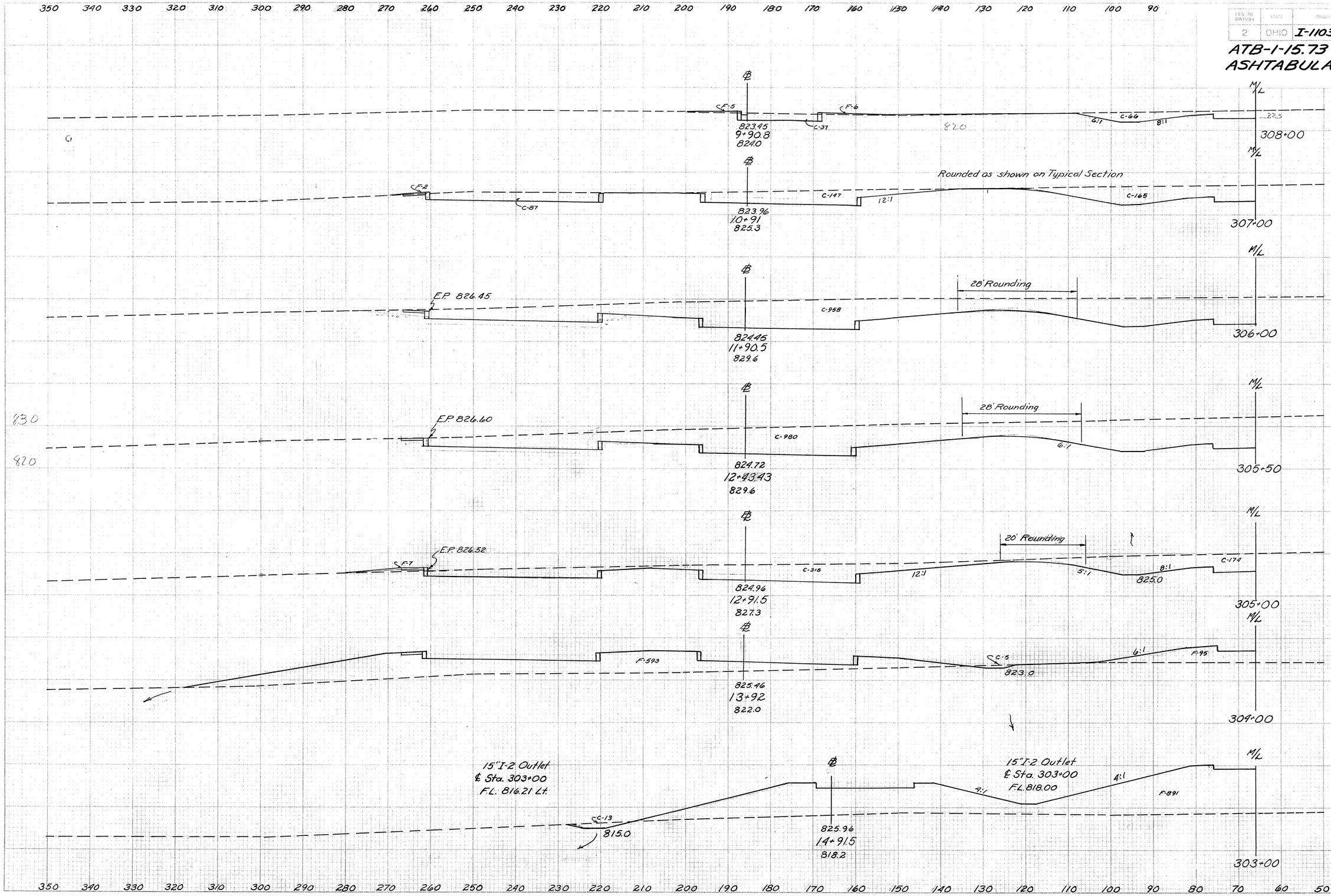
302+00 · 301+00 · 300+00 · 299+00 · 298+50 · 298+00 · 297+00 · 296+00 · 295+00 · 294+00 · 293+88 · 293+00 · 292+00 · 291+00

42" Pipe Culvert
190.80' Lt. Sta. 302+65.41
F.L. 816.65

ROADSIDE REST LEFT STA 291+00 to STA 302+00

ISS. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	159 / 202

ATB-1-15.73
ASHTABULA COUNTY



End Area Cut	End Area Fill	Cu Yds. Cut	Cu Yds. Fill
103	11		
		930	24
399	2		
		2513	4
958	0		
		1794	0
980	0		
		1363	6
492	7		
		920	1287
5	688		
		33	2924
13	891		
		67	2674

ROADSIDE REST LEFT STA. 303+00 to STA. 308+00

End Area		Cu Yd	
Cut	Fill	Cut	Fill
12	12	39	54
9	17	41	85
13	29	52	439
15	208	22	547
9	383	18	880
10	568	9	1100
0	620	14	1172
15	645	144	1848
63	353	122	554
69	245	152	347
95	130	220	385
261	152	407	28
24	78	117	4

CO. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	160 / 202

ATB-1-15.73
ASHTABULA COUNTY

317+00 M/L
0.85 8.9.0
S-12 411 S-13 411 S-13 8.7.0 C-5 8.12.7

316+00 M/L
1.83.5 8.9.2
F-29 F-208

315+00 M/L
2.83.2 8.6.5
F-383 S-9 8.10.5

314+50 M/L
3.33.8 8.4.0
F-568 C-10 8.9.8

314+00 M/L
82.29 3.83.5 8.11.5
¾"/ft
F-616 54" Pipe Culvert 138.78 Lt. Sta. 313+61.05 F.L. 810.51 S-4 8.10.8

313+00 M/L
82.41 4.84.0 8.11.5
F-645 15" T-2 Outlet ℄ Sta. 313+00 F.L. 8.8.300 Lt. C-15 8.12.3

312+00 M/L
F-353 82.67 5.84.2 8.7.0 C-63 8.15.0

311+50 M/L
F-245 82.86 6.35.5 8.8.2 C-69 8.15.25

311+00 M/L
S-14 C-8 F-116 18" T-2 Outlet Sta. 311+00 F.L. 8.6.00 82.208 6.86.3 8.9.2 4:1 C-93 8.15.5

310+00 M/L
F-27 6:1 C-16 F-51 6:1 82.52 7.88.5 8.2.1.0 ¾"/ft 6:1 S-8 8.20.0 4:1

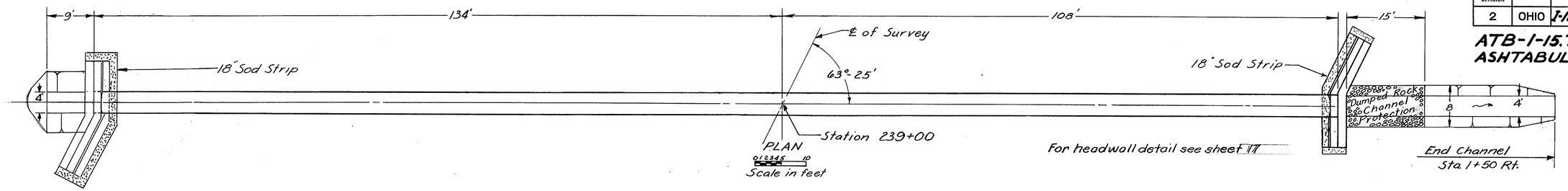
309+00 M/L
S-4 S-112 82.97 8.90.7 8.23.0 8.21.0 8:1

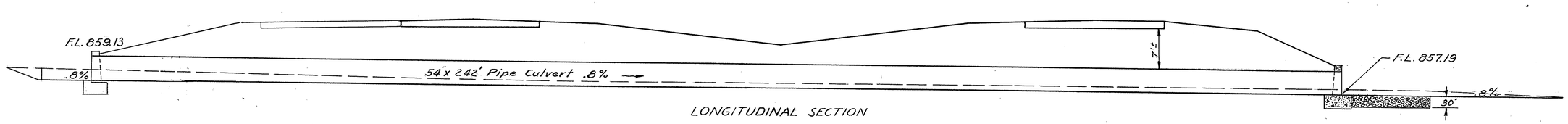
ROADSIDE REST LEFT STA. 309+00 to STA 317+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103(16)	

161
202

ATB-1-15.73
ASHTABULA COUNTY





LONGITUDINAL SECTION

16" 5 cu. yds.
859.2
1+43 Lt.
861.7

16" 23° 51 cu. yds.
858.17 Bedding
859.13 Channel
1+34 Lt.
861.2

10" 19 cu. yds.
857.5
0+50 Lt.
859.5

10" 19 cu. yds.
857.1
0+00
859.2

10" 21 cu. yds.
856.7
0+50 Rt.
858.8

45° 10"
856.2 Bedding
857.19 Channel
1+08 Rt.
858.3

0° 2 cu. yds.
861.8
1+50 Lt.
861.0

Headwall = 13 cu. yds.

Headwall = 13 cu. yds.

5 cu. yds.
858.0
1+50 Rt.
858.0

CROSS SECTIONS
0 1 2 3 4 5 10
Scale in feet

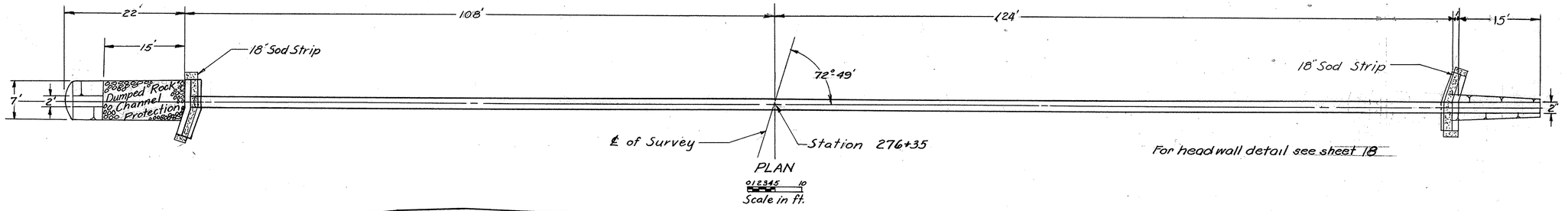
CULVERT DATA
TYPE- Pipe culvert Std. Drawing HW-A&B and S-27 P.C.3
SIZE 54"x242'
WORK REQUIRED- Construct pipe culvert and headwalls as per plan. Excavate inlet and outlet channels, place dumped rock channel protection at outlet.
HW=869.2 V=12'/sec.

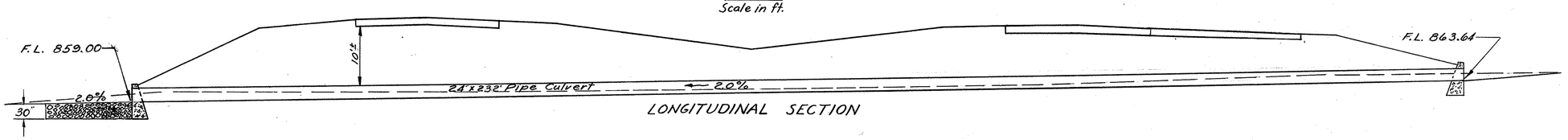
ESTIMATED QUANTITIES

E-2 Excavation for Structures	136 Cu. Yds.
E-3 Channel Excavation	12 Cu. Yds.
I-10 Dumped Rock Channel Protection	12 Cu. Yds.
S-1 Concrete for Headwalls, Class "C"	31.5 Cu. Yds.
S-27 54 Pipe for Roadway Culverts M-6.6(b)	242 Lin. Ft.
S-4 Reinforcing Steel	1945 Lbs.
L-10 Sodding	9 Sq. Yd.

STRUCTURE No. ATB-1-1735
Drainage Area = 86 Ac. Q_{50}=124 c.f.s.

1	Sta. 239+00	P.C. 54"x242'	ATB-1-1735





LONGITUDINAL SECTION

16" 7"
858.25 Bedding
858.9 Channel
1+08 Lt.
860.2

24 cu. yds.

5°
860.3
0+00
861.7

25 cu. yds.

7"
862.8 Bedding
863.6 Channel
1+24 Rt.
864.7

Headwall = 5 cu. yds.

0° 2 cu. yds.
858.3
1+30 Lt.
858.3

CROSS SECTIONS
0 1 2 3 4 5 10
Scale in feet

Headwall = 5 cu. yds.

0° 2 cu. yds
865.0
1+40 Rt.
865.0

CULVERT DATA
TYPE-Pipe culvert-Std. Drawing HW-A&B and S-27 P.C.3
SIZE - 24"x232'
WORK REQUIRED - Construct pipe culvert, excavate inlet & outlet channels, place dumped rock channel protection at outlet.
HW=865.80 V=10.5'/sec.

ESTIMATED QUANTITIES

E-2 Excavation for Structures	62 Cu. Yds.
E-3 Channel Excavation	4 Cu. Yds.
I-10 Dumped Rock Channel Protection	11 Cu. Yds.
S-1 Concrete for Headwalls, Class "C"	7.3 Cu. Yds.
S-27 24" Pipe for Roadway Culverts M-6.6(b) or 6.8(b)	232 Lin. Ft.
S-4 Reinforcing Steel	288 Lbs.
L-10 Sodding	4 Sq. Yd.

STRUCTURE NO. ATB-1-1804
Drainage Area = 6 Ac. Q_{50} = 18 c.f.s.

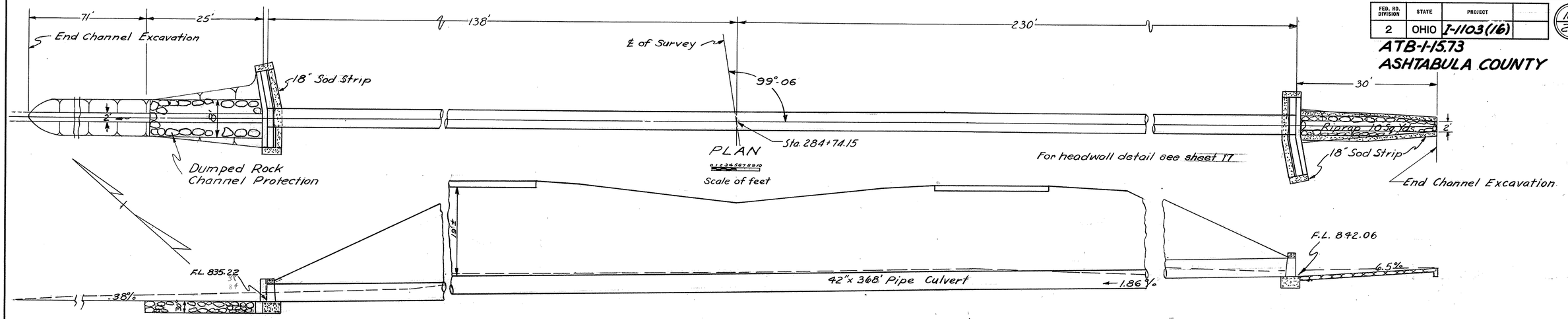
2	Sta. 276+35	P.C. 24"x232'	ATB-1-1804

Designed	
Traced	
Checked	

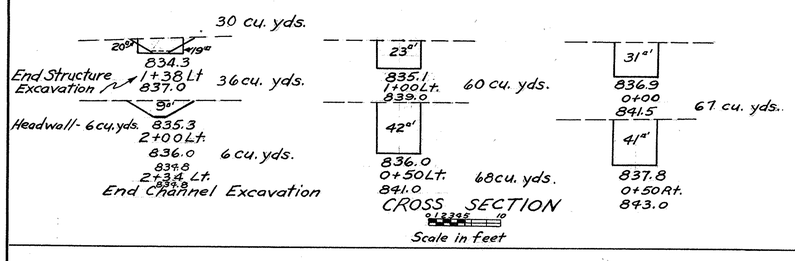
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

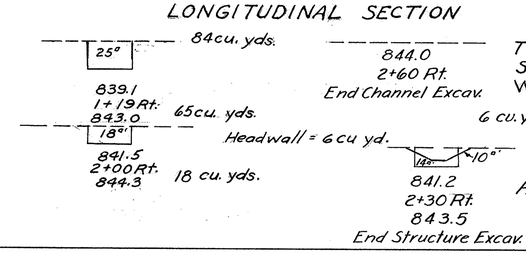
162
202

ATB-1-15.73
ASHTABULA COUNTY



LONGITUDINAL SECTION





CULVERT DATA

TYPE - Pipe culvert Std. drawing HW-A&B and S-27 PC-3
SIZE - 42 x 368'
WORK REQUIRED - Construct pipe culvert and standard headwalls as per plan. Excavate inlet and outlet channels. Place channel protection as per plan.

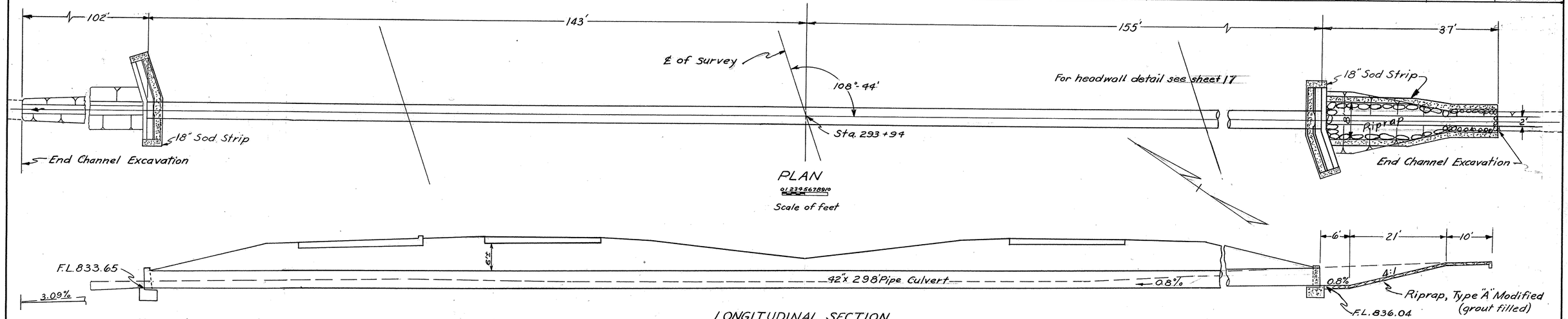
HW=844.87 V=14.3/sec.

ESTIMATED QUANTITIES

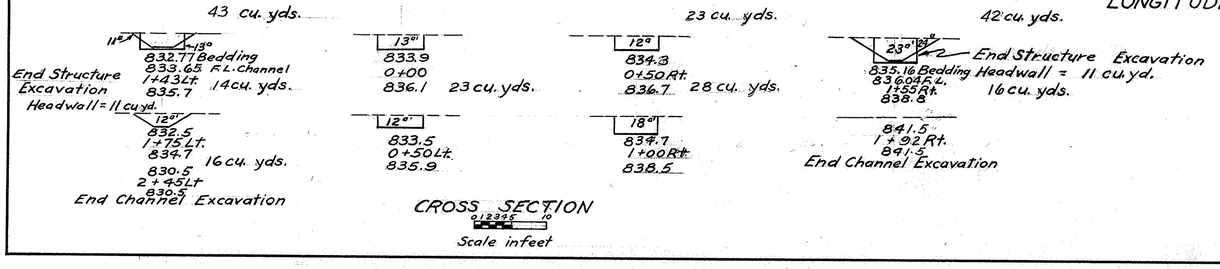
E-2	Excavation for Structures	404 Cu. Yds.
E-3	Channel Excavation	48 Cu. Yds.
I-10	Dumped Rock Channel Protection	28 Cu. Yds.
S-1	Concrete for Headwalls, Class "C"	18.0 Cu. Yds.
S-27	42" Pipe for Roadway Culverts M-6.6 (c) or M6.4 (d)	368' Lin. Ft.
S-4	Reinforcing Steel	836 Lbs.
L-10	Sodding	16 Sq. Yds.
I-10	Riprap, Type "A"	10 Sq. Yds.

STRUCTURE NO ATB-1-1820

Drainage Area = 60 Ac. Q50 = 81 c.f.s.			
3	Sta. 284+74.15	P.C. 42"x 368'	ATB-1-1820



LONGITUDINAL SECTION



CULVERT DATA

TYPE - Pipe culvert - Std. drawing HW-A&B and S-27 PC-3
SIZE - 42" x 298'
WORK REQUIRED - Construct pipe culvert and headwalls as per plan Excavate inlet and outlet channel Place channel protection as per plan.

HW=839.9 V=10'/sec.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	181 Cu. Yds.
E-3	Channel Excavation	46 Cu. Yds.
S-1	Concrete for Headwalls, Class "C"	15.0 Cu. Yds.
S-27	42" Pipe for Roadway Culverts M-6.6 (b)	298 Lin. Ft.
S-4	Reinforcing Steel	768 Lbs.
I-10	Riprap Type, A"	25 Sq. Yds.
L-10	Sodding	19 Sq. Yds.

STRUCTURE NO ATB-1-1837

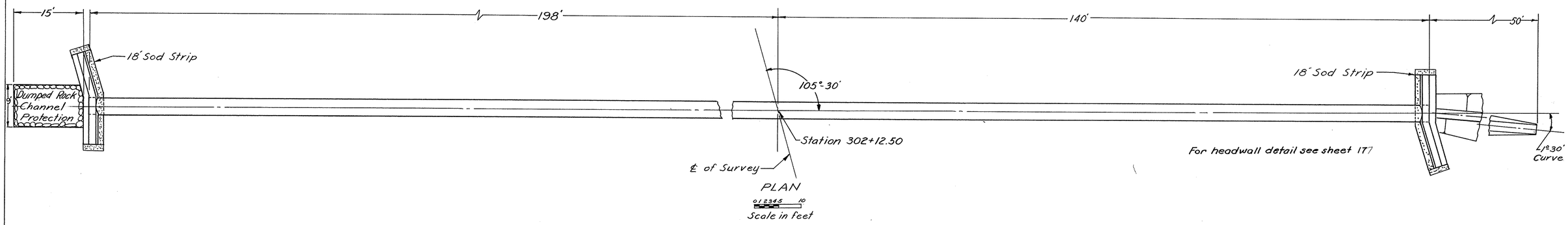
Drainage Area = 27 Ac. Q50 = 58 c.f.s.			
4	Sta. 293+94	P.C. 42"x 298'	ATB-1-1837

Designed
Traced
Checked

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

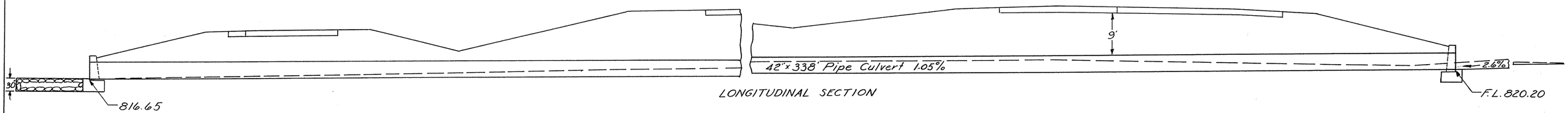
163
202

ATB-1-15.73
ASHTABULA COUNTY



PLAN

0 1 2 3 4 5 10
Scale in feet



LONGITUDINAL SECTION

	Cu. Yds. Chan.	Cu. Yds. Str.
6" — Bedding 815.77 Channel 816.65 1+98Lt 816.7 End Structure Excav.		69
Headwall		13
19" — 818.37 0+50Rt. 821.5		55
7'-0" 14" — Bedding 819.32 Channel 820.20 1+40Rt. 821.5 End Structure Excav.		
Headwall		13
821.5 0° 1+90Rt. 821.5 End Channel Excav.	7	

CULVERT DATA

TYPE - Pipe Culvert - St'd. Drawing HW-A&B and S27 P.C.3
SIZE - 42" x 338'
WORK REQUIRED - Construct pipe culvert and headwalls as per plan. Excavate inlet and outlet channel. Place channel protection as per plan.
HW=829.50 V=10.9'/sec.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	150	Cu. Yds.
E-3	Channel Excavation	74	Cu. Yds.
I-10	Dumped Rock Channel Protection	14	Cu. Yds.
S-1	Concrete for Headwalls, Class "C"	19.8	Cu. Yds.
S-27	42" Pipe for Roadway Culverts	338	Lin. Ft.
S-4	Reinforcing Steel	932	Lbs.
L-10	Sodding	8	Sq. Yds

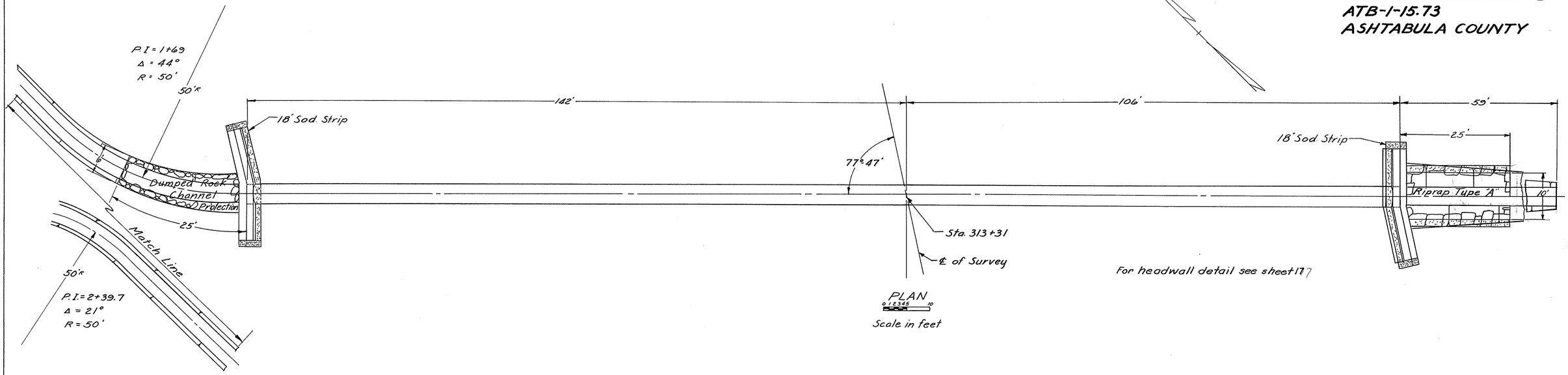
STRUCTURE No. ATB-1-1853

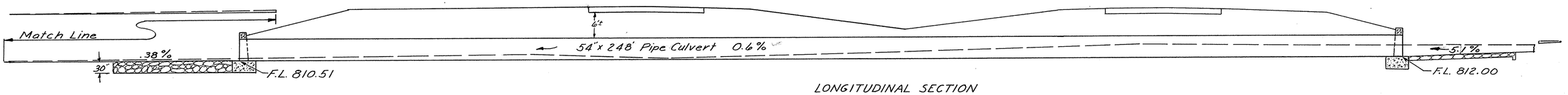
Drainage Area = 33 Ac. Q_{50} = 65 c.f.s.			
5	Sta. 302+12.50	P.C. 42" x 338'	ATB-1-1853

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	HH03(16)	

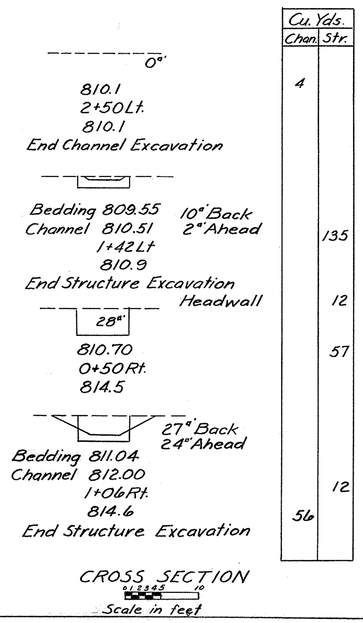
164
202

ATB-1-15.73
ASHTABULA COUNTY





LONGITUDINAL SECTION



Cu. Yds. Chan.	Cu. Yds. Str.
4	
	135
	12
	57
	12
56	

CROSS SECTION
0 1 2 3 4 5 10
Scale in feet

CULVERT DATA

TYPE - Pipe culvert - Std. Drawing HW-A & B and S-27 P.C. 3
SIZE - 54" x 248' M-6.6 b
WORK REQUIRED - Construct pipe culvert and headwalls as per plan. Excavate inlet and outlet channels. Place channel protection as per plan.
HW = 817.4 V = 11.5'/sec.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	216	Cu. Yds.
E-3	Channel Excavation	60	Cu. Yds.
I-10	Dumped Rock Channel Protection	14	Cu. Yds.
I-10	Riprap, Type A, Modified (Grout filled)	27	Sq. Yds.
L-10	Sodding	16	Sq. Yds.
S-1	Concrete for Headwalls, Class "C"	30.4	Cu. Yds.
S-4	Reinforcing Steel	1406	Lbs.
S-27	54" Pipe for Roadway Culverts M-6.6 b	248	Lin. Ft.

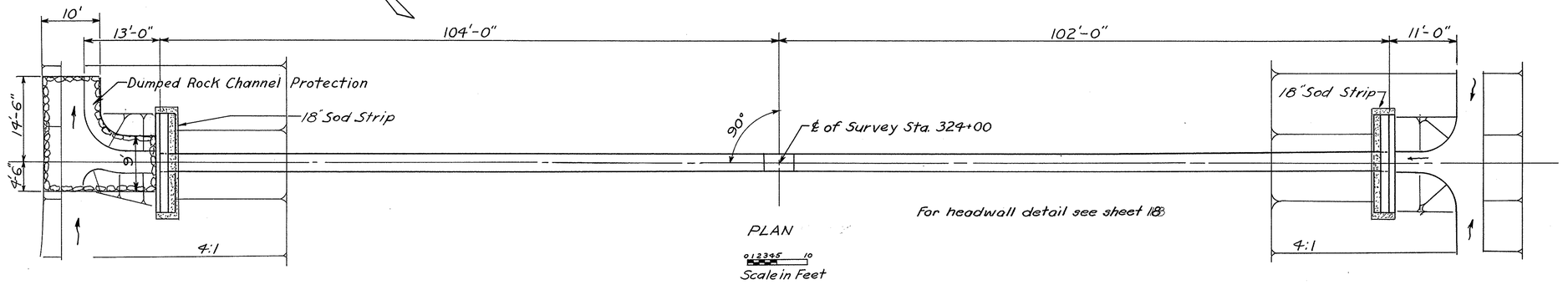
STRUCTURE No. ATB-1-1874

Drainage Area = 92 Ac. Q_{50} = 131 c.f.s.			
6	Sta. 313+31	P.C. 54" x 248	ATB-1-1874

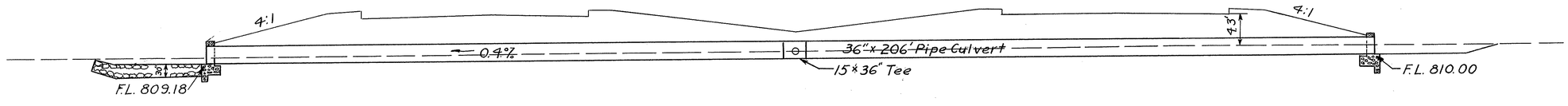
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

165
202

ATB-1-15.73
ASHTABULA COUNTY



For headwall detail see sheet 18B



LONGITUDINAL SECTION

6°
809.18
1+09 to 1+16 Lt.
810.2
3 Cu. Yd.

7°
808.35
1+04 Lt.
810.2
Headwall 6 Cu. Yd.

73 Cu. Yd.

12°
809.17
1+02 Rt.
811.0
Headwall 6 Cu. Yd.

14°
810.00
1+02 Rt to 1+11 Rt
811.8
5 Cu. Yd.

CULVERT DATA
TYPE- Pipe Culvert - Std. Drawing HW-A&B and S-27 P.C. 3
SIZE- 36" x 206'
WORK REQUIRED- Construct pipe culvert and headwalls as per plan. Excavate inlet and outlet channels and place channel protection at outlet.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	85	Cu. Yds.
E-3	Channel Excavation	8	Cu. Yds.
I-5	Pipe Specials 36"x15" Tee	1	Each
I-10	Dumped Rock Channel Protection	25	Cu. Yds.
S-1	Concrete for Headwalls, Class "C"	16	Cu. Yds.
S-4	Reinforcing Steel	738	Lbs.
S-27	36" Pipe for Roadway Culverts M-6.6(b) or M6.8(b)	202	Lin. Ft.
L-10	Sodding	8	Sq. Yds.

HW = 812.5
V = 6.2'/sec.

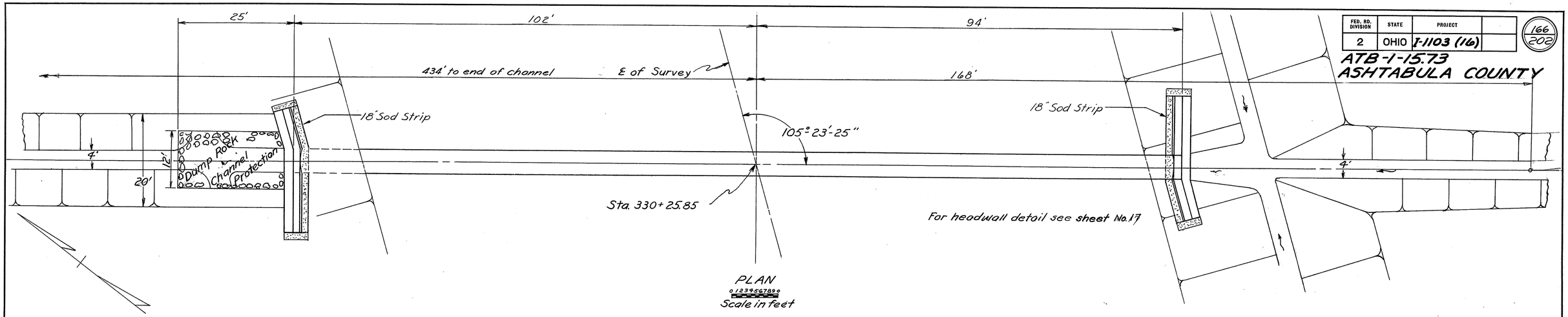
STRUCTURE No. ATB-1-1895
Drainage Area = 12 Ac. Q50 = 31 c.f.s.

7	Sta. 324+00	P.C. 36"x 206	ATB-1-1895

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

166/202

ATB-1-15.73
ASHTABULA COUNTY



9°
806.52
1+02 Lt. 33 cu. yds.
807.0
Headwall - 14 cu. yds.

9°
807.03
0+00 31 cu. yds.
808.5

Channel Excavation limits
Structure Excavation limits
9°
807.5 Bedding
0+94 Rt.
809.2
Headwall - 14 cu. yds.

CULVERT DATA

TYPE-Pipe culvert-Std. Drawing H.W.-A&B and S-27 P.C.3
SIZE-60"x 196'
WORK REQUIRED - Construct culvert, headwalls and channel protection, as per plan.
Note: Item E-3 Channel Excavation was calculated prior to the calculation of E-2 Excavation for Structures.
HW=812.92 V=10.3'/sec.

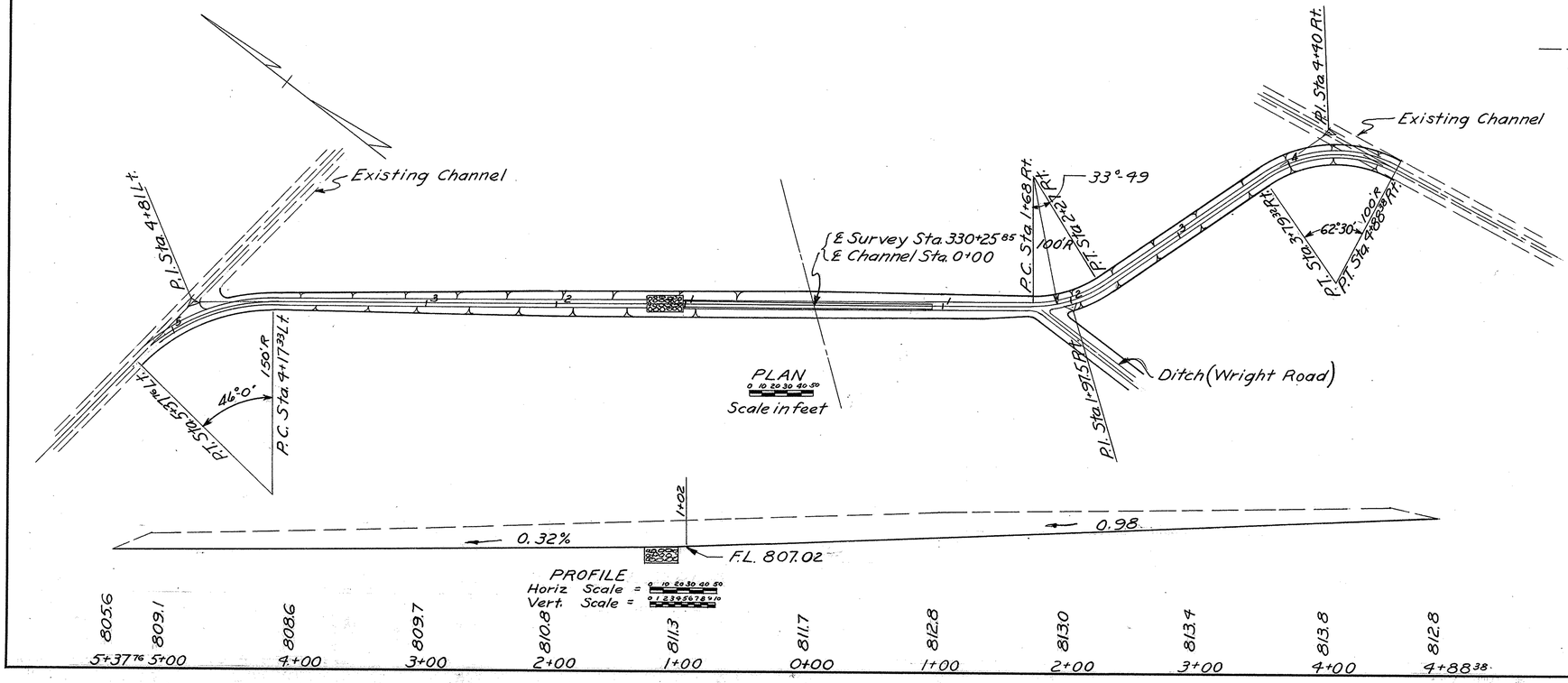
ESTIMATED QUANTITIES

E-2 Excavation for Structures	92	Cu. Yds.
I-10 Dumped rock channel protection	46	Cu. Yds.
S-1 Concrete for Headwalls, Class "C"	43.2	Cu. Yds.
S-27.60" Pipe for roadway culverts Sec. M-6.6(b)	196	Lin Ft.
S-9 Reinforcing Steel	1,798	Lbs.
L-10 Sodding	10	Sq. Yds.

STRUCTURE NO. ATB-1-1907

Drainage Area = 130 Ac Q = 133 c.f.s.			
8	Sta. 330+25.85	60"x 196'	ATB.1-1907

Designed
Traced
Checked



0°
805.6
5+38
805.6
End channel Excavation

32°
82 cu yds.
806.0
4+00 Lt.
809.1

45°
289 cu yds.
806.7
2+00 Lt.
810.8

76°
169 cu. yds.
807.0
1+00 Lt.
811.3

194 cu. yds.

32°
252 cu. yds.
808.0
0+00
811.7

36°
174 cu. yds.
809.9
2+00 Rt.
813.0

11°
18 cu yds.
811.7
4+00 Rt.
813.8

0°
812.8
4+88
812.8
End channel Excavation

CROSS SECTIONS
0 2 3 4 5 °
Scale in feet

ESTIMATED QUANTITIES

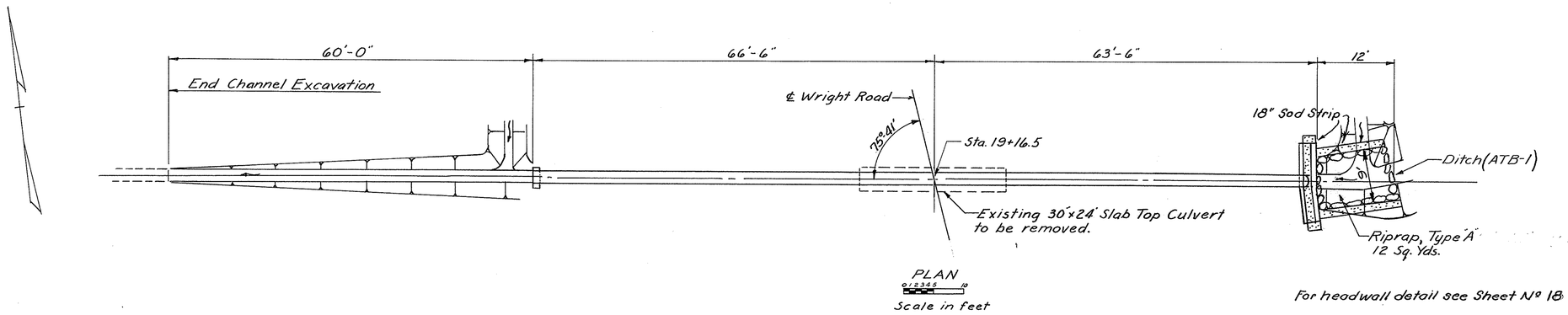
E-3 Channel Excavation 1128 Cu. Yds.

CHANNEL RELOCATION-℄ STA. 330+25.85

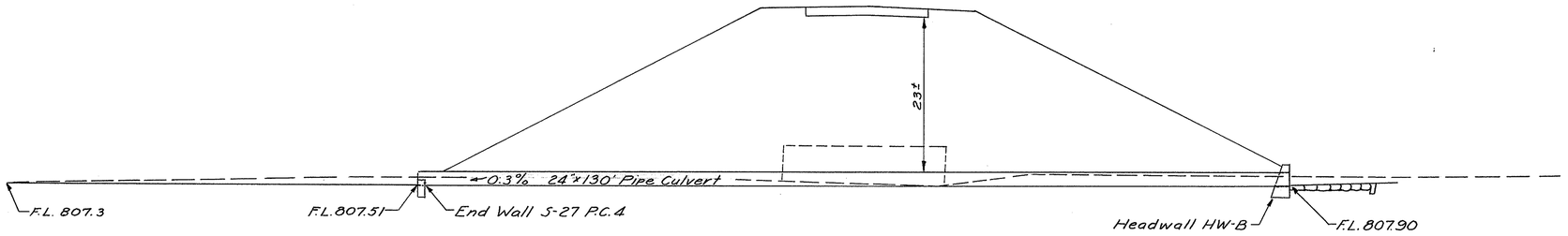
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

167
202

ATB-1-15.73
ASHTABULA COUNTY



For headwall detail see Sheet No. 18



LONGITUDINAL SECTION

	0°	4°	9° 11°	Headwall	
	807.3	807.0	807.90 Channel	807.9	6 Cu. Yds.
	1+26.5 Lt.	0+12 Rt.	807.15 Bedding	0+75.5 Rt.	5 Cu. Yds.
	807.3	807.8	0+63.5 Rt.	809.3	
			809.3		
	End Wall	2 Cu. Yds.	9 Cu. Yds.	15 Cu. Yds.	

	10° 9°	9"	12"	
Channel Bedding	807.51	806.9	807.0	
	806.76	0+26 Lt.	0+25 Rt.	
	0+66.5 Lt.	809.0	809.6	
	808.8	11 Cu. Yds.	13 Cu. Yds.	4 Cu. Yds.

CROSS SECTIONS
0 1 2 3 4 5 10
Scale in feet

CULVERT DATA
TYPE: Pipe Culvert - S'td. Drawing HW-A & B, S-27 P.C. 3 & 4
SIZE: 24" x 130'
WORK REQUIRED: Remove existing structure and construct pipe culvert as per plan. Excavate channel and place channel protection as per plan. Construct headwall and end wall as per plan.

ESTIMATED QUANTITIES

E-2	Excavation for Structures	49 Cu. Yds.
E-3	Channel Excavation	16 Cu. Yds.
I-10	Riprap, Type A,	12 Sq. Yds.
L-10	Sodding	6 Sq. Yds.
S-1	Concrete for Headwall, Class "C"	36 Cu. Yds.
S-1	Concrete for End Wall, Class "E"	0.4 Cu. Yds.
S-4	Reinforcing Steel	126 Lbs.
S-24	Removal of Existing Structures	Lump
S-27	24" Pipe for Roadway Culverts M-6.6 (c)	130 Lin. Ft.

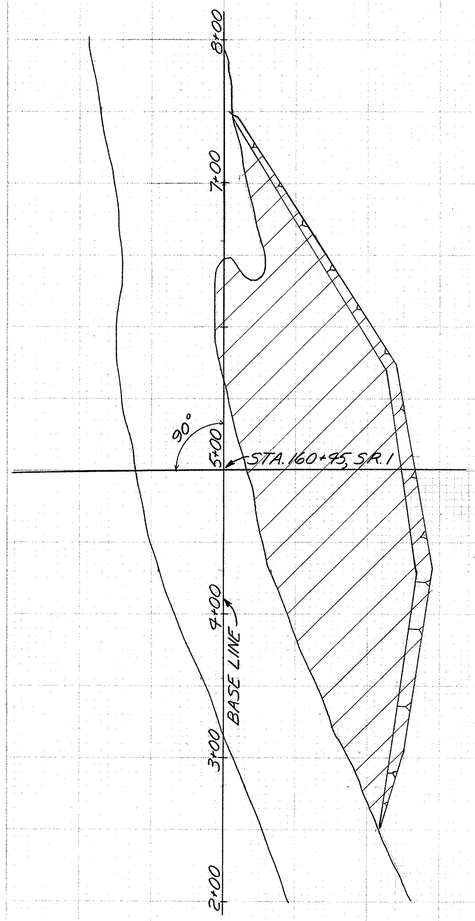
Structure No. ATB-1-

Drainage Area 3 AC. Q50 = 12 cfs.			
11	Wright Rd. Sta. 19+16.5	P.C. 24"x130'	ATB-1-1912

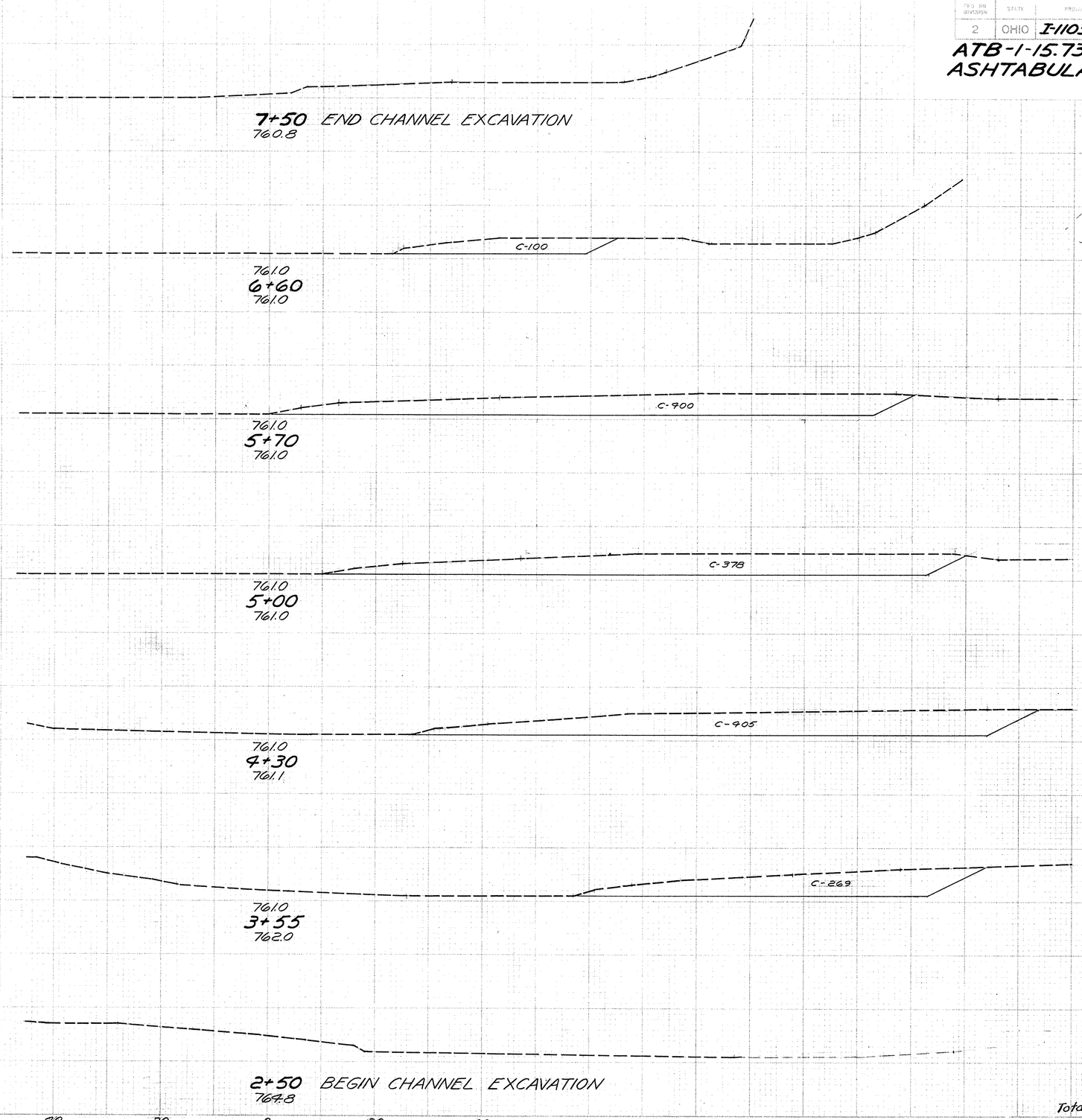
CHIO RD DIVISION	STATE	PROJECT
2	OHIO	I-1103(16)

168
202

ATB-1-15.73
ASHTABULA COUNTY



PLAN OF CHANNEL EXCAVATION
AT ASHTABULA RIVER



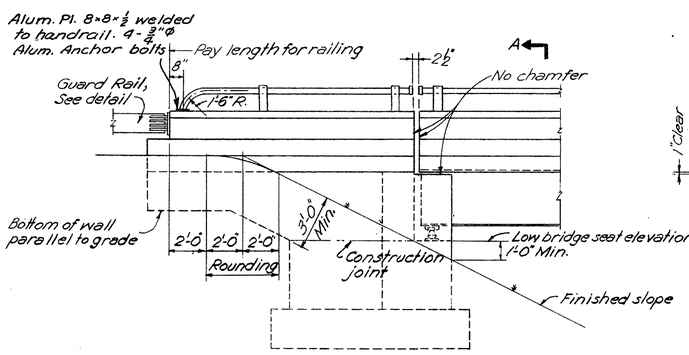
End Areas		Cu. Yd.	
Cut	Fill	Cut	Fill
0	0		
105	0		
		892	0
900	0		
		1009	0
378	0		
		1015	
905	0		
		936	
269	0		
		523	0
0	0		
Total		4325	0

CHANNEL EXCAVATION ASHTABULA RIVER

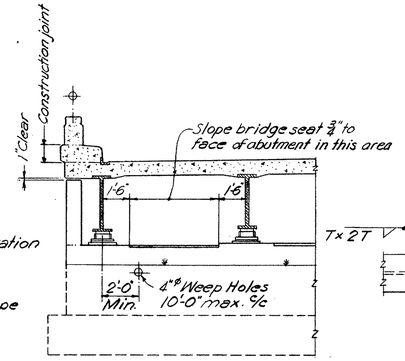
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

169
202

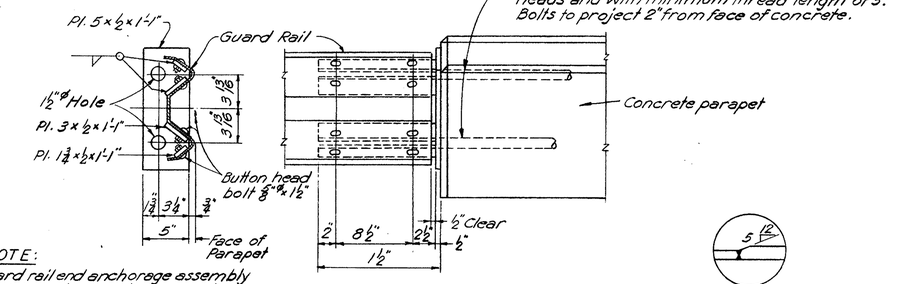
ATB-1-15.73-19.20



TYPICAL ABUTMENT DETAILS



SECTION A-A



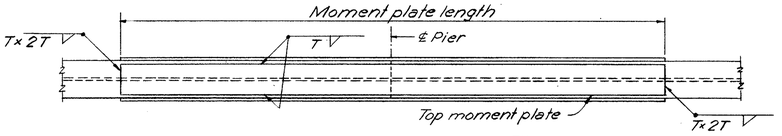
NOTE:
Guard rail end anchorage assembly shall be galvanized after welding and shall be included in cost per linear foot of railing for payment.

GUARD RAIL DETAILS
(As seen from the pavement side)

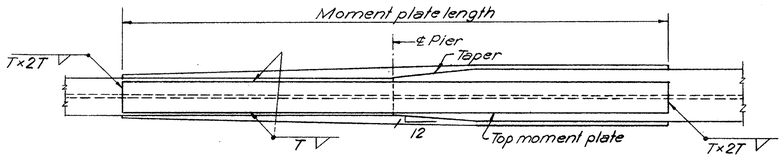


DETAIL F

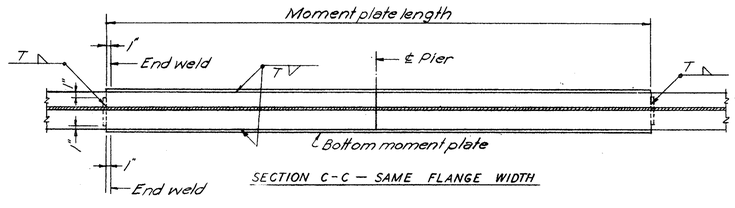
FILLET WELDS	
PLATE THICKNESS – INCHES	SIZE WELD "T" – INCHES
1½ or less	⅜
Over 1½ to 2¼	⅝



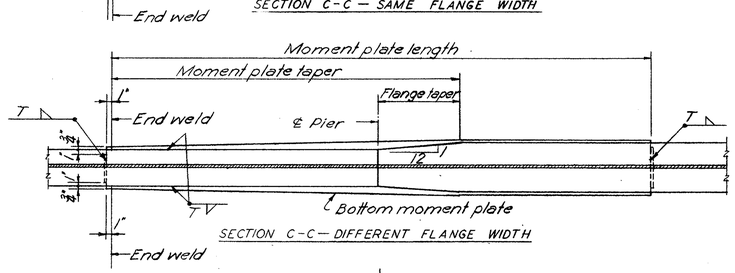
VIEW B-B – SAME FLANGE WIDTH



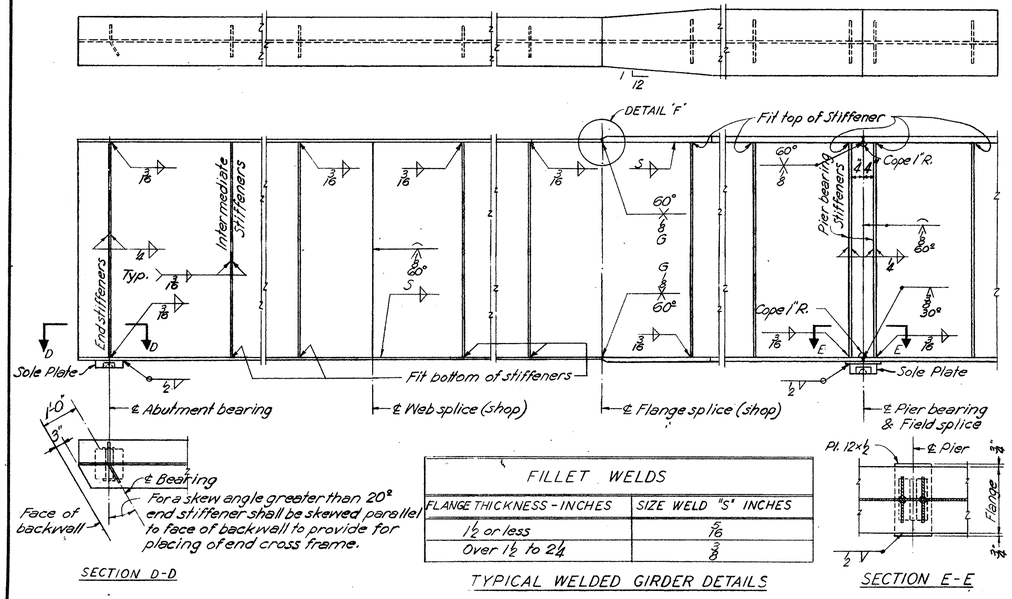
VIEW B-B – DIFFERENT FLANGE WIDTH



SECTION C-C – SAME FLANGE WIDTH



SECTION C-C – DIFFERENT FLANGE WIDTH

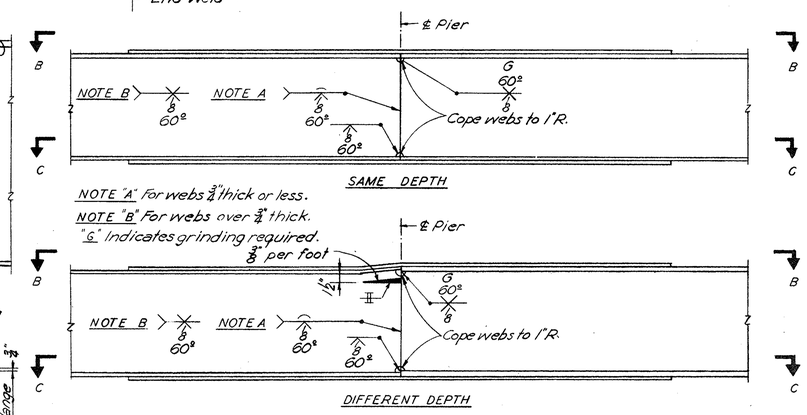


SECTION D-D

FILLET WELDS	
FLANGE THICKNESS – INCHES	SIZE WELD "S" INCHES
1½ or less	⅝
Over 1½ to 2¼	⅞

TYPICAL WELDED GIRDER DETAILS

SECTION E-E



TYPICAL BEAM SPLICE DETAILS

GENERAL NOTES

REFERENCE shall be made to Standard Drawings RB-1-55 dated 3-1-55, CSB-2-56 sheets 2 and 3 of 6 dated 12-3-56, AR-1-57 dated 4-9-57 and Supplemental Specification No. S-114 dated 8-30-55, revised 8-1-57.

DESIGN SPECIFICATIONS: These structures conform to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57.

PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of one hundred (100) feet back of the abutments, after which excavation shall be made for the abutment.

✳ EXCAVATION QUANTITY includes the removal of fill material between the top of the earth slope and the bottom of the abutment. The backfill behind the abutment shall be made using material conforming to Section 1-2202 of the Specifications and compacted according to Section E-1.08 for embankment. This backfill shall be paid for under Item E2, Unclassified Excavation.

WELDED STEEL: The steel for all beams having flanges with a thickness greater than one inch, for all moment plates having a thickness greater than one inch and for the flanges and webs of all welded built-up girders, regardless of thickness, shall conform to A.S.T.M. Designation A-373. All other structural steel shall conform to either A.S.T.M. A7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

WELDING OF STRUTURAL STEEL shall be Class "A" except as otherwise shown. 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 deck slab concrete, the placing of concrete shall progress up grade. The slab may be placed in sections, between the transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

CLEARANCE for reinforcing steel from the face of concrete shall be two (2) inches unless otherwise noted.

SPECIAL CARE must be taken in placing bars in the bridge seat of piers and abutments so that they will not interfere with drilling of holes for anchor bolts or anchor bars.

PARAPETS: Concrete and reinforcing steel above parapet construction joints shall be included in price per linear foot of railing for payment.

BACKWALL concrete above bridge seat construction joint shall not be placed until after the steelwork is erected, but before placing the deck slab.

STEEL END FINISH shall be used as a template for the top of the backwall.

POROUS BACKFILL shall extend upward to the subgrade elevation and for the full length of the abutment.

POROUS DRAIN SLOPE PROTECTION shall be provided under the the structure at both abutments. The porous drain material shall be twelve (12) inches thick and shall extend from the face of the abutment down to the elevation of the bottom of ditch and transversely to three (3) feet outside the exterior face of the superstructure.

ADDITIONAL NOTES: See individual bridge drawings.

✳ NOTE: I-22.02 backfill shall be used only at Br. No. ATB-1-1583

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CONSULTING ENGINEERS
MANSFIELD, OHIO

STANDARD DETAILS & GENERAL NOTES

ASHTABULA COUNTY S.R.1

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
D.R.F.	B.E.J.	B.E.J.	C.W.F.	GCB	11-14-57	

FREDERICK POST CO., N. J.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

170
202

ATB-1-15.73-19.20

EXISTING BRIDGE-ROUTE 83
Approx. 10,500' downstream
5 Spans - 68'-5@85'-68'; 24' Rdwy.
47' ± - streambed to grade

Dumped rock channel protection to min. El. 773.0, 4' thick.

Dumped rock channel protection to min. El. 773.0, 4' thick.

Wooded Area

4' Ditch Bottom

Berm Line

End Appr Slab Sta. 158+92.42 North Bridge

6' Ditch Rounding

℄ Proposed S.R. 1 Curve 0°28'

End Appr Slab Sta. 158+88.49 South Bridge

25'-0"

ASHTABULA RIVER

368' c/c End Brgs. along chords

Excav. Limits of Channel

250'

℄ Bridge

11°

90°

Reference Line (Chord between ℄'s bearings Piers 1 & 4

Proposed channel Width Approx 180'

368' c/c End Brgs. along chord

Toe of Slope at Anc. Rock El. 760

Begin Appr Slab Sta. 162+65.09 North Bridge

℄ Westbound Lanes

℄ Eastbound Lanes

Begin Appr Slab Sta. 162+61.02 South Bridge

6' Rounding

Toe of Slope on Existing Gr.

Proposed dumped rock channel protection to min. El. 773.0, 4' thick

Dumped rock channel protection to min. El. 773.0, 4' thick.

Toe of Slope on Existing Gr.

For details of channel change see Sheet 168

CONNEAUT QUADRANGLE
North 41° 50' 30"
West 80° 43' 56"
3.6 mi. southeast of Ashtabula

DRAINAGE AREA
107 sq. miles

CURVE DATA
P.I. -170+13.67
Δ = 18° 36' 04" Rt.
D = 0° 28'
R = 12,271.67
T = 2,014.33
L = 3,993.10
E = 164.14
P.C. -150+59.32
P.I. -190+52.42
No superelevation

EXISTING BRIDGE-ROUTE 90
Approx. 20,000' upstream.
Conc. Arch of 110' Span, 24' Rdwy.
26' ± streambed to grade.

FOUNDATION SOUNDINGS:
Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of Interstate Projects Office in Columbus, or in the Division office, but the State assumes no responsibility for the accuracy thereof.

BENCH MARK # 28
Spike in root of 40" maple
240' left of Sta. 154+67
Elev. 855.876

BENCH MARK # 30
Spike in root of 30" oak
200' left of Sta. 162+43.
Elev. 793.693

South Bridge Limits - 372.53
North Bridge Limits - 372.67

Sta. 158+88.49 Sta. 158+92.42 Sta. 162+61.02 Sta. 162+65.09

P.V.I. 160+00; El. 804.99
Corr. 4.45; V.C. 1000'

V.C. Proposed Grade S.R.1

-1.62% +1.94%

Steel H piles (12 BP 53). The estimated average pay lengths are:
Rear Abutment - 39'
Forward Abut. - 42'

Existing Grade

Footing El. 799.0 North Bridge
El. 798.3 South Bridge

Slopes 2:1 (Normal)

Excavate new channel to rock

Slopes 2:1 (NORM'L)

Footing El. 800.4 North Bridge
El. 800.6 South Bridge

Assumed 50 Yr. High Water El. 769 ± (See Suppl. Site Plan)

Probable High Water El. 771 ± Due to New Channel.

Assumed 5 Yr. High Water El. 767 ± (See Suppl. Site Plan)

Footing El. -756.0

Footing El. -756.0

Footing El. -756.0

PROPOSED STRUCTURE
TYPE: Continuous steel beam with reinf. concrete deck and substructure.
SPANS: 64'-3@80'-64' c/c bearings
ROADWAY: 42' f/f parapets with 1'-0" curbs
LOAD FREQUENCY: C.F. 2000 Adequate for AASHO alternate loading.
SKEW: 11°
WEARING SURFACE: 1" Monolithic concrete
APPROACH SLABS: AS-1-54 (25' long)
ALIGNMENT: 0°-28' curve
SUPERELEVATION: None

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CONSULTING ENGINEERS
MANSFIELD, OHIO

SITE PLAN

BRIDGE NO ATB-1-1583
S.R.1 OVER ASHTABULA RIVER
ASHTABULA C.O. S.R.1

STA. 158+88.49
TO 162+65.09

SCALE 1 IN=30 FT.

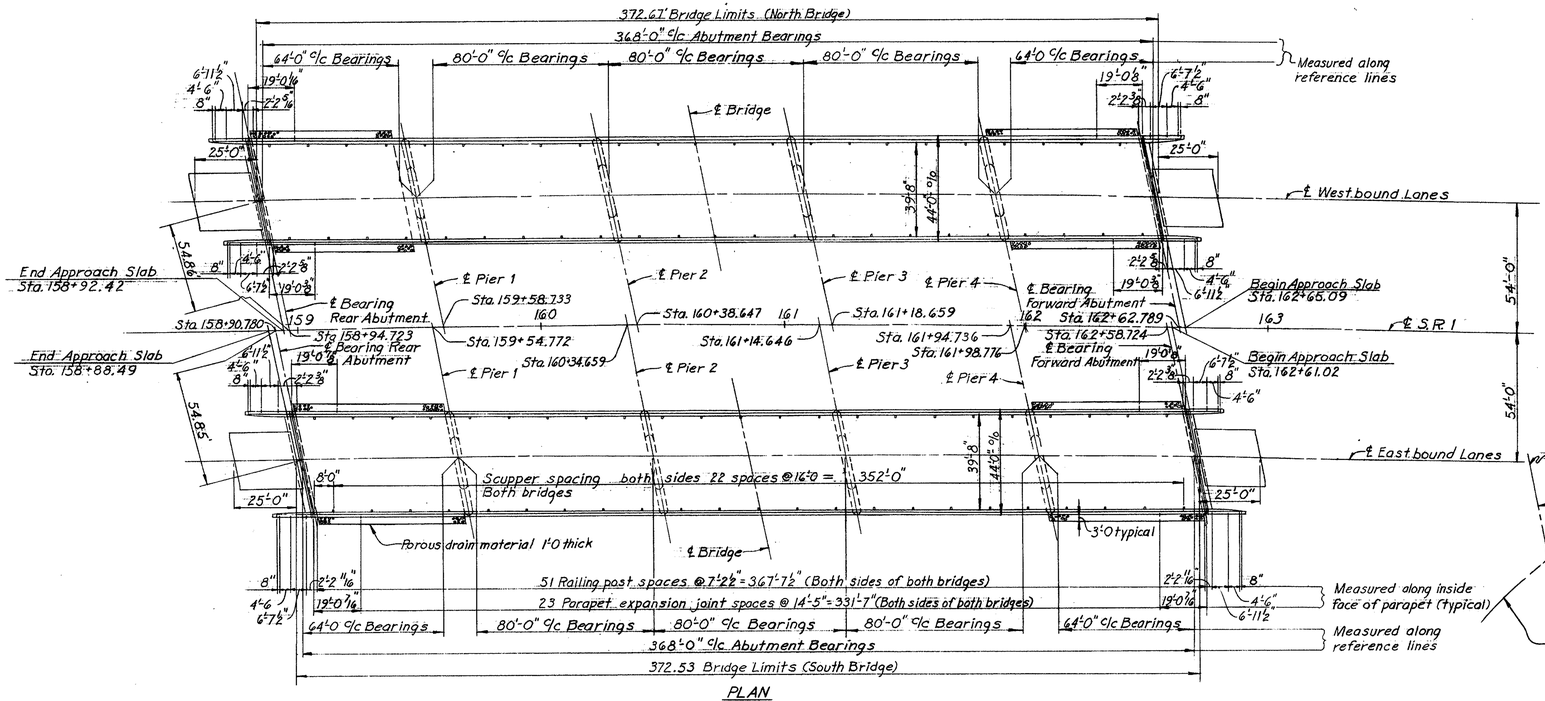
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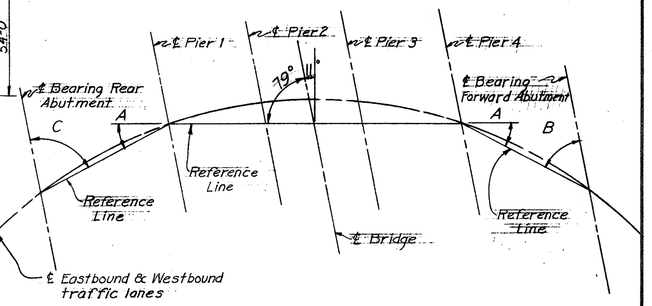
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

171
202

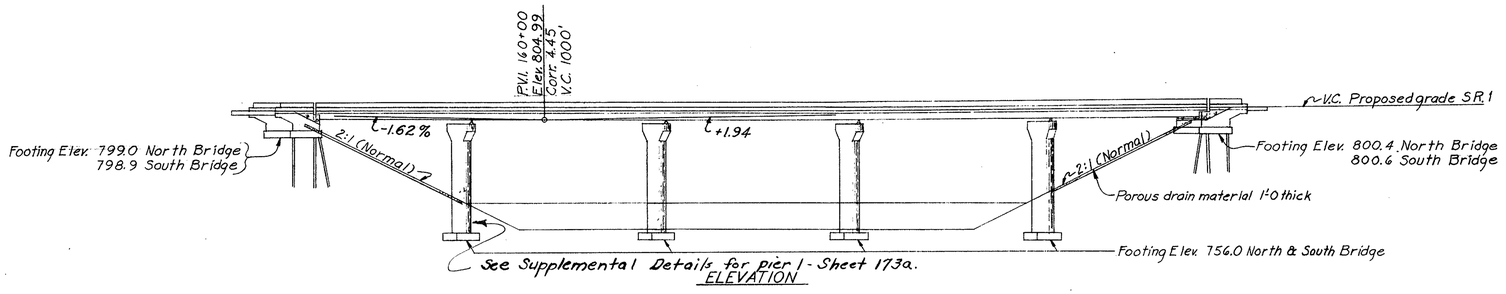
ATB-1-15.73-19.20



PLAN



SCHEMATIC DIAGRAM OF REFERENCE LINES



ELEVATION

	A	B	C
North Bridge	0°42'22"	78°17'38"	100°17'38"
South Bridge	0°42'45"	78°17'15"	100°17'15"

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR	ABUTS	PIERS	GENERAL
E 2	429	Cu.Yds.	Unclassified excavation	———	429	———	———
E 2	Lump	Sum	Cofferdams, cribs and sheeting	———	———	———	Lump Sum
E 2	398	Cu.Yds.	Shale excavation	———	———	398	———
S 1	998	Cu.Yds.	Class "C" concrete, superstructure	998	———	———	———
S 1	946	Cu.Yds.	Class "C" concrete, pier caps and columns	———	———	946	———
S 1	171	Cu.Yds.	Class "E" concrete, abutments above footings	———	171	———	———
S 1	372	Cu.Yds.	Class "E" concrete, footings	———	141	231	———
S 4	380,000	Lbs.	Reinforcing steel	292,600	17,600	69,800	———
S 7	1,212,000	Lbs.	Structural steel	1,212,000	———	———	———
S 8	1,212,000	Lbs.	Field painting of structural steel	1,212,000	———	———	———
S 14	1584	Lin.Ft	Railing (aluminum rail and supports, concrete parapet and guard rail connectors)	1584	———	———	———
S 16	Lump	Sum	First test pile	———	Lump Sum	———	———
S 18	2067	Lin.Ft	Steel piles (12 BP 53)	———	2067	———	———
S 29	58	Cu.Yds.	Porous backfill	———	58	———	———
S 29	510	Cu.Yds.	Porous drains on embankment slopes	———	———	———	510
I 10	3400	Cu.Yds.	Dumped rock channel protection	———	———	———	3400

NOTES

LOADING: C.F. 2000 (51) Adequate for A.A.S.H.O. alternate loading

PILES: shall be driven with a hammer of not less than 11000 ft. lbs per blow to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 5-18.05 is not less than the following value for a pile hammer of the indicated energy rating:
For the abutment piles
40 tons per pile using a 11000 ft. lb hammer
40 tons per pile using a 15000 ft. lb or greater hammer
If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation.
The design load is 40 tons per pile for the abutment piles

GENERAL NOTES: See sheet 169

Rev.-10-29-58

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CONSULTING ENGINEERS
MANSFIELD, OHIO

GENERAL PLAN

BRIDGE No ATB-1-1583
S.R.1 OVER ASHTABULA RIVER
ASHTABULA CO. S.R.1

STA. 158+88.49
TO 162+65.09

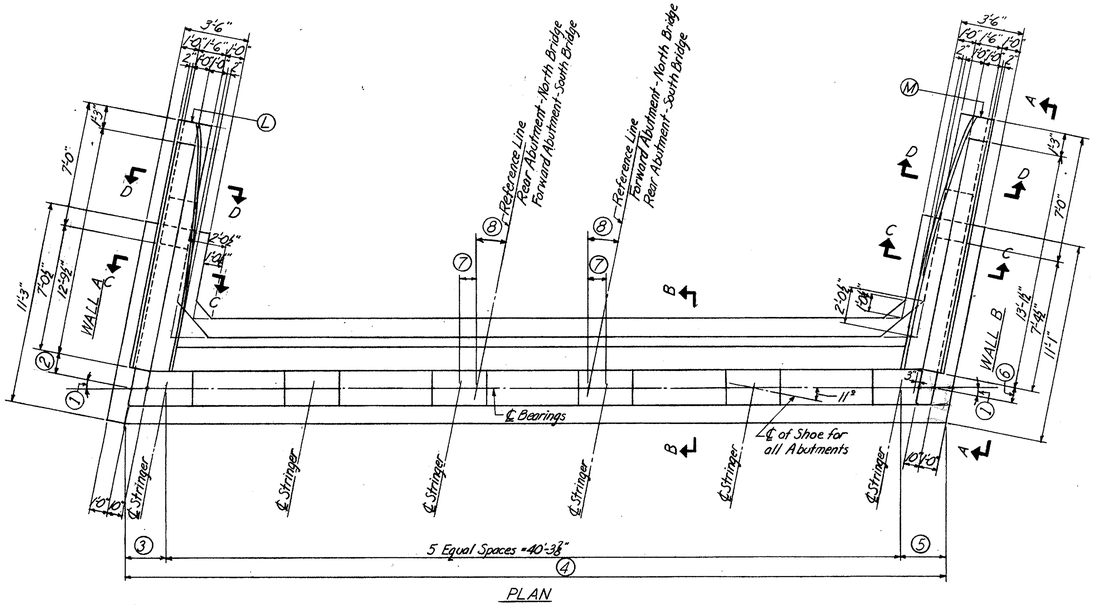
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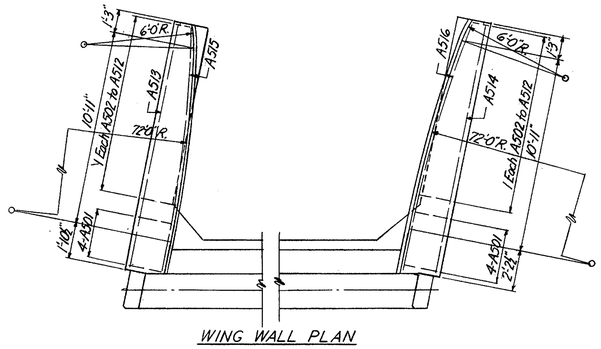
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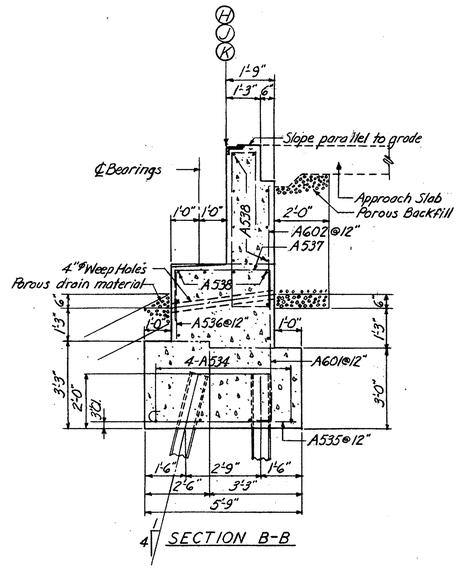
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2	OHIO	I-1103 (16)	

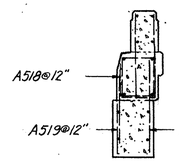
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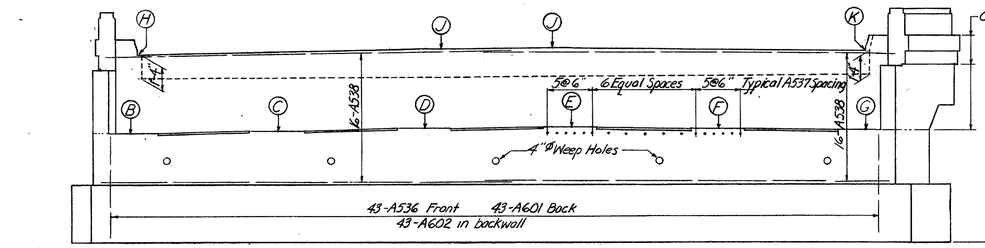
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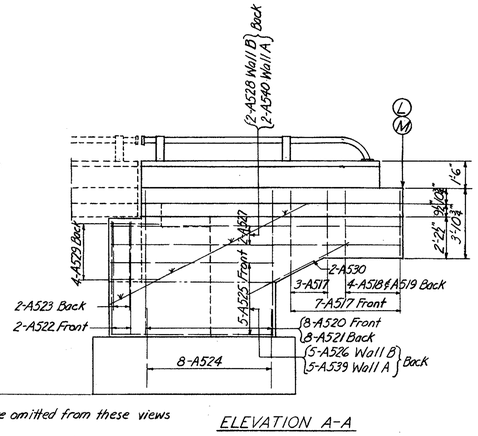


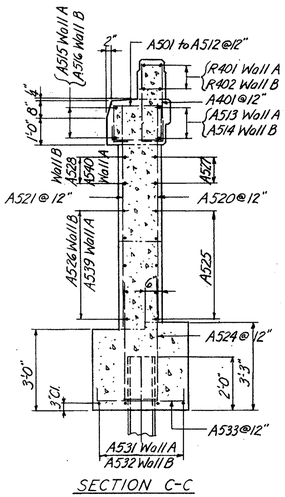


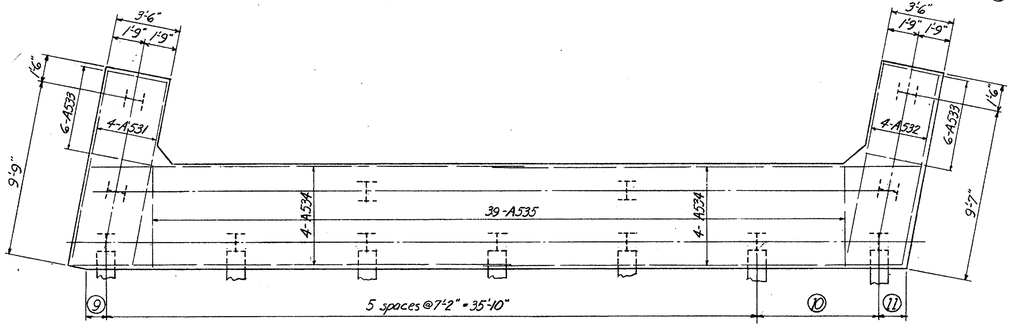












NOTES

CONCRETE: All abutment concrete shall be Class "E" except parapet which shall be Class "C".

RAILING: See AR-1-57 and Sheet 171.

STANDARD DETAILS AND GENERAL NOTES: See Sheet 169.

TABLE OF DIMENSIONS

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
10°-00'	1'-1⅝"	2'-8⅛"	45°-4½"	2'-4½"	0'-10⅞"	0'-8⅞"	10°17'38"	1'-6⅛"	7'-0⅛"	1'-0⅝"
12°-00'	1'-2⅜"	2'-3⅛"	45°-7⅛"	3'-0⅝"	0'-10⅜"	0'-8⅛"	11°42'22"	1'-5⅞"	7'-3⅛"	1'-1"
10°-00'	1'-1⅝"	2'-7⅛"	45°-4½"	2'-4⅛"	0'-10⅞"	1'-3¼"	10°17'15"	1'-6⅛"	7'-0⅛"	1'-0⅝"
12°-00'	1'-2⅜"	2'-3⅛"	45°-7⅛"	3'-0⅝"	0'-10⅜"	1'-3¼"	11°42'45"	1'-5⅞"	7'-3⅛"	1'-1"

TABLE OF ELEVATIONS

LOCATION		Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓙ	Ⓚ	Ⓛ	Ⓜ
North	Rear Abutment	799.0	805.017	805.145	805.272	805.173	805.052	804.932	809.41	809.68	809.34	810.30	810.23
Bridge	Forward Abutment	800.4	806.350	806.490	806.631	806.751	806.645	806.539	810.76	811.17	810.94	811.76	811.95
South	Rear Abutment	798.9	804.889	805.015	805.142	805.230	805.108	804.987	809.28	809.65	809.39	810.17	810.28
Bridge	Forward Abutment	800.6	806.656	806.798	806.940	806.874	806.769	806.665	811.06	811.37	811.07	812.08	812.09

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ABUTMENTS

BRIDGE Nº ATB-1-1583
S.R.1 OVER ASHTABULA RIVER
ASHTABULA CO. S.R.1

STA. 158+88.49
TO 162+65.09

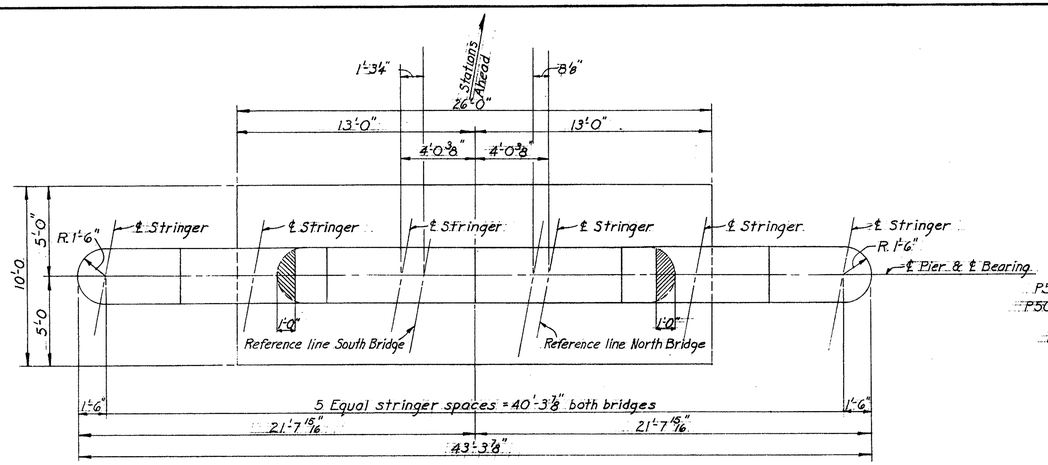
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FREDERICK POST CO., N. J.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

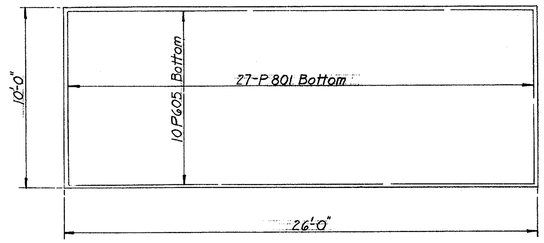
173
202

ATB-I-15.73-19.20

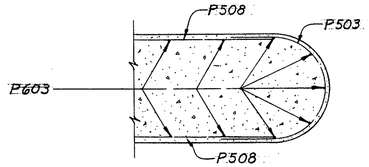


PLAN

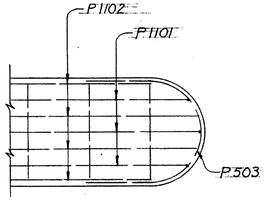
Shaded area indicates '2" Preformed Expansion Joint Filler meeting the requirements of Sect. 1440.02 Type III Included with Class C Concrete for payment.



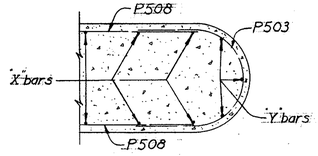
FOOTING PLAN



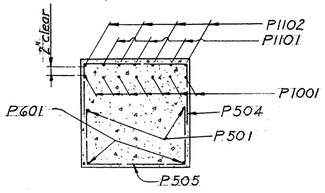
SECTION D



VIEW C

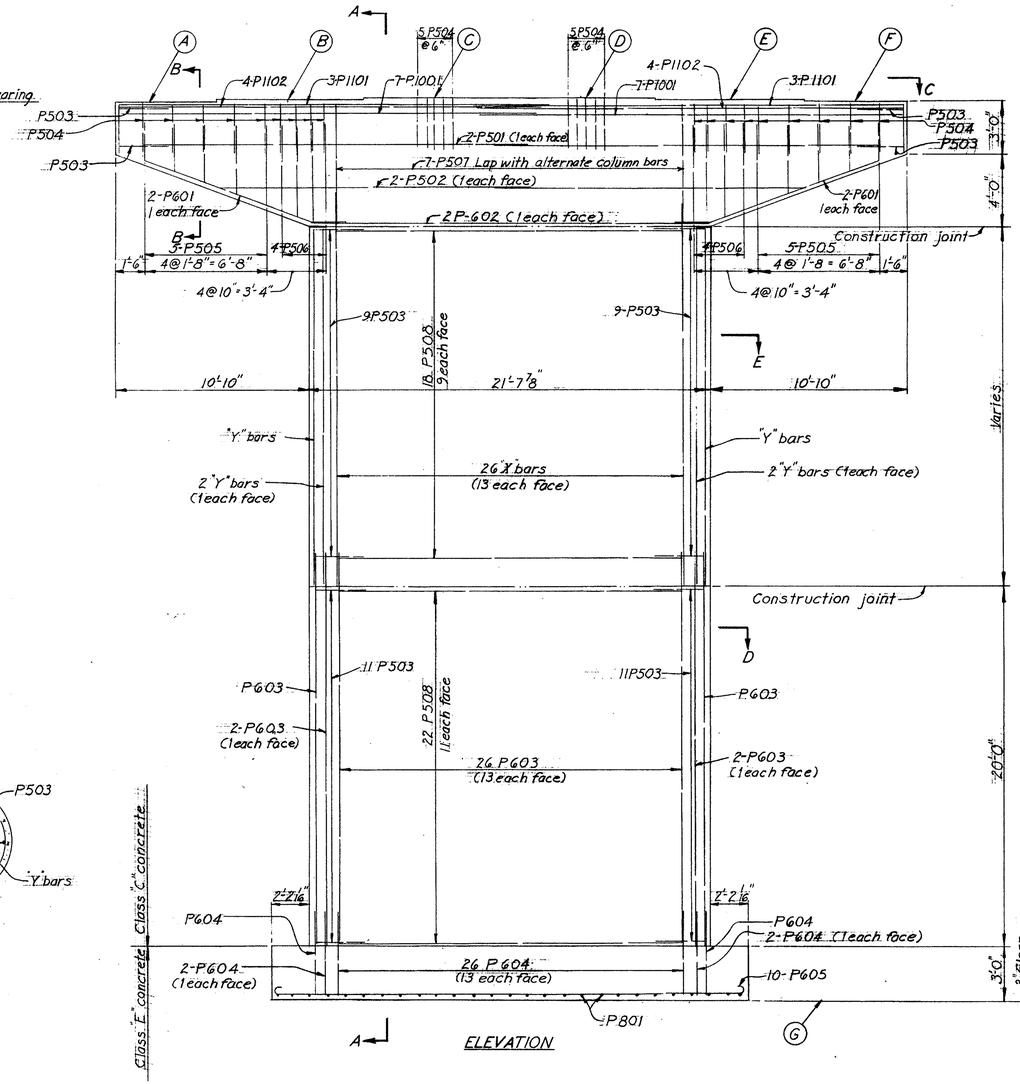


SECTION E

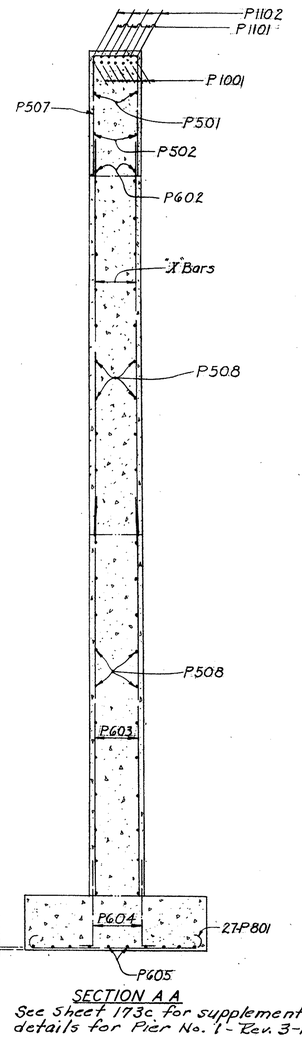


SECTION B B

TABLE OF ELEVATIONS	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	BARS X	BARS Y
Pier 1 North Bridge	804.300	804.423	804.547	804.650	804.525	804.401	756.0	P606	P610
Pier 2 North Bridge	804.391	804.519	804.646	804.737	804.617	804.497	756.0	P606	P610
Pier 3 North Bridge	804.700	804.831	804.963	805.058	804.943	804.828	756.0	P607	P611
Pier 4 North Bridge	805.225	805.361	805.498	805.614	805.504	805.394	756.0	P608	P612
Pier 1 South Bridge	804.393	804.517	804.641	804.557	804.434	804.311	756.0	P606	P610
Pier 2 South Bridge	804.534	804.663	804.791	804.695	804.576	804.458	756.0	P606	P610
Pier 3 South Bridge	804.897	805.030	805.163	805.072	804.958	804.844	756.0	P607	P611
Pier 4 South Bridge	805.481	805.619	805.756	805.686	805.578	805.469	756.0	P609	P613



ELEVATION



SECTION A A

See Sheet 173c for supplemental details for Pier No. 1 - Rev. 3-13-59. Rev

~~See Sheet 173a for supplemental details for pier No. 1 - Rev. 10-28-58.~~ Rev.

NOTES

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

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 5 tons per square foot.

FOOTINGS: shall extend a minimum of three (3) inches into solid rock or to the elevation shown, whichever is lower.

GENERAL NOTES: See sheet 169

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

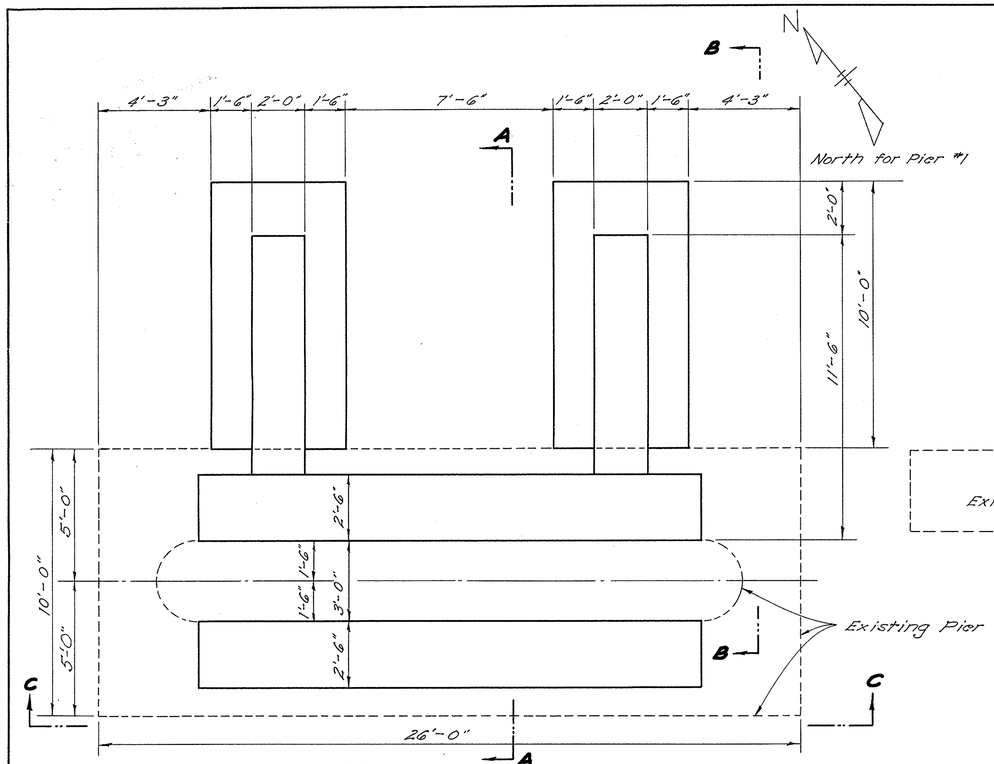
PIERS

BRIDGE Nº ATB-I-1583
S.R.I OVER ASHTABULA RIVER
ASHTABULA CO. S.R.I

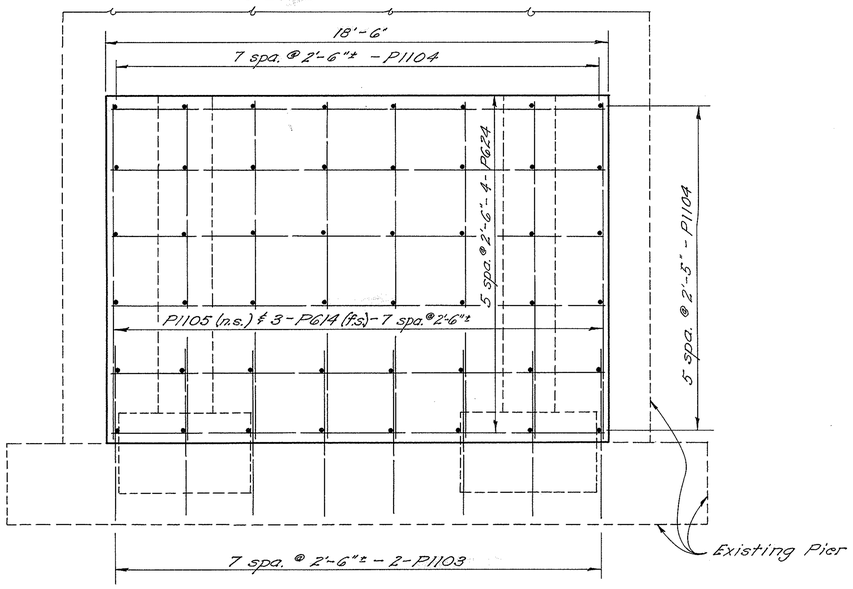
STA. 158+88.49
TO 162+65.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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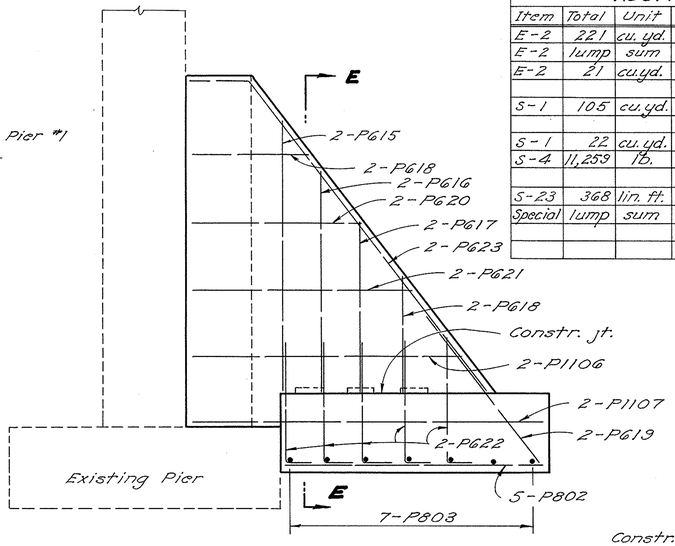
FREDERICK POST CO., N. J.



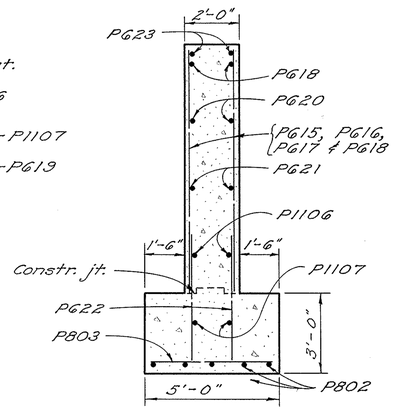
PLAN



VIEW C-C



SECTION B-B



SECTION E-E

ADDITIONAL ESTIMATED QUANTITIES

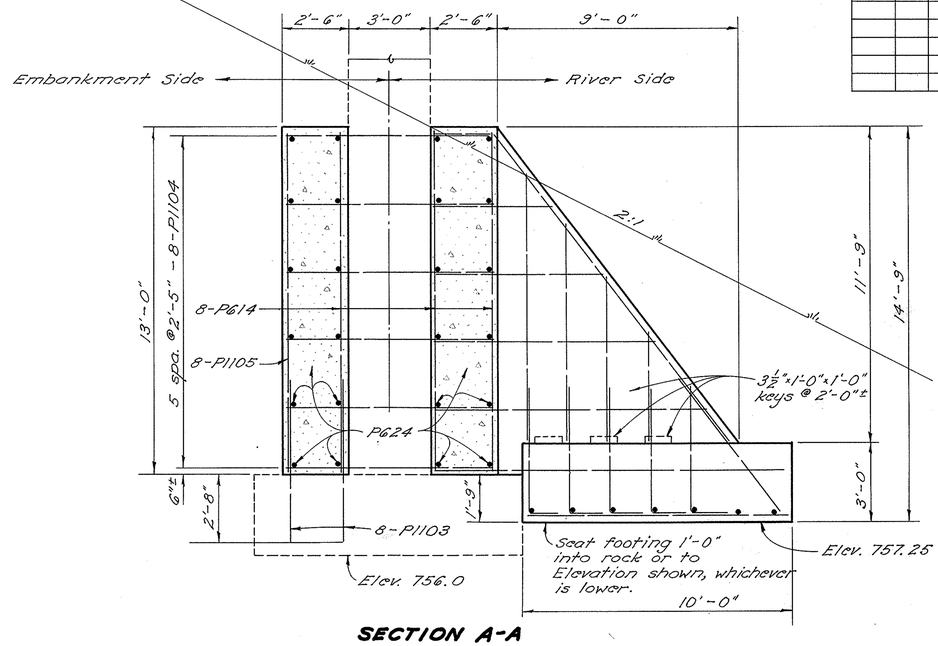
Item	Total	Unit	Description	2-Piers
E-2	221	cu. yd.	Unclassified excavation	221
E-2	lump	sum	Cofferdams, cribs and sheeting	lump
E-2	21	cu.yd.	Shale excavation	21
S-1	105	cu.yd.	Class "C" concrete, piers above footing	105
S-1	22	cu.yd.	Class "E" concrete, footings	22
S-4	11,259	lb.	Reinforcing steel	11,259
S-23	368	lin. ft.	Dowell holes	368
Special	lump	sum	Re-setting Pier #1 (both bridges)	lump

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

1734 202

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp	Bending Diagram
P1103	32	6'-0"	1,020	S	
P1104	36	7'-8"	3,910	S	
P1105	16	12'-10"	1,091	S	
P1106	8	10'-0"	425	S	
P1107	8	13'-2"	560	S	
P802	20	9'-8"	516	S	
P803	28	4'-8"	343	S	
P614	48	12'-10"	325	S	
P615	8	10'-0"	120	S	
P616	8	8'-0"	96	S	
P617	8	6'-3"	75	S	
P618	16	4'-4"	104	S	
P619	8	5'-3"	63	S	
P620	8	6'-4"	76	S	
P621	8	8'-4"	100	S	
P622	40	5'-4"	320	B	4'-8" ± P622
P623	8	16'-7"	199	B	P623, 2'-2", 14'-6" ±
P624	48	18'-2"	1,310	S	



SECTION A-A

EXPLANATORY NOTE:
After Piers #1 (both North Bridge and South Bridge) had been built and the embankment placed and compacted, these piers tipped eastward due to unexpected great horizontal earth pressure against the pier wall. This force caused the wall to crack above the footings and necessitated the detail changes shown hereon.

PROPOSED WORK:
1. Perform necessary excavation.
2. Pull pier stem to vertical position, cutting existing footing dowells if necessary.
3. Drill dowel holes and construct repairs as shown on this sheet.

NOTE: P1104 bars shown in dowel holes thru existing wall shall be grouted according to S-23 of the Construction and Material Spec's. P1103 bars shown in dowel holes in existing footing. P1103 bars shall be grouted in existing footing with non-shrinking Portland cement grout.

Rev. 10-29-58

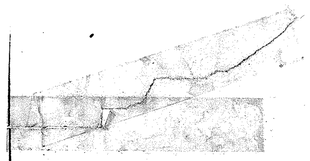
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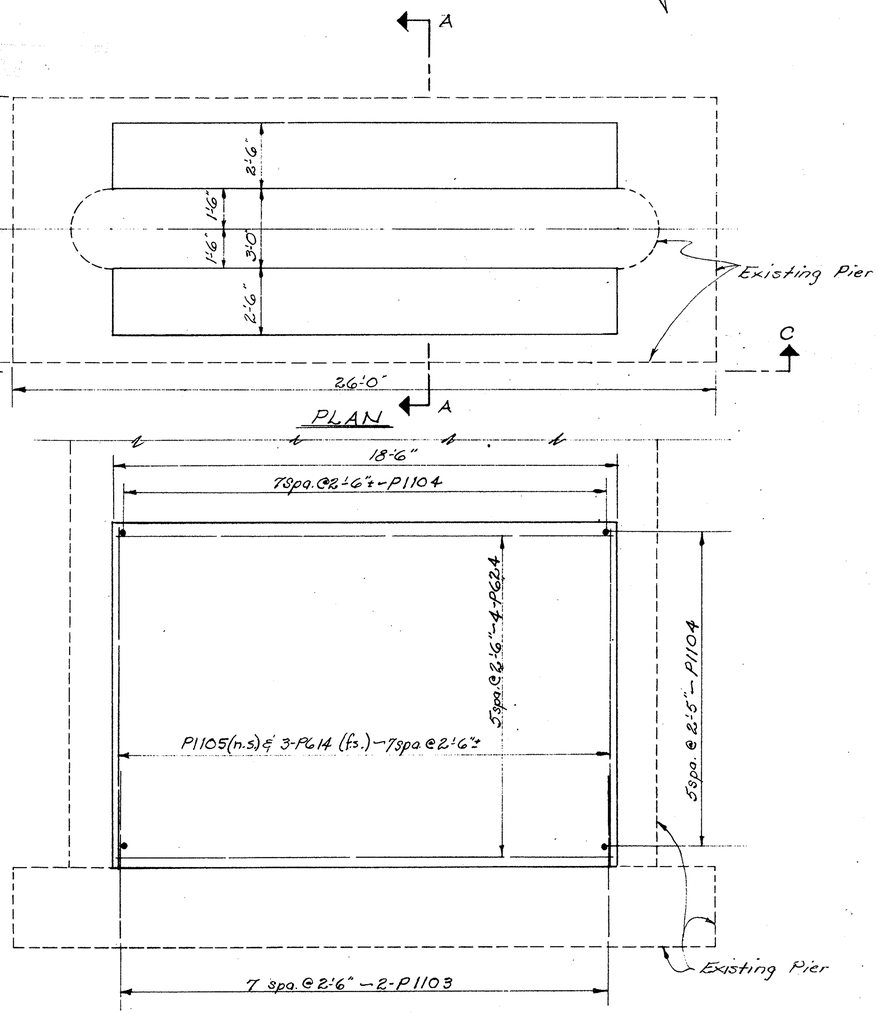
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPPLEMENTAL DETAILS PIER NO. 1 - BOTH BRIDGES

BRIDGE NO. ATB-1-1583
S.R. 1 OVER ASHTABULA RIVER
STA. 158+88.49
ASHTABULA COUNTY TO 162+65.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	MCH	PMOST	JRR	GFH	10-29-58	





ADDITIONAL ESTIMATED QUANTITIES

Item	Total	Unit	Description	2-Piers		
E-2	146	Cu.Yd.	Unclassified excavation	146		
E-2	Lump	Sum	Cofferdams, cribs and sheeting	Lump		
S-1	89	Cu.Yd.	Class "C" concrete, piers above footing	89		
S-4	8256	lbs.	Reinforcing steel	8256		
S-23	368	Lin.ft.	Dowel holes	368		
Special	Lump	Sum	Re-setting Pier #1 (both bridges)	Lump		

ACI-1103 (6)

1736
208

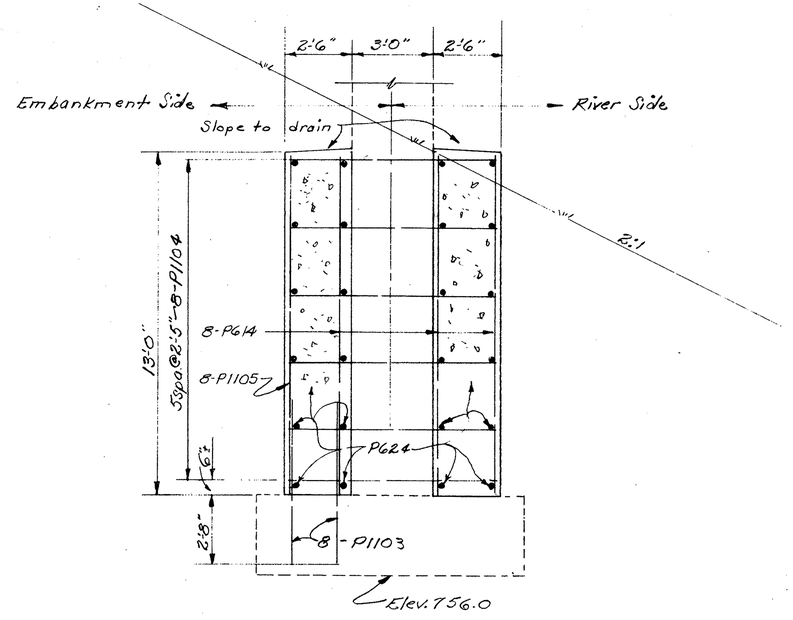
ATB-1-15.73
ASHTABULA Co

REINFORCING STEEL LIST

Mark	No	Length	Weight	Shp
P1103	32	6'-0"	1,020	S
P1104	96	7'-8"	3,910	S
P1105	16	12'-10"	1,091	S
P614	48	12'-10"	925	S
P624	48	18'-2"	1,310	S

EXPLANATORY NOTE:

After further consideration it was decided that the buttresses as shown on sheet No. 173a were not necessary.



SECTION A-A

NOTE: P1104 bars shown in dowel holes thru existing wall shall be grouted according to S-23 of the Construction and Material Spec's. P1103 bars shown in dowel holes in existing footing shall be grouted with non-shrinking portland cement grout.

PROPOSED WORK

1. Perform necessary excavation
2. Pull pier stem to vertical position, cutting existing bars if necessary.
3. Drill dowel holes and construct repairs as shown on this sheet.

This sheet supersedes sheet 173d, 11-12-58
This sheet superseded by sheet 173c (3-13-59)

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

SUPPLEMENTAL DETAILS PIER No. 1 - BOTH BRIDGES BRIDGE No. ATB-1-1583 SR. 1 over ASHTABULA RIVER

Ashtabula County

Sta. 158+88.49 to 162+65.09

D.C.H.		E.J.S.	11-14-58

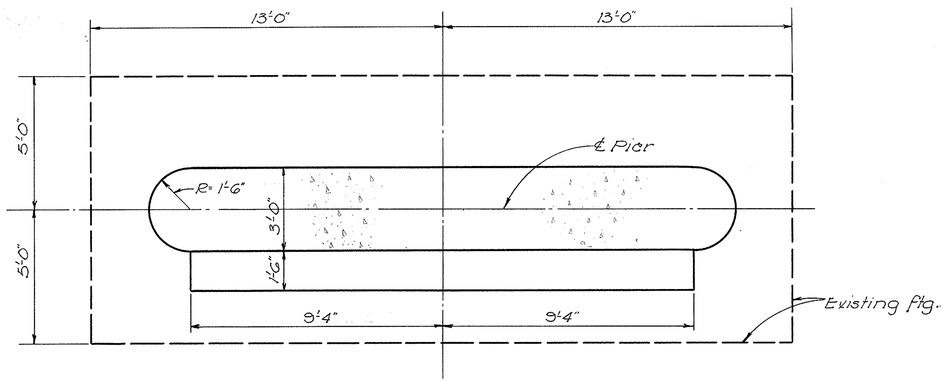
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	ACI-1103(16)	

173c / 202

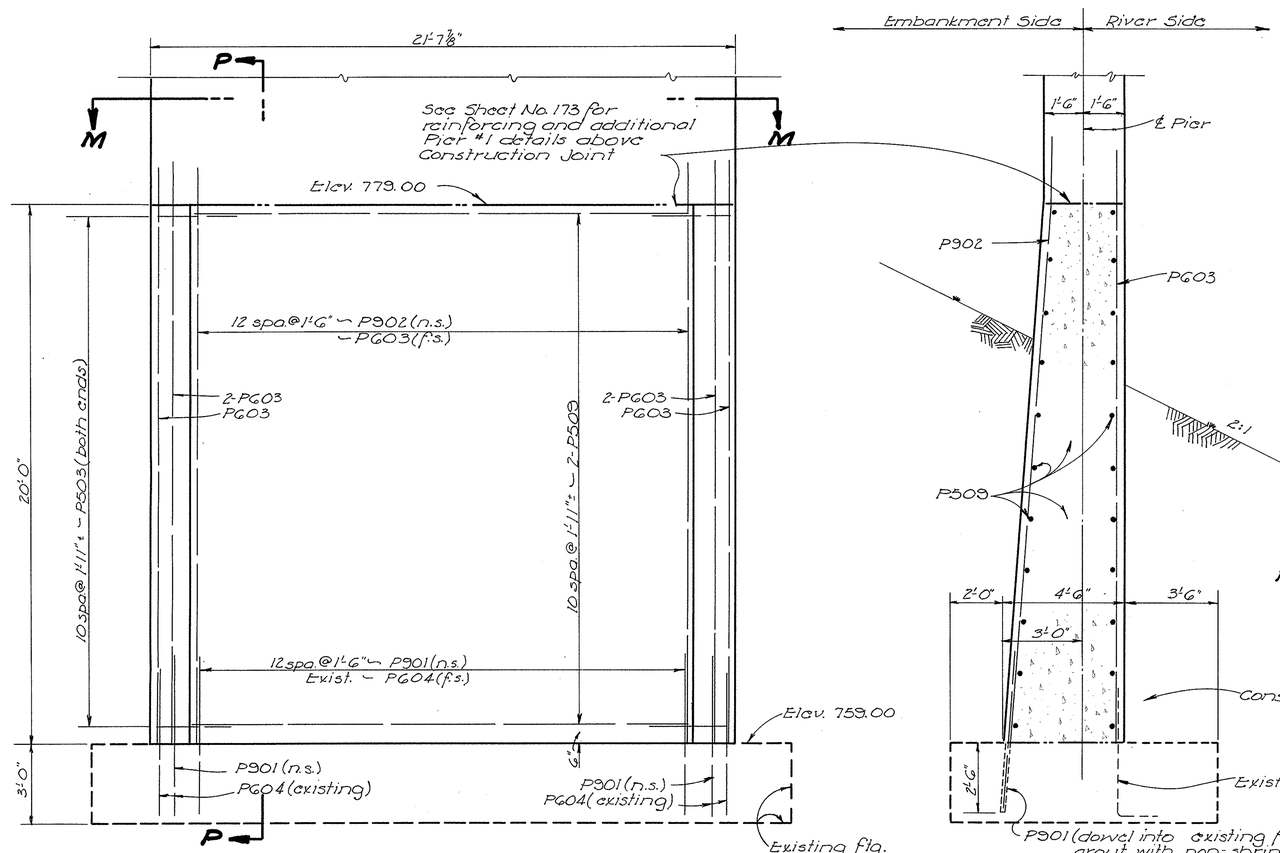
ATB-1-15.73-19.20
ASHTABULA COUNTY

ESTIMATED QUANTITIES

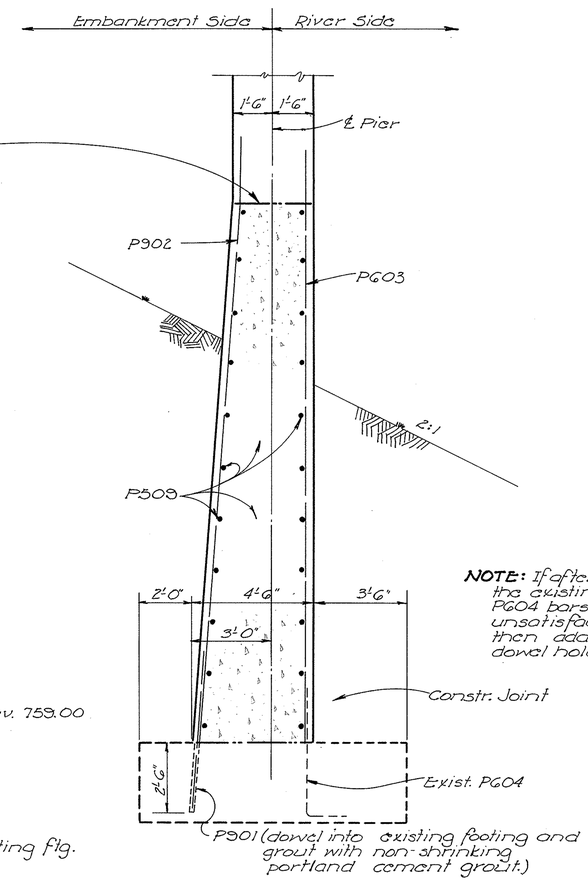
Item	Total	Unit	Description
E-2	104	Cu.Yd.	Unclassified excavation
E-2	Lump	Sum	Cofferdams, cribs and sheeting
S-1	200	Cu.Yd.	Class "C" concrete, pier caps & columns
S-4	7,919	Lbs.	Reinforcing steel
S-22	Lump	Sum	Removal of portions of existing structure
S-23	75	Lin.Ft.	Dowel holes



SECTION M-M



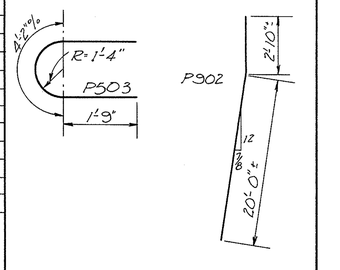
PART ELEVATION



SECTION P-P

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.	Bending Diagrams
P901	30	5'-4"	544	St.	
P902	26	22'-10"	2018	Bt.	
P603	38	21'-11"	1251	St.	
P606	52	20'-5"	1595	St.	
P610	12	18'-3"	329	St.	
P503	80	7'-8"	640	Bt.	
P508	36	18'-8"	701	St.	
P509	44	18'-4"	841	St.	



NOTE: If after the removal of the existing pier stem the P604 bars are found to be in unsatisfactory condition, then additional dowels and dowel holes shall be provided.

EXPLANATORY NOTE:
After Piers #1 (both North Bridge and South Bridge) had been built and the embankment placed and compacted, these piers tipped eastward due to unexpected horizontal earth pressure against the pier wall. This force caused the wall to crack above the footings, necessitating repair.
After further consideration of the risk involved in re-setting the piers and performing the repairs as shown on Sheet 173b, it was decided that re-building the piers as shown hereon was advisable.

PROPOSED WORK
1. Perform necessary excavation.
2. Remove existing piers above footings.
3. Drill dowel holes and construct pier stem as shown on this sheet.

This sheet supersedes sheet 173b, 3-13-59.

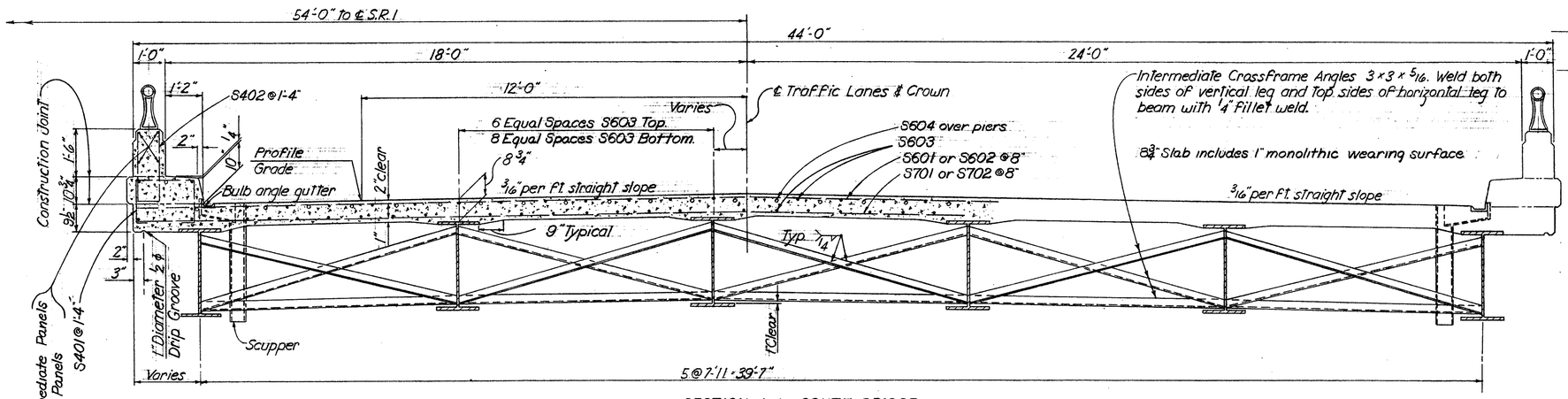
NOTE:
Use this sheet in conjunction with Sheet 173. Reinforcing steel and Estimated Quantities are figured between the top of footing and the bottom of pier cap for both bridges.

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

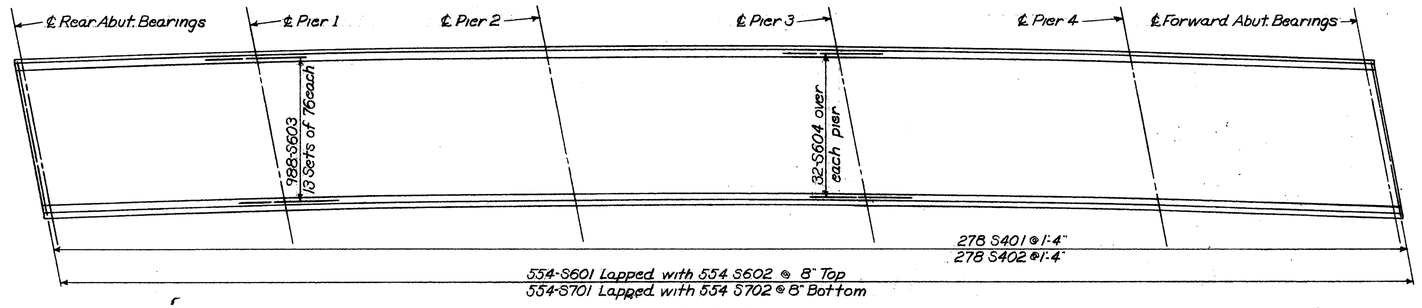
SUPPLEMENTAL DETAILS PIER No. 1 BOTH BRIDGES

BRIDGE No. ATB-1-1583
S.R. 1 OVER ASHTABULA RIVER
STA. 158+88.49
ASHTABULA COUNTY TO 162+65.09

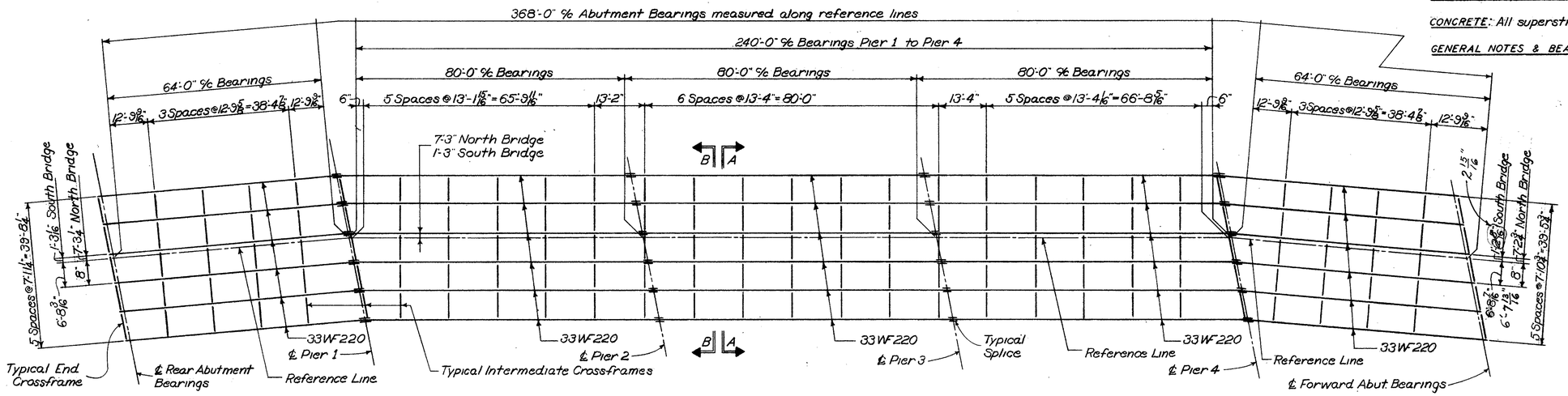
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	D.C.H.	Rice	F.H.R.	BFG	3-26-59	



SECTION A-A SOUTH BRIDGE
SECTION B-B NORTH BRIDGE



SLAB PLAN



PLAN OF STEEL FRAMING

NOTE: Facia of deck shall be placed on curve. Beams are parallel to reference lines and are spaced as shown. Refer to Sheet 171 for schematic diagram of reference lines.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

174
202

ATB-1-15.73-19.20

NOTES:

CAMBERING of beams is required in accordance with the following table:

DEFLECTION AND CAMBER

	OUTSIDE BEAMS		INSIDE BEAMS	
	END SPANS	INT. SPANS	END SPANS	INT. SPANS
Deflection due to weight of steel.	1/16	1/8	1/16	1/8
Deflection due to remaining dead load.	3/16	1/16	3/16	1/16
Convexity reqd for vertical curve.	-1/4	-5/16	-1/4	-5/16
Sum of deflection and convexity.	1/8	1/4	1/8	1/4
Required Camber	0	0	0	0

BEAM SPLICE WELDING PROCEDURE

1. Raise end of beam at first pier 3 5/8".
2. Butt-weld the beam flanges and web at the second pier using the following sequence: make one pass on each flange, then one on the web; repeat until the welds are completed. Weld the bottom and top moment plates.
3. Make splice at third pier in the same manner, raising the end of the beam at fourth pier 3 5/8".
4. After splices are completed at the second and third piers, lower the end of the beams at the first and fourth piers to final position.
5. Erect cross frames in second, third and fourth spans.
6. Make splice at first and fourth piers in the same manner, raising the end of the beam 1 5/8" at the abutment.
7. After splices are completed at the first and fourth piers, lower the end of the beams at the abutments to final position.

BEARINGS: See RB-1-55 for the following: R100 Abutments.
B200 Pier 2
R200 Pier 1, & 4.
For Pier 3, See revised Details, sht. 174a

END CROSS FRAMES, END FINISH, GUTTERS
SCUPPERS & CURB PLATE DETAILS: See CSB-2-56 Sheet 2 & 3 of 6.

RAILING: See AR-1-57 Type "A"

RAILING POST, PARAPET EXPANSION JOINT, & SCUPPER SPACING: See Sheet 171.

CONCRETE: All superstructure concrete shall be class "C".

GENERAL NOTES & BEAM SPLICE DETAILS: See Sheet 169.

MOMENT PLATE SIZE

	PIERS 1 & 4	PIERS 2 & 3
TOP PLATE	13 x 13/16 x 24'-0"	14 x 3/4 x 27'-0"
BOTTOM PLATE	18 x 1/16 x 24'-0"	17 x 11/16 x 27'-0"
	12'-0" 12'-0"	13'-6" 13'-6"

NOTE: Special care shall be used in placing moment plates at Piers 1 & 4 to insure space for welding.

Rev. 10-29-58
Rev. 11-14-58

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

SUPERSTRUCTURE
BRIDGE No. ATB-1-1583
S.R.1 OVER ASHTABULA RIVER
ASHTABULA CO. S.R.1

STA. 158+88.49
TO 162+65.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.M.H.	M.M.N. R.M.H.	M.M.N. R.M.H.	R.H.B.	G.C.B.	10-14-57	6-26-58

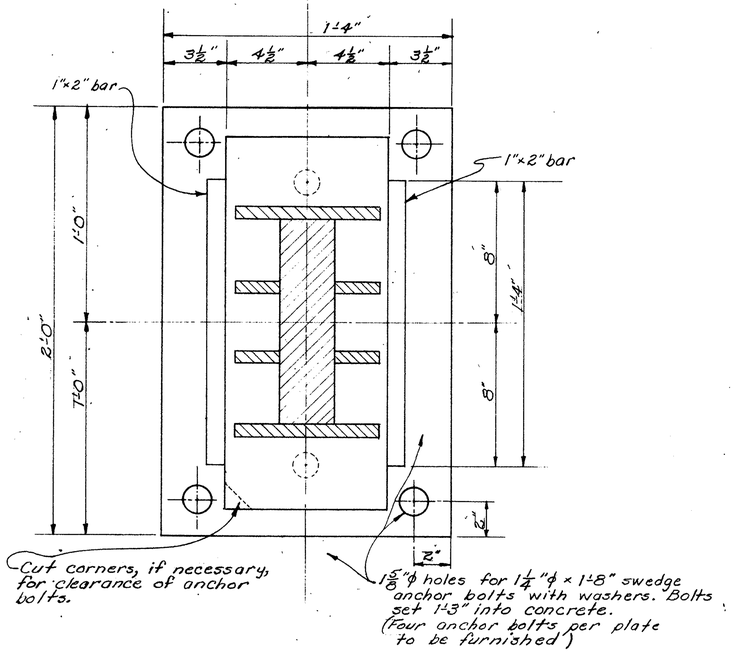
FREDERICK POST CO., N. J.

ACI-1103(6)

ATB-1-15.73

ASHTABULA C°

1740
202



SECTION B-B

ADDITIONAL QUANTITIES

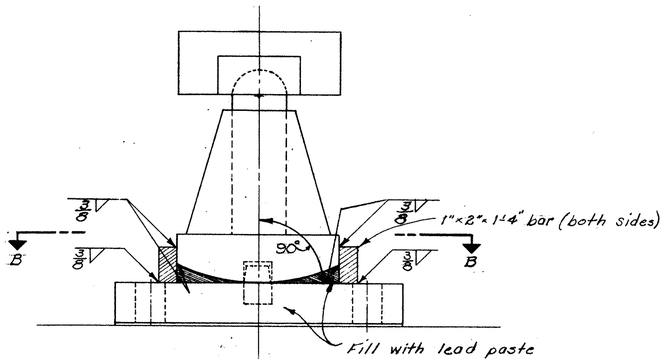
Item	Total	Unit	Description
S-7	610	lbs	Structural steel
S-8	Lump	Sum	Painting of structural steel
Special	Lump	Sum	Lead paste

PROPOSED WORK

1. Drill anchor bolt holes in base plate of (12) R-200 rockers.
2. Weld (2)- 1"×2"×1'-4" bars to rocker and base plate, maintaining 90° between rocker and plate.
3. Fill void between plate and rocker with lead paste as shown on details.

EXPLANATORY NOTE

After failure of piers 1, a re-examination of piers 2 indicated it to be adviseable to fix the superstructures at both piers 2 & 3. The details shown here were necessary because the rockers for piers 3 had been fabricated.



ELEVATION

NOTE:
Alteration of (12) R-200 Rockers, as shown hereon, required.

This Sheet Added 11-14-58.

PROJECT No. 593 (57)

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

ALTERATION OF R-200 ROCKERS FOR PIERS No. 3.

BRIDGE No. ATB-1-1583
S.R. 1 over ASHTABULA RIVER
Sta. 158+88.49
Ashtabula County to 162+65.09

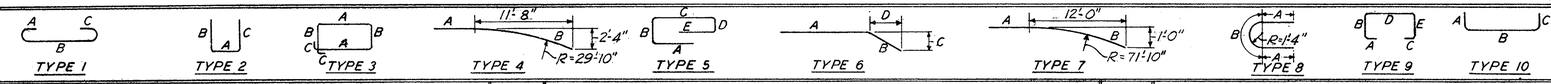
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	BCH		FHR		11-14-58	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

175
202

ATB-1-15.73-19.20

REINFORCING STEEL BAR SCHEDULE



ABUTMENTS

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R401	16	12'-5½"	Str.	Included with Railing for payment					
R402	16	12'-9½"	Str.						
A401	112	6'-4"	2	8	2'-10"	2'-10"			474
A501	32	7'-4"	3	1'-10"	1'-4"	6			245
A502	8	7'-3"	3	1'-9½"	1'-4"	6			60
A503	8	7'-2"	3	1'-9"	1'-4"	6			60
A504	8	7'-1"	3	1'-8½"	1'-4"	6			59
A505	8	7'-0"	3	1'-8"	1'-4"	6			58
A506	8	6'-10"	3	1'-7"	1'-4"	6			57
A507	8	6'-8"	3	1'-6"	1'-4"	6			56
A508	8	6'-5"	3	1'-4½"	1'-4"	6			54
A509	8	6'-2"	3	1'-3"	1'-4"	6			51
A510	8	5'-11"	3	1'-1½"	1'-4"	6			49
A511	8	5'-8"	3	1'-0"	1'-4"	6			47
A512	8	5'-4"	3	10"	1'-4"	6			44
A513	8	13'-8½"	Str.						114
A514	8	14'-0½"	Str.						117
A515	8	13'-7"	7	1'-6"	12'-1"				113
A516	8	14'-3"	7	2'-2"	12'-1"				119
A517	80	3'-6"	Str.						292
A518	32	3'-1"	Str.						103
A519	32	1'-10"	Str.						61
A520	64	7'-9"	Str.						517
A521	64	8'-0"	Str.						534
A522	16	6'-0"	Str.						100
A523	16	4'-11"	Str.						82
A524	64	10'-5"	2	1'-2"	4'-9"	4'-6"			696
A525	40	8'-10½"	Str.						370
A526	20	7'-0"	Str.						146
A527	16	15'-10½"	Str.						265
A528	8	14'-0"	Str.						117
A529	32	3'-5½"	Str.						115
A530	16	6'-2"	Str.						103
A531	16	10'-6"	Str.						175
A532	16	10'-9"	Str.						179
A533	48	4'-2"	10	6	3'-2"	6			209
A534	32	24'-0"	Str.						801
A535	36	6'-0"	1	7	5'-5	—			225
A536	172	2'-7"	Str.						463
A537	244	5'-5"	2	2'-0"	3'-5"	—			1379
A538	128	22'-8"	Str.						3037
A539	20	6'-7"	Str.						137
A540	8	13'-7"	Str.						113
A601	172	6'-3"	10	8	5'-7"	—			1615
A602	172	15'-5"	5	4'-5"	1'-5"	5'-9"	11"	2-11"	3984
						TOTAL WEIGHT			17,600

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R401	368	14'-1"	Str.	Included with Railing for payment					
R402	32	18'-8"	Str.						
S401	1112	5'-0"	9	5	1'-3"	5	1'-8"	1'-3"	3714
S402	1112	5'-0"	2	8	2'-2"	2'-2"			3714
S601	1108	25'-0"	Str.						41605
S602	1108	21'-6"	Str.						35781
S603	1976	30'-2"	Str.						89543
S604	256	32'-0"	Str.						12304
S701	1108	25'-0"	Str.						56619
S702	1108	21'-10"	Str.						49440
						TOTAL WEIGHT			292,600

PIERS

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
P501	32	20'-11½"	Str.						700
P502	32	17'-6"	Str.						584
P503	352	7'-4"	8	1'-7"	4'-2"				2691
P504	224	8'-0"	2	2'-8"	2'-8"	2'-8"			1869
P505	80	6'-11"to11'-10"	2	2'-8"	2½"to4'-7"	2'-8"to4'-7"	+		782
P506	64	12'-6"to14'-5"	2	2'-8"	4'-11"to5'-8"	4'-11"to5'-8"	++		884
P507	56	16'-4"	2	2'-8"	6'-10"	6'-10"			954
P508	320	18'-8"	Str.						6231
P601	32	11'-10½"	6	1'-11"	9'-11½"	4'-0"	10'-10		571
P602	16	21'-7"	Str.						519
P603	256	21'-11"	Str.						8428
P604	256	5'-4"	10	8	4'-8"	—			2051
P605	80	27'-0"	1	8	25'-8"	8			3244
P606	104	20'-5"	Str.						3189
P607	52	20'-9"	Str.						1621
P608	26	21'-1"	Str.						823
P609	26	21'-5"	Str.						836
P610	24	18'-3"	Str.						658
P611	12	18'-8"	Str.						336
P612	6	19'-0"	Str.						171
P613	6	19'-4"	Str.						174
P801	216	11'-10"	1	1'-1"	9'-8"	1'-1"			6823
P1001	112	23'-1½"	Str.						11145
P1101	48	25'-11½"	2	2'-8"	23'-3½"				6620
P1102	64	23'-3½"	Str.						7919

SPIRAL BARS

MARK	NUMBER	LENGTH	PITCH	Nº TURNS	CORE DIA.	WEIGHT
					TOTAL WEIGHT	69,800

+ 2ea. Pier Vary By 7¾"
++ 2ea. Pier Vary By 3"

REPLACEMENT BARS

MARK	Nº	LENGTH	TYPE	WEIGHT
RE401	11	5'-0"	2	
RE502	2	5'-7"	Str.	
RE601	11	5'-11"	Str.	
RE701	6	6'-3"	Str.	
RE801	1	7'-7	1	
RE1001	1	7'-3"	Str.	
RE1101	1	7'-7"	Str.	

NOTES

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has been previously tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in section S-4.02 need not be furnished and replacement bars will not be required.

BAR SIZE: Bar size is indicated in the bar mark. The first digit where three digits are used and the first two where four are used, indicates the bar size number. For example, A401 is a Nº 4 bar and A1102 is a Nº 11 bar.

LENGTH OF SPIRALS shown in the steel list for the spiral bars is the distance from the top of footing to the bottom of the pier cap.

Nº OF TURNS shown in the steel list for the spiral bars is the length divided by the pitch, plus three (3) turns (total number of closed coils), expressed to the nearest whole number. One and one half (1½) closed coils shall be provided at ends of each spiral unit.

DEFORMATIONS: Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item S-4.

SPACERS: Four (4) steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. foot of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. foot, will be paid for as reinforcing steel and is included in the tabulated quantity for spiral bars.

BAR HOOKS: For detail dimensions of 180° and 90° hooks for bar types 1, 3, 9 & 10, see section S-4.05 of Specifications.

GENERAL NOTES: See sheet 169.

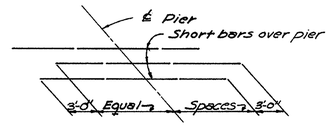


DIAGRAM SHOWING STAGGER OF SHORT BARS OVER PIERS

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CONSULTING ENGINEERS
MANSFIELD, OHIO

REINFORCING STEEL LIST

BRIDGE Nº ATB-1-1583
S.R.1 OVER ASHTABULA RIVER
ASHTABULA CO. S.R.1

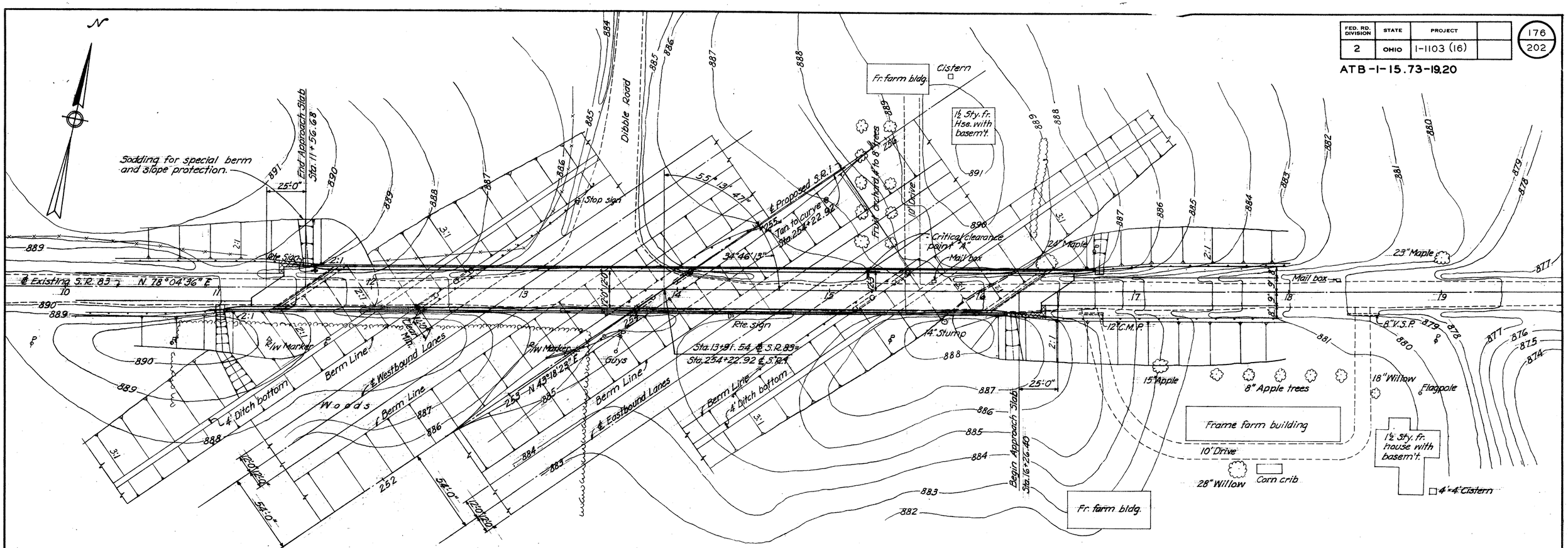
STA. 158+88.49
TO 162+65.09

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	J.K.		R.H.B.	GCB	11-14-77	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

176
202

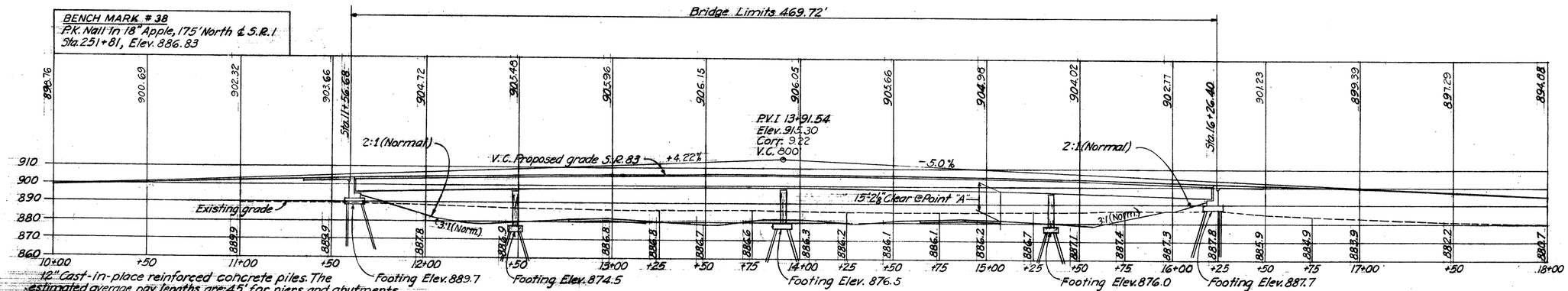
ATB-I-15.73-19.20



FOUNDATION SOUNDINGS

Foundation design and foundation quantities are based on a study of test borings and tests made on soil samples taken at the site. This information may be inspected in the office of Interstate Projects in Columbus or in the Division office, but the State assumes no responsibility for the accuracy thereof.

CURVE DATA
P.I. 238+55.65
Δ = 27°32'20" Lt.
D = 0°28'
T = 3008.74
P.C. = 208+44.91
P.T. = 267+46.10 (Back)
= 268+25.96 (Ahead)
L = 5901.19
No Superelevation



PROPOSED STRUCTURE

TYPE: Continuous steel girder with reinforced concrete deck and substructure.
SPANS: 86'-7" - 144'-4" - 144'-4" - 86'-7"
ROADWAY: 24'-0" f/f 2'-0" Safety Curbs.
LOAD FREQUENCY: C.F.130(51)
SKEW: 55°13'47" L.F.
WEARING SURFACE: ¾" Monolithic Concrete
APPROACH SLABS: 25'-0" Long
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC (1975) 980

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CONSULTING ENGINEERS
MANSFIELD, OHIO

SITE PLAN

BRIDGE Nº ATB-I-1764
S.R.1 UNDER S.R. 83
ASHTABULA CO. S.R.1
SCALE: 1 IN. = 30 FT. STA. 254+22.92

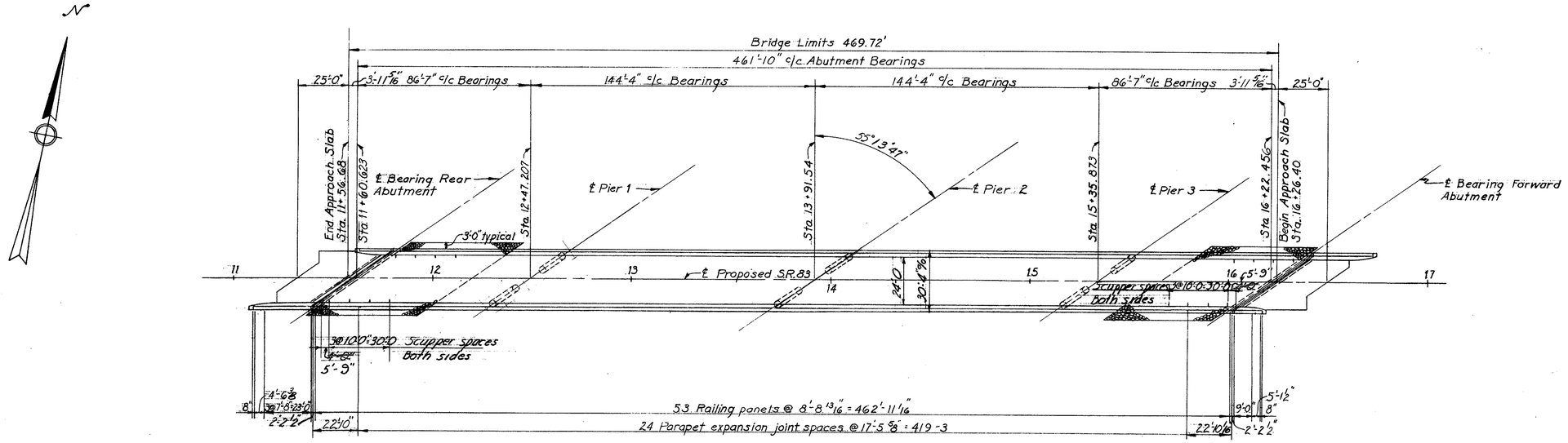
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C.W.F.	C.W.F. M.M.N.	C.W.F. M.M.N.	D.R.F.	G.C.B.	7-25-57	

FREDERICK POST CO., N. J.

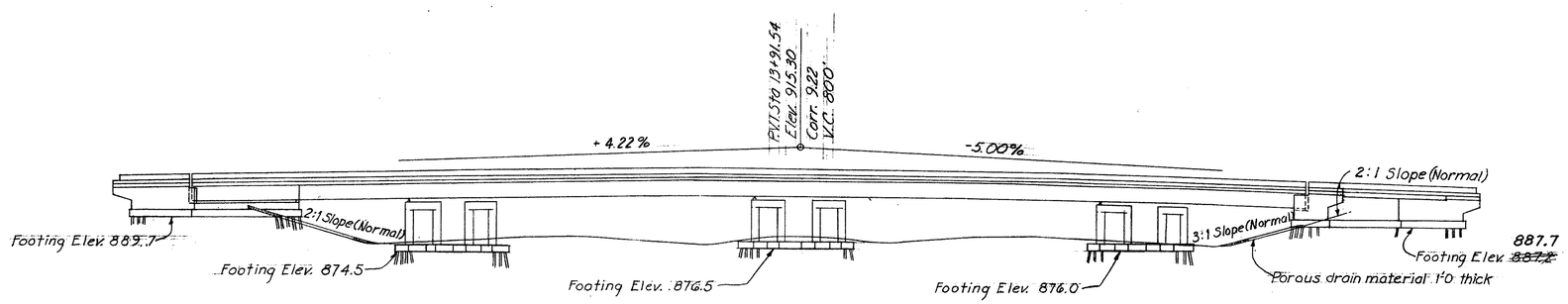
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

177
202

ATB-1-15.73-19.20



PLAN



ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR	ABUTS	PIERS	GENERAL
E 2	654	Cu.Yds.	Unclassified excavation	——	358	296	——
E 2	Lump	Sum	Cofferdams, cribs and sheeting	——	——	——	Lump Sum
				——	——	——	——
S 1	430	Cu.Yds.	Class "C" concrete, superstructure	430	——	——	——
S 1	81	Cu.Yds.	Class "C" concrete, pier caps and columns	——	——	81	——
S 1	154	Cu.Yds.	Class "E" concrete, abutment above footings	——	154	——	——
211 S 1	~~133~~	Cu.Yds.	Class "E" concrete footings	——	~~25~~ 103	108	——
S 4	143000	Lbs.	Reinforcing steel 99,200 →	~~15,800~~	~~99,200~~	28,000	——
S 7	571,000	Lbs.	Structural steel	571,000	——	——	——
S 8	571,000	Lbs.	Field painting of structural steel	571,000	——	——	——
S 14	1021	Lin.Ft.	Railing (aluminum rail and supports, concrete parapet and guard rail connectors.)	1021	15,800	——	——
S 16	Lump	Sum	First test pile	——	——	Lump Sum	——
S 18	6075	Lin.Ft.	12" cast-in-place reinforced concrete piles	——	1800	2475	——
S 29	58	Cu.Yds.	Porous backfill	——	58	——	——
S 29	163	Cu.Yds.	Porous drains on embankment slopes	——	——	——	165

NOTES

LOADING: C.F 130 (51)

PILES: shall be driven to a minimum bearing capacity of 40 tons per pile for the abutments and 36 tons per pile for the piers

GENERAL NOTES: See sheet 169

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CONSULTING ENGINEERS
MANSFIELD, OHIO

GENERAL PLAN

BRIDGE Nº ATB-1-1764
S.R. 1 UNDER S. R. 83
ASHTABULA CO. S.R. 1
STA. 254 + 22.92

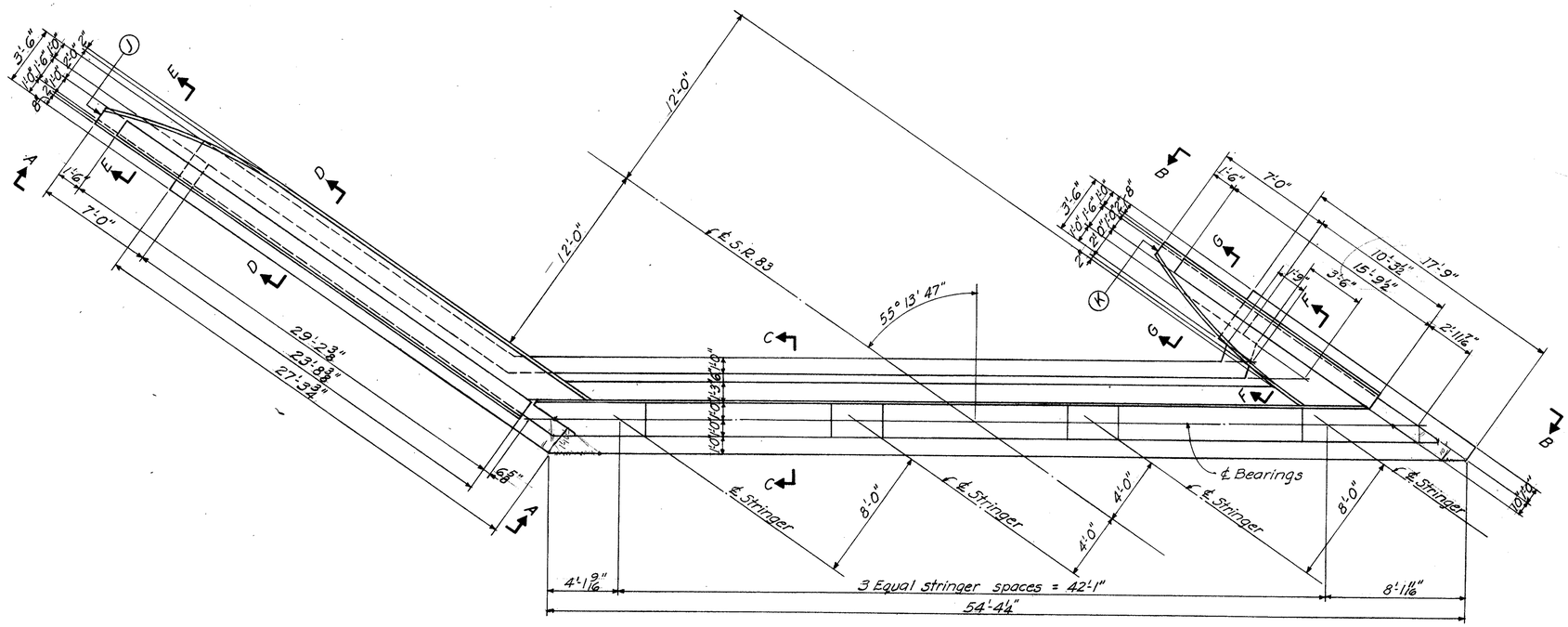
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.W.F.	E.R.J.	E.R.J.	D.R.F.	RJT	11-14-57	1-8-58 2-28-58 3-24-58

FREDERICK POST CO., N. J.

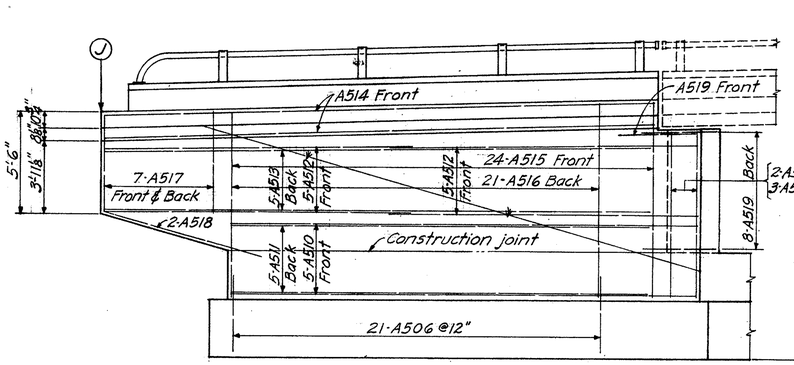
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

178
202

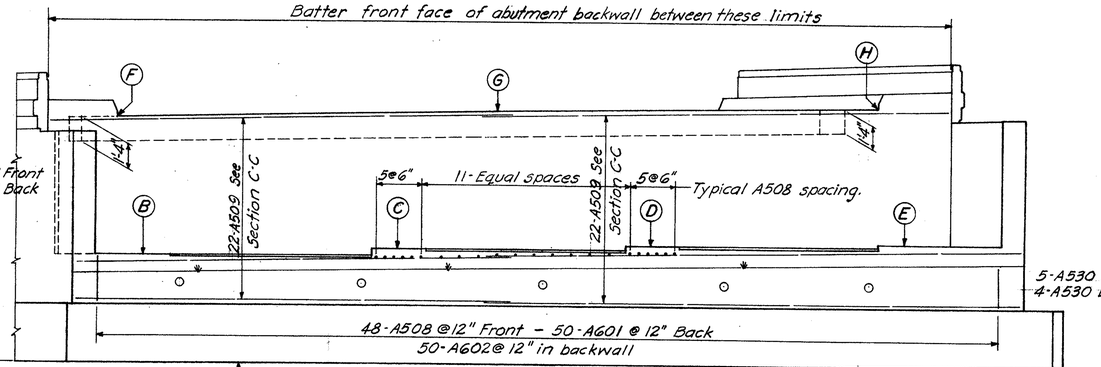
ATB-1-15.73-19.20



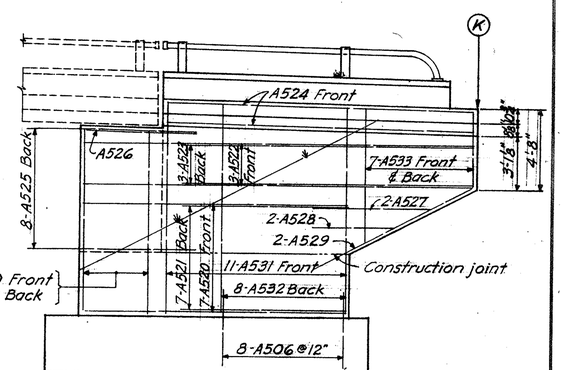
PLAN



ELEVATION A-A



ABUTMENT ELEVATION



ELEVATION B-B

NOTE: Piles are omitted from these views.

NOTE: See sheet 179 for remainder of abutment details.

TABLE OF ELEVATIONS

LOCATION	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓙ	Ⓚ
Rear Abutment	889.7	895.680	896.082	896.344	896.466	903.27	~~903.68~~ 903.96	904.06	903.21	904.61
Forward Abutment	887.7	893.745	894.236	894.588	894.795	901.32	~~901.87~~ 902.24	902.38	901.00	902.81

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CONSULTING ENGINEERS
MANSFIELD, OHIO

ABUTMENTS

BRIDGE Nº ATB-1-1764
S.R. 1 UNDER S.R. 83
ASHTABULA CO. S.R. 1
STA. 254 + 22.92

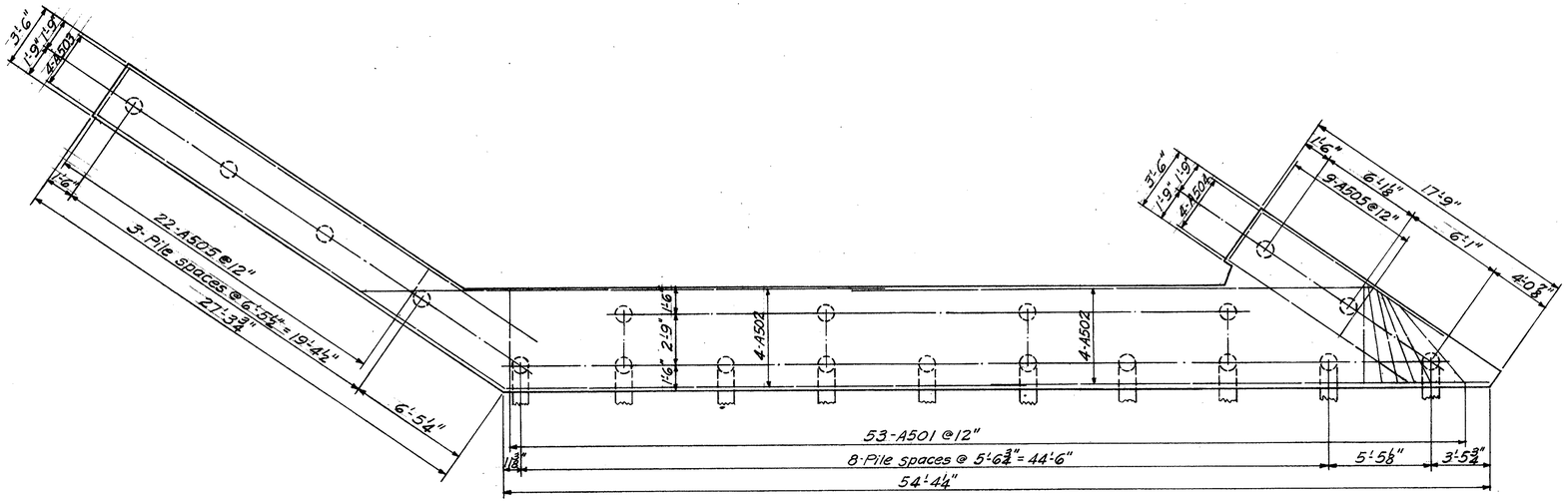
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DRF	CWF	CWF	DRF	RJT	1-14-57	2-28-58

FREDERICK POST CO., N. J.

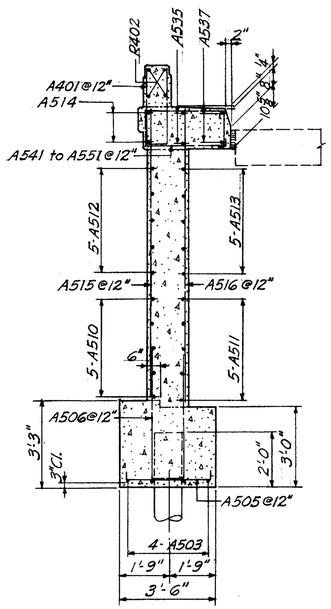
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

179
202

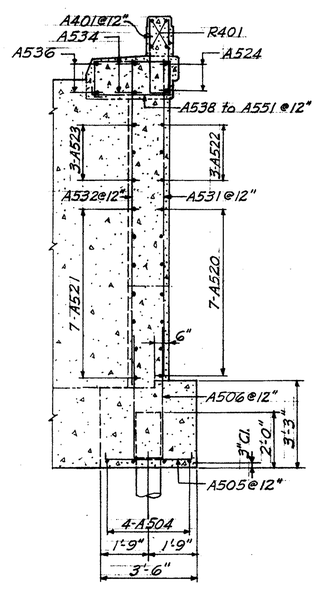
ATB-15.73 - 19.20



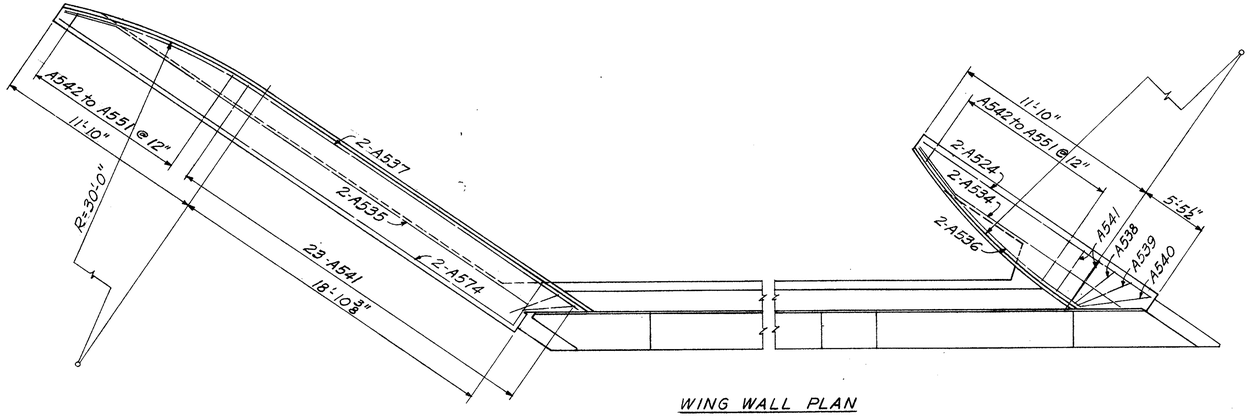
FOOTING PLAN



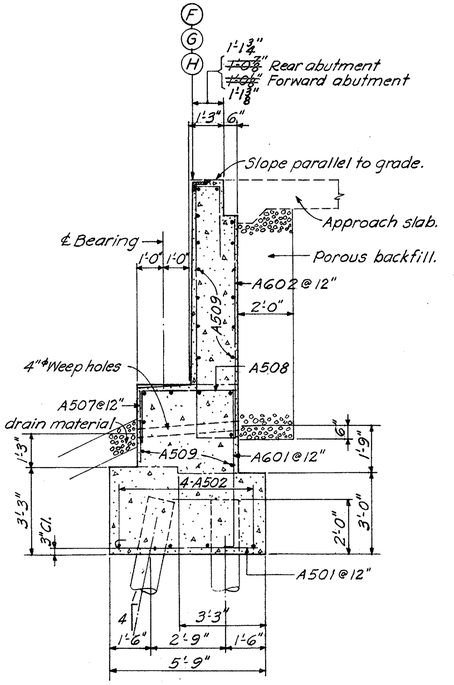
SECTION D-D



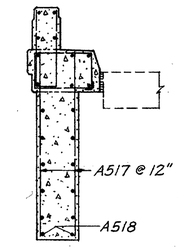
SECTION F-F



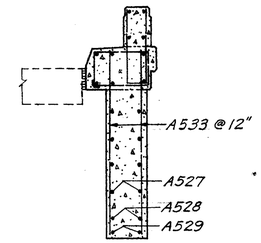
WING WALL PLAN



SECTION C-C



SECTION E-E



SECTION G-G

NOTES:

CONCRETE: All abutment concrete shall be Class "E" except parapets which shall be Class "C."

RAILING: See AR-1-57 and sheet 177.

STANDARD DETAILS & GENERAL NOTES: See sheet 169.

See sheet 178 for remainder of abutment details.

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

ABUTMENTS

BRIDGE Nº ATB-1-1764
S.R. 1 UNDER S.R. 83
ASHTABULA CO. S.R. 1
STA. 254 + 22.92

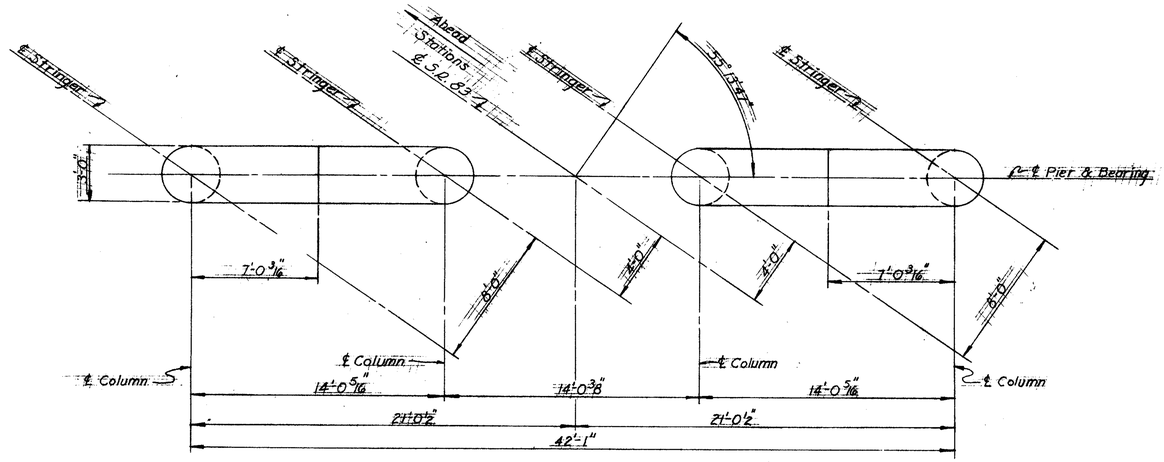
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DRF	CWF	CWF	DRF	RJT	11-14-57	3-24-58

FREDERICK POST CO., N. J.

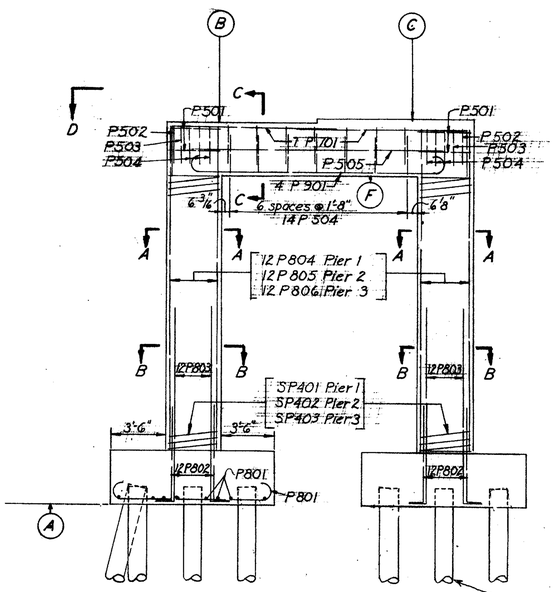
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

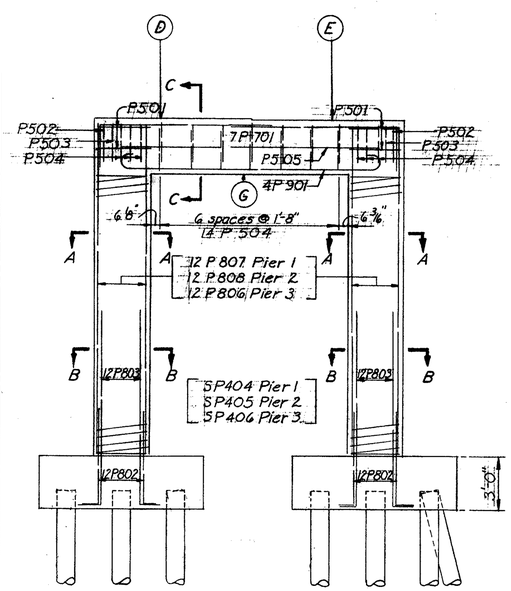
180
202

ATB-1-15.73-19.20



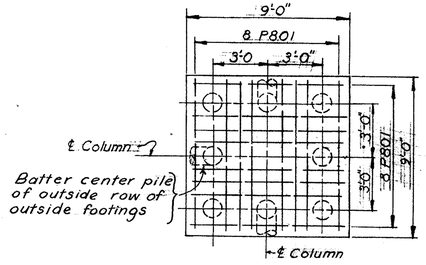
PLAN



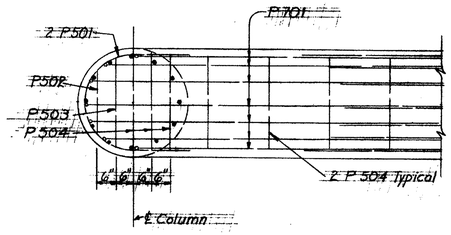


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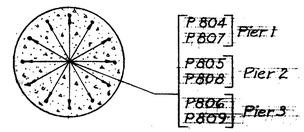
ELEVATION



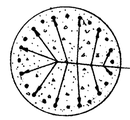
PLAN OF FOOTING



VIEW D

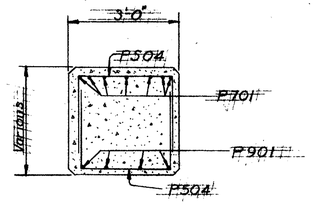


SECTION AA



For bars not marked see section A-A

SECTION BB



SECTION CC

TABLE OF ELEVATIONS

Location	A	B	C	D	E	F	G
Pier 1	874.5	897.213	897.207	897.060	896.773	894.207	893.773
Pier 2	876.5	897.454	897.639	897.684	897.589	894.454	894.589
Pier 3	876.0	895.512	895.889	896.126	896.222	892.512	893.126

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MANSFIELD, OHIO

PIERS

BRIDGE Nº ATB-1-1764
S.R. 1 UNDER S.R. 83
ASHTABULA CO. S.R. 1
STA. 254 + 22.92

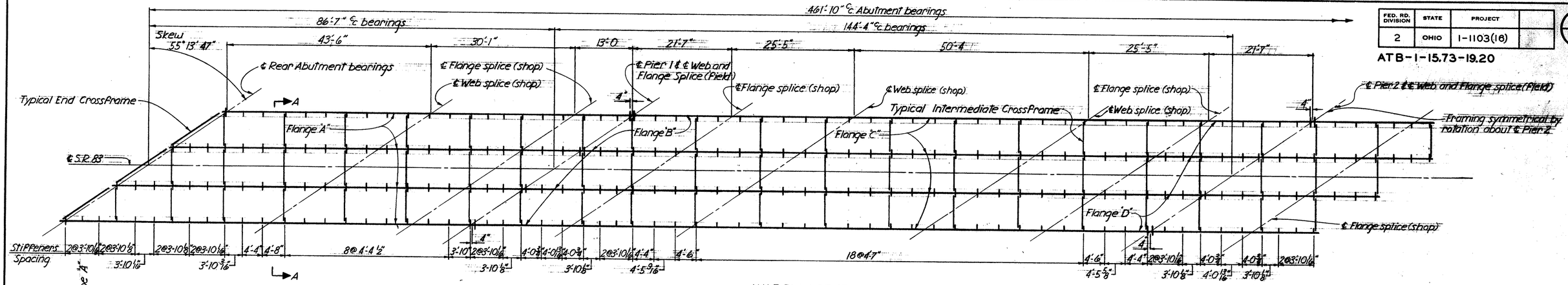
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E.F.C.	E.R.J.	E.R.J.	R.H.B.	RJT	11-14-57	

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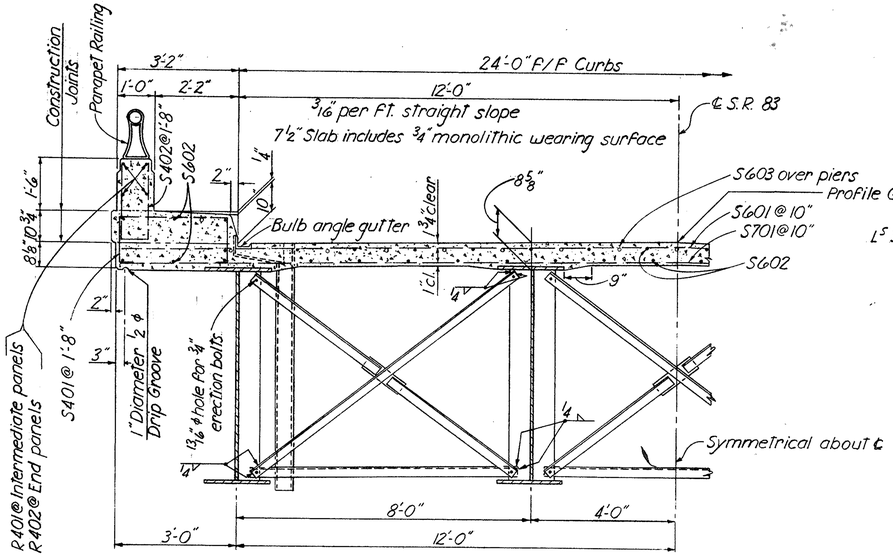
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(18)	

181
202

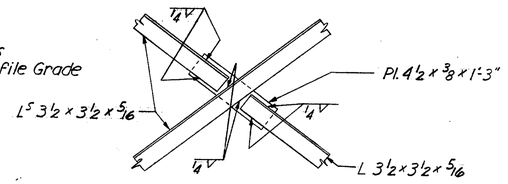
ATB-I-15.73-19.20



HALF PLAN OF STEEL FRAMING



SECTION A-A



CROSSFRAME DETAILS

GIRDER MATERIALS	
Web	70 × 7/16
Flange "A"	16 × 11/16
Flange "B"	22 × 1 5/16
Flange "C"	22 × 1 1/16
Flange "D"	22 × 1⅞
Intermediate Stiffeners	7 × 7/16
End Stiffeners	7 × ⅝
Pier Bearing Stiffeners	7 × ⅝

NOTES:

CAMBERING of girders is in accordance with the following table:

DEFLECTION AND CAMBER				
	OUTSIDE BEAMS		INSIDE BEAMS	
	END SPANS	MIDDLE SPANS	END SPANS	MIDDLE SPANS
Deflection due to weight of steel	0	3/8	0	3/8
Deflection due to remaining dead load	1/16	1	1/16	13/16
Convexity required for vertical curve	1 5/16	3 5/8	1 5/16	3 5/8
Sum of deflection and convexity	1 3/8	5	1 3/8	4 13/16
Required Camber	1 3/8	5	1 3/8	4 13/16

GIRDER SPLICE WELDING PROCEDURE:
1 Raise end of girder at third pier 7 13/16"
2 Butt-weld girder flanges and web at second pier using the following sequence; make one pass on each flange, then one on the web, repeat until all welds are completed. Weld bottom plate over shoe.
3 Lower end of girder to final position at third pier.
4 Make splice at first & third piers in the same manner, raising the end of the girder 1 5/8" at the abutment.
5 After splices are completed at first & third piers, lower the end of the girders at the abutments to final position.

BEARINGS: See RB-1-55 for the following: R-125 at abutments
R-275 at piers 1 & 3
B-300 at pier 2

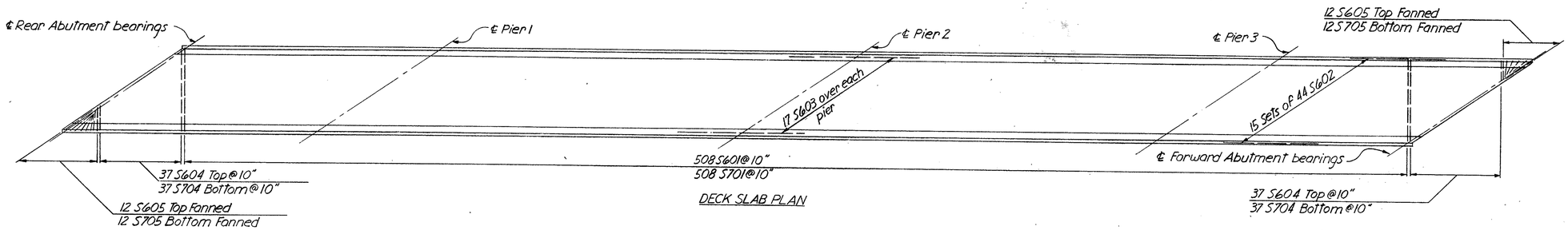
END CROSS FRAMES, END FINISH, GUTTERS, SCUPPERS & CURB PLATE DETAILS: See CSB-2-56 sheets 2 & 3 of 6
Use 4 × 4 × ⅜ angles in place of 4 × 4 × 5/16 angles for end crossframes.

RAILING: See AR-1-57

RAILING POST, PARAPET EXPANSION JOINT, & SCUPPER SPACING: See sheet 177

CONCRETE: All superstructure concrete shall be Class "C"

GIRDER DETAILS & GENERAL NOTES: See Sheet 169



DECK SLAB PLAN

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

SUPERSTRUCTURE

BRIDGE № ATB-I-1764
S.R. 1 UNDER S.R. 83
ASHTABULA CO. S.R. 1
STA. 254 + 22.92

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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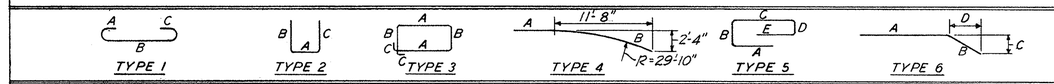
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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

182
202

ATB-1-15.73-19.20

REINFORCING STEEL BAR SCHEDULE



ABUTMENTS

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R401	8	15'-5"	Str.	Included with Railing for payment.					
R402	8	28'-10"	Str.						
A401	92	6'-6"	2	8"	2'-11"	2'-11"			399
A501	106	6'-0"	1	7"	5'-5"	—			663
A502	16	29'-0"	Str.						484
A503	8	27'-2"	Str.						227
A504	8	13'-6"	Str.						113
A505	62	4'-2"	10	6"	3'-2	6"			270
A506	58	12'-1"	2	1'-2"	4'-7"	4'-4"			731
A507	96	2'-7"	Str.						258
A508	118	5'-4"	2	3'-5"	2'-7"				656
A509	88	27'-3"	Str.						2229
A510	10	25'-7"	Str.						267
A511	10	23'-2"	Str.						242
A512	20	17'-4"	Str.						362
A513	10	30'-2"	6	27'-3"	2'-11"	1'-0"	2'-9"		315
A514	4	30'-4"	Str.						127
A515	48	10'-2"	Str.						509
A516	42	11'-1"	Str.						485
A517	28	5'-6"	Str.						161
A518	14	9'-2"	Str.						134
A519	18	4'-10"	Str.						91
A520	14	14'-8"	Str.						214
A521	14	9'-3"	Str.						135
A522	6	21'-8"	Str.						136
A523	6	16'-6"	6	13'-7"	2'-11"	1'-0"	2'-9"		103
A524	4	16'-11"	Str.						71
A525	16	5'-3"	Str.						88
A526	2	6'-4"	Str.						13
A527	4	7'-0"	Str.						29
A528	4	5'-0"	Str.						21
A529	4	9'-8"	Str.						40
A530	18	9'-11"	Str.						186
A531	22	11'-6"	Str.						264
A532	16	11'-9"	Str.						196
A533	14	4'-6" to 7'-6"	Str.	2 each vary by 6"					88
A534	4	13'-3"	Str.						55
A535	4	28'-3"	Str.						118
A536	4	14'-7"	4	2'-7½"	11'-11½"				61
A537	4	33'-3"	4	21'-3½"	11'-11½"				139
A538	2	9'-2"	3	2'-10"	1'-3"	6"			19
A539	2	9'-10"	3	3'-2"	1'-3"	6"			21
A540	2	11'-2"	3	3'-10"	1'-3"	6"			23
A541	54	8'-10"	3	2'-8"	1'-3"	6"			497
A542	4	8'-9"	3	2'-7½"	1'-3"	6"			37
A543	4	8'-7"	3	2'-6½"	1'-3"	6"			36
A544	4	8'-4"	3	2'-5"	1'-3"	6"			35
A545	4	8'-0"	3	2'-3"	1'-3"	6"			33
A546	4	7'-8"	3	2'-1"	1'-3"	6"			32
A547	4	7'-3"	3	1'-10½"	1'-3"	6"			30
A548	4	6'-9"	3	1'-7½"	1'-3"	6"			28
A549	4	6'-2"	3	1'-4"	1'-3"	6"			26
A550	4	5'-6"	3	1'-0"	1'-3"	6"			23
A551	4	4'-9"	3	0'-7½"	1'-3"	6"			20
A601	100	6'-3"	10	8"	5'-7"	—			939
A602	100	22'-6"	5	8'-1"	1'-5"	9'-5"	9"	2'-10"	3380

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

183
202

ATB-I-15.73 - 19.20

60"X 192' Pipe Culvert

℄ Westbound Lanes

Sodding for special berm and slope protection

End Approach Slab Sta. 14+11.32

4' Ditch bottom

Critical Clearance Point A

Sta. 330+23.85

12" V.S.P. inv. el. 810.4

Sta. 16+24.58 Wright Road
Sta. 330+66.85 Proposed S.R.1

105° 23' 25"

51° 31' 45"

38° 28' 15"

℄ Eastbound Lanes

Berm Line

12" C.M.P. inv. elev. 810

14' Clear

℄ Proposed S.R.1

Begin Approach Slab Sta. 18+37.84

14'-0" Clear

Partially Wooded Area

Mostly Stumps

Edge of gravel road

℄ Existing Wright Road N.0° 04' 57" E.

Stone box culvert 30'x48'

Field Entrance

EQ+00

25'-0"

9'-0"

12'-0"

5'-4"

N.38° 33' 12" E. 353

FOUNDATION SOUNDINGS:

Foundation design and foundation quantities are based on a study of test borings and tests made on soil samples taken at the site. This information maybe inspected in the office of Interstate Projects in Columbus or in the Division office, but the State assumes no responsibility for the accuracy thereof.

Bridge Limits 426.52'

P.V.I. 16+24.58
Elev. 849.74
Corr. 10.62
850 V.C.

+5.00%

-5.00%

V.C. Proposed Grade Wright Rd.

15'0" Clear @ Point "A"

2:1 (Normal)

Ftg. Elev. 822.6
Existing Grade

Ftg. Elev. 810.0

Ftg. Elev. 811.5

Ftg. Elev. 822.6

60"x 192 Pipe Culvert
Flow line elev. 808.16

12" cast-in-place reinforced concrete piles.
The estimated average pay lengths are:
30' for piers.

BENCH MARK #45
P.K. nail in 12 in. Elm. 71 ft. N. of ℄ S.R. 1 Sta. 382+39
Elevation 810.83

PROPOSED STRUCTURE

TYPE: Continuous steel girder with reinforced concrete deck and substructure.
SPANS: 78'-7½" — 131'-0¼" — 131'-0¼" — 78'-7½"
ROADWAY: 24' 1ft. 2'0" Safety curbs
LOAD FREQUENCY: C.F. 130 (5.1)
SKEW: 51° 31' 45" R.F.
WEARING SURFACE: 3¼" monolithic concrete.
APPROACH SLABS: 25' long
ALIGNMENT: Tangent
AVERAGE DAILY TRAFFIC (1975) 240

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MANSFIELD, OHIO

SITE PLAN

BRIDGE № ATB-1-1905
S.R.1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R.1

SCALE 1 IN.= 20 FT. STA. 330+66.85

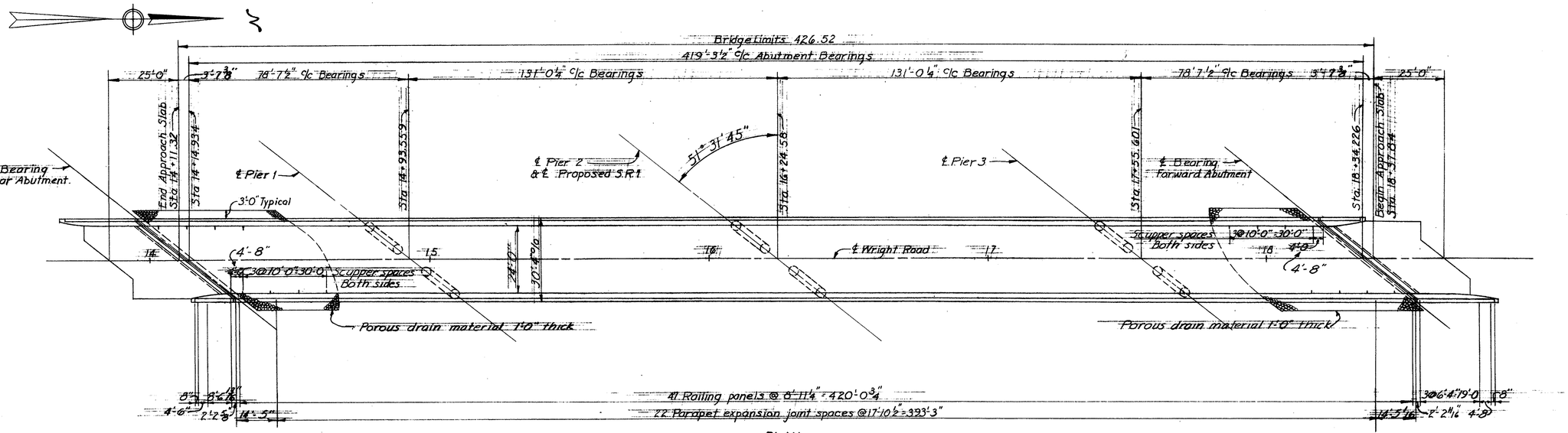
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S.C.J.	M.M.N. S.C.J.	M.M.N. C.W.F.	D.R.F.	S.R.R.	7/23/57	

FREDERICK POST CO., N. J.

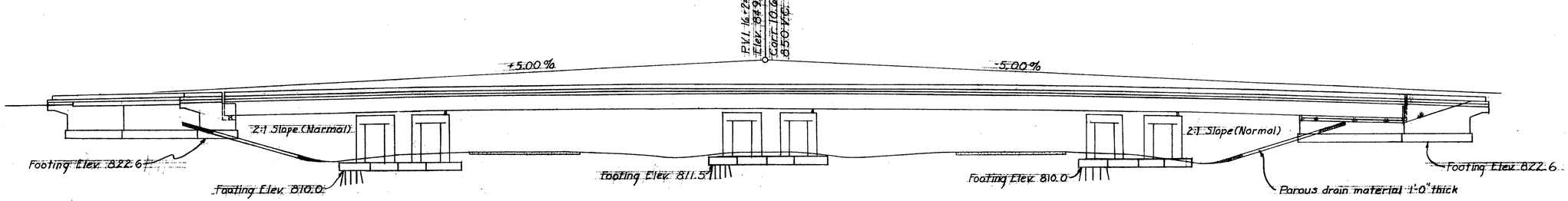
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

184
202

ATB-1-15.73-19.20



PLAN



ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR	ABUTS	PIERS	GENERAL
E 2	806	Cu.Yds.	Unclassifed excavation	———	496	310	———
E 2	Lump Sum		Cofferdams, cribs and sheeting	———	———	———	Lump Sum
S 1	392	Cu.Yds.	Class "C" concrete, superstructure	392	———	———	———
S 1	76	Cu.Yds.	Class "C" concrete, pier caps and columns	———	———	76	———
S 1	160	Cu.Yds.	Class "E" concrete, abutments above footings	———	160	———	———
S 1	181	Cu.Yds.	Class "E" concrete, footings	———	73	108	———
S 4	190000	Lbs.	Reinforcing steel	90,100	15,800	24,100	———
S 7	465000	Lbs.	Structural steel	465,000	———	———	———
S 8	465000	Lbs.	Field painting of structural steel	465,000	———	———	———
S 14	925	Lin.Ft.	Railing (aluminum rail and supports, concrete parapet and guard rail connectors.)	925	———	———	———
S 16	Lump	Sum	First test pile	———	———	Lump Sum	———
S 18	2850	Lin.Ft.	12" cast-in-place reinforced concrete piles	———	———	2850	———
S 29	50	Cu.Yds.	Porous backfill	———	50	———	———
S 29	138	Cu.Yds.	Porous drains on embankment slopes	———	———	———	138

NOTES

LOADING: C.E. 130 (51)

PILES: shall be driven to a minimum bearing capacity of 36 tons per pile.

GENERAL NOTES: See sheet 169

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
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MANSFIELD, OHIO

GENERAL PLAN

BRIDGE Nº ATB-1-1905
S.R.1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R.1

STA. 330+66.85

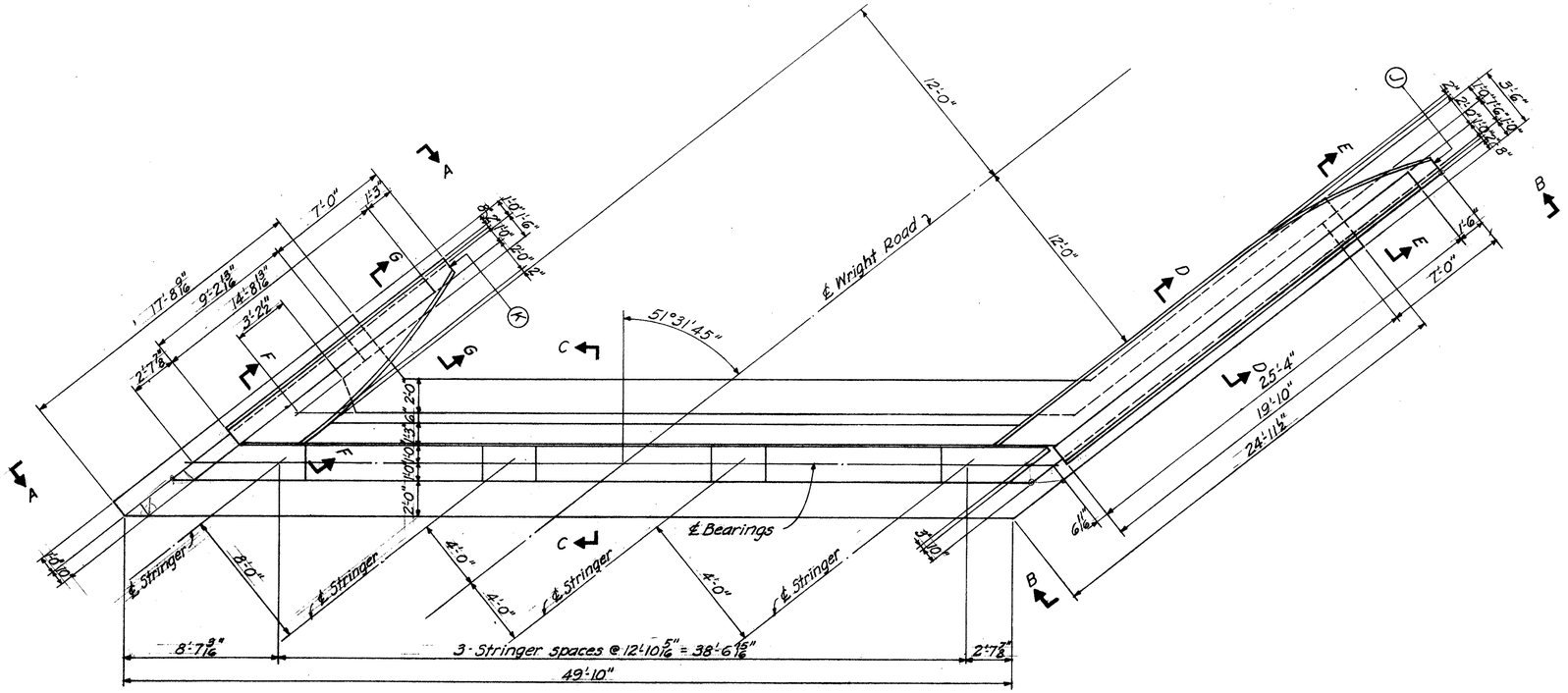
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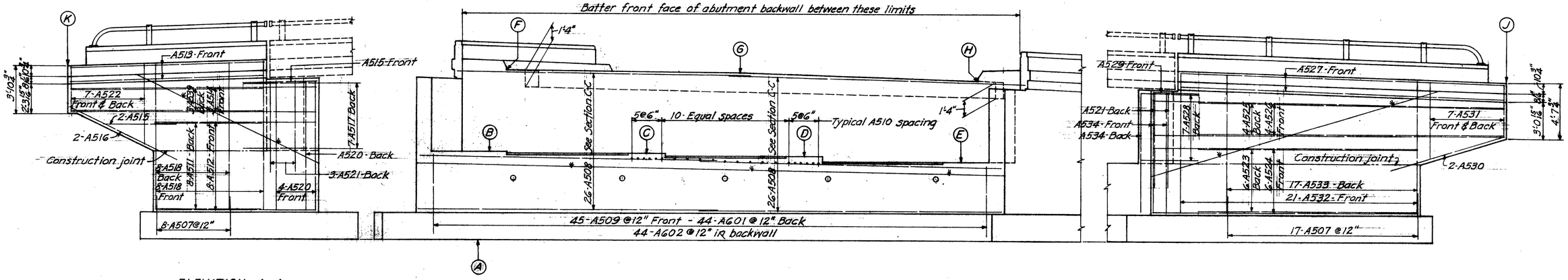
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

185
202

ATB-1-15.73-19.20



PLAN



ELEVATION A-A

ABUTMENT ELEVATION

ELEVATION B-B

TABLE OF ELEVATIONS

LOCATION	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓙ	Ⓚ
Rear Abutment	822.6	829.869	829.758	829.509	829.124	836.67	836.49	835.91	835.93	837.20
Forward Abutment	822.6	829.869	829.758	829.509	829.124	836.67	836.49	835.91	835.93	837.20

NOTE: For remainder of abutment details see sheet 186.

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MANSFIELD, OHIO

ABUTMENTS

BRIDGE Nº ATB-1-1905
S.R.1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R.1

STA. 330+66.85

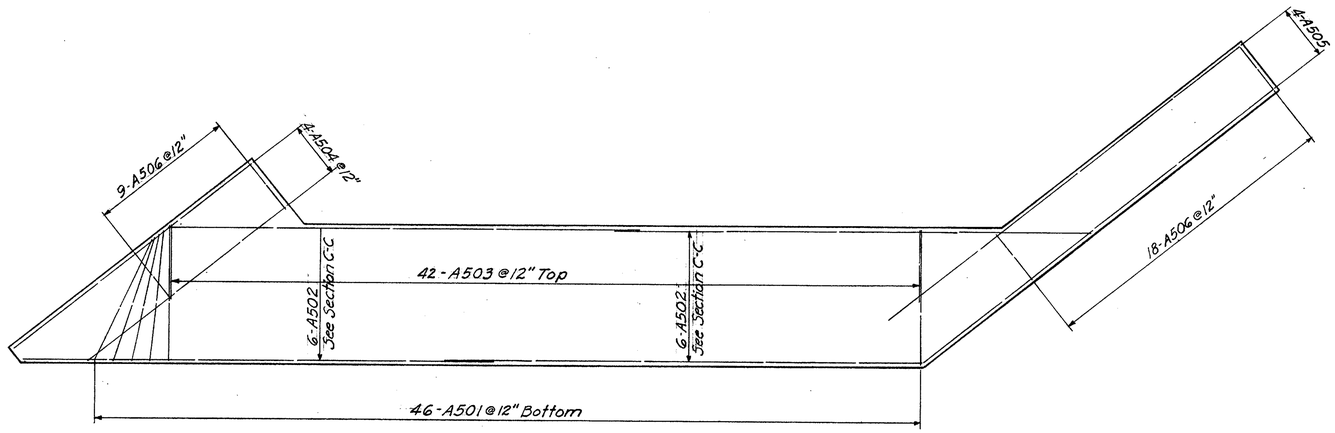
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FREDERICK POST CO., N. J.

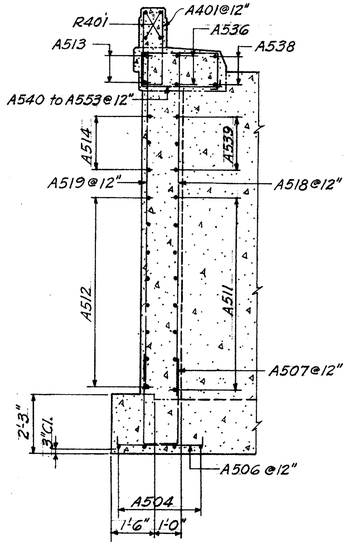
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186
202

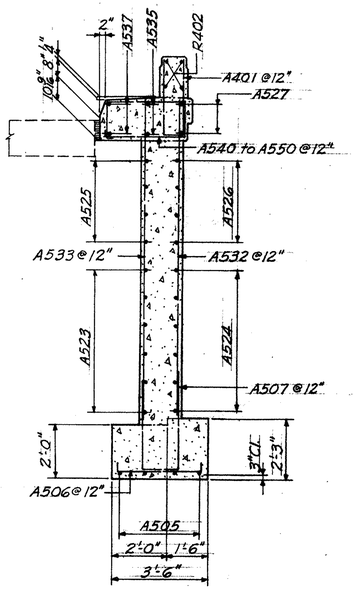
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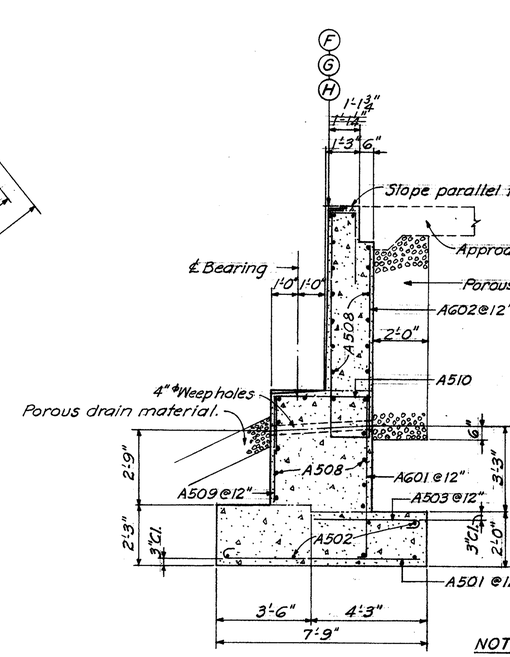
FOOTING PLAN



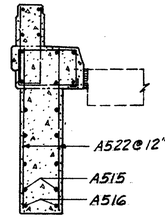
SECTION F-F



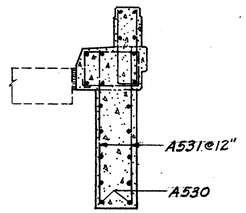
SECTION D-D



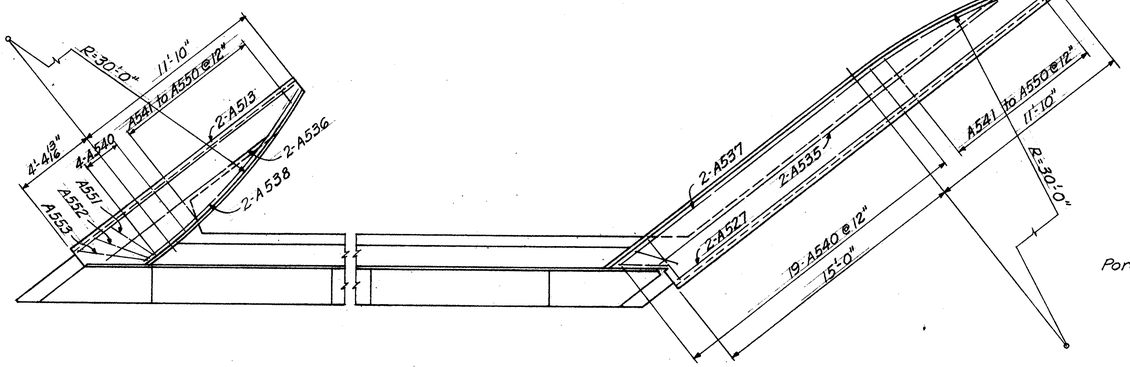
SECTION C-C



SECTION G-G



SECTION E-E



WING WALL PLAN

NOTES:

PROCEDURE: Embankment shall be placed to subgrade elevation for a distance of approximately 200 feet beyond bridge limits as early as practical in the construction procedure and before work is begun on abutments. The abutments should be constructed as late as practical with a minimum time lapse of thirty (30) days between the completion of embankment and starting of work on the abutments.

FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum bearing pressure of 1½ tons per square foot.

CONCRETE: All abutment concrete shall be Class "E" except parapets which shall be Class "C".

RAILING: See AR-1-57 and sheet 184.

STANDARD DETAILS & GENERAL NOTES: See sheet 169.

NOTE:
For remainder of abutment details see sheet 185.

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CONSULTING ENGINEERS
MANSFIELD, OHIO

ABUTMENTS

BRIDGE Nº ATB-1-1905
S.R. 1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R. 1
STA. 330+66.85

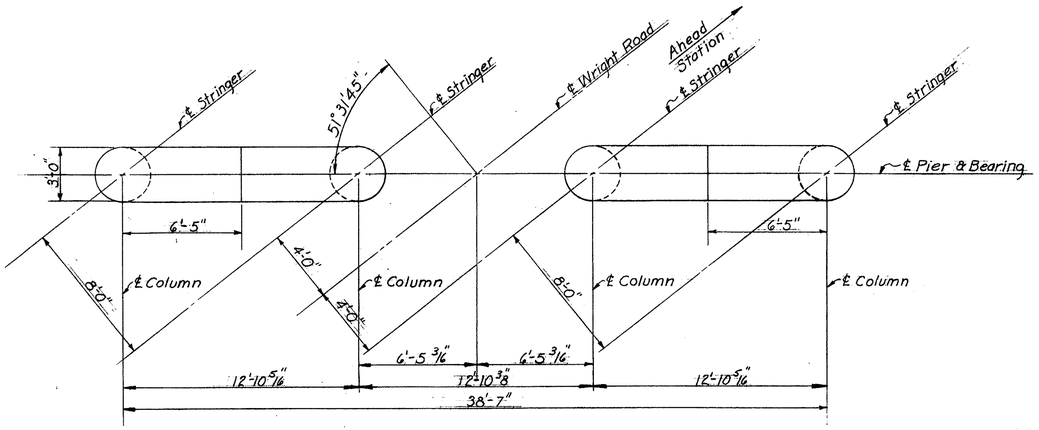
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FREDERICK POST CO., N. J.

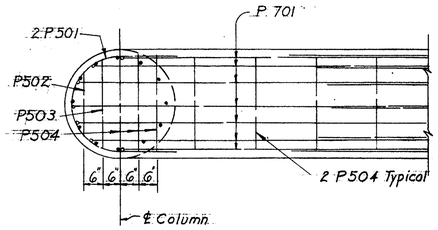
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

187
202

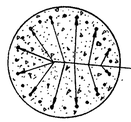
ATB-1-15,73-19,20



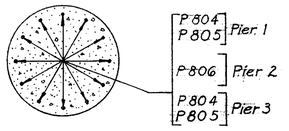
PLAN



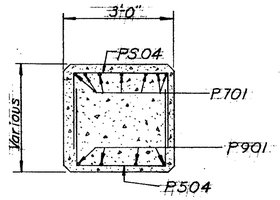
VIEW D



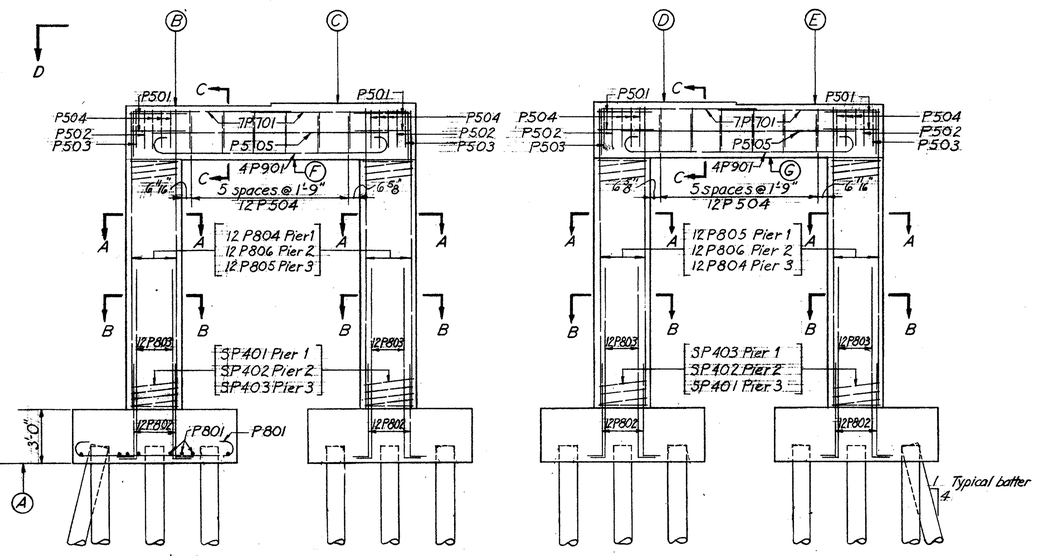
SECTION B B



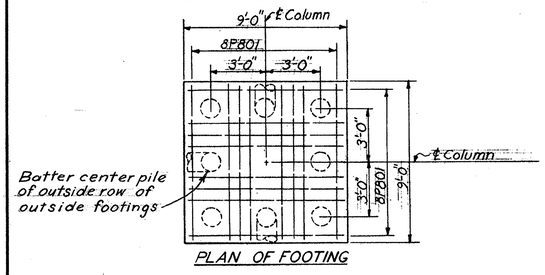
SECTION A A



SECTION C C



ELEVATION



PLAN OF FOOTING

TABLE OF ELEVATIONS							
Location	A	B	C	D	E	F	G
Pier 1	810.0	830.169	830.461	830.616	830.635	827.169	827.616
Pier 2	811.5	831.231	831.368	831.368	831.231	828.231	828.231
Pier 3	810.0	830.635	830.616	830.461	830.169	827.616	827.169

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

PIERS

BRIDGE Nº ATB-1-1905
S.R.1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R.1

STA. 330+66.85

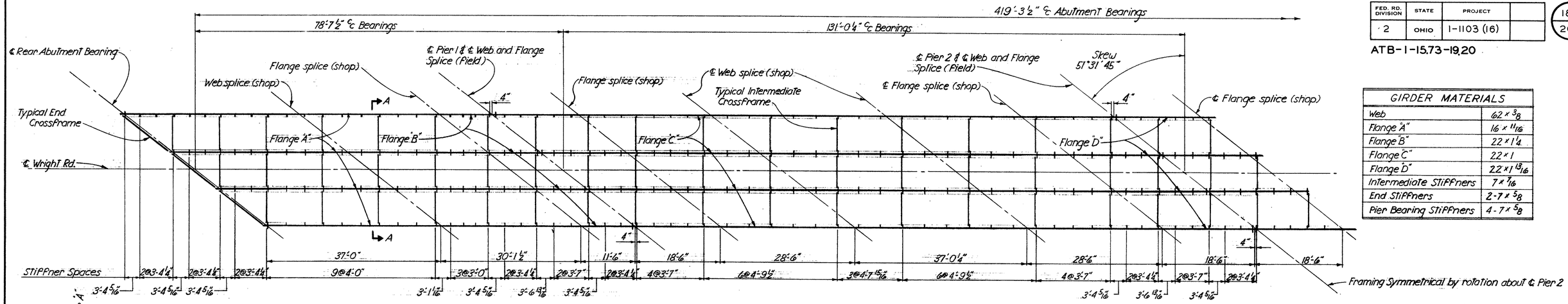
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
EFC	EFC ERJ	ERJ	DRF	RJT	11-14-57	

FREDERICK POST CO., N. J.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	1-1103 (16)	

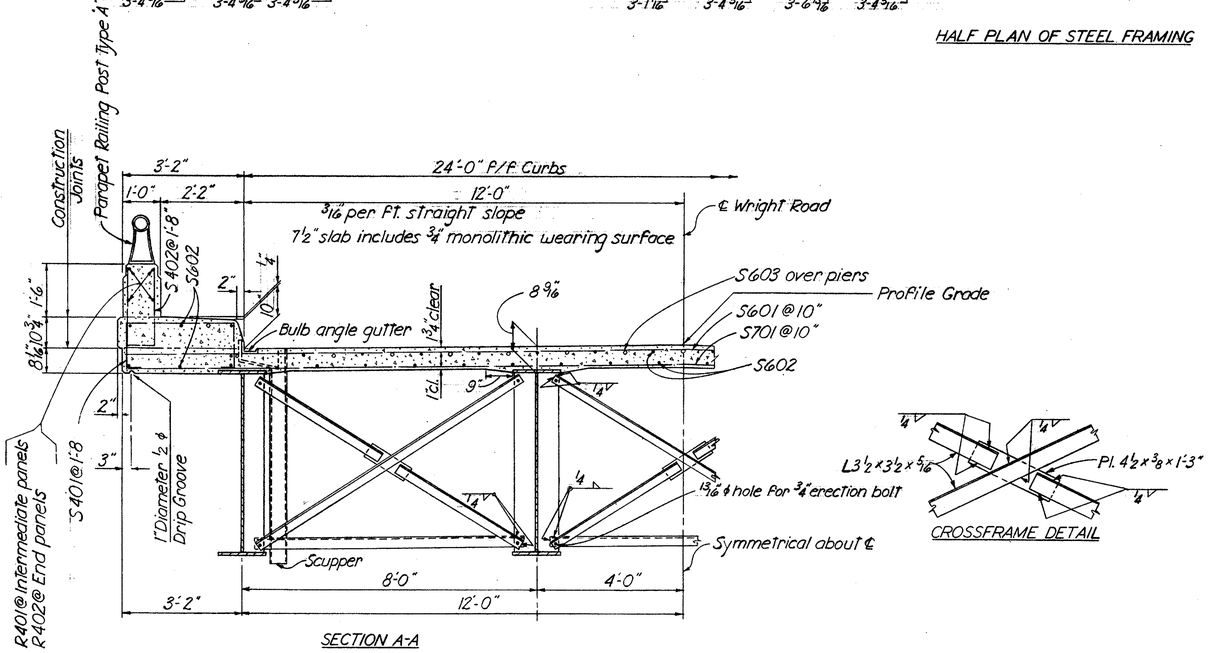
188
202

ATB-1-15.73-19.20



HALF PLAN OF STEEL FRAMING

GIRDER MATERIALS	
Web	62 × 3/8
Flange "A"	16 × 11/16
Flange "B"	22 × 1¼
Flange "C"	22 × 1
Flange "D"	22 × 1 13/16
Intermediate Stiffners	7 × 7/16
End Stiffners	2-7 × 5/8
Pier Bearing Stiffners	4-7 × 5/8



SECTION A-A

CROSSFRAME DETAIL

NOTES:
CAMBERING of girders is required in accordance with the following Table:

DEFLECTION AND CAMBER				
	OUTSIDE BEAMS		INSIDE BEAMS	
	END SPANS	MIDDLE SPANS	END SPANS	MIDDLE SPAN
Deflection due to weight of steel	0	3/8	0	3/8
Deflection due to remaining dead load	1/16	1 3/16	1/16	1
Convexity required for vertical curve	15/16	2½	15/16	2½
Sum of deflection & convexity	1	4 1/16	1	3⅜
Required Camber	1	4 1/16	1	3⅜

GIRDER SPLICE WELDING PROCEDURE:
1 Raise end of girder at third pier 6½".
2 Butt-weld girder flanges and web at second pier, using the following sequence: make one pass on each flange, then one on the web, repeat until all welds are completed. Weld bottom plate over shoe.
3 Lower end of girder to final position at third pier.
4 Make splice at first and third piers in the same manner, raising the end of the girder 1 3/8" at the abutment.
5 After splices are completed at first and third piers, lower the end of the girders at the abutments to final position.

BEARINGS: See RB-1-55 for the following: R-100 Abutments
R-250 Piers 1 & 3
B-300 Pier 2

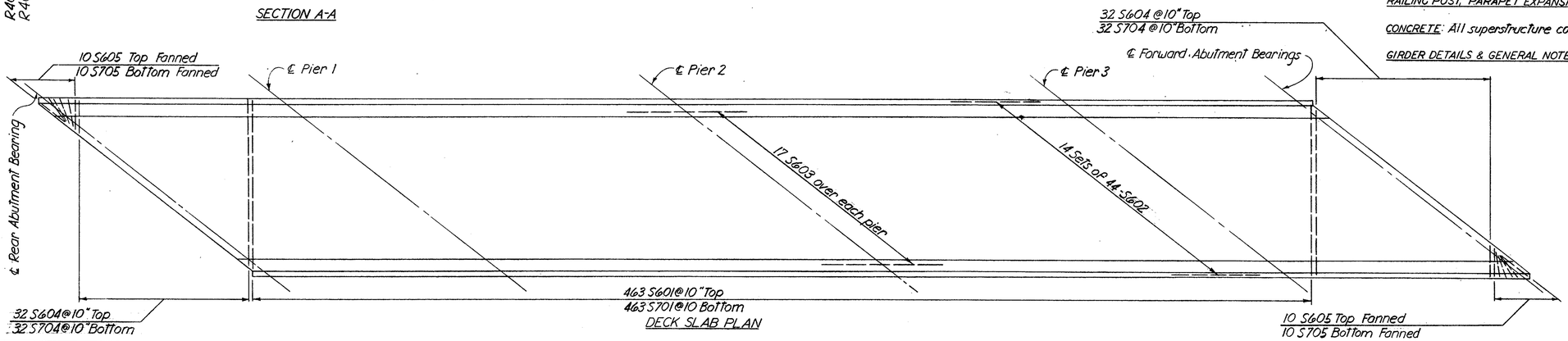
END CROSS FRAMES, END FINISH, GUTTERS, SCUPPERS & CURB PLATE DETAILS: See CSB-2-56 sheets 2 & 3 of 6
Use 4×4×3/8 angles in place of 4×4×5/16 angles for end crossframes.

RAILING: See AR-1-57

RAILING POST, PARAPET EXPANSION JOINT & SCUPPER SPACING: See sheet 184

CONCRETE: All superstructure concrete shall be Class "C"

GIRDER DETAILS & GENERAL NOTES: See Sheet 169



DECK SLAB PLAN

SHAFFER, PARRETT & ASSOCIATES AND BROOKHART & TYO
CONSULTING ENGINEERS
MANSFIELD, OHIO

SUPERSTRUCTURE

BRIDGE Nº ATB-1-1905
S.R.1 UNDER WRIGHT ROAD
ASHTABULA CO. S.R.1

STA. 330+66.85

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISE
GGB	MMN	MMN	EFC	RJT	11-14-57	

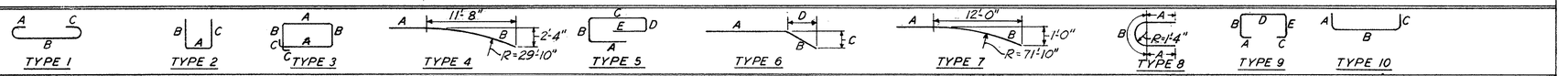
FREDERICK POST CO.: N. J.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

189
202

ATB-1-15,73-19,20

REINFORCING STEEL BAR SCHEDULE



ABUTMENTS

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R401	8	14'-5"	Str.		Included with Railing				
R402	8	25'-0"	Str.		for payment.				
A401	82	6'-2"	2	8"	2'-9"	2'-9"			338
A501	92	8'-0"	1	7"	7'-5"	–			768
A502	24	26'-6"	Str.						663
A503	84	4'-6"	1	7"	3'-11"	–			394
A504	8	14'-8 to 17'-5"	Str.			1 each vary by 11"			134
A505	8	24'-7"	Str.						205
A506	54	4'-2"	10	6"	3'-2"	6"			235
A507	50	9'-11"	2	1'-2"	4'-6"	4'-3"			517
A508	104	24'-11"	Str.						2703
A509	90	3'-11"	Str.						368
A510	106	6'-1"	2	3'-5"	2'-8"				672
A511	16	8'-9"	Str.						146
A512	16	13'-1"	Str.						218
A513	4	15'-10"	Str.						66
A514	6	20'-1"	Str.						126
A515	6	6'-2"	Str.						39
A516	4	9'-9"	Str.						41
A517	14	5'-2"	Str.						75
A518	16	12'-3"	Str.						204
A519	20	12'-0"	Str.						250
A520	10	10'-8"	Str.						111
A521	10	7'-10"	Str.						82
A522	28	3'-7 to 6'-7"	Str.		2 each vary by 6"				148
A523	12	17'-10"	Str.						223
A524	12	21'-7"	Str.						270
A525	8	25'-0"	6	22'-1"	2'-11"	1'-0"	2'-9"		209
A526	8	28'-8"	Str.						239
A527	4	26'-6"	Str.						111
A528	14	4'-8"	Str.						68
A529	2	4'-1"	Str.						9
A530	4	9'-3"	Str.						39
A531	28	4'-3 to 6'-3"	Str.		2 each vary by 6"				153
A532	42	10'-10"	Str.						474
A533	34	11'-1"	Str.						393
A534	6	9'-11"	Str.						62
A535	4	24'-3"	Str.						101
A536	4	13'-1"	Str.						55
A537	4	29'-0"	4	17'-0½"	11'-11½"				121
A538	4	13'-11"	4	1'-11½"	11'-11½"				58
A539	6	16'-0"	6	13'-1"	2'-11"	1'-0"	2'-9"		100
A540	42	8'-10"	3	2'-8"	1'-3"	6"			387
A541	4	8'-9"	3	2'-7½"	1'-3"	6"			37
A542	4	8'-7"	3	2'-6½"	1'-3"	6"			36
A543	4	8'-4"	3	2'-5"	1'-3"	6"			35
A544	4	8'-0"	3	2'-3"	1'-3"	6"			33
A545	4	7'-8"	3	2'-1"	1'-3"	6"			32
A546	4	7'-3"	3	1'-10½"	1'-3"	6"			30
A547	4	6'-9"	3	1'-7½"	1'-3"	6"			28
A548	4	6'-2"	3	1'-4"	1'-3"	6"			26
A549	4	5'-6"	3	1'-0"	1'-3"	6"			23
A550	4	4'-9"	3	7½"	1'-3"	6"			20
A551	2	9'-2"	3	2'-10"	1'-3"	6"			19
A552	2	9'-10"	3	3'-2"	1'-3"	6"			21
A553	2	11'-2"	3	3'-10"	1'-3"	6"			23
A601	88	6'-9"	10	8"	6'-1"	–			892
A602	88	22'-9"	5	8'-0"	1'-5"	9'-4"	9"	3'-3"	3007
						TOTAL WEIGHT			15800

SUPERSTRUCTURE

MARK	NUMBER	LENGTH	TYPE	A	B	C	D	E	WEIGHT
R401	176	17'-6"	Str.		Included with Railing				
R402	16	14'-1"	Str.		for payment.				
S401	508	6'-0"	9	5"	1'-3"	5"	2'-8"	1'-3"	2036
S402	508	5'-0"	2	8"	2'-2"	2'-2"			1697
SG01	463	30'-0"	Str.						20863
SG02	616	31'-10"	Str.						29450
SG03	51	39'-4"	Str.						3013
SG04	64	28'-7 to 31'-11"	Str.		2 each vary by 8"				1754
SG05	20	7'-3"	Str.						218
S701	463	30'-0"	Str.						28391
S704	64	28'-7 to 31'-11"	Str.		2 each vary by 8"				2387
S705	20	7'-3"	Str.						296

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

190/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

1/13

CENTER LINE PLAT
ATB-1-15.73 ASHTABULA COUNTY

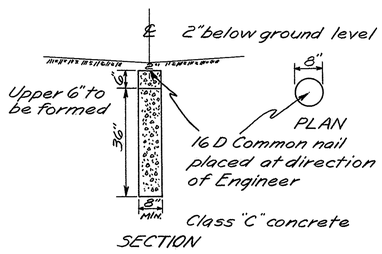
0 500' 1000' 1500' 2000'
Scale

This improvement has been declared a Limited Access Highway or Freeway by action of the Director of Highways and recorded in Volume ____, Page ____ of the Director's Journal in accordance with the provisions of Section 5511.02 revised code (1178-21), General Code of Ohio and dated _____

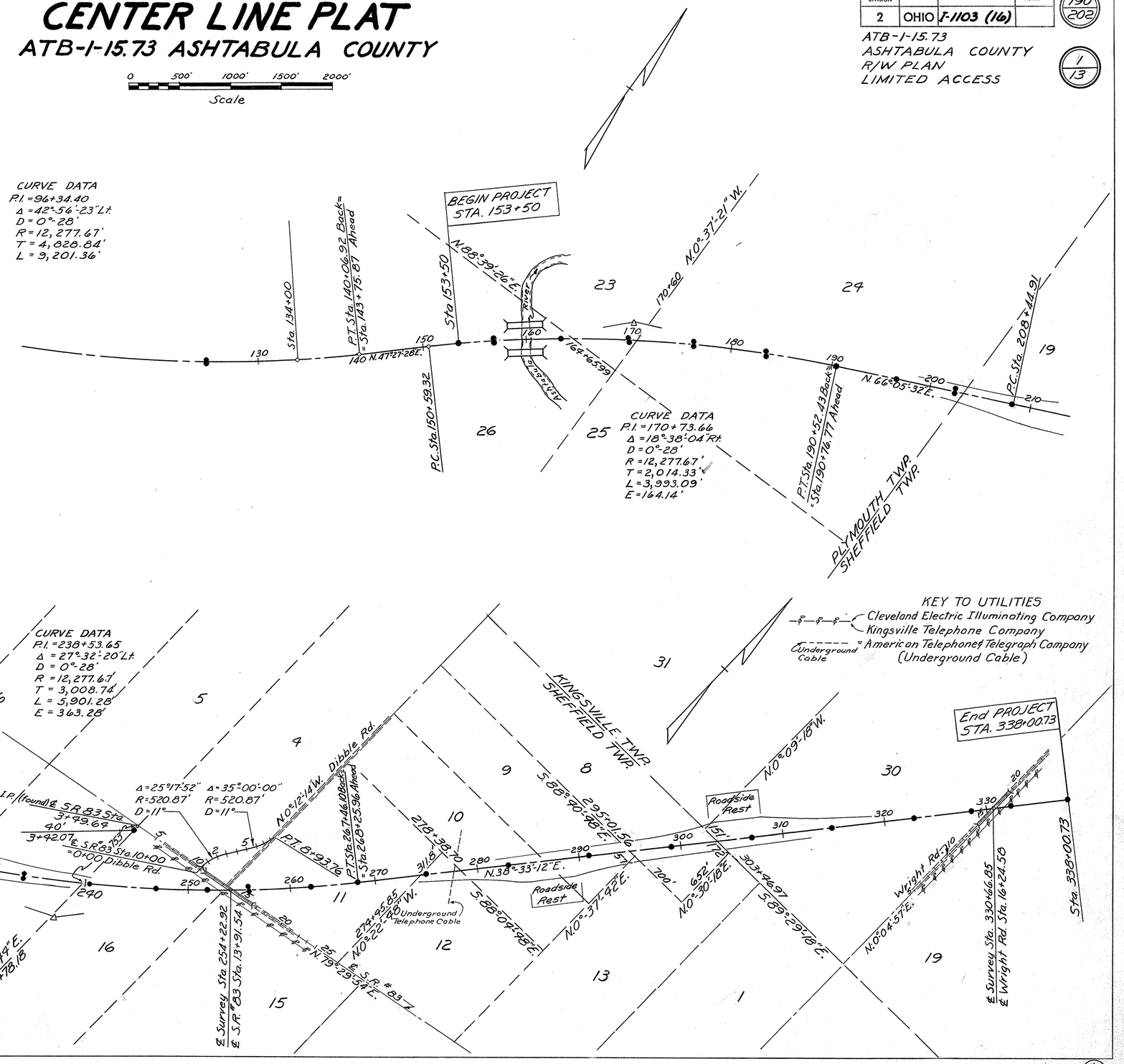
RECEIVED _____ AT _____
RECORDED _____
PLAT BOOK _____ PAGE _____
Signed _____
ASHTABULA COUNTY RECORDER
FEE $ _____

Signed _____
R/W ENGINEER
INTERSTATE PROJECTS
Date _____

All Bearings are derived from True North.



Detail of Centerline Reference Monuments



This plat was prepared by:

SHAFFER-PARRETT & ASSOCIATES
CONSULTING ENGINEERS, MANSFIELD, OHIO

Kenneth P. Shaffer C.E. No. 3511
Registered Surveyor No. 2172

MONUMENTS TO BE PLACED AFTER CONSTRUCTION

Station	Side	Dist	Station	Side	Dist
153+50	℄		234+00	Rt.	5.00
157+00	Rt.	5.00	234+00	Lt.	5.00
157+00	Lt.	5.00	240+50	℄	
163+50	℄		247+00	Rt.	5.00
170+00	Rt.	5.00	247+00	Lt.	5.00
170+00	Lt.	5.00	252+00	℄	
176+50	Rt.	5.00	256+00	Rt.	5.00
176+50	Lt.	5.00	256+00	Lt.	5.00
183+50	Rt.	5.00	262+00	℄	
183+50	Lt.	5.00	P.T. 267+46.10 Back =	℄	
P.T. 190+52.43 Back =	℄		268+25.96 Ahead		
190+76.77 Ahead			275+00	℄	
196+50	℄		283+00	℄	
202+50	Rt.	5.00	291+00	℄	
202+50	Lt.	5.00	299+00	℄	
PC. 208+44.91	℄		307+00	℄	
212+33.20	Rt.	4.65	315+00	℄	
212+65.85	Rt.	28.05	323+00	℄	
214+50	℄		328+50	℄	
221+00	℄		332+50	℄	
227+50	Rt.	5.00	338+00	℄	
227+50	Lt.	5.00			

1/13

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

191/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

2/13

SUMMARY OF ADDITIONAL R/W REQUIRED

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-1X	R.H. SEYMOUR	0.02	None	3/13	
12-1LA	"	16.50	"	3/13	
12-2LA	WILLIAM S. THOMAS &				
	JANET THOMAS	5.85	"	3/13	
12-2X	"	0.32	"	3/13	
12-2Y	"	0.29	"	3/13	
12-3LA	JOHN F. DUBACH &				
	MOLLY DUBACH	5.03	"	3/13 9/13	
12-9LA	WILLIAM S. THOMAS &				
	JANET THOMAS	36.39	"	9/13 5/13	See 12-2LA
12-5LA	E.R. LEHTINEN &				
	H.E. LEHTINEN	32.29	"	5/13 6/13 11/13	
12-5		0.06	"	6/13 11/13	S.R. 83
12-6LA	BENJAMIN H. SIMMONS &				
	STELLA SIMMONS	0.07	"	6/13 11/13	
12-6T	"	0.27	"	6/13 11/13	Temp. R/W
12-6	"	1.97	"	6/13 11/13	S.R. 83 & Dibble Rd.
12-6T-1	"	0.30		11/13	Temp R/W
12-6WA	"	[illegible]	"	11/13	
12-7LA	MARTIN F. KUHN &				
	LOIS ANN KUHN	0.60	"	6/13 11/13	

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-7	MARTIN F. KUHN &				
	LOIS ANN KUHN	0.32	None	6/13 11/13	
12-7WA	"	~~0.08~~	"	11/13	
12-7X	"	0.01	"	11/13	
12-7A	DEAN R. STANTON &				
	ROSIBEL STANTON	0.07	"	11/13	S.R. 83
12-7AX	"	0.02		11/13	
12-8LA	HARRY W. BOGAR &				
	LUCILLE B. BOGAR	1.93	Yes	6/13 7/13 11/13	
12-8	"	0.03	None	6/13 11/13	S.R. 83
12-10	MELVIN R. DEWEY &				
	MARGARET M. DEWEY	0.20	"	11/13	S.R. 83
12-10T		0.95	"	11/13	S.R. 83
12-11T	JOHN DEWEY	0.11		11/13	S.R. 83
12-9LA	MELVIN DEWEY	1.74	"	6/13 7/13 11/13	
12-10LA	MELVIN R. DEWEY &				
	MARGARET M. DEWEY	9.71	"	7/13	See 12-10
12-11LA	JOHN DEWEY	2.32	"	7/13	See. 12.11T

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-12LA	VIVIAN CHARLOTTE OLIN	2.72	None	7/13	
12-13LA	RAYMOND R. SIMMONS	3.15	"	7/13	
12-14LA	KARL LUKAS &				
	SALLY LUKAS	12.35	"	7/13 8/13 9/13	
					12-13LA
12-15LA	RAYMOND R. SIMMONS	9.19	"	7/13 9/13	See 12-13LA
12-14X	KARL LUKAS &				
	SALLY LUKAS	0.09	"	7/13	See 12-14LA
12-14Y	"	0.02	"	8/13 9/13	
12-16LA	FRANK S. FOX	0.93	"	8/13 9/13	
12-17LA	CARL E. SULIN &				
	EULA I. SULIN	7.15	"	8/13 9/13	
12-17X	"	0.11	"	8/13	
12-17Y	"	0.03	"	8/13	
12-18LA	ARTHUR E. REILLY &				
	CAROLINE M. REILLY	1.92	"	8/13 9/13	
12-19LA	PERRY M. PARKER &				
	GENEVIEVE C. PARKER	23.84	"	6/13 9/13 10/13 12/13	

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
	~~LIFE ESTATE~~	~~0.04~~	~~None~~	~~8/13 9/13~~	
12-20LA	B.O. PAGE & IRENE M. PAGE	0.04	None	9/13	
	~~LIFE ESTATE~~	~~0.04~~	~~"~~	~~8/13~~	
12-19X	PERRY M. PARKER &				
	GENEVIEVE C. PARKER	0.04	"	8/13	See 12-19LA
	~~LIFE ESTATE~~	~~0.04~~	~~"~~	~~8/13~~	~~See 12-19LA~~
12-19Y	"	0.11	"	9/13	
12-19	"	0.97	"	10/13 12/13	Wright Rd.
12-19Z	"	1.30	"	10/13 12/13	
12-19A	"	0.71	"	10/13 12/13	Wright Rd.
12-21LA	LLOYD E. KISTER &				
	THELMA W. KISTER	9.77	"	10/13 12/13	
12-21	"	0.75	"	10/13 12/13	Wright Rd.
12-21X	"	0.59	"	10/13 12/13	
12-21A	"	0.91	"	12/13	Wright Rd.

Revised 3-28-58

2/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

192
202

3
13

150'
134+00

MAUDE E. WESTCOTT
Cont.

182.8'
136+80

166.10'
136+80

P.I.

135'
137+30

12-1
X

R.H. SEYMOUR
~~R.H. SEYMOUR~~
Cont. 0.02

167.90'
137+30

175'
140+06.92 Back
143+75.87 Ahead

Fence

2220'
152+00

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

BEGIN WORK
STA. 152+50

CURVE DATA
P.I. 96+39.90
Δ = 42°-56'-23" Lt.
D = 0°-28'
R = 12,277.67'
T = 4,828.89'
L = 9,201.28'

167'
136+95.91

Sta. 140+06.92 Back =
Sta. 143+75.87 Ahead

Pond

Woods

134 135 136 137 138 139 140 144 145 146 147 148 149 150 151 152 153

N. 47°27'-28" E.

℄
135+82.63

P.T. Sta. 140+06.92

MAUDE E. WESTCOTT

12-1
LA

R.H. SEYMOUR
Cont. 16.50

Woods

P.C. Sta. 150+59.32

CURVE DATA
P.I. Sta. 170+73.66
Δ = 18°-38'-09" Rt.
D = 0°-28'
R = 12,277.67'
T = 2014.33'
L = 3,993.09'
E = 164.14'

152'
136+00

151.50'
136+80

155'
134+00

MAUDE E. WESTCOTT
Cont

430'
135+75

430'
136+25

155'
140+06.92 Back
143+75.87 Ahead

155.29'
144+18.68

Fence

160'
P.C. Sta. 150+59.32

ASHTABULA COUNTY

R-3 LOT 26

210'
157+00

270'
160+03

270'
160+99.31

12-2
X

WILLIAM S. THOMAS & JANET THOMAS
Cont. 0.32

170.91'
162+25.36

165'
163+50

Fence

Fence

RIVER

℄

183.79'
160+15

Bridge No.
ATB-1-1583
South Bridge

Woods

12-3
LA

JOHN F. DUBACH & MOLLY DUBACH
Cont. 5.03

℄
164+65.99

12-1
LA

R.H. SEYMOUR
Cont. 16.50

153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168

℄
160+15

BEGIN PROJECT
STA. 153+50

CURVE DATA
P.I. Sta. 170+73.66
Δ = 18°-38'-09" Rt.
D = 0°-28'
R = 12,277.67'
T = 2,014.33'
L = 3,993.09'
E = 164.14'

Woods

Bridge No.
ATB-1-1583
North Bridge

12-2
LA

WILLIAM S. THOMAS &
JANET THOMAS
Cont. 5.85

ASHTABULA

Fence

Fence

185'
163+50

Fence

215'
157+00

200.57'
161+00

270'
161+42.5

210'
161.95

12-2
Y

WILLIAM S. THOMAS & JANET THOMAS
Cont. 0.29

186.01'
167+93.98

Lot 23
Lot 26

ASHTABULA COUNTY

PLYMOUTH TWP.

R-3

Revised 3-28-58

Sta. 134+00 to Sta. 168+00

3
13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

193
202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

9
13

155'
170+00

P.I. Sta. 170+23.66

Lot 23
Lot 24

151.83'
171+55.60

155'
176+50

Fence

12-3 LA
JOHN F. DUBACH & MOLLY DUBACH
Cont. 5.03

P.I.

168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183

℄
170+60

CURVE DATA
P.I. Sta. 170+73.66
Δ - 18° 38' 04" Rt.
D - 0° 28'
R - 12,277.67'
T - 2,014.33'
L - 3993.09'
E - 164.14'

Woods

12-9 LA
WILLIAM S. THOMAS & JANET THOMAS
Cont. 36.34

Woods

Fence

150'
176+50

Lot 23
Lot 24

181.83'
169+41.67

150'
170+00

ASHTABULA COUNTY PLYMOUTH TWP. R-3

155'
183+50

155'
Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

Fence

EQUATION

150'
196+50

Woods

12-4 LA
WILLIAM S. THOMAS & JANET THOMAS
Cont. 36.34

183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198

Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

N. 66° 05' 32" E.

CURVE DATA
P.I. Sta. 170+73.66
Δ - 18° 38' 04" Rt
D - 0° 28'
R - 12,277.67'
T - 2,014.33'
L - 3,993.09'
E - 164.14'

P.T. Sta. 190+52.43

Woods

Fence

150'
183+50

150'
Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

ASHTABULA COUNTY PLYMOUTH TWP. R-3

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

194
202

5
13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

CURVE DATA
P.I. - 238+53.65'
Δ - 27°-32'-20"Lt.
D - 0°-28'
R - 12,277.66'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

12-4 LA WILLIAM S. THOMAS & JANET THOMAS
Con't. 36.34

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN
Con't. 32.29
P.R.O. 0.22

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN
Con't. 32.29
P.R.O. 0.22

PLYMOUTH TWP. R-3 | ASHTABULA COUNTY | SHEFFIELD TWP. R-2

Revised 3-28-58 **Sta. 198+00 to Sta. 228+00**

5

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

195/202

6/13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

12-5 LA — E.R. LEHTINEN & H.E. LEHTINEN
Cont. 32.29
P.R.O. 0.22

155' 234+00

155' 290+50

Lot 17 Sec.1
Lot 16 Sec.1

Weigh Station ℄ Ramp "B"

Woods

Structure No. ATB-1-17.35

P.C.C. 1+37.91

P.C. 0+00

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20" Lt.
D - 0°-28'
R - 12,277.67'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

Weigh Station ℄ Ramp "A"

P.R.C. 39+01.35

P.T. 40+21.35

℄ 239+78.18

Woods

Fence

155' 234+00

155' 290+50

Lot 17 Sec.1
Lot 16 Sec.1

ASHTABULA COUNTY — SHEFFIELD TWP. — R-2

12-5 — E.R. LEHTINEN & H.E. LEHTINEN
Cont. 0.06
P.R.O. 0.38

Lot 16 Sec.1

Lot 9 Sec.1

12-6 Cont. 1.97

12-6 T — Cont. 0.27

12-6 LA — Cont. 0.07
P.R.O. 0.25

Lot 9 Sec.1

Lot 11 Sec.1

N. 9°-29'-54" E.

Existing R/W

To N. 79°-29'-54" E.

63.36' @ 1+61.76

Benjamin H. Simmons & Stella Simmons

165.81' 255+21.39

151.73' 254+63.97

151.35' 255+06.31

℄ Dibble Rd.

150.81' 255+49.23

150' 256+00

198.19' 255+46.52

REMOVAL OF EXISTING STRUCTURE
ITEM S-24 (Lump)
Parcel 12-8 LA 1-1½ Sty. Frame Res.
Parcel 12-8 LA 1-Frame Farm Bldg.

150' 241+00

Fence

53.30' @ 10+40.92
152.24' @ 251+00

40' @ 10+61.19
151.97' @ 251+25.05

℄ @ 11+23.60
150.60' @ 252+00

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20" Lt.
D - 0°-28'
R - 12,277.67'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

Bridge No. 1 ATB-1-17.64

40' @ 11+81.70
151.60' @ 252+27.50

R/W Marker

R/W Marker

Woods

℄ S.R.83 Sta. 13+41.62
28.91' ℄ Survey Sta. 253+81.81

40' @ 13+16.40
151' @ 253+85.44

150.91' 255+92.62

1 Existing R/W

40' @ 13+79.38
39.19' @ 254+35.80

℄ Survey Sta. 254+22.92
℄ S.R. 83 Sta. 13+91.54

12-9 LA — MELVIN DEWEY
Cont. 1.74

97.68' 258+83.30

℄ 257+53

12-8 LA — HARRY W. BOGAR & LUCILLE B. BOGAR
Cont. 1.43
P.R.O. 0.44

Frame Res. 61.5 Sq.

12.3 Sq. Frame Garage

Hedge

Fruit Trees

℄ 253+53.60

12-7 LA — MARTIN F. KUHN & LOIS ANN KUHN
Cont. 0.60
P.R.O. 0.26

R/W Marker

Existing R/W

40' @ 15+97.47
151.16' @ 255+67.51

76.91' @ 15+95.78
151.06' @ 255.05

N. 79°-29'-54" E.

Lot 16 Sec.1
Lot 15 Sec.1

155' 252+02.68

MARTIN F. KUHN & LOIS ANN KUHN
Cont. 0.32
P.R.O. 0.39

12-7

℄ S.R.83 16+54.20
151.69' @ 256+36.07

Drive to be Abandoned

12" Cmp.

Existing R/W Lot 11 Sec.1

℄ Lot 15 Sec.1

230.96' Sta. 257+92.83
S.R. 83-17+88.22

155' 258+21.79

ASHTABULA COUNTY — SHEFFIELD TWP. — R2

Revised 3-28-58

Sta. 228+00 to Sta. 258+00

6/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

196 / 202

7 / 13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20Lt.
D - 0°-28'
R - 12,277.64'
T - 3,008.74'
L - 5,901.28
E - 363.28

12-8 LA
HARRY W. BOGAR &
LUCILLE B. BOGAR
Cont. 1.43
P.R.O. 0.44

12-9 LA
MELVIN DEWEY
Cont. - 1.74

12-10 LA
MELVIN R. DEWEY &
MARGARET M. DEWEY
Cont. 4.71

12-11 LA
JOHN DEWEY
Cont. 2.32

12-12 LA
VIVIAN CHARLOTTE OLIN
Cont. - 2.72

12-13 LA
RAYMOND R.
SIMMONS
Cont. 3.15

12-14 LA
KARL LUKAS &
SALLY LUKAS
Cont. 12.35

12-14X LA
KARL LUKAS &
SALLY LUKAS
Cont. 0.09

12-15 LA
RAYMOND R. SIMMONS
Cont. 4.14

150' 261+57.05
150' 267+46.10 Back 269+25.96 Ahead
150' 268+78.99
129.22' 269+02.94
97.18' 258+83.30
155' 258+21.79
155' 264+76.16
164.81' 272+41.84
℄ 257+53
℄ 259+88.84
℄ 266+62.47
Sta. 267+46.10 Back Sta. 268+25.96 Ahead
Pt. Sta. 267+46.10
℄ 270+51.88
℄ 274+45.85
N. 38°33'-12" E.
Fence
Lot 11 Sec. 1 Lot 12 Sec. 1
R-2 P/L Lot 11 Sec. 1 Lot 12 Sec. 1
ASHTABULA COUNTY SHEFFIELD TWP. Lot 11 Sec. 1

Description of the American Telephone and Telegraph Company's Utility Relocation Work also Sheet No. 87.
Excavate 460' trench 3 to 6 feet deep, lower existing buried cable (460'), place 2-3½" Steel Pipes for emergency use, place electrolysis testing facilities and back fill trench.

Lot 10 Sec. 1 Lot 11 Sec. 1
198.27' 276+91.27
150' 276+31.53
150' 277+27.16
150' 282+00
195' 284+00
187.71' 284+85
255' 284+85
255' 285+40
183' 285+40
165' 287+50
R-10,000' 37+52.78
R-10,000' 36+11.36
130.26' 283+53.69 P/L
℄ 274+45.85
℄ 278+38.70
℄ 281+96.6
℄ 284+58.70
℄ 286+70.13
Structure No. ATB-1-1804
Structure No. ATB-1-1820
Underground Telephone Cable
Proposed 2-3½" Pipes
P.C. 0+00
℄ 4+53.07
183.59' 279+75.27
P.R.C. 8+49.16
P.T. 9+83.61
Roadside Rest Ramp "C" ℄
Roadside Rest Ramp "D" ℄
N. 38°33'-12" E.
Fence
Lot 10 Sec. 1 Lot 12 Sec. 1
Lot 9 Sec. 1 Lot 10 Sec. 1
R-2
ASHTABULA COUNTY SHEFFIELD TWP.

Sta. 258+00 to Sta. 289+00

7 / 13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

197/202

8/13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

Lot 8 Sec. 1 / Lot 9 Sec. 1 — 160' 292+00 — 172.23' 293+60.67 — 255' 294+50 — 174.67' 294+20 — 255' 295+00 — 180' 295+00 — 185' 299+00 — 216.25' 301+77.76 — Lot 8 Sec. 1 / Lot 31

12-17X CARL E. SULIN & EULA I. SULIN Cont. 0.11

12-18 LA ARTHUR E. REILLY & CAROLINE M. REILLY Cont. 1.42

Lot 31 / Lot 30 — 118.92' 302+53.92

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O. 0.28

KINGSVILLE TWP. / SHEFFIELD TWP.

Structure No. ATB-1-1853

Structure No. ATB-1-1837

12-17 LA CARL E. SULIN & EULA I. SULIN Cont. 7.15

℄ 295+01.56

29 28 27 26 25 24 23 22 21 — 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304

S.T. 22-52.78 — C.S. 2N02.78

Roadside Rest ℄ Ramp "D" — Roadside Rest ℄ Ramp "C"

Woods — Woods

N. 38°33'-12" E.

45.38' 295+36.05

12-14 LA KARL LUKAS & SALLY LUKAS Cont. 12.35

12-14Y Cont. 0.02

12-16 LA FRANK S. FOX Cont. 0.43

℄ 303+46.97 — TWP. line

Fence

180' 293+00 — Lot 9 Sec. 1 / Lot 13 Sec. 1 — 205.88' 293+30 — 180' 293+63.28

235' 290+00

180' 296+38.35 — Lot 8 Sec. 1 / Lot 13 Sec. 1

180' 301+90 — 135.46' 304+52.96 — Lot 30 / Lot 8 Sec. 1 / Lot 13 Sec. 1

12-17Y CARL E. SULIN & EULA I. SULIN Cont. 0.03

205' 301+90 — 180' 302+00 — 205' 302+00

177.20' 304+01.57 — 12-20 LA B.O. PAGE & IRENE M. PAGE Cont. 004

Lot 8 Sec. 1 / Lot 13 Sec. 1

ASHTABULA COUNTY — SHEFFIELD TWP. — R-2

Lot 31 / Lot 30

220' 308+00 — 210' 311+00 — 290' 314+10 — 290' 314+60 — 139' 313+60 — 174' 314+60 — 150' 317+00

12-19Y PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 0.11

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O 0.28

℄ 4+53.07

4 3 2 1 0 — Roadside Rest ℄ Ramp "D"

Structure No. ATB-1-1874

304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 — N. 38°33'-12" E.

KINGSVILLE TWP. / SHEFFIELD TWP.

12-17 LA CARL E. SULIN & EULA I. SULIN Cont. 7.15

30 31 32 33 34 35 36 37 — Roadside Rest ℄ Ramp "C"

A=10000' 36+11.36 — P=10000' 37+52.78

12-19X PERRY M. PARKER & GENEVIEVE C. PARKER Cont. 0.04

135.46' 304+52.96

Fence

150' 312+70 — 150' 313+25 — 180' 312+70 — 190' 313+15

177.20' 304+01.57 — 12-20 LA B.O. PAGE & IRENE M. PAGE Cont. 0.04 — 176.82' 307+86.34 — 175' 306+50

Lot 8 Sec. 1 / Lot 13 Sec. 1 — Lot 30 / Lot 13 Sec. 1

ASHTABULA COUNTY — KINGSVILLE TWP. — R-2

Revised 3-28-58

Sta. 289+00 to 319+00

8/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

197A / 202

ATB - 1 (15.73)
ATB - 90 (18.10)
I-90-2 (13)(86)
R/W SHEET 8A of 13
Added 8-1-67

8-A / 13

FUNDS FOR ADDITIONAL R/W		I-FUNDS	LSI-FUNDS
12-14 W.L.	STANLEY KOLOSINSKY Etal.	0.30 AC.	
12-14 W.S.	STANLEY KOLOSINSKY Etal.		0.99 AC.
12-15 W.L.	RAYMOND R. SIMMONS	1.22 AC.	
12-15 W.S.	RAYMOND R. SIMMONS		1.69 AC.
12-17 W.S.	CARL E. & EULA I SULIN		1.23 AC.
12-18 W.L.	WILLIAM L. HARMON Etal.	1.48 AC.	
12-18 W.S.	WILLIAM L. HARMON Etal.		6.92 AC.
12-19 W.L.	PERRY M. PARKER Etal.	0.24 AC.	
12-19 W.S.	PERRY M. PARKER Etal.		4.50 AC.
12-18A W.S.	EMIL A. HAKUNDY		0.25 AC.

ASHTABULA COUNTY
SHEFFIELD TOWNSHIP
LOTS 9 & 10 SEC. 1, RANGE-2

NOTE:- This plan was prepared from surveys made by the Department of Highways, under the supervision of Robert L. Krieg, Registered Surveyor number 5138, State of Ohio.

Scale :-
1" = 100'

Added to Original Plan 8-1-67
COMPLETED 8-1-67

SEE SHEET 7 OF 13 FOR PRECEEDING R/W DETAILS. PRIOR TO 8-1-67

SEE SHEETS 8 & 13 FOR SUCCEEDING R/W DETAILS PRIOR TO 8-1-67

RIGHT-OF-WAY STA. 278+00 TO STA. 315+00

PARCEL SUMMARY

Par. 12-15	W.L.	Raymond R. Simmons	
Par. 12-15	W.L.	T.B.A.	1.22 Ac.
Par. 12-15	L.A.	P.R.O.	4.14 Ac.
		Total Par. 12-15 W.L.	5.36 Ac.
Par. 12-15	W.S.	T.B.A.	1.69 Ac.
Par. 12-14	W.L.	Stanley Kolosinsky, et al.	
Par. 12-14	W.L.	T.B.A.	0.30 Ac.
Par. 12-14	L.A.	P.R.O.	12.35 Ac.
		Total Par. 12-15 W.L.	12.65 Ac.
Par. 12-14	W.S.	T.B.A.	0.99 Ac.

PARCEL SUMMARY

Par. 12-17	W.L.	Carl E. & Eula I. Sulin	
Par. 12-17	L.A.	P.R.O.	7.15 Ac.
		Total	7.15 Ac.
Par. 12-17	W.S.	T.B.A.	1.23 Ac.
Par. 12-18	W.L.	William L. Harmon, et al.	
Par. 12-18	W.L.	T.B.A.	1.48 Ac.
Par. 12-18	L.A.	P.R.O.	1.42 Ac.
		Total	2.90 Ac.
Par. 12-18	W.S.	T.B.A.	6.92 Ac.
Par. 12-18A	W.S.	Emil A. Hakundy	
Par. 12-18A	W.S.	T.B.A.	0.25 Ac.
		Total	0.25 Ac.
Par. 12-19	W.L.	Perry M. Parker, et al.	
Par. 12-19	W.L.	T.B.A.	0.24 Ac.
Par. 12-18	L.A.	P.R.O.	23.84 Ac.
		Total	24.08 Ac.
Par. 12-18	W.S.	T.B.A.	4.50 Ac.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

198/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

9/13

450' 303+00 — Lot 31 Lot 8 Sec. 1 — P/L — Twp. line 2 — 450' 306+67.05 — 450' 308+00

(12-18 LA) ARTHUR E. REILLY & CAROLINE M. REILLY Cont. 1.42

230' 303+00 — 216.25' 301+77.76 — 185' 299+00 — Fence — 220' 308+00 — 210' 311+00 — Fence

P/L — Lot 31 — Lot 30 — P.C. 15+02.78 — ℄ Park Area 305+50 — P.C. 9+83.61 — P.R.C. 8+99.16 — ℄ 4+55.07

C.S. 21+02.78

21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5

Roadside Rest & Ramp D

118.92' 302+53.92

(12-17 LA) CARL E. SULIN & EULA I. SULIN Cont. 7.15

(12-19 LA) PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O. 0.28

KINGSVILLE TWP. — SHEFFIELD TWP.

297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313

N-38° 33'-12"E

Structure No. ATB-1-1853

℄ 303+46.97

Lot 30 — Lot 8 — P/L

ASHTABULA COUNTY — SHEFFIELD TWP. — R2 — ASHTABULA COUNTY — KINGSVILLE TWP. — R-2

280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296

P/L

(12-14 LA) KARL LUKAS & SALLY LUKAS Cont. 12.35

℄ 281+96.6

(12-15 LA) RAYMOND R. SIMMONS Cont. 4.14

℄ 284+58.10

Structure No. ATB-1-1820

℄ 286+10.13

N-38° 33'-12"E

Structure No. ATB-1-1837

Lot 8 Sec. 1 — Lot 9 Sec. 1

(12-17 LA) CARL E. SULIN & EULA I. SULIN Cont. 7.15

℄ 295+01.56

45.38' 295+36.05

(12-14 LA) KARL LUKAS SALLY LUKAS Cont. 12.35

(12-14Y) Cont. 0.02

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

℄ 4+55.07

Roadside Rest & Ramp C

P.R.C. 8+99.16 — P.T. 9+83.61 — ℄ Park Area 287+50 — P.C. 5+02.78 — C.S. 21+02.78

Fence — Fence

183.59' 279+75.21

P/L — Lot 10 Sec. 1 — Lot 12 Sec. 1

300' 285+00 — 430' 285+00 — 430' 288+05.38 — 235' 290+00 — 180' 293+00 — 180' 293+63.28 — 205.88' 293+50

Lot 9 Sec. 1 — Lot 10 Sec. 1 — Lot 9 Sec. 1 — Lot 13 Sec. 1

(12-16 LA) FRANK S. FOX Cont. 0.43

ASHTABULA COUNTY — SHEFFIELD TWP. — R.2

Revised 3-28-58

Rt. Sta. 280+00 To Sta. 296+00 - Lt. Sta. 297+00 To Sta. 313+00

9/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

199/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

10/13

150' ℄ Survey Sta. 330+70
115.47' ℄ Wright Rd. Sta. 17+20.35

150' ℄ Survey Sta. 330+37
136.05' ℄ Wright Rd. Sta. 16+94.86

12-19 LA — PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~
Cont. 23.84
P.R.O. 0.28

Fence

Structure No. ATB-1-1895

Structure No. ATB-1-1907

Sta. 330+66.85 ℄ Survey
Sta. 16+29.58 ℄ Wright Rd.

319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334

N. 38° 33' 12" E.

Bridge No. ATB-1-1905

150' ℄ 328+72.08
℄ @ 13+03.94

150' ℄ 328+37.89
℄ @ 13+51.95

Existing R/W

15 P/L

16

Existing R/W

12-21 LA — LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

Fence

150' ℄ Survey Sta. 327+38
87.16' ℄ Wright Rd. Sta. 12+73.73

12-19 — Cont. 0.47
P.R.O. 0.38

Lot 30 13
Lot 19

℄ Wright Road

N. 04° 57' E.

150' @ 329+18.27
25' @ 14+14.90

283.96
14+00

12-21 — Cont. 0.75
P.R.O. 0.43

10.5.13'
14+65

12-21X — Cont. 0.54

150' ℄ Survey Sta. 330+56
110.68' ℄ Wright Rd. Sta. 15+22.78

12-19A — Cont. 0.71
P.R.O. 0.34

12-19Z — Cont. 1.30

150' @ 332+15.93
25' @ 18+34.20

P/L

18

150' @ 332+55.62
℄ @ 18+65.72

150' @ 332+95.81
25' @ 18+97.18

Structure No. ATB-1-1912

ASHTABULA COUNTY KINGSVILLE TWP. R-2

150' ℄ Survey Sta. 338+10
96.04' Wright Rd. 19+86.58

END PROJECT
STA. 338+00.73

150'
338+00.73

Fence

12-21 LA — LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

End Section 12
Sta. 338+00.73

℄
338+00.73

334 Lot 19
Lot 19
335 336 337 338

N. 38° 33' 12" E.

Woods

END WORK
STA. 338+30

Fence

150'
338+00.73

ASHTABULA COUNTY KINGSVILLE TWP R-2

Revised 3-28-58

Sta. 319+00 to Sta. 338+00

10/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

200
202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

11
13

Begin Work Sta. 6+00

BEGIN WORK STA. 0+09.53

12-6 T-1 BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 0.30 ~~P.R.O. 0.01~~

12-6 WA BENJAMIN H. SIMMONS & STELLA SIMMONS ~~Cont. 0.02~~

12-6 BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 1.97 ~~P.R.O. 1.97~~

12-6 T BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 0.27

12-6 LA Cont. 0.07 P.R.O. 0.25

12-5 E.R. LEHTINEN & H.E. LEHTINEN Cont. 0.05 ~~P.R.O. 0.41~~

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN Cont. 32.29 P.R.O. 0.22

12-7 LA MARTIN F. KUHN LOIS ANN KUHN Cont. 0.60 P.R.O. 0.26

12-7 MARTIN F. KUHN LOIS ANN KUHN Cont. 0.32 ~~P.R.O. 0.05~~

12-7 WA MARTIN F. KUHN & LOIS ANN KUHN ~~Cont. 0.05~~

12-7X Cont. 001

12-7A X ~~Cont. 0.002~~

12-7A DEAN R. STANTON & ROSIBEL STANTON Cont. 0.07 P.R.O. 0.28

12-8 LA HARRY W. BOGAR & LUCILLE B. BOGAR Cont. 1.43 P.R.O. 0.44

12-8 HARRY W. BOGAR & LUCILLE B. BOGAR Cont. 0.03 ~~P.R.O. 1.8~~

12-9 LA MELVIN DEWEY Cont. 1.74

12-10 MELVIN R. DEWEY & MARGARET M. DEWEY Cont. 0.20 P.R.O. 0.40

12-10 MELVIN R. DEWEY & MARGARET M. DEWEY Cont. 0.45

12-10T

12-11 T JOHN DEWEY Cont. 0.11 ~~P.R.O. 0.11~~

END WORK STA. 10+00

End Work Sta. 29+00

Δ=35°00'00"
D=11°
R=520.87'
T=169.23'
L=318.18'
E=25.28'

Existing R/W

Lot 4 Sec.1 / Lot 11 Sec.1

Lot 16 Sec.1

Lot 15 Sec.1

Lot 11 Sec.1

Bridge No. ATB-1-1764

Sta. 10+00 SR 83 = Sta. 0+00 Dibble Rd.

℄ Temporary Runaround

See Sheet No. 3/16 for disposition of buildings

Frame Farm Bldg.

18.5 Sty Frame House

Drive to be abandoned

Frame Farm Bldg.

4 Story Frame Bldg.

4'x4' Cistern

5'x5' Septic Tank

Barn

Corn Crib

Lodge

6" FT. 30" Maple

Woods

Fence

ASHTABULA COUNTY SHEFFIELD TWP. R-2

Revised 3-28-58

SR. 83 Sta. 6+00 to Sta. 24+00 & Dibble Rd. Sta. 0+00 to Sta. 10+00

11/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

201
202

12
13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

BEGIN WORK
STA. 7+65

12-19 PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 0.47
~~P.R.O. 0.38~~

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 23.84
P.R.O. 0.29

12-19Z PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 1.30

12-19A Cont. 0.71
~~P.R.O. 0.54~~

12-21 LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.75

12-21 LA LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

12-21A LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.41
~~P.R.O. 0.30~~

12-21X LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.54

Fence

Structure No. ATB-1-1907

Bridge No. ATB-1-1905

Structure No. ATB-1-1912

End Channel Change

Existing Channel

Existing R/W

Lot 30

Lot 19

℄ Wright Rd.

℄ Buie Rd.

℄ of Ditch

N. 0°-04'-57" E.

N. 38°-33'-12" E.

150' ℄ Survey Sta. 330+37
136.05' ℄ Wright Rd Sta. 16+99.46

150' ℄ Survey Sta. 330+70
115.41' ℄ Wright Rd. Sta. 11+20.35

150' ℄ Survey Sta. 327+38
87.16' ℄ Wright Rd. Sta. 12+93.73

150' @ 328+37.99
25' @ 3°-57.98

150' @ 329+73.08
& @ 3°-53.44

150' @ 329+18.27
25' @ 14+14.90

150' @ 332+15.93
25' @ 18°-34.26

150' @ 332+55.62
& @ 18°-63.72

150' @ 332+95.81
25' @ 18°-97.81

150' ℄ Survey Sta. 330+37
Sta. 16+24.58 ℄ Wright Rd

150' ℄ Survey Sta. 330+56
110.68' ℄ Wright Rd. 15+22.78

150' ℄ Survey Sta. 334+10
96.04' ℄ Wright Rd Sta. 19+86.54

390'
20+25

395'
19+65

86.53'
19+90

64'
22+00

98.88'
14+00

105.13'
14+65

320'
12+60

320'
13+80

370'
12+90

25'
6+50

25'
8+50

25'
1+00

25'
24+50

25'
24+00

END WORK
STA. 24+00

ASHTABULA COUNTY KINGSVILLE TWP. R2

ASHTABULA COUNTY KINGSVILLE TWP. R-2

Revised 3-28-73 Wright Rd Sta. 11+20.35 to Sta. 37+00

12

ESTIMATED QUANTITIES OF FENCE

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

202/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

13/13

(1) FENCE RIGHT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchor: Line Post	Intermediate Deflection Anchor: Anchor Post Assembly	Type A Fence Lin. Ft.
153+50		188	1				
156+01		207	1				
153+50	156+01						298
166+51		187	1				
170+00		178			1		
166+51	170+00						349
176+50		198				1	
170+00	176+50						690
180+00		153			1		
176+50	180+00						347
183+50		198			1		
180+00	183+50						346
187+00		153			1		
183+50	187+00						346
190+52.93		198			1		
187+00	190+52.93						350
196+50		148			1		
190+76.77	196+50						573
202+50		198				1	
196+50	202+50						600
208+9991		228				1	
202+50	208+9991						600
210+58.34		293			1		
208+9991	210+58.34						218
219+50		298				1	
210+58.34	219+50						398
221+00		183			1		
219+50	221+00						656
229+00		172			1		
221+00	229+00						307
227+50		168			1		
224+00	227+50						356
234+00		153			1		
227+50	234+00						658
239+71		152	1				
234+00	239+71						579
239+85		152	1				
290+50		153			1		
239+85	290+50						68
297+00		153			1		
290+50	297+00						652
252+0268		153			1		
297+00	252+0268						510
255+05		149	1				
252+0268	255+05						303
257+55		153	1				
258+21.79		153			1		
257+55	258+21.79						70
269+76.16		153			1		
258+21.79	269+76.16						660
269+00		157			1		
269+76.16	269+00						398
272+91.89		162.8			1		
269+00	272+91.89						343
276+85		176	1				
272+91.89	276+85						494
276+97		176	1				
279+75.21		181.6				1	
276+97	279+75.21						280
284+25		279	1				
279+75.21	284+25						460
284+37		279	1				
285+02		298		1			
284+37	285+02						67
		Total	11	1	18	5	11,768

(2) FENCE RIGHT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchor: Line Post	Intermediate Deflection Anchor: Anchor Post Assembly	Type A Fence Lin. Ft.
FOR ROADSIDE REST AREA FENCE SEE SHEET No. 10							
289+98		233		1			
293+00		178				1	
289+98	293+00						316
293+28		178	1				
293+00	293+28						28
293+90		178	1				
296+3835		178			1		
293+90	296+3835						302
301+56		178	1				
296+3835	301+56						518
301+68		178	1				
302+00		178			1		
301+68	302+00						32
306+50		173			1		
302+00	306+50						950
312+70		198			1		
306+50	312+70						620
312+92		198	1				
312+70	312+92						22
313+09		198	1				
318+50		198			1		
313+09	318+50						546
324+00		198			1		
318+50	324+00						550
327+90		198	1				
324+00	327+90						390
330+59		198	1				
333+75		198			1		
330+59	333+75						321
338+00		198	1				
333+75	338+00						425
		Total	9	1	7	1	9,470

(3) FENCE LEFT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchors: Line Post	Intermediate Deflection Anchors: Anchor Post Assembly	Type A Fence Lin. Ft.
153+50		212	1				
155+00		209	1				
153+50	155+00						153
162+25.36		168.9	1				
163+50		163			1		
162+25.36	163+50						125
170+00		153			1		
163+50	170+00						660
176+50		153			1		
170+00	176+50						658
180+00		149			1		
176+50	180+00						354
183+50		153			1		
180+00	183+50						354
187+00		149			1		
183+50	187+00						354
190+52.93		153			1		
187+00	190+52.93						356
196+50		148			1		
190+76.77	196+50						574
202+50		168			1		
196+50	202+50						600
208+9991		188			1		
202+50	208+9991						595
219+12.70		163				1	
208+9991	219+12.70						560
217+50		209			1		
219+12.70	217+50						334
221+00		238			1		
217+50	221+00						347
227+50		248				1	
221+00	227+50						635
234+00		153				1	
227+50	234+00						693
238+12		157	1				
234+00	238+12						908
238+24		157	1				
240+50		153			1		
238+24	240+50						232
247+00		148			1		
240+50	247+00						640
251+02		150	1				
247+00	251+02						396
253+15		149.9	1				
256+00		148			1		
253+15	256+00						282
261+57.05		148			1		
256+00	261+57.05						560
267+96.10		148			1		
216+57.05	267+96.10						580
272+50		148			1		
268+2596	272+50						424
275+82		148	1				
272+50	275+82						332
275+94		148	1				
282+00		148				1	
275+94	282+00						606
289+00		193				1	
282+00	289+00						205
285+00		184	1				
289+00	285+00						100
285+12		183	1				
287+50		163				1	
285+12	287+50						239
		Total	11	0	18	6	12,303

(4) FENCE LEFT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchors: Line Post	Intermediate Deflection Anchors: Anchor Post Assembly	Type A Fence Lin. Ft.
292+00		158			1		
287+50	292+00						450
294+98		174	1				
292+00	294+98						298
294+62		175	1				
295+00		178			1		
294+62	295+00						38
299+00		183				1	
295+00	299+00						400
302+70		224	1				
299+00	302+70						371
302+86		226	1				
303+02		228		1			
302+86	303+02						16
FOR ROADSIDE REST AREA FENCE SEE SHEET No. 10							
307+98		218		1			
311+00		208			1		
307+98	311+00						302
313+82		180	1				
311+00	313+82						287
313+98		178	1				
317+00		148				1	
313+98	317+00						304
321+50		198			1		
317+00	321+50						450
326+00		198			1		
321+50	326+00						450
330+56		148	1				
326+00	330+56						456
334+08		198	1				
338+00		198	1				
334+08	338+00						392
		Total	9	2	5	2	9,161

Column No.	1		11	1	18	5	11,768
Column No.	2		9	1	7	1	9,470
Column No.	3		11	0	18	6	12,303
Column No.	4		9	2	5	2	9,161
		Total	40	4	48	14	32,702

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

190/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

1/13

CENTER LINE PLAT
ATB-1-15.73 ASHTABULA COUNTY

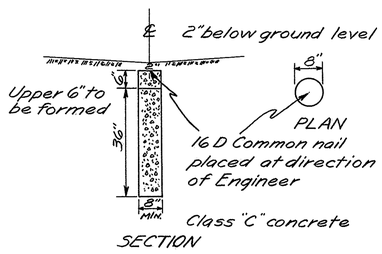
0 500' 1000' 1500' 2000'
Scale

This improvement has been declared a Limited Access Highway or Freeway by action of the Director of Highways and recorded in Volume ____, Page ____ of the Director's Journal in accordance with the provisions of Section 5511.02 revised code (1178-21), General Code of Ohio and dated _____

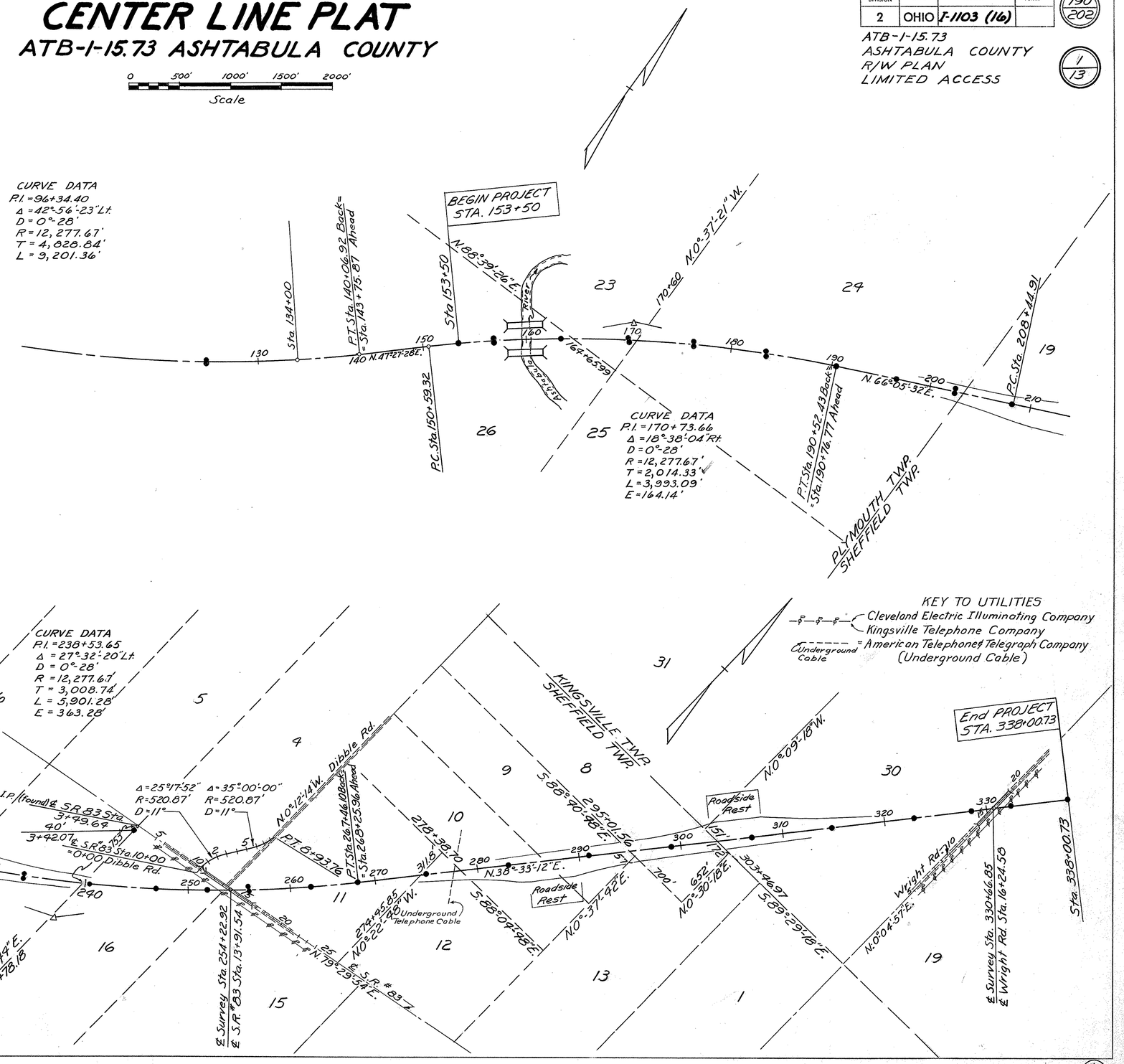
RECEIVED _____ AT _____
RECORDED _____
PLAT BOOK _____ PAGE _____
Signed _____
ASHTABULA COUNTY RECORDER
FEE $ _____

Signed _____
R/W ENGINEER
INTERSTATE PROJECTS
Date _____

All Bearings are derived from True North.



Detail of Centerline Reference Monuments



This plat was prepared by:

SHAFFER-PARRETT & ASSOCIATES
CONSULTING ENGINEERS, MANSFIELD, OHIO

Kenneth P. Shaffer C.E. No. 3511
Registered Surveyor No. 2172

MONUMENTS TO BE PLACED AFTER CONSTRUCTION

Station	Side	Dist	Station	Side	Dist
153+50	℄		234+00	Rt.	5.00
157+00	Rt.	5.00	234+00	Lt.	5.00
157+00	Lt.	5.00	240+50	℄	
163+50	℄		247+00	Rt.	5.00
170+00	Rt.	5.00	247+00	Lt.	5.00
170+00	Lt.	5.00	252+00	℄	
176+50	Rt.	5.00	256+00	Rt.	5.00
176+50	Lt.	5.00	256+00	Lt.	5.00
183+50	Rt.	5.00	262+00	℄	
183+50	Lt.	5.00	P.T. 267+46.10 Back =	℄	
P.T. 190+52.43 Back =	℄		268+25.96 Ahead		
190+76.77 Ahead			275+00	℄	
196+50	℄		283+00	℄	
202+50	Rt.	5.00	291+00	℄	
202+50	Lt.	5.00	299+00	℄	
PC. 208+44.91	℄		307+00	℄	
212+33.20	Rt.	4.65	315+00	℄	
212+65.85	Rt.	28.05	323+00	℄	
214+50	℄		328+50	℄	
221+00	℄		332+50	℄	
227+50	Rt.	5.00	338+00	℄	
227+50	Lt.	5.00			

1/13

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (16)	

191/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

2/13

SUMMARY OF ADDITIONAL R/W REQUIRED

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-1X	R.H. SEYMOUR	0.02	None	3/13	
12-1LA	"	16.50	"	3/13	
12-2LA	WILLIAM S. THOMAS &				
	JANET THOMAS	5.85	"	3/13	
12-2X	"	0.32	"	3/13	
12-2Y	"	0.29	"	3/13	
12-3LA	JOHN F. DUBACH &				
	MOLLY DUBACH	5.03	"	3/13 9/13	
12-9LA	WILLIAM S. THOMAS &				
	JANET THOMAS	36.39	"	9/13 5/13	See 12-2LA
12-5LA	E.R. LEHTINEN &				
	H.E. LEHTINEN	32.29	"	5/13 6/13 11/13	
12-5		0.06	"	6/13 11/13	S.R. 83
12-6LA	BENJAMIN H. SIMMONS &				
	STELLA SIMMONS	0.07	"	6/13 11/13	
12-6T	"	0.27	"	6/13 11/13	Temp. R/W
12-6	"	1.97	"	6/13 11/13	S.R. 83 & Dibble Rd.
12-6T-1	"	0.30		11/13	Temp R/W
12-6WA	"	[illegible]	"	11/13	
12-7LA	MARTIN F. KUHN &				
	LOIS ANN KUHN	0.60	"	6/13 11/13	

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-7	MARTIN F. KUHN &				
	LOIS ANN KUHN	0.32	None	6/13 11/13	
12-7WA	"	~~0.08~~	"	11/13	
12-7X	"	0.01	"	11/13	
12-7A	DEAN R. STANTON &				
	ROSIBEL STANTON	0.07	"	11/13	S.R. 83
12-7AX	"	0.02		11/13	
12-8LA	HARRY W. BOGAR &				
	LUCILLE B. BOGAR	1.93	Yes	6/13 7/13 11/13	
12-8	"	0.03	None	6/13 11/13	S.R. 83
12-10	MELVIN R. DEWEY &				
	MARGARET M. DEWEY	0.20	"	11/13	S.R. 83
12-10T		0.95	"	11/13	S.R. 83
12-11T	JOHN DEWEY	0.11		11/13	S.R. 83
12-9LA	MELVIN DEWEY	1.74	"	6/13 7/13 11/13	
12-10LA	MELVIN R. DEWEY &				
	MARGARET M. DEWEY	9.71	"	7/13	See 12-10
12-11LA	JOHN DEWEY	2.32	"	7/13	See. 12.11T

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
12-12LA	VIVIAN CHARLOTTE OLIN	2.72	None	7/13	
12-13LA	RAYMOND R. SIMMONS	3.15	"	7/13	
12-14LA	KARL LUKAS &				
	SALLY LUKAS	12.35	"	7/13 8/13 9/13	
					12-13LA
12-15LA	RAYMOND R. SIMMONS	9.19	"	7/13 9/13	See 12-13LA
12-14X	KARL LUKAS &				
	SALLY LUKAS	0.09	"	7/13	See 12-14LA
12-14Y	"	0.02	"	8/13 9/13	
12-16LA	FRANK S. FOX	0.93	"	8/13 9/13	
12-17LA	CARL E. SULIN &				
	EULA I. SULIN	7.15	"	8/13 9/13	
12-17X	"	0.11	"	8/13	
12-17Y	"	0.03	"	8/13	
12-18LA	ARTHUR E. REILLY &				
	CAROLINE M. REILLY	1.92	"	8/13 9/13	
12-19LA	PERRY M. PARKER &				
	GENEVIEVE C. PARKER	23.84	"	6/13 9/13 10/13 12/13	

PARCEL NO	OWNER	AREA ACRES	EXIST BLDG.	SHEET NO'S	REMARKS
	~~LIFE ESTATE~~	~~0.04~~	~~None~~	~~8/13 9/13~~	
12-20LA	B.O. PAGE & IRENE M. PAGE	0.04	None	9/13	
	~~LIFE ESTATE~~	~~0.04~~	~~"~~	~~8/13~~	
12-19X	PERRY M. PARKER &				
	GENEVIEVE C. PARKER	0.04	"	8/13	See 12-19LA
	~~LIFE ESTATE~~	~~0.04~~	~~"~~	~~8/13~~	~~See 12-19LA~~
12-19Y	"	0.11	"	9/13	
12-19	"	0.97	"	10/13 12/13	Wright Rd.
12-19Z	"	1.30	"	10/13 12/13	
12-19A	"	0.71	"	10/13 12/13	Wright Rd.
12-21LA	LLOYD E. KISTER &				
	THELMA W. KISTER	9.77	"	10/13 12/13	
12-21	"	0.75	"	10/13 12/13	Wright Rd.
12-21X	"	0.59	"	10/13 12/13	
12-21A	"	0.91	"	12/13	Wright Rd.

Revised 3-28-58

2/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

192
202

3
13

150'
134+00

MAUDE E. WESTCOTT
Cont.

182.8'
136+80

166.10'
136+80

P.I.

135'
137+30

12-1
X

R.H. SEYMOUR
~~R.H. SEYMOUR~~
Cont. 0.02

167.90'
137+30

175'
140+06.92 Back
143+75.87 Ahead

Fence

2220'
152+00

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

BEGIN WORK
STA. 152+50

CURVE DATA
P.I. 96+39.90
Δ = 42°-56'-23" Lt.
D = 0°-28'
R = 12,277.67'
T = 4,828.89'
L = 9,201.28'

167'
136+95.91

Sta. 140+06.92 Back =
Sta. 143+75.87 Ahead

Pond

Woods

134 135 136 137 138 139 140 144 145 146 147 148 149 150 151 152 153

N. 47°27'-28" E.

℄
135+82.63

P.T. Sta. 140+06.92

MAUDE E. WESTCOTT

12-1
LA

R.H. SEYMOUR
Cont. 16.50

Woods

P.C. Sta. 150+59.32

CURVE DATA
P.I. Sta. 170+73.66
Δ = 18°-38'-09" Rt.
D = 0°-28'
R = 12,277.67'
T = 2014.33'
L = 3,993.09'
E = 164.14'

152'
136+00

151.50'
136+80

155'
134+00

MAUDE E. WESTCOTT
Cont

430'
135+75

430'
136+25

155'
140+06.92 Back
143+75.87 Ahead

155.29'
144+18.68

Fence

160'
P.C. Sta. 150+59.32

ASHTABULA COUNTY

R-3 LOT 26

210'
157+00

270'
160+03

270'
160+99.31

12-2
X

WILLIAM S. THOMAS & JANET THOMAS
Cont. 0.32

170.91'
162+25.36

165'
163+50

Fence

Fence

RIVER

℄

183.79'
160+15

Bridge No.
ATB-1-1583
South Bridge

Woods

12-3
LA

JOHN F. DUBACH & MOLLY DUBACH
Cont. 5.03

℄
164+65.99

12-1
LA

R.H. SEYMOUR
Cont. 16.50

153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168

℄
160+15

BEGIN PROJECT
STA. 153+50

CURVE DATA
P.I. Sta. 170+73.66
Δ = 18°-38'-09" Rt.
D = 0°-28'
R = 12,277.67'
T = 2,014.33'
L = 3,993.09'
E = 164.14'

Woods

Bridge No.
ATB-1-1583
North Bridge

12-2
LA

WILLIAM S. THOMAS &
JANET THOMAS
Cont. 5.85

ASHTABULA

Fence

Fence

185'
163+50

Fence

215'
157+00

200.57'
161+00

270'
161+42.5

210'
161.95

12-2
Y

WILLIAM S. THOMAS & JANET THOMAS
Cont. 0.29

186.01'
167+93.98

Lot 23
Lot 26

ASHTABULA COUNTY

PLYMOUTH TWP.

R-3

Revised 3-28-58

Sta. 134+00 to Sta. 168+00

3
13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

193
202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

9
13

155'
170+00

P.I. Sta. 170+23.66

Lot 23
Lot 24

151.83'
171+55.60

155'
176+50

Fence

12-3 LA
JOHN F. DUBACH & MOLLY DUBACH
Cont. 5.03

P.I.

168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183

℄
170+60

CURVE DATA
P.I. Sta. 170+73.66
Δ - 18° 38' 04" Rt.
D - 0° 28'
R - 12,277.67'
T - 2,014.33'
L - 3993.09'
E - 164.14'

Woods

12-9 LA
WILLIAM S. THOMAS & JANET THOMAS
Cont. 36.34

Woods

Fence

150'
176+50

Lot 23
Lot 24

181.83'
169+41.67

150'
170+00

ASHTABULA COUNTY PLYMOUTH TWP. R-3

155'
183+50

155'
Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

Fence

EQUATION

150'
196+50

Woods

12-4 LA
WILLIAM S. THOMAS & JANET THOMAS
Cont. 36.34

183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198

Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

N. 66° 05' 32" E.

CURVE DATA
P.I. Sta. 170+73.66
Δ - 18° 38' 04" Rt
D - 0° 28'
R - 12,277.67'
T - 2,014.33'
L - 3,993.09'
E - 164.14'

P.T. Sta. 190+52.43

Woods

Fence

150'
183+50

150'
Sta. 190+52.43 Back =
Sta. 190+76.77 Ahead

ASHTABULA COUNTY PLYMOUTH TWP. R-3

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

194
202

5
13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

CURVE DATA
P.I. - 238+53.65'
Δ - 27°-32'-20"Lt.
D - 0°-28'
R - 12,277.66'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

12-4 LA WILLIAM S. THOMAS & JANET THOMAS
Con't. 36.34

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN
Con't. 32.29
P.R.O. 0.22

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN
Con't. 32.29
P.R.O. 0.22

PLYMOUTH TWP. R-3 | ASHTABULA COUNTY | SHEFFIELD TWP. R-2

Revised 3-28-58 **Sta. 198+00 to Sta. 228+00**

5

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

195/202

6/13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

12-5 LA — E.R. LEHTINEN & H.E. LEHTINEN
Cont. 32.29
P.R.O. 0.22

155' 234+00

155' 290+50

Lot 17 Sec.1
Lot 16 Sec.1

Weigh Station ℄ Ramp "B"

Woods

Structure No. ATB-1-17.35

P.C.C. 1+37.91

P.C. 0+00

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20" Lt.
D - 0°-28'
R - 12,277.67'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

Weigh Station ℄ Ramp "A"

P.R.C. 39+01.35

P.T. 40+21.35

℄ 239+78.18

Woods

Fence

155' 234+00

155' 290+50

Lot 17 Sec.1
Lot 16 Sec.1

ASHTABULA COUNTY — SHEFFIELD TWP. — R-2

12-5 — E.R. LEHTINEN & H.E. LEHTINEN
Cont. 0.06
P.R.O. 0.38

Lot 16 Sec.1

Lot 9 Sec.1

12-6 Cont. 1.97

12-6 T — Cont. 0.27

12-6 LA — Cont. 0.07
P.R.O. 0.25

Lot 9 Sec.1

Lot 11 Sec.1

N. 9°-29'-54" E.

Existing R/W

To N. 79°-29'-54" E.

63.36' @ 1+61.76

Benjamin H. Simmons & Stella Simmons

165.81' 255+21.39

151.73' 254+63.97

151.35' 255+06.31

℄ Dibble Rd.

150.81' 255+49.23

150' 256+00

198.19' 255+46.52

REMOVAL OF EXISTING STRUCTURE
ITEM S-24 (Lump)
Parcel 12-8 LA 1-1½ Sty. Frame Res.
Parcel 12-8 LA 1-Frame Farm Bldg.

150' 241+00

Fence

53.30' @ 10+40.92
152.24' @ 251+00

40' @ 10+61.19
151.97' @ 251+25.05

℄ @ 11+23.60
150.60' @ 252+00

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20" Lt.
D - 0°-28'
R - 12,277.67'
T - 3,008.74'
L - 5,901.28'
E - 363.28'

Bridge No. 1 ATB-1-17.64

40' @ 11+81.70
151.60' @ 252+27.50

R/W Marker

R/W Marker

Woods

℄ S.R.83 Sta. 13+41.62
28.91' ℄ Survey Sta. 253+81.81

40' @ 13+16.40
151' @ 253+85.44

150.91' 255+92.62

1 Existing R/W

40' @ 13+79.38
39.19' @ 254+35.80

℄ Survey Sta. 254+22.92
℄ S.R. 83 Sta. 13+91.54

12-9 LA — MELVIN DEWEY
Cont. 1.74

97.68' 258+83.30

℄ 257+53

12-8 LA — HARRY W. BOGAR & LUCILLE B. BOGAR
Cont. 1.43
P.R.O. 0.44

Frame Res. 61.5 Sq.

12.3 Sq. Frame Garage

Hedge

Fruit Trees

℄ 253+53.60

12-7 LA — MARTIN F. KUHN & LOIS ANN KUHN
Cont. 0.60
P.R.O. 0.26

R/W Marker

Existing R/W

40' @ 15+97.47
151.16' @ 255+67.51

76.91' @ 15+95.78
151.06' @ 255.05

N. 79°-29'-54" E.

Lot 16 Sec.1
Lot 15 Sec.1

155' 252+02.68

MARTIN F. KUHN & LOIS ANN KUHN
Cont. 0.32
P.R.O. 0.39

12-7

℄ S.R.83 16+54.20
151.69' @ 256+36.07

Drive to be Abandoned

12" Cmp.

Existing R/W Lot 11 Sec.1

℄ Lot 15 Sec.1

230.96' Sta. 257+92.83
S.R. 83-17+88.22

155' 258+21.79

ASHTABULA COUNTY — SHEFFIELD TWP. — R2

Revised 3-28-58

Sta. 228+00 to Sta. 258+00

6/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

196 / 202

7 / 13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

CURVE DATA
P.I. - 238+53.65
Δ - 27°-32'-20Lt.
D - 0°-28'
R - 12,277.64'
T - 3,008.74'
L - 5,901.28
E - 363.28

12-8 LA
HARRY W. BOGAR &
LUCILLE B. BOGAR
Cont. 1.43
P.R.O. 0.44

12-9 LA
MELVIN DEWEY
Cont. - 1.74

12-10 LA
MELVIN R. DEWEY &
MARGARET M. DEWEY
Cont. 4.71

12-11 LA
JOHN DEWEY
Cont. 2.32

12-12 LA
VIVIAN CHARLOTTE OLIN
Cont. - 2.72

12-13 LA
RAYMOND R.
SIMMONS
Cont. 3.15

12-14 LA
KARL LUKAS &
SALLY LUKAS
Cont. 12.35

12-14X LA
KARL LUKAS &
SALLY LUKAS
Cont. 0.09

12-15 LA
RAYMOND R. SIMMONS
Cont. 4.14

150' 261+57.05
150' 267+46.10 Back 269+25.96 Ahead
150' 268+78.99
129.22' 269+02.94
97.18' 258+83.30
155' 258+21.79
155' 264+76.16
164.81' 272+41.84
℄ 257+53
℄ 259+88.84
℄ 266+62.47
Sta. 267+46.10 Back Sta. 268+25.96 Ahead
Pt. Sta. 267+46.10
℄ 270+51.88
℄ 274+45.85
N. 38°33'-12" E.
Fence
Lot 11 Sec. 1 Lot 12 Sec. 1
R-2 P/L Lot 11 Sec. 1 Lot 12 Sec. 1
ASHTABULA COUNTY SHEFFIELD TWP. Lot 11 Sec. 1

Description of the American Telephone and Telegraph Company's Utility Relocation Work also Sheet No. 87.
Excavate 460' trench 3 to 6 feet deep, lower existing buried cable (460'), place 2-3½" Steel Pipes for emergency use, place electrolysis testing facilities and back fill trench.

Lot 10 Sec. 1 Lot 11 Sec. 1
198.27' 276+91.27
150' 276+31.53
150' 277+27.16
150' 282+00
195' 284+00
187.71' 284+85
255' 284+85
255' 285+40
183' 285+40
165' 287+50
R-10,000' 37+52.78
R-10,000' 36+11.36
130.26' 283+53.69 P/L
℄ 274+45.85
℄ 278+38.70
℄ 281+96.6
℄ 284+58.70
℄ 286+70.13
Structure No. ATB-1-1804
Structure No. ATB-1-1820
Underground Telephone Cable
Proposed 2-3½" Pipes
P.C. 0+00
℄ 4+53.07
183.59' 279+75.27
P.R.C. 8+49.16
P.T. 9+83.61
Roadside Rest Ramp "C" ℄
Roadside Rest Ramp "D" ℄
N. 38°33'-12" E.
Fence
Lot 10 Sec. 1 Lot 12 Sec. 1
Lot 9 Sec. 1 Lot 10 Sec. 1
R-2
ASHTABULA COUNTY SHEFFIELD TWP.

Sta. 258+00 to Sta. 289+00

7 / 13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

197/202

8/13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

Lot 8 Sec. 1 / Lot 9 Sec. 1 — 160' 292+00 — 172.23' 293+60.67 — 255' 294+50 — 174.67' 294+20 — 255' 295+00 — 180' 295+00 — 185' 299+00 — 216.25' 301+77.76 — Lot 8 Sec. 1 / Lot 31

12-17X CARL E. SULIN & EULA I. SULIN Cont. 0.11

12-18 LA ARTHUR E. REILLY & CAROLINE M. REILLY Cont. 1.42

Lot 31 / Lot 30 — 118.92' 302+53.92

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O. 0.28

KINGSVILLE TWP. / SHEFFIELD TWP.

Structure No. ATB-1-1853

Structure No. ATB-1-1837

12-17 LA CARL E. SULIN & EULA I. SULIN Cont. 7.15

℄ 295+01.56

29 28 27 26 25 24 23 22 21 — 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304

S.T. 22-52.78 — C.S. 2N02.78

Roadside Rest ℄ Ramp "D" — Roadside Rest ℄ Ramp "C"

Woods — Woods

N. 38°33'-12" E.

45.38' 295+36.05

12-14 LA KARL LUKAS & SALLY LUKAS Cont. 12.35

12-14Y Cont. 0.02

12-16 LA FRANK S. FOX Cont. 0.43

℄ 303+46.97 — TWP. line

Fence

180' 293+00 — Lot 9 Sec. 1 / Lot 13 Sec. 1 — 205.88' 293+30 — 180' 293+63.28

235' 290+00

180' 296+38.35 — Lot 8 Sec. 1 / Lot 13 Sec. 1

180' 301+90 — 135.46' 304+52.96 — Lot 30 / Lot 8 Sec. 1 / Lot 13 Sec. 1

12-17Y CARL E. SULIN & EULA I. SULIN Cont. 0.03

205' 301+90 — 180' 302+00 — 205' 302+00

177.20' 304+01.57 — 12-20 LA B.O. PAGE & IRENE M. PAGE Cont. 004

Lot 8 Sec. 1 / Lot 13 Sec. 1

ASHTABULA COUNTY — SHEFFIELD TWP. — R-2

Lot 31 / Lot 30

220' 308+00 — 210' 311+00 — 290' 314+10 — 290' 314+60 — 139' 313+60 — 174' 314+60 — 150' 317+00

12-19Y PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 0.11

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O 0.28

℄ 4+53.07

4 3 2 1 0 — Roadside Rest ℄ Ramp "D"

Structure No. ATB-1-1874

304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 — N. 38°33'-12" E.

KINGSVILLE TWP. / SHEFFIELD TWP.

12-17 LA CARL E. SULIN & EULA I. SULIN Cont. 7.15

30 31 32 33 34 35 36 37 — Roadside Rest ℄ Ramp "C"

A=10000' 36+11.36 — P=10000' 37+52.78

12-19X PERRY M. PARKER & GENEVIEVE C. PARKER Cont. 0.04

135.46' 304+52.96

Fence

150' 312+70 — 150' 313+25 — 180' 312+70 — 190' 313+15

177.20' 304+01.57 — 12-20 LA B.O. PAGE & IRENE M. PAGE Cont. 0.04 — 176.82' 307+86.34 — 175' 306+50

Lot 8 Sec. 1 / Lot 13 Sec. 1 — Lot 30 / Lot 13 Sec. 1

ASHTABULA COUNTY — KINGSVILLE TWP. — R-2

Revised 3-28-58

Sta. 289+00 to 319+00

8/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

197A / 202

ATB - 1 (15.73)
ATB - 90 (18.10)
I-90-2 (13)(86)
R/W SHEET 8A of 13
Added 8-1-67

8-A / 13

FUNDS FOR ADDITIONAL R/W		I-FUNDS	LSI-FUNDS
12-14 W.L.	STANLEY KOLOSINSKY Etal.	0.30 AC.	
12-14 W.S.	STANLEY KOLOSINSKY Etal.		0.99 AC.
12-15 W.L.	RAYMOND R. SIMMONS	1.22 AC.	
12-15 W.S.	RAYMOND R. SIMMONS		1.69 AC.
12-17 W.S.	CARL E. & EULA I SULIN		1.23 AC.
12-18 W.L.	WILLIAM L. HARMON Etal.	1.48 AC.	
12-18 W.S.	WILLIAM L. HARMON Etal.		6.92 AC.
12-19 W.L.	PERRY M. PARKER Etal.	0.24 AC.	
12-19 W.S.	PERRY M. PARKER Etal.		4.50 AC.
12-18A W.S.	EMIL A. HAKUNDY		0.25 AC.

ASHTABULA COUNTY
SHEFFIELD TOWNSHIP
LOTS 9 & 10 SEC. 1, RANGE-2

NOTE:- This plan was prepared from surveys made by the Department of Highways, under the supervision of Robert L. Krieg, Registered Surveyor number 5138, State of Ohio.

Scale :-
1" = 100'

Added to Original Plan 8-1-67
COMPLETED 8-1-67

SEE SHEET 7 OF 13 FOR PRECEEDING R/W DETAILS. PRIOR TO 8-1-67

SEE SHEETS 8 & 13 FOR SUCCEEDING R/W DETAILS PRIOR TO 8-1-67

RIGHT-OF-WAY STA. 278+00 TO STA. 315+00

PARCEL SUMMARY

Par. 12-15	W.L.	Raymond R. Simmons	
Par. 12-15	W.L.	T.B.A.	1.22 Ac.
Par. 12-15	L.A.	P.R.O.	4.14 Ac.
		Total Par. 12-15 W.L.	5.36 Ac.
Par. 12-15	W.S.	T.B.A.	1.69 Ac.
Par. 12-14	W.L.	Stanley Kolosinsky, et al.	
Par. 12-14	W.L.	T.B.A.	0.30 Ac.
Par. 12-14	L.A.	P.R.O.	12.35 Ac.
		Total Par. 12-15 W.L.	12.65 Ac.
Par. 12-14	W.S.	T.B.A.	0.99 Ac.

PARCEL SUMMARY

Par. 12-17	W.L.	Carl E. & Eula I. Sulin	
Par. 12-17	L.A.	P.R.O.	7.15 Ac.
		Total	7.15 Ac.
Par. 12-17	W.S.	T.B.A.	1.23 Ac.
Par. 12-18	W.L.	William L. Harmon, et al.	
Par. 12-18	W.L.	T.B.A.	1.48 Ac.
Par. 12-18	L.A.	P.R.O.	1.42 Ac.
		Total	2.90 Ac.
Par. 12-18	W.S.	T.B.A.	6.92 Ac.
Par. 12-18A	W.S.	Emil A. Hakundy	
Par. 12-18A	W.S.	T.B.A.	0.25 Ac.
		Total	0.25 Ac.
Par. 12-19	W.L.	Perry M. Parker, et al.	
Par. 12-19	W.L.	T.B.A.	0.24 Ac.
Par. 12-18	L.A.	P.R.O.	23.84 Ac.
		Total	24.08 Ac.
Par. 12-18	W.S.	T.B.A.	4.50 Ac.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

198/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

9/13

450' 303+00 — Lot 31 Lot 8 Sec. 1 — P/L — Twp. line 2 — 450' 306+67.05 — 450' 308+00

(12-18 LA) ARTHUR E. REILLY & CAROLINE M. REILLY Cont. 1.42

230' 303+00 — 216.25' 301+77.76 — 185' 299+00 — Fence — 220' 308+00 — 210' 311+00 — Fence

P/L — Lot 31 — Lot 30 — P.C. 15+02.78 — ℄ Park Area 305+50 — P.C. 9+83.61 — P.R.C. 8+99.16 — ℄ 4+55.07

C.S. 21+02.78

21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5

Roadside Rest & Ramp D

118.92' 302+53.92

(12-17 LA) CARL E. SULIN & EULA I. SULIN Cont. 7.15

(12-19 LA) PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~ Cont. 23.84 P.R.O. 0.28

KINGSVILLE TWP. — SHEFFIELD TWP.

297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313

N-38° 33'-12"E

Structure No. ATB-1-1853

℄ 303+46.97

Lot 30 — Lot 8 — P/L

ASHTABULA COUNTY — SHEFFIELD TWP. — R2 — ASHTABULA COUNTY — KINGSVILLE TWP. — R-2

280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296

P/L

(12-14 LA) KARL LUKAS & SALLY LUKAS Cont. 12.35

℄ 281+96.6

(12-15 LA) RAYMOND R. SIMMONS Cont. 4.14

℄ 284+58.10

Structure No. ATB-1-1820

℄ 286+10.13

N-38° 33'-12"E

Structure No. ATB-1-1837

Lot 8 Sec. 1 — Lot 9 Sec. 1

(12-17 LA) CARL E. SULIN & EULA I. SULIN Cont. 7.15

℄ 295+01.56

45.38' 295+36.05

(12-14 LA) KARL LUKAS SALLY LUKAS Cont. 12.35

(12-14Y) Cont. 0.02

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

℄ 4+55.07

Roadside Rest & Ramp C

P.R.C. 8+99.16 — P.T. 9+83.61 — ℄ Park Area 287+50 — P.C. 5+02.78 — C.S. 21+02.78

Fence — Fence

183.59' 279+75.21

P/L — Lot 10 Sec. 1 — Lot 12 Sec. 1

300' 285+00 — 430' 285+00 — 430' 288+05.38 — 235' 290+00 — 180' 293+00 — 180' 293+63.28 — 205.88' 293+50

Lot 9 Sec. 1 — Lot 10 Sec. 1 — Lot 9 Sec. 1 — Lot 13 Sec. 1

(12-16 LA) FRANK S. FOX Cont. 0.43

ASHTABULA COUNTY — SHEFFIELD TWP. — R.2

Revised 3-28-58

Rt. Sta. 280+00 To Sta. 296+00 - Lt. Sta. 297+00 To Sta. 313+00

9/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

199/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

10/13

150' ℄ Survey Sta. 330+70
115.47' ℄ Wright Rd. Sta. 17+20.35

150' ℄ Survey Sta. 330+37
136.05' ℄ Wright Rd. Sta. 16+94.86

12-19 LA — PERRY M. PARKER & GENEVIEVE C. PARKER ~~LIFE ESTATE~~
Cont. 23.84
P.R.O. 0.28

Fence

Structure No. ATB-1-1895

Structure No. ATB-1-1907

Sta. 330+66.85 ℄ Survey
Sta. 16+29.58 ℄ Wright Rd.

319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334

N. 38° 33' 12" E.

Bridge No. ATB-1-1905

150' ℄ 328+72.08
℄ @ 13+03.94

150' ℄ 328+37.89
℄ @ 13+51.95

Existing R/W

15 P/L

16

Existing R/W

12-21 LA — LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

Fence

150' ℄ Survey Sta. 327+38
87.16' ℄ Wright Rd. Sta. 12+73.73

12-19 — Cont. 0.47
P.R.O. 0.38

Lot 30 13
Lot 19

℄ Wright Road

N. 04° 57' E.

150' @ 329+18.27
25' @ 14+14.90

283.96
14+00

12-21 — Cont. 0.75
P.R.O. 0.43

10.5.13'
14+65

12-21X — Cont. 0.54

150' ℄ Survey Sta. 330+56
110.68' ℄ Wright Rd. Sta. 15+22.78

12-19A — Cont. 0.71
P.R.O. 0.34

12-19Z — Cont. 1.30

150' @ 332+15.93
25' @ 18+34.20

P/L

18

150' @ 332+55.62
℄ @ 18+65.72

150' @ 332+95.81
25' @ 18+97.18

Structure No. ATB-1-1912

ASHTABULA COUNTY KINGSVILLE TWP. R-2

150' ℄ Survey Sta. 338+10
96.04' Wright Rd. 19+86.58

END PROJECT
STA. 338+00.73

150'
338+00.73

Fence

12-21 LA — LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

End Section 12
Sta. 338+00.73

℄
338+00.73

334 Lot 19
Lot 19
335 336 337 338

N. 38° 33' 12" E.

Woods

END WORK
STA. 338+30

Fence

150'
338+00.73

ASHTABULA COUNTY KINGSVILLE TWP R-2

Revised 3-28-58

Sta. 319+00 to Sta. 338+00

10/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103(16)	

200
202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

11
13

Begin Work Sta. 6+00

BEGIN WORK STA. 0+09.53

12-6 T-1 BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 0.30 ~~P.R.O. 0.01~~

12-6 WA BENJAMIN H. SIMMONS & STELLA SIMMONS ~~Cont. 0.02~~

12-6 BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 1.97 ~~P.R.O. 1.97~~

12-6 T BENJAMIN H. SIMMONS & STELLA SIMMONS Cont. 0.27

12-6 LA Cont. 0.07 P.R.O. 0.25

12-5 E.R. LEHTINEN & H.E. LEHTINEN Cont. 0.05 ~~P.R.O. 0.41~~

12-5 LA E.R. LEHTINEN & H.E. LEHTINEN Cont. 32.29 P.R.O. 0.22

12-7 LA MARTIN F. KUHN LOIS ANN KUHN Cont. 0.60 P.R.O. 0.26

12-7 MARTIN F. KUHN LOIS ANN KUHN Cont. 0.32 ~~P.R.O. 0.05~~

12-7 WA MARTIN F. KUHN & LOIS ANN KUHN ~~Cont. 0.05~~

12-7X Cont. 001

12-7A X ~~Cont. 0.002~~

12-7A DEAN R. STANTON & ROSIBEL STANTON Cont. 0.07 P.R.O. 0.28

12-8 LA HARRY W. BOGAR & LUCILLE B. BOGAR Cont. 1.43 P.R.O. 0.44

12-8 HARRY W. BOGAR & LUCILLE B. BOGAR Cont. 0.03 ~~P.R.O. 1.8~~

12-9 LA MELVIN DEWEY Cont. 1.74

12-10 MELVIN R. DEWEY & MARGARET M. DEWEY Cont. 0.20 P.R.O. 0.40

12-10 MELVIN R. DEWEY & MARGARET M. DEWEY Cont. 0.45

12-10T

12-11 T JOHN DEWEY Cont. 0.11 ~~P.R.O. 0.11~~

END WORK STA. 10+00

End Work Sta. 29+00

Δ=35°00'00"
D=11°
R=520.87'
T=169.23'
L=318.18'
E=25.28'

Existing R/W

Lot 4 Sec.1 / Lot 11 Sec.1

Lot 16 Sec.1

Lot 15 Sec.1

Lot 11 Sec.1

Bridge No. ATB-1-1764

Sta. 10+00 SR 83 = Sta. 0+00 Dibble Rd.

℄ Temporary Runaround

See Sheet No. 3/16 for disposition of buildings

Frame Farm Bldg.

18.5 Sty Frame House

Drive to be abandoned

Frame Farm Bldg.

4 Story Frame Bldg.

4'x4' Cistern

5'x5' Septic Tank

Barn

Corn Crib

Lodge

6" FT. 30" Maple

Woods

Fence

ASHTABULA COUNTY SHEFFIELD TWP. R-2

Revised 3-28-58

SR. 83 Sta. 6+00 to Sta. 24+00 & Dibble Rd. Sta. 0+00 to Sta. 10+00

11/13

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-1103 (16)	

201
202

12
13

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

BEGIN WORK
STA. 7+65

12-19 PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 0.47
~~P.R.O. 0.38~~

12-19 LA PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 23.84
P.R.O. 0.29

12-19Z PERRY M. PARKER & GENEVIEVE C. PARKER
~~LIFE ESTATE~~
Cont. 1.30

12-19A Cont. 0.71
~~P.R.O. 0.54~~

12-21 LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.75

12-21 LA LLOYD E. KISTER & THELMA W. KISTER
Cont. 4.77
P.R.O. 0.28

12-21A LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.41
~~P.R.O. 0.30~~

12-21X LLOYD E. KISTER & THELMA W. KISTER
Cont. 0.54

Fence

Structure No. ATB-1-1907

Bridge No. ATB-1-1905

Structure No. ATB-1-1912

End Channel Change

Existing Channel

Existing R/W

Lot 30

Lot 19

℄ Wright Rd.

℄ Buie Rd.

℄ of Ditch

N. 0°-04'-57" E.

N. 38°-33'-12" E.

150' ℄ Survey Sta. 330+37
136.05' ℄ Wright Rd Sta. 16+99.46

150' ℄ Survey Sta. 330+70
115.41' ℄ Wright Rd. Sta. 11+20.35

150' ℄ Survey Sta. 327+38
87.16' ℄ Wright Rd. Sta. 12+93.73

150' @ 328+37.99
25' @ 3°-57.98

150' @ 329+73.08
& @ 3°-53.44

150' @ 329+18.27
25' @ 14+14.90

150' @ 332+15.93
25' @ 18°-34.26

150' @ 332+55.62
& @ 18°-63.72

150' @ 332+95.81
25' @ 18°-97.81

150' ℄ Survey Sta. 330+37
Sta. 16+24.58 ℄ Wright Rd

150' ℄ Survey Sta. 330+56
110.68' ℄ Wright Rd. 15+22.78

150' ℄ Survey Sta. 334+10
96.04' ℄ Wright Rd Sta. 19+86.54

390'
20+25

395'
19+65

86.53'
19+90

64'
22+00

98.88'
14+00

105.13'
14+65

320'
12+60

320'
13+80

370'
12+90

25'
6+50

25'
8+50

25'
1+00

25'
24+50

25'
24+00

END WORK
STA. 24+00

ASHTABULA COUNTY KINGSVILLE TWP. R2

ASHTABULA COUNTY KINGSVILLE TWP. R-2

Revised 3-28-73 Wright Rd Sta. 11+20.35 to Sta. 37+00

12

ESTIMATED QUANTITIES OF FENCE

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103(16)	

202/202

ATB-1-15.73
ASHTABULA COUNTY
R/W PLAN
LIMITED ACCESS

13/13

(1) FENCE RIGHT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchor: Line Post	Intermediate Deflection Anchor: Anchor Post Assembly	Type A Fence Lin. Ft.
153+50		188	1				
156+01		207	1				
153+50	156+01						298
166+51		187	1				
170+00		178			1		
166+51	170+00						349
176+50		198				1	
170+00	176+50						690
180+00		153			1		
176+50	180+00						347
183+50		198			1		
180+00	183+50						346
187+00		153			1		
183+50	187+00						346
190+52.93		198			1		
187+00	190+52.93						350
196+50		148			1		
190+76.77	196+50						573
202+50		198				1	
196+50	202+50						600
208+9991		228				1	
202+50	208+9991						600
210+58.34		293			1		
208+9991	210+58.34						218
219+50		298				1	
210+58.34	219+50						398
221+00		183			1		
219+50	221+00						656
229+00		172			1		
221+00	229+00						307
227+50		168			1		
224+00	227+50						356
234+00		153			1		
227+50	234+00						658
239+71		152	1				
234+00	239+71						579
239+85		152	1				
290+50		153			1		
239+85	290+50						68
297+00		153			1		
290+50	297+00						652
252+0268		153			1		
297+00	252+0268						510
255+05		149	1				
252+0268	255+05						303
257+55		153	1				
258+21.79		153			1		
257+55	258+21.79						70
269+76.16		153			1		
258+21.79	269+76.16						660
269+00		157			1		
269+76.16	269+00						398
272+91.89		162.8			1		
269+00	272+91.89						343
276+85		176	1				
272+91.89	276+85						494
276+97		176	1				
279+75.21		181.6				1	
276+97	279+75.21						280
284+25		279	1				
279+75.21	284+25						460
284+37		279	1				
285+02		298		1			
284+37	285+02						67
		Total	11	1	18	5	11,768

(2) FENCE RIGHT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchor: Line Post	Intermediate Deflection Anchor: Anchor Post Assembly	Type A Fence Lin. Ft.
FOR ROADSIDE REST AREA FENCE SEE SHEET No. 10							
289+98		233		1			
293+00		178				1	
289+98	293+00						316
293+28		178	1				
293+00	293+28						28
293+90		178	1				
296+3835		178			1		
293+90	296+3835						302
301+56		178	1				
296+3835	301+56						518
301+68		178	1				
302+00		178			1		
301+68	302+00						32
306+50		173			1		
302+00	306+50						950
312+70		198			1		
306+50	312+70						620
312+92		198	1				
312+70	312+92						22
313+09		198	1				
318+50		198			1		
313+09	318+50						546
324+00		198			1		
318+50	324+00						550
327+90		198	1				
324+00	327+90						390
330+59		198	1				
333+75		198			1		
330+59	333+75						321
338+00		198	1				
333+75	338+00						425
		Total	9	1	7	1	9,470

(3) FENCE LEFT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchors: Line Post	Intermediate Deflection Anchors: Anchor Post Assembly	Type A Fence Lin. Ft.
153+50		212	1				
155+00		209	1				
153+50	155+00						153
162+25.36		168.9	1				
163+50		163			1		
162+25.36	163+50						125
170+00		153			1		
163+50	170+00						660
176+50		153			1		
170+00	176+50						658
180+00		149			1		
176+50	180+00						354
183+50		153			1		
180+00	183+50						354
187+00		149			1		
183+50	187+00						354
190+52.93		153			1		
187+00	190+52.93						356
196+50		148			1		
190+76.77	196+50						574
202+50		168			1		
196+50	202+50						600
208+9991		188			1		
202+50	208+9991						595
219+12.70		163				1	
208+9991	219+12.70						560
217+50		209			1		
219+12.70	217+50						334
221+00		238			1		
217+50	221+00						347
227+50		248				1	
221+00	227+50						635
234+00		153				1	
227+50	234+00						693
238+12		157	1				
234+00	238+12						908
238+24		157	1				
240+50		153			1		
238+24	240+50						232
247+00		148			1		
240+50	247+00						640
251+02		150	1				
247+00	251+02						396
253+15		149.9	1				
256+00		148			1		
253+15	256+00						282
261+57.05		148			1		
256+00	261+57.05						560
267+96.10		148			1		
216+57.05	267+96.10						580
272+50		148			1		
268+2596	272+50						424
275+82		148	1				
272+50	275+82						332
275+94		148	1				
282+00		148				1	
275+94	282+00						606
289+00		193				1	
282+00	289+00						205
285+00		184	1				
289+00	285+00						100
285+12		183	1				
287+50		163				1	
285+12	287+50						239
		Total	11	0	18	6	12,303

(4) FENCE LEFT

STATIONS		Distance Out	End Post	Corner Post	Intermediate Deflection Anchors: Line Post	Intermediate Deflection Anchors: Anchor Post Assembly	Type A Fence Lin. Ft.
292+00		158			1		
287+50	292+00						450
294+98		174	1				
292+00	294+98						298
294+62		175	1				
295+00		178			1		
294+62	295+00						38
299+00		183				1	
295+00	299+00						400
302+70		224	1				
299+00	302+70						371
302+86		226	1				
303+02		228		1			
302+86	303+02						16
FOR ROADSIDE REST AREA FENCE SEE SHEET No. 10							
307+98		218		1			
311+00		208			1		
307+98	311+00						302
313+82		180	1				
311+00	313+82						287
313+98		178	1				
317+00		148				1	
313+98	317+00						304
321+50		198			1		
317+00	321+50						450
326+00		198			1		
321+50	326+00						450
330+56		148	1				
326+00	330+56						456
334+08		198	1				
338+00		198	1				
334+08	338+00						392
		Total	9	2	5	2	9,161

Column No.	1		11	1	18	5	11,768
Column No.	2		9	1	7	1	9,470
Column No.	3		11	0	18	6	12,303
Column No.	4		9	2	5	2	9,161
		Total	40	4	48	14	32,702

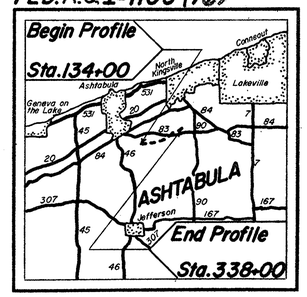
TE-54 A
25-6-56

SOIL PROFILE
ASHTABULA COUNTY
ATB-1-15.73
STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

1/5

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

FED. A.C. I-1103 (16)



LOCATION MAP

Recon - C.J.K. - 7-11-57
Drilling - C.A.S., C.A.C., C.E.G. - 7-27-57
Drafting - R.V.S. - 8-15-57

LEGEND FOR PROJECT - AVERAGE RESULTS OF TESTS - 170 SAMPLES TESTED

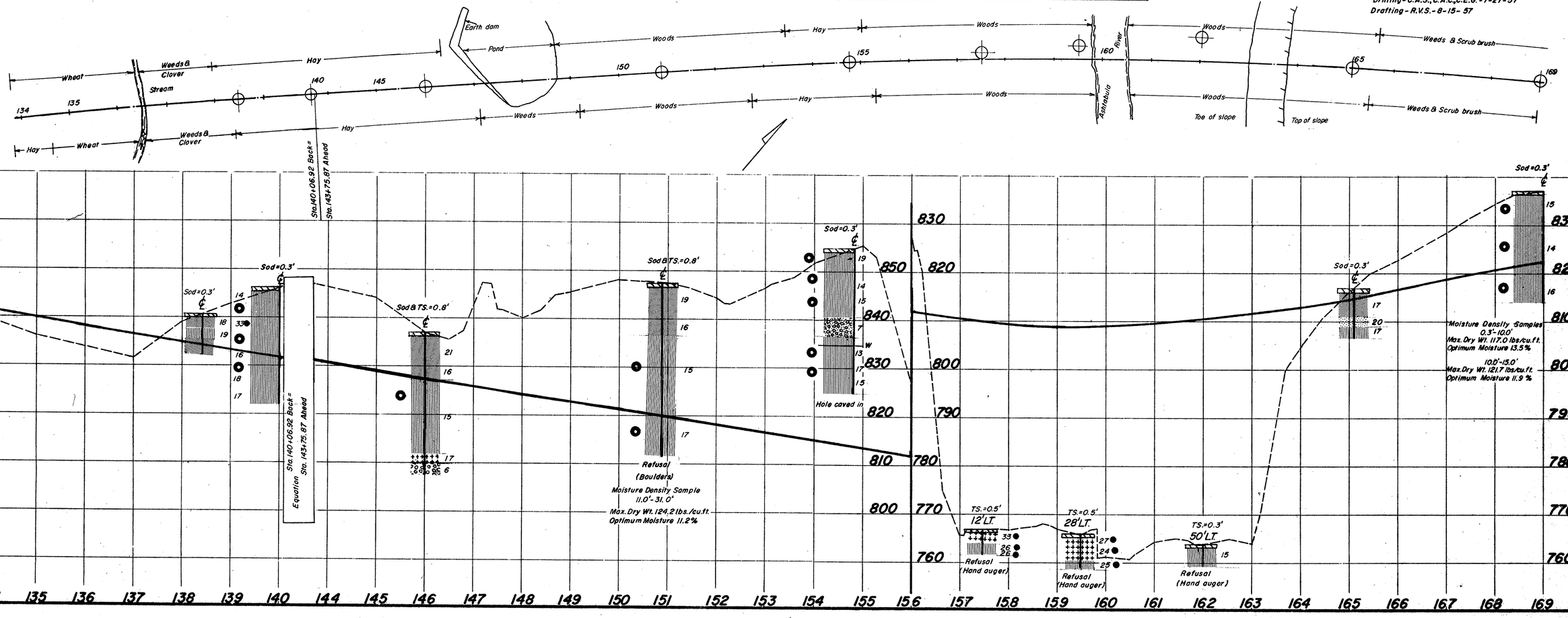
DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel	A-1-a (0)	A-1-a	85	4	4	5	2	NP	NP	6	1
Gravel with sand	A-1-b (0)	A-1-b	48	28	6	11	7	22	3	7	1
Coarse and fine sand	—	A-3a	3	52	12	16	17	27	5	20	1
Sandy silt	A-4 (7)	A-4a	9	7	13	39	32	24	7	47	80
Silt	A-4 (8)	A-4b	2	4	10	56	28	26	6	24	14
Silt and clay	A-6 (8)	A-6a	6	5	9	40	40	32	11	19	70
Silty clay	A-6 (11)	A-6b	3	4	11	41	41	37	17	24	3

- Auger boring - plan view
- Auger boring plotted to vertical scale only.
- Water content nearly equal to or greater than liquid limit.
- This A-4a soil will be rubbery and unstable at water contents which exceed the optimum.
- Sod & Topsoil = X' Approximate depth.
- Berm material
- W Free water

Moisture Density Samples
Lab. Nos. So.
61324-61325 Incl, 61949, 64094, 68647-68649 Incl.

Samples Tested
Lab. Nos. So.
61324-61326 Incl, 61328, 61397-61407 Incl, 61492-61431 Incl, 61602-61608 Incl, 61613-61615 Incl, 61618-61619 Incl, 61833-61835 Incl, 61949, 61981-62014 Incl, 62021-62026 Incl, 64094, 64201-64208 Incl, 68585-68611 Incl, 68647-68649 Incl, 68877-68933 Incl.

NOTE: Figures beside borings indicate water content in percent.



TE-54-B
200-3-57

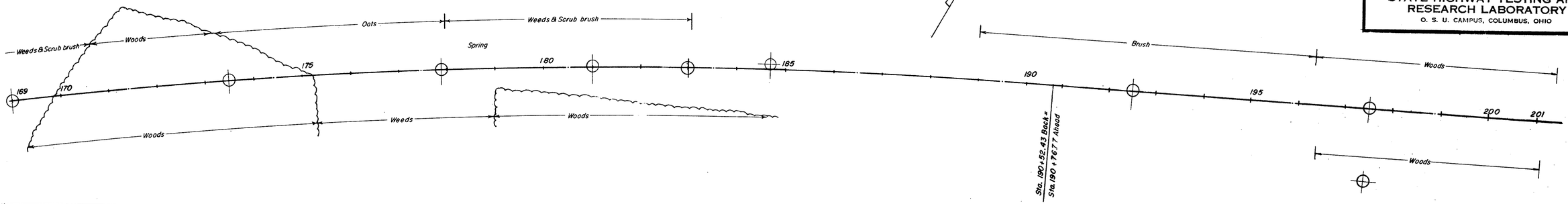
SOIL PROFILE

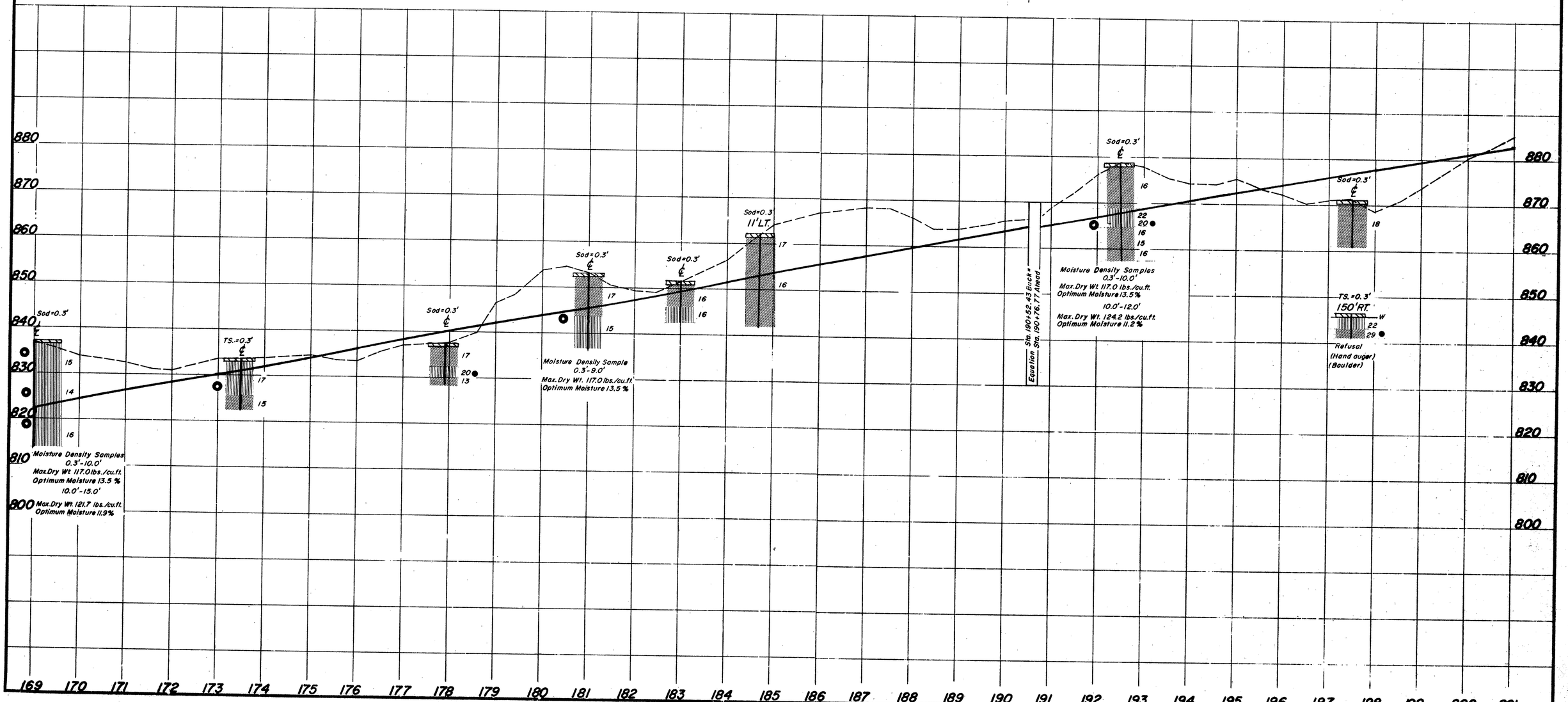
ASHTABULA COUNTY

ATB- 1 -15.73

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

2
5





TE-54 B
ROD-3-57

SOIL PROFILE

ASHTABULA COUNTY

ATB- 1 -15.73

STATE HIGHWAY TESTING AND RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

3
5

Woods
Pasture
Weeds & Scrub brush
Swamp
Tree line
Weeds & Small pines
Weeds
Woods
Pond
Woods
Weeds & Scrub brush
Weeds & Small pines
Weeds
Woods

TS.=0.3'
37
16
15
TS.=0.3
30'RT.
16
15
Sod=0.3'
30'LT.
23
18
16
Sod=0.3
26
17
18
Sod=0.3'
17
21
17
13
TS.=0.4'
Sod=0.3'
21
19
17
13
Sod=0.3'
17
17
14

890 880 870 860 850

201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233

Weeds
Scrub brush
Woods
Infirmary Road
Weeds
Woods
Low wet area
Weeds
Scrub brush
Woods

S.R. 83

Log of Offset Boring
Sod=0.3'
75'RT.
24
18
19
13

Sod=0.3'
18
13
Sod=0.3'
12
14
14
Sod=0.3'
25
19
14
Sod=0.3'
19
16
14
Sod=0.3'
17
17
Sod=0.3'
18
14
Sod=0.3'
17
17
19
18
13
10'RT.
15
12
13
15
16
Sod=0.3'
16
14
Sod=0.3'
15'RT.
26
19
Refusal
(Hand auger)
TS.=0.3'
32

880 870 860 850

233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265

TE-54-B
200-3-57

SOIL PROFILE
ASHTABULA COUNTY
ATB- 1 -15.73

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

4/5

Woods | Woods | Woods | Woods

265 270 275 280 285 290 295 297

Sta. 267+46.10 Back =
Sta. 268+25.96 Ahead

Equation

TS. = 0.3'
19
16
15
13

Moisture Density Sample
1.5'-8.0'
Max. Dry Wt. 117.0 lbs./cu.ft.
Optimum Moisture 13.5 %

Sod = 0.3'
14
32
23

Sod = 0.3'
24
18
14

TS. = 0.3
26
16
14
15
14

Sod = 0.3'
19
17

Sod = 0.3'
25
17
18

Sod = 0.3'
16
16
12

880 870 860 850 840 830 820

265 266 267 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 296 297

TE-54-B
2.00-3-57

SOIL PROFILE
ASHTABULA COUNTY
ATB- 1 -15.73

5/5

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

