MICROFILMED
FEB 1980

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

1/77

F-634(7)

PER-13-26.12

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
PER-13-26.12
READING TOWNSHIP
PERRY COUNTY
VILLAGE OF SOMERSET

DESIGN DESIGNATION

	Rural	Municipal
Current A.D.T.	2150	2610
Design Year A.D.T.	3225	4510
D.H.V.	269	326
T.	12%	11%
V.	60 M.P.H.	35 M.P.H.
D	65 %	65 %

CONVENTIONAL SIGNS

Township Line
Corporation Line
Center Line
Utility Line — Telephone Power
Fence Line
Railroad
Trees — Existing
Existing Right of Way
Proposed Right of Way — R/W
Temporary Right of Way — T T
Guard Rail — Existing New

INDEX OF SHEETS

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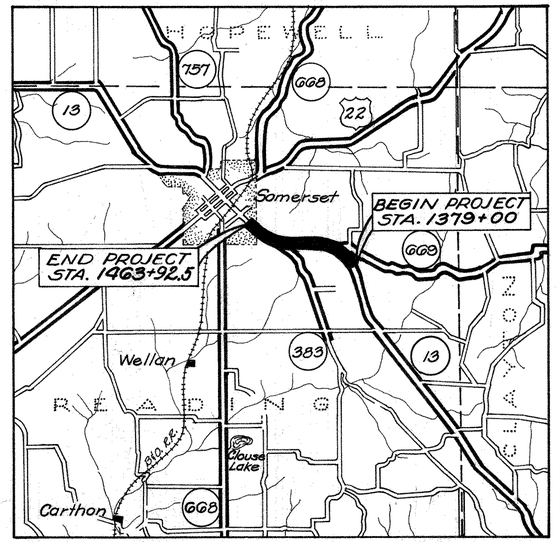
LINE DATA

	RURAL		MUNICIPAL		TOTAL
Begin Project	1379+00		1448+34.02		
End Project	1448+34.02		1463+92.50		
Net Length of Project	6934.02 L.F.	+	1558.48 L.F.	=	8492.5 L.F. or 1.608 Mile
Begin Work	1377+30		1448+34.02		
End Work	1448+34.02		1463+92.50		
Length of Work	7104.02 L.F.	+	1558.48 L.F.		
Add for S.R. 669	787.23				
Add for S.R. 383	1023.85				
Net Length of Work	8915.10	+	1558.48 L.F.	=	10473.58 L.F. or 1.983 Mile



Delivery Point: SOMERSET Average Haul: 1.5 Miles
B. & O. Railroad

LOCATION MAP

0 1 2 3
Scale of Miles

Portion To Be Improved
State Highways
Other Roads

SCALES

Plan 50
Profile Horizontal 50
Profile Vertical 10
Cross Sections 10

1965 SPECIFICATIONS

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

The right of way for this improvement will be provided by the State of Ohio.

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

Approved James T. Holden
Date: 1-28-66 Division Deputy Director

Approved
Date: Engineer of Bridges

Approved R. N. Rinkes
Date: 4-19-66 Engineer of Location & Design

Approved R. E. Hault
Date: 4-19-66 Deputy Director of Design & Construction

Approved T. H. Borrud
Date: 4-25-66 Deputy Director of Right of Way

Approved E. W. Wilson
Date: 4-25-66 Deputy Director of Planning & Programming

Approved
Date: First Assistant Director

Approved P. E. Masheter
Date: 4/25/66 Director of Highways

TUBE # 849

STANDARD CONSTRUCTION DRAWINGS						
BP-5	6-1-65	MC-5	6-1-65	MC-2	6-1-65	
BP-6	6-1-65	FACI-1	6-1-65	GR-1	6-1-65	
BP-7	1-1-66	FACI-2	6-1-65	GR-2A	9-1-65	
MC-1	6-1-65	HW-E	6-1-65	L-1	6-1-65	
MC-3	6-1-65	SP-53	6-30-61	CB-2-2-A&B	6-1-65	
MC-4	6-1-65	CB-3A	6-1-65	CB-3	6-1-65	

SUPPLEMENTAL SPECIFICATIONS		
1001	9-2-65	

FILE NO.	PERRY COUNTY S.R. 13
	SEC. PER-13-26.12
	Date of Letting
	Contract No.

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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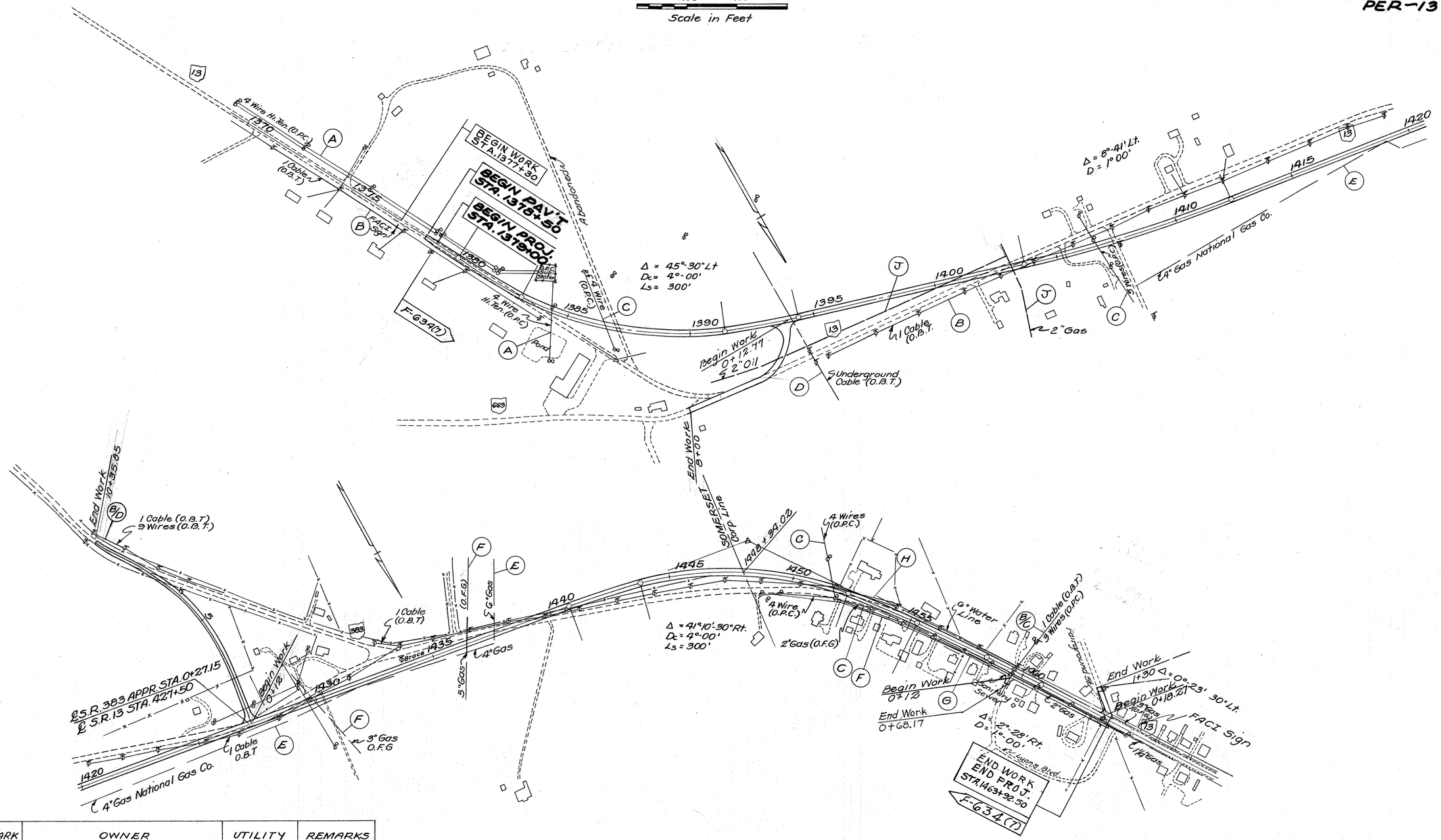
SCHEMATIC PLAN

0 200 400 600

Scale in Feet



MARK	OWNER	UTILITY	REMARKS
A	Ohio Power Co, Canton, O.	Power	High Tension
B	Ohio Bell Telephone, Columbus, O.	Telephone	Cable
C	Ohio Power Co., Canton, O.	Power	Service
D	Ohio Bell Telephone, Columbus	Telephone	Underground
E	National Gas Co., Newark, O.	Gas	4" & 6"
F	Ohio Fuel Gas Co., Columbus, O.	Gas	3", 5", 2", 3" & 1 1/2"
G	Village of Somerset	San. Sewer	8" & 4"
H	Village of Somerset	Water Line	6"
J	Dell Oil Co. Mt. Gilead, O.	Oil & Gas	2"

SCHEMATIC PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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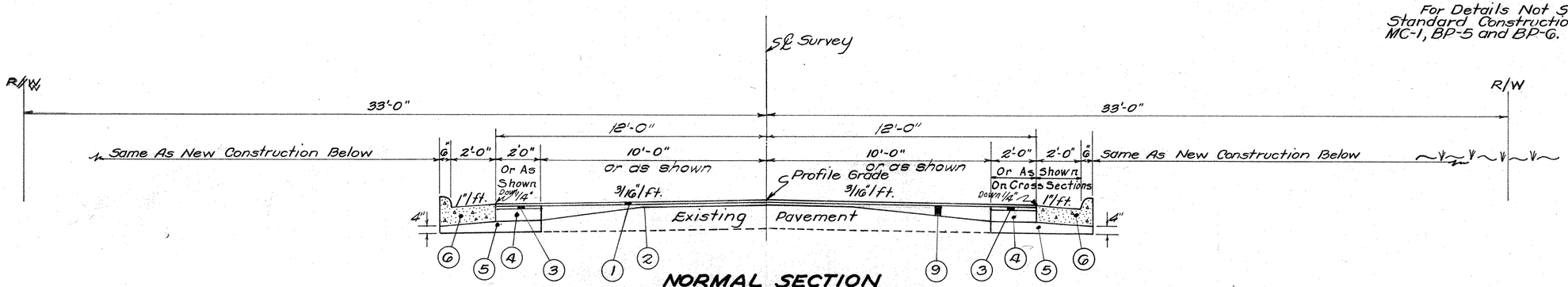
PER-13-26.12

TYPICAL SECTIONS

TYPE 404

NOTE:

For Details Not Shown Refer to Standard Construction Drawings MC-1, BP-5 and BP-6.

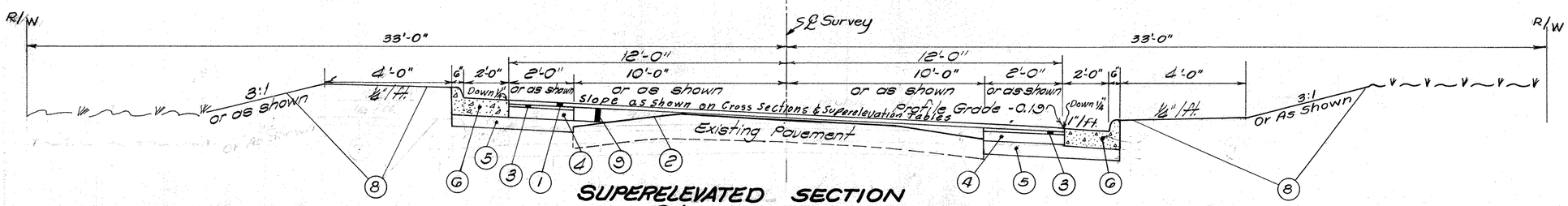


NORMAL SECTION SALVAGE TYPICAL

Schedule of Stationing

*Sta. 1461+50 to Sta. 1463+92.50	242.50 Lin. Ft.
Sta. 1456+00 to Sta. 1457+50	150.00 Lin. Ft.
total	392.50 Lin. Ft.

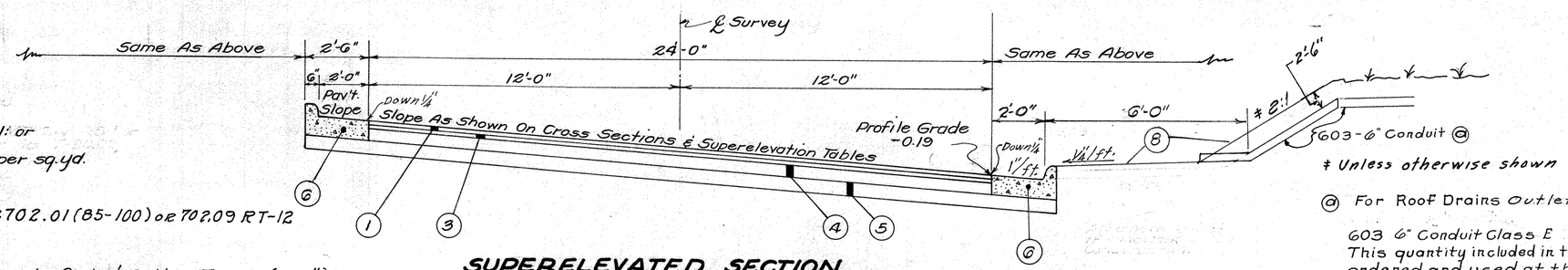
*Includes taper as shown on line Sheet & Cross Sections



SUPERELEVATED SECTION SALVAGE TYPICAL

Schedule of Stationing

Sta. 1453+00 to Sta. 1456+00	300 Lin. Ft.
Sta. 1457+50 to Sta. 1461+50	400 Lin. Ft.
	700 Lin. Ft.



(1)	404	1 1/4" Asphalt Concrete (70-85)
(2)	407	Tack Coat 702.04 MS-2 or RS-1 or 702.02 RC-70 or RC-250 applied at the rate of 0.10 gal. per sq. yd.
(3)	402	1 1/4" Asphalt Concrete (70-85)
(4)	301	6" Bituminous Aggregate Base: 702.01 (85-100) or 702.09 RT-12
(5)	310	6" Subbase
(6)	609	Standard Portland Cement Concrete Curb & Gutter Type 2 (T=8 1/4")
(8)	659	Seeding & Mulching
(9)	301	0" Min Asphalt Concrete Preleveling Course (70-85)

SUPERELEVATED SECTION NEW CONSTRUCTION

Schedule of Stationing

Sta. 1448+50 to Sta. 1453+00 450 Lin. Ft.

* Unless otherwise shown

@ For Roof Drains Outlets

603 6" Conduit Class E 100 Lin. Ft.
This quantity included in the General Summary to be ordered and used at the direction of the Engineer.

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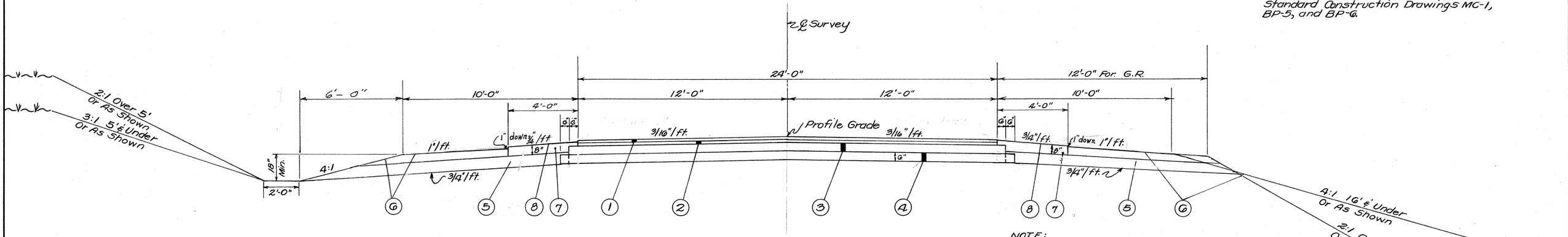
TYPICAL SECTIONS

TYPE 404 ON 301

NOTE:

For Details Not Shown Refer to Standard Construction Drawings MC-1, BP-5, and BP-6.

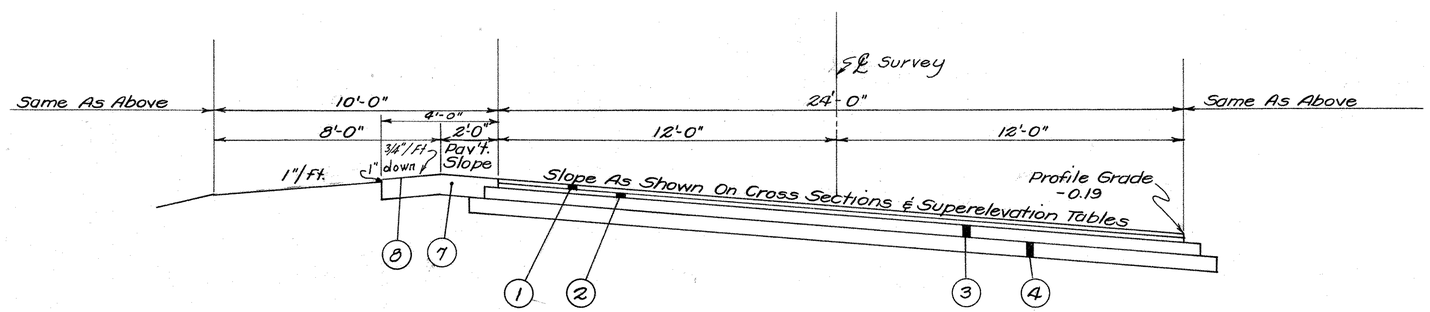


NOTE:
In lieu of 605.05 of the specifications the aggregate drains shall be placed prior to the construction of the aggregate shoulders.

NORMAL SECTION

Schedule of Stationing

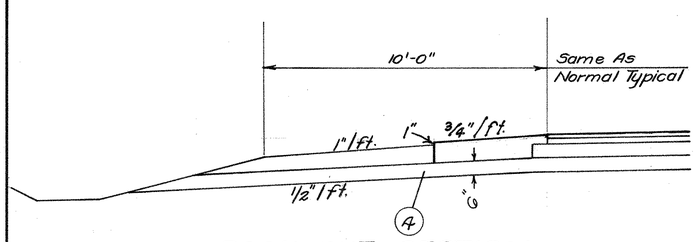
Sta. 1378+50	to	Sta. 1379+00 (taper)	50 Lin. Ft.
Sta. 1379+00	to	Sta. 1379+50	50 Lin. Ft.
Sta. 1395+25	to	Sta. 1402+00	675 Lin. Ft.
Sta. 1414+00	to	Sta. 1440+25	2625 Lin. Ft.
			3400 Lin. Ft.



SUPERELEVATED SECTION

Schedule of Stationing

Sta. 1379+50	to	Sta. 1395+25	1575 Lin. Ft.
Sta. 1402+00	to	Sta. 1414+00	1200 Lin. Ft.
Sta. 1440+25	to	Sta. 1448+50	825 Lin. Ft.
			3600 Lin. Ft.



ROCK CUT SECTION

310 THRU SHOULDER

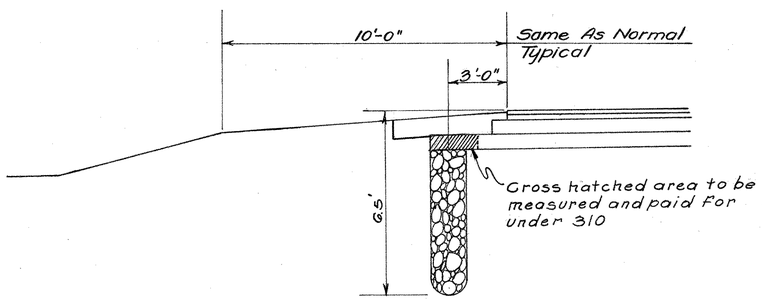
Schedule of Stationing

				310 Subbase	203 Embankment	203 Excavation
xx Sta. 1399+00	to	Sta. 1403+00	Lt. & Rt.	158 Cu. Yds.	69 Cu. Yds.	261 Cu. Yds.
Sta. 1411+00	to	Sta. 1413+25	Lt.	44 Cu. Yds.	20 Cu. Yds.	74 Cu. Yds.
xx Sta. 1413+25	to	Sta. 1415+00	Lt. & Rt.	69 Cu. Yds.	30 Cu. Yds.	114 Cu. Yds.
xx Sta. 1420+00	to	Sta. 1437+00	Lt. & Rt.	434 Cu. Yds.	191 Cu. Yds.	718 Cu. Yds.
Sta. 1437+00	to	Sta. 1439+50	Rt.	45 Cu. Yds.	22 Cu. Yds.	82 Cu. Yds.
S.R. 383 Sta. 0+00	to	Sta 8+00	Lt.	95 Cu. Yds.	30 Cu. Yds.	121 Cu. Yds.
			Total	① 849 Cu. Yds.	362 Cu. Yds.	1371 Cu. Yds.

① Carried to Summary of Tables

xx Deduction Due To Rock Cut 203 Subgrade Preparation ① 7511 Sq. Yds.

1	404	1 1/4" Asphalt Concrete (70-85)
2	402	1 1/4" Asphalt Concrete (70-85)
3	301	6" Bituminous Aggregate Base : 702.01 (85-100) or 702.09 RT-12
4	310	6" Subbase
5	605	Aggregate Drains
6	659	Seeding & Mulching
7	304	8" Aggregate Base
8	408	Bituminous Prime Coat 702.09 RT-2 or RT-3 at rate of 0.4 gal. per sq. yd. (In two equal applications)
	409	Seal Coat Bituminous Material ; 702.09 RT-9 or RT-10 or 702.02 MC-800 or MC-3000 @ rate of 0.3 gal. per sq. yd.
	409	Seal Coat Cover Aggregate No. 8 @ 0.008 Cu. Yds. per Sq. Yd.



PIPE UNDERDRAINS

*605 Deep Pipe Underdrains 2000 Lin. Ft.

* To be ordered and used at the direction of the Engineer. Quantity included in General Summary.

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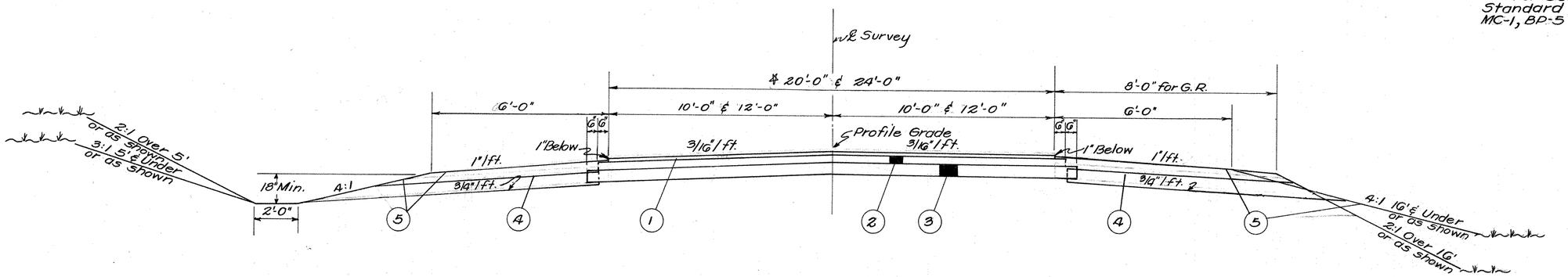
TYPICAL SECTIONS

TYPE 404 ON 301

NOTE:-

For Details Not Shown Refer to Standard Construction Drawings MC-1, BP-5 and BP-6.



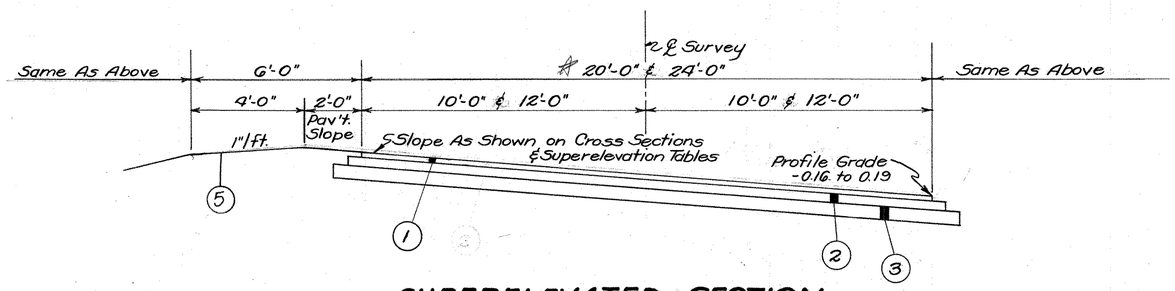
NORMAL SECTION

Schedule of Stationing

S.R. 383 Width = 20'

Sta. 0+12 to 1+50	138
Sta. 8+25 to 8+50	25
Sta. 8+50 to 8+75 (Taper)	25
	188 Lin. Ft.

S.R. 669 Width = 24'
None



SUPERELEVATED SECTION

Schedule of Stationing

S.R. 383 width = 20'

Sta. 1+50 to Sta. 8+25 =	675
Sta. 8+75 to Sta. 9+35.85 (Taper)	60.85
	735.85 Lin. Ft.

S.R. 669 width = 24'

Sta. 0+12.77 to Sta. 6+50	637.23
Sta. 6+50 to Sta. 7+00 (Taper)	50
	687.23 Lin. Ft.

1	404	1 1/4" Asphalt Concrete (70-85)
2	301	4" Bituminous Aggregate Base
3	310	6" Subbase
4	605	Aggregate Drains
5	659	Seeding & Mulching

TYPICAL DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634-7	

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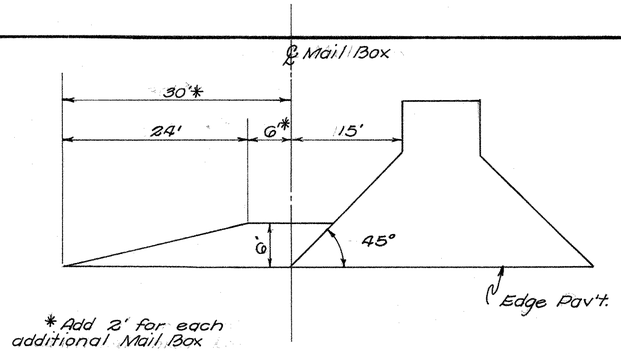


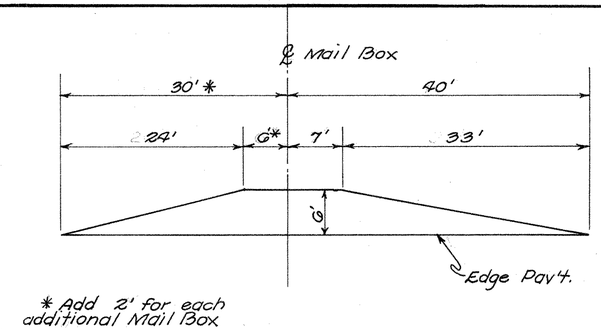
TYPICAL PLAN
MAIL BOX TURNOUT COMBINED WITH DRIVE

* * ESTIMATED QUANTITIES

Station	404 Cu. Yds	304 Cu. Yds.	408 Gals.
1379 + 80 Rt	0.8	2.0	5.6
1401 + 50 Rt.	0.8	2.0	5.6
1406 + 00 Lt.	0.8	2.0	5.6
1406 + 50 Lt.	0.8	2.0	5.6
1406 + 50 Rt.	0.8	2.0	5.6
1407 + 20 Rt.	0.8	2.0	5.6
1436 + 00 Lt.	0.8	2.0	5.6
S.R. 669 3+00 Lt.	0.8	2.0	5.6
	6.4	16.0	44.8

* * Quantities for Mail Box Turnouts Carried to Drives & Approaches Table.

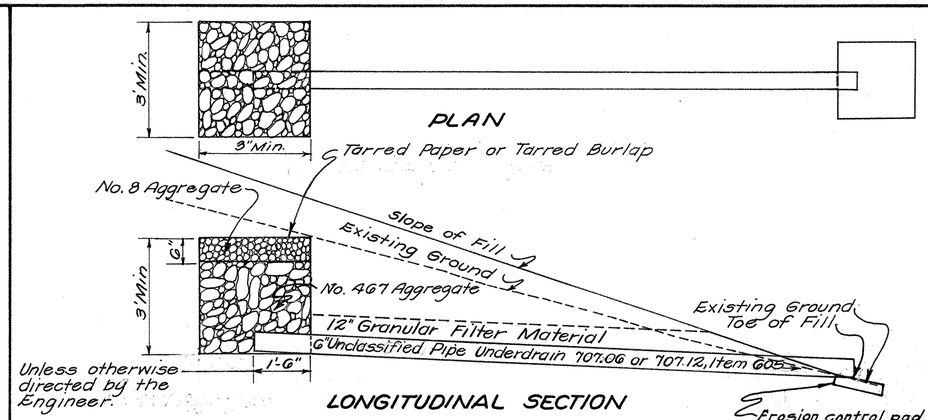
Location of Mail Box Turnouts may be varied at the direction of the Engineer.



TYPICAL PLAN
MAIL BOX TURNOUT

* * ESTIMATED QUANTITIES

Station	404 Cu. Yds.	304 Cu. Yds	408 Gals.
1381 + 00 Rt.	1.7	4.3	12.0
1410 + 15 Lt.	1.7	4.3	12.0
1412 + 90 Lt.	1.7	4.3	12.0
S.R. 669 5+50 Lt.	1.7	4.3	12.0
	6.8	17.2	48.0



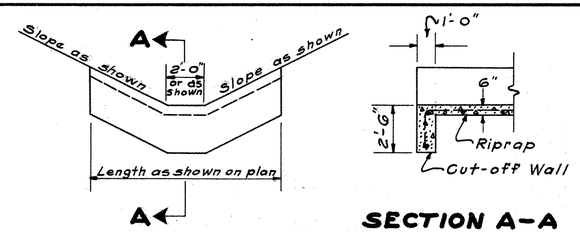
DETAIL OF SPRING DRAINS

ESTIMATED QUANTITIES

* 605 6" Unclassified Pipe Underdrains 707.06 or 707.12 (with granular filter backfill) 100 Lin. Ft.
* 605 Aggregate Drains For Springs 9 Lin. Ft.

* Quantity Carried to General Summary Sheet

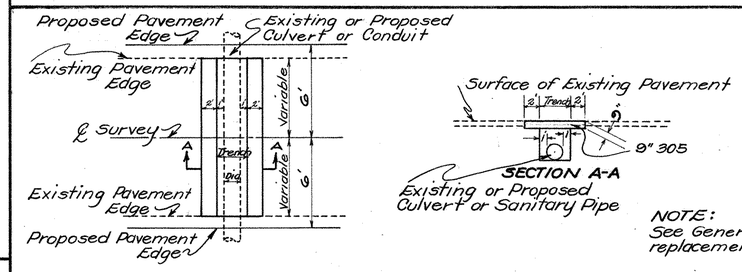
Aggregates, tarred paper or tarred burlap, and necessary excavation for spring drains shall be included for payment in the unit price bid per Lin. Ft. for "Item 605, Aggregate Drains for Springs, as per plan."
The 6" pipe 707.06 or 707.12 shall be covered with granular filter material 605.03(c) to a height of one (1) foot above the top of the pipe. The remainder of the backfill for this item shall be soil or granular filter backfill placed in accordance with 603.08.
Spring drains shall be built in reasonably close conformity with the detail shown above. The lengths and exact locations of the drains shall be determined by the Engineer.



DETAIL OF CUT-OFF WALLS

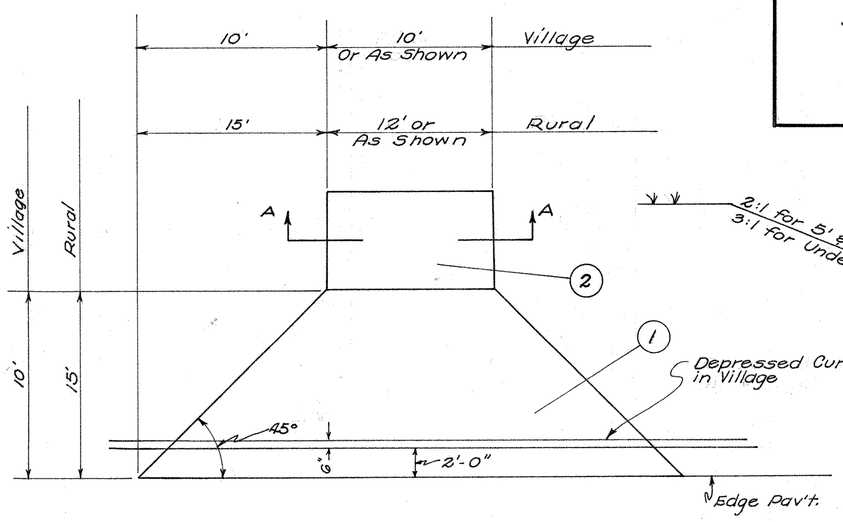
To Be Provided For Riprap Using 6" Reinforced Concrete Slab

Cost of cut-off walls to be included in unit price bid for Item 601, Riprap.

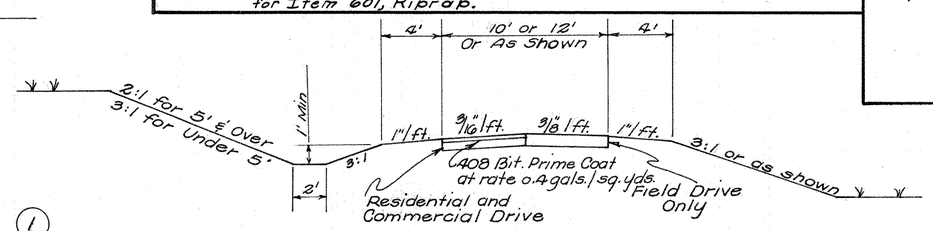


NOTE:
See General Notes for base replacement estimated quantities.

BASE REPLACEMENT IN SALVAGE SECTION



DRIVE TYPICAL

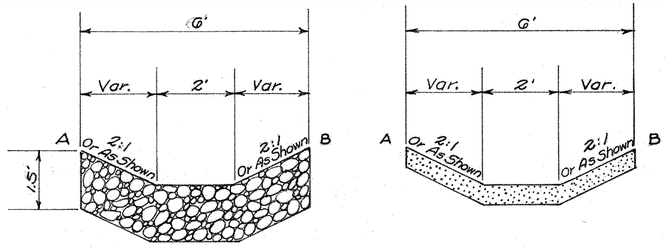


SECTION A-A

(1) Residential 2-1" Courses 404 on 5" 304 ①
Commercial 2-1" Courses 404 on 7" 304
Field 6" 304

(2) As shown on Drive Detail
Residential 2-1" Courses 404 on 5" 304 ① or 8" 304 ① or 7" 452
Commercial 2-1" Courses 404 on 7" 304 ① or 9" 304 ①
Field 6" 304

① 304 for these drives to be crushed limestone



DUMPED ROCK SOD

DITCH TYPICALS

NOTE: Points A & B to be at same elevations

GENERAL NOTES

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS:

The rounded corners shown on Standard Drawing MC-1, apply to all cross sections, even though otherwise shown on these plans.

UTILITY ADJUSTMENT:

Any or all work required for public or private utilities will be done by and at the expense of their respective owners, unless otherwise noted on these plans.

Electric: Ohio Power Co., Canton, Ohio
Gas: Ohio Fuel Gas Co., Columbus, Ohio
National Gas Co., Newark, Ohio
Telephone: Ohio Bell, Columbus, Ohio
Water: Village of Somerset
Sewer: Village of Somerset
Oil & Gas Dell Oil Co. Mt. Gilead, Ohio

FIELD OFFICE:

The Contractor shall, in addition to the requirements of 105.152, provide a suitable field office having a minimum of 300 sq. ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project. The Contractor shall also provide and maintain sanitary provisions as per 107.06. All the above is included in the lump sum price bid for Field Office.

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 does not guarantee their accuracy or completeness.

ESTIMATED QUANTITIES:

Specific locations and usage of estimated quantities set up on this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project.

SUPERELEVATION:

Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in the portion between the beginning of the transition and the point where the superelevation equals twice the crown.

PROFILE:

The profile of the proposed surface course in salvage areas shall be approximately one and one quarter inches above that of the existing pavement unless indicated otherwise on the cross sections or Superelevation Tables.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS:

The Contractor shall furnish, erect, maintain and subsequently remove Federal Aid construction identification signs at each of the following locations: 1. Right Sta. 1377+30
2. Left Sta. 1465+00

Sign details shall be as specified on Std. Drwg. FACI-1, Code N-54 (1)-96(2). The signs shall be erected in accordance with Std. Drwg. FACI-2. Additional requirements shall be in accordance with notes in the proposal.

RIGID PAVEMENT REMOVAL:

Removal and disposal of existing rigid pavement, unless otherwise indicated in these plans, shall be measured and paid for as 202 Existing Pavement Removed and Disposed of.

CONSTRUCTION LAYOUT STAKES:

See note in proposal describing the work included in this lump sum pay item.

REMOVAL OF EXISTING PIPE:

The removal of all existing pipe drains within the limits of the proposed excavation items shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

REMOVAL OF TREES AND STUMPS:

All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for Item 201 Clearing and Grubbing, except that those trees for which protection and preservation work is indicated elsewhere in these plans shall not be removed.

The following is an approximate estimate of the number of trees and stumps to be removed.

SIZES	18"	30"	48"	60"			
Trees	175	5	0	0			
Stumps	5	0	0	0			

The above estimate is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201, Clearing and Grubbing.

SPECIAL SEEDING PREPARATION AREAS:

The reference in the first paragraph of 659.09 to preparation of the seed bed in front of residences, etc., shall on this project be considered to be particularly applicable to all areas listed in 659.09 in addition to the following areas:

Sta. 1378 to 1388 Rt. Sta. 1405 to 1408 Rt.
Sta. 1448 to 1463 Rt. Sta. 1450 to 1463 Lt.
S.R. 669 2+00 to 6+50 Lt.

MANHOLES RECONSTRUCTED TO GRADE AS PER PLAN

This item shall consist of the careful removal of the existing manhole down to the spring line and reconstruction of the manhole to the new grade, conforming as nearly as practicable to the existing dimensions and type of construction and using the salvaged manhole frame and cover.

CONNECTIONS TO EXISTING PIPE:

At places where the plans provide for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed pipe. The cost of this operation shall be included in the unit price bid for the pertinent 603 conduit item.

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS:

This plan makes no provision for connecting, nor shall the Engineer or Contractor connect, any existing or new drainage into the highway drainage system when such drains carry flow from any plumbing fixtures including floor drains and sink drains or drains from live-stock lots or barns or polluted water of any kind.

Existing pipe carrying flow which comes within the category outlined above shall be plugged with Class E concrete at the right-of-way line. Payment for said plugging shall be included in the unit price bid for Item 203 Excavation.

MAINTENANCE OF SEWER FLOWS:

The Contractor shall conduct his operations so as to maintain at all times sewer flows through existing facilities to remain in place and through existing facilities to be replaced until new facilities are completed and placed into use.

Payment for any additional costs involved in maintaining these flows by pumping or by any other means approved by the Engineer shall be included in the unit prices bid for the respective items of 603 Conduit.

WORK AGREEMENT AREAS:

The Contractor shall conduct his work in such a manner that existing installations and trees within work agreement areas shall be protected against permanent damage. Any paved areas shall be cleaned and left in the same condition as they were found at the start of work.

NON-RIGID PAVEMENT REMOVAL:

Removal and disposal of existing non-rigid pavement, unless otherwise indicated on these plans, shall be measured and paid for as 203 Excavation.

DRIVE LOCATIONS:

Drive locations on this project may be varied at the direction of the Engineer provided there is no additional cost to the State.

BASE REPLACEMENT IN SALVAGE SECTIONS:

At places where the plans provide for proposed culverts and storm sewers to cross existing pavement which is to be salvaged, the pipe backfill shall be carried to an elevation of 9" below the surface of the existing pavement. The remainder of the backfill shall consist of 9" of 305 Portland Cement Concrete Base which shall be finished off flush with the existing pavement surface.

The following estimated quantity has been included in the General Summary for this purpose. Payment shall be based on final measurement.

305 Portland Cement Concrete Base 9" Thickness 43 Sq. Yds.

Typical detail of Base Replacement shown on Sheet No. 6.

DUST CONTROL:

In accordance with 616 of the Construction and Materials Specifications 5 tons of 616 calcium chloride for dust control and 10 M. Gals. of 616 water have been included in the General Summary for Dust Control.

AGGREGATE DRAINS:

Aggregate drains shall be placed at 50' intervals on each side of normal crowned sections and at 25' intervals on the low side only of superelevated sections, except where 605 Pipe Underdrains have been provided. An aggregate underdrain shall be placed at the low point of each sag vertical curve. The aggregate drains shall be placed prior to constructing the Bituminous Surface Treated Shoulders.

SPRING DRAINS:

Reference is made to the detailed drawing on Sheet No. 6 showing the method of draining any springs that may be shown on the plan or encountered during construction as determined by the Engineer. Estimated quantities are listed on Sheet No. 6.

The Contractor shall not order materials for Spring Drains until authorized by the Engineer and in the event no springs are encountered, the item shall be non-performed.

SEEDING:

Quantities for seeding are calculated for the soil areas between lines 10' outside the work limits as shown on the cross sections, or to the right-of-way line if such line is less than 10' from the work limits.

GENERAL NOTES Continued on Sheet 10

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SUPERELEVATION TABLES

T.S. 1380+00 C.S. 1391+37.5
S.C. 1383+00 S.T. 1394+37.50
Rate of Super = .083 ft./ft.

Elevation Left Edge	℄ Station	℄ Pav't. Elevation	Elevation Right Edge
1062.79	1379+25	1062.98	1062.79
1062.84	+50	1063.03	1062.91
1062.90	+75	1063.09	1063.03
1062.98	1380+00	1063.15	1063.17
1063.02	+30	1063.21	1063.39
1063.10	+60	1063.40	1063.65
1063.26	+90	1063.62	1063.99
1063.23	1381+20	1063.69	1064.14
1063.30	+50	1063.85	1064.39
1063.37	+80	1064.01	1064.65
1063.44	1382+10	1064.17	1064.90
1063.51	+40	1064.33	1065.14
1063.58	+70	1064.49	1065.37
1063.65	1383+00	1064.62	1065.56
1063.70	+25	1064.70	1065.67
1063.76	+50	1064.76	1065.75
1063.82	+75	1064.82	1065.81
1063.88	1384+00	1064.88	1065.87
1063.93	+25	1064.93	1065.92
1063.99	+50	1064.99	1065.98
1064.05	+75	1065.05	1066.04
1064.11	1385+00	1065.11	1066.10
1064.16	+25	1065.16	1066.15
1064.22	+50	1065.22	1066.21
1064.28	+75	1065.28	1066.27
1064.34	1386+00	1065.34	1066.33
1064.39	+25	1065.39	1066.38
1064.45	+50	1065.45	1066.44
1064.51	+75	1065.51	1066.50
1064.57	1387+00	1065.57	1066.56
1064.62	+25	1065.62	1066.61
1064.68	+50	1065.68	1066.67
1064.74	+75	1065.74	1066.73
1064.80	1388+00	1065.80	1066.79
1064.85	+25	1065.85	1066.84
1064.91	+50	1065.91	1066.90
1064.97	+75	1065.97	1066.96
1065.03	1389+00	1066.03	1067.02
1065.08	+25	1066.08	1067.07
1065.14	+50	1066.14	1067.13
1065.20	+75	1066.20	1067.19
1065.26	1390+00	1066.26	1067.25
1065.31	+25	1066.31	1067.30
1065.37	+50	1066.37	1067.36
1065.43	+75	1066.43	1067.42
1065.49	1391+00	1066.49	1067.48
1065.54	+25	1066.52	1067.49
1065.57	+37.5	1066.54	1067.49
1065.64	+67.5	1066.55	1067.44
1065.71	+97.5	1066.54	1067.34
1065.78	1392+27.5	1066.51	1067.23
1065.85	+57.5	1066.49	1067.12
1065.92	+87.5	1066.47	1067.01
1065.99	1393+17.5	1066.45	1066.90
1066.05	+47.5	1066.42	1066.78
1066.12	+77.5	1066.40	1066.67
1066.19	1394+07.5	1066.41	1066.56
1066.26	+37.5	1066.46	1066.49
1066.29	+50	1066.48	1066.48
1066.35	+75	1066.54	1066.45
1066.41	1395+00	1066.60	1066.46
1066.47	+25	1066.66	1066.49

Dc = 1°00' P.C. = 1403+68.59
Δ = 8°41' Lt. P.T. = 1412+36.94
Rate of Super = .024 ft./ft.

Elevation Left Edge	℄ Station	℄ Pavt. Elevation	Elevation Right Edge
1068.02	1402+00	1068.21	1068.04
1068.08	+25	1068.27	1068.14
1068.13	+50	1068.32	1068.25
1068.19	+75	1068.38	1068.37
1068.25	1403+00	1068.44	1068.49
1068.31	+25	1068.50	1068.61
1068.36	+50	1068.56	1068.72
1068.42	+75	1068.63	1068.84
1068.48	1404+00	1068.72	1068.96
1068.53	+25	1068.80	1069.07
1068.59	+50	1068.86	1069.17
1068.65	+75	1068.94	1069.23
1068.71	1405+00	1069.00	1069.29
1068.76	+25	1069.05	1069.34
1068.82	+50	1069.11	1069.40
1068.88	+75	1069.17	1069.46
1068.94	1406+00	1069.23	1069.52
1068.99	+25	1069.28	1069.57
1069.05	+50	1069.34	1069.63
1069.10	+75	1069.40	1069.69
1069.17	1407+00	1069.46	1069.75
1069.22	+25	1069.51	1069.80
1069.28	+50	1069.57	1069.86
1069.34	+75	1069.63	1069.92
1069.40	1408+00	1069.69	1069.98
1069.45	+25	1069.74	1070.03
1069.51	+50	1069.80	1070.09
1069.57	+75	1069.86	1070.15
1069.63	1409+00	1069.92	1070.21
1069.68	+25	1069.97	1070.26
1069.74	+50	1070.03	1070.32
1069.80	+75	1070.09	1070.38
1069.86	1410+00	1070.15	1070.44
1069.91	+25	1070.20	1070.49
1069.97	+50	1070.26	1070.55
1070.03	+75	1070.32	1070.61
1070.09	1411+00	1070.38	1070.67
1070.14	+25	1070.43	1070.72
1070.20	+50	1070.49	1070.78
1070.26	+75	1070.53	1070.80
1070.32	1412+00	1070.56	1070.80
1070.37	+25	1070.58	1070.79
1070.43	+50	1070.63	1070.79
1070.49	+75	1070.68	1070.79
1070.55	1413+00	1070.74	1070.79
1070.61	+25	1070.80	1070.79
1070.66	+50	1070.85	1070.78
1070.72	+75	1070.91	1070.78
1070.78	1414+00	1070.97	1070.80

T.S. = 1440+79.49 C.S. = 1452+33.87
S.C. = 1443+79.49 S.T. = 1455+33.87

Elevation Left Edge	℄ Station	℄ Pav't. Elevation	Elevation Right Edge
1036.86	1440+00	1037.05	1036.86
1036.10	+25	1036.24	1036.05
1035.33	+50	1035.41	1035.22
1034.44	+79.49	1034.44	1034.25
1033.56	1441+09.49	1033.42	1033.23
1032.67	+39.49	1032.44	1032.20
1031.78	+69.49	1031.48	1031.17
1030.86	+99.49	1030.49	1030.11
1029.91	1442+29.49	1029.48	1029.04
1028.98	+59.49	1028.47	1027.95
1028.03	+89.49	1027.45	1026.86
1027.06	1443+19.49	1026.41	1025.75
1026.07	+49.49	1025.35	1024.63
1025.02	+79.49	1024.26	1023.49
1024.28	1444+00	1023.49	1022.70
1023.32	+25	1022.53	1021.74
1022.34	+50	1021.55	1020.76
1021.36	+75	1020.57	1019.78
1020.37	1445+00	1019.58	1018.79
1019.40	+25	1018.61	1017.82
1018.48	+50	1017.69	1016.90
1017.62	+75	1016.83	1016.04
1016.82	1446+00	1016.03	1015.24
1016.07	+25	1015.28	1014.49
1015.38	+50	1014.59	1013.80
1014.74	+75	1013.95	1013.16
1014.16	1447+00	1013.37	1012.58
1013.63	+25	1012.84	1012.05
1013.16	+50	1012.37	1011.58
1012.75	+75	1011.96	1011.17
1012.40	1448+00	1011.61	1010.82
1012.19	+25	1011.40	1010.61
1011.84	+50	1011.05	1010.26
1011.65	+75	1010.86	1010.07
1011.52	1449+00	1010.73	1009.94
1011.44	+25	1010.65	1009.86
1011.41	+50	1010.62	1009.83
1011.44	+75	1010.65	1009.86
1011.53	1450+00	1010.74	1009.95
1011.67	+25	1010.88	1010.09
1011.87	+50	1011.08	1010.29
1012.13	+75	1011.34	1010.55
1012.44	1451+00	1011.65	1010.86
1012.80	+25	1012.01	1011.22
1013.22	+50	1012.43	1011.64
1013.70	+75	1012.91	1012.12
1014.23	1452+00	1013.44	1012.65
1014.87	+25	1014.09	1013.32
1015.08	+33.87	1014.33	1013.56
1015.80	+63.87	1015.09	1014.37
1016.46	+93.87	1015.81	1015.15
1016.96	1453+23.87	1016.38	1015.81
1017.33	+53.87	1016.82	1016.31
1017.48	+83.87	1017.05	1016.61
1017.66	1454+13.87	1017.29	1016.91
1017.86	+43.87	1017.63	1017.31
1018.53	+73.87	1018.25	1018.01
1019.06	1455+03.87	1018.90	1018.71
1019.73	+33.87	1019.70	1019.51
1020.27	+50	1020.30	1020.11
1021.15	+75	1021.25	1021.06
1022.04	1456+00	1022.20	1022.01
1023.23	+25	1023.40	1023.21
1024.41	+50	1024.60	1024.41
1026.11	+75	1026.30	1026.11

Continued on Next Table

S.R. 669

P.C. = 0+82.74 P.C. = 6+14.08
P.T. = 2+83.29 P.T. = 7+45.56

Elevation Left Edge	℄ Station	℄ Pav't. Elevation	Elevation Right Edge
	0+12.77	1066.54	
	+25	1066.62	
	+50	1066.79	
	+75	1066.95	
1067.25	1+00	1067.12	1066.94
1067.56	+25	1067.34	1067.11
1067.86	+50	1067.58	1067.29
1068.22	+75	1067.87	1067.50
1068.64	2+00	1068.26	1067.83
1069.12	+25	1068.70	1068.26
1069.62	+50	1069.20	1068.80
1070.13	+75	1069.78	1069.43
1070.74	3+00	1070.46	1070.17
1071.47	+25	1071.25	1071.02
1072.35	+50	1072.16	1071.97
1073.41	+75	1073.22	1073.03
1074.57	4+00	1074.38	1074.19
1075.83	+25	1075.64	1075.45
1077.20	+50	1077.01	1076.82
1078.53	+75	1078.34	1078.15
1079.69	5+00	1079.50	1079.31
1080.68	+25	1080.49	1080.30
1081.49	+50	1081.30	1081.11
1082.13	+75	1081.94	1081.75
1082.59	6+00	1082.40	1082.21
1082.88	+25	1082.69	1082.50
1082.99	+50	1082.80	1082.61

SUPERELEVATION TABLE
(Continued)

Elevation Left Edge	℄ Station	℄ Pav't. Elevation	Elevation Right Edge
1027.81	1457+00	1028.00	1027.81
1029.01	+25	1029.20	1029.01
1030.23	+50	1030.40	1030.21
1031.79	+75	1031.90	1031.71
1033.44	1458+00	1033.50	1033.31
1035.14	+25	1035.10	1034.91
1036.93	+50	1036.80	1036.61
1038.09	+75	1038.00	1037.81
1039.39	1459+00	1039.20	1039.01
1039.99	+25	1039.80	1039.61
1040.65	+50	1040.40	1040.21
1040.54	+75	1040.35	1040.16
1040.49	1460+00	1040.30	1040.11
1039.79	+25	1039.60	1039.41
1039.09	+50	1038.90	1038.71
1038.13	+75	1038.00	1037.81
1037.02	1461+00	1037.00	1036.81
1035.92	+25	1036.00	1035.81
1034.71	+50	1034.90	1034.71
1033.71	+75	1033.90	1033.71

S.R. 383

T.S. = 2+13.55 C.S. = 5+41.05
S.C. = 4+13.55 S.T. = 7+41.05

Elevation Left Edge	℄ Station	℄ Pav't. Elevation	Elevation Right Edge
1066.52	1+25	1066.68	1066.52
1067.37	50	1067.53	1067.38
1068.30	+75	1068.46	1068.37
1069.14	2+00	1069.28	1069.25
1069.53	+13.55	1069.69	1069.69
1070.06	+33.55	1070.22	1070.32
1070.54	+53.55	1070.72	1070.87
1070.94	+73.55	1071.17	1071.40
1071.27	+93.55	1071.55	1071.82
1071.55	3+13.55	1071.89	1072.22
1071.77	+33.55	1072.14	1072.53
1071.91	+53.55	1072.34	1072.78
1071.99	+73.55	1072.47	1072.95
1072.00	+93.55	1072.53	1073.07
1071.94	4+13.55	1072.52	1073.11
1071.87	+25	1072.48	1073.09
1071.66	+50	1072.31	1072.96
1071.35	+75	1072.00	1072.65
1070.95	5+00	1071.58	1072.24
1070.41	+25	1071.03	1071.65
1070.02	+41.05	1070.60	1071.19
1069.48	+61.05	1070.01	1070.55
1068.87	+81.05	1069.35	1069.83
1068.20	6+01.05	1068.63	1069.05
1067.46	+21.05	1067.84	1068.22
1066.65	+41.05	1066.98	1067.31
1065.79	+61.05	1066.07	1066.35
1064.84	+81.05	1065.07	1065.30
1063.83	7+01.05	1064.01	1064.19
1062.76	+21.05	1062.92	1063.02
1061.62	+41.05	1061.78	1061.78
1061.09	+50	1061.25	1061.23
1059.59	+75	1059.75	1059.67
1058.09	8+00	1058.25	1058.11
1056.59	+25	1056.75	1056.59
1055.09	+50	1055.25	1055.09
1053.59	+75	1053.75	1053.59
The Elevations Below Are Edge Of Pavement On Taper			
1052.55	9+00	1052.25	1051.95
1051.35	+25	1050.75	1050.15
1050.6	+35.85	1050.1	1049.3

PER-13-26.12

SUMMARY OF TABLES & CALCULATIONS

1 EARTHWORK

Sheet No.	203 Excavation Cu.Yds.	203 Embankm't Cu.Yds.	659 Seeding & Mulching Sq.Yds.
11	480	2	1006
12	7091	20789	17828
13	29034	9504	18945
14	18,383	100954	27319
15	105503	195	24785
16	4168	39507	18457
17	713	1454	1454
53	1087	4182	3270
57	31614	13	8823
4	1371	362	
9	12039	4862	
63	22		31
Table 3	817		
Table 6	344		
Totals	212,666	180,417	121918

-6053 Paved Berm
115,865
+3,045 Sodding
118,910 To Line 2 & 5 Calc. 659 Items

2 PAVEMENT

Sheet No.	404 Asphalt Concrete Cu.Yds.	402 Asphalt Concrete Cu.Yds.	301 Bitumin. Aggregate Base Cu.Yds.	310 Subbase Cu.Yds.	203 Subgrade Prepar. Sq.Yds.	609 Curb & Gutter Type 2 Lin.Ft.	304 Aggregate Base Cu.Yds.
11	13.5	13.5	671.6	70.4	389		
12	138.8	138.8	694.6	722.4	4000		
13	138.8	138.8	694.6	722.4	4000		
14	138.8	138.8	694.6	722.4	4000		
15	138.8	138.8	694.6	722.4	4000		
16	138.8	123.4	655.9	671.0	3607	810	
17	82.6	14.0	126.0	147.0		1655	
53	68.7		228.3	355.4	1979		
57	69.4		233.7	367.7	2001		
4				849.0	-7511		
9	134.2		22.0	62.0			1539.0
63	4.0		12.6	23.0	197	104	13.0
Table 3							
Table 6							
Totals	1066.4	706.1	4124.5	5435.1	16,662	2569	1552.0

3 REMOVALS

Sheet No.	202 Pipe Removed Lin. Ft. 15" & Under	202 Pipe Removed Lin. Ft. Over 15"	202 Existing Pavement Rem. & Disp. Sq.Yds.	203 Excavation Bit. Pav't, Shldrs. Rem. & Disp. Cu.Yds.	202 Curb & Gutter Rem. & Disp. Lin.Ft.	202 Inlets Removed Each
11	22		267			
12	40		836	69		
13			2501	272		
14	24		889	150		
15			2667			
16	50		1776	326	500	2
17	47	47			1650	2
53	20		436			
57						
4						
9			109			
63						
Table 3						
Table 6						
Totals	46					
	249	47	9481	**817	2150	4

4 GUARD RAIL

Sheet No.	606 Guard Rail Type 4 Lin.Ft.
11	
12	
13	250
14	
15	1400
16	
17	550
53	
57	
4	
9	
63	
Table 3	
Table 6	
Totals	2200

5 SANITARY & STORM SEWERS

Sheet No.	603 Conduit Type B 706.02 or 706.08 Lin.Ft. 8"	15"	12"	18"	604 Catch Basin Each 3	3-A	2-B	602 Conc. Masonry Cu.Yds.	601 Dump Rock Channel Protection Cu.Yds.
11									
12									
13									
14									
15									
16		124	72	301	1	3	1	0.3	3
17		100	480	178		6	3	0.3	
53									
57									
4									
9									
63									
Table 3									
Table 6									
Totals		224	552	479	1	9	4	① 0.6	② 3

② Quantity Carried to Table 8
① Quantity Carried to Table 6

6 STRUCTURES

Sheet No.	Structure No.	602 Concrete Masonry Cu.Yds.	601 Riprap 6" Reinf. Sq.Yds.	601 Dump Rock Channel Protection Cu.Yds.	202 Removal Existing Structure Lump	202 Pipe Removal 15" & Under Lin.Ft.	203 Excavation Cu.Yds.	603 Conduit Type A with Class B Bedding - Lin.Ft. 24" 706.02 Cl. III or 706.08	36" 706.02 Class IV	706.02 or 706.08 15"	24"	42" 707.05 8 Ga. Shop Elang. & Strut	72" 707.03 10-8 Ga.	15" 706.02 Class III or 706.08
66	1	1.9	7	11		46	5	130						
67	2	1.2		11					172					
68	3	0.8	30				13				108			
69	4	1.5		23	Lump		240					242		
70	5	5.9		25	Lump		86						176	
54	6	0.5	14	8										138
58	7	0.5								50				
Table 8			6											
Table 5		0.6												
Totals		12.9	63	② 78	Lump	***46	**344	130	172	50	108	242	176	138

② To Table 8

7 DRIVES & APPROACHES

Sheet No.	Station	603 Conduit Type D Lin.Ft. 12"	15"	18"	24"	310 Subbase Cu.Yds.	301 Bitumin. Aggregate Base Cu.Yds.	404 Asphalt Concrete Cu.Yds	304 Aggregate Base (Limestone) Cu.Yds.	408 Bitumin. Prime Gals.	452 7" Plain Portland Cement Concrete Sq.Yds.	203 Embank. Cu.Yds.	203 Excavation Cu.Yds.	202 Pavement Removal Sq.Yds.	304 Aggregate Base Cu.Yds.
18	1379+78.5							2.5	6.3	18.0	84		70	84	
19	1382+97	38						2.6	16.1	18.7		68			
19	1383+25	38										100	60		21.1
21	1387+00	46						11.9	38.4	85.4		49	40		
26	1401+41	34										24	715		24
26	1401+47			36				2.5	52.2	18.0		17	1814		
28	1405+90	32						2.5	13.0	18.0		42			
28	1406+41	34						2.5	15.0	18.0		96			
28	1406+50	32						2.5	30.9	18.0		22	65		
28	1407+31											14	10		12
29	1410+21	44						2.5	25.0	18.0		20			
30	1411+86	28						2.5	28.0	18.0			460		
36	1425+00							2.5	24.9	18.0		22			
38	1429+00	34										23	2500		45.7
38	1430+38		32					2.5	53.0	18.0		18	1733		
41	1436+08				42			2.5	68.0	18.0		23	2037		
44	1447+00											1400			36.1
45/46	1450+00	48/				/26		/8.8	99.2/18.0	/63.2		1675/341			
47	1452+02							2.8	7.0	20.2		50			
47	1452+23							1.6	4.0	11.5					
47	1453+34							0.8	11.4	5.8			30		
47	1454+01							0.8	5.0	5.8			8		
48	1455+07							2.3	5.6	16.4		5			
48	1455+13							2.0	10.3	14.4					
48	1456+03							0.8	2.0	5.8					
48	1456+18							0.8	2.0	5.8					
49	1458+37							3.6	9.0	25.9			20		
50	1459+56							0.8	4.0	5.8					
50	1459+80							0.8	4.0	5.8					
50	1460+24.5							0.8	6.4	5.8					
50	1460+66							3.2	8.0	23.0			37		
51	1462+09.5							0.9	7.0	6.5			14		
51	1462+93							1.1	6.0	7.9					
51	1463+97					36	22	15.7					93		
55	2+96	36						2.5	24.4	18.0		98			
56	6+00							2.5	8.1	18.0			8		
57	2+44												7		6.3
57	5+13								37.9				238		
60	5+50	40						26.4	66.0	190.0		18	2064		
6	Mail Box Turnouts							13.2	33.2	92.8					
63	0+68										54		12	25	
56	6+18							2.5	6.3	18.0					
53	1+50											717			40
21	1387+00	32										20	4		9
Totals		516	32	36	42	* 62	22	*134.2	755.6	850.5	138	**4862	**2033	***109	*194.2

* Quantities Carried to Table 2
** Quantities Carried to Table 1
*** Quantity Carried to Table 3

CALCULATIONS

Line No.	CALCULATIONS	Quant.	Unit
1	659 Commercial Fertilizer (12-12-12)		
2	Seeding & Sodding 118,910 × 3 × 20 ÷ 1000 × 2000 = 10.70 Use	10.70	Tons
3			
4	659 Agricultural Liming Material		
5	Seeding & sodding 118,910 × 3 × 100 ÷ 1000 × 2000 = 53.51 Use	53.51	Tons
6			
7	605 Aggregate Drains		
8	1378+50 to 1379+25 4×13 = 52		
9	1379+25 to 1395+25 68+16 = 1088		
10	1395+25 to 1399+00 15×13 = 195		
11	1403+00 to 1411+00 32×16 = 512		
12	1415+00 to 1426+00 44×13 = 572		
13	1438+00 to 1440+00 8×13 = 104		
14	1440+00 to 1449+50 38×16 = 608		
15	0+12.77 to 0+75 3×8 = 24		
16	0+75 to 6+50 23×9.5 = 219		
17	8+00 to 8+75 4×8 = 32		
18	8+75 to 9+35.85 2×9.5 = 19	3425	Lin.Ft.
19			
20	203 Water		
21	Emb. 180417 + 310(5435) = x5 ÷ 1000 = 923.26 Use	923	M.Gals.
22			
23	Treated Shoulders: 13,619 L.F. × 4 ÷ 9 = 6053 Sq.Yds.		
24	408 Bituminous Prime Coat		
25	6053 × 0.4 = 2421.2 Use	2421	Gals.
26	409 Seal Coat Bituminous Material		
27	6053 × 0.3 = 1815.9 Use	1810	Gals.
28	409 Seal Cover Aggregate #8		
29	6053 × 0.008 = 48.4 Use	48	Cu.Yds.
30	304 Aggregate Base		
31	6053 × .2222 = 1345 Use	*1345	Cu.Yds.
32	304 Water 1552 + 756 = 2308 × 5 ÷ 1000 Use	12	M.Gals.

8 DITCHES

Sheet No.	660 Sodding Sq.Yds.	601 Dump Rock Channel Protection Cu.Yds.	601 Paved Gutter Type 5 Lin.Ft.	601 Riprap 6" Reinf. Conc. Sq.Yds.
12	539	26	60	
13	376	10		
14	279			
15	889	9		6
16	503	60		
53	163	3		
57	296	3		
Table 5		3		
Table 6		78		
Totals	3045	192	60	① 6

① Quantity Carried to Table 6

PER-13-26.12

GENERAL SUMMARY

CODE G203
* Y060
** Y005

Item No.		100% State		Total	Unit	DESCRIPTION	Carried From Sheet	Carried From Table
						ROADWAY		
203				212,666	Cu.Yds.	Excavation Not Including Embankment Construction	9	1 & 6
203				180,417	Cu.Yds.	Embankment	9	1
203				16,662	Sq.Yds.	Subgrade Preparation	9	1
203				323	M.Gals.	Water	9	Calc.
202				Lump	Lump	Parcel No 12 - Removal of one 2 Story Frame House and 1 Frame Shed	13	
202				9481	Sq.Yds.	Existing Pavement Removed and Disposed Of	9	3
202				91	Sq.Ft.	Existing Conc. Walk Removed and Disposed of	49-50	
202				2150	Lin.Ft.	Curb and Gutter Removed and Disposed of	9	3
202				4	Each	Inlet Removed	9	3
202				Lump	Lump	Existing Structures Removed	9	6
202				229	Lin.Ft.	Pipe Removed 15" & Under	9	3
202				47	Lin.Ft.	Pipe Removed Over 15"	9	3
201				Lump	Lump	Clearing & Grubbing	7	
659				11580**	Sq.Yds.	Seeding & Mulching	9	Calc.
659				10.70**	Tons	Commercial Fertilizer (12-12-12)	9	Calc.
659				53.51**	Tons	Agricultural Liming	9	Calc.
608				91	Sq.Ft.	Concrete Walk	49-50	
608				9	Lin.Ft.	Concrete Steps, Standard Type B	50	
660				3045**	Sq.Yds.	Sodding	9	8
606				2200	Lin.Ft.	Guard Rail, Type 4	9	4
410				3000	Cu.Yds.	Traffic Compacted Surface, Type A or B	10	
410				3000	Cu.Yds.	Traffic Compacted Surface, Type C	10	
615				Lump	Lump	Temporary Roads	10	
616				125	Tons	Calcium Chloride	7 & 10	
616				10	M.Gals.	Water	7	
657				16	Sq.Yds.	Riprap For Tree Protection	47	
Spec.				2	Each	Cleaning and Disposing of Septic Tank	13	
						DRAINAGE		
601				60**	Lin.Ft.	Paved Gutter Standard Type 5	9	8
601				63**	Sq.Yds.	Riprap Using 6" Reinforced Concrete Slab, as per Plan	9	6
601				192**	Cu.Yds.	Dumped Rock Channel Protection	9	8
602				12.9	Cu.Yds.	Concrete Masonry	9	6
603				100	Lin.Ft.	6" Conduit Type E	3	
603				552	Lin.Ft.	12" Conduit Type B With Class B Bedding	9	5
603				28	Lin.Ft.	12" Conduit Type D 707.01 or 707.02 14 Ga.		
603				488	Lin.Ft.	12" Conduit Type D	9	7
603				50	Lin.Ft.	15" Conduit Type A 706.01 or 706.02 or 706.08 with Class B Bedding	9	6
603				138	Lin.Ft.	15" Conduit Type A 706.02 Class III or 706.08 with Class B Bedding	9	6
603				224	Lin.Ft.	15" Conduit Type B with Class B Bedding	9	5
603				32	Lin.Ft.	15" Conduit Type D 707.01 or 707.02 14 Ga.	9	7
603				35	Lin.Ft.	18" Conduit Type C with Class B Bedding		
603				444	Lin.Ft.	18" Conduit Type B with Class B Bedding	9	5
603				36	Lin.Ft.	18" Conduit Type D	9	7
603				42	Lin.Ft.	24" Conduit Type D	9	7
603				136	Lin.Ft.	24" Conduit Type A 706.02 Class III or 706.08 with Class B Bedding	9	6
603				172	Lin.Ft.	36" Conduit Type A 706.02 Class IV with Class B Bedding	9	6
603				242	Lin.Ft.	42" Conduit Type A 707.05 8 Gage Shop Elongated & Strutted with Class B Bedding	9	6
603				176	Lin.Ft.	72" Conduit Type A 707.03 with Class B Bedding 10-8 Ga.	9	6
603				108	Lin.Ft.	24" Conduit Type A 706.02 or 706.08 with Class B Bedding	9	6
604				9	Each	Standard No. 3-A Catch Basin	9	5
604		1*		1	Each	Manhole Reconstructed to Grade (Sanitary)	17	
604				1	Each	Catch Basin Standard No. 3	9	5
604				4	Each	Catch Basin Standard No. 2-2-B	9	5
605				2000	Lin.Ft.	6" Deep Pipe Underdrains	4	
605				3425	Lin.Ft.	Aggregate Drains	9	Calc.
605				9	Lin.Ft.	Aggregate Drains For Springs, As Per Plan	6	
605				100	Lin.Ft.	6" Unclassified Pipe Underdrain 707.06 or 707.12, as per plan	6	

Item No.		100% State		Total	Unit	DESCRIPTION	Carried From Sheet	Carried From Table
						PAVEMENT		
402				706	Cu.Yds.	Asphalt Concrete (70-85)	9	2
							9	2
404				1066	Cu.Yds.	Asphalt Concrete (70-85)	9	2
301				4125	Cu.Yds.	Bituminous Aggregate Base : 702.01 (85-100) or 702.09 RT-12	9	2
310				5435	Cu.Yds.	Subbase	9	2
609				2563	Lin.Ft.	Combination Curb & Gutter Std. Type 2	9	2
407				286	Gals.	Tack Coat: 702.04, MS-2 or RS-1; or 702.02, RC-70 or RC-250	17	
408				3272	Gals.	Bituminous Prime Coat: 702.03, Pt-2 or Pt-3	9	7 & Calc.
409				1816	Gals.	Seal Coat Bituminous Material: 702.03, Pt 9 or Pt 10 or 702.02, MC-800 or MC 3000	9	Calc.
409				48	Cu.Yds.	Seal Coat Cover Aggregate No. 8	9	Calc.
302				12	M.Gals	Water		
304				1552	Cu.Yds.	Aggregate Base	9	2
304				756	Cu.Yds.	Aggregate Base, Using Limestone		
305				43	Sq.Yds.	9" Portland Cement Concrete Base, as per plan	7	
452				138	Sq.Yds.	7" Plain Portland Cement Concrete Pavement	9	7
				Lump	Lump	Construction Layout Stakes		
				Lump	Lump	Field Office	7	
614				Lump	Lump	Maintaining Traffic		

GENERAL NOTES (Continued)

TRAFFIC MAINTENANCE:

Two way traffic shall be maintained at all times by the use of part width construction, traffic crossovers as required, the existing and new pavement, or temporary roads surfaced with 410 aggregate and stabilized with 616 calcium chloride.

In the first stage of construction, traffic shall be maintained as follows:

1377+30 to 1383+50	Temporary Road on Right	1431+00 to 1452+00	Existing Pavement
1383+50 to 1425+00	Existing Pavement	1452+00 to 1465+00	Existing Right Lane and Right Shoulder & Existing Pav't in Village of Somerset
1425+00 to 1431+00	Temporary Road on Left		

The following sections of pavement shall be constructed during the first stage of construction:

1378+50 to 1400+50	Both Lanes	1440+00 to 1450+50	Both Lanes
1404+00 to 1434+00	Both Lanes	1450+50 to 1463+92.5	Left Lane

In the second stage of construction traffic shall be maintained as follows:

1378+50 to 1399+00	New pavement	1435+00 to 1442+00	Temporary Road on Left
1399+00 to 1405+00	Temporary Road on Left	1442+00 to 1452+00	New Pavement
1405+00 to 1435+00	Same as Stage I	1452+00 to 1465+00	New Left Lane & Left Shoulder & In Village Existing Pav't & New Left Lane

The remaining sections of pavement of S.R. 13 shall be constructed during the second stage of construction.

During Stages 1 & 2 work shall progress on S.R. 669 and S.R. 383 maintaining traffic at all times on existing pavement and temporary roads.

The final pavement shall be the connecting section of new S.R. 383 when S.R. 13 has opened to traffic past 1427+50.

All pav't. widening in the Village of Somerset shall be done on one side at a time: first left side and then right side with traffic maintained on the existing pavement and temporary roadways.

The following items have been included in the General Summary for Maintaining Traffic:

410 Traffic Compacted Surface Course, Type A or B	3000	Cu.Yds.
410 Traffic Compacted Surface Course, Type C	3000	Cu.Yds.
616 Calcium Chloride	120	Tons

If the Contractor so elects, he may submit alternate methods for the maintenance of traffic provided the intent of the above provisions is followed and no additional inconvenience to the traveling public results there from. No alternate plan shall be placed into effect until approval has been granted, in writing, by the Director.

PAVEMENT REMOVAL OUTSIDE NORMAL CONSTRUCTION LIMITS:

After the existing pavement as indicated on the plans has been removed, the old roadway shall be graded to the level of the surrounding ground, the old ditches filled and the disturbed areas sloped to drain and left in a neat condition ready for seeding. Seeding shall be measured and paid for in accordance with Item 659 Seeding and Mulching. Payment for all other work required shall be included in the unit price bid for Item 203

601 PAVED GUTTERS:

The provisions of 203.13 are thereby expanded to the extent that the subgrade under 601 Paved Gutters shall be compacted to a depth of 6" below the surface of the subgrade and to the full width of the paved gutter. No waiver of the specifications is intended and for paved gutter placed contiguously with the paved portion of the roadway, the 6" compaction shall apply beyond the limits of normal subgrade preparation.

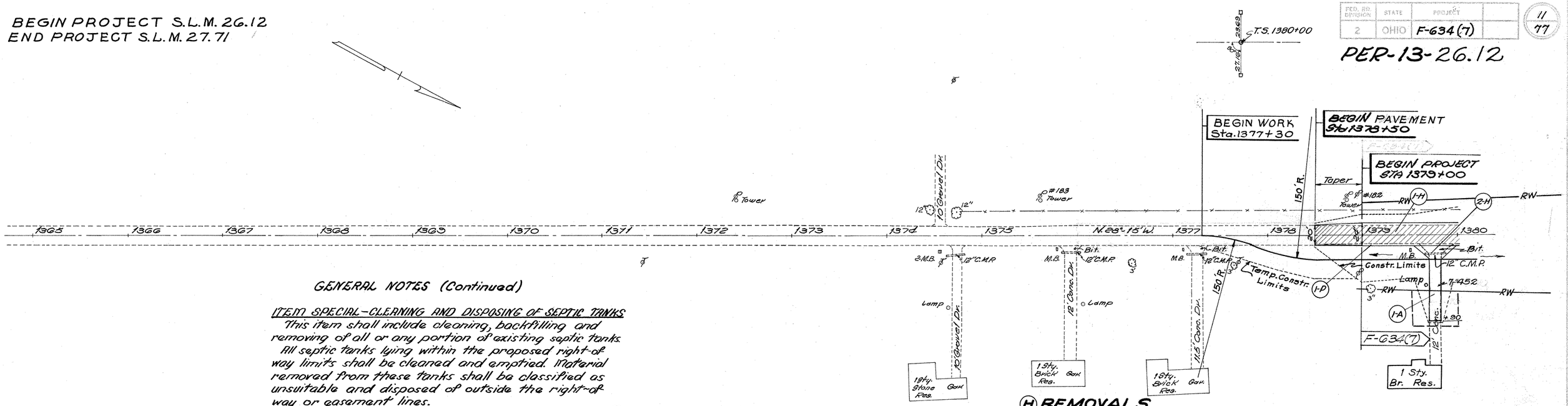
The cost of compacting subgrade to depth of six inches shall be included in the pertinent unit price bid for 203.

General Notes continued on Sheet 11.

BEGIN PROJECT S.L.M. 26.12
END PROJECT S.L.M. 27.71

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

PER-13-26.12



GENERAL NOTES (Continued)

ITEM SPECIAL-CLEANING AND DISPOSING OF SEPTIC TANKS

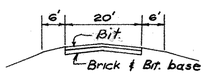
This item shall include cleaning, backfilling and removing of all or any portion of existing septic tanks.

All septic tanks lying within the proposed right-of way limits shall be cleaned and emptied. Material removed from these tanks shall be classified as unsuitable and disposed of outside the right-of way or easement lines.

When the septic tanks are located above the finished pavement or ground lines, they shall be entirely removed and disposed of in accordance with 202.

When the tanks are located below the finished pavement or ground lines, the tops of the tanks shall be removed, and the walls shall be removed to a depth of 3 feet below the finished subgrade or ground lines. The removed material shall be disposed of as explained above. The tanks shall be backfilled with a suitable soil or granular material in accordance with 203.

This item shall be paid for at the unit price bid per each for "Item Special- Cleaning and Disposing of Septic Tanks," which price and payment shall constitute full compensation for cleaning, removing and disposing of excess materials, backfilling and for all labor, tools, equipment and incidentals necessary to complete this item including incidental excavation.



TYPICAL SECTION ADJOINING PAVEMENT

(P) PAVEMENT

Mark	Station From	Station To	404 Asphalt Concrete Cu. Yds.	402 Asphalt Concrete Cu. Yds.	301 Bituminous Aggregate Base Cu. Yds.	310 Subbase Cu. Yds.	203 Subgrade Preparation Sq. Yds.
1-P	1378+50	1380+00	13.5	13.5	67.6	70.4	389

(H) REMOVALS

Mark	Station	Side	202 Pipe Removed Lin. Ft.	202 Rem. & Disp. of Exist. Pav't. Sq. Yds.
			15" & Under	14" Concrete Conc.
1-H	1378+50 to 1380+00	℄		267
2-H	1379+78.5	Rt.	22	
Totals			22	267

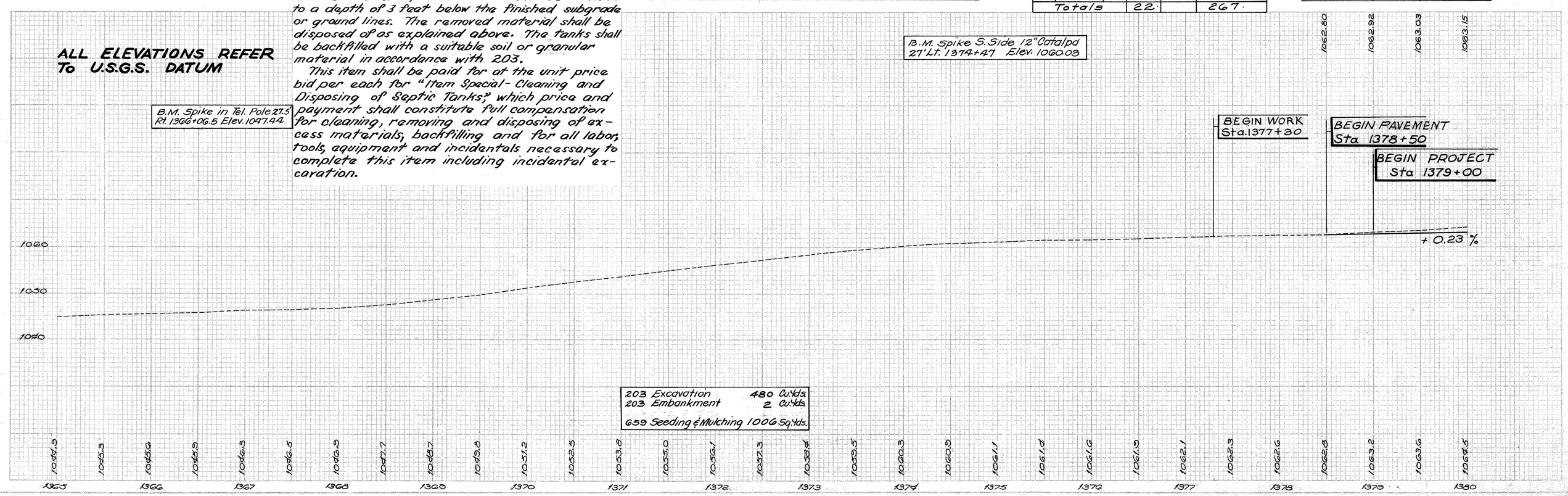
(A) DRIVES

Mark	Station	Type	Side	Detailed on Sheet
1-A	1379+78.5	Res.	Rt.	18

ALL ELEVATIONS REFER TO U.S.G.S. DATUM

B.M. Spike in Tel. Pole 27.5' Rt. 1366+06.5 Elev. 1047.44

B.M. Spike S. Side 12" Catalpa 27' Lt. 1374+47 Elev. 1060.03



1365+00-1380+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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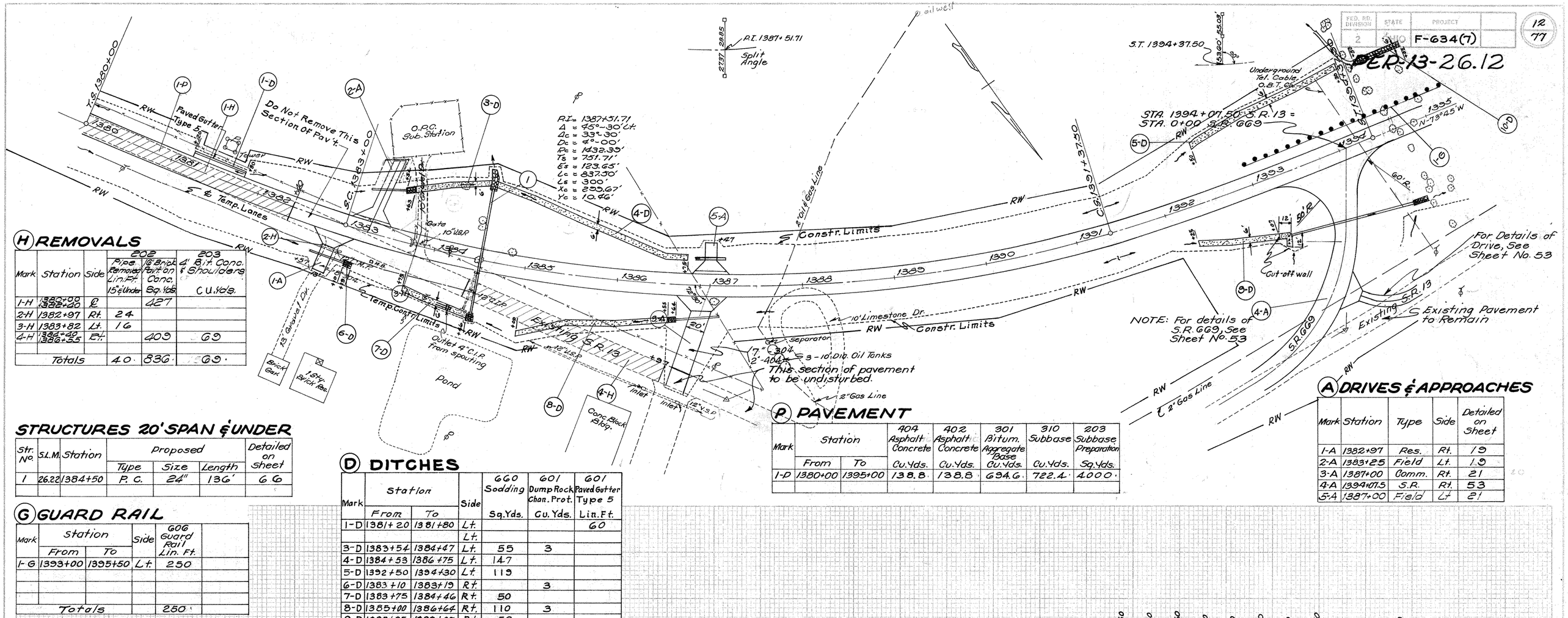
ER 13-26.12



H REMOVALS

Mark	Station	Side	202 Pipe Removed Lin. Ft. 15" & Under	202 6" Brick Pavt. on Conc. Sq. Yds.	203 4" Bit. Conc. & Shoulders C.U. Yds.
1-H	1380+00 1382+20	℄		427	
2-H	1382+97	Rt.	24		
3-H	1383+82	Lt.	16		
4-H	1384+40 1386+55	Ext.		409	69
Totals			40	836	69

STRUCTURES 20' SPAN & UNDER

Str. No.	S.L.M.	Station	Proposed Type	Proposed Size	Proposed Length	Detailed on Sheet
1	26.22	1384+50	P. C.	24"	136'	66

G GUARD RAIL

Mark	Station From	Station To	Side	606 Guard Rail Lin. Ft.
1-G	1393+00	1395+50	Lt.	250
Totals				250

D DITCHES

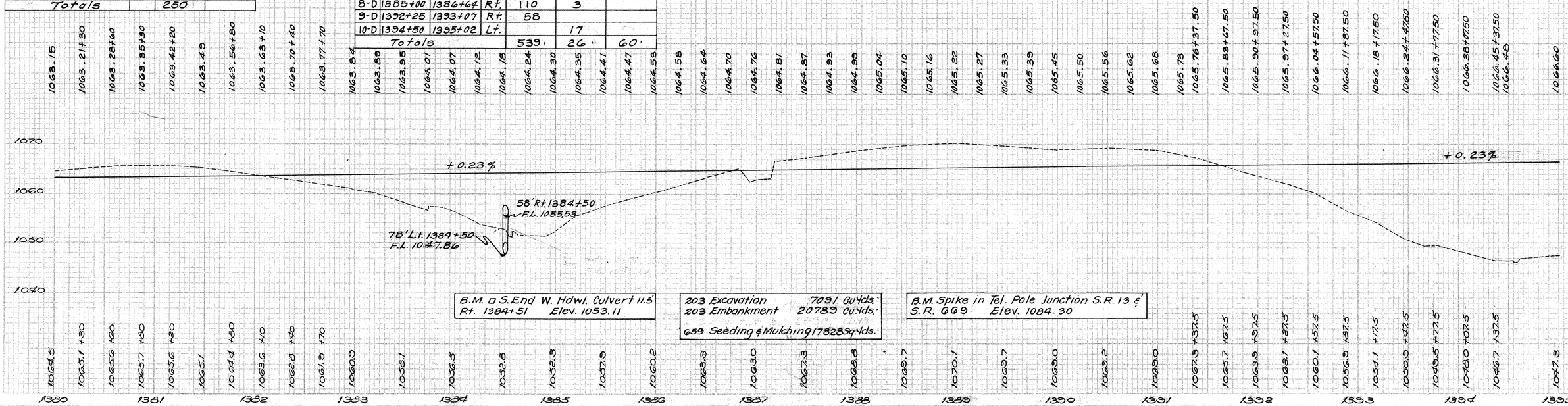
Mark	Station From	Station To	Side	660 Sodding Sq. Yds.	601 Dump Rock Chan. Prot. Cu. Yds.	601 Paved Gutter Type 5 Lin. Ft.
1-D	1381+20	1381+80	Lt.			60
			Lt.			
3-D	1383+54	1384+47	Lt.	55	3	
4-D	1384+53	1386+75	Lt.	147		
5-D	1392+50	1394+30	Lt.	113		
6-D	1383+10	1383+19	Rt.		3	
7-D	1383+75	1384+46	Rt.	50		
8-D	1385+00	1386+64	Rt.	110	3	
9-D	1392+25	1393+07	Rt.	58		
10-D	1394+50	1395+02	Lt.		17	
Totals				539	26	60

P PAVEMENT

Mark	Station From	Station To	404 Asphalt Concrete Cu. Yds.	402 Asphalt Concrete Cu. Yds.	301 Bitum. Aggregate Base Cu. Yds.	310 Subbase Cu. Yds.	203 Subbase Preparation Sq. Yds.
1-P	1380+00	1395+00	138.8	138.8	694.6	722.4	4000

A DRIVES & APPROACHES

Mark	Station	Type	Side	Detailed on Sheet
1-A	1382+97	Res.	Rt.	19
2-A	1383+25	Field	Lt.	19
3-A	1387+00	Comm.	Rt.	21
4-A	1394+07.5	S.R.	Rt.	53
5-A	1387+00	Field	Lt.	21



B.M. □ S. End W. Hdwl. Culvert 11.5 Rt. 1384+51 Elev. 1053.11

203 Excavation 7031 Cu. Yds.
203 Embankment 20783 Cu. Yds.
659 Seeding & Mulching 17828 Sq. Yds.

B.M. Spike in Tel. Pole Junction S.R. 13 & S.R. 669 Elev. 1084.30

1380+00-1395+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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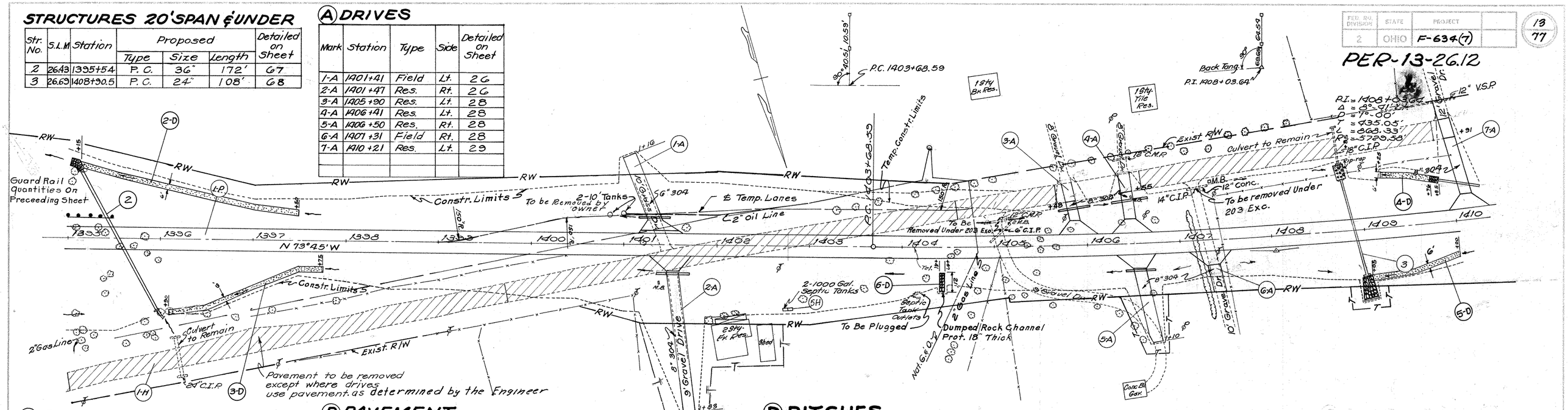
STRUCTURES 20' SPAN & UNDER

Str. No.	S.I.M.	Station	Proposed			Detailed on Sheet
			Type	Size	Length	
2	26.43	1395+54	P. C.	36"	172'	67
3	26.69	1408+90.5	P. C.	24"	108'	68

(A) DRIVES

Mark	Station	Type	Side	Detailed on Sheet
1-A	1401+41	Field	Lt.	26
2-A	1401+47	Res.	Rt.	26
3-A	1405+90	Res.	Lt.	28
4-A	1406+41	Res.	Lt.	28
5-A	1406+50	Res.	Rt.	28
6-A	1407+31	Field	Rt.	28
7-A	1410+21	Res.	Lt.	29



(H) REMOVALS

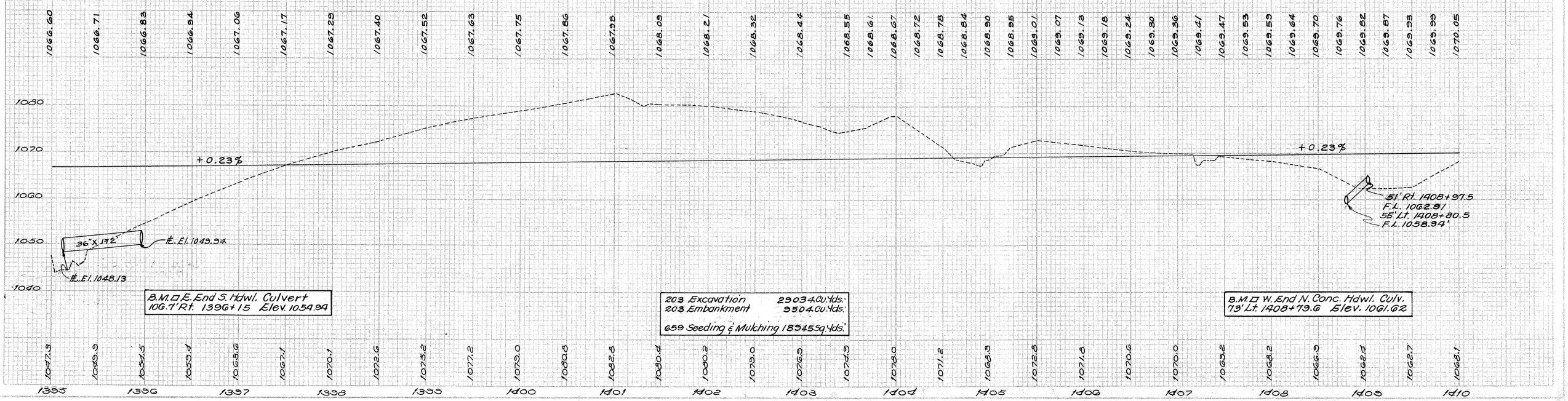
Mark	Station From	Station To	Side	202 Rem. & Disp. 4" Bit. Conc. 16" Brk. on Conc. & S/Hld. Sq. Yds	203 Bit. Conc. Cu. Yds	Special Cleaning and Disposing of Septic Tanks EACH
1-H	1395+00	1399+70	Rt.	853	142	
2-H	1399+70	1402+60	Lt. & Rt.	889		
3-H	1402+60	1405+66	Lt.	190	32	
4-H	1406+53	1409+82	Lt.	569	96	
5-H	1402+76		Rt.			2
Totals				2501	272	2

(P) PAVEMENT

Mark	Station From	Station To	404 Asphaltic Concrete Cu. Yds.	402 Asphaltic Concrete Cu. Yds.	301 Bitum. Aggregate Cu. Yds.	310 Subbase Cu. Yds.	203 Subbase Preparation Sq. Yds.
1-P	1395+00	1410	138.8	138.8	694.6	722.4	4000

(D) DITCHES

Mark	Station From	Station To	Side	660 Sodding Sq. Yds.	601 Dump Rock Chan. Prot. Cu. Yds.
2-D	1395+15	1397+50	Lt.	159	
3-D	1395+30	1397+75	Rt.	117	
4-D	1409+25	1409+85	Lt.	35	3
5-D	1409+05	1410+00	Rt.	65	
6-D	1404+41	1404+47	Rt.		7
Totals				376	10



B.M. □ E. End S. Hdwl. Culvert
106.7' Rt. 1396+15 Elev. 1054.94

203 Excavation 29034 Cu. Yds.
203 Embankment 9504 Cu. Yds.

659 Seeding & Mulching 183455 Sq. Yds.

B.M. □ W. End N. Conc. Hdwl. Culv.
73' Lt. 1408+79.6 Elev. 1061.62

1395+00-1410+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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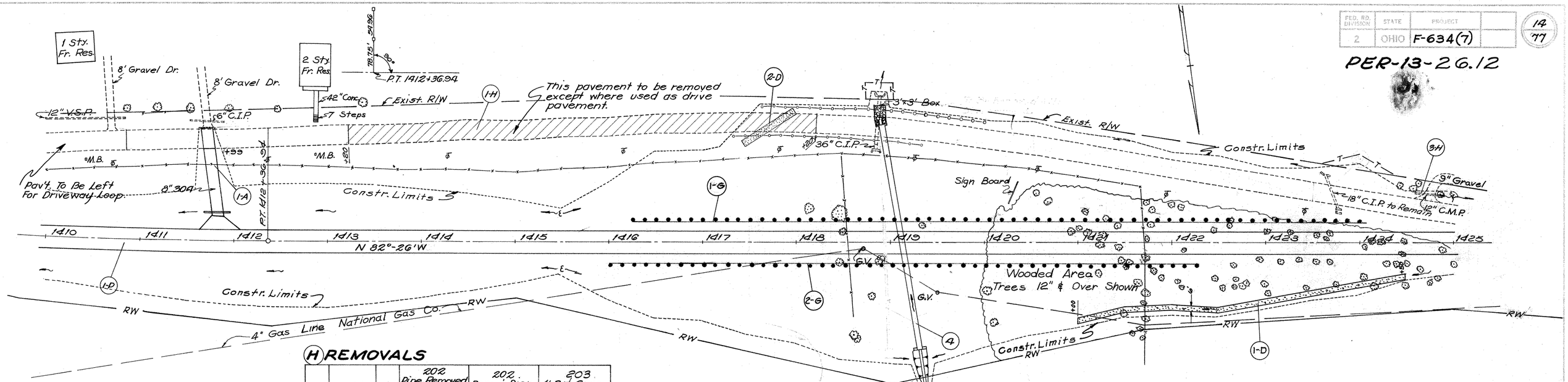
PER-13-26.12



STRUCTURES 20' SPAN & UNDER

Str. No.	S.L.M.	Station	Proposed Type	Proposed Size	Proposed Length	Detailed On Sheet
4	26.89	1419+13.4	P.C.	42"	242'	69

(H) REMOVALS

Mark	Station	Side	202 Pipe Removed Lin. Ft. 15" & Under	202 Pipe Removed Lin. Ft. Over 15"	202 Rem. & Disp. 16" Brick on Conc. Sq. Yds.	203 4" Bit. Conc. Shoulders Cu. Yds.
1-H	1418+20 1418+20	Lt.			889	150
3-H	1424+70	Lt.	24			
Totals			24		889	150

(A) DRIVES

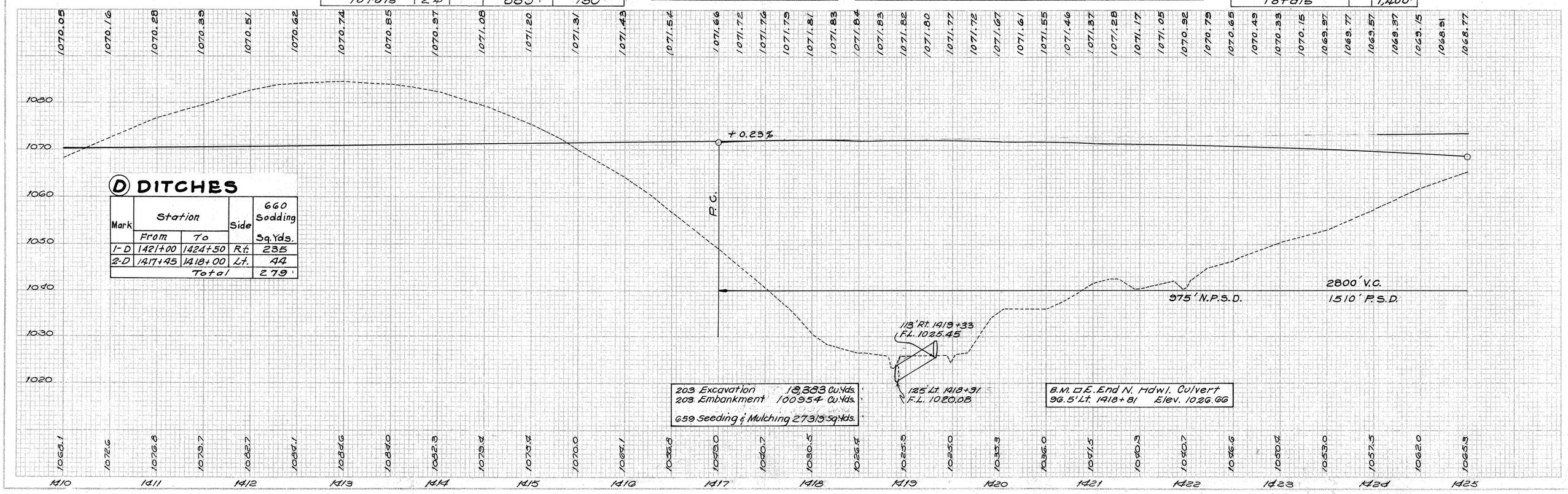
Mark	Station	Type	Side	Detailed on Sheet
1-A	1411+86	Res.	Lt.	30

(P) PAVEMENT

Mark	Station From	Station To	404 Asphaltic Concrete Cu. Yds.	402 Asphaltic Concrete Cu. Yds.	301 Bitum. Aggregate Base Cu. Yds.	310 Subbase Cu. Yds.	203 Subbase Preparation Sq. Yds.
1-P	1410+00	1425+00	138.8	138.8	634.6	722.4	4000

(G) GUARD RAIL

Mark	Station From	Station To	Side	606 Guard Rail Lin. Ft.
1-G	1416+25	1424+00	Lt.	775
2-G	1416+00	1422+25	Rt.	625
Totals				1,400



(D) DITCHES

Mark	Station From	Station To	Side	660 Sodding Sq. Yds.
1-D	1421+00	1424+50	Rt.	235
2-D	1417+45	1418+00	Lt.	44
Total				279

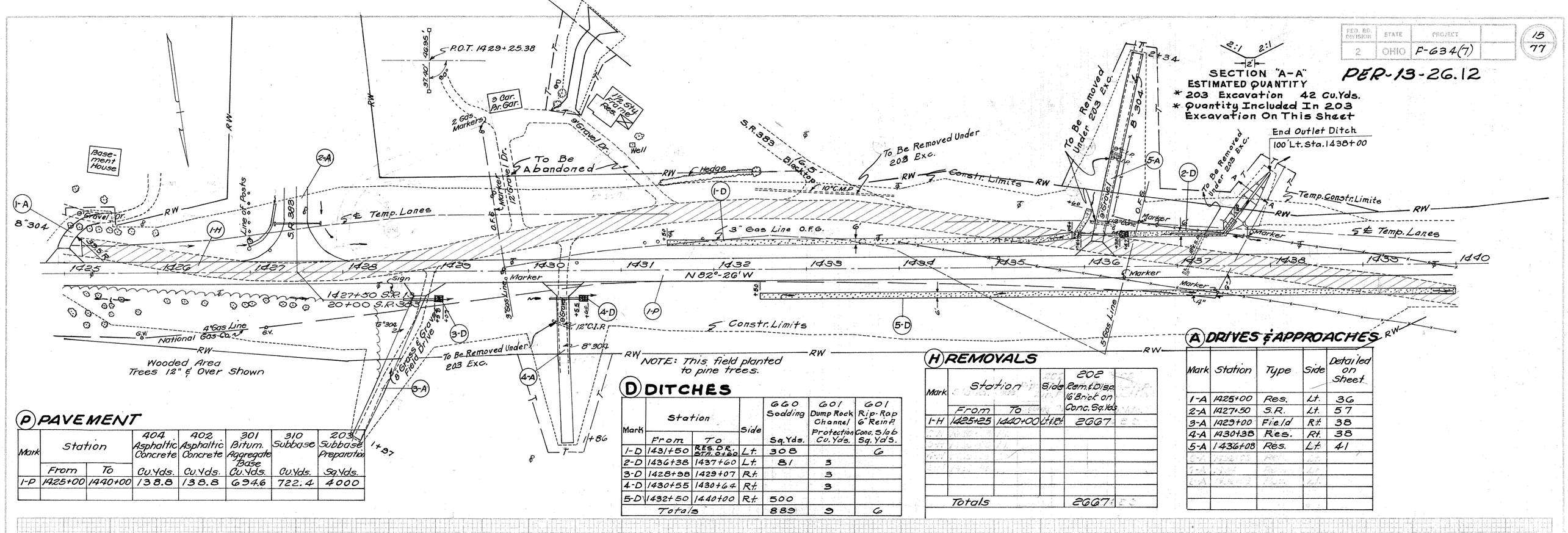
203 Excavation 18,383 Cu. Yds.
203 Embankment 100954 Cu. Yds.

659 Seeding & Mulching 273.3 Sq. Yds.

B.M. □ E. End N. Hdwl. Culvert
96.5' Lt. 1418+81 Elev. 1026.66

1410+00-1425+00

PER-13-26.12



P PAVEMENT

Mark	Station From	Station To	404 Asphaltic Concrete Cu. Yds.	402 Asphaltic Concrete Cu. Yds.	301 Bitum. Aggregate Base Cu. Yds.	310 Subbase Cu. Yds.	203 Subbase Preparation Sq. Yds.
1-P	1425+00	1440+00	138.8	138.8	694.6	722.4	4000

D DITCHES

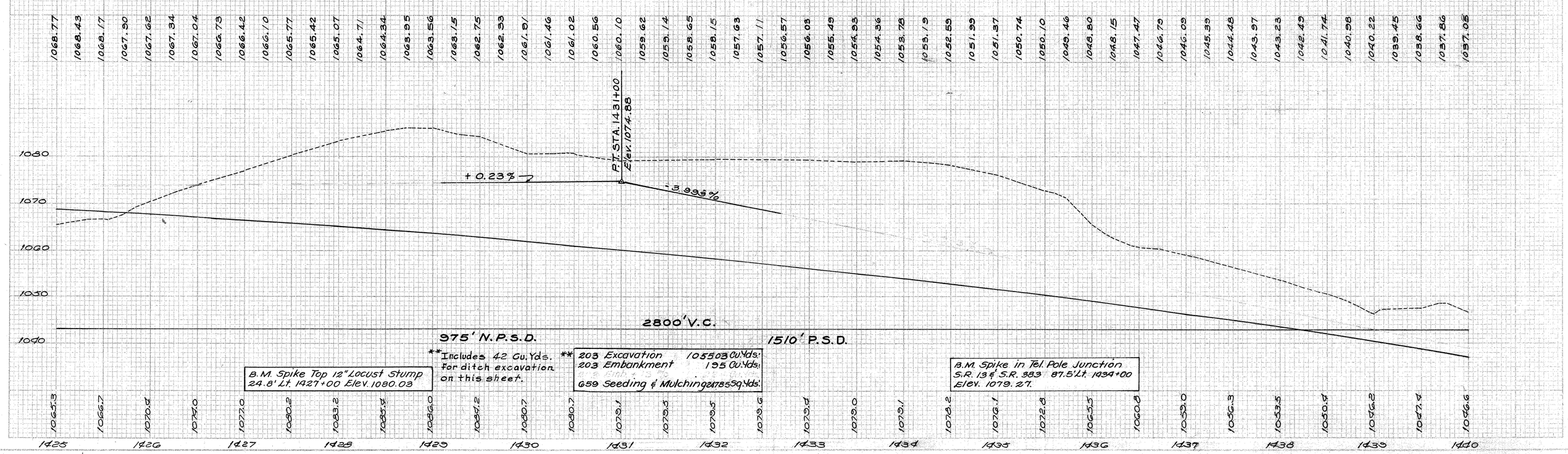
Mark	Station From	Station To	Side	660 Sodding Sq. Yds.	601 Dump Rock Channel Protection Cu. Yds.	601 Rip-Rap 6" Reinf. Conc. Slab Sq. Yds.
1-D	1431+50	RES. DR. STA. 0+60	Lt.	308		6
2-D	1436+38	1437+60	Lt.	81	3	
3-D	1428+98	1429+07	Rt.		3	
4-D	1430+55	1430+64	Rt.		3	
5-D	1432+50	1440+00	Rt.	500		
Totals				889	9	6

H REMOVALS

Mark	Station From	Station To	Side	202 Rem. & Disp. 16" Brick on Conc. Sq. Yds.
1-H	1425+25	1440+00	Lt. & Rt.	2667
Totals				2667

A DRIVES & APPROACHES

Mark	Station	Type	Side	Detailed on Sheet
1-A	1425+00	Res.	Lt.	36
2-A	1427+50	S.R.	Lt.	57
3-A	1429+00	Field	Rt.	38
4-A	1430+38	Res.	Rt.	38
5-A	1436+08	Res.	Lt.	41



1425+00-1440+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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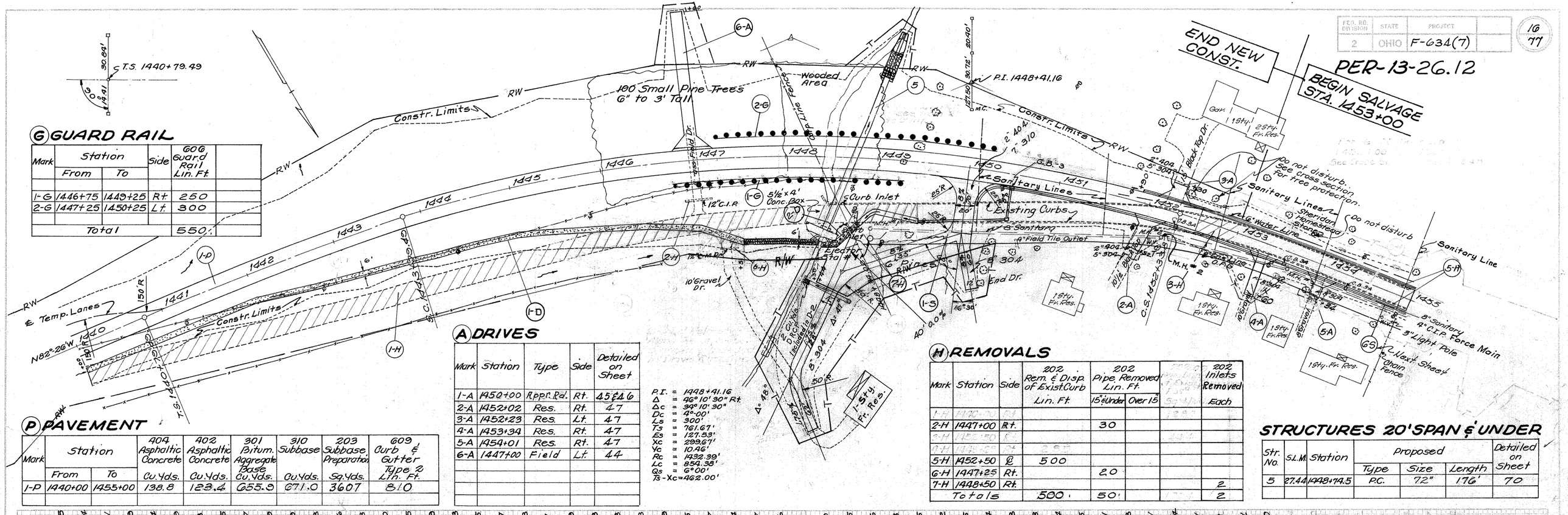
PER-13-26.12



G GUARD RAIL

Mark	Station From	Station To	Side	606 Guard Rail Lin. Ft.	
1-G	1446+75	1449+25	Rt.	250	
2-G	1447+25	1450+25	Lt.	300	
Total				550.	

P PAVEMENT

Mark	Station From	Station To	404 Asphaltic Concrete Cu. Yds.	402 Asphaltic Concrete Cu. Yds.	301 Bitum. Aggregate Base Cu. Yds.	310 Subbase Cu. Yds.	203 Subbase Preparation Sq. Yds.	609 Curb & Gutter Type 2 Lin. Ft.
1-P	1440+00	1455+00	138.8	123.4	655.9	671.0	3607	810

A DRIVES

Mark	Station	Type	Side	Detailed on Sheet
1-A	1450+00	R.ppr. Rd.	Rt.	45 & 46
2-A	1452+02	Res.	Rt.	47
3-A	1452+23	Res.	Lt.	47
4-A	1453+34	Res.	Rt.	47
5-A	1454+01	Res.	Rt.	47
6-A	1447+00	Field	Lt.	44

H REMOVALS

Mark	Station	Side	202 Rem. & Disp. of Exist. Curb Lin. Ft.	202 Pipe Removed Lin. Ft. 15" & Under	202 Pipe Removed Lin. Ft. Over 15"		202 Inlets Removed Each
1-H	1440+00	Rt.					
2-H	1447+00	Rt.		30			
3-H	1450+50	℄					
4-H	1452+50	℄					
5-H	1452+50	℄	500				
6-H	1447+25	Rt.		20			
7-H	1448+50	Rt.					2
Totals			500.	50.			2

STRUCTURES 20' SPAN & UNDER

Str. No.	S.L.M.	Station	Proposed Type	Proposed Size	Proposed Length	Detailed on Sheet
5	27.44	1448+14.5	P.C.	72"	176'	70

PAV'T. REMOVAL

Mark	Station From	Station To	Side	202 16" Brick on Conc. Sq. Yds.	203 4" B.T. Conc. & Shoulder Cu. Yds.
1-H	1440+00	1449+50	Rt.	1671	326
3-H	1452+50	1453+00	Lt. & Rt.	105	
Totals				1776	326

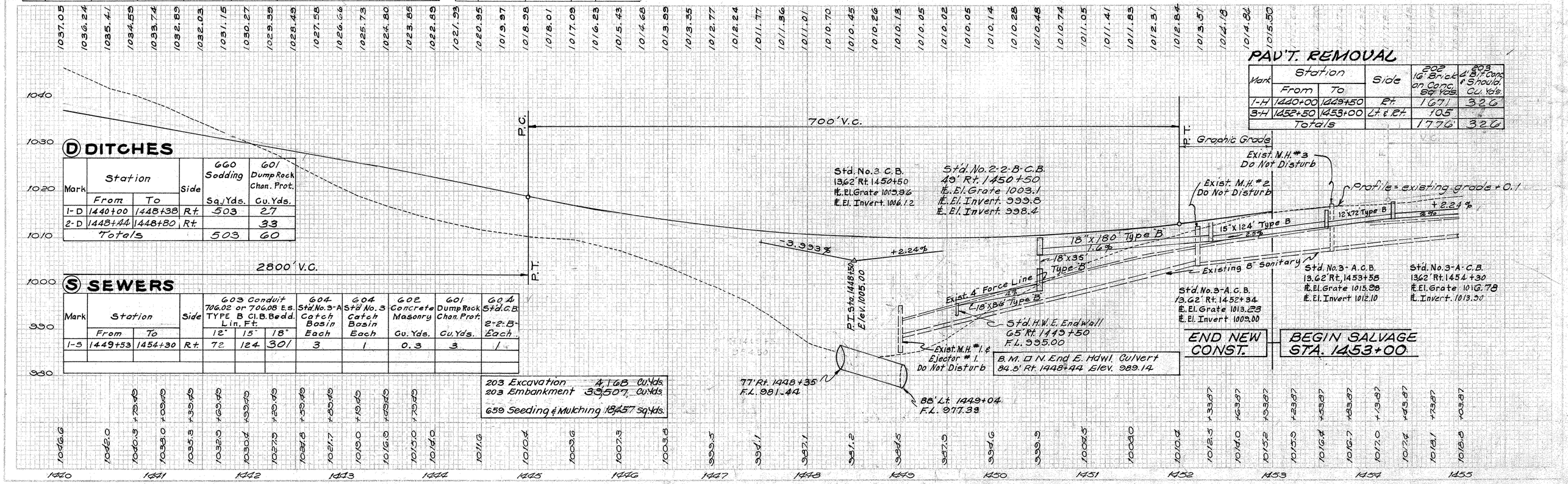
D DITCHES

Mark	Station From	Station To	Side	660 Sodding Sq. Yds.	601 Dump Rock Chan. Prot. Cu. Yds.
1-D	1440+00	1448+38	Rt.	503	27
2-D	1448+44	1448+80	Rt.		33
Totals				503	60

S SEWERS

Mark	Station From	Station To	Side	603 Conduit 706.02 or 706.08 E.S. TYPE B Cl. B. Bedd. Lin. Ft. 12"	15"	18"	604 Std. No. 3-A Catch Basin Each	604 Std. No. 3 Catch Basin Each	602 Concrete Masonry Cu. Yds.	601 Dump Rock Chan. Prot. Cu. Yds.	604 Std. C.B. 2-2-B Each
1-S	1449+53	1454+30	Rt.	72	124	301	3	1	0.3	3	1

203 Excavation	4,168 Cu. Yds.
203 Embankment	33,507 Cu. Yds.
659 Seeding & Mulching	18,457 Sq. Yds.



1440+00-1455+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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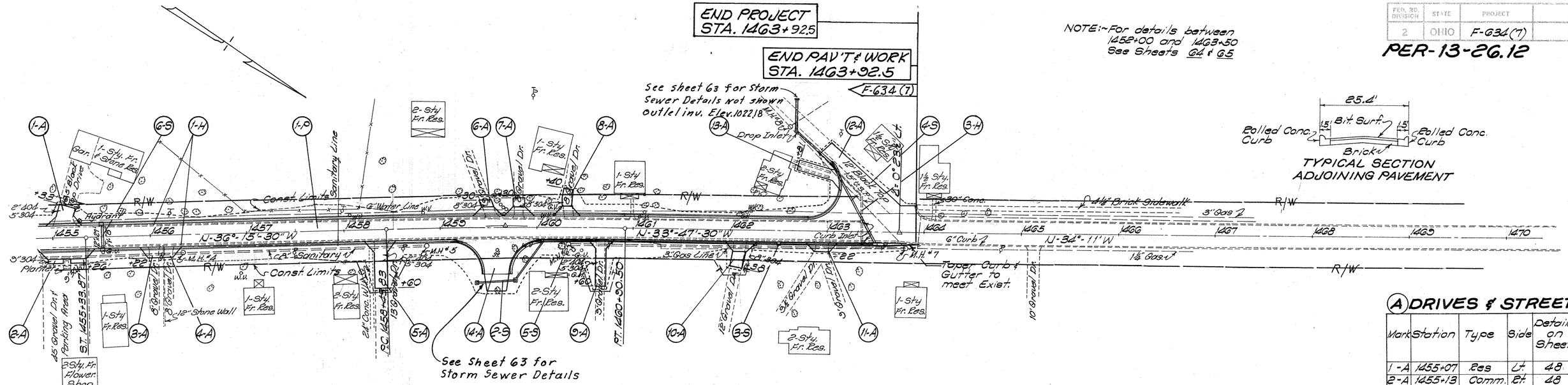
END PROJECT
STA. 1463+92.5

END PAV'T & WORK
STA. 1463+92.5

F-634 (7)

NOTE:- For details between 1452+00 and 1463+50 See Sheets 64 & 65



TYPICAL SECTION ADJOINING PAVEMENT

(A) DRIVES & STREETS

Mark	Station	Type	Side	Detailed on Sheet
1-A	1455+07	Res	Lt.	48
2-A	1455+13	Comm.	Rt.	48
3-A	1456+03	Res.	Rt.	48
4-A	1456+18	Res.	Rt.	48
5-A	1458+37	Res.	Rt.	49
6-A	1459+56	Res.	Lt.	50
7-A	1459+80	Res.	Lt.	50
8-A	1460+24.5	Res.	Lt.	50
9-A	1460+66	Res	Rt.	50
10-A	1462+09.5	Res.	Rt.	51
11-A	1462+93	Res.	Rt.	51
12-A	1463+97	Street	Lt.	51 & 63
13-A	Fair Dr.	Res	Lt.	63
14-A	1459+58.5	Street	Rt.	63

(P) PAVEMENT

Mark	Station From	Station To	404 Asphaltic Concrete Cu. Yds.	402 Asphaltic Concrete Cu. Yds.	301 Bitum. Aggreg. Base Cu. Yds	310 Subbase Cu. Yds.	609 Curb & Gutter Type "2" Lin. Ft.	*407 Tack Coat Gal's.
1-P	1455+00	1463+32.5	82.6	14.0	126.0	147.0	1655	286

PI = 1459+67.19
Δ = 2°-28' Rt.
D = 1°-00'
T = 123.36'
L = 246.67'
R = 5729.59'
E = 1.33'

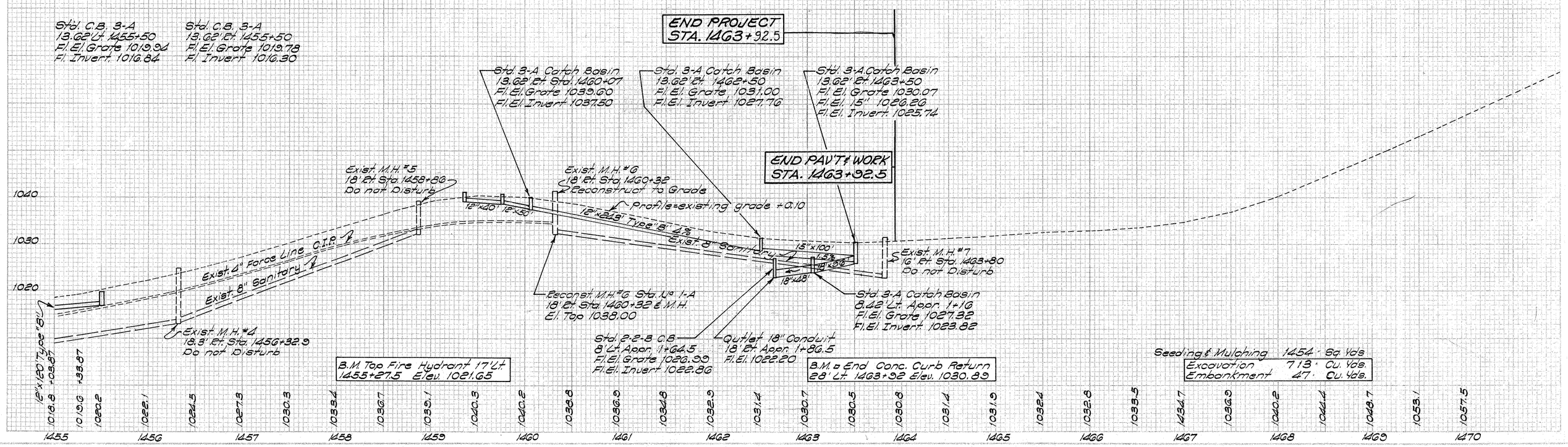
* Quantity calculated for area from 1453 to 1463+32.5 including appr. Street & carried to the Gen. Sum.

(H) REMOVALS

Mark	Station	Side	202 Pipe Removed Lin. Ft. 15" & Under	202 Pipe Removed Lin. Ft. Over 15"	202 Rem. & Disp. of Exist. Curb Lin. Ft.	202 Inlets Removed Each
1-H	1455+00	Lt. & Rt.			1650	
3-H	1463+35	Lt. & Rt.	47	47		2
Totals			47	47	1650	2

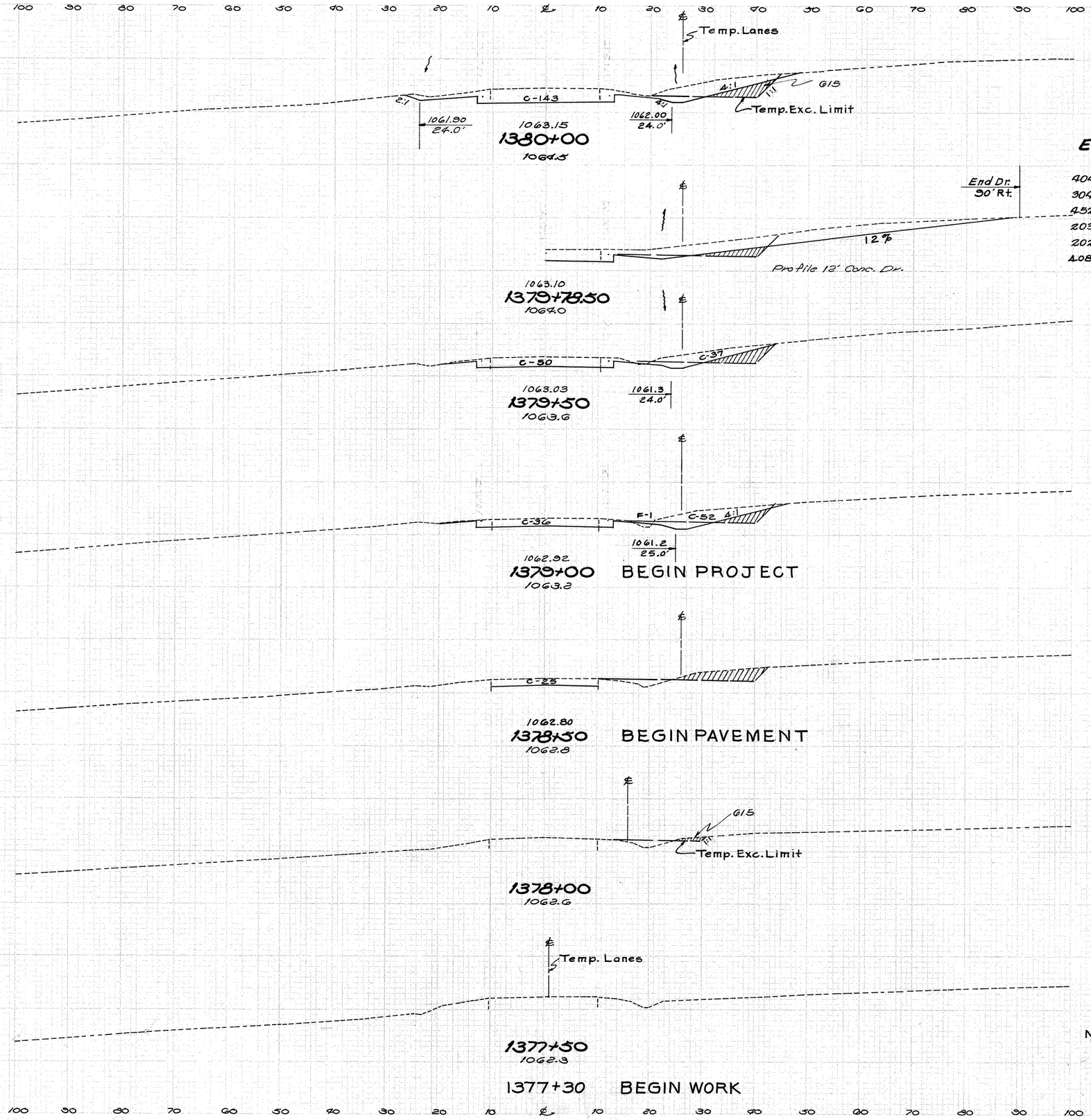
(S) SEWERS

Mark	Station From	Station To	Side	603 Conduit Type "B" Lin. Ft. 706.02 or 706.08 E.S. 12"	15"	18"		604 Manhole Re-Const. San. Each	602 Concrete Masonry Cu. Yds.	604 Std. C.B. Each 2-2-B	3-A
2-S	1459+36.8	1460+07	Rt.	90						2	
3-S	1460+07	1463+50	Rt.	243	100						3
4-S	1463+50	1+86.5 Rt. Fairgrades	Lt. & Rt.			178			0.3	1	1
5-S	1460+32		Rt.					1			
6-S	1454+30	1455+50	Lt. & Rt.	147							2
Totals				480	100	178		1	0.3	3	6



1455+00 - 1470+00

PER-13-26.12



ESTIMATED QUANTITIES

RES. DR. RT. 1379+78.50

404	Asphaltic Conc.	2.5	Cu.Yds.	143	0
304	Aggr. Base (Limestone)	6.3	Cu.Yds.		
452	P.C. Concrete (T=7")	84	Sq.Yds.		
203	Excavation	70	Cu.Yds.		
202	Pavement Removal	84	Sq.Yds.	213	0
408	Bit. Prime	18	Gals.		
				87	0
				162	1
				88	1
				105	1
				25	0

Note:—
Drive Quantities Carried To Sheet No. 9.

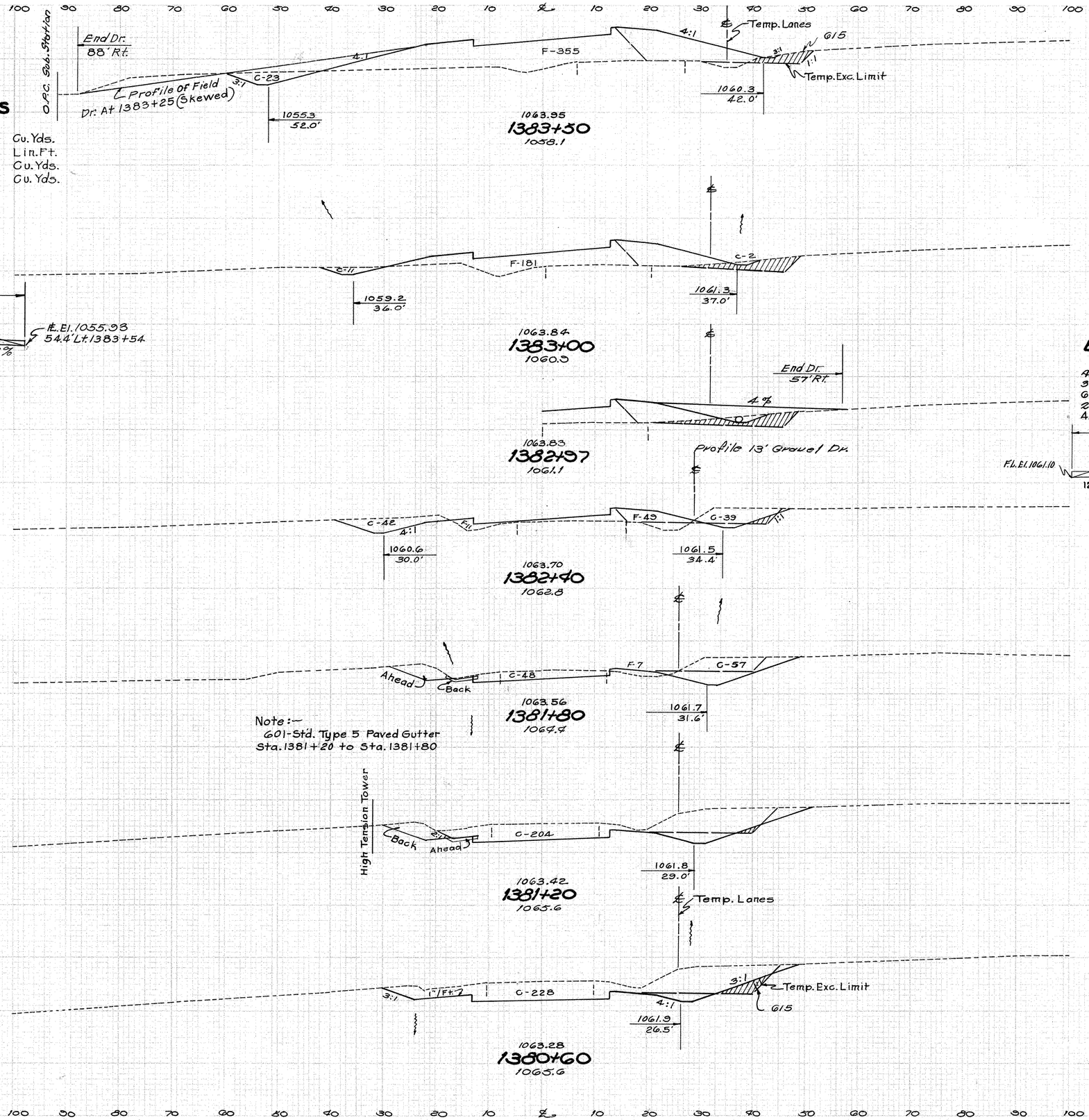
1377+50 - 1380+00

PER-13-26.12

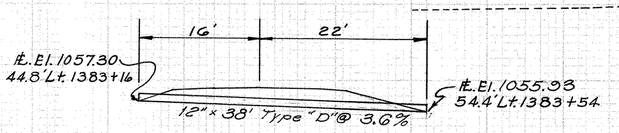
ESTIMATED QUANTITIES

FIELD DR. LT. 1383+25

304	Aggr. Base	21.1	Cu. Yds.
603	12" Conduit Type "D"	38	Lin. Ft.
203	Embankment	100	Cu. Yds.
203	Excavation	60	Cu. Yds.



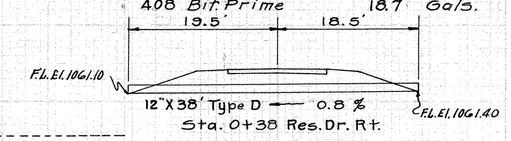
Note:—
601-Std. Type 5 Paved Gutter
Sta. 1381+20 to Sta. 1381+80



ESTIMATED QUANTITIES

RES. DR. RT. 1382+97

404	Asphaltic Conc.	2.6	Cu. Yds
304	Aggr. Base (Limestone)	6.1	Cu. Yds
603	12" Conduit Type (D)	38	Lin. Ft.
203	Embankment	68	Cu. Yds
408	Bit. Prime	18.7	Gals.

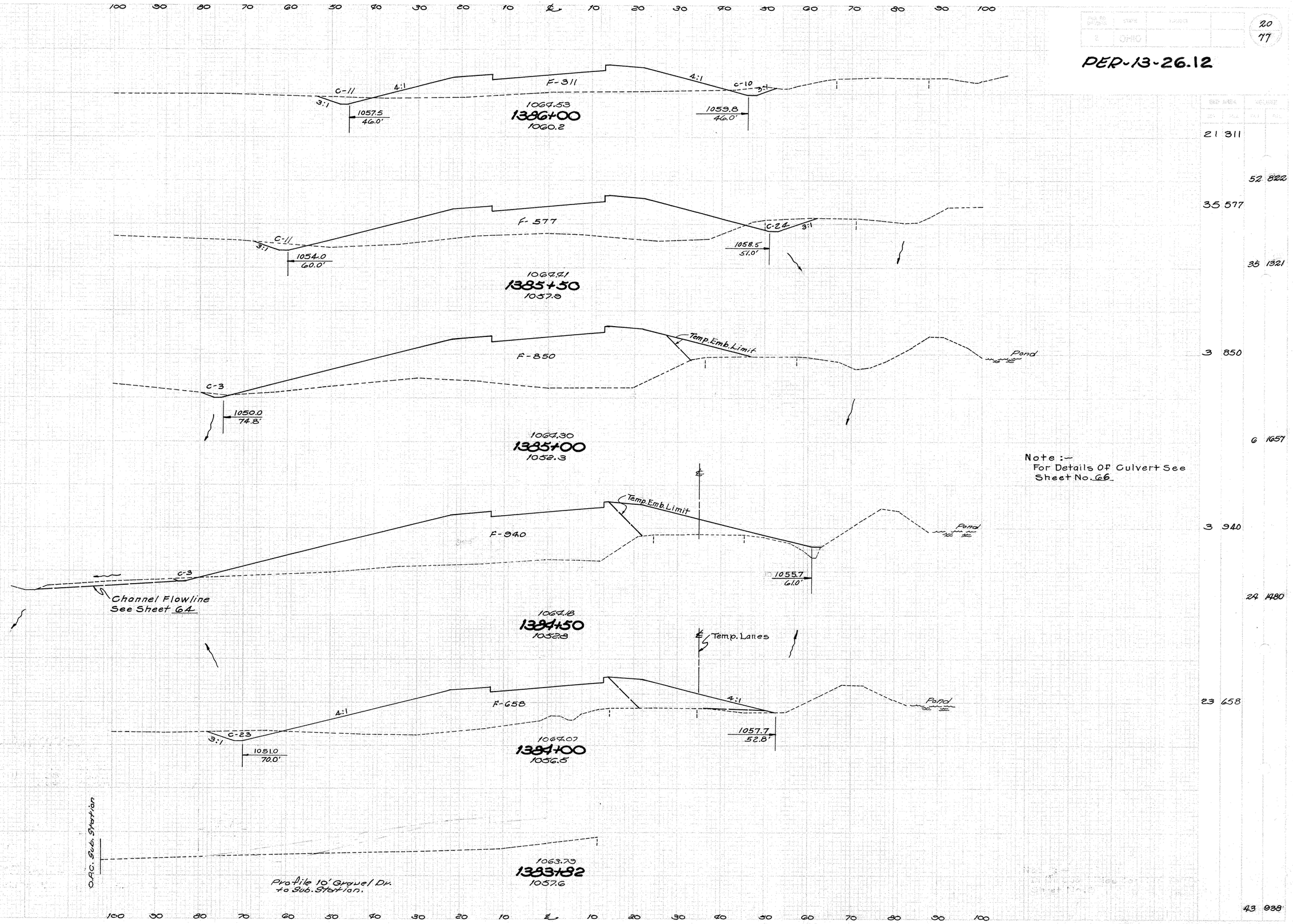


	END AREA	VOLUME
	23 355	
		33 496
	13 181	
		104 268
	81 60	
	207 74	
	105 7	
	343 8	
	204 0	
	480 0	
	228 0	
	412 0	

Note:—
Drive Quantities Carried To Sheet No. 9.

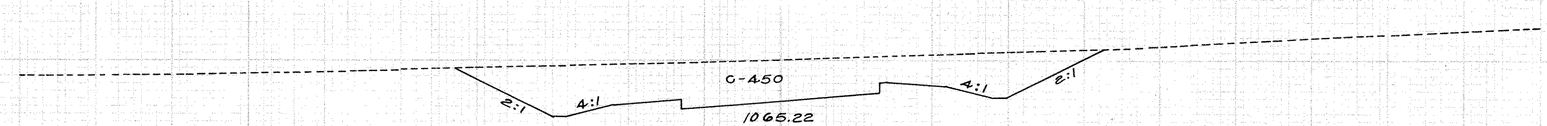
1380+60 - 1383+50

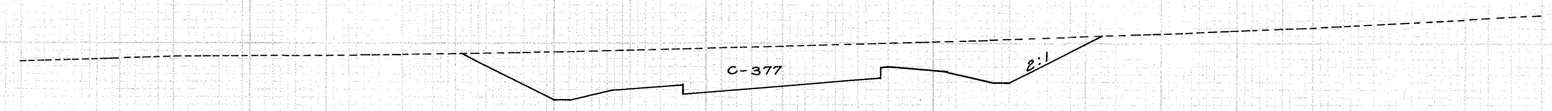
PER-13-26.12

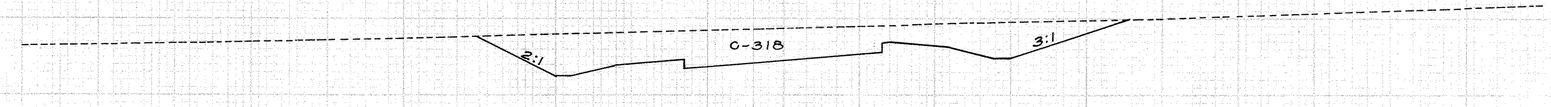


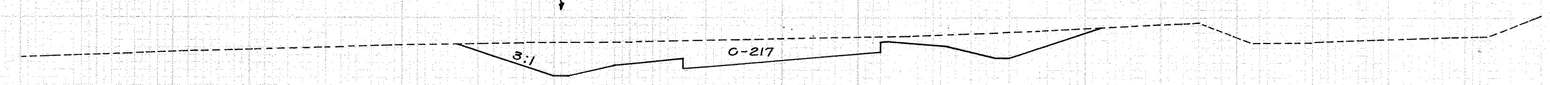
1383+82-1386+00

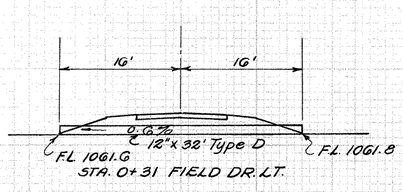
PER-13-26.12







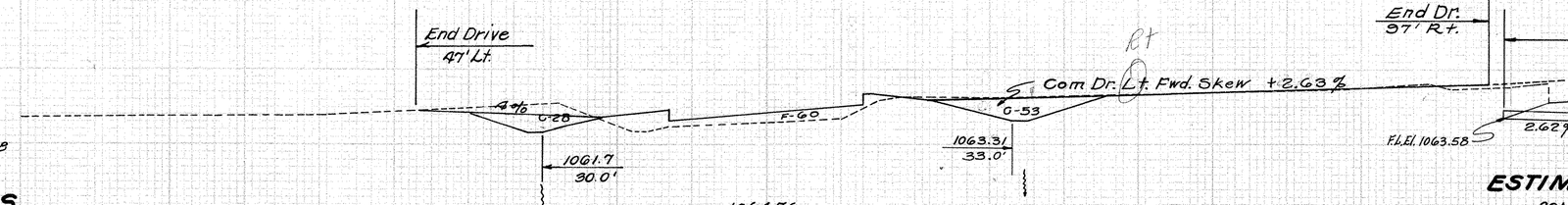


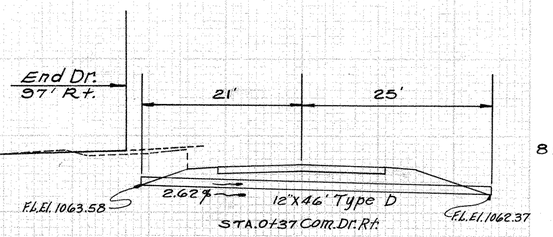


ESTIMATED QUANTITIES

FIELD DRIVE LT. 1387+00

304	Aggr. Base	9 Cu.Yds.
603	12" Conduit Type D	32 Lin. Ft.
203	Excavation	4 Cu.Yds.
203	Embankment	20 Cu.Yds.

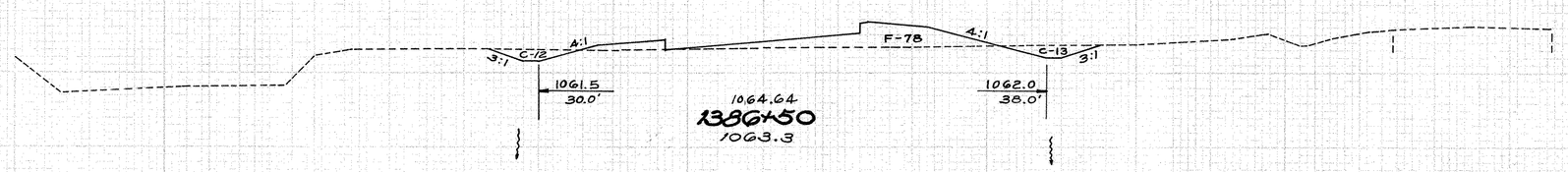




ESTIMATED QUANTITIES

COM. DR. Rt. 1387+00

404	Asphaltic Conc.	11.9	Cu.Yds.
304	Aggr. Base (Limestone)	38.4	Cu.Yds.
203	Excavation	40	Cu.Yds.
203	Embankment	49	Cu.Yds.
603	12" Conduit Type D	46	Lin. Ft.
408	Bit. Prime	85.4	Gals.

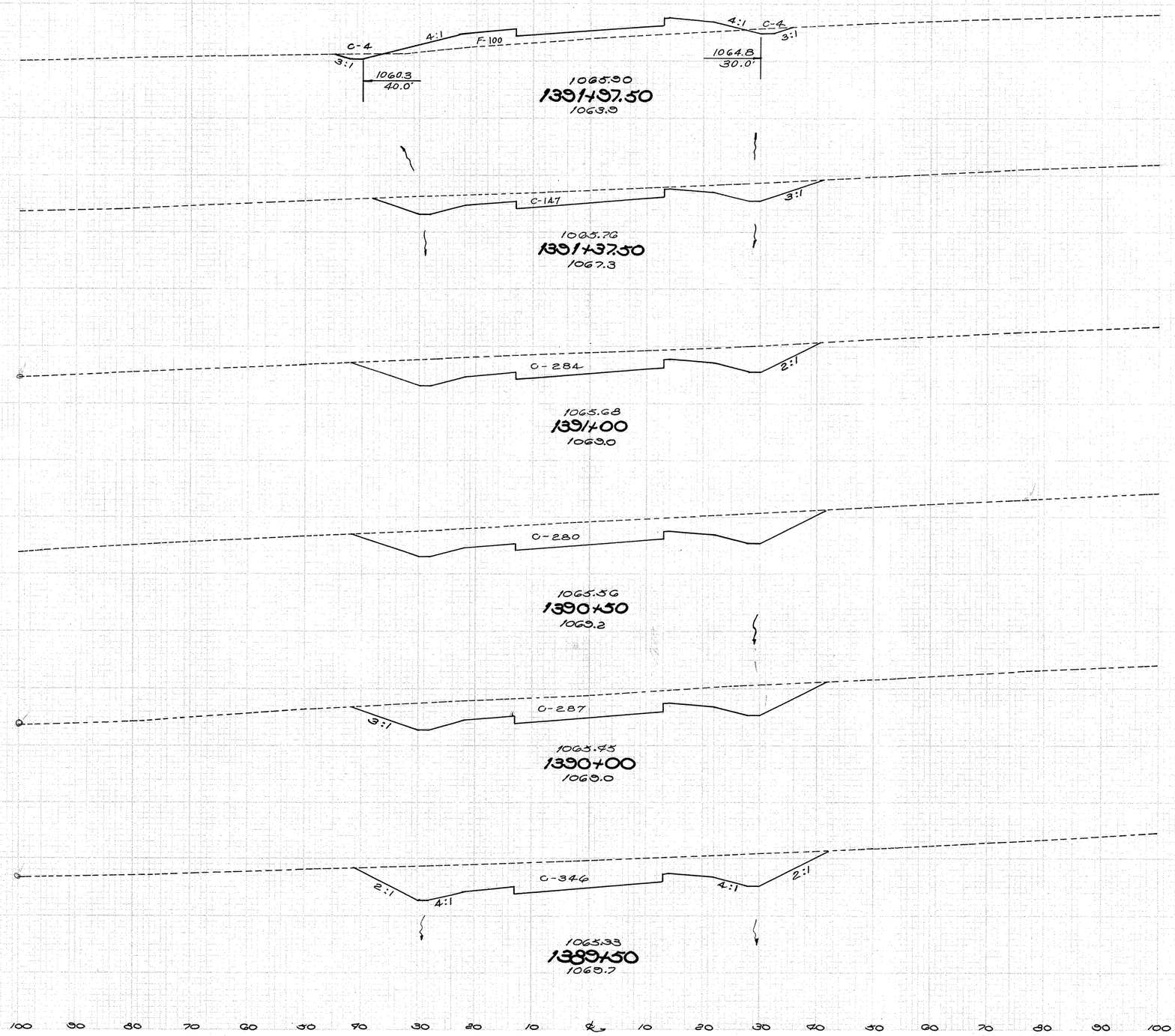


Note :—
Drive Quantities Carried To
Sheet No. 9

450	0		
		766	0
377	0		
		644	0
318	0		
		495	0
217	0		
		276	56
81	60		
98	128		
25	78		
		43	360

1386+50 - 1389+00

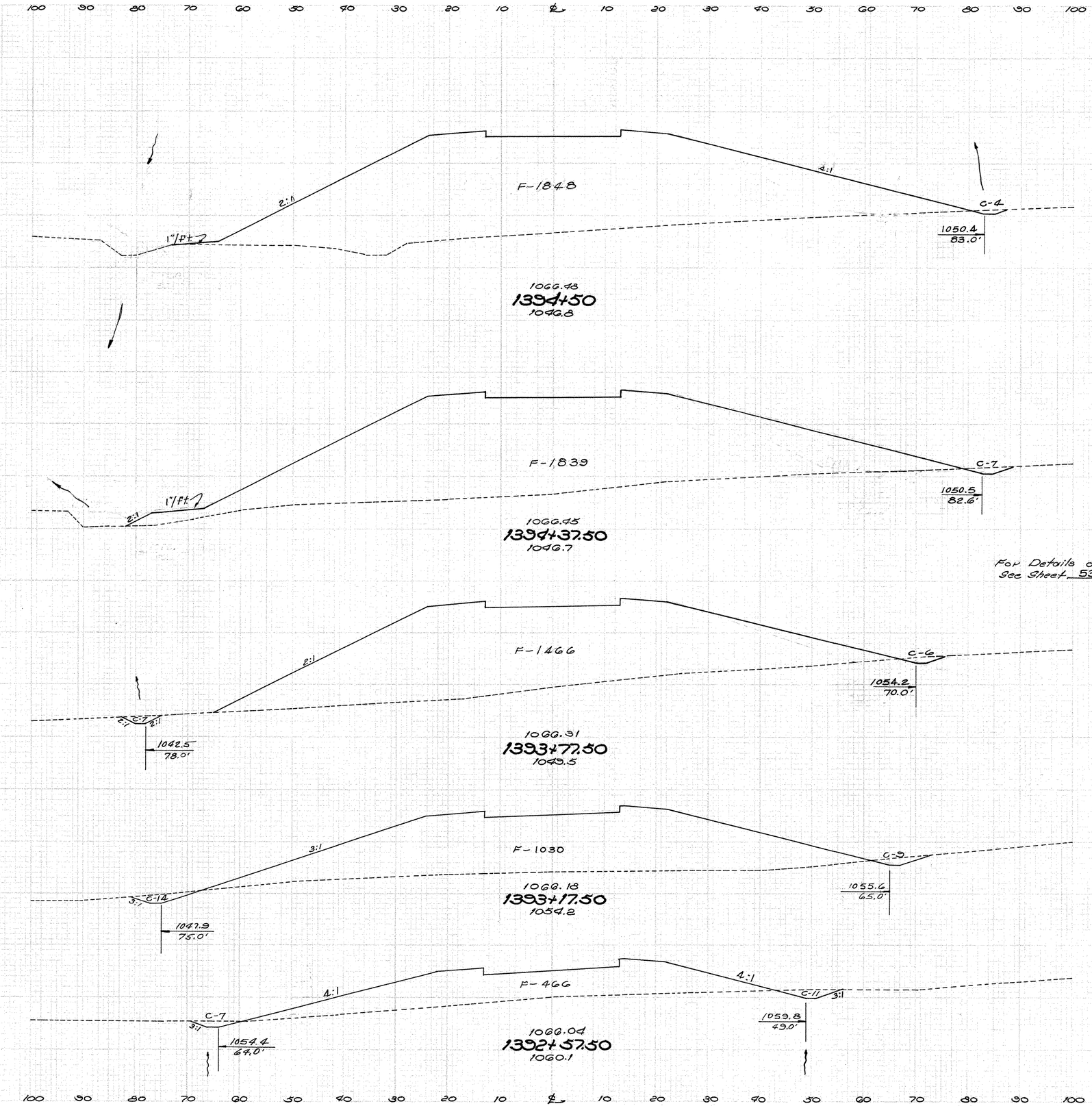
PER-13-26.12



END AREA		VOLUME	
CUT	FILL	CUT	FILL
8	100		
		172	111
147	0		
		299	0
284	0		
		522	0
280	0		
		525	0
287	0		
		586	0
346	0		
		737	0

138+50 – 139+97.50

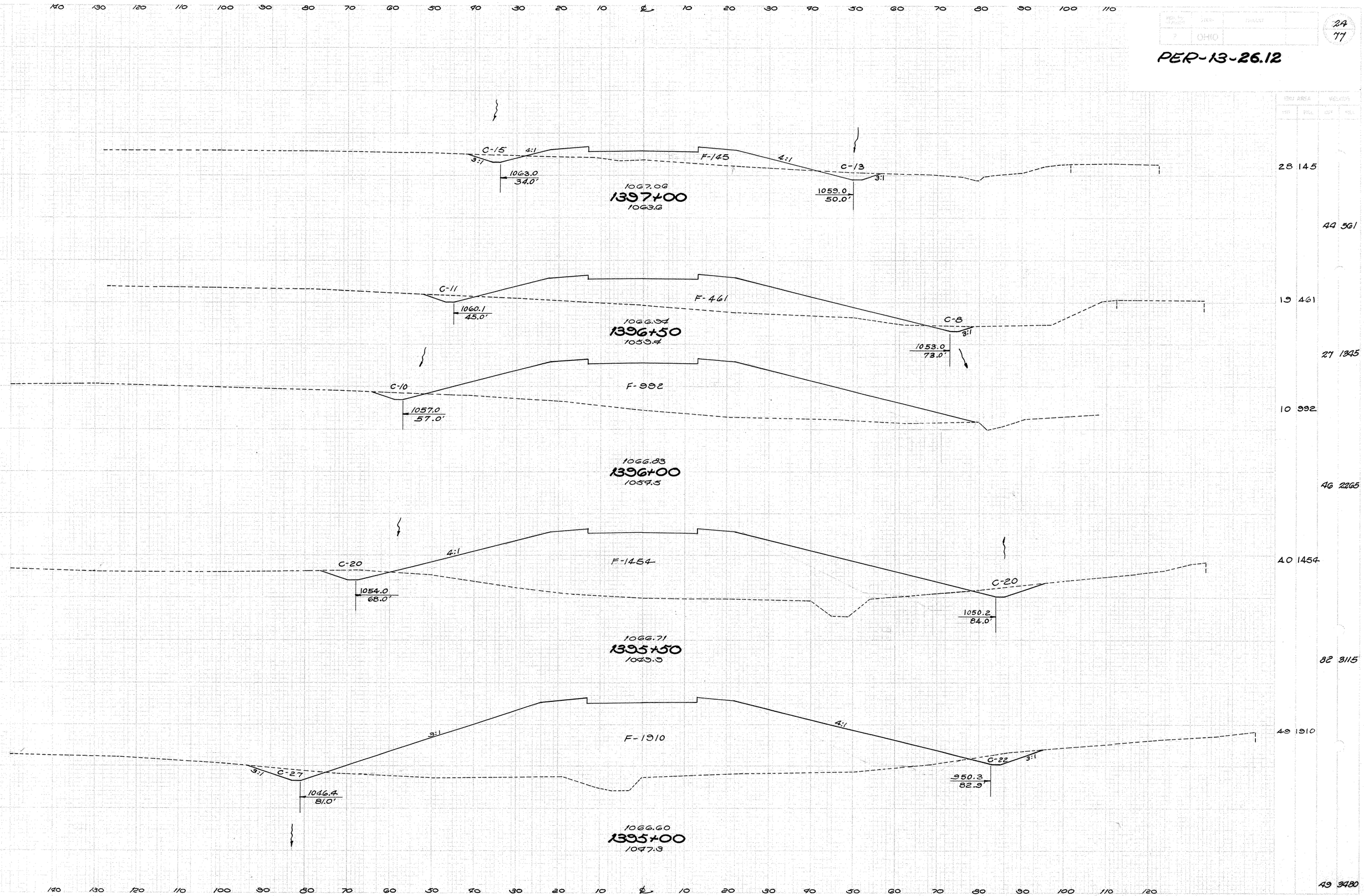
PER-13-26.12



4 1848	
3 854	
7 1839	
22 3672	
13 1466	
40 2793	
23 1030	
46 1662	
18 466	
29 629	

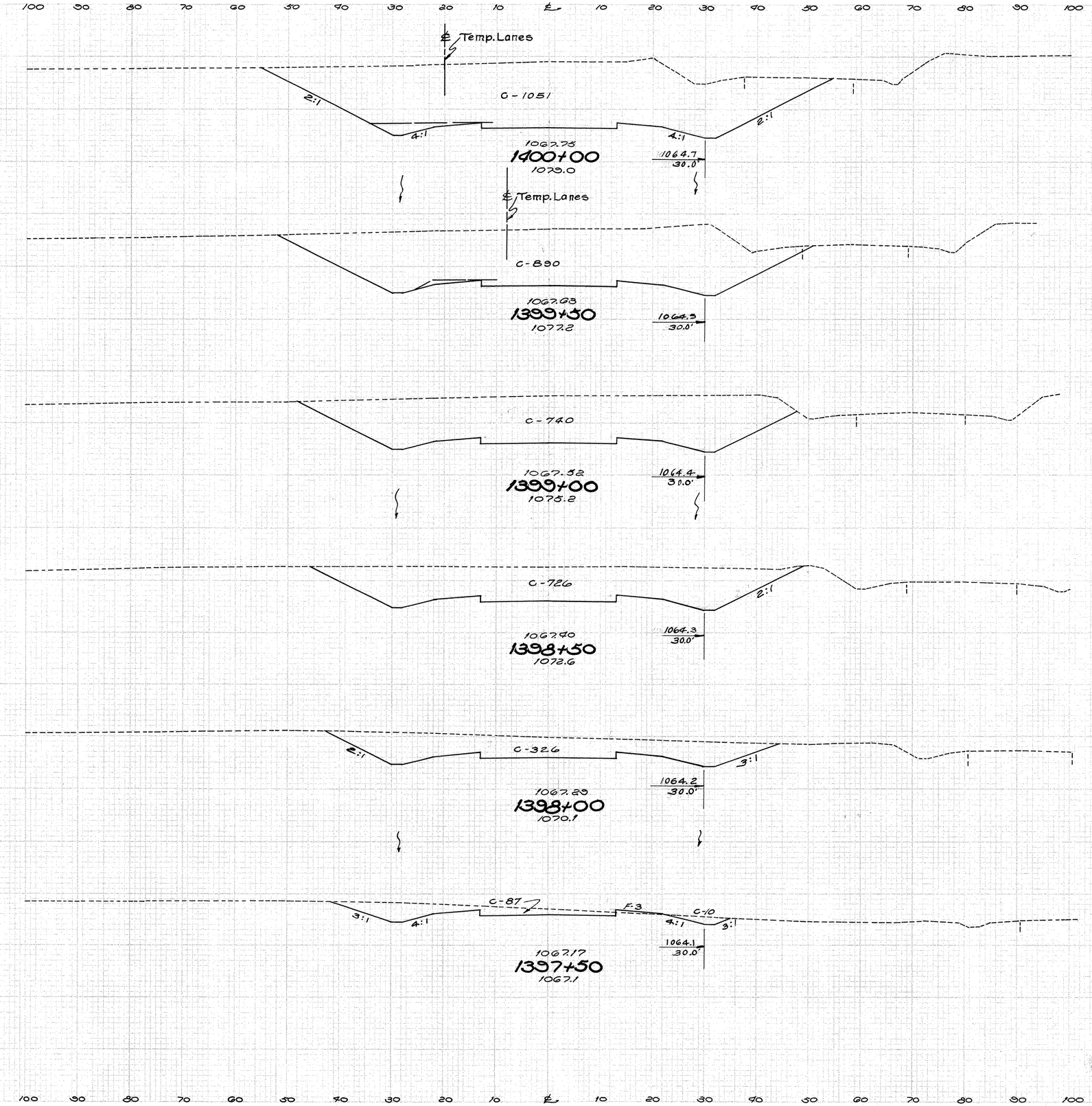
1392+57.50 - 1394+50

PER-13-26.12



1395+00-1397+00

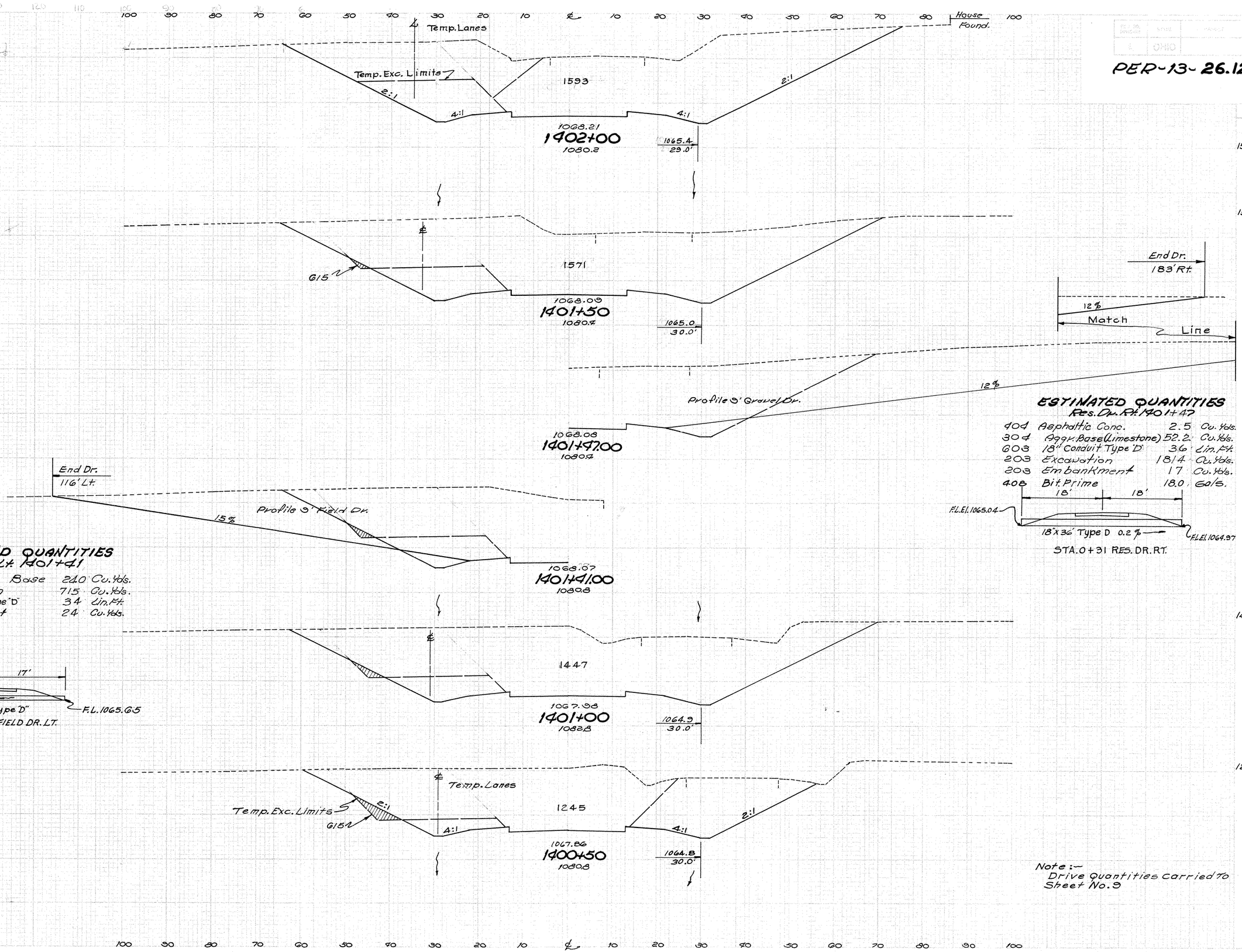
PER-13-26.12



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1051	0		
		1797	0
890	0		
		1508	0
740	0		
		1357	0
726	0		
		974	0
326	0		
		392	3
97	3		
		116	137

1397+50 - 1400+00

PER-13-26.12



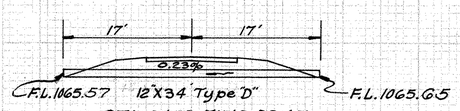
ESTIMATED QUANTITIES
Res. Dr. Rt. 1401+47

401	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	52.2	Cu. Yds.
603	18" Conduit Type "D"	3.6	Lin. Ft.
203	Excavation	1814	Cu. Yds.
203	Embankment	17	Cu. Yds.
408	Bit. Prime	18.0	Gals.

STA. 0+31 RES. DR. RT.

ESTIMATED QUANTITIES
Field Dr. Lt. 1401+41

304	Aggregate Base	210	Cu. Yds.
203	Excavation	715	Cu. Yds.
603	12" Conduit Type "D"	34	Lin. Ft.
203	Embankment	24	Cu. Yds.

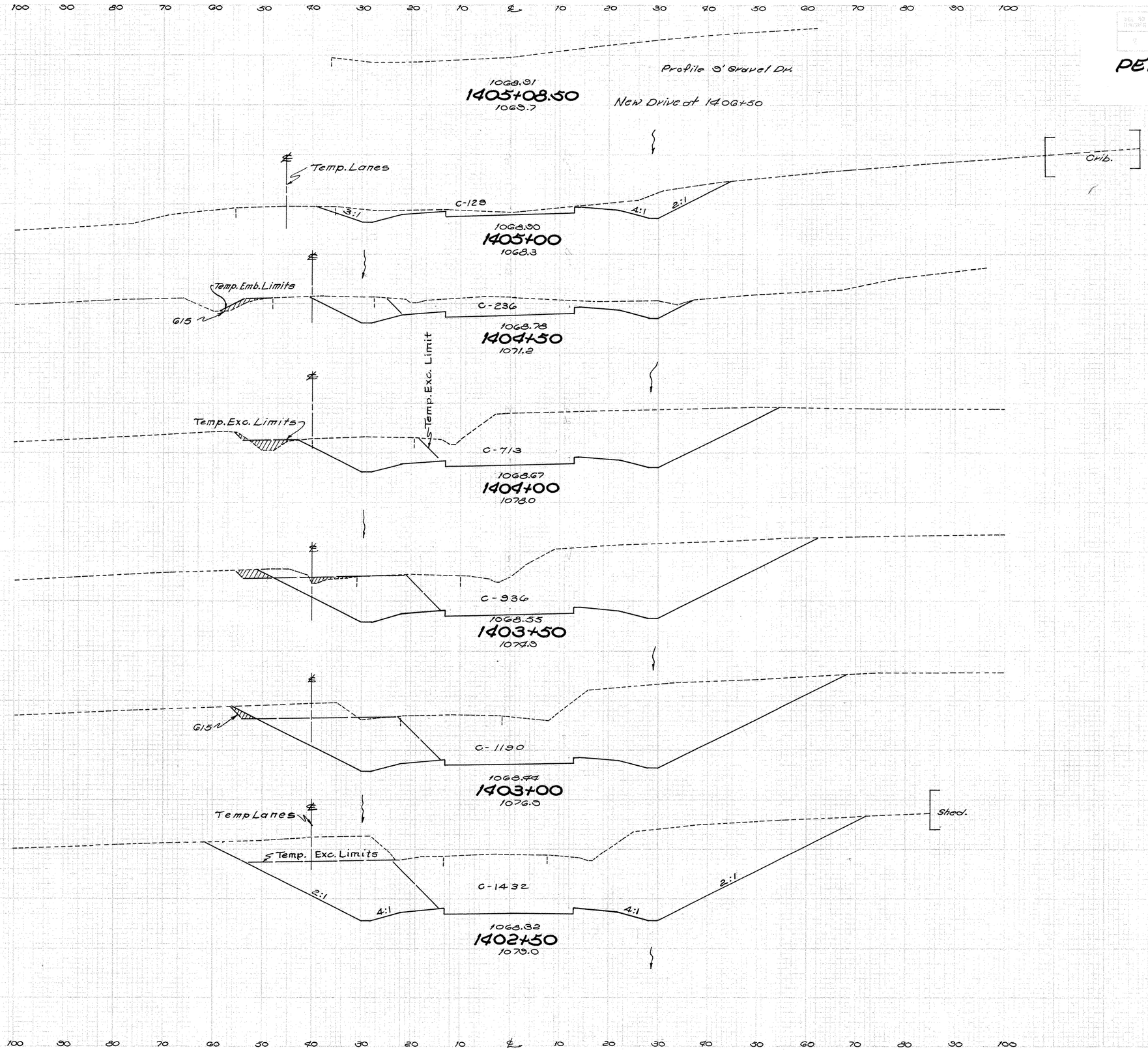


STA. 0+29 FIELD DR. LT.

Note:—
Drive Quantities Carried To Sheet No. 9

1400+50 - 1402+00

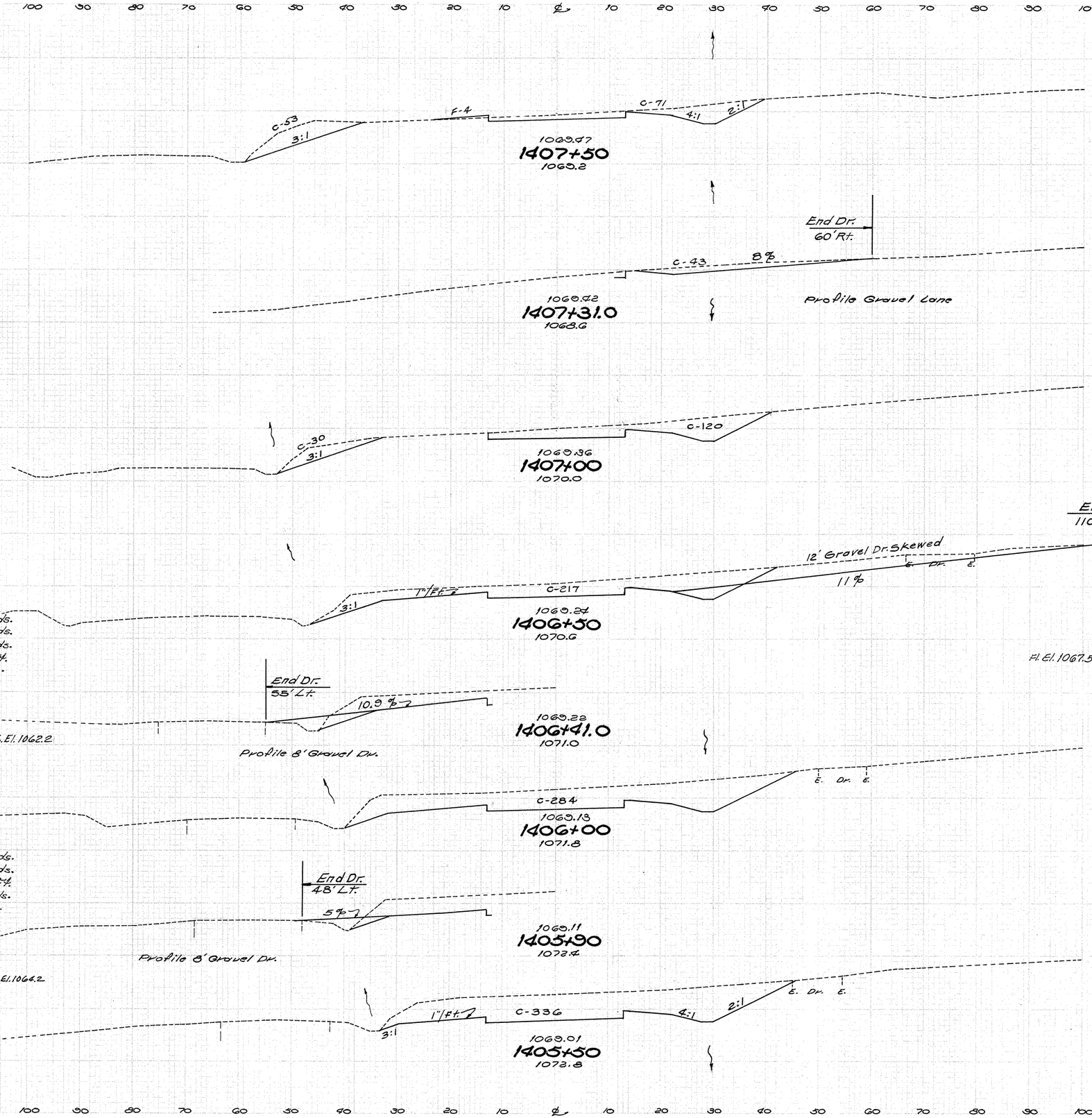
PER-13-26.12



SMD AREA CUT	SMD AREA FILL	VOLUME CUT	VOLUME FILL
129	0		
		338	0
236	0		
		879	0
713	0		
		1527	0
936	0		
		1968	0
1190	0		
		2428	0
1432	0		
		2801	0

1402+50 - 1405+08.50

PER-13-26.12



ESTIMATED QUANTITIES
Field Dr. Rt. 1407+31

304	Aggregate Base	112	Cu. Yds.
203	Embankment	14	Cu. Yds.
203	Excavation	10	Cu. Yds.

ESTIMATED QUANTITIES
Res. Dr. Rt. 1406+30 Skewed

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	30.3	Cu. Yds.
603	12" Conduit Type "D"	32	Lin. Ft.
203	Excavation	65	Cu. Yds.
203	Embankment	22	Cu. Yds.
408	Bit. Prime	18.0	Gals.

ESTIMATED QUANTITIES
Res. Dr. Lt. 1406+71

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	15	Cu. Yds.
203	Embankment	96	Cu. Yds.
603	12" Conduit Type "D"	34	Lin. Ft.
408	Bit. Prime	18	Gals.

16' 18'
Fl. El. 1063.1 12"x34' Type "D" 2.75% Fl. El. 1062.2

ESTIMATED QUANTITIES
Res. Dr. Lt. 1405+90

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	13	Cu. Yds.
603	12" Conduit Type "D"	32	Lin. Ft.
203	Embankment	42	Cu. Yds.
408	Bit. Prime	18.0	Gals.

14' 18'
Fl. El. 1065.3 12"x32' Type "D" 3.53% Fl. El. 1064.2

NOTE:-
Drive Quantities Carried To Sheet No. 9-

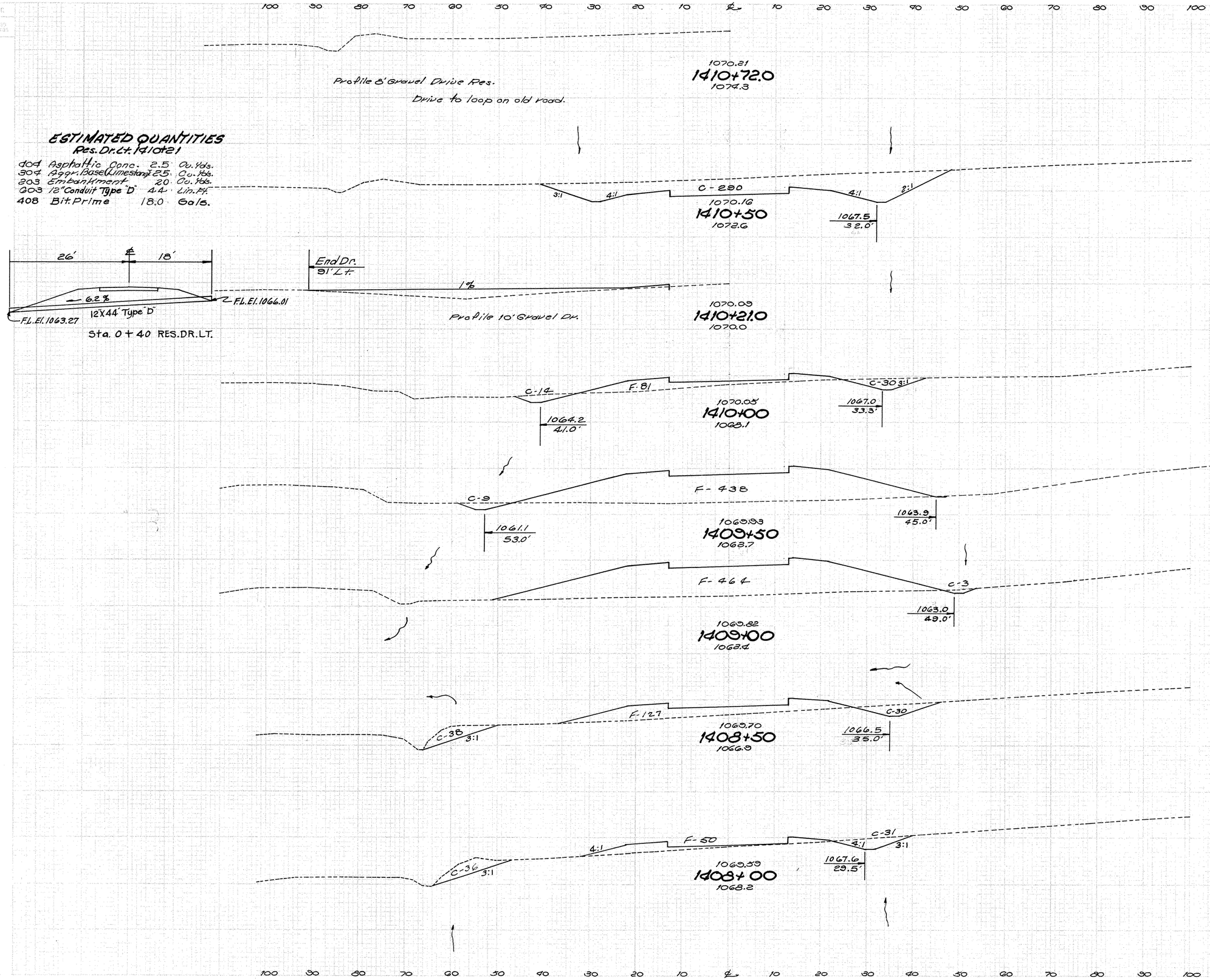
	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	124	4		
			59	1
	43	0		
			110	0
	150	0		
			340	0
	217	0		
	464	0		
	284	0		
	574	0		
	336	0		
	431	0		

1405+50-1407+50

PER-13-26.12

ESTIMATED QUANTITIES
Res. Dr. Ct. 1410+21

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	25.	Cu. Yds.
203	Embankment	20	Cu. Yds.
603	12" Conduit Type "D"	44	Lin. Ft.
408	Bit. Prime	18.0	Gals.

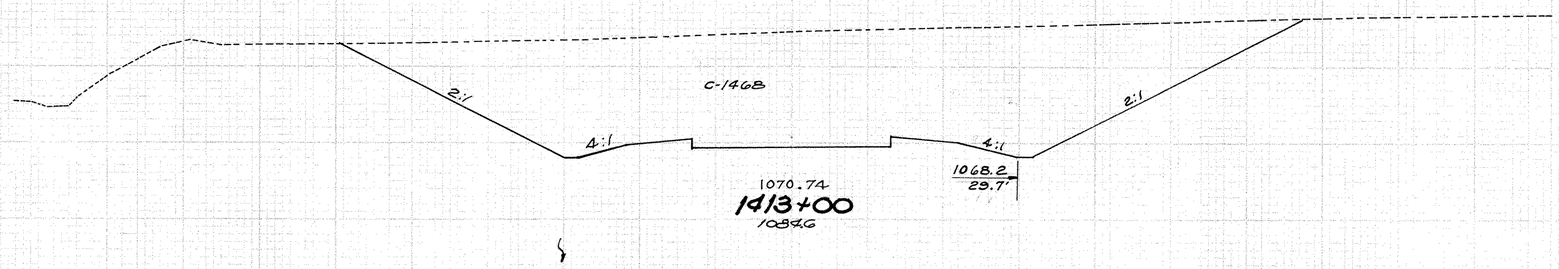


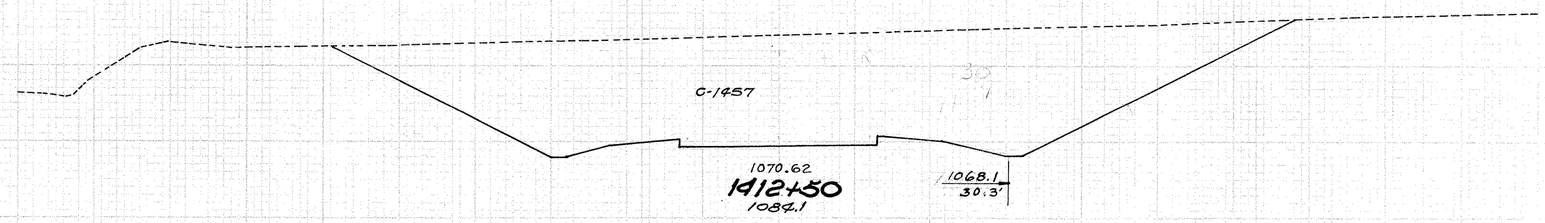
END AREA		VOLUME	
CUT	FILL	CUT	FILL
290	0		
		309	75
44	81		
		49	481
9	438		
		11	835
3	464		
		66	547
68	127		
		125	164
67	50		
		177	50

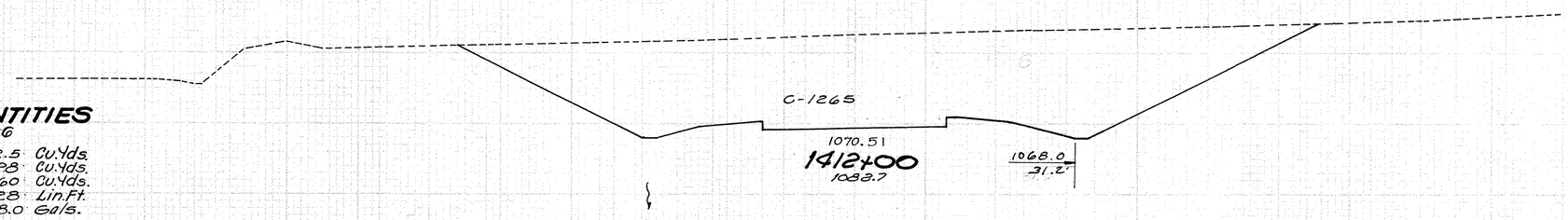
NOTE:—
Drive Quantities Carried To Sheet No. 9

1408+00 - 1410+72.0

PER-13-26.12





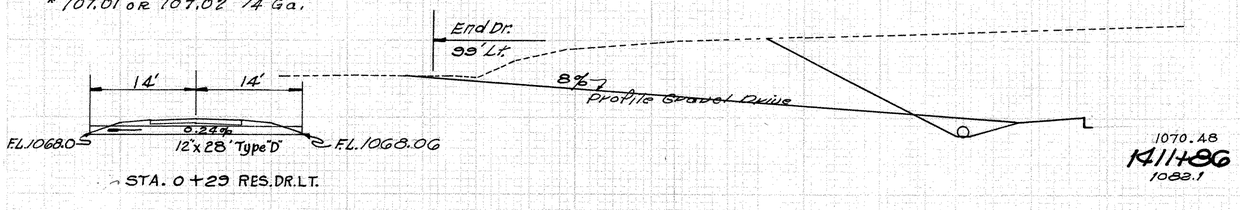


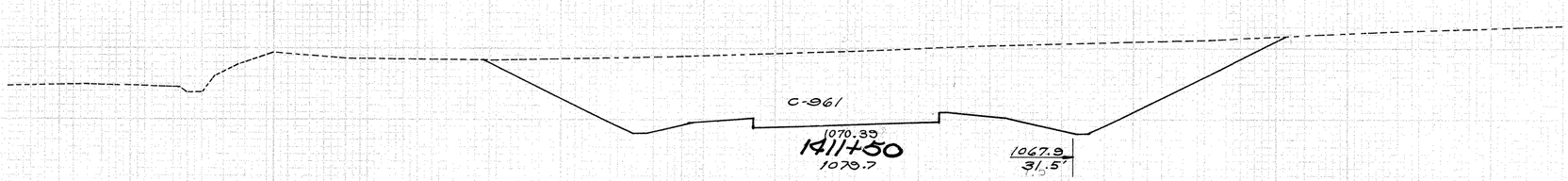
ESTIMATED QUANTITIES

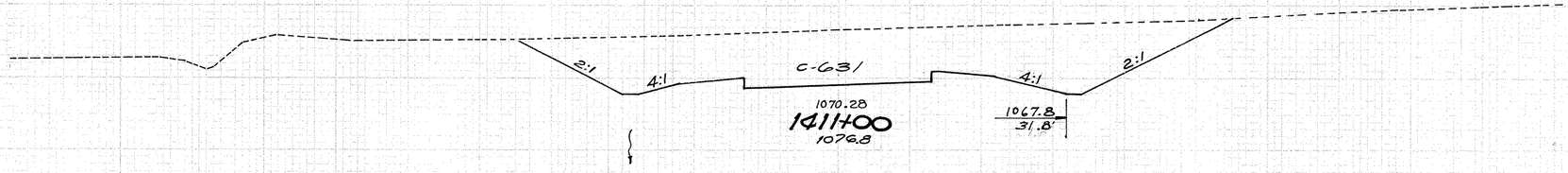
RES. DR. LT. 1411+86

404	Asphaltic Conc.	2.5	Cu.Yds.
304	Aggr. Base (Limestone)	28	Cu.Yds.
203	Excavation	460	Cu.Yds.
603	12" Conduit Type D*	28	Lin.Ft.
408	Bit. Prime	18.0	Gals.

* 707.01 OR 707.02 14 Ga.







NOTE :—
Drive Quantities Carried to Sheet No. 9

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1468	0			
			2708	0
1457	0			
			2520	0
1265	0			
			2061	0
961	0			
			1474	0
631	0			
			853	0

1411+00 - 1413+00

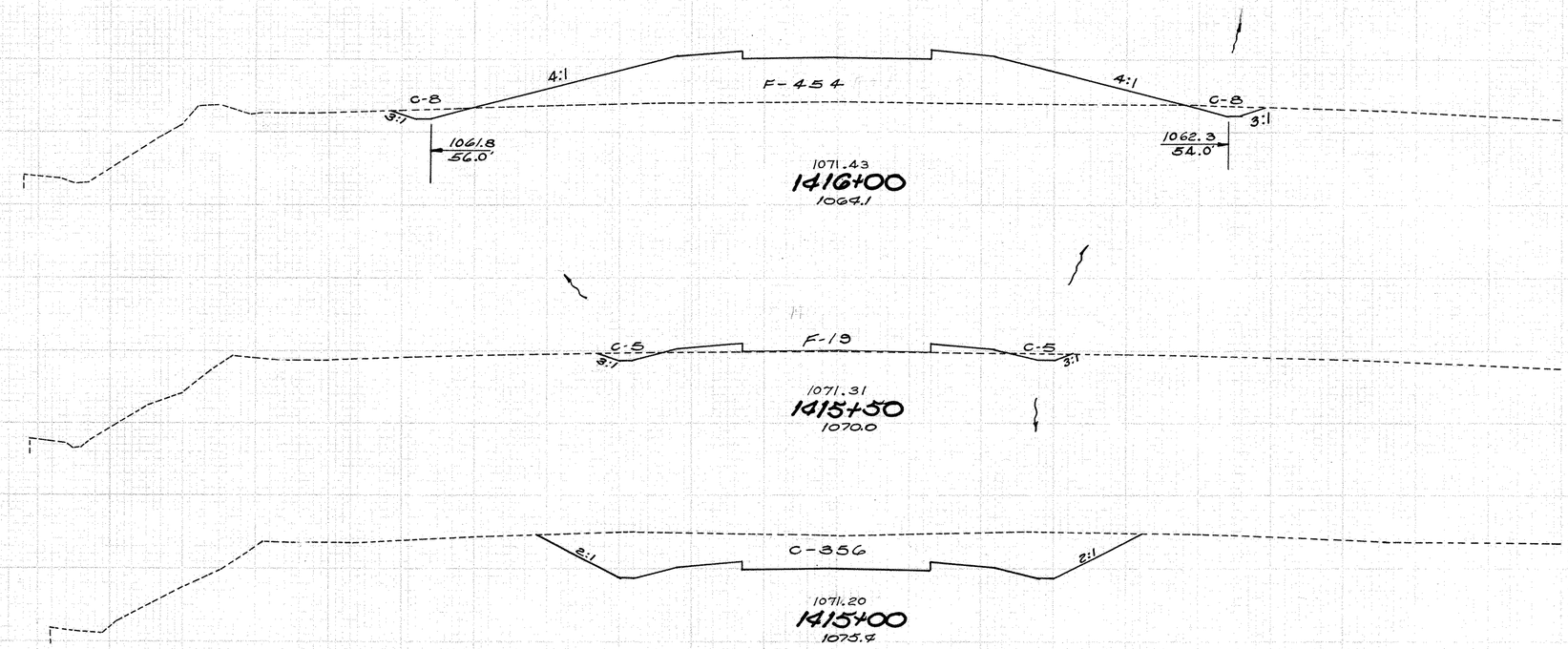
SEEDING

LBS PER MIN	SQ. YDS.

CODE NO. REV. DATE	PROJECT		
3	OHIO		

31
77

PER-13-26.12



CROSS AREA CUT	CROSS AREA FILL	VOLUME CUT	VOLUME FILL
16	454		
		24	438
10	19		
		339	18
356	0		
		1018	0
744	0		
		1705	0
1097	0		
		2252	0
1335	0		
		2595	0

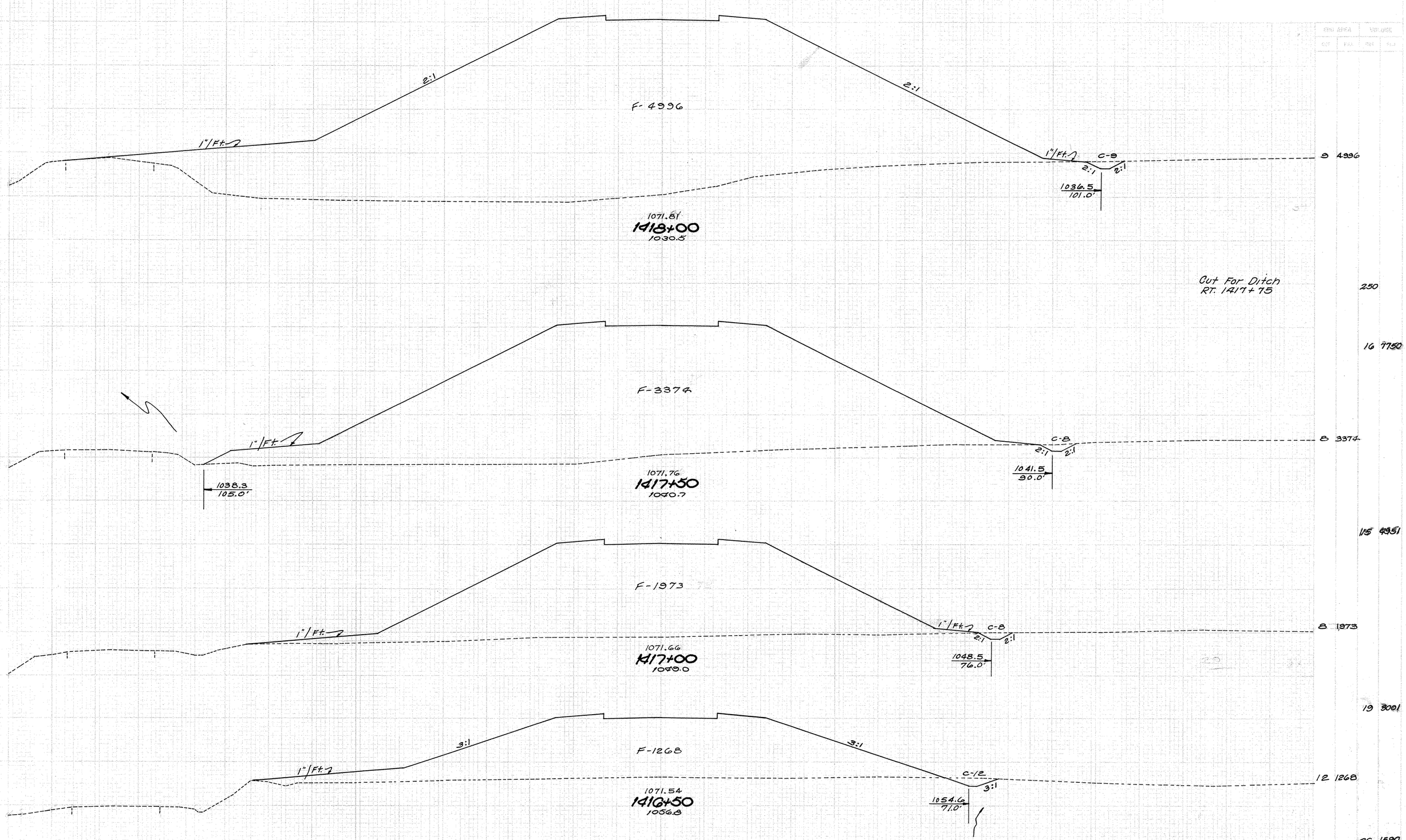
AREAS | CUT | FILL

(R.P.)

1413+50 - 1416+00

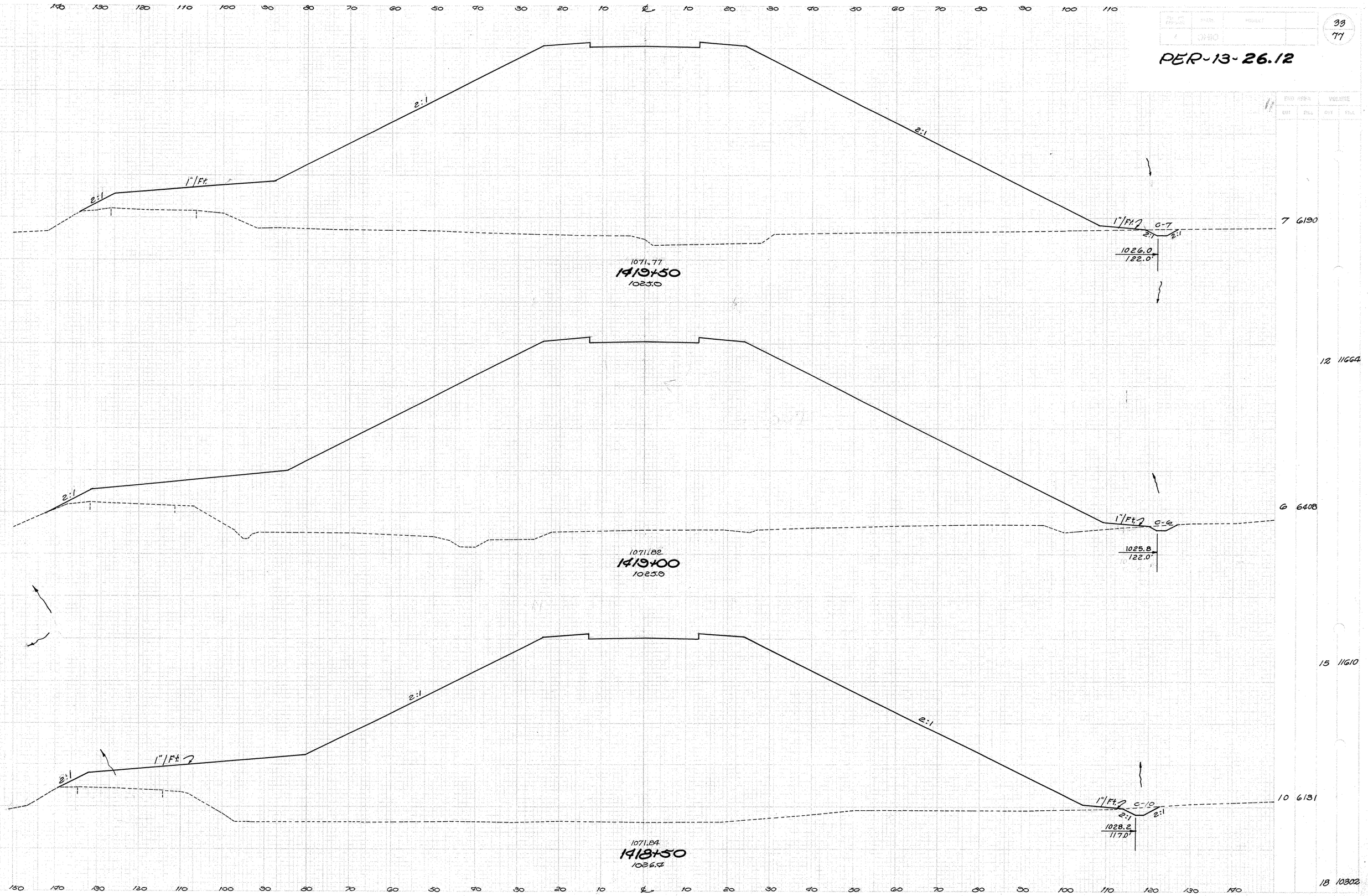
PER-13-26.12

32
77



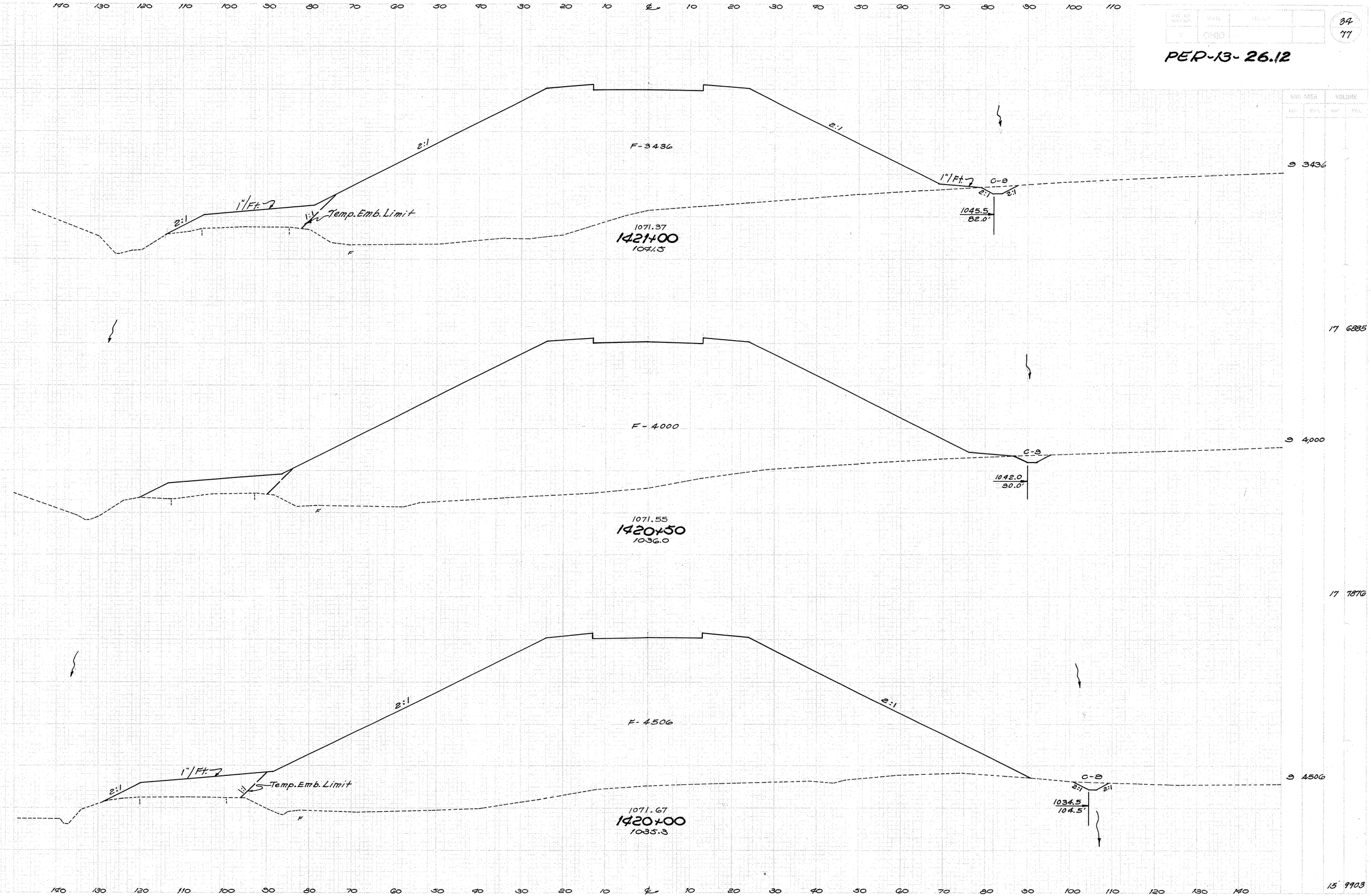
1416+50 - 1418+00

PER-13-26.12



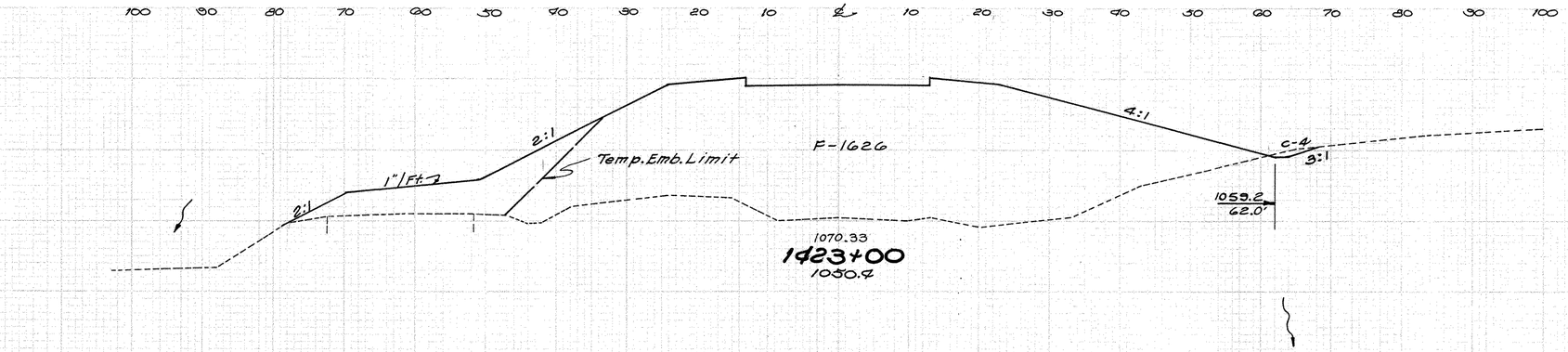
1418+50 - 1419+50

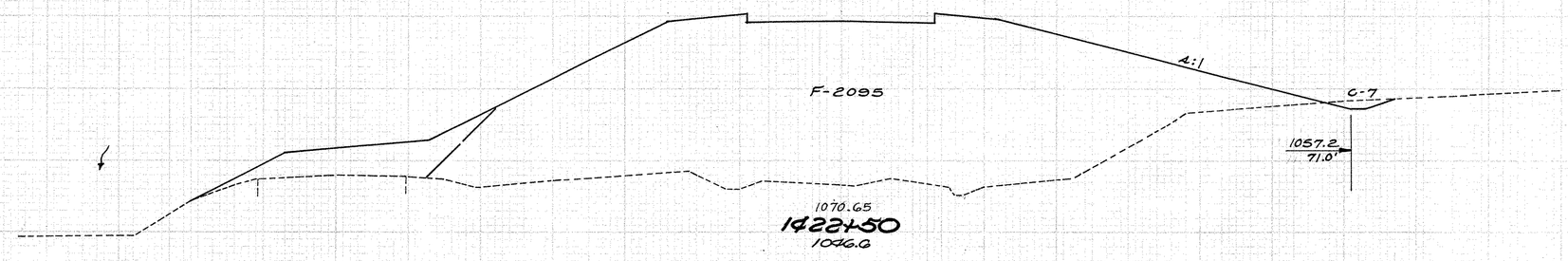
PER-13-26.12

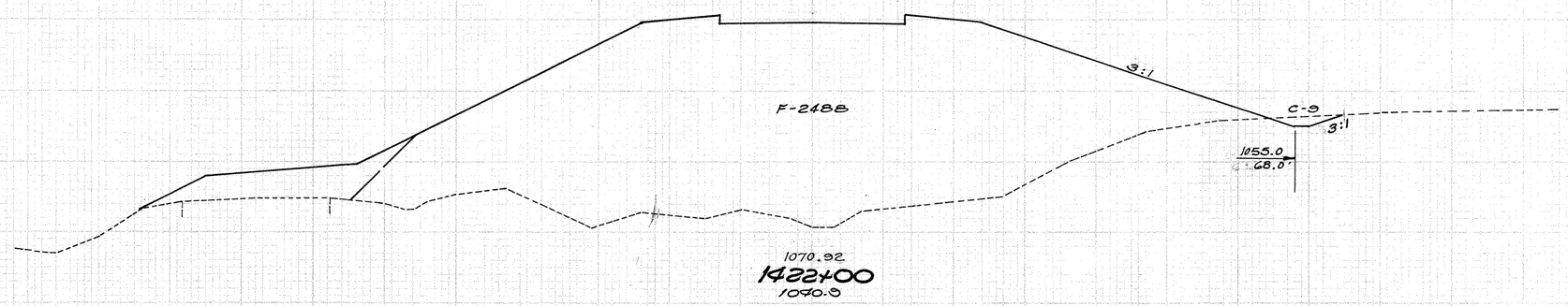


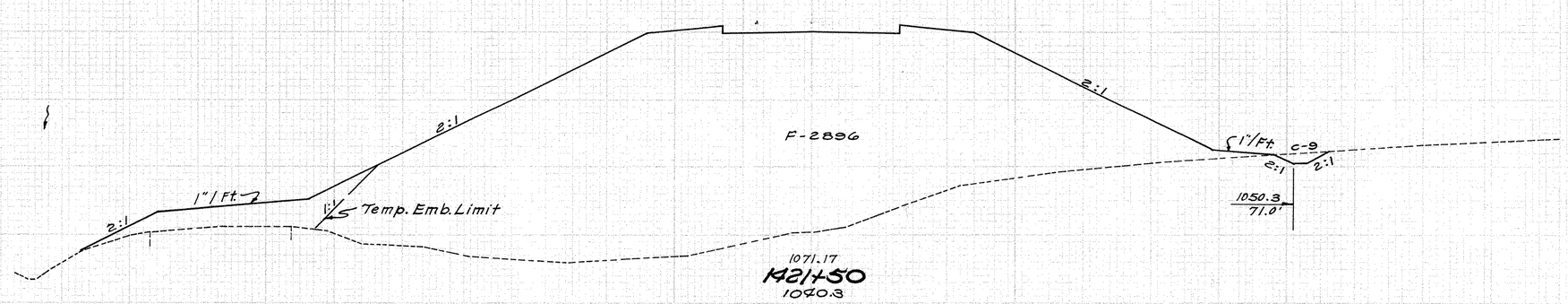
1420+00-1421+00

PER-13-26.12









	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
A	1626			
			10	3445
7	2095			
			15	4243
9	2488			
			17	4985
9	2896			
			17	5863

110 100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100 110

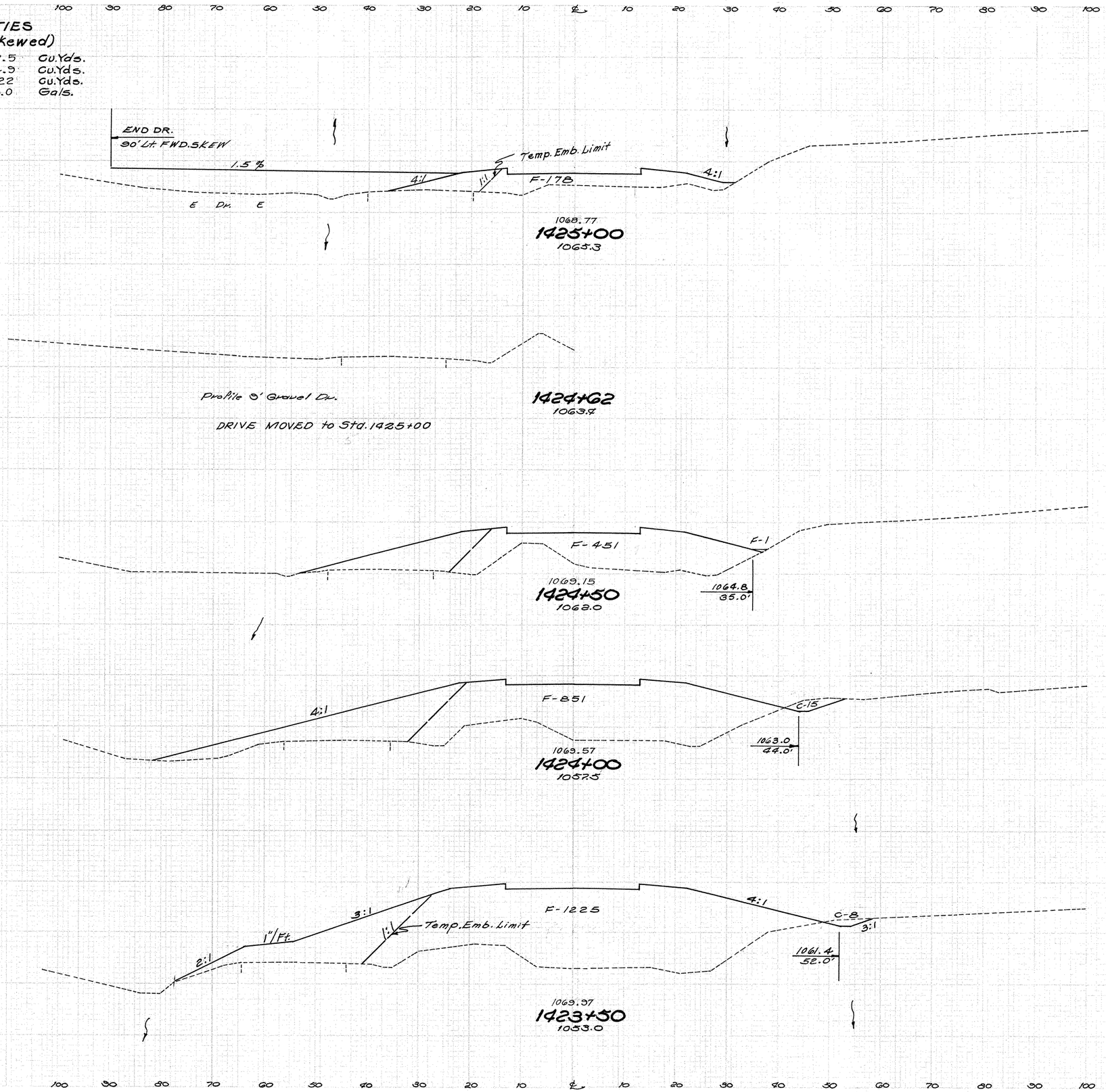
1421+50 - 1423+00

ESTIMATED QUANTITIES
Res. Dr. Lt. 1425+00 (Skewed)

404	Asphaltic Conc.	2.5	Cu.Yds.
304	Aggr. Base (Limestone)	24.9	Cu.Yds.
203	Embankment	22	Cu.Yds.
408	Bit. Prime	18.0	Gals.

36
77

PER-13-26.12

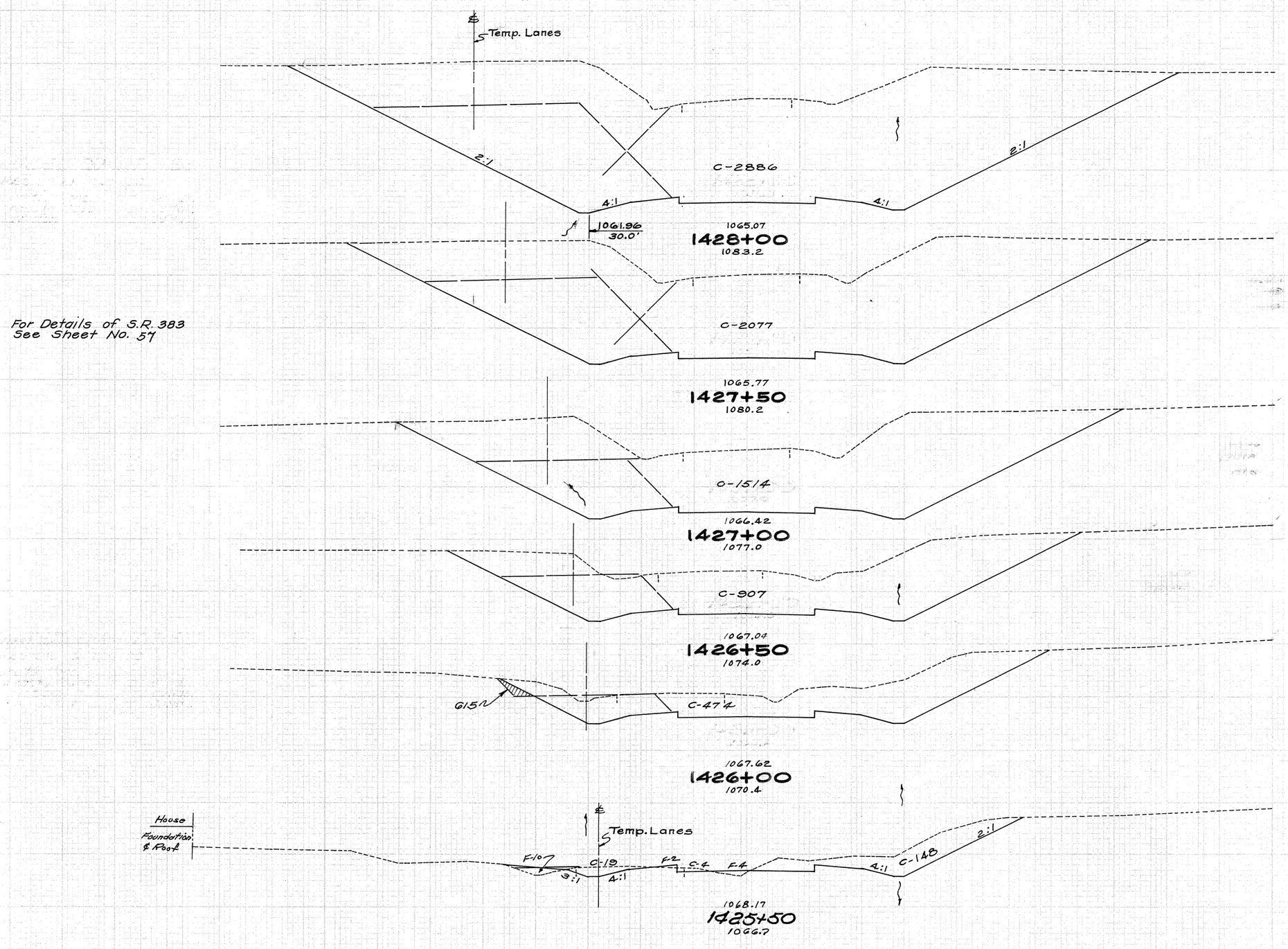


END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	178		
		0	583
0	452		
		14	1206
15	851		
		21	1922
8	1225		
		11	2640

Note :—
Drive Quantities Carried To Sheet No. 3

1423+50 - 1425+00

PER-13-26.12

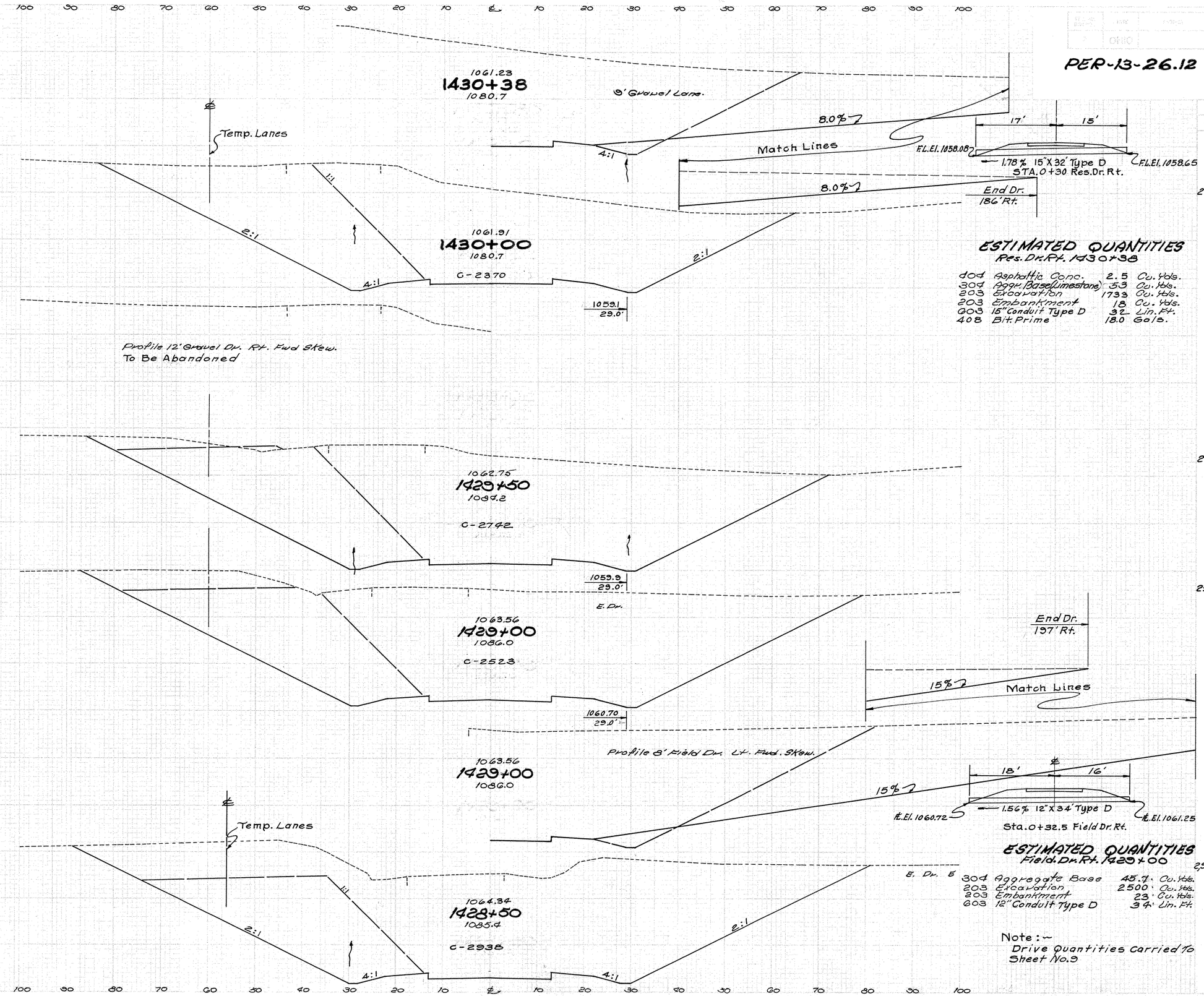


For Details of S.R. 383
See Sheet No. 57

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2886	0		
4585	0		
2077	0		
3325	0		
1514	0		
2242	0		
907	0		
1279	0		
474	0		
598	15		
172	16		
159	180		

1425+50-1428+00

PER-13-26.12



ESTIMATED QUANTITIES
Res. Dr. Rt. 1430+38

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Agg. Base (Limestone)	53	Cu. Yds.
203	Excavation	1733	Cu. Yds.
203	Embankment	18	Cu. Yds.
603	15" Conduit Type D	32	Lin. Ft.
408	Bit. Prime	18.0	Gals.

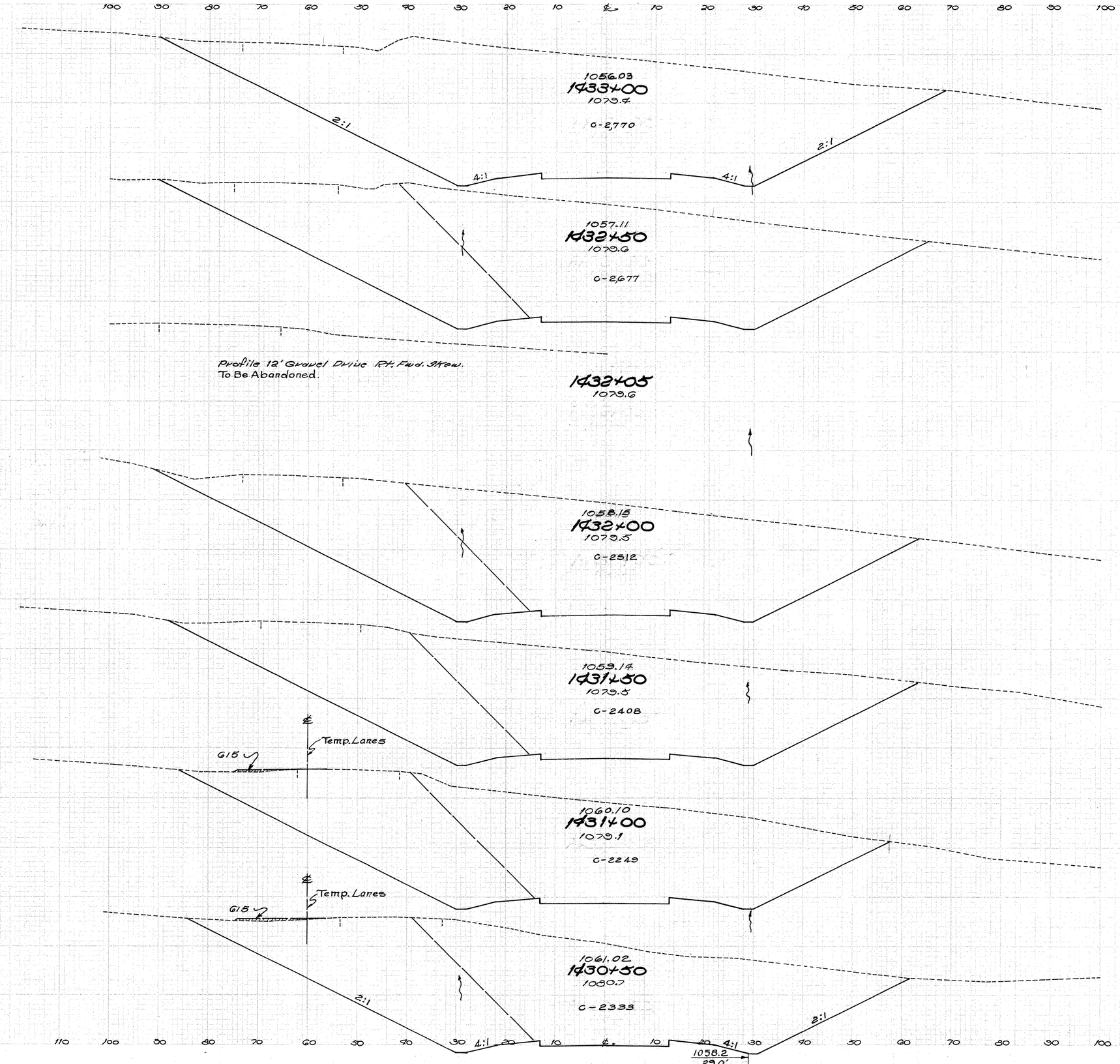
ESTIMATED QUANTITIES
Field Dr. Rt. 1429+00

304	Aggregate Base	45.7	Cu. Yds.
203	Excavation	2500	Cu. Yds.
203	Embankment	23	Cu. Yds.
603	12" Conduit Type D	34	Lin. Ft.

Note :-
Drive Quantities Carried To
Sheet No. 3

1428+50 - 1430+38.0

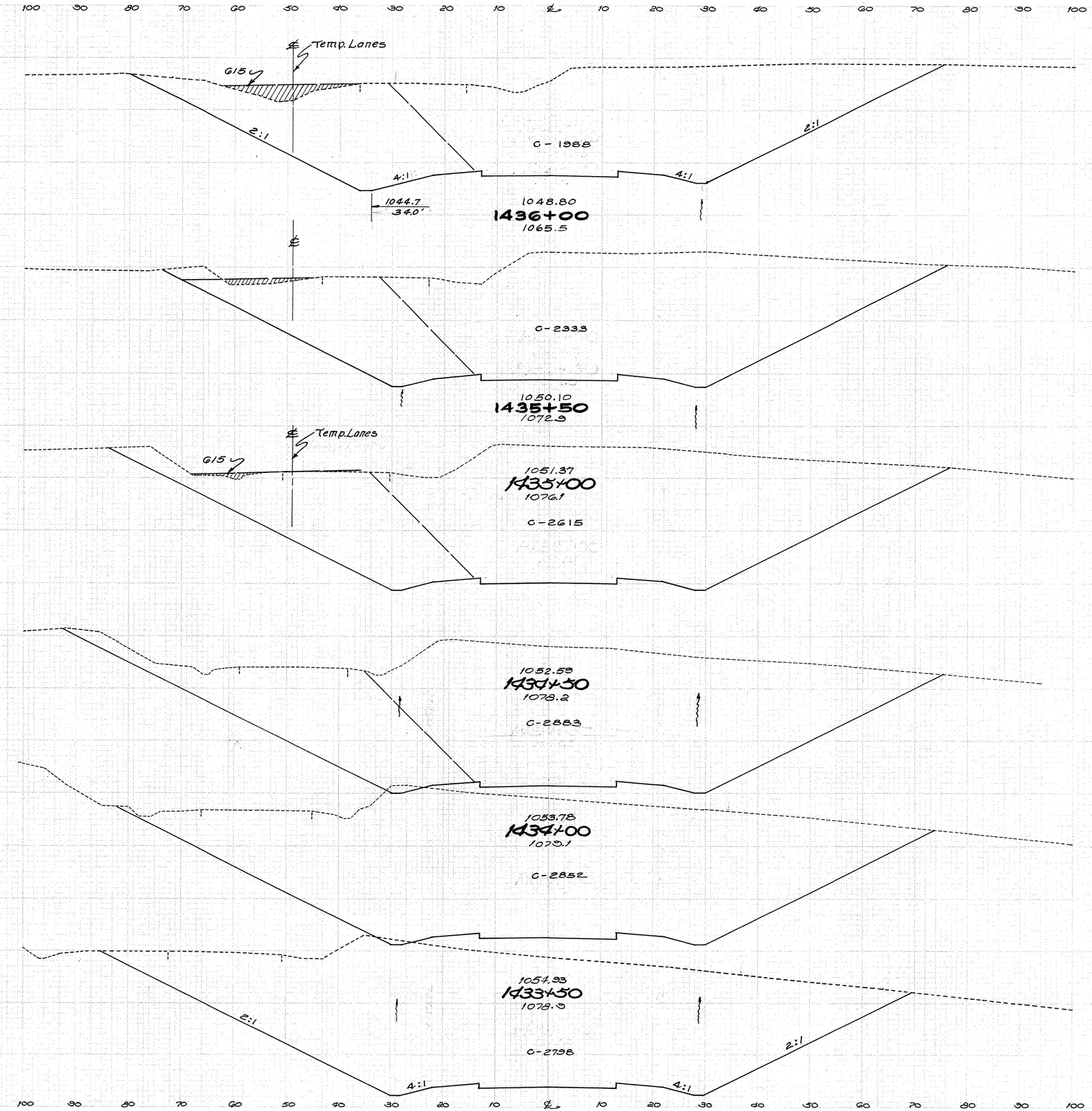
PER-13-26.12



CUT	FILL	CUT	FILL
2,770	0		
		5043	0
2677	0		
		4804	0
2512	0		
		4555	0
2408	0		
		4312	0
2249	0		
		4242	0
2,333	0		
		4355	0

1430+50-1433+00

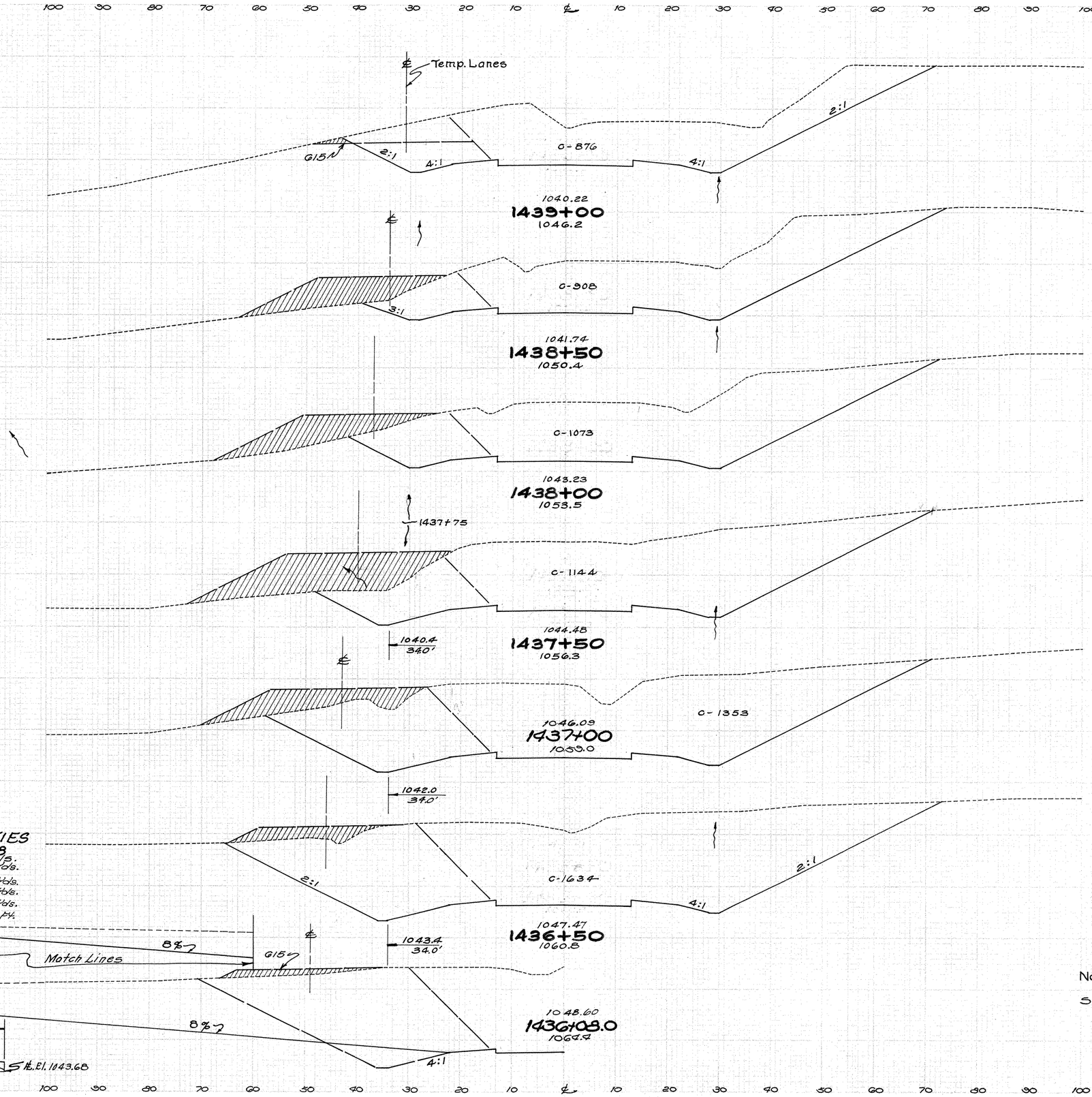
PER-13-26.12



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1988	0		
		4001	0
2333	0		
		4581	0
2615	0		
		5081	0
2883	0		
		5810	0
2852	0		
		5231	0
2798	0		
		5155	0

1433+50 - 1436+00

PER-13-26.12



ESTIMATED QUANTITIES
Res. Dr. Lt. 1436+08

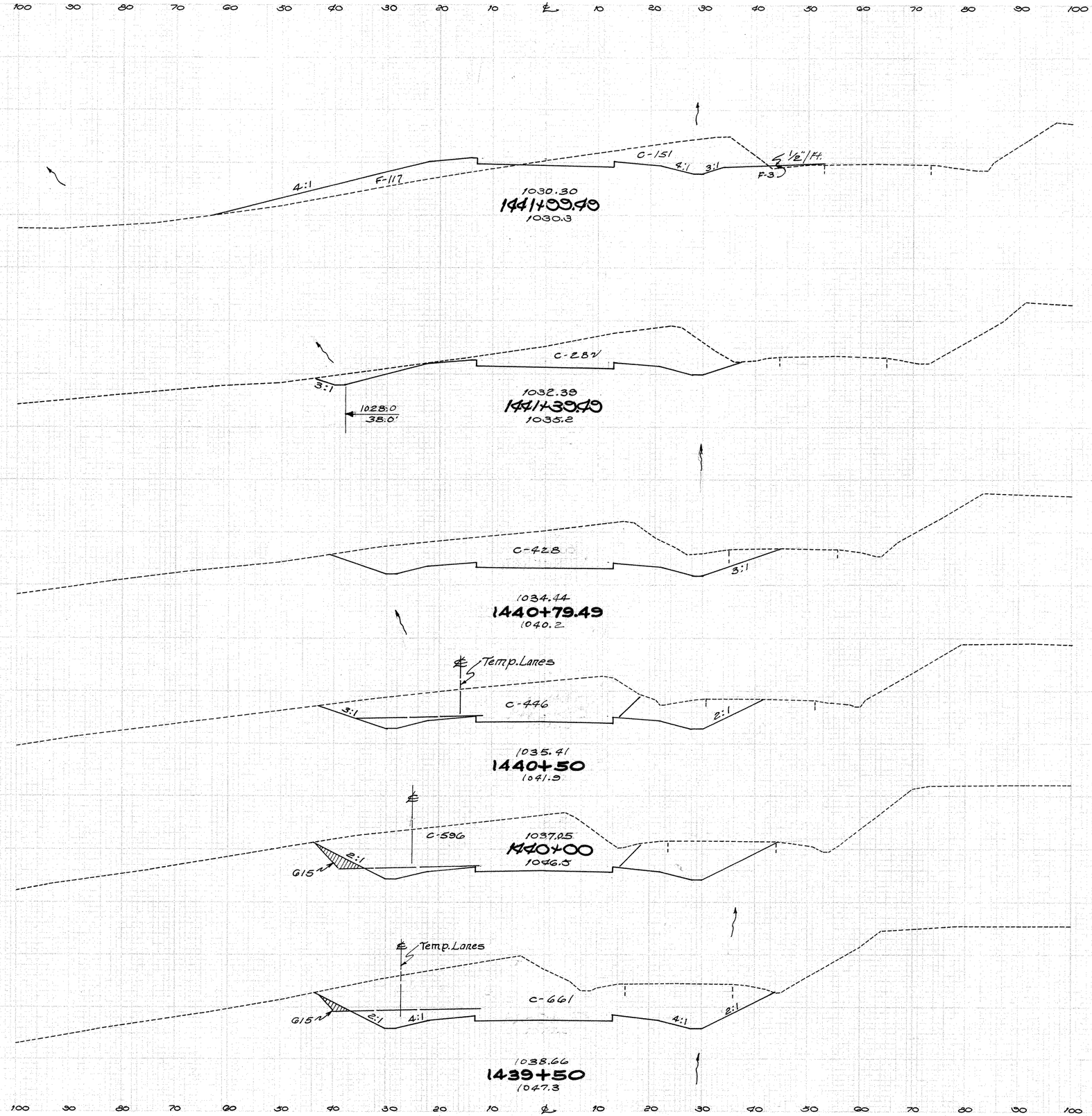
408	Bit. Prime	18.0	Gals.
404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	6.8	Cu. Yds.
203	Excavation	203.7	Cu. Yds.
203	Embankment	2.3	Cu. Yds.
603	24" 706.02 or 706.08 E.S. Conduit Type (D)	42.	Lin. Ft.

	FIELD AREA CUT	FIELD AREA FILL	VOLUME CUT	VOLUME FILL
	876	0		
	908	0	1652	0
			1884	0
	1073	0		
			2053	0
	1144	0		
			2812	0
	1353	0		
			2766	0
	1634	0		
			3354	0

Note :-
Drive Quantities Carried To Sheet 9

1436+08.0-1439+00

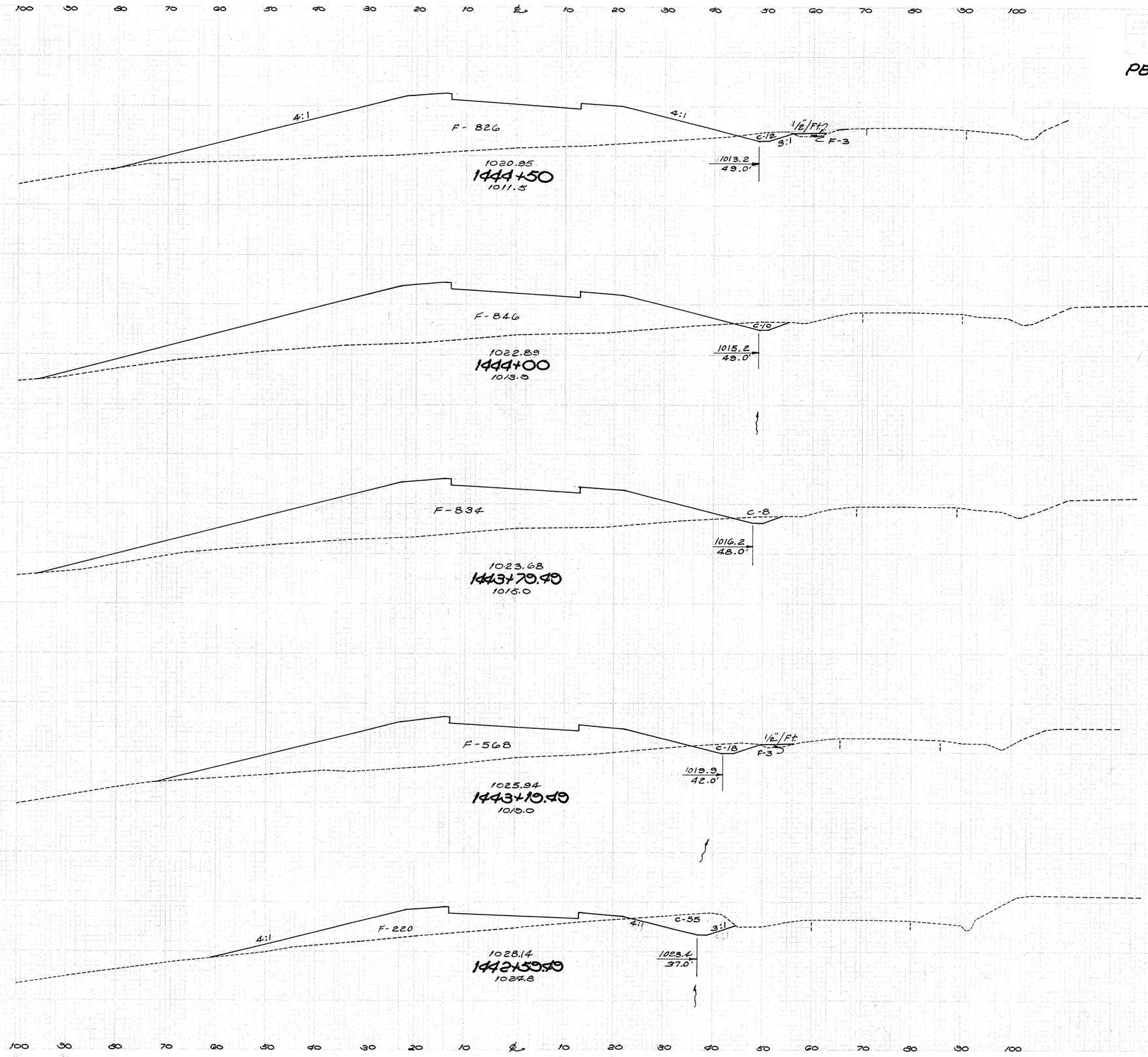
PER-13-26.12



151	120
481	133
282	0
789	0
428	0
477	0
446	0
965	0
596	0
1164	0
661	0
1423	0

1439+50 - 1441+09.49

PER-13-26.12



12	829	
20	1551	
10	846	
7	638	
8	834	
29	1561	
18	571	
81	879	
55	220	
229	378	

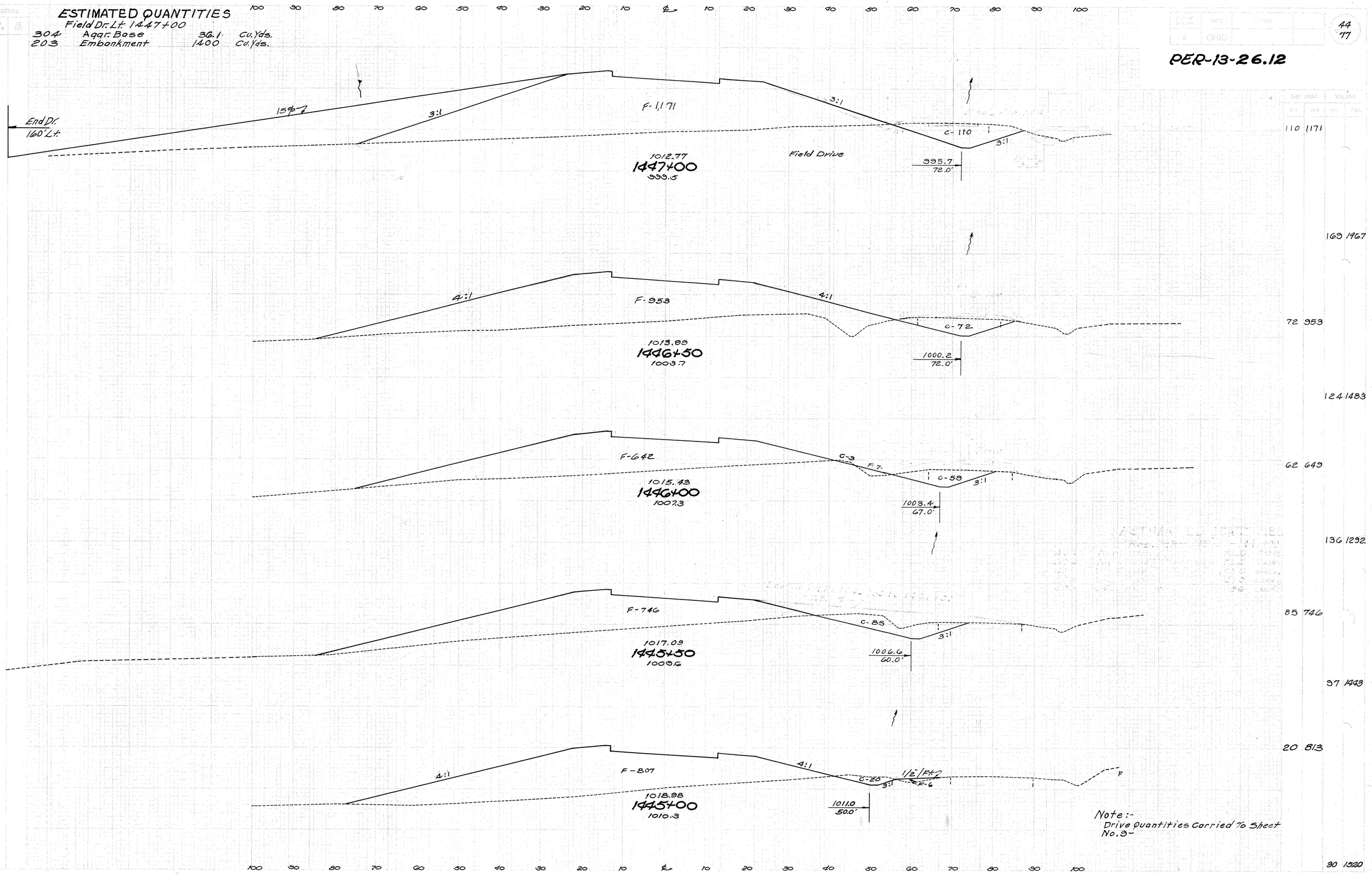
1442+59.49 - 1444+50

PER-13-26.12

ESTIMATED QUANTITIES

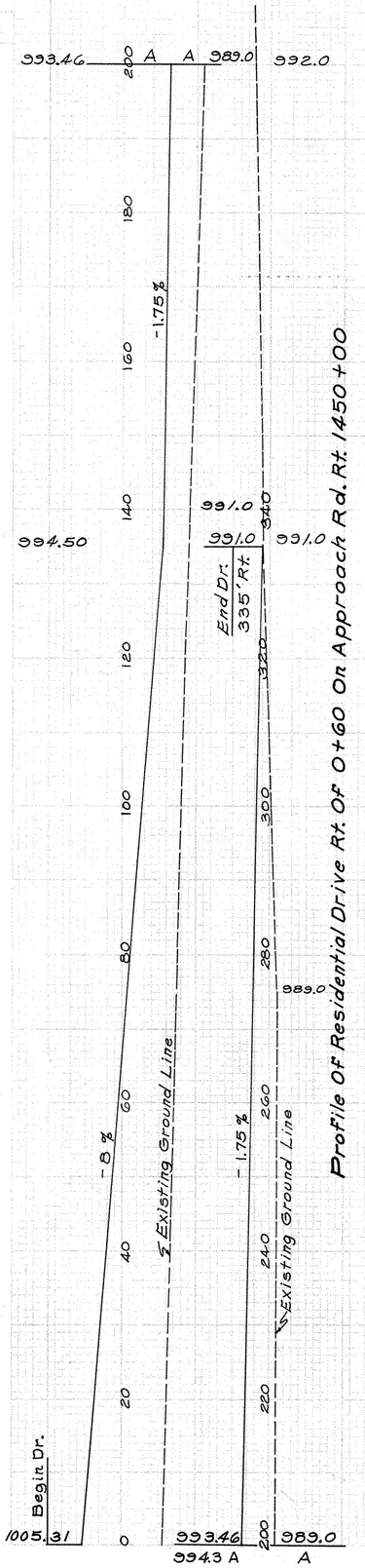
Field Dr. Lt. 1447+00

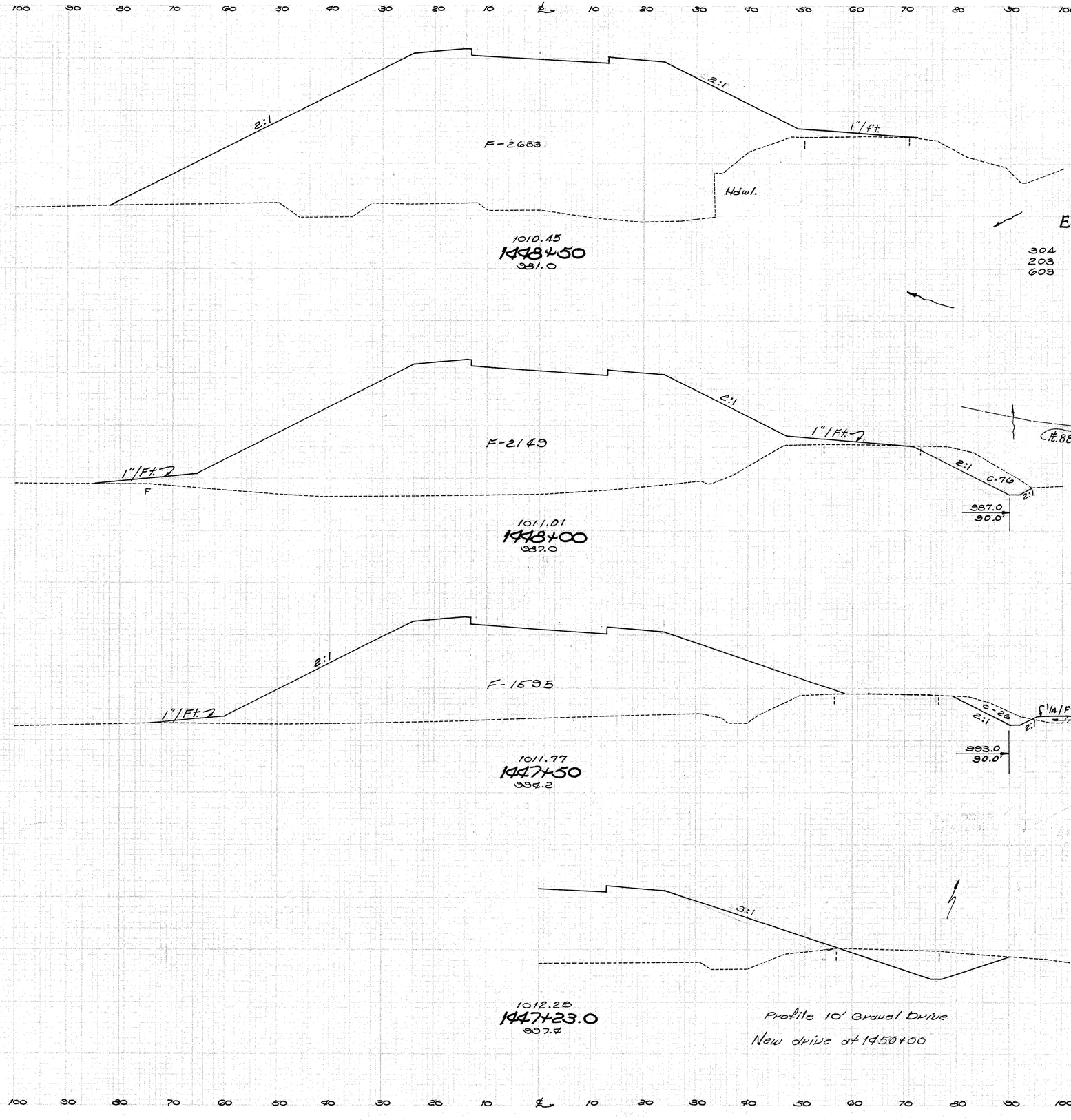
304	Aggr. Base	36.1	Cu. Yds.
203	Embankment	1400	Cu. Yds.



1445+00-1447+00

PER-13-26.12

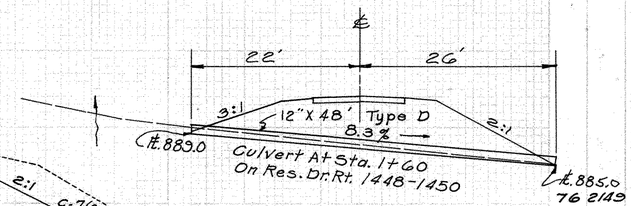




ESTIMATED QUANTITIES

Res. Dr. 1448-1450 Rt.

304	Aggr. Base (Limestone)	99.2 Cu.yds.
203	Embankment	1675 Cu.yds.
603	12" Conduit Type F-	48 Lin.Ft.



Profile 10' Gravel Drive
New drive at 1450+00

Note:-
Drive quantities carried to Sheet No. 3.

0 2683

70 4474

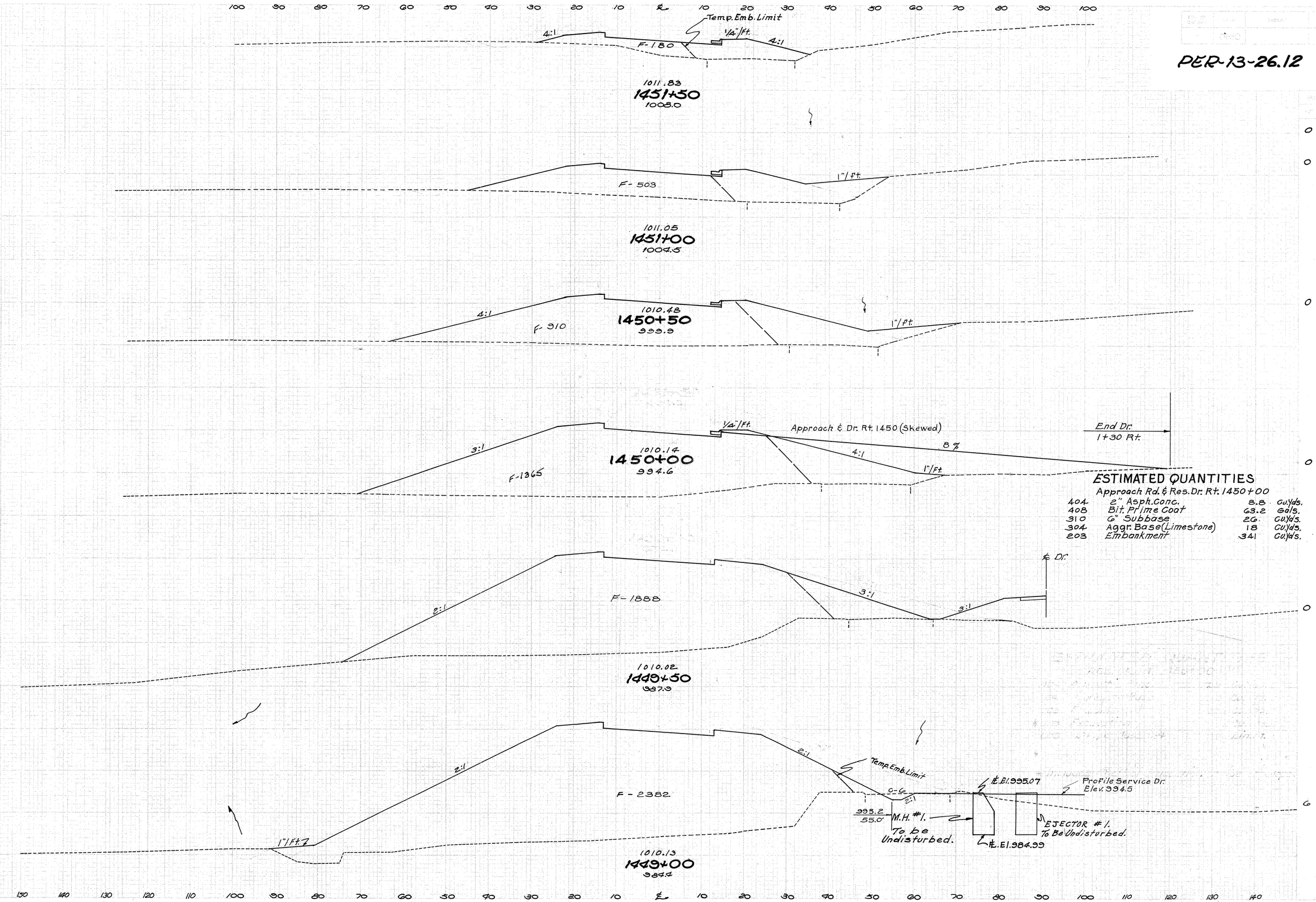
94 3873

26 1602

126 2568

1447+23.0-1448+50

PER-13-26.12



ESTIMATED QUANTITIES

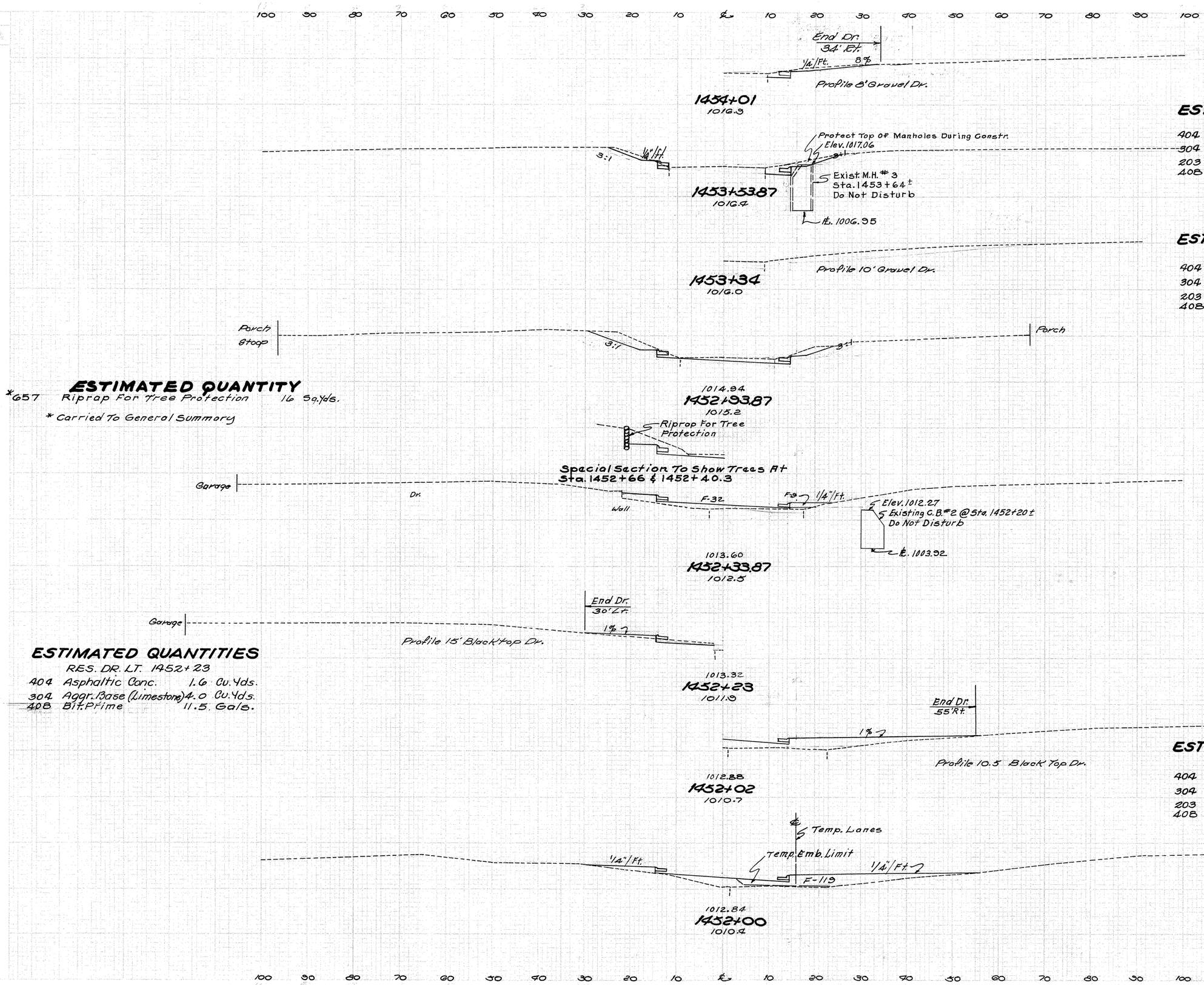
Approach Rd. & Res. Dr. Rt. 1450+00

404	2" Asph. Conc.	8.8	Cu. Yds.
408	Bit. Prime Coat	63.2	Gals.
310	6" Subbase	26.	Cu. Yds.
304	Aggr. Base (Limestone)	18	Cu. Yds.
203	Embankment	341	Cu. Yds.

0	180
0	632
0	503
0	1308
0	910
0	2106
0	1365
0	3012
0	1888
0	3954
0	2382
0	4690

1449+00 – 1451+50

PER-13-26.12



ESTIMATED QUANTITIES

RES. DR. RT. 1454+01

				Cut	Fill
404	Asphaltic Conc.	0.8	Cu.Yds.		
304	Aggr. Base (Limestone)	5.0	Cu.Yds.		
203	Excavation	8	Cu.Yds.	26	0
408	Bit. Prime	5.8	Gals.		

ESTIMATED QUANTITIES

RES. DR. RT. 1453+34

				Cut	Fill
404	Asphaltic Conc.	0.8	Cu.Yds.		
304	Aggr. Base (Limestone)	11.4	Cu.Yds.		
203	Excavation	30	Cu.Yds.	84	0
408	Bit. Prime	5.8	Gals.		

ESTIMATED QUANTITY

*657 Riprap For Tree Protection 16 Sq.Yds.

* Carried To General Summary

ESTIMATED QUANTITIES

RES. DR. LT. 1452+23

404	Asphaltic Conc.	1.6	Cu.Yds.
304	Aggr. Base (Limestone)	4.0	Cu.Yds.
408	Bit. Prime	11.5	Gals.

ESTIMATED QUANTITIES

RES. DR. RT. 1452+02

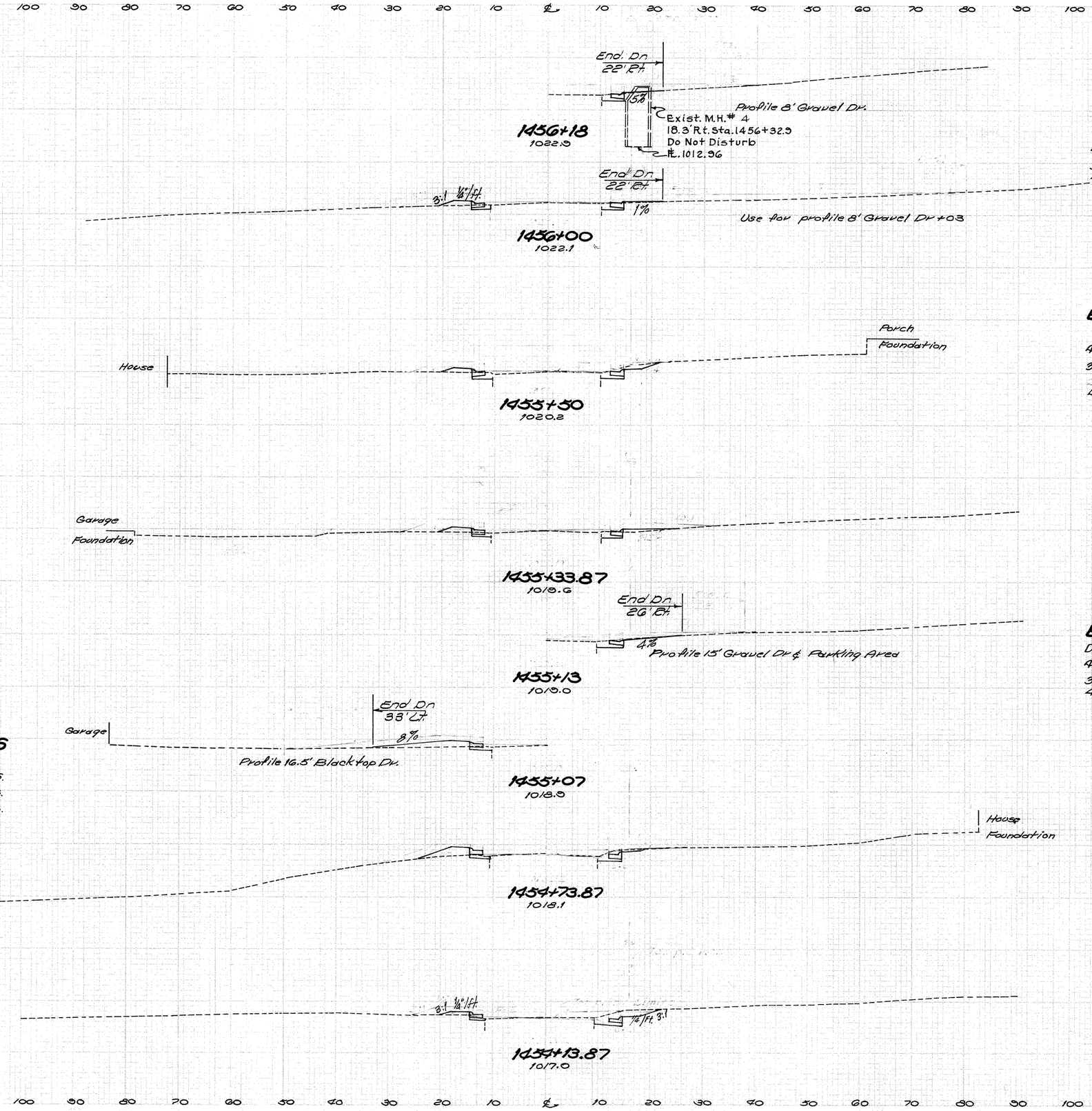
404	Asphaltic Conc.	2.8	Cu.Yds.
304	Aggr. Base (Limestone)	7.0	Cu.Yds.
203	Embankment	50	Cu.Yds.
408	Bit. Prime	20.2	Gals.

Note:—
Drive Quantities Carried To Sheet No. 9

50	0		
56	43		
0	39		
0	31		
0	110		
0	269		

1452+00 - 1454+01

PER-13-26.12



ESTIMATED QUANTITIES

RES. DR. RT. 1456+18

				END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
404	Asphaltic Conc.	0.8	Cu.Yds.				
304	Aggr. Base (Limestone)	2.0	Cu.Yds.	9	4		
408	Bit. Prime	5.8	Gals.				

ESTIMATED QUANTITIES

RES. DR. RT. 1456+03

				END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
404	Asphaltic Conc.	0.8	Cu.Yds.	16	3		
304	Aggr. Base (Limestone)	2.0	Cu.Yds.				
408	Bit. Prime	5.8	Gals.				

ESTIMATED QUANTITIES

Double 15' Comm. Dr. Rt. 1455+13

				END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
404	Asphaltic Conc.	2.0	Cu.Yds.				
304	Aggr. Base (Limestone)	10.3	Cu.Yds.				
408	Bit. Prime	14.4	Gals.				

ESTIMATED QUANTITIES

RES. DR. LT. 1455+07

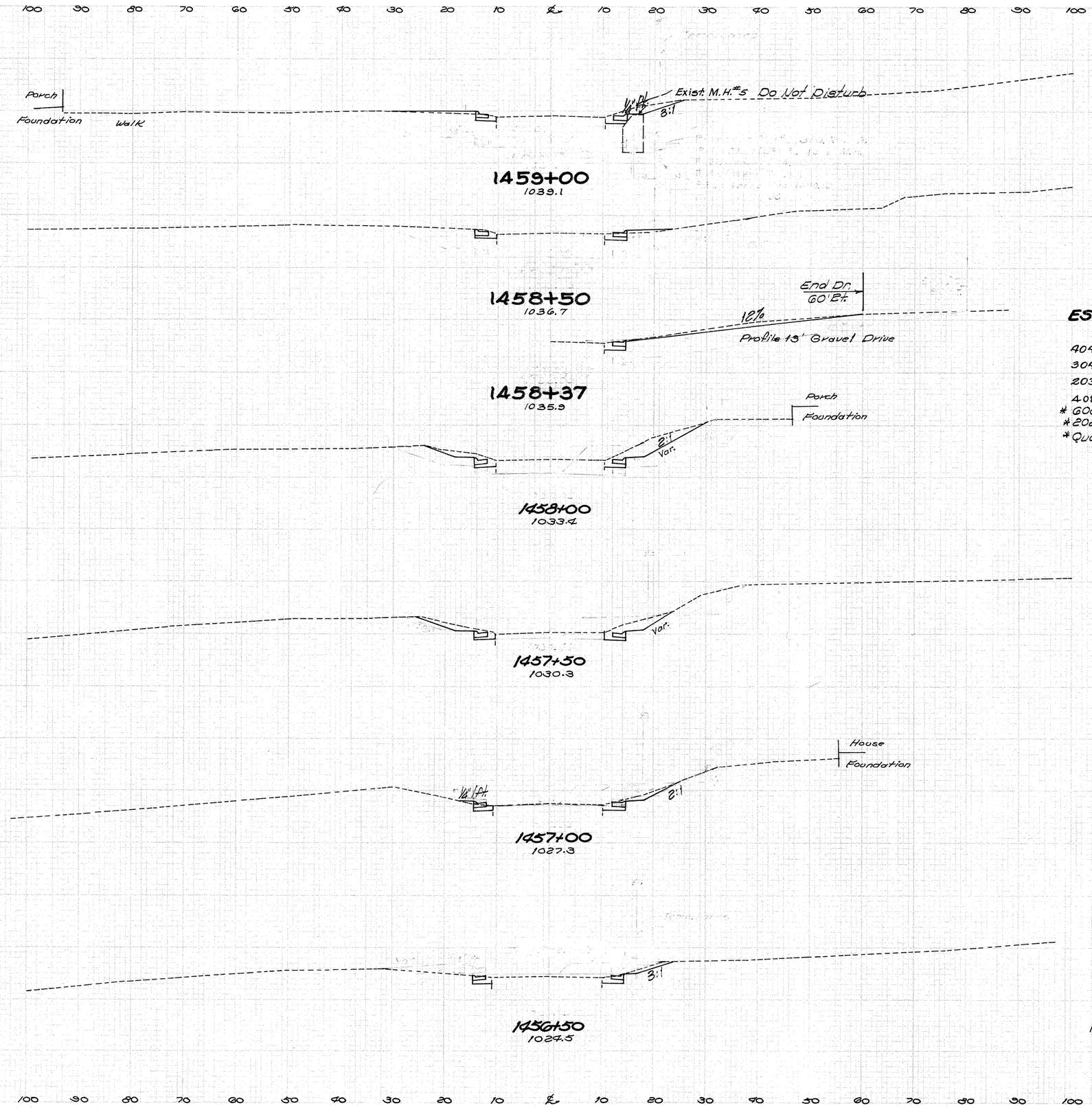
404	Asphaltic Conc.	2.3	Cu.Yds.
304	Aggr. Base (Limestone)	5.6	Cu.Yds.
203	Embankment	5	Cu.Yds.
408	Bit. Prime	16.4	Gals.

23	6		
7	13		
8	8		
18	22		
8	12		
27	17		
16	3		
47	3		

Note:-
Drive Quantities Carried To Sheet No. 3.

1454+13.87 - 1456+18

PER-13-26.12



ESTIMATED QUANTITIES

RES. DR. RT. 1458+37 (12' width)

404	Asphaltic Conc.	3.6	Cu. Yds.	
304	Aggr. Base (Limestone)	3.0	Cu. Yds.	
203	Excavation	20	Cu. Yds.	
408	Bit. Prime	25.9	Gals.	
* 608	Conc. Walk	80	Sq. Ft.	
* 202	Rem. of Exist. Walk	80	Sq. Ft.	52 0

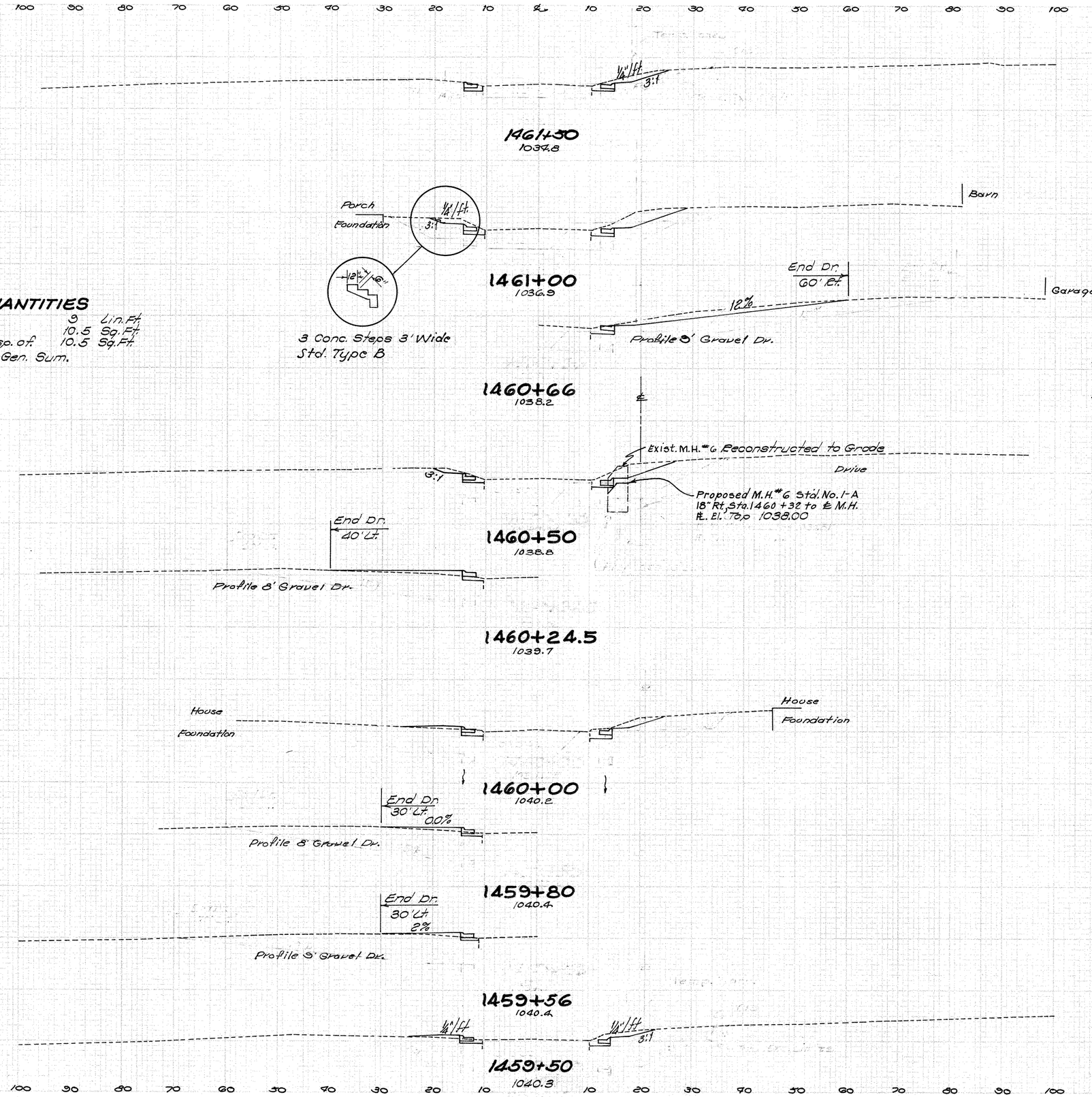
*Quantity Carried to Gen. Sum.

Note :—
Drive quantities carried to Sheet No. 9.

Exc. Area Yds.	Exc. Area Pct.	Volume Cut	Volume Fill
24	4		
			32 7
11	4		
			58 3
			89 0
44	0		
			62 1
23	1		
			35 1
15	0		
			22 3

1456+50 - 1459+00

PER-13-26.12



*ESTIMATED QUANTITIES

608 Conc. Steps Type B	3	Lin. Ft.
608 Conc. Walks	10.5	Sq. Ft.
202 Exist. Conc. Walk Removed & Disp. of	10.5	Sq. Ft.

*Quantities Carried to Gen. Sum.

ESTIMATED QUANTITIES

RES. DR. RT. 1460+66

404 Asphaltic Conc.	3.2	Cu. Yds.
304 Aggr. Base (Limestone)	8.0	Cu. Yds.
203 Excavation	37.0	Cu. Yds.
408 Bit. Prime	23.0	Gals.

ESTIMATED QUANTITIES

RES. DR. LT. 1460+24.5

404 Asphaltic Conc.	0.8	Cu. Yds.
304 Aggr. Base (Limestone)	6.4	Cu. Yds.
408 Bit. Prime	5.8	Gals.

ESTIMATED QUANTITIES

RES. DR. LT. 1459+80

404 Asphaltic Conc.	0.8	Cu. Yds.
304 Aggr. Base (Limestone)	4.0	Cu. Yds.
408 Bit. Prime	5.8	Gals.

ESTIMATED QUANTITIES

RES. DR. LT. 1459+56

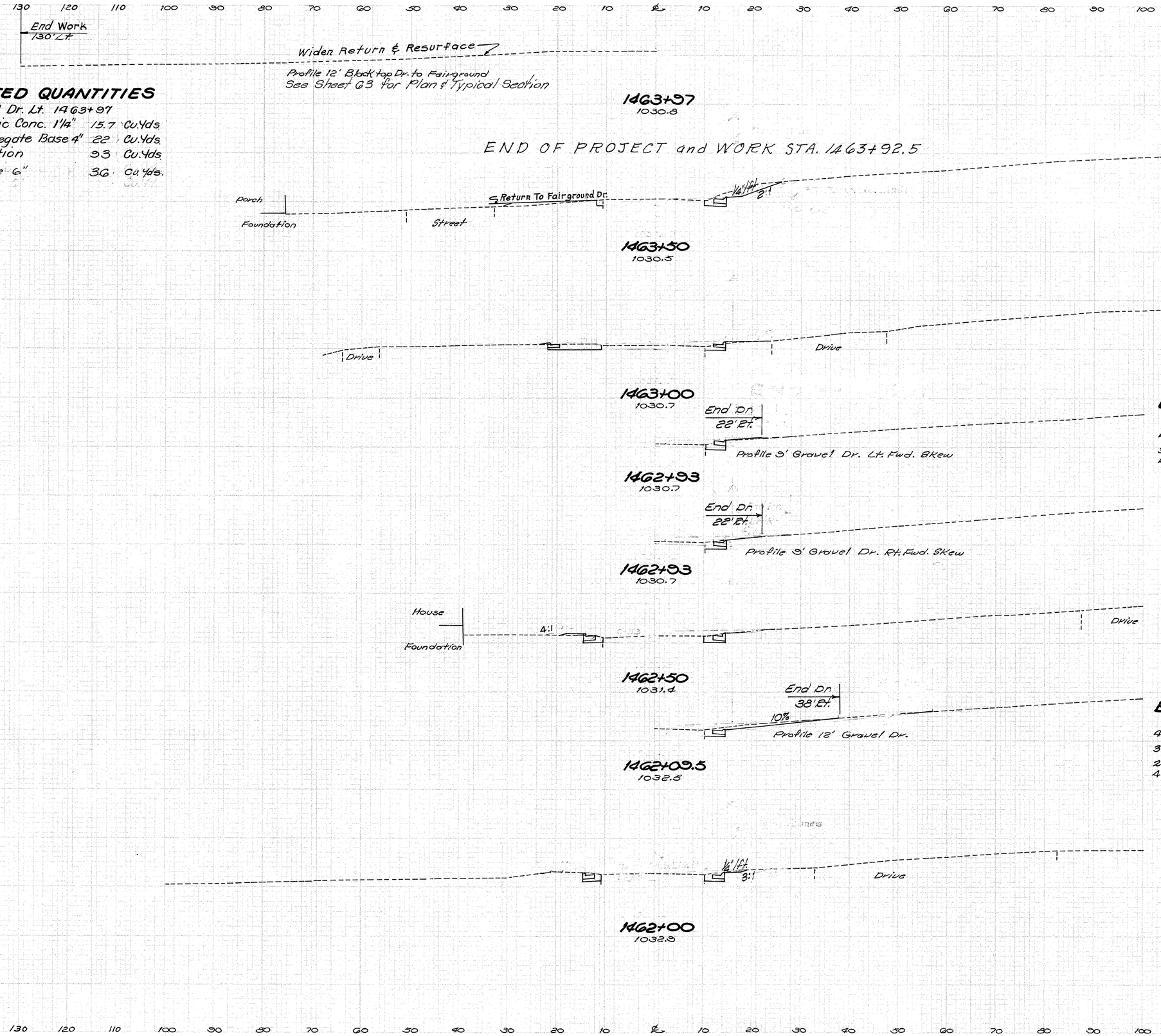
404 Asphaltic Conc.	0.8	Cu. Yds.
304 Aggr. Base (Limestone)	4.0	Cu. Yds.
408 Bit. Prime	5.8	Gals.

Note :-
Drive Quantities Carried
To Sheet No. 9

Sta.	Cut	Fill
20	0	57 0
42	0	72 0
36	0	54 4
22	5	36 8
17	4	38 7

1459+50-1461+50

PER-13-26.12



ESTIMATED QUANTITIES

Fairground Dr. Lt. 1463+97

404	Asphaltic Conc. 1¼"	15.7	Cu.Yds
301	Bit. Aggregate Base 4"	22	Cu.Yds.
202	Excavation	93	Cu.Yds.
310	Subbase 6"	36	Cu.Yds.

ESTIMATED QUANTITIES

Combined Res. Dr. Rt. 1462+93

404	Asphaltic Conc.	1.1	Cu.Yds.
304	Aggr. Base (Limestone)	6.0	Cu.Yds.
408	Bit. Prime	7.9	Gals.

ESTIMATED QUANTITIES

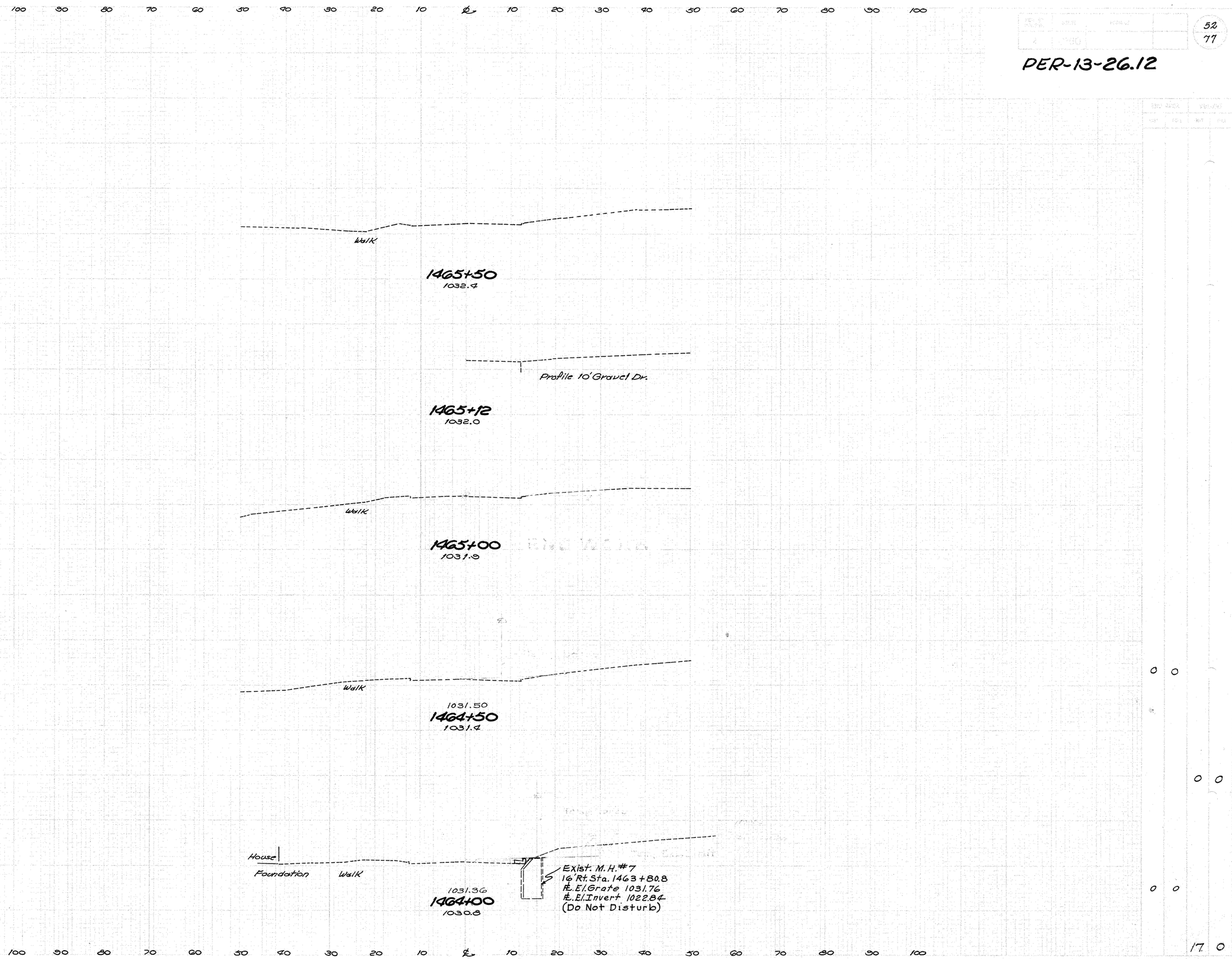
RES. DR. RT. 1462+09.5 (12' width)

404	Asphaltic Conc.	0.3	Cu.Yds.
304	Aggr. Base (Limestone)	7.0	Cu.Yds.
203	Excavation	12.0	Cu.Yds.
408	Bit. Prime	6.5	Gals.

Note :—
Drive quantities Carried To Sheet No. 9.

1462+00-1463+97

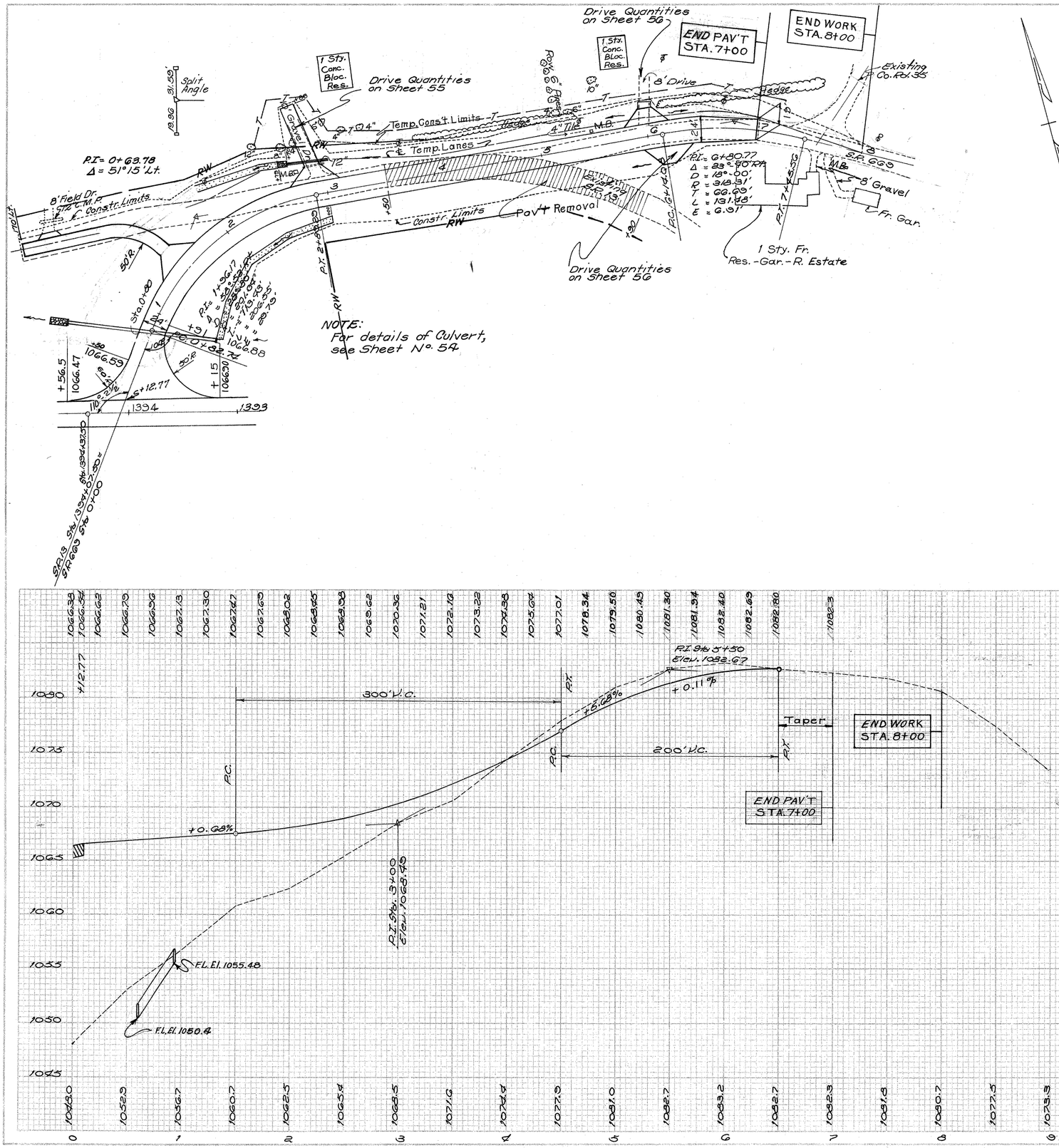
PER-13-26.12

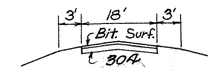


1464+00 - 1465+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

PER-13-26.12





TYPICAL SECTION ADJOINING PAVEMENT

* ESTIMATED QUANTITIES

S.R. 669

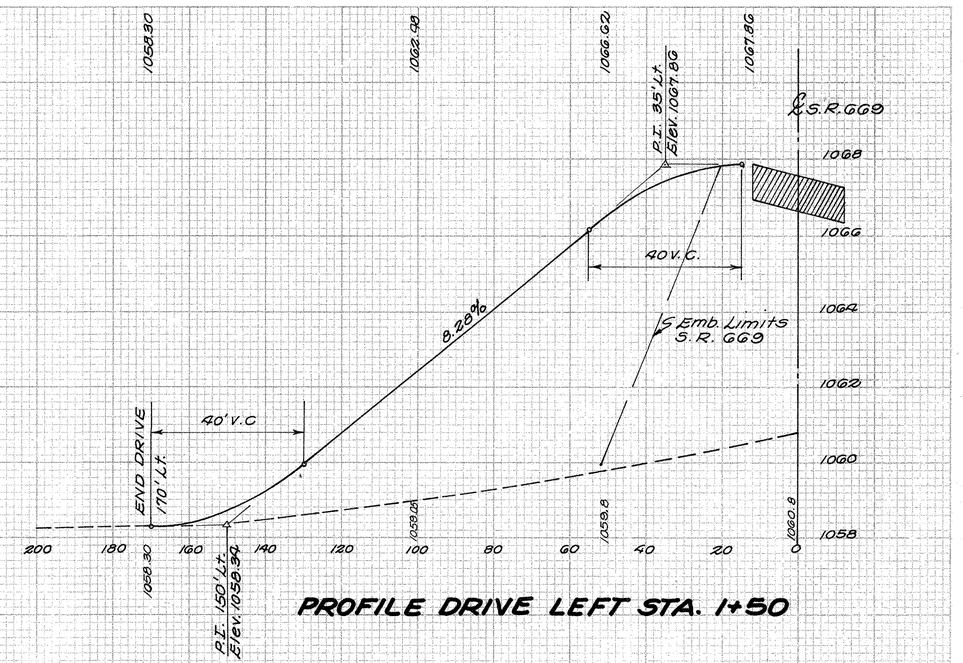
404	1 1/4" Asph. Conc.	68.7	Cu. Yds.
301	4" Bit. Aggr. Base	228.3	Cu. Yds.
310	6" Subbase	355.4	Cu. Yds.
203	Subbase Preparation	1373	Sq. Yds.
659	Seeding & Mulching	3,270	Sq. Yds.
202	Pipe Removal (15" Culvert)	20'	Lin. Ft.
203	Excavation	1087	Cu. Yds.
203	Embankment	4182	Cu. Yds.
660	Sodding	163	Sq. Yds.
601	Dumped Rock Ch. Prot.	3	Cu. Yds.
202	Exist. Pav't. Rem. & Disp. of	436	Sq. Yds.

* Quantities Carried to Summary of Tables

ESTIMATED QUANTITIES

FIELD DRIVE LT. STA. 1+50

304	Aggregate Base	40	Cu. Yds.
203	Embankment	717	Cu. Yds.

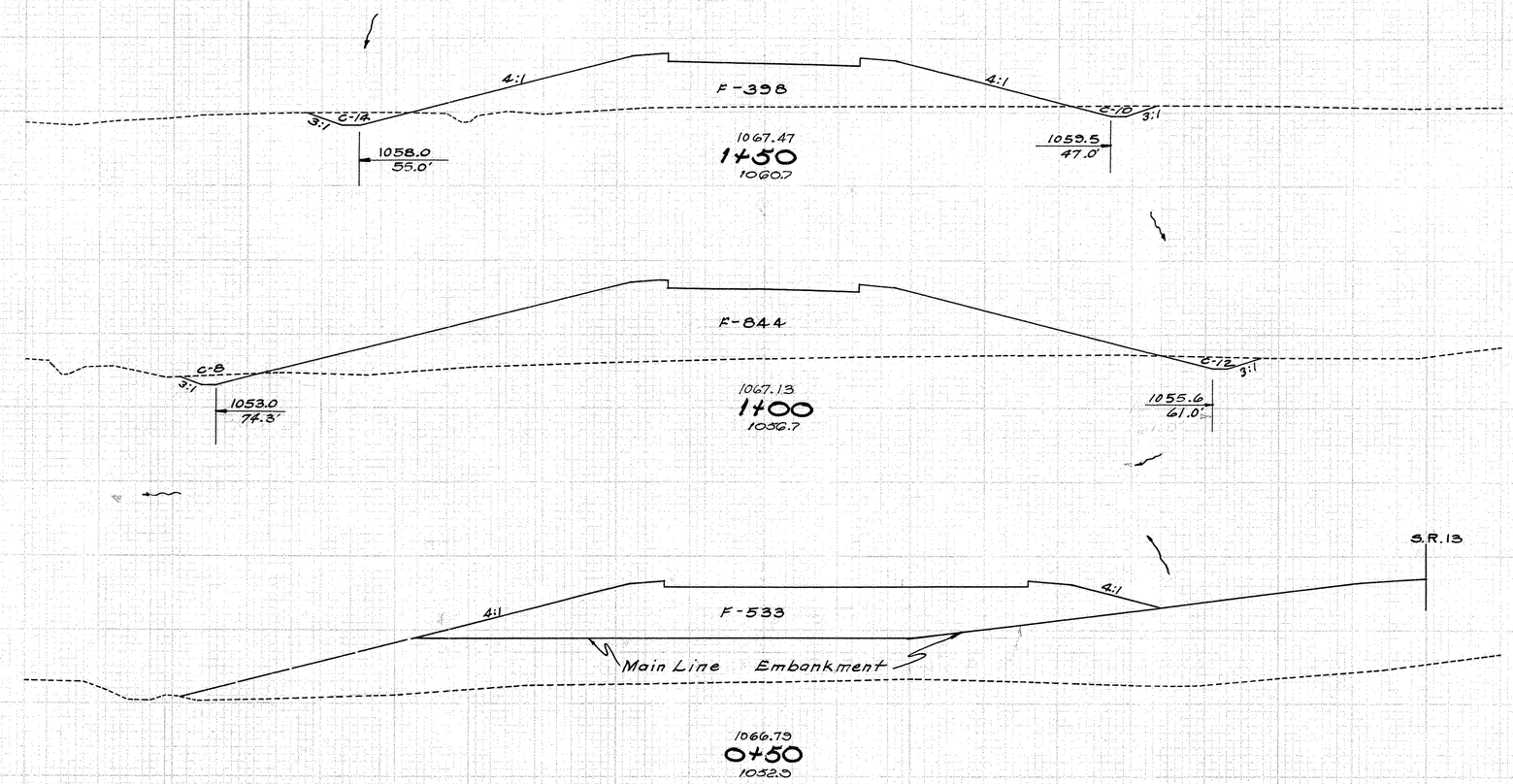


PROFILE DRIVE LEFT STA. 1+50

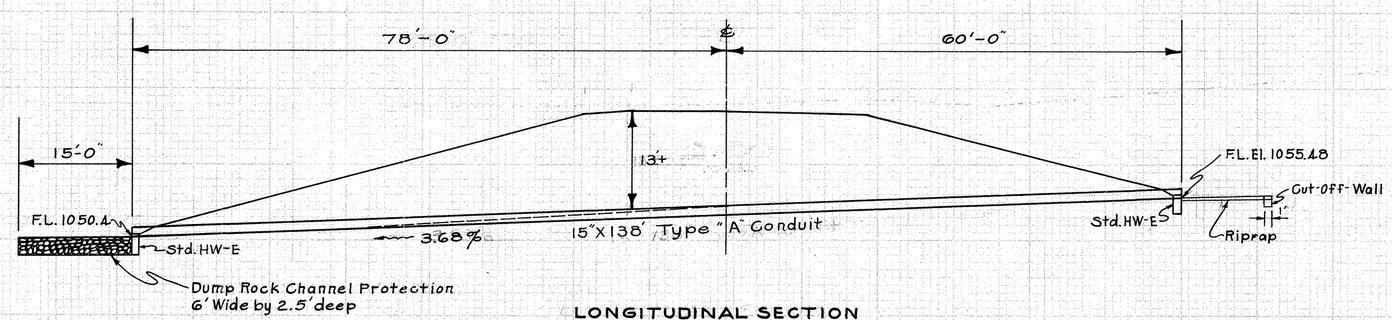
APPROACH ROAD - S.R. 669

54
77

PER-13-26.12



0+12.77 BEGIN APPROACH



LONGITUDINAL SECTION
STA. 0+80

CULVERT DATA

TYPE: Pipe Culvert Std. Drwg. MC-4 & HW-E
SIZE: 15"X138'
WORK REQUIRED: Install new pipe culvert as shown using 15" Conduit TYPE "A". Construct Std. HW-E Endwalls. Place Dumped Rock Channel Protection at outlet.

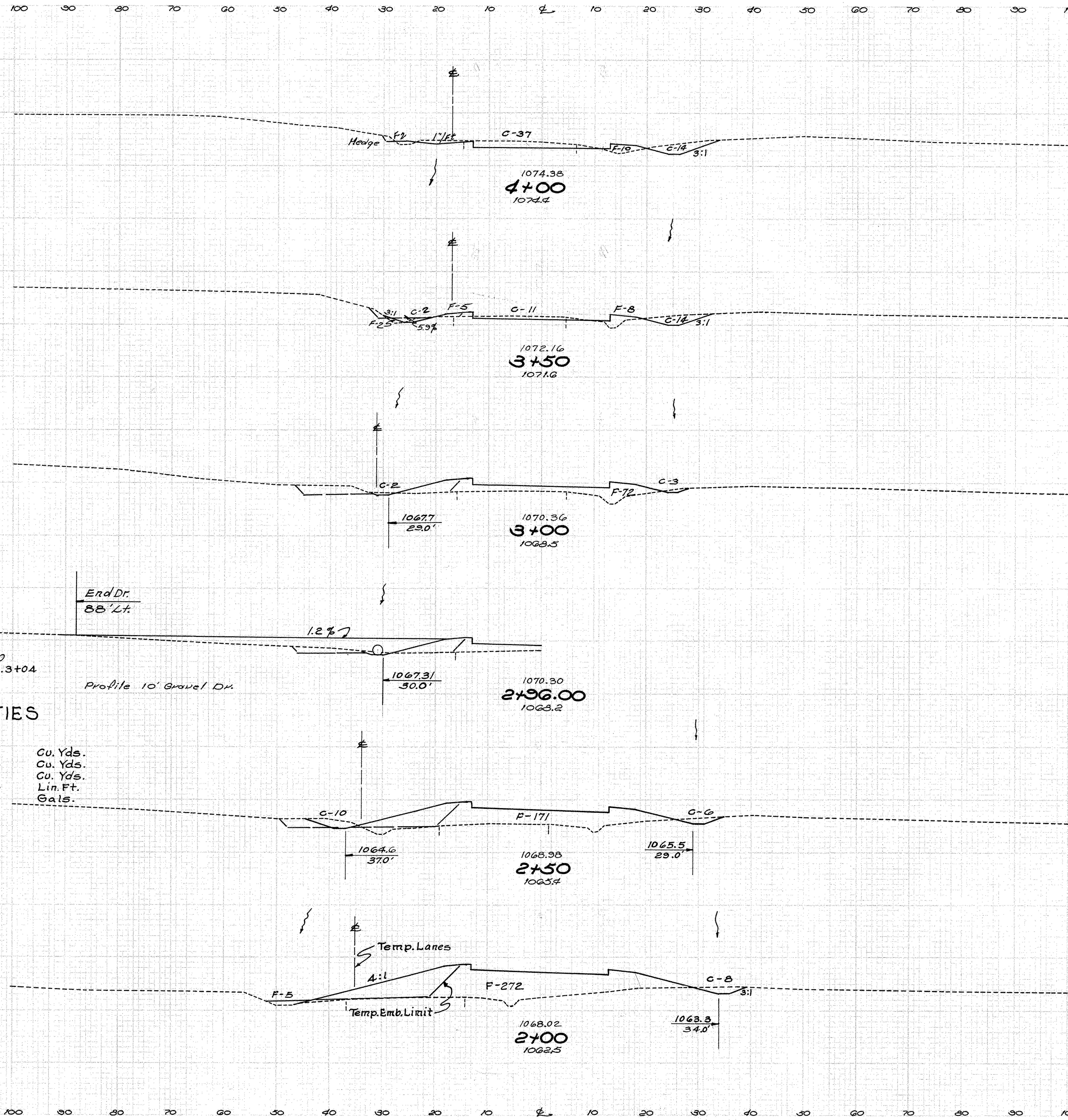
ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	QUANTITY	UNIT
603	15" Conduit 706.02 Cl. III or 706.08 Extra Strength Conduit Type A With Cl. B Bedding	138	Lin. Ft.
602	Concrete Masonry	0.5	Cu. Yds.
601	Dumped Rock Ch. Protection	8.0	Cu. Yds.
601	Riprap	14	Sq. Yds.

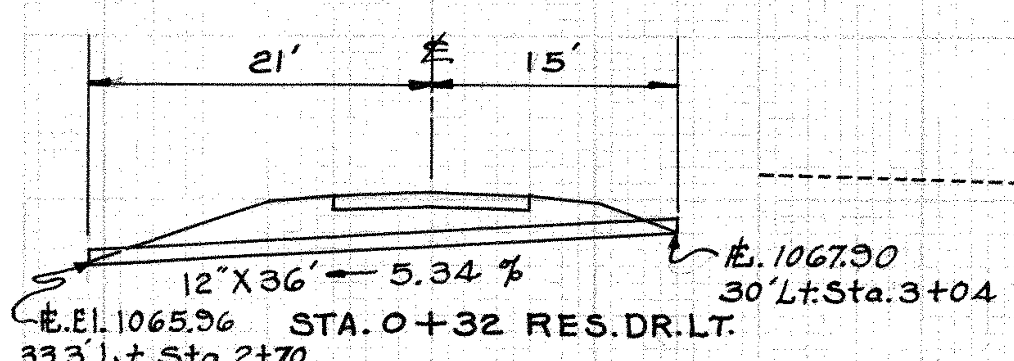
Drainage Area 1.5 A²		Q25 6 c.f.s.	
6	S.R.669 Appr. Sta. 0+80	15" X 138'	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
24	398		
41	1150		
20	844		
34	1275		
0	533		
0	307		
0	0		

S.R. 669 0+00 - 1+50

End Area Cut	End Area Fill	Volume Cut	Volume Fill
51	12		
		72	25
27	15		
		30	81
5	72		
		19	225
16	171		
		22	415
8	277		
		30	625





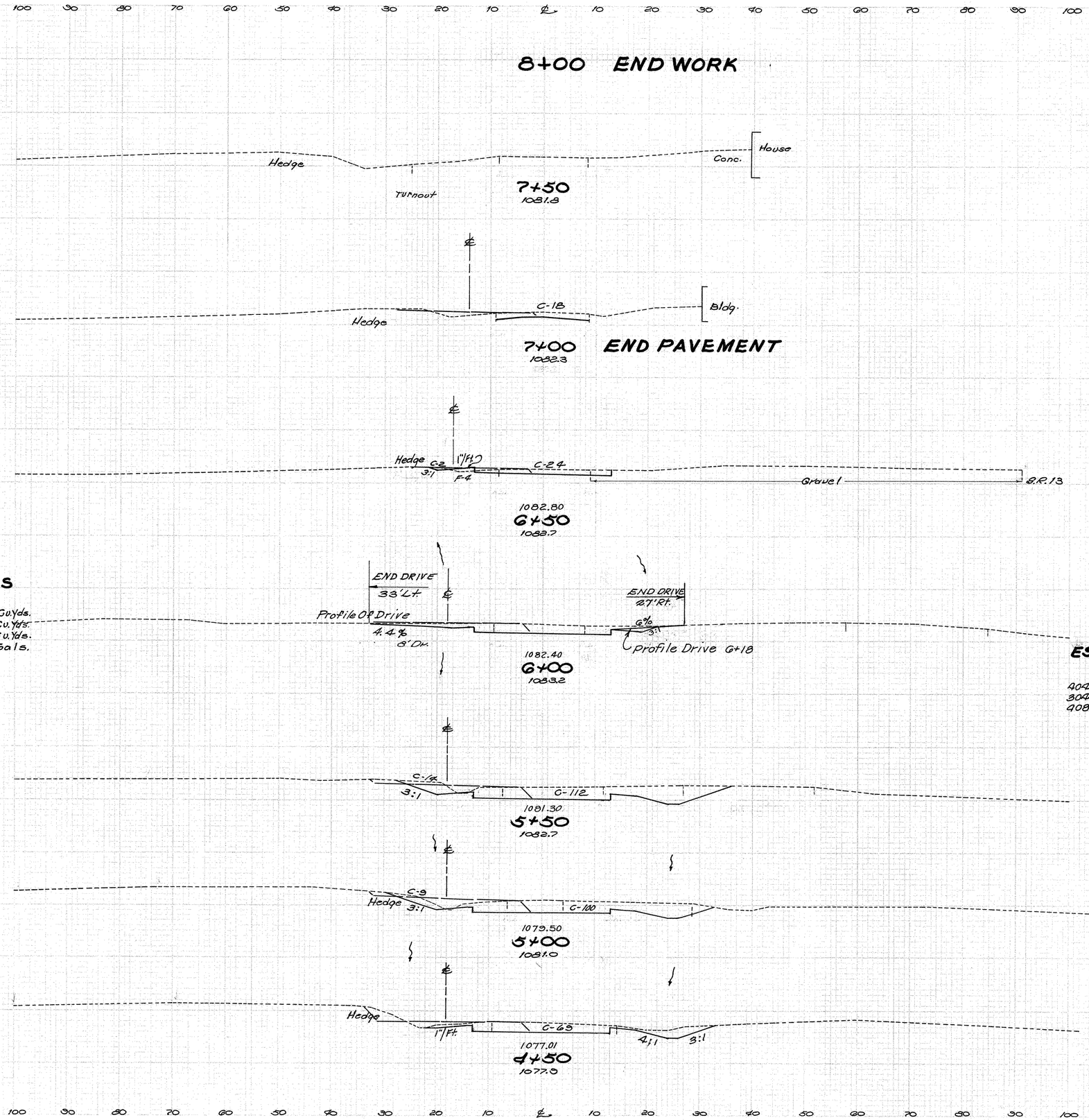
ESTIMATED QUANTITIES

RES. DR. LT. 2+96

404	Asphaltic Conc.	2.5	Cu. Yds.
304	Aggr. Base (Limestone)	24.4	Cu. Yds.
203	Embankment	98	Cu. Yds.
603	12" Conduit Type (D)	36	Lin. Ft.
408	Bit. Prime	18.0	Gals.

Note :-
Drive Quantities Carried To Sheet No. 9

PER-13-26.12



ESTIMATED QUANTITIES

RES. DR. LT. 6+00

404	Asphaltic Conc.	2.5	Cu.Yds.
304	Aggr. Base (Limestone)	8.1	Cu.Yds.
202	Excavation	8	Cu.Yds.
408	Bit. Prime	18.0	Gals.

ESTIMATED QUANTITIES

RES. DR. RT. 6+18

404	Asphaltic Conc.	2.5 Cu.Yds.
304	Aggr. Base (Limestone)	6.3 Cu.Yds.
408	Bit. Prime	18.0 Gals.

Note:—
Drive Quantities Carried To Sheet No. 9

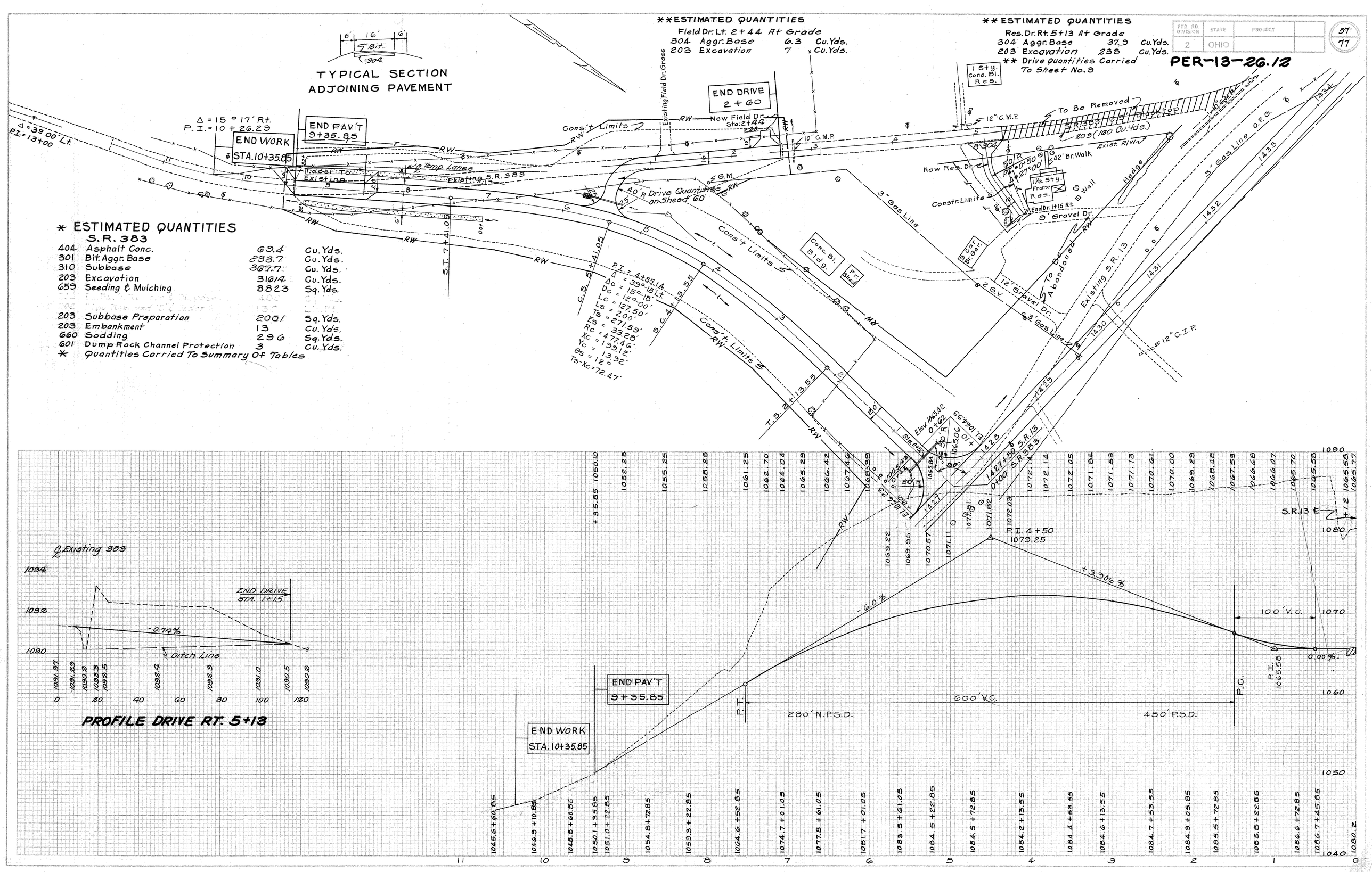
18	0		
		41	4
26	4		
		106	4
60	0		
		198	0
126	0		
		218	0
109	0		
		165	0
69	0		
		111	11

S.P. 669 4+50 - 7+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

51 / 77

PER-13-26.12



* ESTIMATED QUANTITIES
S.R. 383

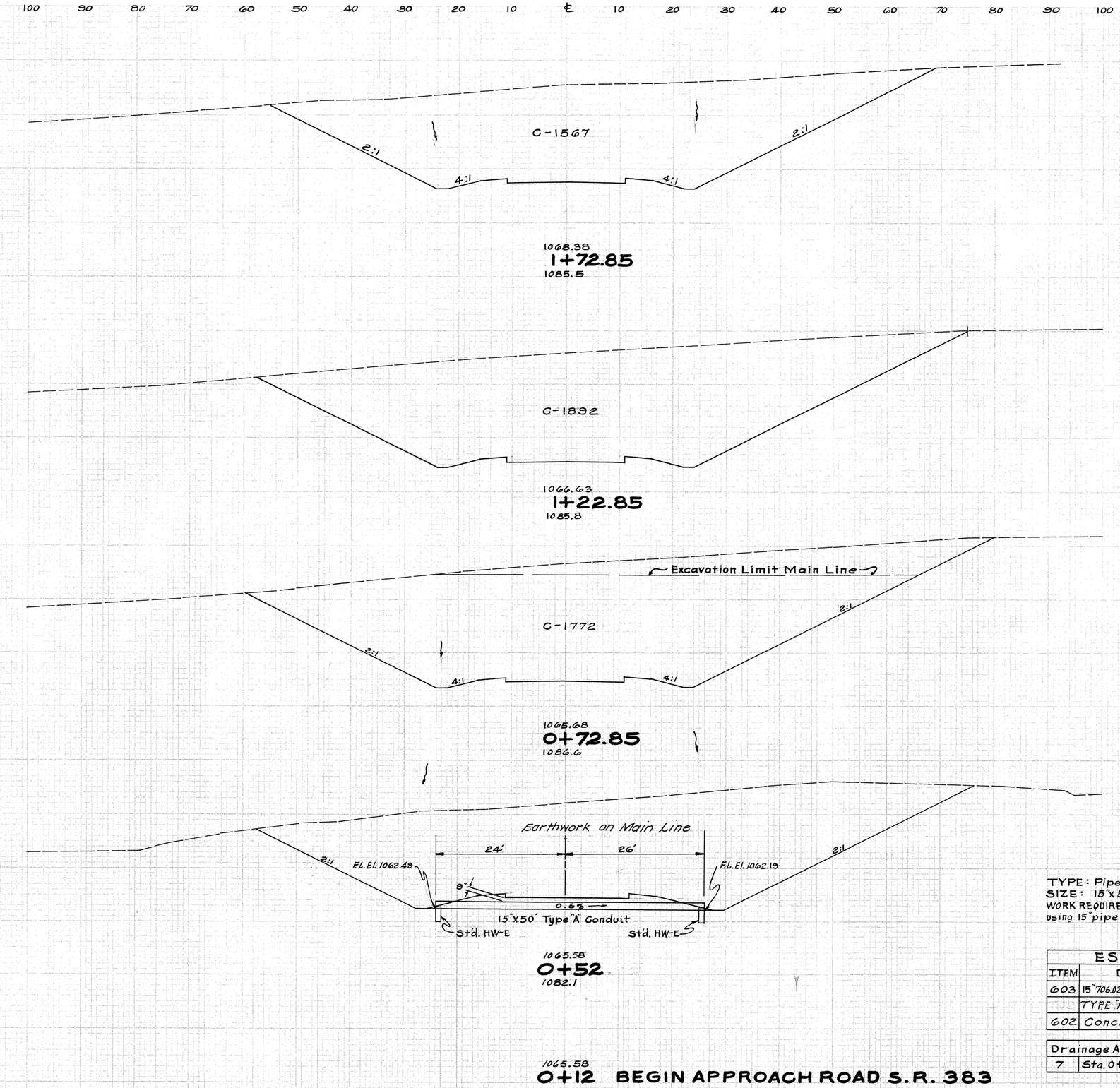
404	Asphalt Conc.	69.4	Cu. Yds.
301	Bit. Aggr. Base	233.7	Cu. Yds.
310	Subbase	367.7	Cu. Yds.
203	Excavation	31614	Cu. Yds.
659	Seeding & Mulching	8823	Sq. Yds.
203	Subbase Preparation	2001	Sq. Yds.
203	Embankment	13	Cu. Yds.
660	Sodding	296	Sq. Yds.
601	Dump Rock Channel Protection	3	Cu. Yds.

* Quantities Carried To Summary Of Tables

APPROACH ROAD - S.R. 383

58
77

PER-13-26.12



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1567	0		
		3203	0
1892	0		
		3892	0
1772	0		
		750	0
0	0		

CULVERT DATA

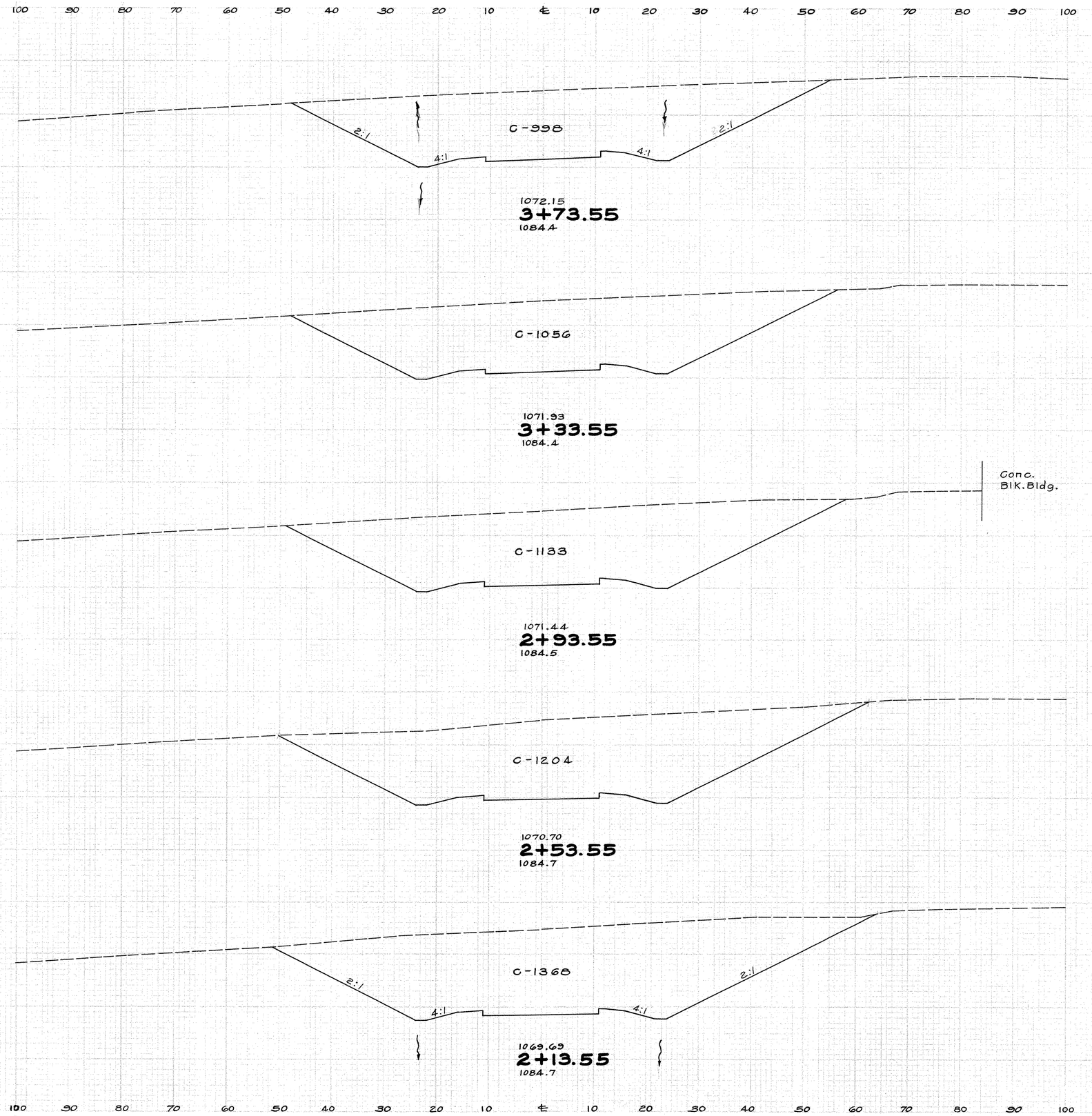
TYPE: Pipe Culvert Std. Drwg MC-4 & HW-E
SIZE: 15"X50'
WORK REQUIRED: Install new pipe culvert as shown using 15" pipe Type "A". Construct Std. HW-E Endwalls.

ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	QUANTITY	UNIT
603	15" 706.02 or 706.08 Conduit	50	Lin. Ft.
	TYPE "A" With Class (B) - Bedding		
602	Concrete Masonry	0.5	Cu. Yds.

Drainage Area = 1.5 A @ Q25 = 6 C.F.S.			
7	Sta. 0+52	S.R. 383 APPR.	15" X 50'

S.R.383 — 0+12 — 1+72.85

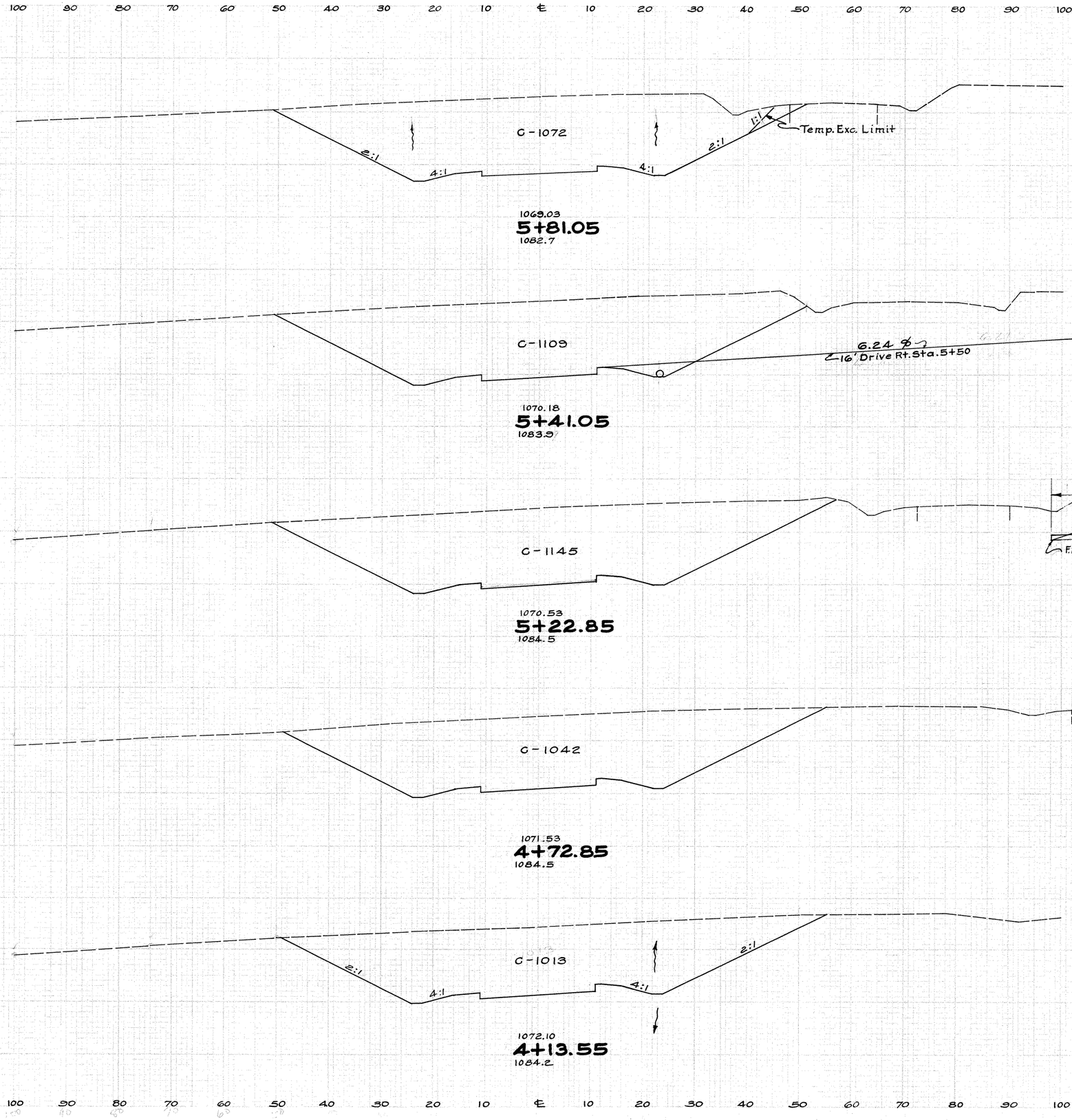
PER-13-26.12

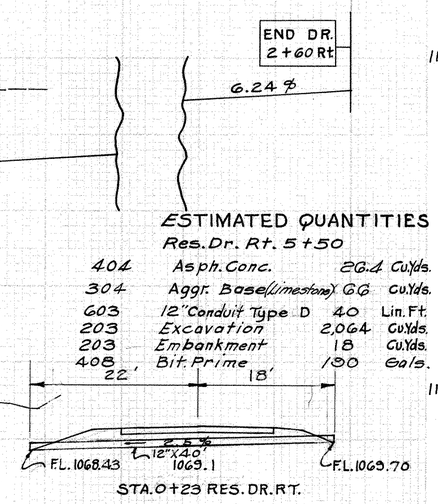


	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
998	0			
			1521	0
1056	0			
			1621	0
1133	0			
			1731	0
1204	0			
			1905	0
1368	0			
			2212	0

S.R.383 – 2+13.55 – 3+73.55

PER-13-26.12





ESTIMATED QUANTITIES

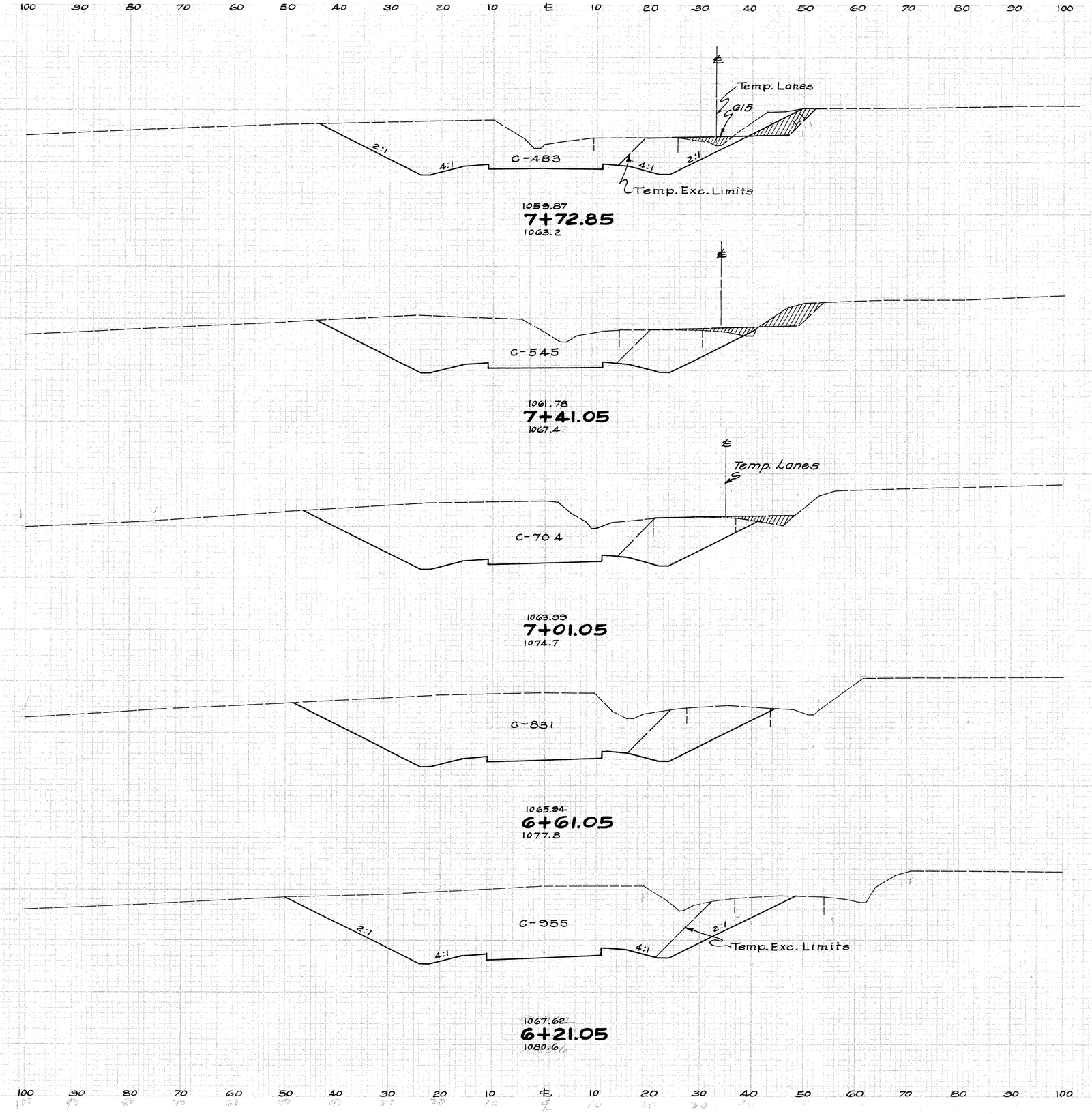
Res. Dr. Rt. 5+50

404	Asph. Conc.	26.4	Cu. Yds.
304	Aggr. Base (Limestone) G.G.		Cu. Yds.
603	12" Conduit Type D	40	Lin. Ft.
203	Excavation	2,064	Cu. Yds.
203	Embankment	18	Cu. Yds.
408	Bit. Prime	180	Gals.

1072	0	
1615	0	
1109	0	
760	0	
1145	0	
2025	0	
1042	0	
2257	0	
1013	0	
1490	0	

Note :—
Drive Quantities carried to Sheet No. 3.

PER-13-26.12



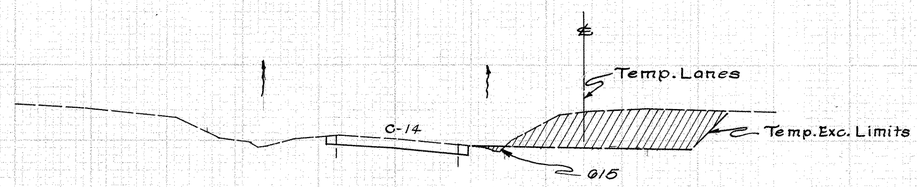
AREA CUT	AREA FILL	VOLUME CUT	VOLUME FILL
483	0		
605	0		
545	0		
925	0		
704	0		
1137	0		
831	0		
1323	0		
955	0		
1501	0		

S.R. 383 6+21.05 ~ 7+72.85

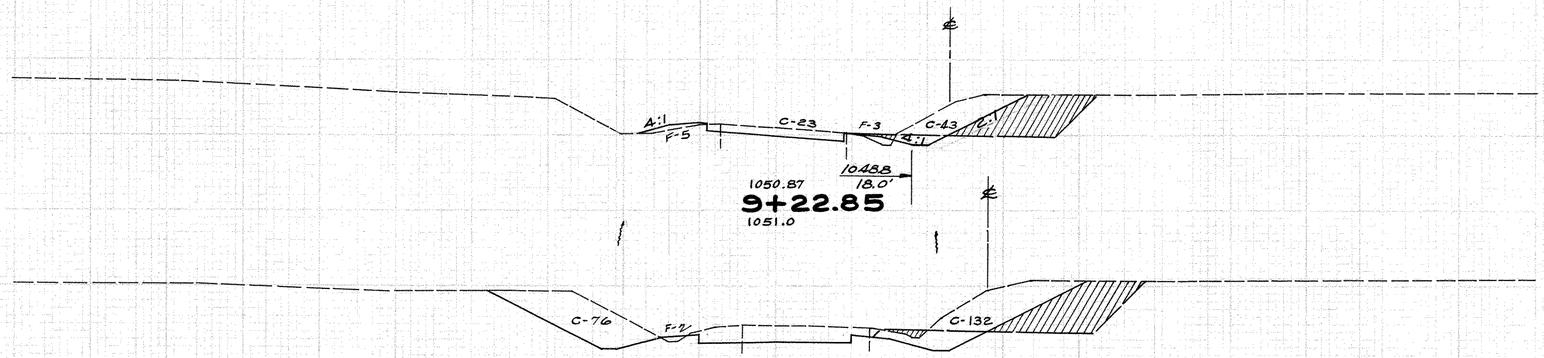
PER-13-26.12

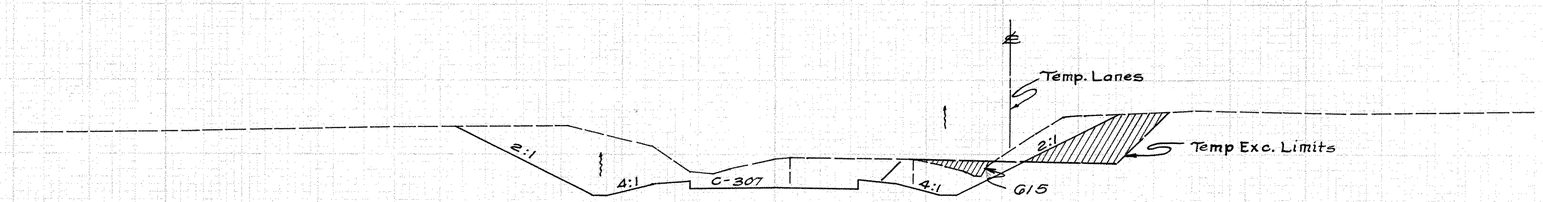
100 90 80 70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70 80 90 100

10+35.85 END WORK



1050.1
9+35.85 END PAVEMENT
1050.1





1056.87
8+22.85
1059.3

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

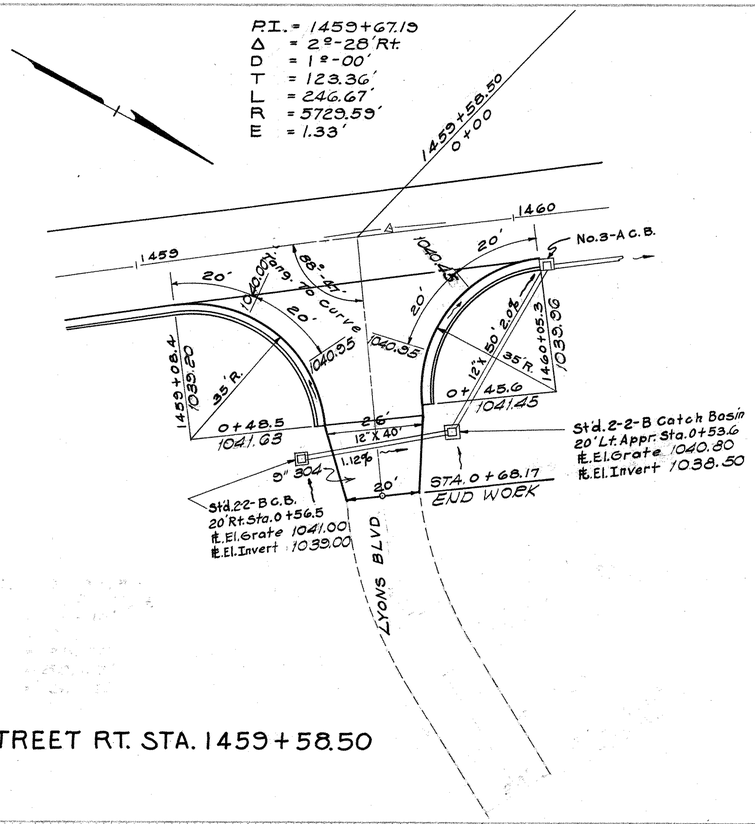
140	0		
192			
668			
254	9		
208	2		
477	2		
307	0		
731	0		

S.R.383 8+22.85-9+35.85

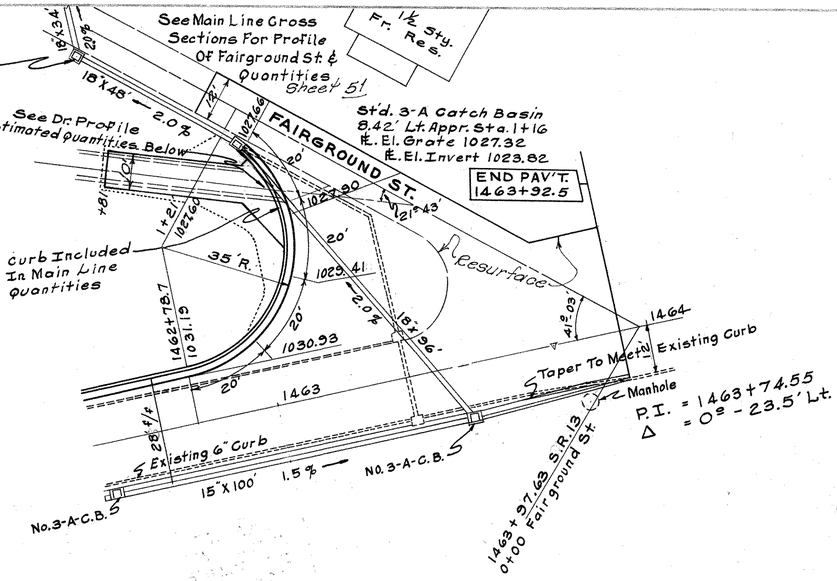
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

63
77

PER-13-26.12

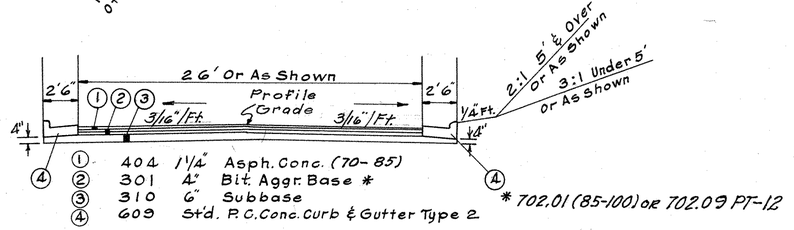


STREET RT. STA. 1459+58.50



ESTIMATED QUANTITIES
STREET RT.
1459+58.5

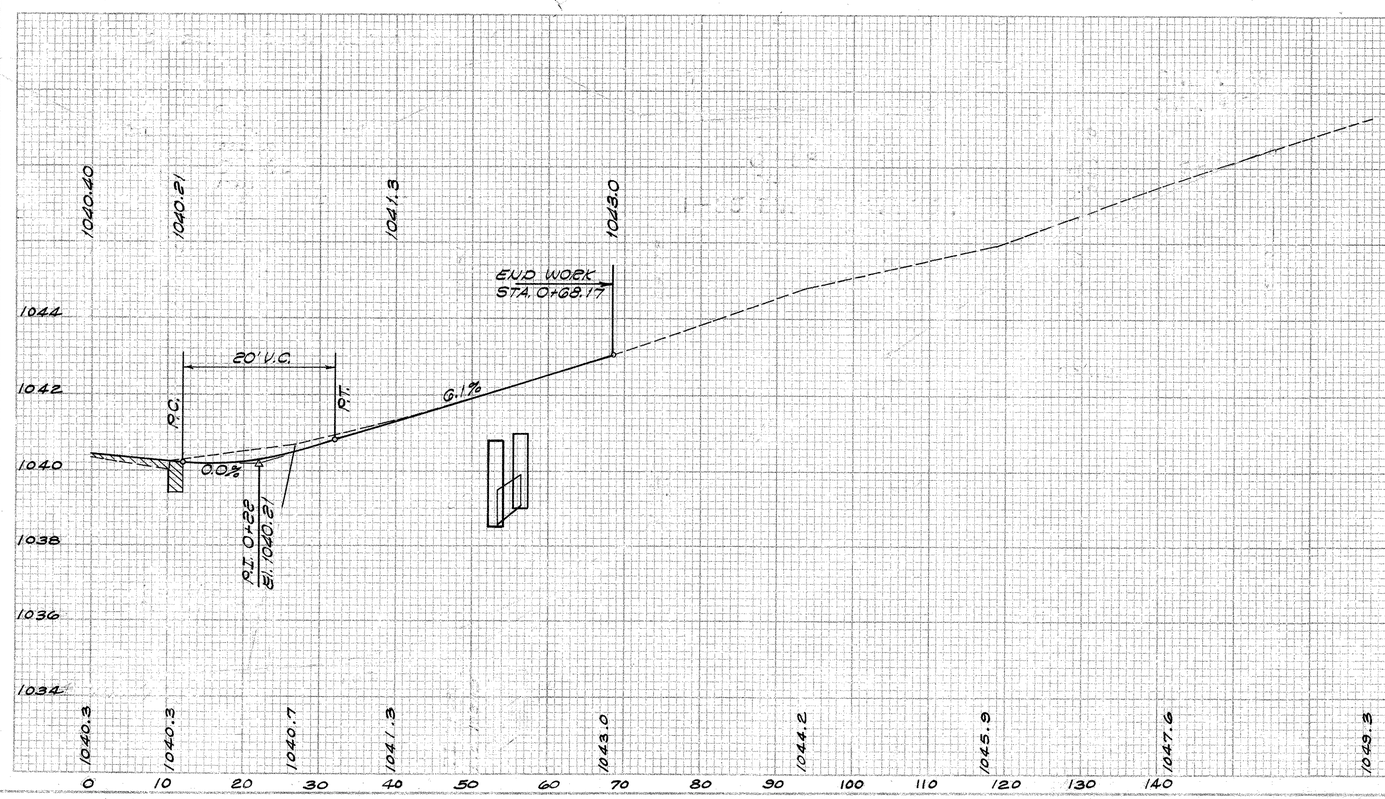
203	Subgrade Prep.	197	Sq. Yds.
203	Excavation	22	Cu. Yds.
404	1¼ Asph. Conc.	4.0	Cu. Yds.
301	4" Bit. Aggr. Base	12.6	Cu. Yds.
310	6" Subbase	23	Cu. Yds.
609	Conc. Curb & Gutter	104	Lin. Ft.
304	9" Aggr. Base	13	Cu. Yds.
659	Seeding & Mulching	31	Sq. Yds.

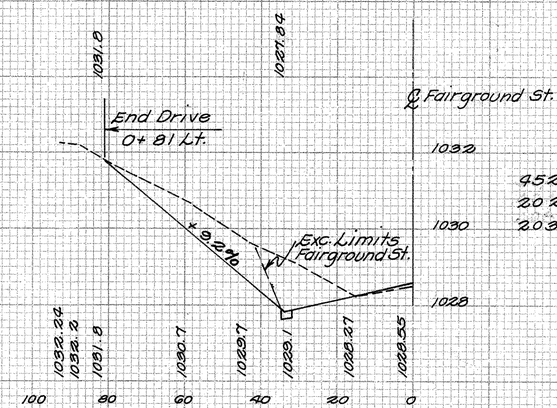


①	404	1¼"	Asph. Conc. (70-85)
②	301	4"	Bit. Aggr. Base *
③	310	6"	Subbase
④	609		Std. P.C. Conc. Curb & Gutter Type 2

* 702.01 (85-100) or 702.09 PT-12

TYPICAL SECTION
For Village Streets Unless Otherwise Shown





PROFILE RES. DR. LT. 0+68 (Skewed)

ESTIMATED QUANTITIES
Res. Dr. Rt. 0+68

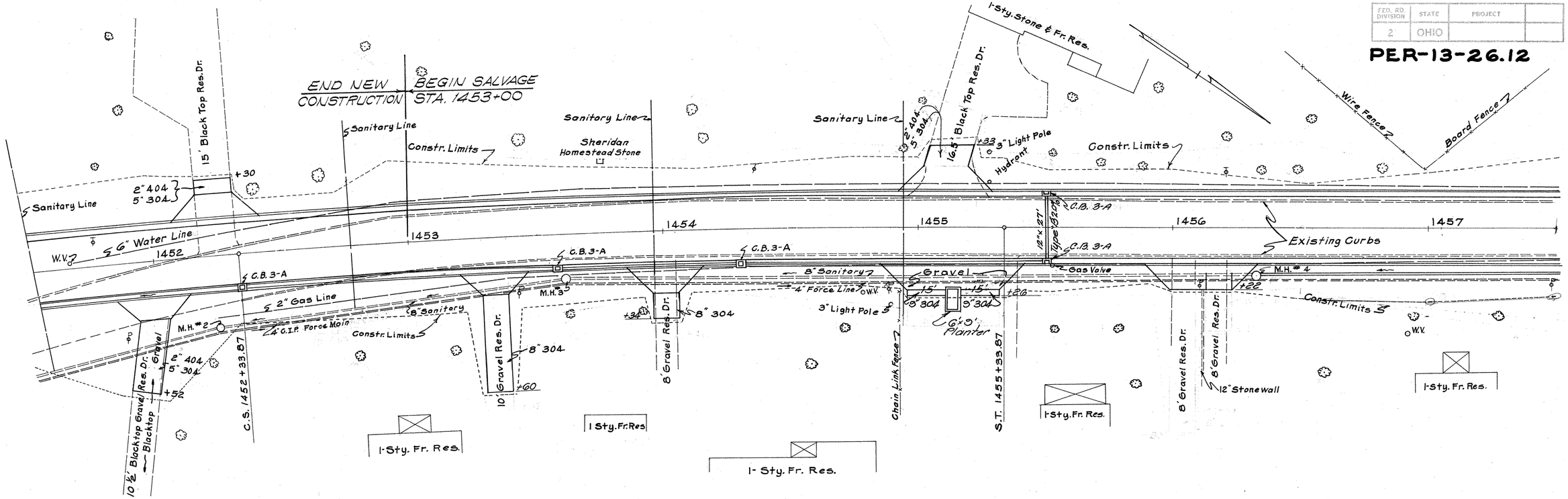
452	7" Plain P.C. Conc.	54	Sq. Yds.
202	Ex. Pav't. Rem. & Disp. of	25	Sq. Yds.
203	Excavation	12	Cu. Yds.

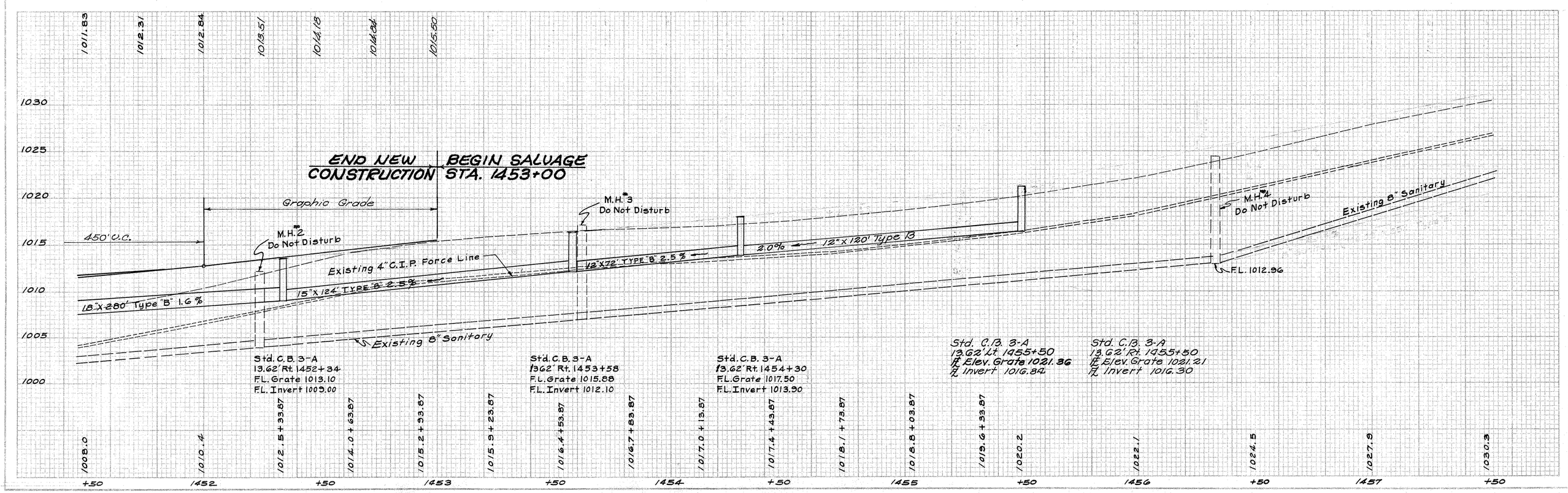
LYONS BLVD. & FAIRGROUND STREET

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

64
77

PER-13-26.12

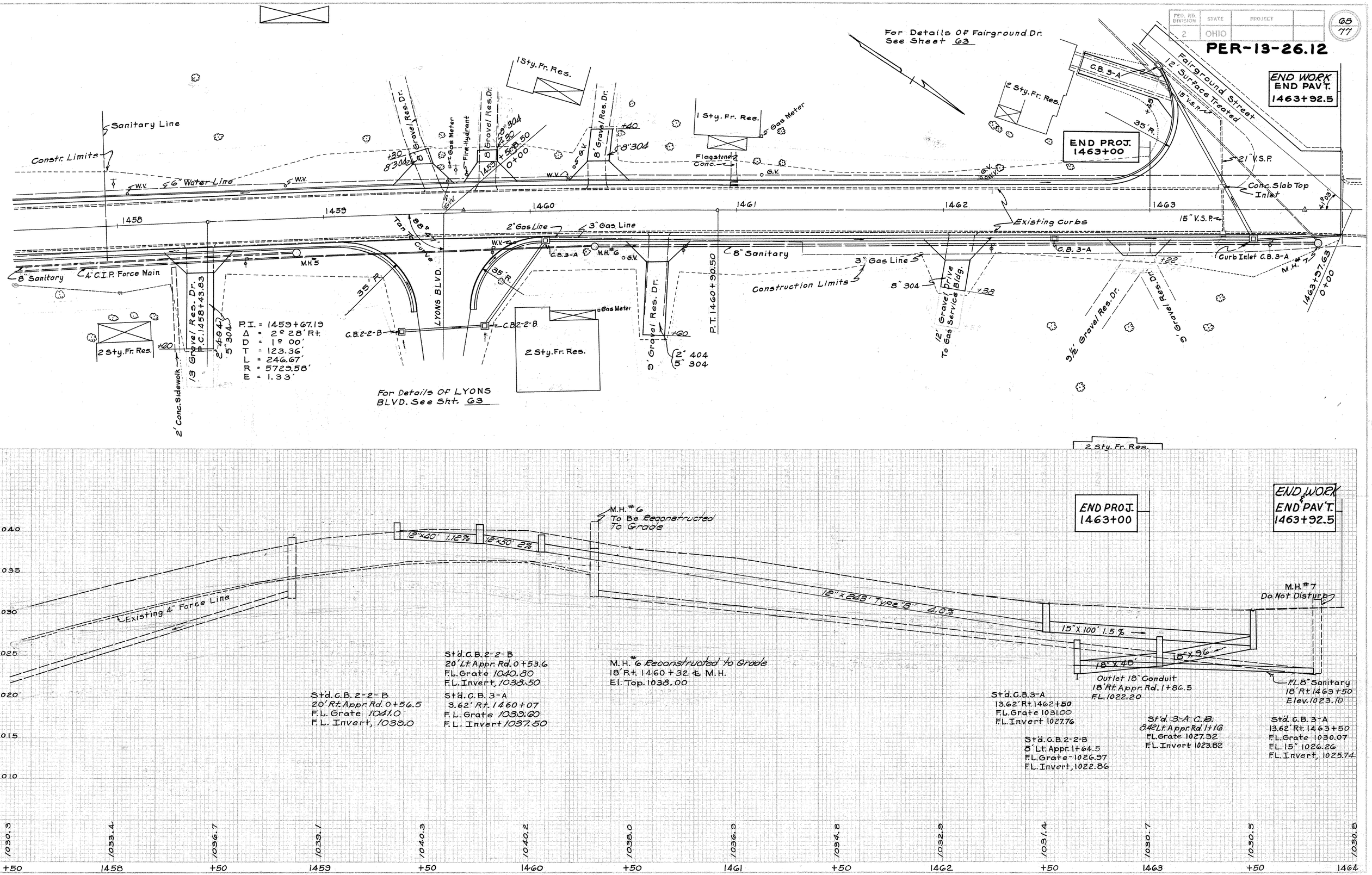




1451+50-1457+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

PER-13-26.12

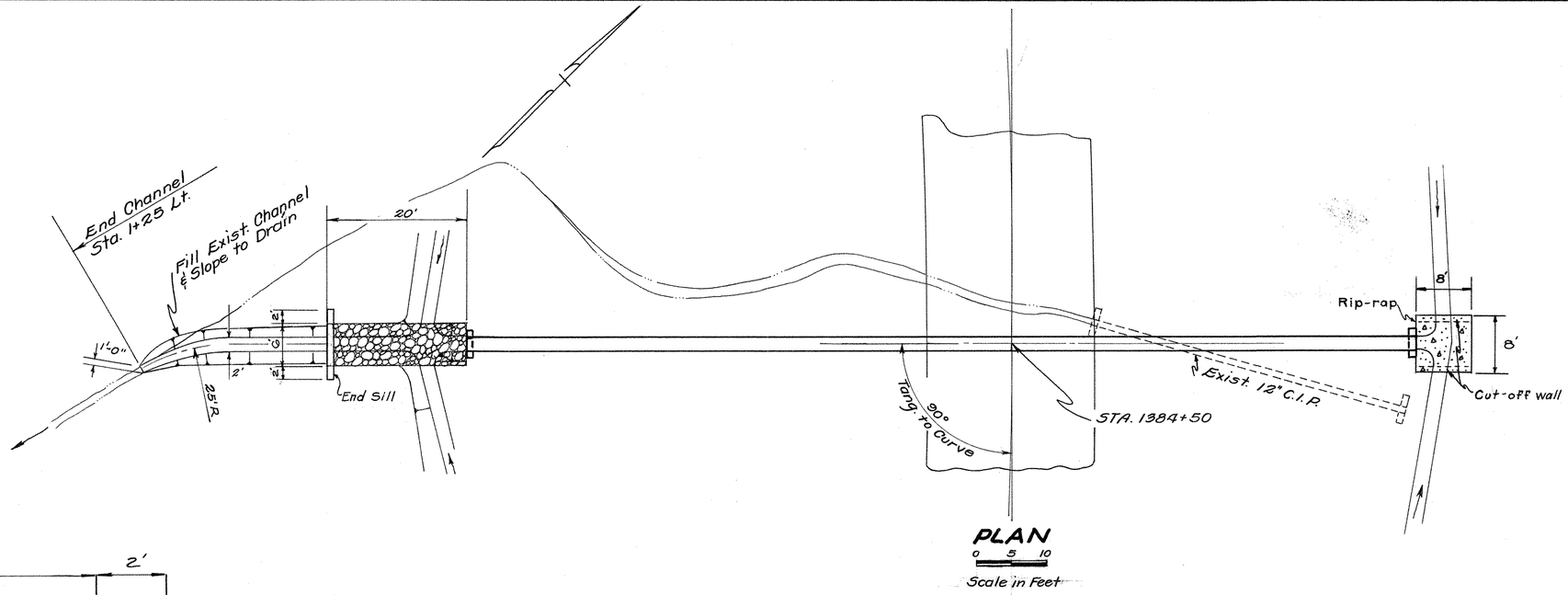


1457+50 – 1463+97.63

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

66/77

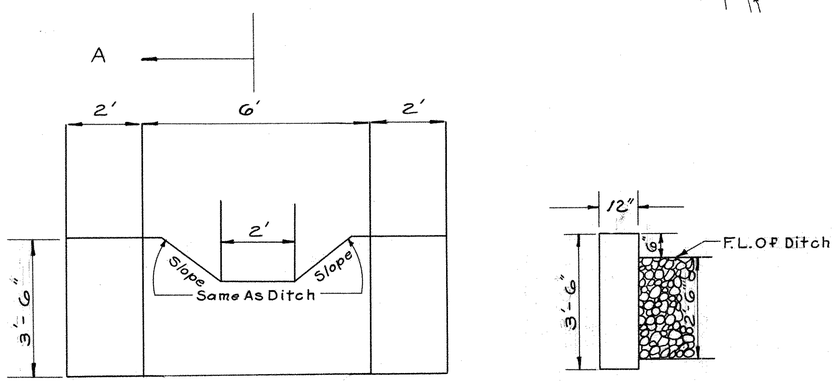
PER-13-2622



PLAN

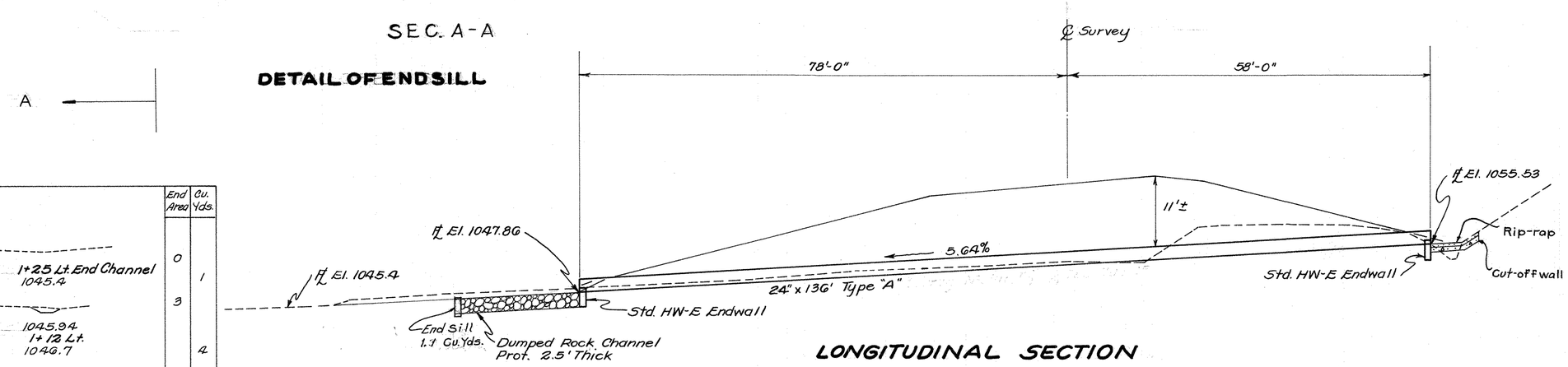
0 5 10

Scale in Feet



SEC. A-A

DETAIL OF ENDSILL



LONGITUDINAL SECTION

CULVERT DATA

TYPE: Culvert Std. Drwg. MC-4 & HW-E
SIZE: 24" x 136'
WORK REQUIRED: Remove existing 12" C.I.P., install culvert as shown using 24" Conduit. Construct Std. HW-E Endwalls. Place Dumped Rock Channel at Outlet. Excavate Outlet Channel as shown. Construct End Sill

ESTIMATED QUANTITIES

Item	Description	Quantity	Unit
603	24" Conduit Type "A" with Class "B"		
	Bedding 706.02 Cl. III or 706.08 E.S.	136	Lin. Ft.
602	Concrete Masonry	1.9	Cu. Yds.
601	Dumped Rock Channel Protection	11	Cu. Yds.
202	Pipe Removed	46	Lin. Ft.
203	Excavation	5	Cu. Yds.
601	Rip-rap 6" Reinforced Conc. Slab	7	Sq. Yds.

Drainage Area = 11 Ac. Q25 = 28 c.f.s.

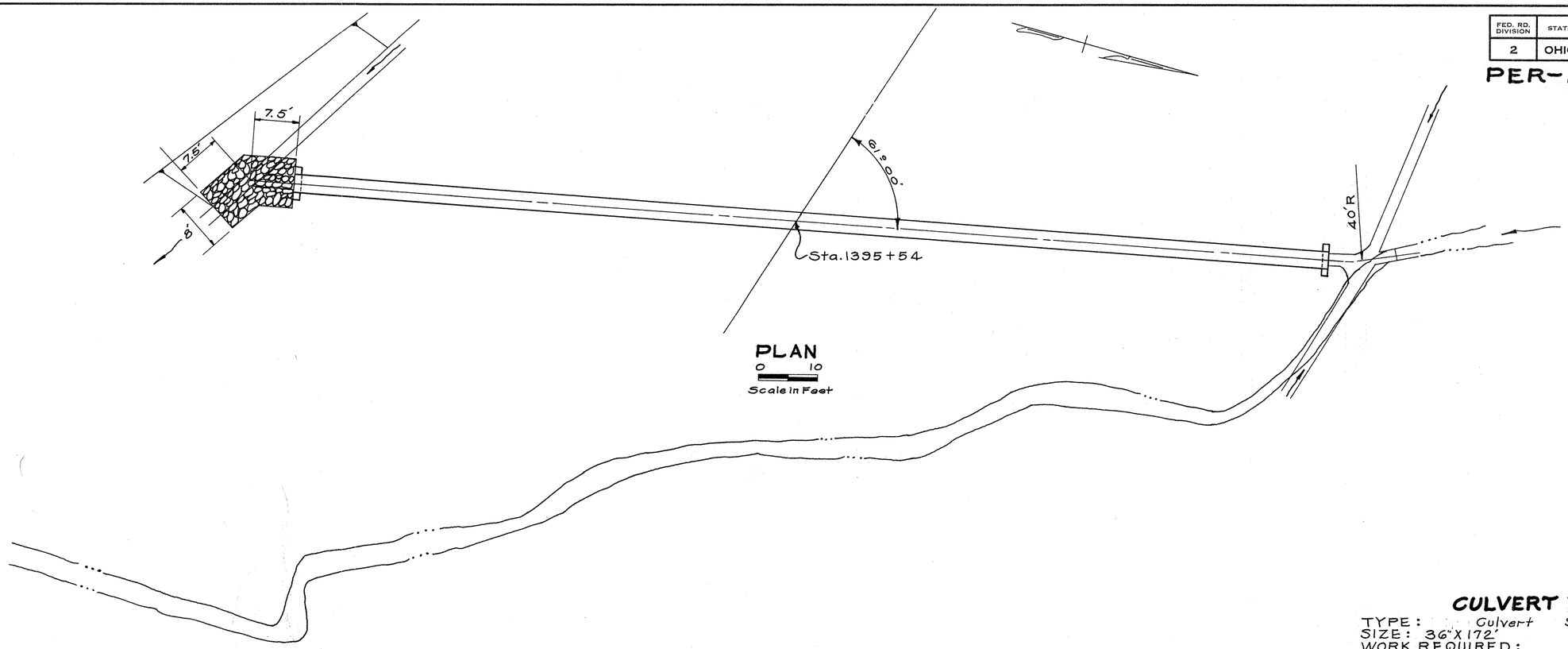
1	Sta. 1384+50	P.C. 24" x 136'	PER-13-2622

Note:-
See Typical Detail Of Cut Off Wall On Sheet-6

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

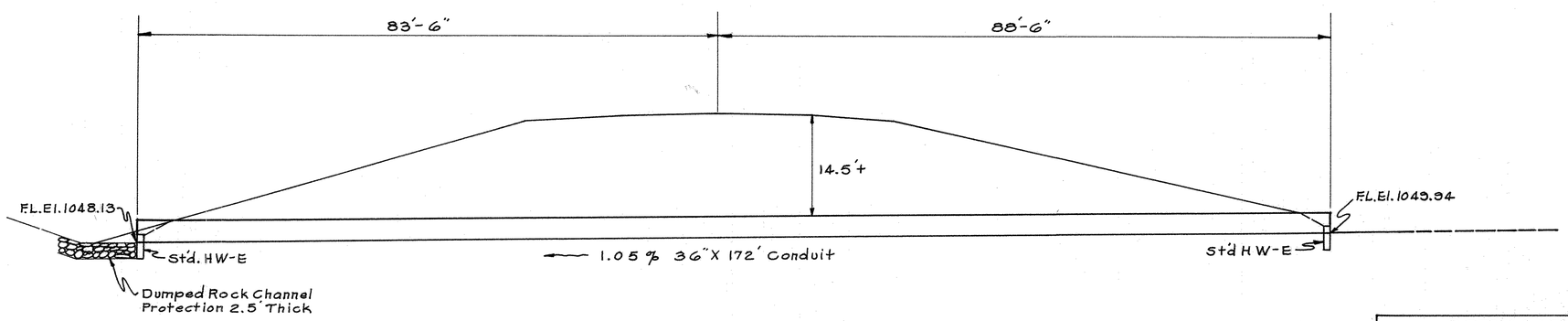
67/77

PER-13-26.12



CULVERT DATA

TYPE: Culvert Std. Drwg. MC-4 & HW-E
SIZE: 36" X 172'
WORK REQUIRED:
Install new conduit as shown using 36" conduit Type "A". Construct Std. HW-E Endwalls. Place Dumped Rock Channel Protection at outlet.



LONGITUDINAL SECTION

ESTIMATED QUANTITIES

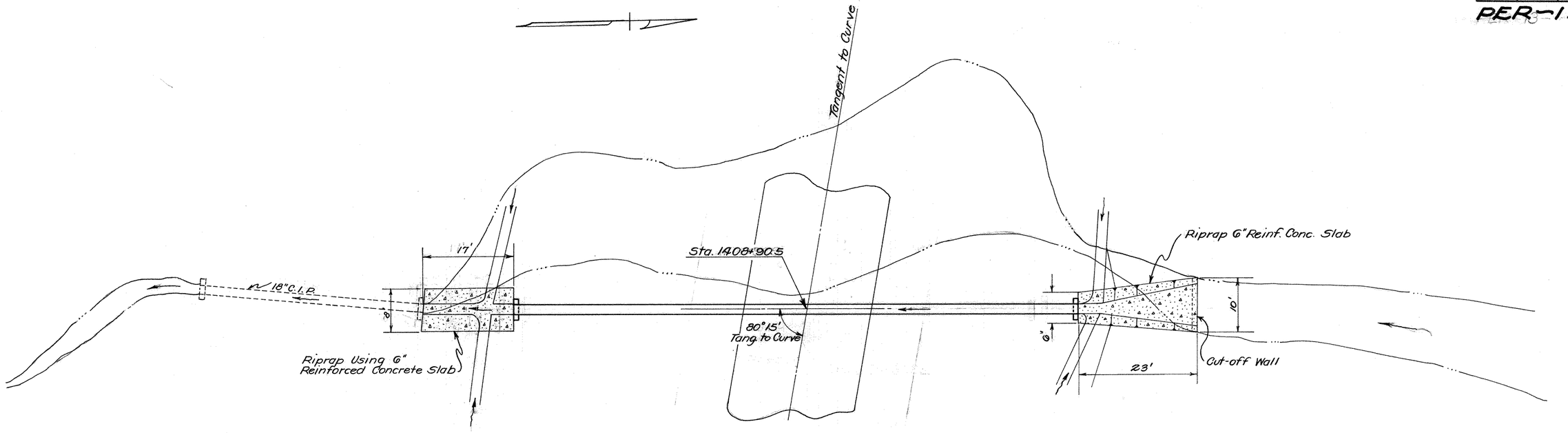
Item	Description	Quantity	Unit
603	36" 706.02 Class IV. Conduit Type "A"	172	Lin. Ft.
	With Class "B" Bedding		
602	Concrete Masonry	1.2	Cu. Yds.
601	Dumped Rock Channel Protection	11	Cu. Yds.

Drainage Area = 31.4 A^c Q25 = 1.0 X 1.0 X 0.65 X 88 = 57 c.f.s.			
2	Sta. 1395+54	P.C. 36" X 172'	PER-13-2643

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

68
77

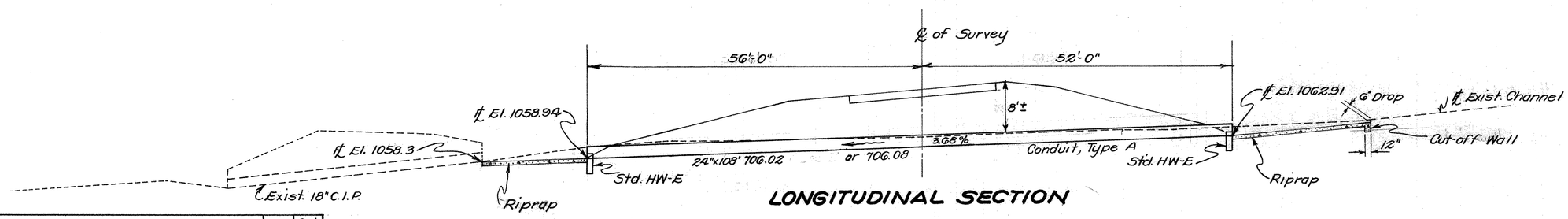
PER-13-26.12



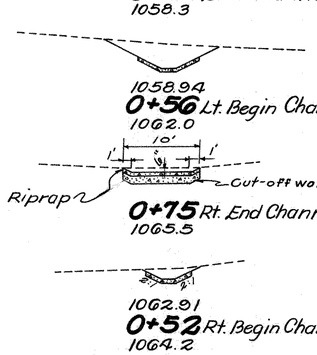
PLAN

0 5 10

Scale in Feet



LONGITUDINAL SECTION



	E.A.	C.Y.
0+73 End Channel 1058.3	0	
		8
1058.94 **0+56** Lt. Begin Channel 1062.0	27	
	5	
0+75 Rt. End Channel 1065.5		
		5
1062.91 **0+52** Rt. Begin Channel 1064.2	7	
Total		13

CROSS SECTIONS

0 5 10

Scale in Feet

Note:—
See Typical Detail Of Cut Off Wall On Sheet-6

CULVERT DATA

TYPE: Culvert Std. Drwgs. ~~NG-4~~ HW-E
SIZE: 24" x 108'
WORK REQUIRED:
Install new culvert using 24" Type A Conduit
Excavate channel at inlet and outlet as shown. Place riprap using 6" Reinforced Concrete Slab at inlet and outlet as shown.

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
603	24" 706.02 or 706.08 Conduit, Type A with Cl. B Bedding	108	Lin. Ft.
602	Concrete Masonry	0.8	Cu. Yds.
202	Excavation	13	Cu. Yds.
601	Riprap 6" Reinforced Concrete Slab	36	Sq. Yds.

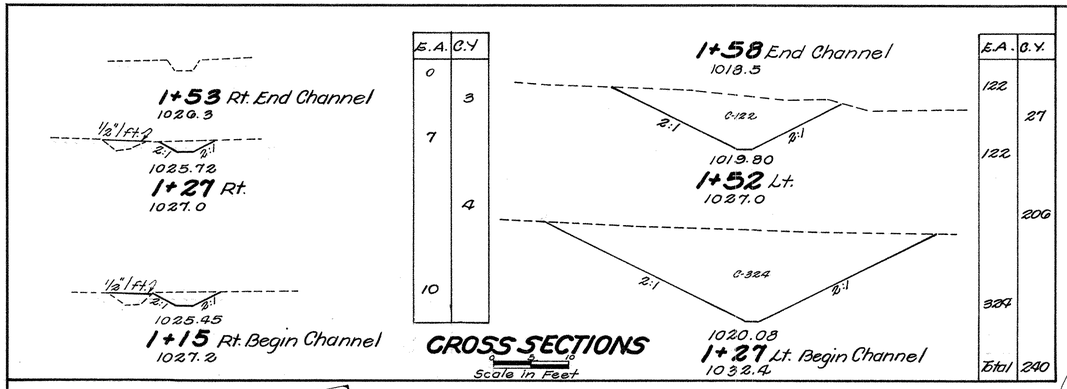
Drainage Area = 8.2 Acres Q_{25} = 24 c.f.s.

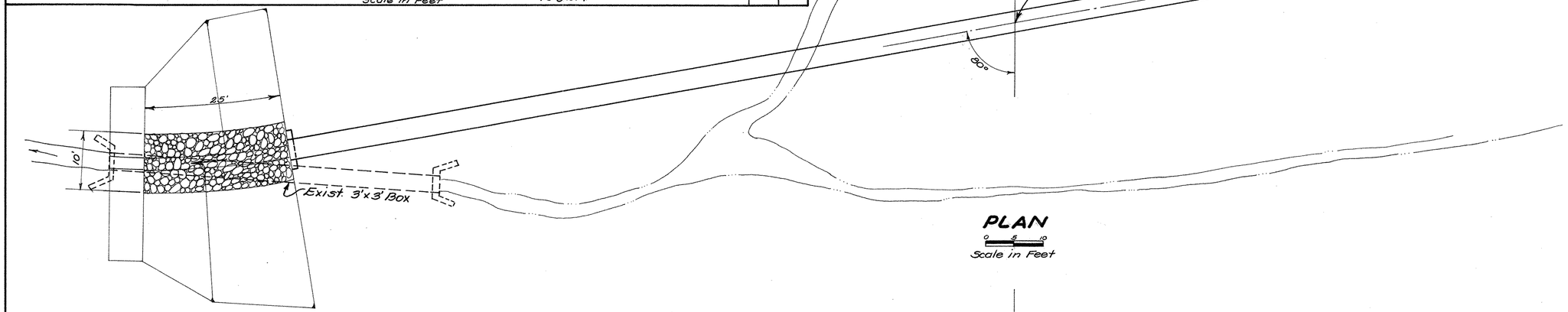
3	Sta. 1408+90.5	24" x 108'	PER-13-26.69

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

69
77

PER-13-26.12





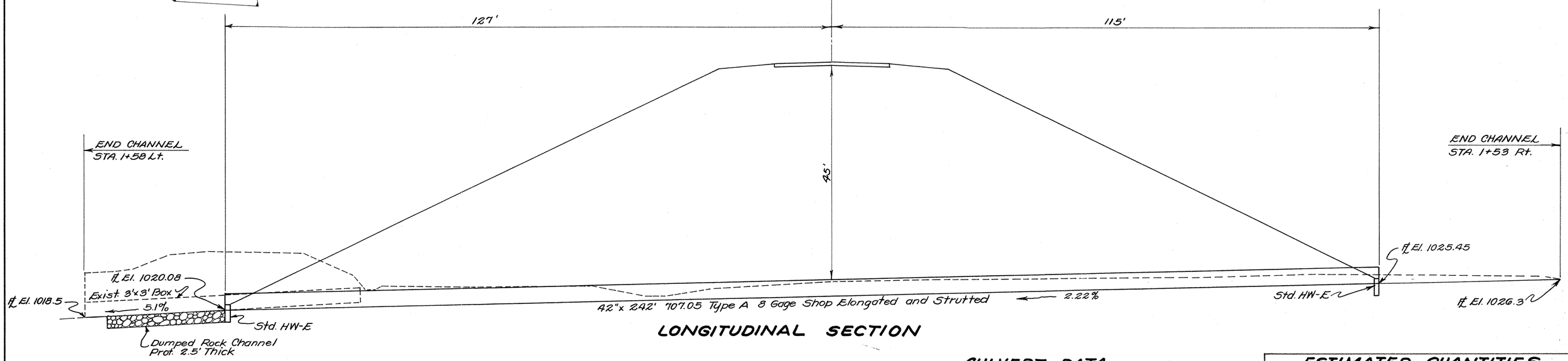
PLAN

0 5 10
Scale in Feet

NOTE:

ELONGATION OF C.M.P

The 42" corrugated metal pipe shall be shop strutted by use of horizontal wires to produce and maintain a 5% vertical elongation. The wire struts shall be satisfactorily removed from the inside of the pipe immediately after completion of the overlying embankment construction.



LONGITUDINAL SECTION

CULVERT DATA

TYPE: Pipe Culvert
Std. Drwgs.: ~~MC-4~~ & HW-E
SIZE: 42" x 242'
WORK REQUIRED:
Remove existing 3' x 3' box culvert and install culvert as shown using 42" Conduit. Excavate channel inlet and outlet as shown. Place dumped rock channel protection at outlet.

ESTIMATED QUANTITIES

Item	Description	Quantity	Unit
603	42" 707.05 Conduit Type A 8 Gage Shop Elongated & Strutted with Class B Bedding	242	Lin. Ft.
602	Concrete Masonry	1.5	Cu. Yds.
601	Dumped Rock Channel Protection	23	Cu. Yds.
203	Excavation	240	Cu. Yds.
202	Removal of Existing Structure	Lump	Lump

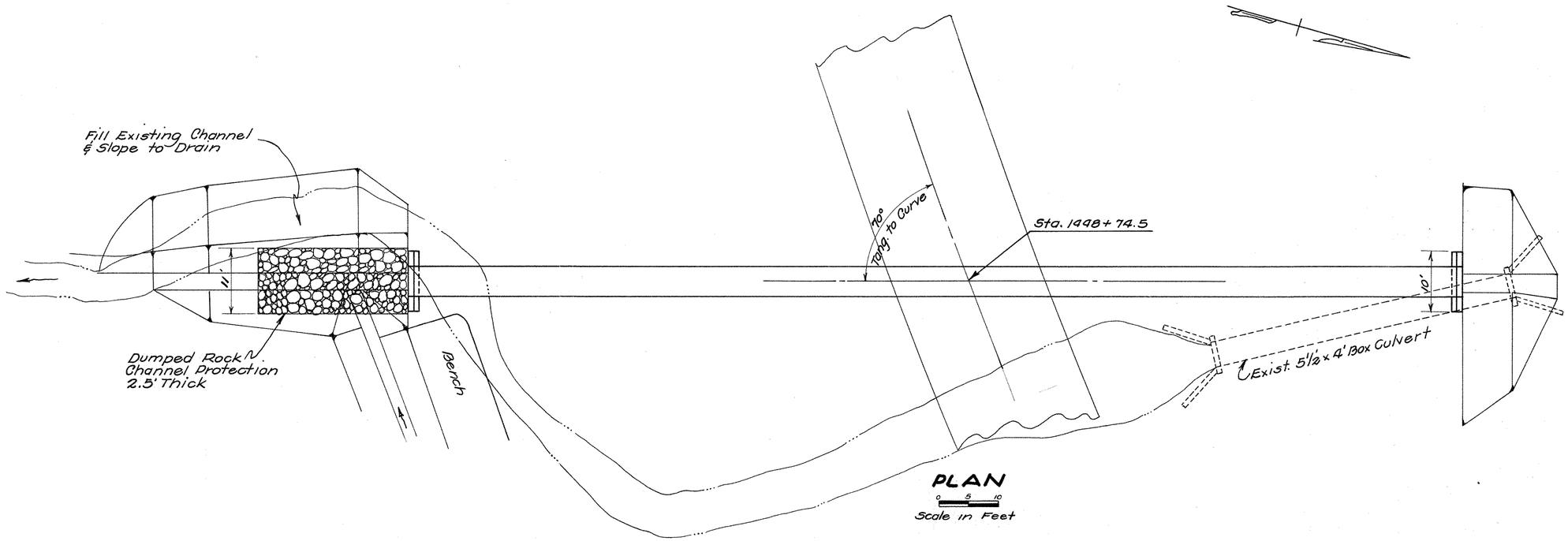
Drainage Area = 60 Acres Q_{25} = 1.0 × 1.0 × 0.65 × 140 = 91 c.f.s.

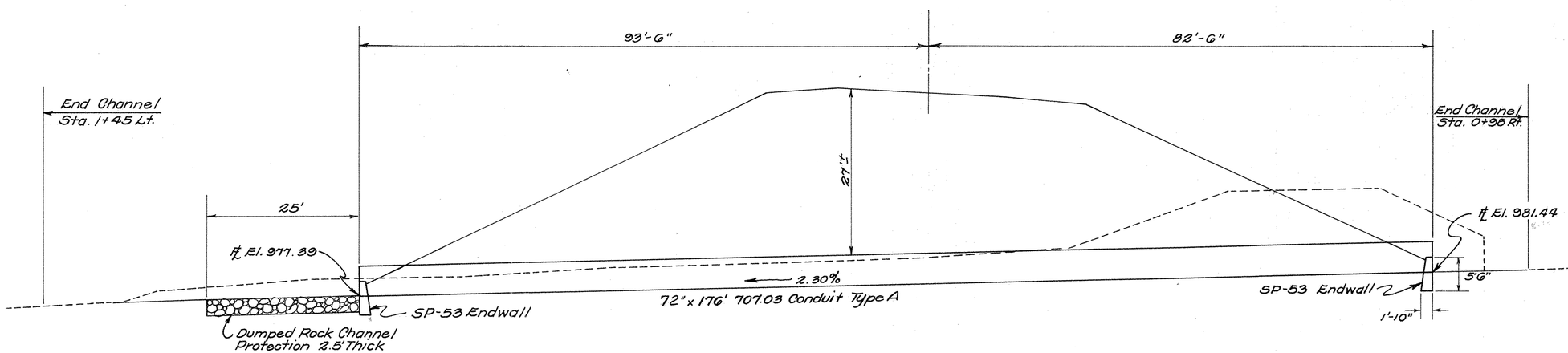
4	Sta. 1419+13.40	P.C. 42" x 242'	PER-13-26.89

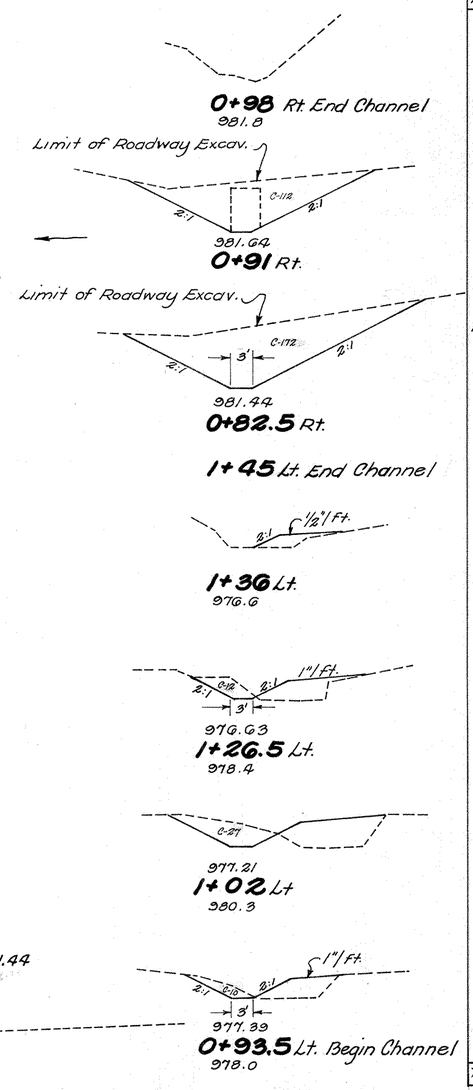
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

70
77

PER-13-26.12







	E.A.	C.Y.
	0	
		15
	112	
		45
	172	
	0	
		2
	12	
		18
	27	
		6
	10	
Total		86

CROSS SECTIONS

0 10
Scale in Feet

CULVERT DATA

TYPE: Pipe Culvert — Std. Drwgs. ~~MC-4e~~ S.P. 53
SIZE: 72"x 176'
WORK REQUIRED:
Remove existing 5½'x 4' box culvert and install new culvert using 72" Conduit 707.03 Type A. Excavate inlet and outlet channel as shown. Place dumped rock channel protection at outlet.

* 10-8 Ga.

ESTIMATED QUANTITIES

Item	Description	Quantity	Unit
*603	72" Conduit 707.03 Type A, with Cl. B Bedding	176	Lin. Ft.
602	Concrete Masonry	5.9	Cu. Yds.
203	Excavation	86	Cu. Yds.
202	Removal of Existing Structure	Lump	Lump
601	Dumped Rock Channel Protection	25	Cu. Yds.

Drainage Area = 144.7 Ac. Q_{25} = 1.0 x 1.0 x 0.65 x 250 = 162 c.f.s.

5	Sta. 1448+74.5	P.C. 72" x 176'	PER-13-2744

#31423
Received April 5 1966 Time 10:55
Recorded April 5 1966
Plat Book 7 Page 156
Signed James A. O'Hara Recorder, Perry Co., Ohio
Fee [illegible] Paid

LOCATION PLAN
PER-13-26.12 PERRY COUNTY
NEWARK-NEW LEXINGTON ROAD

PER-13-26.12

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

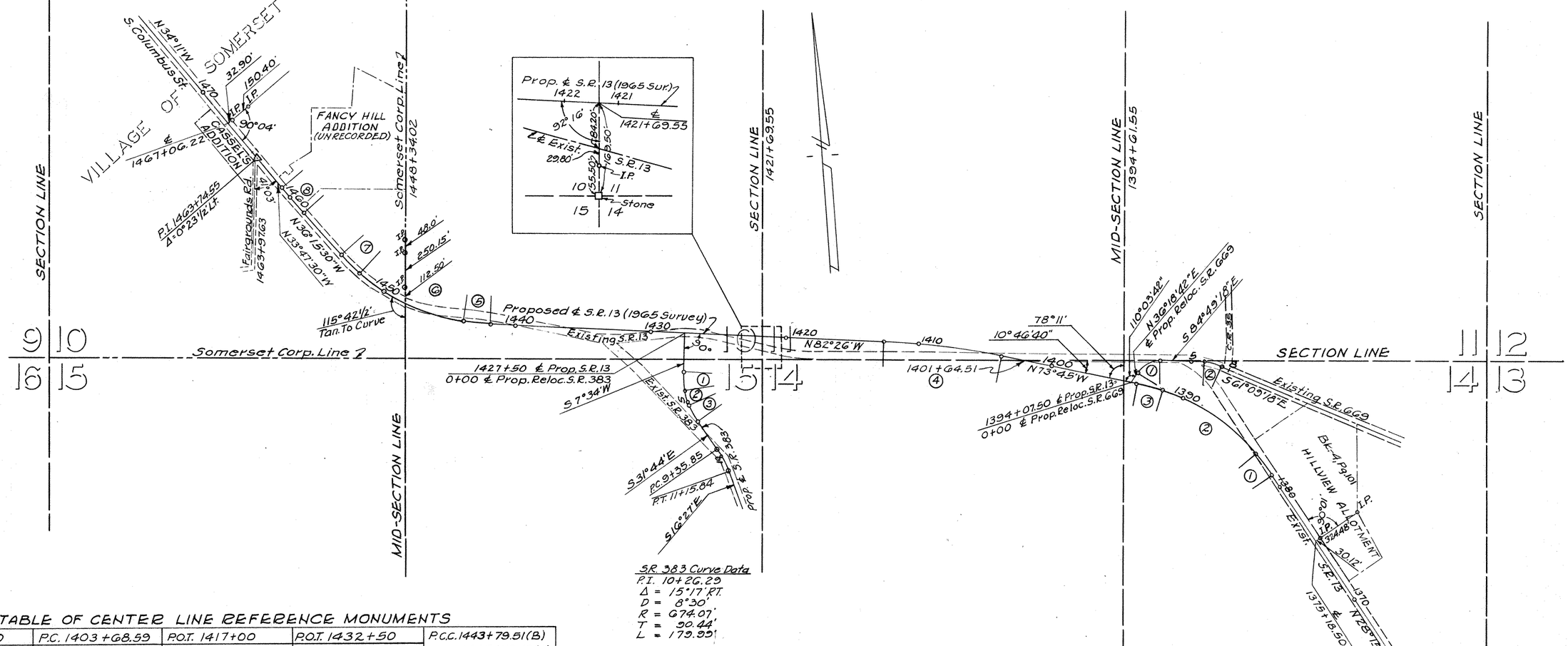
71/77

1/7

Note: This Instrument Was Prepared By The Ohio Dep't. Of Highways Under The Supervision Of James T. Holden, P.E. No. 14456.
Signed: James T. Holden
Registered Surveyor No. 3766.
Resident Division Deputy Director.
Date: 3-14-66

400 0 400 800
Scale In Feet

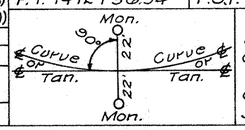
READING TWP. T-16 R-16
SECTIONS 10,11,14 & 15



S.R. 383 Curve Data
P.I. 10+26.29
Δ = 15°17' Rt.
D = 8°30'
R = 674.07'
T = 90.44'
L = 179.99'

TABLE OF CENTER LINE REFERENCE MONUMENTS

P.O.T. 1377+00	P.C. 1403+68.59	P.O.T. 1417+00	P.O.T. 1432+50	P.C.C. 1443+79.51(B)
P.C. 1381+00.01	P.O.C. 1408+00	P.O.T. 1423+00	P.O.T. 1437+00	= 1443+79.49(A)
P.C.C. 1383+00.02(B)	P.T. 1412+36.94	P.O.T. 1428+00	P.C. 1441+79.50	P.O.C. 1448+00
= 1383+00.00(A)				P.C.C. 1452+33.87
P.O.C. 1387+50				P.T. 1454+33.88(B)
P.O.C. 1391+50				= 1454+33.86(A)
P.T. 1393+37.51(B)				P.C. 1458+43.83
= 1393+37.49(A)				P.T. 1460+90.50
P.O.T. 1398+50				P.I. 1463+74.55



All Center Line Reference Monuments will be set after construction at right angles to and 22.0 feet on each side of the Center Line at the Stations shown in the table.

CURVE DATA

PROPOSED CENTER LINE S.R. 13

1	2	3	4	5	6	7	8
P.C. 1381+00.01	P.C.C. 1383+00.02(B)	P.C.C. 1391+37.50	P.C. 1403+68.59	P.C. 1441+79.50	P.C.C. 1443+79.51(B)	P.C.C. 1452+33.87	P.C. 1458+43.83
P.C.C. 1383+00.02(B)	= 1383+00.00(A)	P.T. 1393+37.51(B)	P.T. 1412+36.94	P.C.C. 1443+79.51(B)	= 1443+79.49(A)	P.T. 1454+33.88(B)	P.T. 1460+90.50
= 1383+00.00(A)	P.C.C. 1391+37.50	= 1393+37.49(A)	P.I. 1408+03.64	= 1443+79.49(A)	P.C.C. 1452+33.87	= 1454+33.86(A)	P.I. 1459+67.19
Δ = 6°00' Lt.	Δ = 33°30' Lt.	Δ = 6°00' Lt.	Δ = 8°41' Lt.	Δ = 6°00' Rt.	Δ = 34°10'30" Rt.	Δ = 6°00' Rt.	Δ = 2°28' Rt.
D = 2.99987°	D = 4°00'	D = 2.99987°	D = 1°00'	D = 2.99987°	D = 4°00'	D = 2.99987°	D = 1°00'
R = 1909.94'	R = 1432.39'	R = 1909.94'	R = 5729.58'	R = 1909.94'	R = 1432.39'	R = 1909.94'	R = 5729.58'
T = 100.10'	T = 431.11'	T = 100.10'	T = 435.05'	T = 100.10'	T = 440.32'	T = 100.10'	T = 123.36'
L = 200.01'	L = 837.50'	L = 200.01'	L = 868.33'	L = 200.01'	L = 854.38'	L = 200.01'	L = 246.67'

PROPOSED CENTER LINE S.R. 669

1	2
P.C. 0+82.74	P.C. 6+14.08
P.T. 2+89.29	P.T. 7+45.56
P.I. 1+96.17	P.I. 6+80.77
Δ = 58°52' Rt.	Δ = 23°40' Rt.
D = 28°30'	D = 18°00'
R = 201.04'	R = 318.31'
T = 113.43'	T = 66.69'
L = 206.55'	L = 131.48'

PROPOSED CENTER LINE S.R. 383

1	2	3
P.C. 2+80.24	P.C.C. 4+13.65(B)	P.C.C. 5+41.05
P.C.C. 4+13.65 (B)	= 4+13.55(A)	P.T. 6+74.46 (B)
= 4+13.55(A)	P.C.C. 5+41.05	= 6+74.36 (A)
Δ = 12°00' Lt.	Δ = 15°18' Lt.	Δ = 12°00' Lt.
D = 8.99448°	D = 12°00'	D = 8.99448°
R = 637.01'	R = 477.46'	R = 637.01'
T = 66.95'	T = 64.13'	T = 66.95'
L = 133.41'	L = 127.50'	L = 133.41'

TOTAL NO. OWNERS ~ 32

SUMMARY OF ADDITIONAL R/W REQUIRED

PER.~13~26.12
R/W PLAN

2/7

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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Par No.	Owner	Type Fund	Sheet No.	Deed Records Book	Deed Records Page	Deed Area	Total P.R.O.	To Be Acquired Land	To Be Acquired Bldg	Residue Left	Residue Right	Remarks	Easement Recorded Book	Easement Recorded Page
1	Leo Hines & Jane Hines	F	4	173	213	43.81	0	0.04	—	42.93	—			
1A		F	4					0.07	—	—	—			
1B		F	4					0.77	—	—	—			
2	Junior O'Neil & Kathryn O'Neil	F	4	179	164	1.310	0	0.09	—	—	1.220			
2-T	Pt. Lots 5 & 6 Hillview Allotment	F	4	179	267			0.04	—	—	—			
2WA		F	4					—	—	—	—			
3	Frank J. Koracin & Helen Koracin	F	4	177	455	0.655	0	0.08	—	—	0.575			
	Pt. Lot 7 Hillview Allotment													
4	Albert L. Fogarty & Sophia J. Fogarty	F	4	180	525	1.321	0	0.12	—	—	1.201			
	Pt. Lots. 8 & 9 Hillview Allotment			177	653									
5	The Ohio Power Co.	F	4	102	614	0.39	0.01	0.13	—	0.25	—			
5WA		F	4					—	—	—	—			
6	George Sakas & Alexandra Sakas	F	4	178	542	3.222	0.37	0.04	—	—	2.812			
				179	508									
7	Harry W. Koblentz & Frances P. Koblentz	F	4	179	588	1.24		NO	PARCEL					
8	John D. Emmert & Thomas H. Johnson, Jr.	F	4	174	583	19.19	0.33	2.90	—	14.62	1.34			
9-T	Mary K. Brown	F	4	148	440	1.00	0.30	0.03	—	—	0.70			
10	Clyde W. Drumm & Marie A. Drumm	F	4	164	450	1.33	0.37	0.03	—	—	0.93			
10-T		F	4	165	6			0.10	—	—	—			
11	Augusta C. Caywood	F	4 & 5	156	252	2.57	0.90	0.02	—	—	1.65			
				95	139									
12	Harold A. Mossman & Mary J. Mossman	F	5	158	241	59.61	0.41	0.54	Yes	—	58.66			
12-T		F	5					0.21	Yes	—	—			
13	Robert E. Shumaker & Nancy A. Shumaker	F	5	180	258	3.00	0.23	0.43	—	—	2.34			
13-T		F	5					0.06	—	—	—			
14	Rexford L. Masterson & Nancy Sue Masterson	F	5	173	249	1.007		NO	PARCEL					
15	Ralph A. Hammer & Dorothy E. Hammer	F	4 & 5	140	532	262.42	2.79	2.32	—	262.31	—			
15WA		F	5	179	504			—	—	—	—			
				179	356									
16	Roy S. Raney & Helen Raney	F	5	149	5.80	1.16		NO	PARCEL					
				173	102									
17	Bertha Griffith	F	5	180	350	28.085		NO	PARCEL					
				155	570									
18	Thomas L. Spohn & Charlotte Spohn	F	5	174	656	1.075		NO	PARCEL					
				158	435									
19	Louis Edward Brown & Erma Brown	F	5	108	300	30.14	1.82	5.50	—	—	22.82			
19-T		F	5					0.02	—	—	—			
19-T-1		F	5					0.01	—	—	—			
19-T-2		F	5					0.01	—	—	—			
20	Lewis Edward Brown	F	5	101	323	100.00	0.04	0.07	—	—	99.89			
21	Frank Scallan & Alice Scallan	F	6	126	641	67.288	2.35	1.55	—	63.388	—			
21-T		F	5	138	76			0.01	—	—	—			
21-T-1		F	6					0.04	—	—	—			
22	Glenn Steen & Margaret Steen	F	6	169	201	1.152		NO	PARCEL					
23	Otis Forgrave & Helen Forgrave	F	6	161	238	4.55	1.57	1.18	—	1.78	—	Deed Area Calc.		
23A		F	6					0.02	—	—	—			
23-T		F	6					0.10	—	—	—			
24	Charles G. Slack & Edith E. Slack	F	5 & 6	175	483	1.30	0	0.13	—	1.17	—			
24-T		F	5					0.02	—	—	—			
24WA		F	6					—	—	—	—			
25	Thomas H. Johnson, Sr. & Thomas H. Johnson, Jr.	F	5, 6 & 7	176	334	149.92	1.43	3.22	—	—	145.27			
25-T		F	6					0.14	—	—	—			
25-T-1		F	6					0.17	—	—	—			

Par No.	Owner	Type Fund	Sheet No.	Deed Records Book	Deed Records Page	Deed Area	Total P.R.O.	To Be Acquired Land	To Be Acquired Bldg	Residue Left	Residue Right	Remarks	Easement Recorded Book	Easement Recorded Page
26	Jennie Rusler (Life Estate)	F	6 & 7	173	337	62.00	1.17	2.94	—	57.89	—			
26-T	William V. Rusler & Pauline E. Rusler (Fee)	F	6	166	107			0.38	—	—	—			
26WA		F	7	107	464			—	—	—	—			
27	Ross S. Underwood & Mary Ann Underwood	F	7	137	597	28.29	0.64	0.71	—	26.94	—			
27-T		F	7					0.05	—	—	—			
28	Village of Somerset	F	7	121	273	6.00	0	0.12	—	5.88	—			
29	Thomas E. Olive & Sharon Kay Olive	F	7	179	9	1.65	0.13	0.03	—	—	1.49			
29T		F	7	184	179			0.25	—	—	—			
30T	Lewis W. Beard & Marie I. Beard	F	7	165	48	5.10	0	0.01	—	—	5.10			
				156	428									
31-T	Miles D. King	F	7	110	636	0.55	0	0.02	—	—	0.55			
32-T	J.R. Underwood & Hazel Underwood	F	7	175	316	0.45	0.05	0.01	—	0.40	—			
33-T	Austin J. Sweeney & Pauline E. Sweeney	F	7	153	504	0.23	0	0.01	—	—	0.23			
33T-1		F						0.01	—	—	—			
34	Thomas W. Ream & Ethel L. Ream		7	172	498	0.40		No	Parcel					
35	Oscar G. Miller & Audrey Faye Miller		7	166	388	1.16		No	Parcel					
				171	402									
				148	353									
36	John T. McHale & Margaret V. McHale		7	150	112	0.46		No	Parcel					
37	William Berry		7	111	447	10.96		No	Parcel					
				112	179									
38-T	B.P. Scallan	F	7	162	525	0.77	0.09	0.02	—	—	0.68	Deed Area Calc.		
				183	143									
39	Thomas B. Underwood & Patricia M. Underwood		7	183	146	0.68		No	Parcel					
				183	12									
				182	394									
40-S	Thomas B. Underwood & Rufus F. Dornbirer	F	7	182	394	12.89	0.03	0.01	—	—	12.86			
40-T		F	7					0.02	—	—	—			
41-T	Wilma F. Green	F	7	158	472	0.44	0	0.01	—	0.44	—	Deed Area Calc.		
42	Edna E. Wilson (Fee)		7	124	614	0.32		No	Parcel			Deed Area Calc.		
	Joseph Lyons & Delilah Lyons (L.C.)		7	124	576									
43	James T. Davidson & Alice R. Davidson	F	7	177	495	0.40	0	0.02	—	0.38	—			
43T		F						0.02	—	—	—			
44-T	The Ohio Fuel Gas Co. Inc.	F	7	178	407	0.1265	0.03	0.01	—	—	0.0965			
45	Junie F. Pennington & Ada B. Pennington		7	180	425	1.63		No	Parcel					
46	Hub Developing Co., Inc.		7	184	63	2.00		No	Parcel					

TYPE FUND ~ F

Completion Date ~ 2-7-66

Rev.	Date	Description
1	2-25-66	Rev. Par. 29, Added 29T, 30 & 30T-1.
2	3-14-66	Rev. Par. 29 & 29T Deleted 30T-1 & 30.
3	3-30-66	Rev. Parcels 23 & 25 & 5.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-G34(7)	

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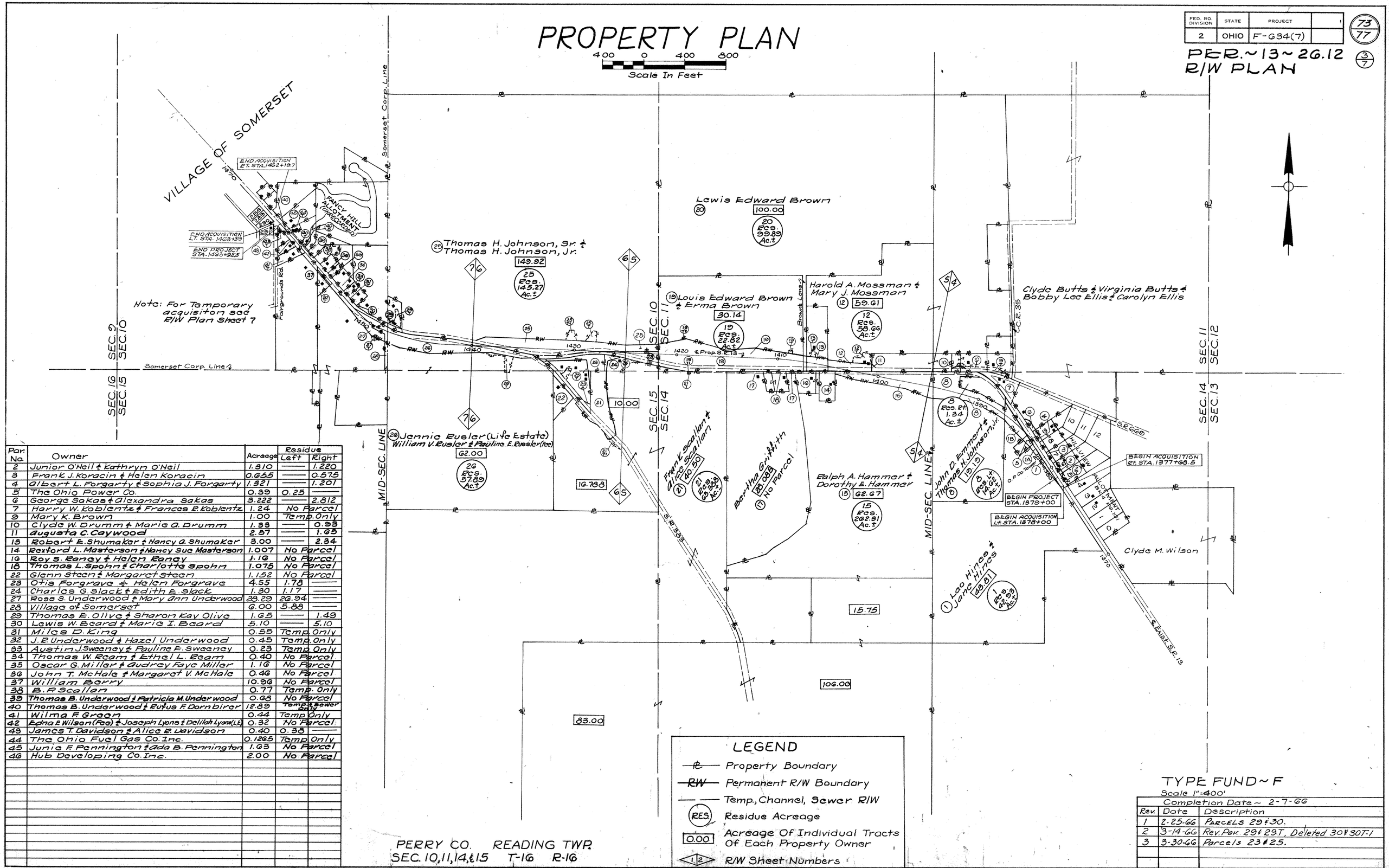
PER.~13~26.12
R/W PLAN

3/7

PROPERTY PLAN

400 0 400 800
Scale In Feet



Par. No.	Owner	Acreage	Residue Left	Residue Right
2	Junior O'Neil & Kathryn O'Neil	1.310	——	1.220
3	Frank J. Koracin & Helen Koracin	0.655	——	0.575
4	Albert L. Forgarty & Sophia J. Forgarty	1.321	——	1.201
5	The Ohio Power Co.	0.39	0.25	——
6	George Sakas & Alexandra Sakas	3.222	——	2.812
7	Harry W. Koblentz & Frances E. Koblentz	1.24	No Parcel	
9	Mary K. Brown	1.00	Temp. Only	
10	Clyde W. Drumm & Marie G. Drumm	1.33	——	0.33
11	Augusta C. Caywood	2.57	——	1.65
13	Robert E. Shumaker & Nancy A. Shumaker	3.00	——	2.34
14	Rexford L. Masterson & Nancy Sue Masterson	1.007	No Parcel	
16	Roy S. Rancy & Helen Rancy	1.16	No Parcel	
18	Thomas L. Spohn & Charlotte Spohn	1.075	No Parcel	
22	Glenn Steen & Margaret Steen	1.152	No Parcel	
23	Otis Forgrave & Helen Forgrave	4.55	1.78	——
24	Charles G. Slack & Edith E. Slack	1.30	1.17	——
27	Ross S. Underwood & Mary Ann Underwood	28.29	26.94	——
28	Village of Somerset	6.00	5.88	——
29	Thomas E. Olive & Sharon Kay Olive	1.65	——	1.49
30	Lewis W. Beard & Marie I. Beard	5.10	——	5.10
31	Miles D. King	0.55	Temp. Only	
32	J. E. Underwood & Hazel Underwood	0.45	Temp. Only	
33	Austin J. Sweeney & Pauline E. Sweeney	0.23	Temp. Only	
34	Thomas W. Ream & Ethel L. Ream	0.40	No Parcel	
35	Oscar G. Miller & Audrey Faye Miller	1.16	No Parcel	
36	John T. McHale & Margaret V. McHale	0.46	No Parcel	
37	William Berry	10.96	No Parcel	
38	B. P. Scallan	0.77	Temp. Only	
39	Thomas B. Underwood & Patricia M. Underwood	0.68	No Parcel	
40	Thomas B. Underwood & Eufus F. Dornbirer	12.89	~~Temp. & sewer~~ Only	
41	Wilma F. Green	0.44	Temp. Only	
42	Edna E. Wilson (Rec) & Joseph Lyons & Delilah Lyons (L.E.)	0.32	No Parcel	
43	James T. Davidson & Alice E. Davidson	0.40	0.38	——
44	The Ohio Fuel Gas Co. Inc.	0.1265	Temp. Only	
45	Junie F. Pennington & Ada B. Pennington	1.63	No Parcel	
46	Hub Developing Co. Inc.	2.00	No Parcel	

LEGEND

- Property Boundary
- Permanent R/W Boundary
- Temp., Channel, Sewer R/W
- (RES.) Residue Acreage
- 0.00 Acreage Of Individual Tracts Of Each Property Owner
- 1 2 R/W Sheet Numbers

PERRY CO. READING TWP.
SEC. 10, 11, 14, & 15 T-16 R-16

TYPE FUND ~ F
Scale 1" = 400'
Completion Date ~ 2-7-66

Rev.	Date	Description
1	2-25-66	Parcels 29 & 30.
2	3-14-66	Rev. Par. 29 & 29T, Deleted 30 & 30T-1
3	3-30-66	Parcels 23 & 25.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-694(7)	

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PER.~13~26.12
R/W PLAN

4/7

Perry Co. Sec. 11 & 14 — Reading Twp. T. 16 R. 16

Coast Guard Data
PI. 1357+31.91
Δ: 45°30' Lt.
Δc: 33°30'
Dc: 4°00'
Rc: 1432.39'
Tc: 751.71'
Es: 123.65'
Lc: 837.50'
Ls: 300'
Xc: 299.67'
Yc: 10.46'
θs: 6°00'
Tc: 431.11'

Leo Hines & Jane Hines
(1) Cont. 0.04 Ac.±
(1-A) Cont. 0.07 Ac.±
(1-B) Cont. 0.77 Ac.±

The Ohio Power Co.
(5) Cont. 0.13 Ac.±
P.R.O. 0.01 Ac.±

John D. Emmert & Thomas H. Johnson, Jr.
(8) Cont. 2.90 Ac.±
P.R.O. 0.33 Ac.±

George Sakas & Alexandra Sakas
(6) Cont. 0.04 Ac.±

Frank J. Koracin & Helen Koracin
(3) Cont. 0.08 Ac.±

Albert L. Fogarty, Sophia J. Fogarty
(4) Cont. 0.12 Ac.±

Harry W. Koblentz & Frances P. Koblentz
(7) No Parcel

Mary K. Brown
(9/T) Cont. 0.03 Ac.±

Clyde Butts, Et Al

Clyde W. Drumm & Marie A. Drumm
(10) Cont. 0.03 Ac.±
P.R.O. 0.37 Ac.±
(10/T) Cont. 0.10 Ac.±

Junior O'Neil & Kathryn O'Neil
(2) Cont. 0.09 Ac.±
(2/T) Cont. 0.04 Ac.±

Clyde M. Wilson — Eugene Dibari & Anna Dibari — Clyde M. Wilson — Ellen J. Shaner & Donald E. Shaner — Etta Ryan — Edward Poling & Imogene Poling

HILLVIEW ALLOTMENT BK. 4 PG. 101

Perry Co. Sec. 11 & 14 — Reading Twp. T-16 R-16

R/W Curve Data
Δ = 6°00' Lt.
D = 2.99987°
R = 1909.86'
T = 100.10'
L = 200.01'

S.R. 669 Curve Data
PI 6+80.77
Δ = 23°40' Rt.
D = 18°00'
R = 318.31'
T = 66.69'
L = 131.48'
E = 6.91'

S.R. 669 Curve Data
PI 1+96.17
Δ = 58°52' Rt.
D = 28°30'
R = 201.04'
T = 113.43'
L = 206.55'
E = 29.79'

BEGIN ACQUISITION LT. STA. 1378+00
BEGIN PROJECT STA. 1379+00
BEGIN ACQUISITION RT. STA. 1377+68.5

Utilities

Electric	Ohio Power Co., Canton
Telephone	Ohio Bell Telephone Co., Columbus, O.
Telephone	National Gas Co., Newark, O.
Gas	Ohio Fuel Gas Co., Columbus, O.
Oil & Gas	Dell Oil Co., Mt. Gilead, O.

TYPE FUND~F
50 0 50 100
Scale in Feet

Completion Date ~ 12-21-66

Rev.	Date	Description
1	4-1-66	Revised Corners Par. 1A, 5, & 5WA
2	4-13-66	" " " " "

PER.~13~26.12 STA. 1371+00 ~ 1395+00

4

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

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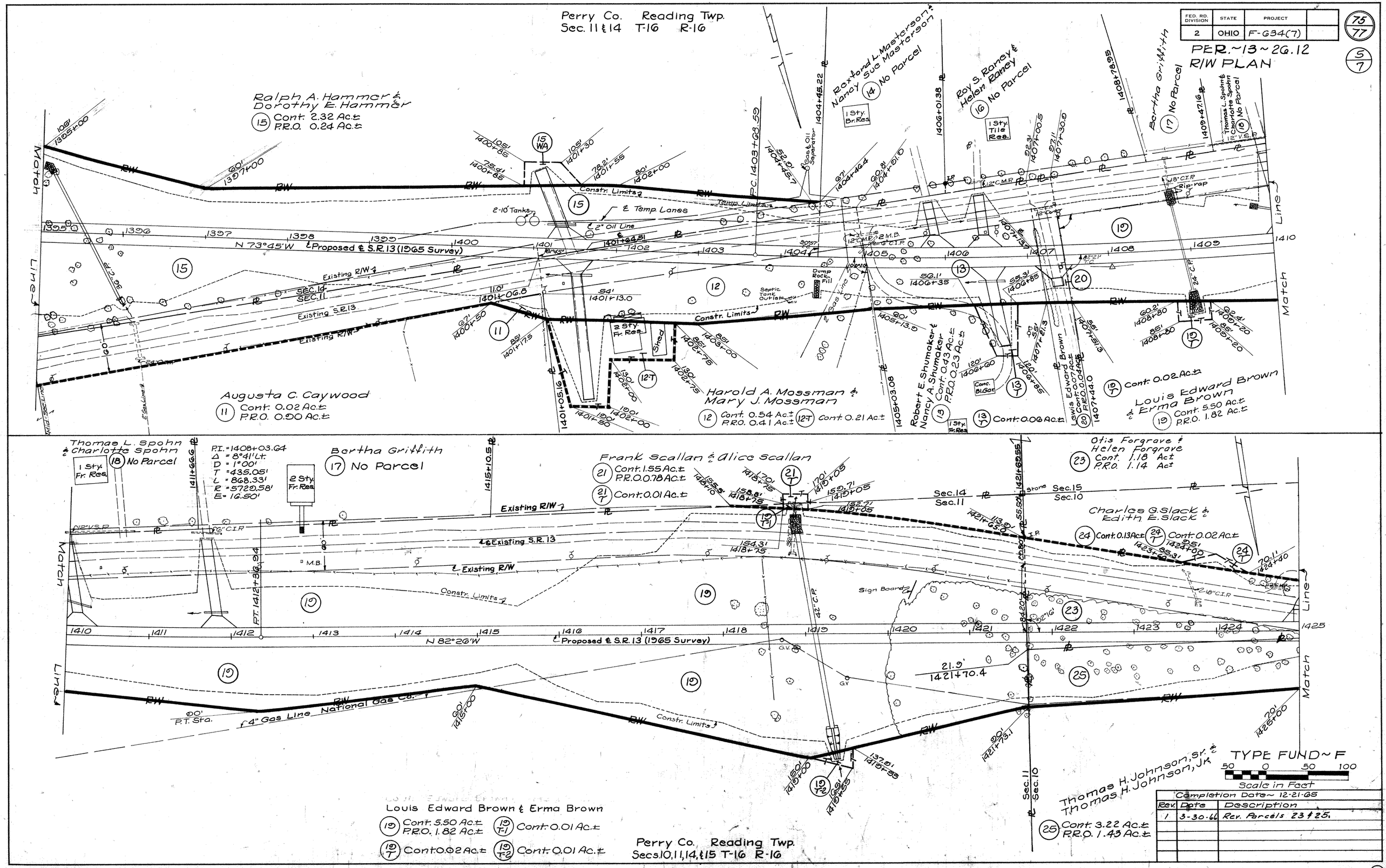
5/7

PER.~13~26.12

R/W PLAN

Perry Co. Reading Twp.
Secs. 11 & 14 T-16 R-16



Louis Edward Brown & Erma Brown
(19) Cont. 5.50 Ac.± P.R.O. 1.82 Ac.±
(19-T) Cont. 0.02 Ac.±
(19-T1) Cont. 0.01 Ac.±
(19-T2) Cont. 0.01 Ac.±

Perry Co. Reading Twp.
Secs. 10, 11, 14, & 15 T-16 R-16

Completion Date ~ 12-21-65

Rev.	Date	Description
1	3-30-66	Rev. Parcels 23 & 25.

PER.~13~26.12 STA. 1395+00~1425+00

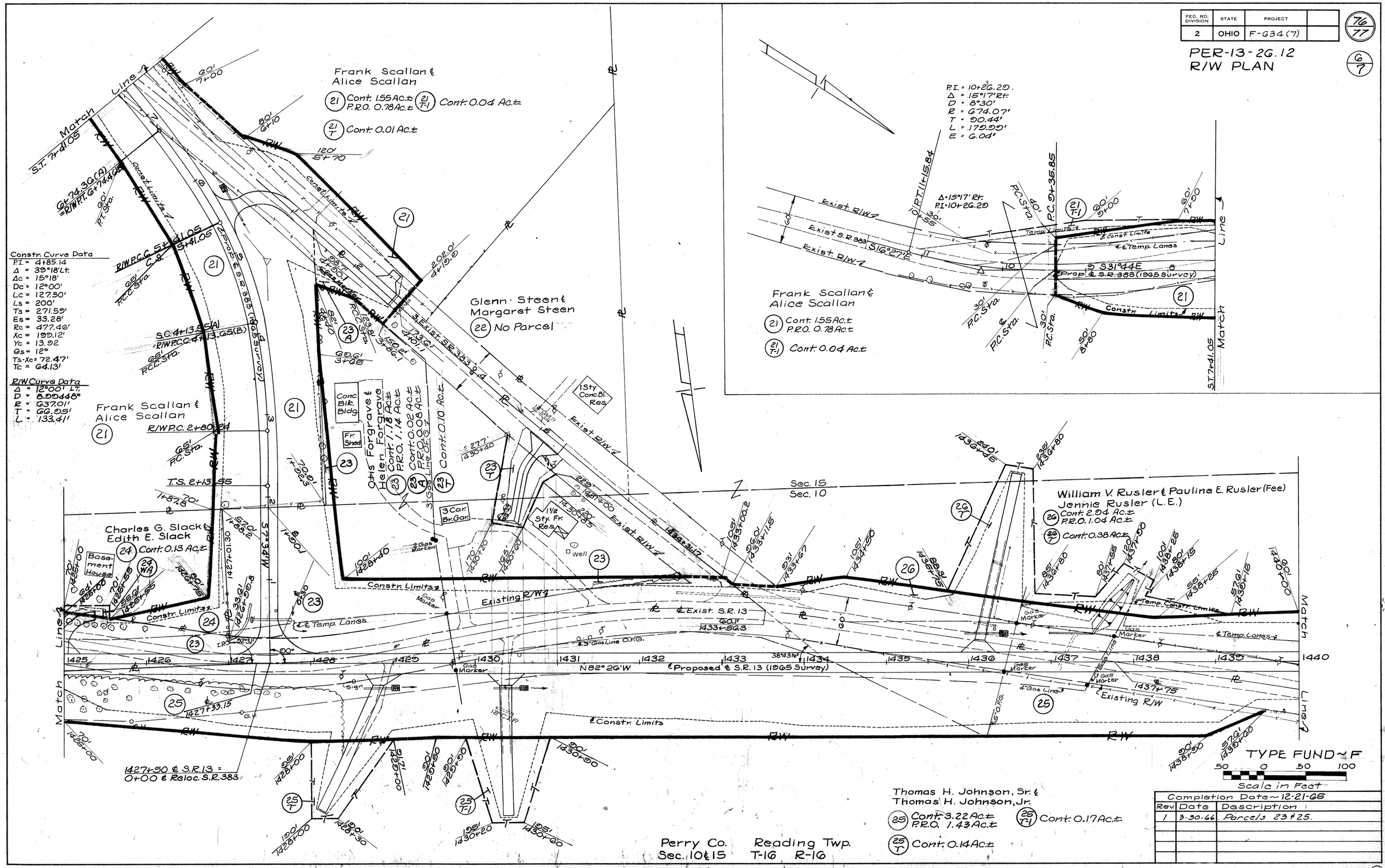
5

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-G34(7)	

76/77

6/7

PER-13-26.12
R/W PLAN



Perry Co. Reading Twp.
Sec. 10 & 15 T-16 R-16

Completion Date ~ 12-21-65

Rev.	Date	Description
1	3-30-66	Parcels 23 & 25.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-634(7)	

77/77

PER-13-20.12
R/W PLAN

7/7

William V. Rusler & Pauline E. Rusler (Fee)
Jennie Rusler (Life Estate)
(26) Cont. 2.94 Ac.±
P.R.O. 1.04 Ac.±
(26/T) Cont. 0.38 Ac.±

Village of Somerset
Perry Co. Reading Twp.
Sec. 10 T-16 R-16
(28) Cont. 0.12 Ac.±

Ross S. Underwood &
Mary Ann Underwood
(27) Cont. 0.71 Ac.±
P.R.O. 0.04 Ac.±
(27/T) Cont. 0.05 Ac.±

Thomas H. Johnson, Sr. &
Thomas H. Johnson, Jr.
(25) Cont. 3.22 Ac.±
P.R.O. 1.43 Ac.±

Perry Co. Reading Twp.
Sec. 10 & 15 T-16 R-16

Thomas E. Olive &
Sharon Kay Olive
(29) Cont. 0.03 Ac.±
P.R.O. 0.13 Ac.±
(29/T) Cont. 0.25 Ac.±

Lewis W. Beard &
Marie I. Beard
(30/T) Cont. 0.01 Ac.±

Miles D. King
Cont. 0.02 Ac.±

Austin J. Sweeney &
Pauline E. Sweeney
(33/T) Cont. 0.01 Ac.±
(33/T1) Cont. 0.01 Ac.±

Thomas W. Beam &
Ethel L. Beam
(34) No Parcel

R/W Curve Data
Δ = 6°00' Rt.
D = 2.999987°
R = 1909.94'
T = 100.10'
L = 200.01'

Constr. Curve Data
PI = 1448+41.16
Δ = 46°10'30" Rt.
Δc = 34°10'30"
Dc = 4°00'
Lc = 300'
Ts = 761.67'
Sc = 127.53'
Lc = 299.67'
Yc = 10.49'
Rc = 1432.39'
Lc = 854.38'
Θs = 6°00'
Ts-Sc = 462.00'
Tc = 440.32'

END PROJECT
STA. 1463+92.5

END ACQUISITION
LT. STA. 1463+39

END ACQUISITION
RT. STA. 1464+19.7

PI = 1459+67.19
Δ = 2°28' Rt.
D = 1°00'
T = 123.36'
L = 246.67'
R = 5729.58'
E = 1.33'

J.R. Underwood &
Hazel Underwood
(32/T) Cont. 0.01 Ac.±

William Berry
(37) No Parcel

Oscar G. Miller &
Audry Faye Miller
(35) No Parcel

John T. McHale &
Margaret V. McHale
(36) No Parcel

B.P. Scallan
(39/T) Cont. 0.02 Ac.±

Thomas B. Underwood &
Patricia M. Underwood
(39) No Parcel

Thomas B. Underwood &
Rufus F. Dornbirer
(40/S) Cont. 0.01 Ac.±
(40/T) Cont. 0.02 Ac.±

Junie F. Pennington &
Ada B. Pennington
(45) No Parcel

Hub Developing Co.
(46) No Parcel

The Ohio Fuel Gas Co. Inc.
(44/T) Cont. 0.01 Ac.±

Gene P. King

M.A. Russell

FANCY HILL ADDITION

CASSEL'S ADD.

Lot 290 · Lot 289 · Lot 288 · Lot 287 · Lot 286 · Lot 285 · Lot 284

Lot 43 · Lot 42 · Lot 41 · Lot 44

Mae Louise Scurlock

Henry A. Flautt & Alice C. Flautt

Nathan E. Cooper & Ethel Cooper

Wilma F. Green

Edna E. Wilson (Fee)
Joseph Lyons &
Delilah Lyons (Life Estate)

James T. Davidson &
Alice E. Davidson

Village of Somerset
Perry Co. Reading Twp.
Sec. 10 T-16 R-16

TYPE FUND ~ F
50 0 50 100
Scale in Feet

Completion Date ~ 2-4-66

Rev.	Date	Description
1	2-25-66	Rev. Par. 29, Added 29 T, 30 & 30T-1.
2	3-14-66	Rev. Par. 29 & 29T Deleted 30 & 30T-1
3	5-30-66	Acreage Par. 25.

PER.-13-20.12 Sta. 1440+00 ~ 1470+00 (7)

SOIL PROFILE

PERRY COUNTY

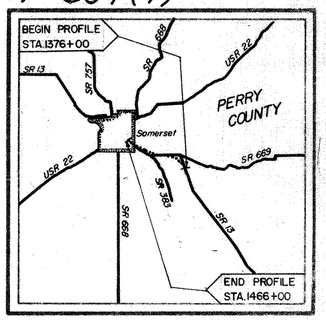
PER-13-26.12

1/5

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT

F-634(7)



LOCATION MAP

Recon-W.C.J.-4/7/65
Drilling-T.R.S.-4/19/65-4/21/65
Drafting-A.D.B.-C.E.H.-5/25/65

GENERAL INFORMATION

INTRODUCTION

The project consists of the relocation, widening, and resurfacing of 1.7 miles of SR 13, beginning on SR 13, 1500 feet southeast of its junction with SR 669, extending west-northwestward, and terminating on SR 13, 500 feet southeast of its junction with SR 668, in Somerset. Included in this report are the soil profiles for the approach to SR 669, and the Connector to SR 383.

Proposed grades indicate proposed cuts and fills as follows:

	CUTS (Max.)	FILL EMBANKMENTS (Max.)
SR 13	15'	46'
SR 669 Approach	2'	18'
SR 383 Connector	20'	1'

GEOLOGY OF THE PROJECT

The alignment traverses the eastern portion of the dissected, glaciated Allegheny Plateau, where shallow to moderately deep glacial drift overlies shales, sandstones, indurated clays, and coals, of the Pottsville Series, Pennsylvanian age.

EXPLORATION

Exploratory borings were made by means of truck-mounted mechanical soil auger, on April 19, 20 and 21, 1965.

INVESTIGATIONAL FINDINGS

Materials occurring immediately below proposed grades consist of frost susceptible silts (A-4b), silt clays (A-6a and A-6b), and clays (A-7-6), as well as sandstone and shale bedrock.

Bedrock is anticipated at the following stations:

SR 13

Stations 1399+00 to 1403+00 - shale or sandstone at grade and in the ditches and lower portions of the backslopes.

Stations 1403+00 to 1403+65 - shale or sandstone in the right ditch and lower portion of the right backslope.

Stations 1411+00 to 1415+00 - shale or sandstone at grade and in the ditches and lower portions of the backslopes.

Stations 1426+00 to 1437+00 - shale at grade and in the ditches and lower portions of the backslopes.

Stations 1437+00 to 1438+00 - shale at grade and in the right ditch and lower portions of the right backslope.

Stations 1438+00 to 1438+50 - shale in the right ditch.

SR 383 Connector

Stations 0+00 to 8+00 - shale or sandstone at grade and in the ditches and the lower portions of the backslopes.

Wet, frost susceptible silts were encountered within three feet below proposed grade at stations 1463+00 and 1465+67.

Three feet of cinders and ashes (residence drive) were encountered at station 1405+00.

Embankment foundation materials comprise silts (A-4b) and silt clays (A-6a and A-6b) having moisture contents within or below the plastic range.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 55 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Stone fragments with sand, silt and clay	A-2-6(0)	A-2-6	39	5	25	14	17	31	12	20	2
Sandy silt	A-4(2)	A-4a	36	3	15	28	18	29	8	14	3
Silt	A-4(8)	A-4b	0	2	4	62	32	30	6	25	8
Silt and clay	A-6(9)	A-6a	14	3	7	42	34	32	12	20	19
Silty clay	A-6(11)	A-6b	8	2	8	37	45	38	18	18	7
Clay	A-7-6(14)	A-7-6	0	1	5	32	62	46	22	19	7
Weathered shale			VISUAL CLASSIFICATION								5
Weathered sandstone			VISUAL CLASSIFICATION								4
Random fill			VISUAL CLASSIFICATION								

Auger boring - plan view.

Auger boring plotted to vertical scale only.

Water content nearly equal to or greater than liquid limit.

Indicates a non-plastic material with a high water content.

W Free water.

NOTE: Figures beside borings indicate water content in percent. e.g. 15

SUMMARY OF SOIL TEST DATA

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.
*Denotes sample taken at or near grade.

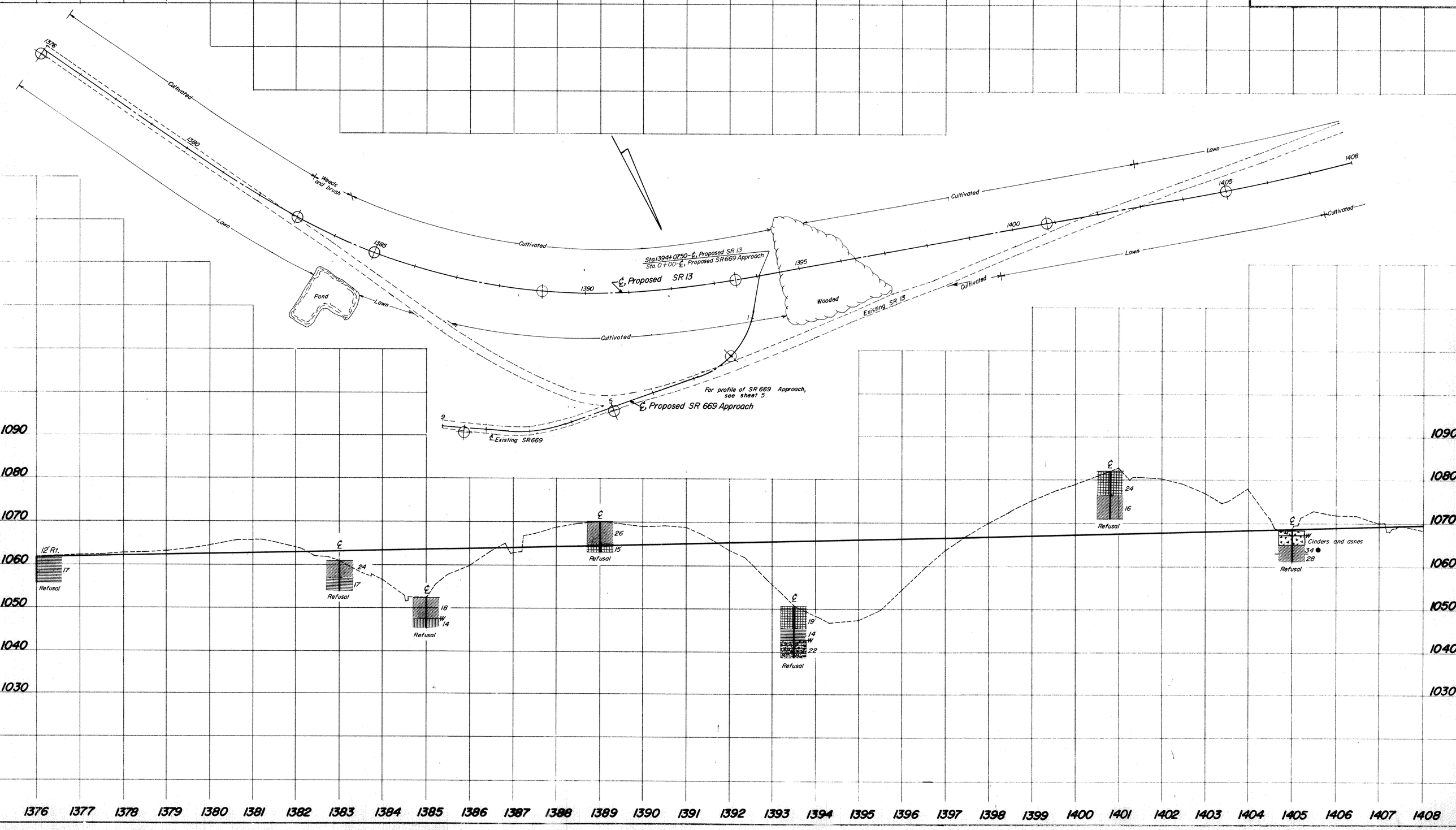
STATION & OFFSET		DEPTH FROM-TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
					SR 13						
1376+00	12'Rt	0.0-6.0	0	1	11	28	60	40	20	17	A-6b*
1383+00	CL	0.0-4.0	0	1	2	59	38	37	15	24	A-6a*
		4.0-7.0	0	2	9	42	47	39	19	17	A-6b
1385+00	CL	0.0-5.0	0	2	13	37	48	31	12	18	A-6a
		5.0-7.0	55	3	5	25	12	33	10	14	A-4a
1389+00	CL	0.0-5.0	0	1	2	57	40	34	11	26	A-6a
		5.0-7.0	0	0	2	32	66	51	27	15	A-7-6*
1393+50	CL	0.0-5.0	0	3	11	30	56	41	18	19	A-7-6
		5.0-8.0	0	3	15	34	48	35	17	14	A-6b
		8.0-12.0	58	1	12	17	12	32	13	22	A-2-6
1400+80	CL	0.0-5.5	0	0	0	58	42	42	20	24	A-7-6
		5.5-11.0	20	4	7	38	31	31	11	16	A-6a
1405+00	CL	0.0-3.0	(57	16	12	10	5	NP	NP	58)	
			Cinders and Ashes								Visual*
		3.0-5.0	38	5	5	33	19	31	11	34	A-6a
		5.0-7.0	32	3	13	26	26	34	11	28	A-6a
1409+25	CL	0.0-3.0	0	1	2	65	32	29	5	32	A-4b
		3.0-6.0	0	1	3	63	33	30	6	26	A-4b
1413+00	CL	0.0-5.0	0	0	1	57	42	38	15	23	A-6a
1415+25	CL	0.0-3.5	58	1	2	20	19	39	19	22	A-6b*
1418+75	CL	0.0-6.0	0	0	1	67	32	31	6	27	A-4b
1421+00	CL	0.0-5.0	0	1	4	56	39	35	13	22	A-6a
1423+00	CL	0.0-3.0	28	3	7	32	30	30	11	19	A-6a
1425+00	CL	0.0-4.0	(41	4	20	21	14	NP	NP	11)	
			Brown Weathered Sandstone								Visual
1427+60	15'Lt	0.0-3.0	0	1	1	17	81	44	19	19	A-7-6
		3.0-7.0	(0	2	13	40	45	29	11	8)	
			Gray Weathered Shale								Visual
1432+00	CL	0.0-5.0	0	3	15	47	35	31	12	18	A-6a
		5.0-10.0	(57	2	6	16	19	34	10	18)	
			Brown Weathered Shale								Visual
		10.0-12.0	Brown Weathered Shale					-	-	12	Visual*
1436+00	CL	0.0-3.0	(51	2	7	22	18	30	11	11)	
			Brown Weathered Siliceous Shale								Visual
1440+00	CL	0.0-5.0	36	3	3	30	28	34	11	16	A-6a*
		5.0-7.0	(44	3	3	27	23	34	11	12)	
			Brown Weathered Shale								Visual
1444+00	CL	0.0-5.0	0	0	1	65	34	37	13	26	A-6a
		5.0-6.0	45	2	9	23	21	-	-	12	A-6a
1448+25	CL	0.0-5.0	0	2	8	57	33	27	8	21	A-4b
1451+00	CL	0.0-5.0	19	10	37	11	23	30	11	18	A-2-6
		5.0-11.0	38	3	2	16	41	-	-	24	A-7-6
1458+50	25'Rt	0.0-3.0	0	1	6	43	50	40	18	18	A-6b*
1463+00	30'Rt	0.0-4.0	0	2	6	58	34	29	7	27	A-4b*
		4.0-10.0	(27	0	44	12	17	NP	NP	14)	
			Brown Weathered Sandstone								Visual
1465+67	15'Lt	0.0-5.0	0	3	8	57	32	29	9	23	A-4b*
		5.0-7.0	0	1	2	72	25	NP	NP	26	A-4b
		7.0-10.0	52	3	6	23	16	28	9	16	A-4a
					SR 669 APPROACH						
2+00	CL	0.0-5.0	0	2	3	52	43	36	17	17	A-6b
		5.0-10.0	0	4	13	36	47	38	17	18	A-6b
		10.0-15.0	0	3	3	55	39	34	8	14	A-4b
		15.0-19.0	18	4	5	37	36	36	11	29	A-6a
5+00	10'Lt	0.0-5.0	18	8	11	31	32	31	12	14	A-6a*
		5.0-10.0	0	4	6	40	50	37	15	19	A-6a*
8+50	10'Lt	0.0-4.0	0	1	3	24	72	49	28	14	A-7-6*
		4.0-7.0	(0	10	22	24	44	35	16	12)	
			Brownish Gray Weathered Sandstone								Visual*
					SR 383 CONNECTOR						
2+30	CL	0.0-5.0	0	1	2	61	36	34	13	24	A-6a
		5.0-7.0	0	4	32	37	27	26	6	11	A-4a
5+50	CL	0.0-5.0	0	2	14	28	56	48	23	21	A-7-6
		5.0-8.0	(0	2	33	39	26	NP	NP	13)	
			Brown Weathered Sandstone								Visual
8+00	CL	0.0-5.0	0	6	12	42	40	35	12	18	A-6a
		5.0-8.0	0	3	6	50	41	36	12	14	A-6a*

SOIL PROFILE

PERRY COUNTY

PER-13-26.12

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

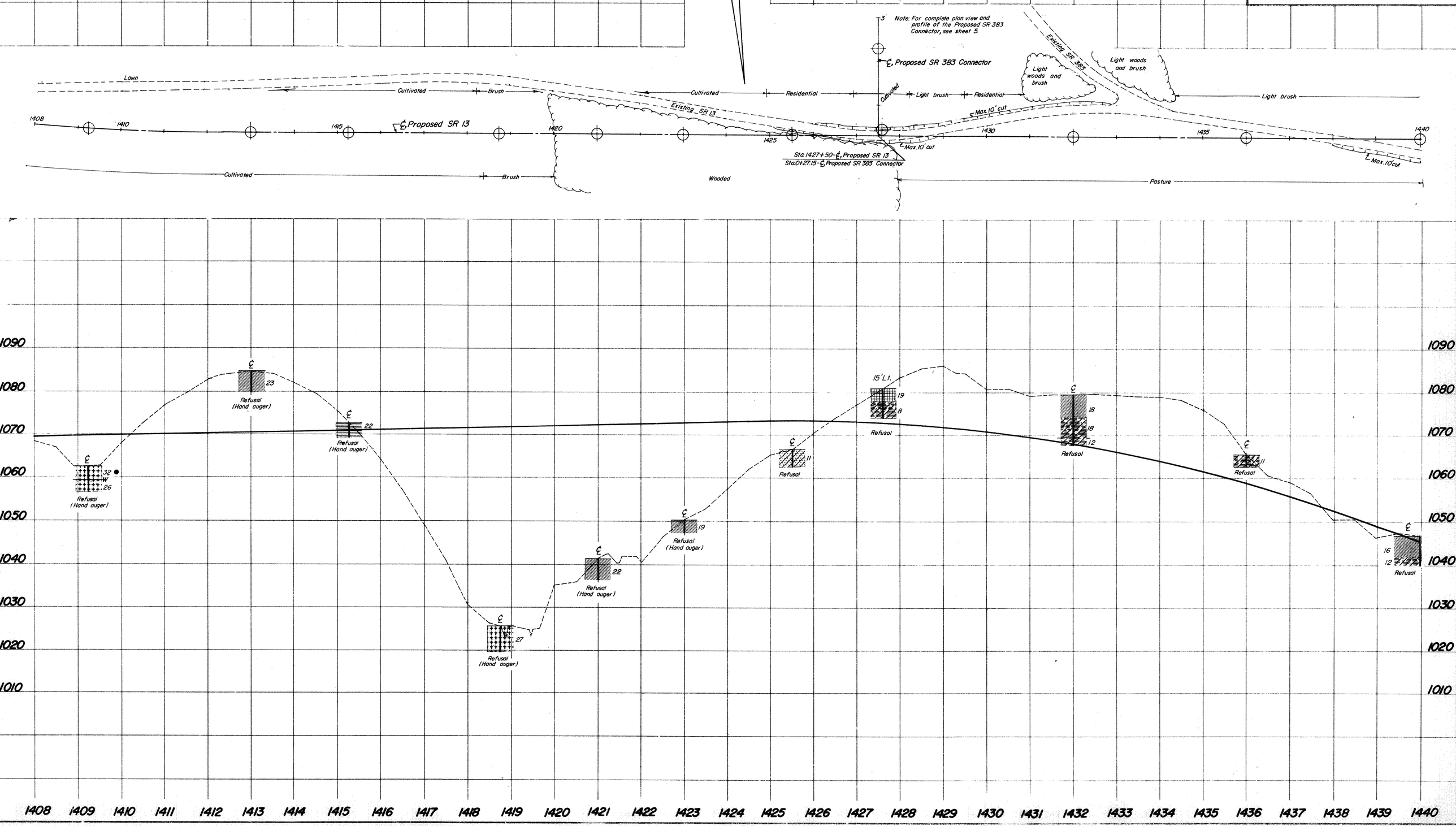


SOIL PROFILE

PERRY COUNTY

PER-13-26.12

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W BROAD ST COLUMBUS 23 OHIO

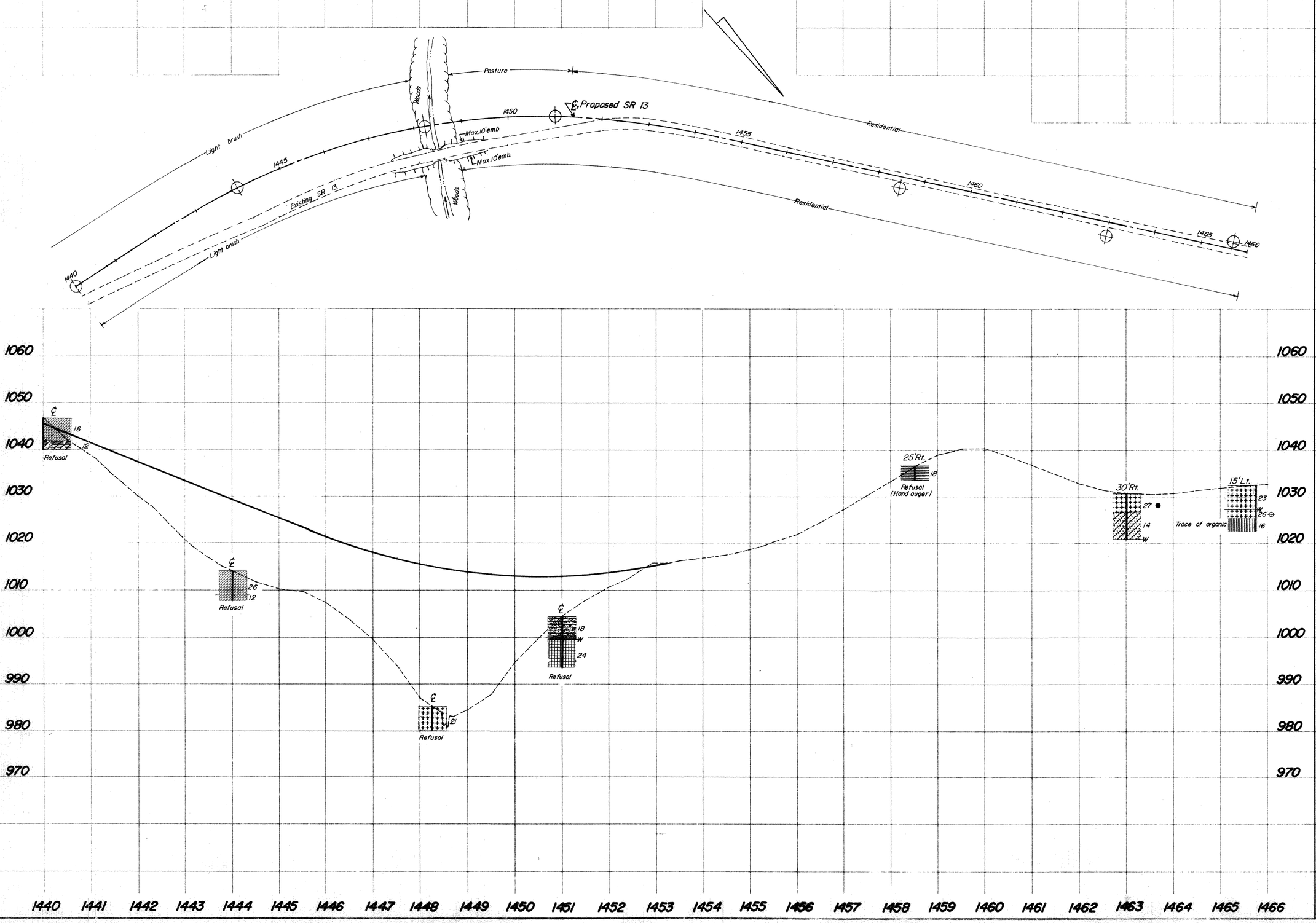


SOIL PROFILE

PERRY COUNTY

PER-13-26.12

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO



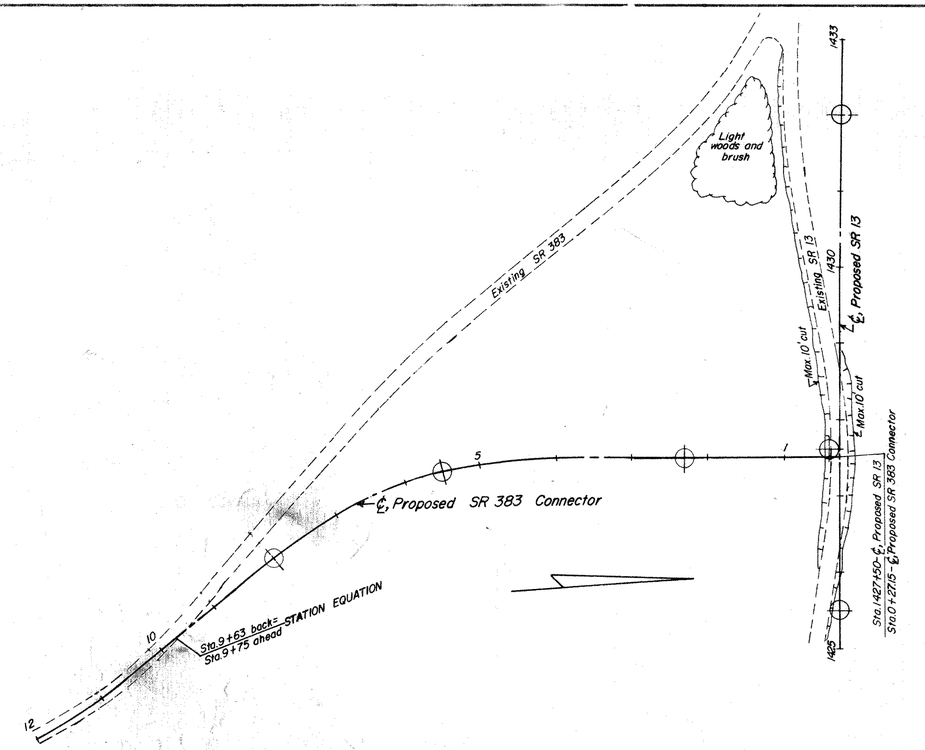
SOIL PROFILE

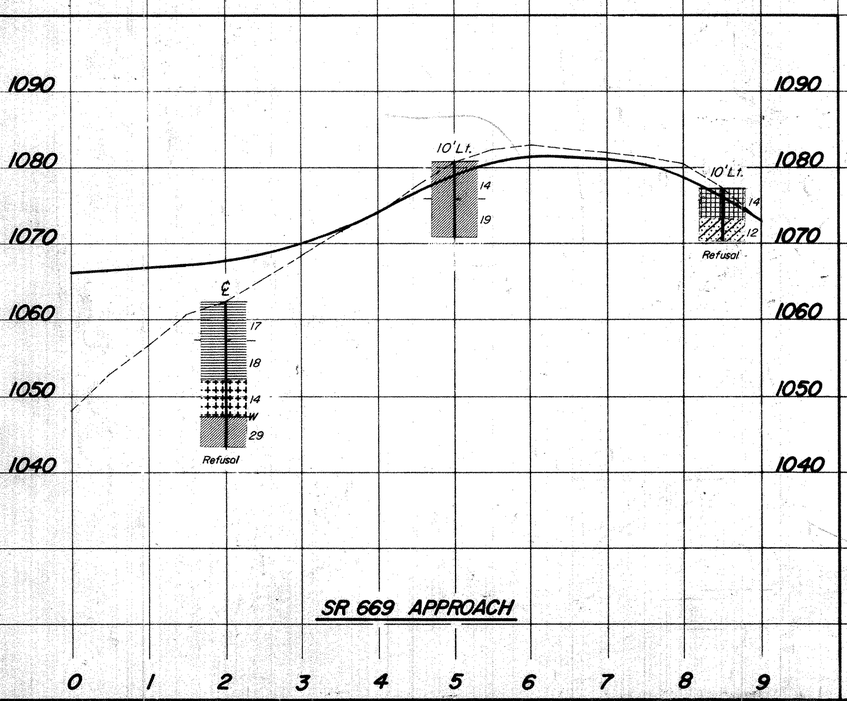
PERRY COUNTY

PER-13-26.12

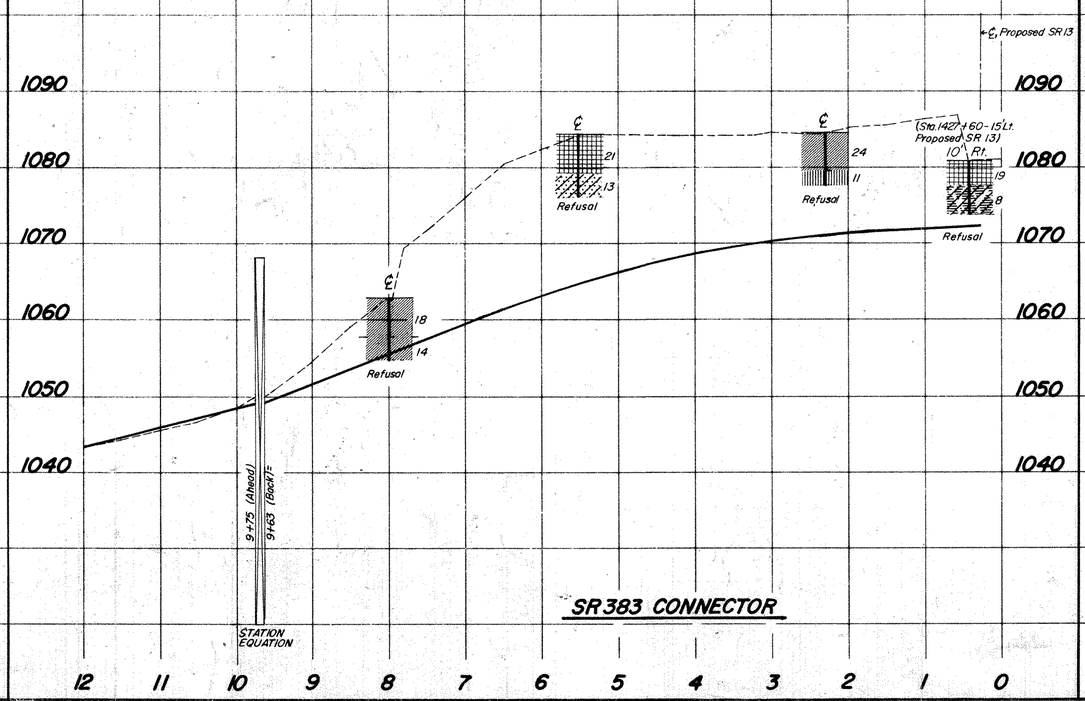
OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

5/5





SR 669 APPROACH



SR 383 CONNECTOR