STATE	DIST.	COUNTY	PROJECT NO.	SHEET NO.	TOTAL SHEETS
S.C.	5	Cherokee	I-301-2(7) 29	1	42

INDEX OF SHEETS

Sheet No. 1 Title Sheet
1A Main Items
2 - 2F Typ'l Sections
3 Intersection Standard
4 Superelevation Standard
4A Superelevation Special
5 Traffic Control Devices
6 Drop Inlet (24"X36")
7 Catch Basin Type 9
8 Standard Design for Right of Way Markers
9 Conc. & Rubble Masonry Gutter
10 Rip Rap Standard
11 Acceleration & Deceleration Standard
12-36 Plan & Profile Main Line - Rt. 29
37-65 Plan, Profile & X-Sections Route 150 Interchange
66-129 " " " Route 18 "
131-149 " " " Route 5 "
151 " " " Route 198 "
152-156 " " " Frontage Road Rt. 1532± to 1557±
157-190 " " " " " Lt. 1560± to 1660±
192-196 " " " " " Rt. 1574± to 1650±
197-204 " " " " " Lt. 1734± to 1759±
205-210 " " " " " Rt. 1735± to 1755±
211-232 " " " " " Rt. 1832± to 1900±
233-234 " " " " " Lt. 2010± to 2055±
* 239 4'X6' R.C. Box Culvert Sta. 1863+00
240 4'X6' " " " Sta. 1869+00
241-241A 4'X6' " " " Sta. 1884+00
242-242A 7'X7' " " " Sta. 1895+00
243-243A 3A 4'X6' " " " Sta. 1904+75
244 12'X10' " " " Sta. 1940+00
245 4'X6' " " " Sta. 1964+00
246 4'X6' " " " Sta. 2059+90
247 4'X6' " " " Sta. 2071+00
248 4'X4' " " " Sta. 2078+00
249-445 Main Line X-Sections - Route 29
* 235-238 Plan, Profile & X-Sections Frontage Road Rt. 2077± to 2091±
238-A Southern Railway Bridge Standard

SOUTH CAROLINA
STATE HIGHWAY DEPARTMENT
COLUMBIA

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

F.A.P. NO. I-301-2(7)
DOCKET NO. 11.347
ROUTE ~~29~~ I-85
CHEROKEE COUNTY

From Route 11 to Route 198

SCALES: PLAN AND PROFILE 1 INCH = 100 FEET HORIZONTAL; 1 INCH = 10 FEET VERTICAL

F.A.P. NO. I-301-2(7) DKT. 11.347
Sta. 1531+50 to Sta. 2083+39.1
(See sheets 12 thru 36)

Begin Sta. 1531+50

End Sta. 2083+39.1

EXCEPTION TO CONTRACT
Sta. 1915+00 to Sta. 1927+25

120' Bridge to be Constructed Under Separate Contract (Plane)
Sta. 1700+30 to Sta. 1701+50

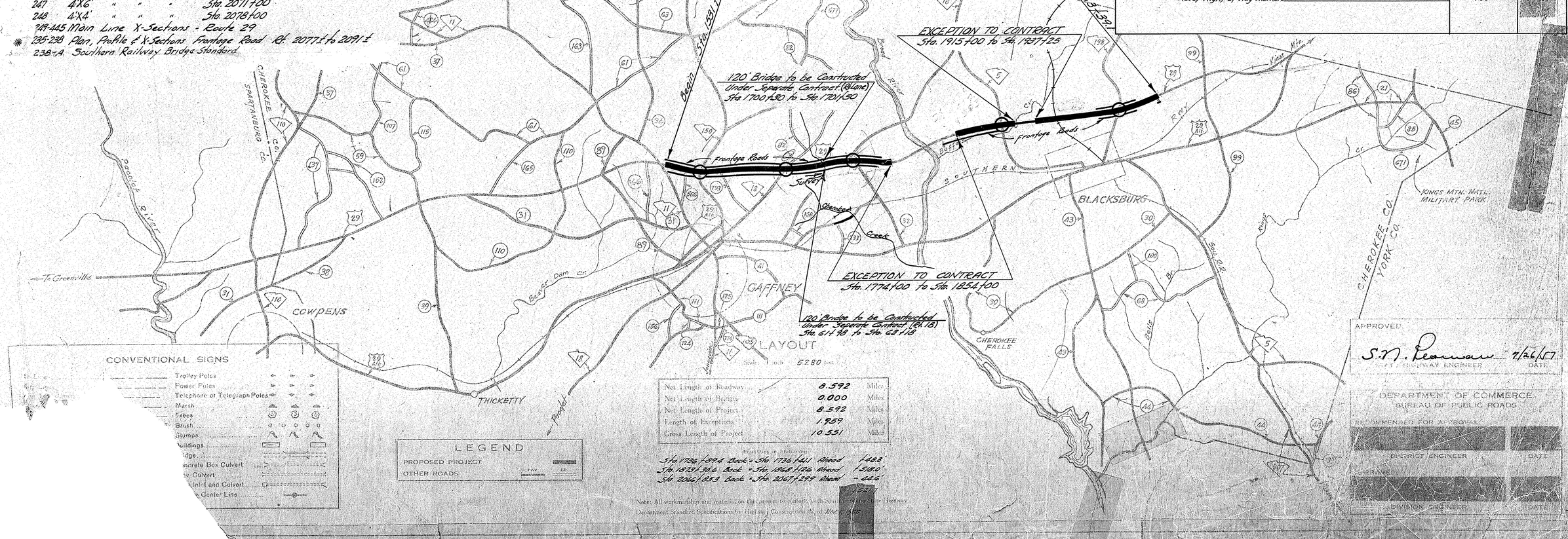
Frontage Roads

Survey

EXCEPTION TO CONTRACT
Sta. 1774+00 to Sta. 1854+00

120' Bridge to be Constructed Under Separate Contract (Rt. 18)
Sta. 614+98 to Sta. 63+18

LAYOUT
Scale: 1 inch = 5280 feet



CONVENTIONAL SIGNS

- Trolley Poles
- Power Poles
- Telephone or Telegraph Poles
- Marsh
- Trees
- Brush
- Stumps
- Buildings
- Bridge
- Concrete Box Culvert
- Pipe Culvert
- Inlet and Culvert
- Center Line

LEGEND

PROPOSED PROJECT — PAV. / ER.

OTHER ROADS

Net Length of Roadway	8.592	Miles
Net Length of Bridges	0.000	Miles
Net Length of Project	8.592	Miles
Length of Exceptions	1.959	Miles
Gross Length of Project	10.551	Miles

Sta. 1736/99.4 Back = Sta. 1736+41 Ahead 141.3'
Sta. 1837+30.6 Back = Sta. 1868+98 Ahead = 3180'
Sta. 2066+83.3 Back = Sta. 2067+27.9 Ahead = 22.6'

Note: All workmanship and material on this project to conform with the South Carolina State Highway Department Standard Specifications for Highway Construction dated May 1968

SUMMARY OF ESTIMATED QUANTITIES

	QUANTITY	UNIT
EARTHWORK		
Clearing and Grubbing within Roadway	N.E.C.	
Clearing and Grubbing of Borrow and Material Pits	3	Acres
Unclassified Excavation	1,033,678	C.Y.
Overhaul	1,180,211	C.Y.-Mile
Selected Material for Slopes	11,762	C.Y.
STRUCTURES		
Concrete for Structures - Class A	8498	C.Y.
Reinforcing Steel for Structures	1279362	Lbs.
15" Reinforced Concrete Culvert Pipe	1658	L.F.
18" " " " "	5400	L.F.
24" " " " "	796	L.F.
30" " " " "	184	L.F.
36" " " " "	168	L.F.
48" " " " "	168	L.F.
30" " " " " (EXTRA STRENGTH)	136	L.F.
36" " " " " " "	258	L.F.
42" " " " " " "	426	L.F.
108" Structural Plate Pipe - 10 Gage	64	L.F.
15" Reinf. Pipe Culvert	208	L.F.
18" " " "	100	L.F.
24" " " "	56	L.F.
INCIDENTALS		
4" Pipe Underdrain	400	L.F.
Seeding Slopes	211.707	M.S.Y.
Fertilizer (5-10-5)	13.0	Ton
Nitrate of Soda	4.5	Ton
Concrete Gutter (24" Bottom)	4,000	L.F.
Catch Basin Type 9	75	Each
Drop Inlet (24"X36")	6	Each
Junction Box (24"X24")	1	Each
Reset Fences	2,000	L.F.
Rip Rap for Protecting Slopes	680	C.Y.
Right of Way Markers	50	Each
Reset Right of Way Markers	100	Each

APPROVED

S. N. Pearman 7/26/67
STATE HIGHWAY ENGINEER — DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER — DATE

DIVISION ENGINEER — DATE

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11347	I-301-2(7)	29	1-A	~~417~~ 425

ITEM NO.	LOCATION: Feet Rt or Lt	LOCATION: Station	DESCRIPTION	WORK TO BE DONE	PRICE	OWNER
1	300' Lt 29' Lt	1549 ⁄ 50 16 ⁄ 38 Front. Rd.	5' X 5' Wood Frame Privy; Tin Roof, Wood Floor, Poor Condition.	Move Privy & Appurtenances approximately 80' Southwesterly to location designated by owner.	L. S.	DR. E. H. DOBSON, SR
2	250' Lt Center Line	1550 ⁄ 50 17 ⁄ 75 Front. Rd	31' X 36' Wood Frame Barn on Rock Pillars; Tin Roof, Wood Floor in Center Section.	Move Barn & Appurtenances approximately 50' Southerly to location designated by owner.	L. S.	DR. E. H. DOBSON, SR
3	500' Rt 62' Rt	1560 ⁄ 00 16 ⁄ 05 Route 150	26' X 32' Wood Frame - 4 Room House; Concrete Steps (Concrete porch 8' X 10'), Water from Well of Moving Item #4, 1 Outside Spigot, Septic Tank, 220 Volt Power TV Antenna on side of house, 1 Chimney, Oil Drum on stand against house.	Move House & Appurtenances Southeasterly approximately 50' to location designated by owner. Retain Septic Tank & Restore Plumbing. Restore utilities.	L. S.	JAMES NATHAN ELLIOTT
4	107' Rt 6' Rt	1559 ⁄ 50 19 ⁄ 00 Line 1 Rt150	30' X 32' Wood Frame 4 Room Dwelling; Tin Roof, Block underpenned, Two flues, 110 Volt Power, 1 Spigot, Dug Well - Well Box & Windless, Electric Pump, Porches on front & back,(6' X 28'), TV Antenna on Iron Pipe, 7 Items of Shrubbery.	Move House & Appurtenances southerly approximately 500' to location designated by owner. Dig new well & restore pump. Restore utilities. Reset shrubbery.	L. S.	JAMES NATHAN ELLIOTT
5	105' Rt	1560 ⁄ 25	8' X 10' Wood Frame Shed on Block Pillars; Tin Roof, Wood Floor.	Move shed & appurtenances approximately 500' southerly to location designated by owner.	L. S.	JAMES NATHAN ELLIOTT
6	135' Rt	1560 ⁄ 50	6' X 8' Wood Frame Shed on Ground; Tin Roof, Dirt Floor.	Move Shed & Appurtenances approximately 500' southerly to location designated by owner.	L. S.	JAMES NATHAN ELLIOTT
7	105' Rt	1561 ⁄ 00	20' X 24' Wood Frame Barn; Tin Roof, Wood Floor on Block Pillars, 12' X 20' Shelter, Tin Roof on front, Dirt Floor, 9' X 18' Shelter on Side, Tin Roof, Dirt Floor.	Move Barn & Appurtenances approximately 500' southerly to location designated by owner.	L. S.	JAMES NATHAN ELLIOTT
8	90' Rt	1561 ⁄ 25	28' X 20' Barn on Block Pillars; Tin Roof, Dirt Floor, 9' X 20' Shelter on Side, Tin Roof, Dirt Floor.	Move Barn & Appurtenances approximately 500' southerly to location designated by owner.	L. S.	JAMES NATHAN ELLIOTT
9	119' Rt	1594 ⁄ 00	32' X 35' Wood Frame - 5 Room House; Composition Roof, Lighting Rodded, Two Chimneys, 220 Volt Power, Telephone, Dug Well with Electric Pump, 2 Screened Porches, Two Rooms with plastered walls, House underpenned with rock, 1 Outside Spigot, 1 Flue, TV Chimney, 11 Pieces of Shrubbery.	Move House & Appurtenances approximately 150' to location designated by owner(Back). Dig Well & restore plumbing. Restore utilities. Underpen with brick or block abandon chimney on kitchen & enclose opening. Build double window on kitchen where chimney removed. Dig cellar under kitchen to replace Storm Pit, dirt floor (10' X 10' X 6'). Restore TV Antenna. Reset Shrubbery.	L. G.	G. H. HUMPHRIES
10	250' Rt	1594 ⁄ 50	10' X 13' Wood Frame Shed; Dirt Floor, Wood Shingle, No Utilities.	Move Shed & Appurtenances approximately 120' Westerly to location designated by owner.	L. S.	G. H. HUMPHRIES
11	300' Rt	1595 ⁄ 00	4.5' X 4.5' Wood Frame Privy; Tin Roof, Concrete Floor.	Move approximately 100' to location designated by owner.	L. S.	G. H. HUMPHRIES
12	4' Rt	1664 ⁄ 00	30' X 42' Wood Frame - 5 Room House; Asbestos Shingle Siding, Brick Underpenned, Composition Roof, 220 Volt Power, 1 Chimney, 6' X 10' Concrete Porch on Front.	Move House & Appurtenances approximately 250' back to left to high ground across Line 3 to location designated by owner. Restore utilities. Replace front porch as at present.	L. S.	L. E. ALLISON EST.
13	42' Rt	1664 ⁄ 16	Dug Well; 4' Diameter, 32.5' deep, 14.5' of water, Concrete Base for Well Box, 1 Pulley on Bell Box.	Dig New Well or run 1" Water Line from 1¼" or 2" Water Line now approximately 400' westerly from House.	L. S.	L. E. ALLISON, EST.
14	122' Rt	1664 ⁄ 16	14' X 26' Wood Frame Crib; 1 Section Dirt Floor, 2 Sections Wood Floor on Rock Pillars, Tin Roof.	Move Crib & Appurtenances approximately 250' back & left to location designated by owner.	L. S.	L. E. ALLISON, EST.
15	125' Rt	1664 ⁄ 80	20' X 28' Wood Frame Barn; Tin Roof, Left, on rock pillars, Fair Shape Dirt Floors, 10' X 20' Tin Shed on 1 Side.	Move Barn & Appurtenances approximately 250' back & left to location designated by owner.	L. S.	L. E. ALLISON, EST.
16	160' Rt	1664 ⁄ 16	4' X 5' Wood Privy; Composition Floor, Wood Floor.	Move Privy & Appurtenances approximately 250' back & left to location designated by owner.	L. S.	L. E. ALLISON, EST.
17	8' Rt Rt	1717 ⁄ 00 Line 3 Rt. 18 Int.	26' X 32' Wood Frame - 4 Room Residence, 7' X 28' Front Porch, 7' X 32' Back Porch ½ enclosed, 1 Chimney, Composition Roof, Sheet Rock Walls, 110' Volt Power, Dug Well - 2' Diameter, 44' Deep, 4' Water, Well Box w/windless & pulley, Front & Rear Concrete Block Steps, Underpenning. 6' X 8' Tin Shed on Wood Frame, Dirt Floor.	Move House & Appurtenances approximately 600' southwesterly to location designated by owner. Restore Utilities. Dig New Well & restore well box appurtenances.	L. S.	MRS. SUSIE R. LAUGHLIN
17 A	68' Rt	1716 ⁄ 50 Line 3 Rt 18 Int.	6' X 9' Tin Shed on Wood Frame, Dirt Floor.	Move Shed & Appurtenances approximately 600' Southwesterly to location designated by owner.	L. S.	MRS. SUSIE R. LAUGHLIN
18	68' Rt	1716 ⁄ 20 L-3 Rt 18	6' X 6' Wood Frame Shed; Tin Roof, Dirt Floor.	Move Shed & Appurtenances approximately 600' southwesterly to location designated by owner.	L. S.	MRS. SUSIE R. LAUGHLIN
19	90' Rt	1717 ⁄ 30 L-3 Rt 18	4' X 4' Privy; Tin Roof, Concrete Floor.	Move approximately 600' southwesterly to location designated by owner.	L. S.	MRS. SUSIE R. LAUGHLIN
20	Center Line	1719 ⁄ 20 L-3 Rt 18	28' X 30' Wood Frame - 5 Room Residence; Plastered Walls, 1 Chimney, 1 Flue, Well with Electric Pump, Septic Tank, Composition Roof, Underpenned - 2 Concrete steps, Telephone, 220 Volt Power, 4.5' X 38' Brick Walk, 71 Items of Shrubbery.	Move House & Appurtenances onto lot bought by SCHD, install new Septic Tank, Dig New Well & install & restore plumbling. Restore utilities. Replace Brick Walk, reset Shrubbery.	L. S.	VIRGIL RAMSEY

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	1-301-2(7)	29	1-B	~~417~~ 447

Item NO.	LOCATION Feet Rt or Lt	LOCATION Station	DESCRIPTION	WORK TO BE DONE	PRICE	OWNER
21	Center Line	1720 ∠ 34	4' X 5' Concrete Block Pump House; Composition Roof	Move Pump House & Appurtenances to New Well for above house. Restore Pump & Plumbing.	L. S.	VIRGIL RAMSEY
22	17' Rt	102 ∠ 75 L-3 Rt. 18	18' X 46' Wood Frame Filling Station; 1 Flue, Tin Roof, 14' X 18' Porch on front on 2 Cedar Posts, 1 10' X 12' & 1 12' X 12' Wood Frame Rooms on North Side, 110 Volt Power, 2 Electric Signs on Iron Pipe, 1 Electric Sign in Tree, Telephone.	Move Store & Appurtenances approximately 200' across Route 18 & turn to face Route 18. Grade Entrance. Restore utilities & facilities.	L. S.	FORREST McCRAW
23	45' Rt	102 ∠ 00 L-3 Rt. 18	4' X 4' Wood Privy; Tin Roof, Concrete Floor.	Move Privy & Appurtenances across Route 18 to location designated by owner.	L. S.	FORREST McCRAW
24	6' Rt	101 ∠ 67 L-3 Rt. 18	6' X 6' Concrete Block Pump House with Composition Roof over Concrete Pipe lined Well, no Pump, no Electric Power.	Dig New Well, line with same size concrete pipe as old well. Reconstruct Concrete Block Pump House.	L. S.	FORREST McCRAW
25	Center Line	100 ∠ 25 L-3 Rt. 18	40' X 40' Wood Frame Barn; Tin Roof, 1 Chimney, Blacksmith Shop inside.	Move Barn & Appurtenances across Route 18 approximately 400' to location designated by owner. Blacksmith Shop to be restored.	L. S.	FORREST McCRAW
26	55' Rt	102 ∠ 40 L-3 Rt. 18	4' X 4' Wood Privy; Tin Roof, Concrete Floor.	Move Privy & Appurtenances across Route 18 to location designated by owner.	L. S.	FORREST McCRAW

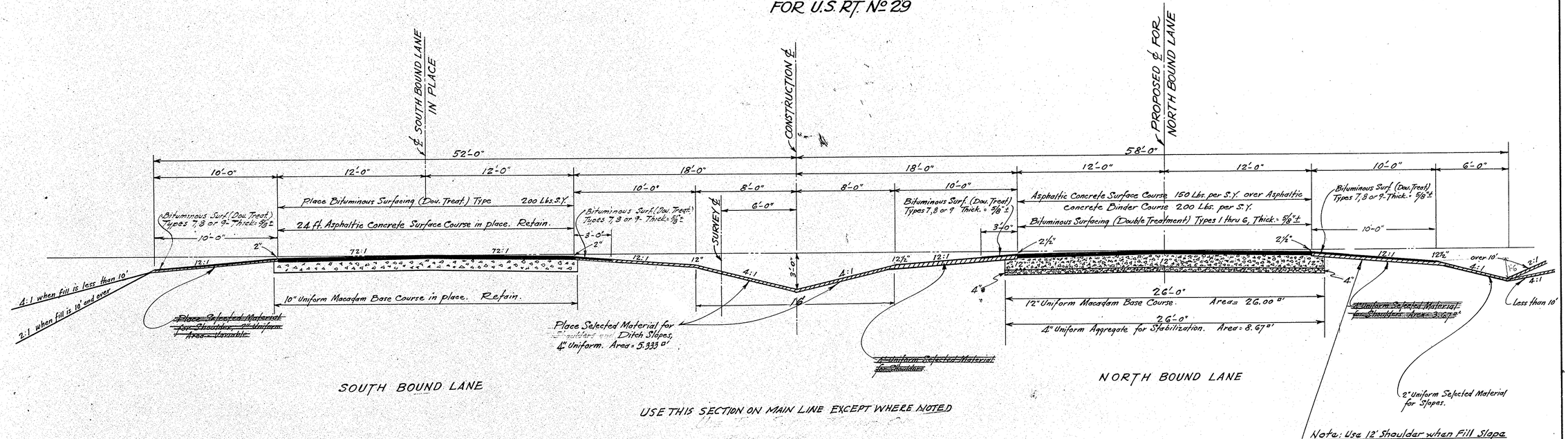
Fed. Rd. Div. No.	State	County	Dkt. No.	Proj. No.	Rd. No.	Sheet No.	Total Sheets
3	S. C.	~~CHEROKEE~~	11,347	I-301-2(7)	29	2	417

445

S. C. STATE HIGHWAY DEPT.

COLUMBIA

TYPICAL SECTIONS OF IMPROVEMENT
FOR U.S. RT. Nº 29



~~Place Selected Material for Shoulder Uniform. Area = Variable.~~

~~2" Uniform Selected Material for Shoulders~~

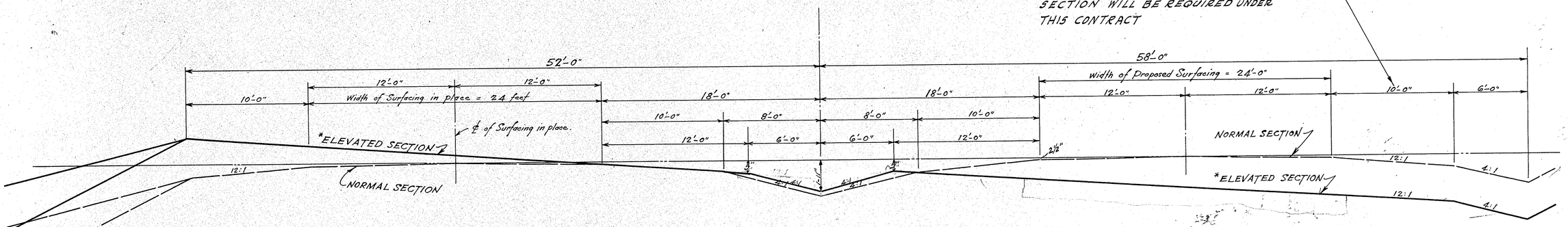
~~2" Uniform Selected Material for Shoulders. Area = 3.67 □'~~

SOUTH BOUND LANE

NORTH BOUND LANE

USE THIS SECTION ON MAIN LINE EXCEPT WHERE NOTED

NOTE-ONLY THE GRADING OF THIS SECTION WILL BE REQUIRED UNDER THIS CONTRACT



SECTION SHOWING METHOD OF SUPERELEVATION

*See "Superelevation Standard" for rate of superelevation.

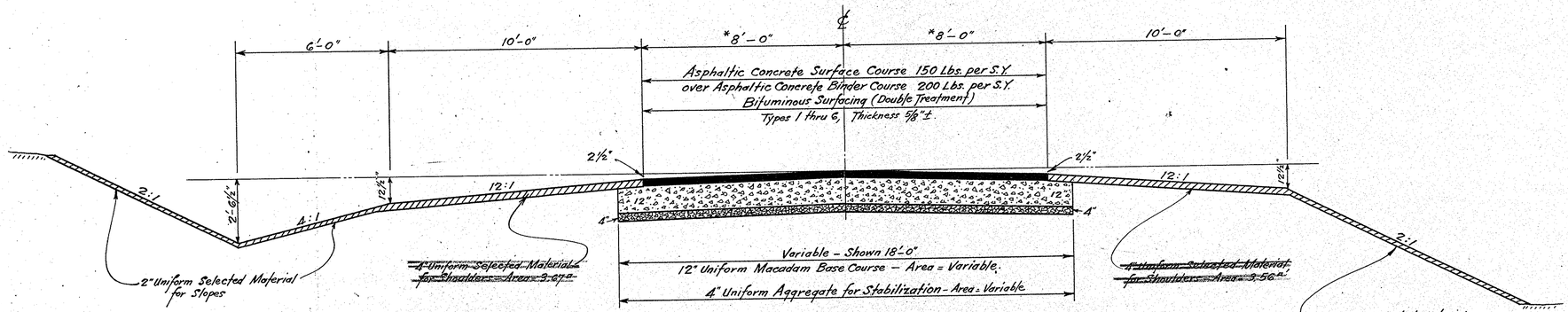
See Sheet no. 2-A for method of obtaining superelevation on North bound lane

Fed. Aid Dist. No.	State	County	Docket No.	Proj. No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11,347	301-2(7)	29	2A	~~417~~ 445

S. C. STATE HIGHWAY DEPT.
COLUMBIA

TYPICAL SECTION OF IMPROVEMENT

Scale: 1/5" = 1'-0"



* Variable (shown 8'-0") see plans for widths.

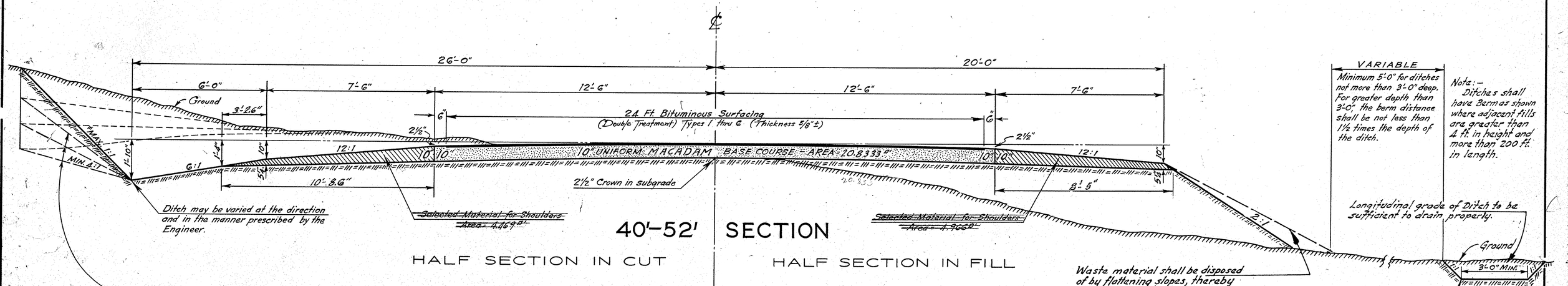
USE THIS SECTION ON LEGS OF INTERCHANGES

NOTE ONLY THE GRADING OF THIS SECTION WILL BE REQUIRED UNDER THIS CONTRACT

SOUTH CAROLINA HIGHWAY DEPARTMENT
COLUMBIA

Fed. Road Dist. No.	State	County	Docket No.	Proj. No.	Route No.	Sheet No.	Total Sheets
12	S. C.	Cherokee	11,347	-301-2(7)	29	2B	447 445

TYPICAL SECTIONS
FOR
EARTH TYPE BASE COURSE
AND BITUMINOUS SURFACING



*NOTE: This slope may be varied when a Special ditch grade is necessary for drainage purposes, using a minimum slope of 12:1 and a maximum slope of 4:1. Where a deeper ditch than provided by a 4:1 is necessary, the ditch shall be placed farther from the ℄ continuing the 4:1 slope to provide for the necessary depth. See profile for Special ditch grades.

Designed by G.C. Sawyer 12-18-44
Drawn by C.W. Metz 12-19-44

APPROVED C. R. McMillan STATE HIGHWAY ENGINEER
DATE 3-20-45

SECTION E-40

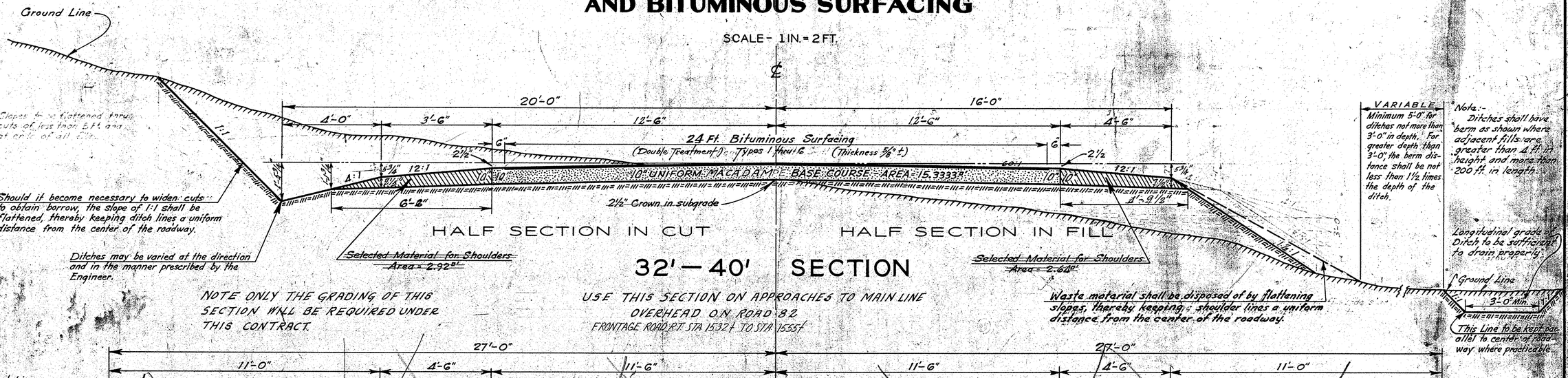
SOUTH CAROLINA HIGHWAY DEPARTMENT
COLUMBIA

FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	PROJ. NO.	RT. NO.	SHEET NO.	TOTAL SHEETS
14	S.C.	Cherokee	11,347	801-20	29	2C	

445

TYPICAL SECTIONS
FOR
EARTH TYPE BASE COURSE
AND BITUMINOUS SURFACING

SCALE - 1 IN. = 2 FT.



Designed by - G.C. Sawyer - Nov. 1944
Drawn by - C.W. Metz - Nov. 1944
Checked by - J. D. MacRae - Nov. 1944

APPROVED
C. R. McMillan
STATE HIGHWAY ENGINEER
12-4-44
DATE

SECTION E-32

Fed. Pat. Dir. No.	State	County	Dist. No.	Rel. No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11,347	29	2D	417

445

STATE HIGHWAY DEPT.
COLUMBIA

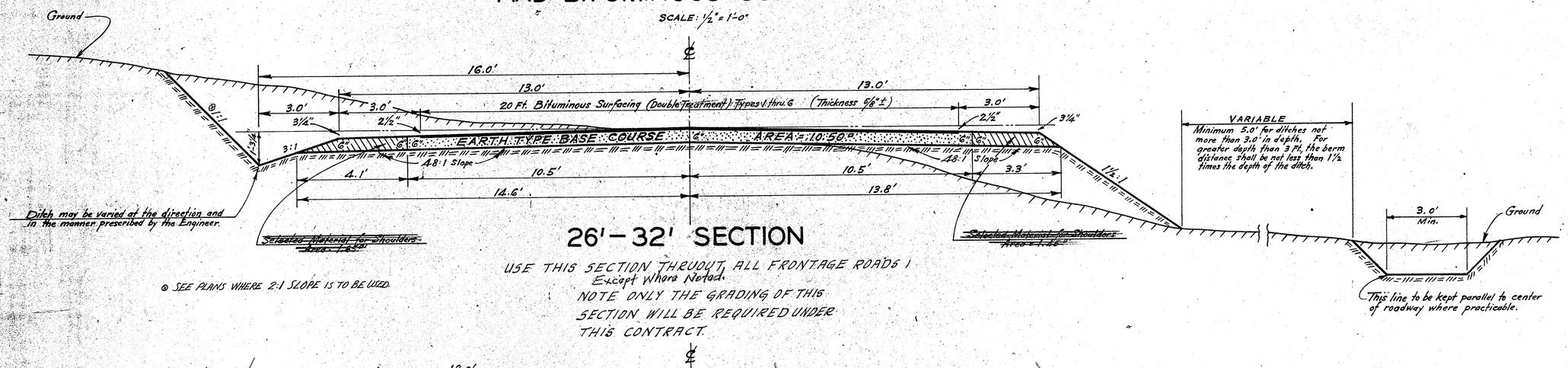
TYPICAL SECTIONS

FOR

EARTH TYPE BASE COURSE

AND BITUMINOUS SURFACING

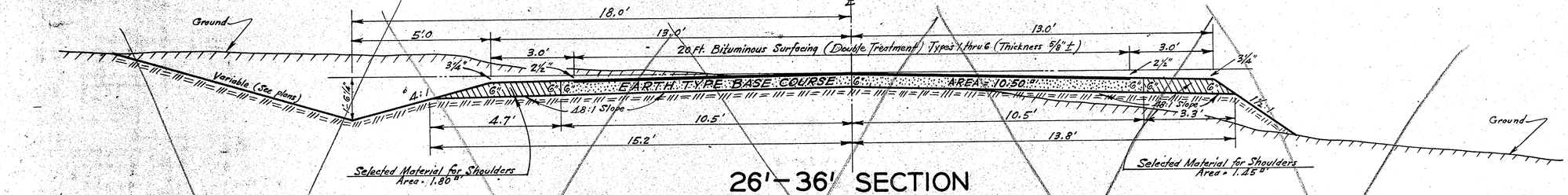
SCALE: 1/2" = 1'-0"



26'–32' SECTION

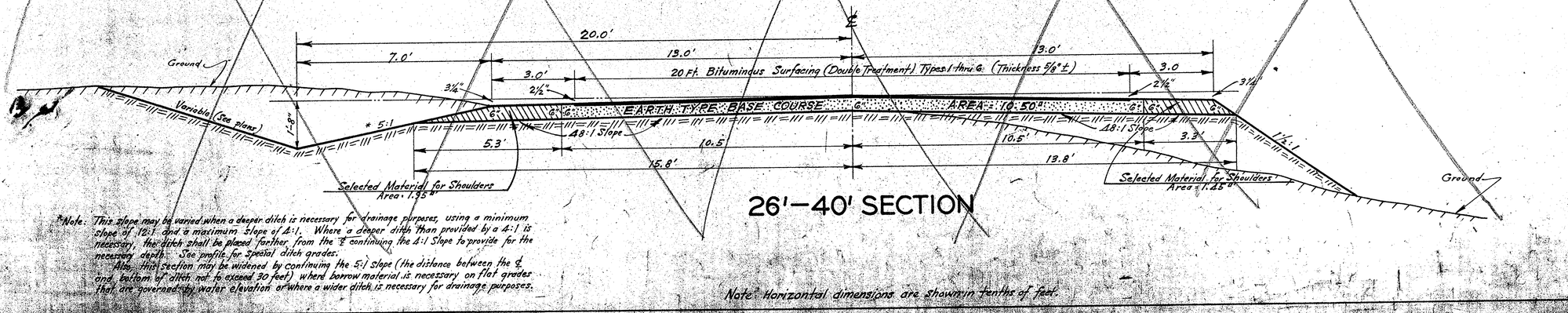
USE THIS SECTION THRUOUT ALL FRONTAGE ROADS
Except Where Noted.
NOTE ONLY THE GRADING OF THIS SECTION WILL BE REQUIRED UNDER THIS CONTRACT.

@ SEE PLANS WHERE 2:1 SLOPE IS TO BE USED.



26'–36' SECTION

*Note: This slope may be varied when a deeper ditch is necessary for drainage purposes, using a minimun slope of 12:1 and a maximum slope of 3:1. Where a deeper ditch than provided by a 3:1 is necessary, the ditch shall be placed farther from the ℄ continuing the 3:1 slope to provide the necessary depth. See profile for Special ditch grades.
Also, this section may be widened by continuing the 4:1 Slope (the distance between ℄ and bottom of the ditch not to exceed 24 ft.) where borrow material is necessary on flat grades that are governed by water elevation or where a wide ditch is necessary for drainage purposes.



26'–40' SECTION

*Note: This slope may be varied when a deeper ditch is necessary for drainage purposes, using a minimum slope of 12:1 and a maximum slope of 4:1. Where a deeper ditch than provided by a 4:1 is necessary, the ditch shall be placed farther from the ℄ continuing the 4:1 Slope to provide for the necessary depth. See profile for Special ditch grades.
Also, this section may be widened by continuing the 5:1 Slope (the distance between the ℄ and bottom of ditch not to exceed 30 feet) where borrow material is necessary on flat grades that are governed by water elevation or where a wider ditch is necessary for drainage purposes.

Note: Horizontal dimensions are shown in tenths of feet.

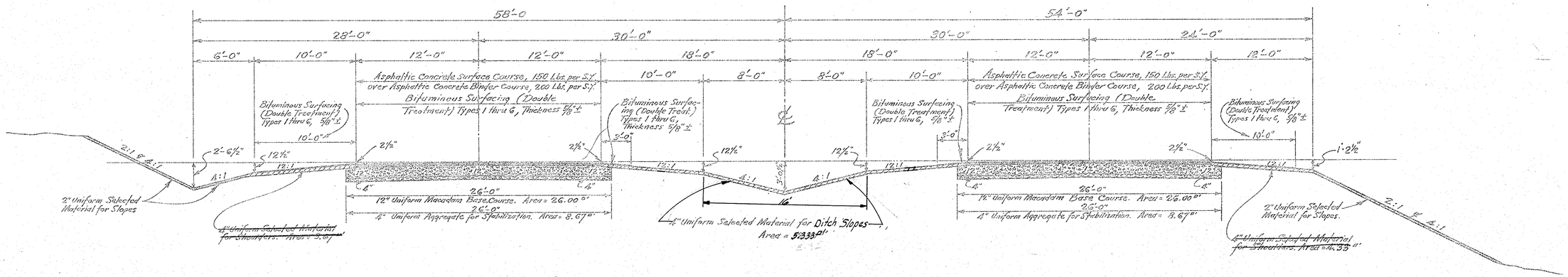
SECTION 26
11-8-48

Fed. Aid Pri. No.	State	County	Docket No.	FAP Proj. No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11347	I-301-2(1)	29	2E	445

S. C. STATE HIGHWAY DEPT.
COLUMBIA

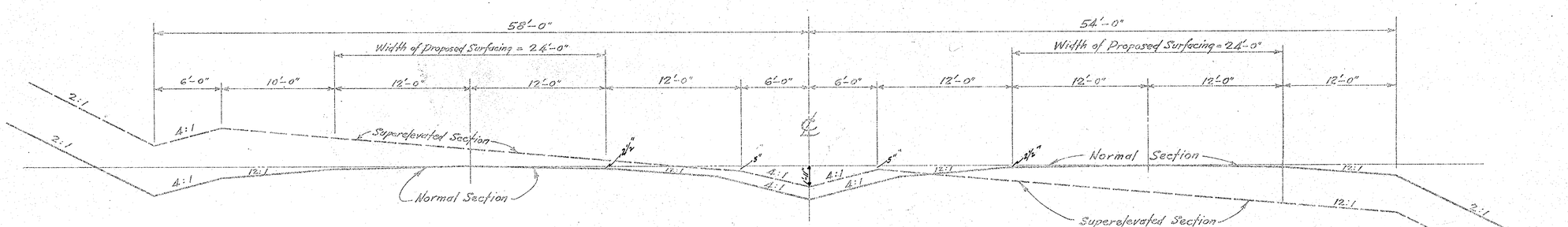
TYPICAL SECTIONS OF IMPROVEMENT

Scale: 1" = 5'



USE THIS SECTION STA 2007+09.2 to STA. 2066+85.2 MAIN LINE

NOTE:- ONLY THE GRADING OF THIS SECTION WILL BE REQUIRED IN THIS CONTRACT



SECTION SHOWING METHOD OF SUPERELEVATION

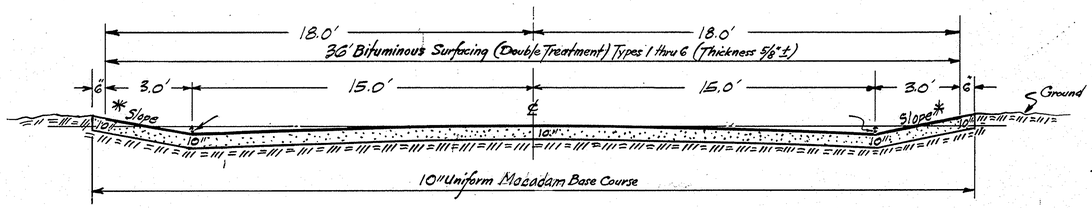
Fed. Rd. Div. No.	State	County	Dkt. No.	Rt. No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11.347	29	2-F	445

F.A.P. No. I-301-2(7)

S. C. STATE HWY. DEPT.
COLUMBIA

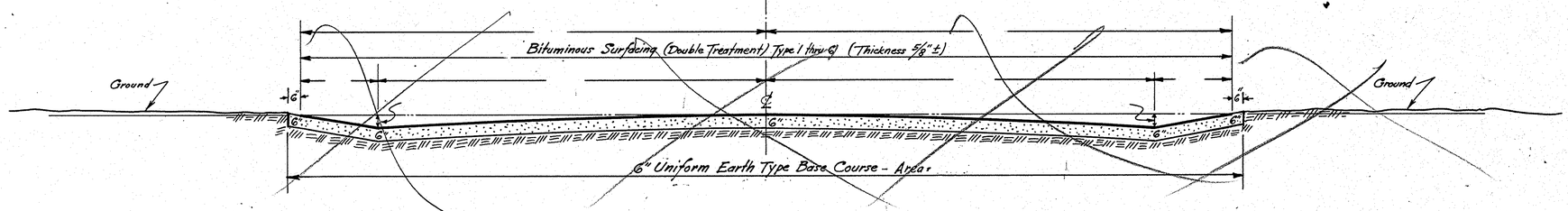
TYPICAL SECTION OF IMPROVEMENT

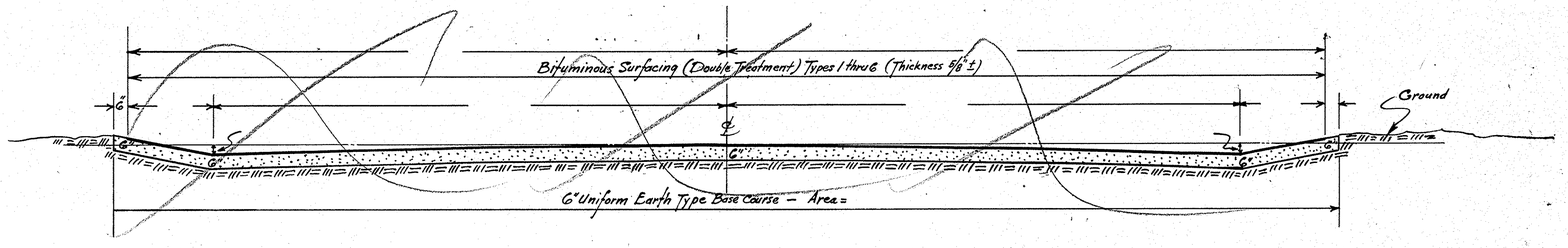
SCALE: 1" = 2'-6"

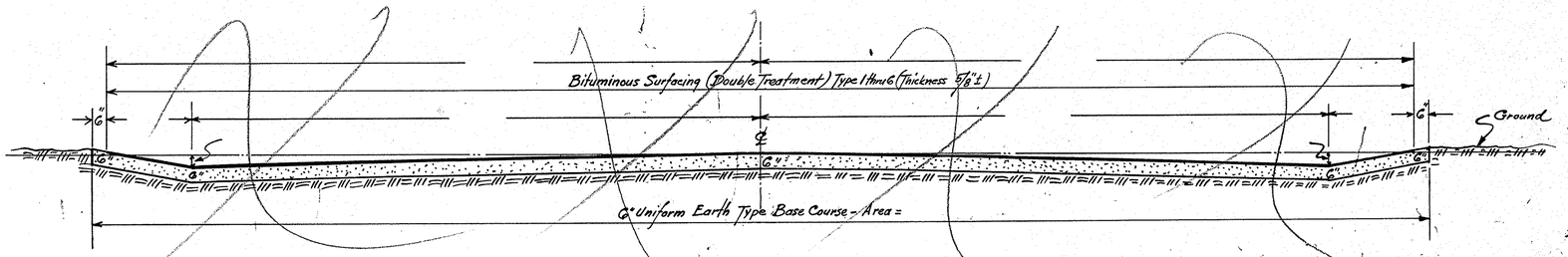


* Slope shall be 1:1 Maximum and 4:1 Minimum. Vary slopes so that construction will remain within the existing right of way.

USE THIS SECTION FROM STA. 10+00 TO STA. 12+50 ON LINE 1, RT. 29 & 150 INTER.







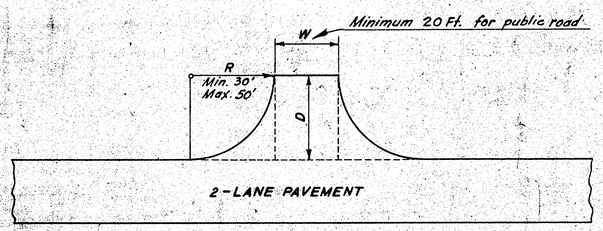
V-1

Division No.	State	County	Docket No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11,347	29	3	~~417~~ 445

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT
COLUMBIA

STANDARD TYPE INTERSECTIONS

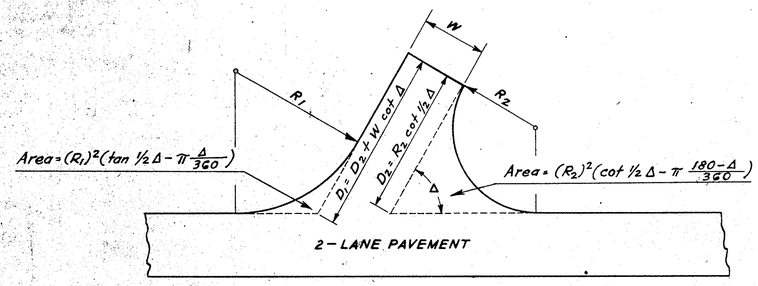
SCALE: 1" = 25'



T-TYPE INTERSECTION

For angles at or near 90°.
Area of Paved Spur = $WD + 0.43 R^2$

For private driveways to be paved, use this type with 20' radii and 10' width at back. Area for driveway = 41.3 S.Y.



Y-TYPE INTERSECTION

MAXIMUM AND MINIMUM RADII WITH CORRESPONDING INTERSECTION AREAS						
ANGLE Δ	MAXIMUM			MINIMUM		
	R_1 FEET	R_2 FEET	AREA* S.Y.	R_1 FEET	R_2 FEET	AREA* S.Y.
90°	50	50	241.7	30	30	116.3
75°	80	50	354.3	50	25	145.1
60°	125	35	350.2	75	20	164.1
45°	200	25	355.9	100	15	170.2
# 30°	300	20	398.1	150	10	180.0

* The areas given are for the total area beyond the edge of the pavement on the main road. Width at back of intersection, W = 22 Ft.

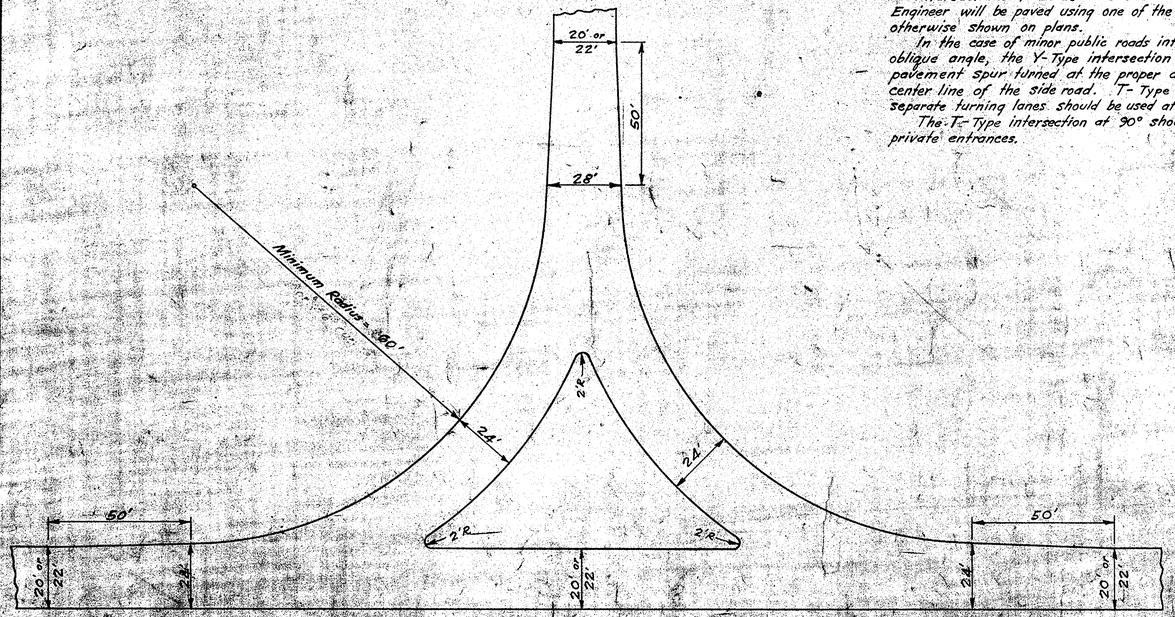
\# Intersections at less than 45° should be constructed with separate turning lanes where practical, as shown by intesection type below.

GENERAL NOTES:-

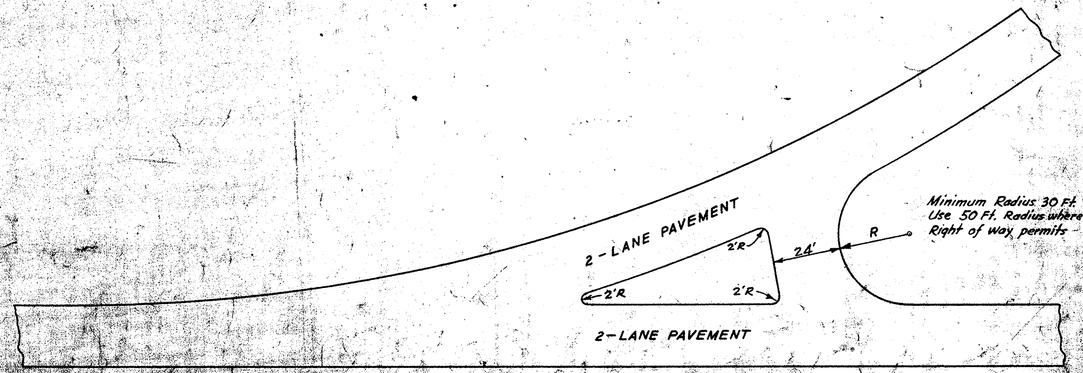
Intersections for side roads and driveways where directed by the Engineer will be paved using one of the Standard Types shown, unless otherwise shown on plans.

In the case of minor public roads intersecting the highway at an oblique angle, the Y-Type intersection should be used with the pavement spur turned at the proper angle to line up with the center line of the side road. T-Type or Y-Type intersections with separate turning lanes should be used at the more important intersections.

The T-Type intersection at 90° should be used at driveways for private entrances.



T-TYPE INTERSECTION WITH SEPARATE TURNING LANES



Y-TYPE INTERSECTION WITH SEPARATE TURNING LANE

Designed by J. C. Sawyer 11-17-45
Drawn by J. W. Metz 11-19-45

DRAWING
A-51

Fed. Road Div. No.	State	County	No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11.347	29	4	417

445

SUPERELEVATION STANDARD

S.C. STATE HIGHWAY DEPT.
COLUMBIA

NOTES: All curves are to be superelevated to the nearest thirty (30') minutes according to table.

In any case where conditions do not permit an approach as long as shown on this sheet, the Resident Engineer is to adjust same to meet the conditions.

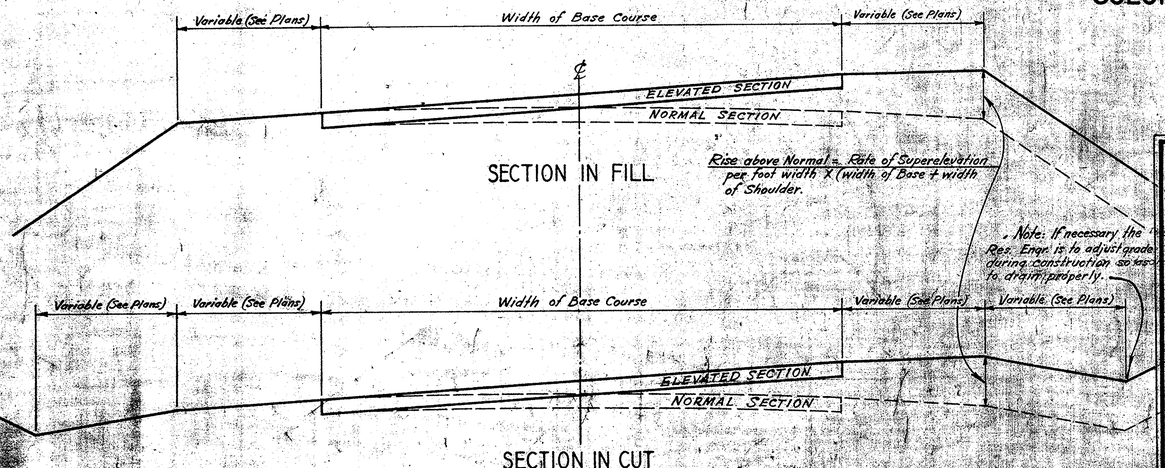
Where unusual conditions make it desirable, superelevation may be obtained by revolving the surface about the centerline instead of the inside edge, the amount of superelevation to be the same as shown in the table.

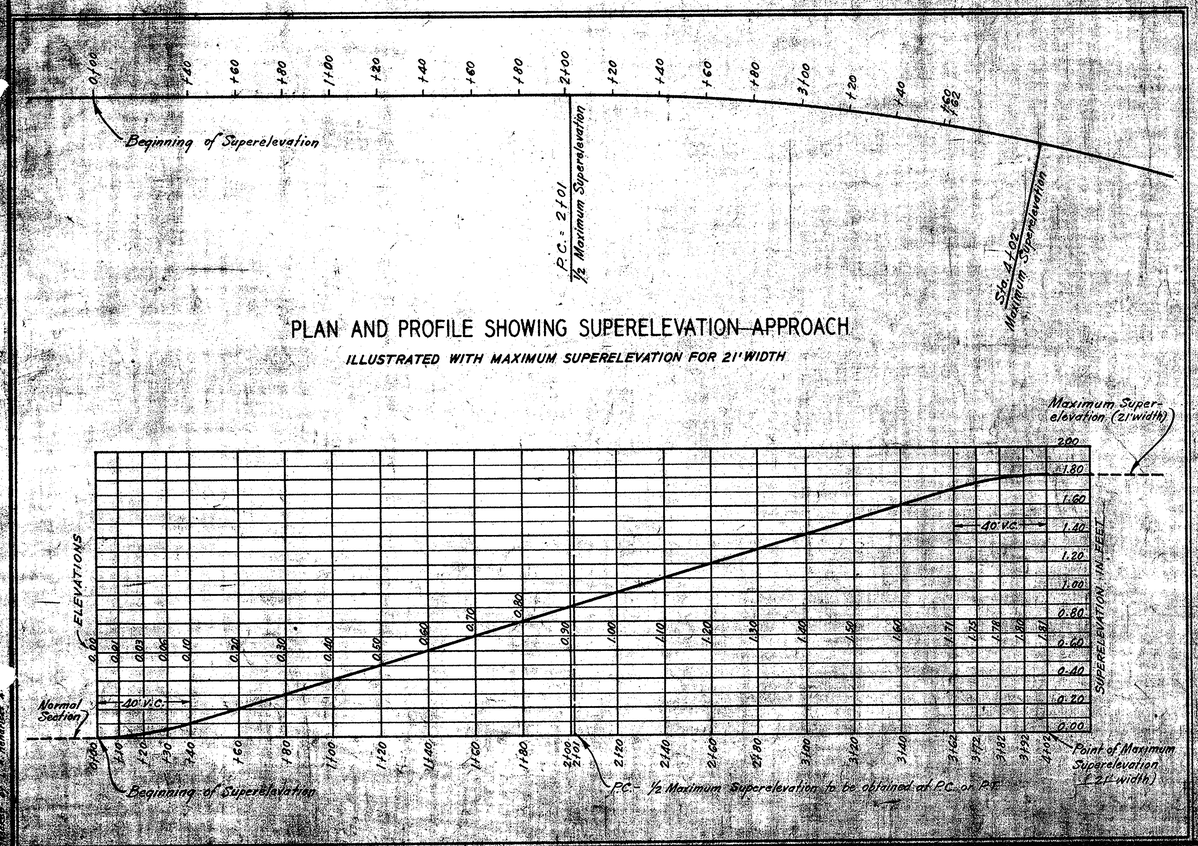
For all types of surfacing the roadway crown shall decrease gradually from the point where superelevation begins, reaching a flat section 80 ft. from the beginning S.E. toward the curve. The crown in subgrade shall be eliminated to conform to the finished surfacing.

SUPERELEVATION FORMULA:

$$E = 0.067 \frac{S^2}{R}$$

E = SUPERELEVATION IN FEET
S = SPEED IN MILES PER HOUR
R = RADIUS OF CURVE IN FEET





Revised by T.J. Hadlin 4-46
Drawn by J.A. Martin 4-46
Checked by J.L. Montague 4-46

SUPERELEVATION FOR DESIGN SPEED OF 65 M.P.H

(BASED ON S = 50 M.P.H. IN FORMULA)

SUPERELEVATION TABLE

DEGREE OF CURVE	RADIUS OF CURVE	SUPERELEV. IN FT. PER FT. WIDTH	TOTAL SUPERELEVATION - FT. 21' WIDTH	TOTAL SUPERELEVATION - FT. 23' WIDTH	TOTAL SUPERELEVATION - FT. 25' WIDTH	LENGTH OF APPROACH — FT. 21' WIDTH	LENGTH OF APPROACH — FT. 23' WIDTH	LENGTH OF APPROACH — FT. 25' WIDTH
0°-30'	11459.19	0.014	0.29	0.32	0.35	98	104	110
1°-00'	5729.65	0.029	0.61	0.67	0.73	162	174	186
1°-30'	3819.83	0.043	0.90	0.99	1.08	220	238	256
2°-00'	2864.93	0.057	1.20	1.31	1.43	280	302	326
2°-30'	2292.01	0.072	1.51	1.66	1.80	342	372	400
3°-00'	1910.08	0.086	1.81	1.98	2.15	402	436	470

3°-30' and over to be superelevated same as 3°-00'

TABLE SHOWING AMOUNT OF SUPERELEVATION AT ANY POINT ON APPROACH TO CURVE

DISTANCE FROM BEGINNING OF SUPERELEVATION IN DIRECTION OF CURVE - FEET

SUPERELEVATION IN FEET — 21 FT. WIDTH — DEGREE OF CURVE

DEGREE OF CURVE	10	20	30	40	50	60	70	80	90	98	100	110	120	130	140	150	160	162	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	342	350	360	370	380	390	400	402
0°-30'	.01	.03	.06	.10	.15	.20	.23	.26	.28	.29																																		
1°-00'	.01	.03	.06	.10	"	"	.23	.30	.35	—	.40	.45	.50	.54	.58	.60	.61	.61																										
1°-30'	.01	.03	.06	.10	"	"	"	"	—	"	"	"	.55	.60	.65	.70	—	.75	.80	.84	.87	.89	.90																						
2°-00'	.01	.03	.06	.10	"	"	"	—	"	"	"	"	"	"	"	"	—	"	"	.85	.90	.95	1.00	1.05	1.10	1.14	1.17	1.19	1.20																
2°-30'	.01	.03	.06	.10	"	"	—	"	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	1.45	1.50	1.55	1.60	—	1.68	1.70	1.74	1.78	1.80	1.81	1.81				
3°-00'	.01	.03	.06	.10	"	—	"	"	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

SUPERELEVATION IN FEET — 23 FT. WIDTH — DEGREE OF CURVE

DEGREE OF CURVE	10	20	30	40	50	60	70	80	90	100	104	110	120	130	140	150	160	170	174	180	190	200	210	220	230	238	240	250	260	270	280	290	300	302	310	320	330	340	350	360	370	372	380	390	400	410	420	430	436
0°-30'	.01	.03	.06	.10	.15	.20	.24	.27	.29	.31	.32																																						
1°-00'	.01	.03	.06	.10	"	"	.25	.30	.35	.40	—	.45	.50	.55	.59	.62	.65	.66	.67																														
1°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	.60	.65	.70	.75	—	.80	.85	.90	.93	.96	.98	.99																								
2°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	.95	1.00	1.05	—	1.10	1.15	1.20	1.25	1.28	1.30	1.31	1.31																		
2°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	—	"	"	"	"	"	1.30	1.35	1.40	—	1.45	1.50	1.55	1.60	1.63	1.65	1.66	1.66							
3°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	—	"	"	"	"	"	1.65	1.70	1.75	—	1.80	1.85	1.89	1.93	1.96	1.98	1.98

SUPERELEVATION FOR DESIGN SPEED OF 45 M.P.H.

(BASED ON S = 35 M.P.H. IN FORMULA)

SUPERELEVATION TABLE

DEGREE OF CURVE	RADIUS OF CURVE	SUPERELEV. IN FT. PER FT. WIDTH	TOTAL SUPERELEVATION - FT. 19' WIDTH	TOTAL SUPERELEVATION - FT. 21' WIDTH	TOTAL SUPERELEVATION - FT. 23' WIDTH	LENGTH OF APPROACH - FT. 19' WIDTH	LENGTH OF APPROACH - FT. 21' WIDTH	LENGTH OF APPROACH - FT. 23' WIDTH
1°-00'	5729.65	0.014	0.27	0.29	0.32	94	98	104
1°-30'	3819.83	0.021	0.40	0.44	0.48	120	128	136
2°-00'	2864.93	0.029	0.55	0.61	0.67	150	162	174
2°-30'	2292.01	0.036	0.68	0.76	0.83	176	192	206
3°-00'	1910.08	0.043	0.82	0.90	0.99	204	220	238
3°-30'	1637.28	0.050	0.95	1.05	1.15	230	250	270
4°-00'	1432.69	0.057	1.08	1.20	1.31	256	280	302
4°-30'	1273.57	0.065	1.24	1.37	1.50	288	314	340
5°-00'	1146.28	0.072	1.37	1.51	1.66	314	342	372
5°-30'	1042.14	0.079	1.50	1.66	1.82	340	372	404
6°-00'	955.37	0.086	1.63	1.81	1.98	366	402	436

6°-30' and over to be superelevated same as 6°-00'

TABLE SHOWING AMOUNT OF SUPERELEVATION AT ANY POINT ON APPROACH TO CURVE

DISTANCE FROM BEGINNING OF SUPERELEVATION IN DIRECTION OF CURVE - FEET

SUPERELEVATION IN FEET — 21 FT. WIDTH — DEGREE OF CURVE

DEGREE OF CURVE	10	20	30	40	50	60	70	80	90	98	100	110	120	128	130	140	150	160	162	170	180	190	192	200	210	220	230	240	250	260	270	280	290	300	310	314	320	330	340	342	350	360	370	372	380	390	400	402
1°-00'	.01	.03	.06	.10	.15	.20	.24	.27	.28	.29																																						
1°-30'	.01	.03	.06	.10	"	"	.25	.30	.35	—	.39	.42	.43	.44																																		
2°-00'	.01	.03	.06	.10	"	"	"	"	"	—	.40	.45	.50	—	.55	.58	.60	.61	.61																												
2°-30'	.01	.03	.06	.10	"	"	"	"	—	"	"	"	"	—	"	.60	.65	.70	—	.73	.75	.76	.76																								
3°-00'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	.75	.80	.84	—	.87	.89	.90																						
3°-30'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	.85	—	.90	.95	.99	1.02	1.04	1.05																		
4°-00'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	"	—	"	"	1.00	1.05	1.10	1.14	1.17	1.19	1.20																
4°-30'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	"	—	"	"	"	"	1.15	1.20	1.25	1.30	1.33	1.36	1.37	1.37												
5°-00'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	"	—	"	"	"	"	"	"	1.35	1.40	1.45	—	1.48	1.50	1.51	1.51										
5°-30'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	"	—	"	"	"	"	"	"	"	"	"	—	1.50	1.55	1.60	—	1.63	1.65	1.66	1.66				
6°-00'	.01	.03	.06	.10	"	"	"	"	"	—	"	"	"	—	"	"	"	"	—	"	"	"	—	"	"	"	"	"	"	"	"	"	—	"	"	"	—	1.65	1.70	1.75	—	1.78	1.80	1.81	1.81		

SUPERELEVATION IN FEET — 23 FT. WIDTH — DEGREE OF CURVE

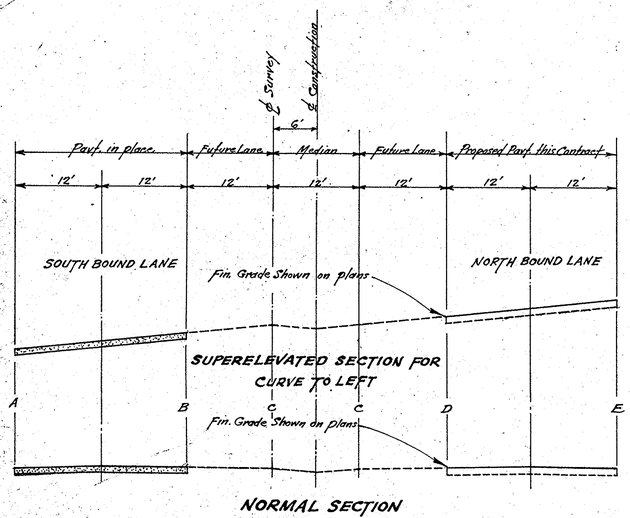
DEGREE OF CURVE	10	20	30	40	50	60	70	80	90	100	104	110	120	130	140	150	160	170	174	180	190	200	206	210	220	230	238	240	250	260	270	280	290	300	302	310	320	330	340	350	360	370	372	380	390	400	404	410	420	430	436
1°-00'	.01	.03	.06	.10	.15	.20	.24	.27	.29	.31	.32																																								
1°-30'	.01	.03	.06	.10	"	"	.25	.30	.35	.40	—	.45	.50	.55	—	.60	.63	.66	.67	.67																																
2°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	.65	.70	.75	—	.79	.81	.83	.83																								
2°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	.80	.85	.89	—	.94	.97	.98	.99																						
3°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	.90	—	.95	1.00	1.05																							
3°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	1.05	1.10	1.15	1.20	1.25	1.28	1.30	1.31	1.31											
4°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	"	"	1.30	1.35	1.40	—	1.45	1.50	1.55	1.60	1.63	1.65	1.66	1.66							
4°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	"	"	"	"	"	—	"	"	"	"	"	1.65	1.70	1.75	—	1.78	1.80	1.81	1.81		
5°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5°-30'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6°-00'	.01	.03	.06	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	—	"	"	"	—	"	"	—	"	"	"	"	"	"	"	"	—	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

S.E. REVISED

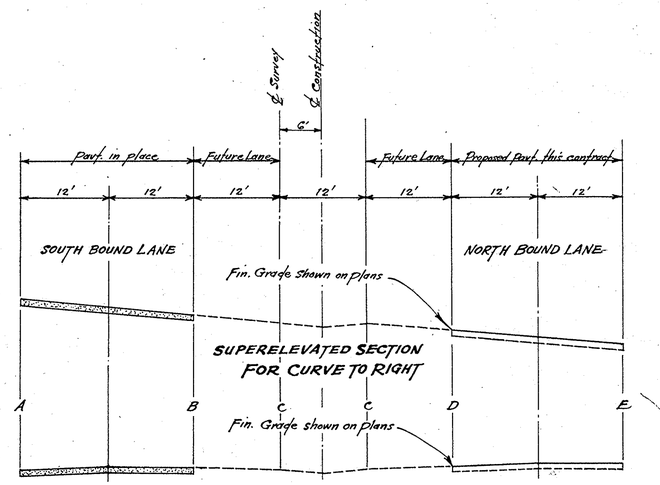
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	4A	~~417~~ 445

S. C. STATE HWY. DEPT.
COLUMBIA

METHOD FOR OBTAINING SUPERELEVATION ON NORTH BOUND LANE
U.S. ROUTE No. 29
SPARTANBURG-CHEROKEE COUNTIES

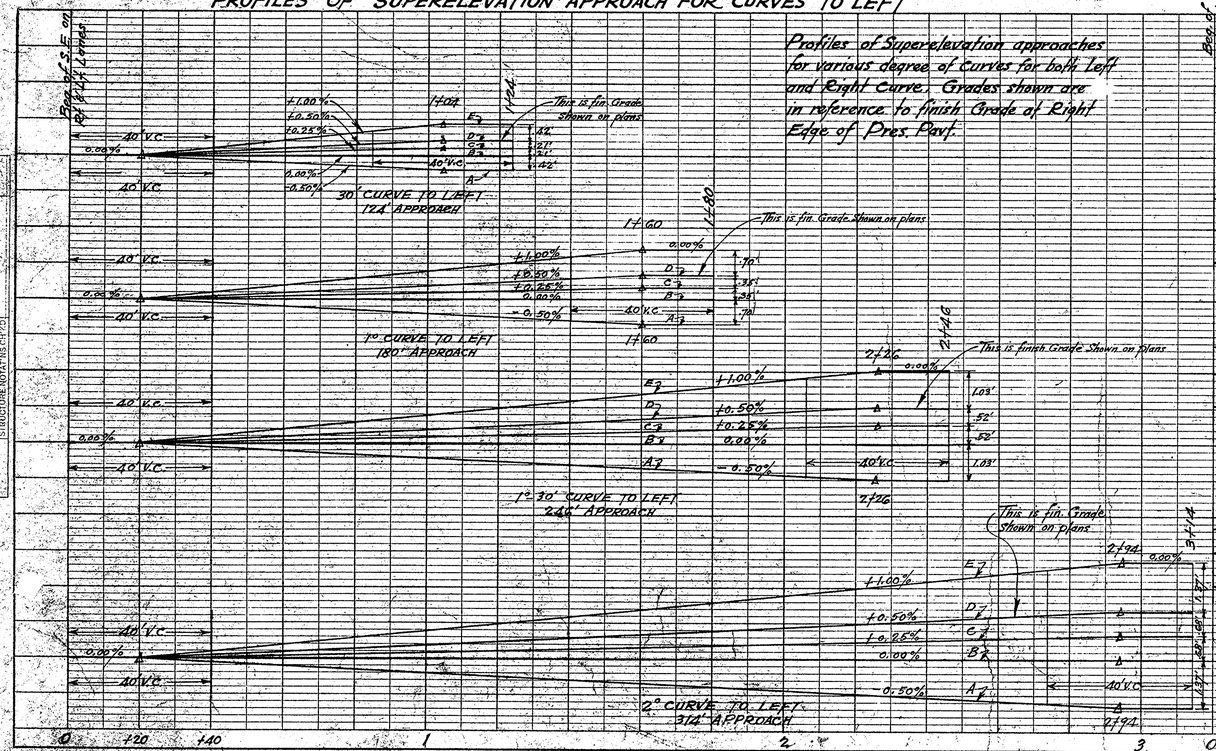


NORMAL SECTION



NORMAL SECTION

PROFILES OF SUPERELEVATION APPROACH FOR CURVES TO LEFT



PROFILES OF SUPERELEVATION APPROACH FOR CURVES TO RIGHT

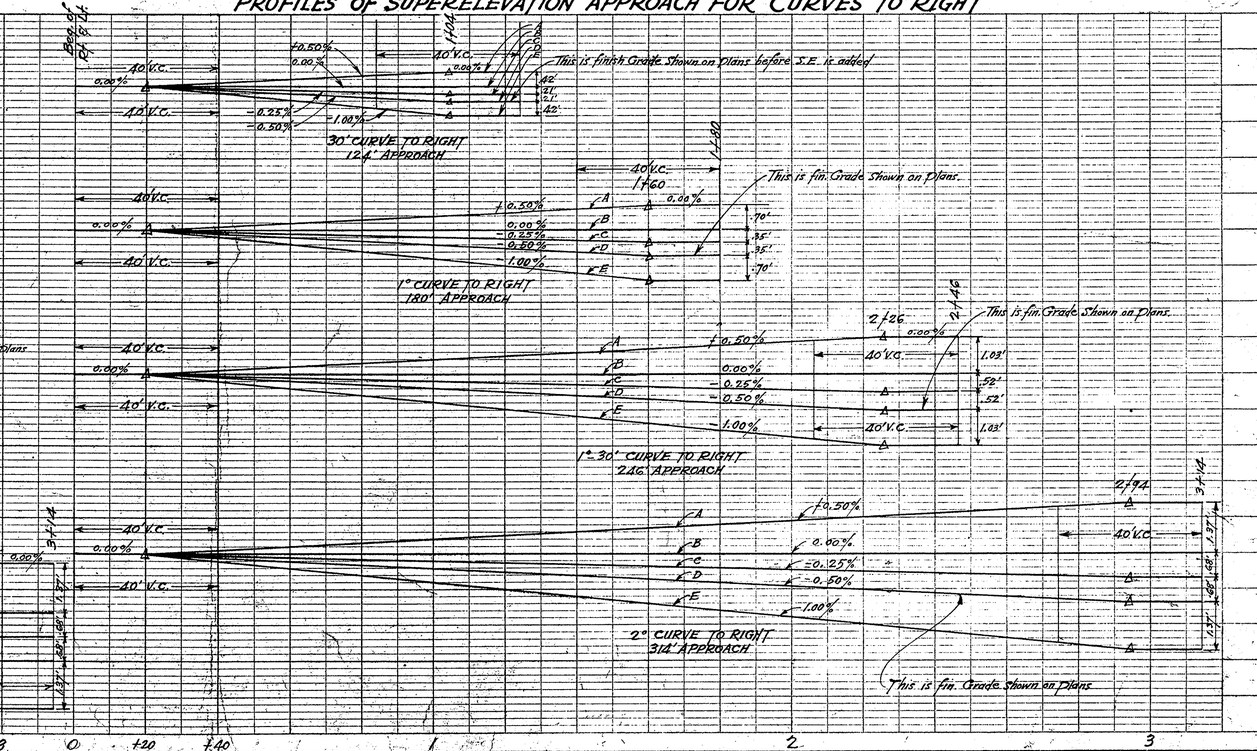
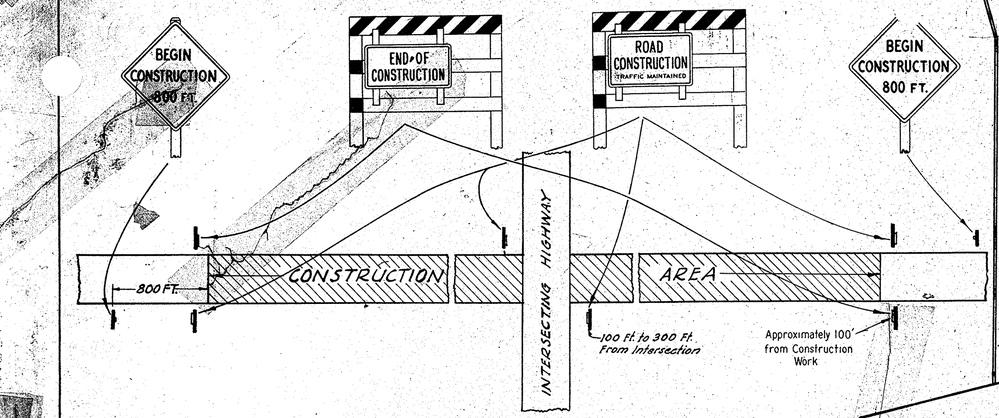


PLATE 1 - PLAN - PROFILE O. P. R. & R. D. STANDARD

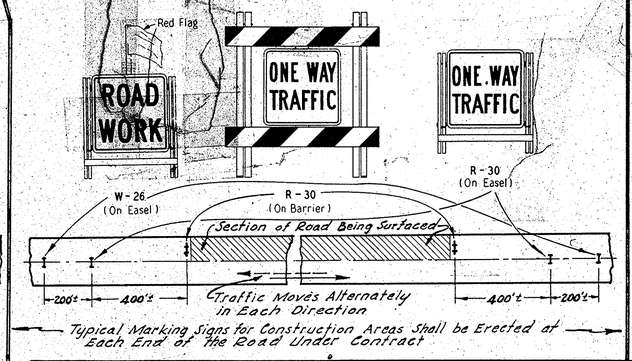
Fed. Proj. No.	State	County	Docket No.	Road No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11,347	29	5	417

445

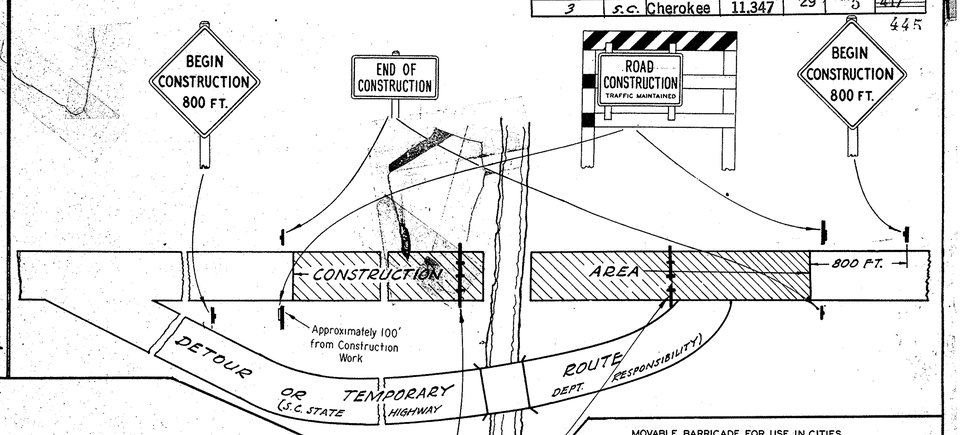
TYPICAL MARKING FOR CONSTRUCTION AREAS



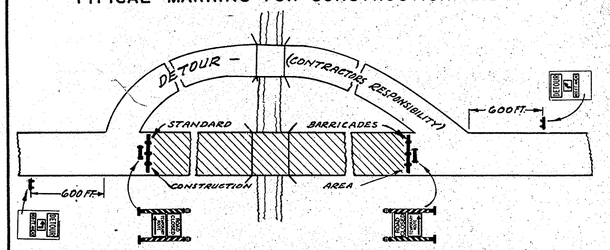
APPLICATION OF STANDARD SIGNS WHEN ROADWAY IS BEING SURFACED



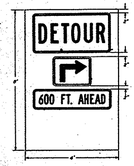
TYPICAL MARKING FOR CONSTRUCTION AREAS



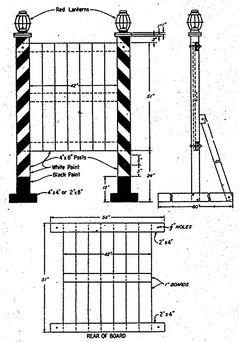
TYPICAL MARKING FOR CONSTRUCTION AREAS



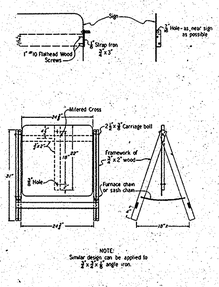
DETOUR 600 FT. AHEAD ASSEMBLY



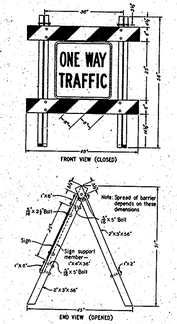
ROAD CLOSED STANDARD



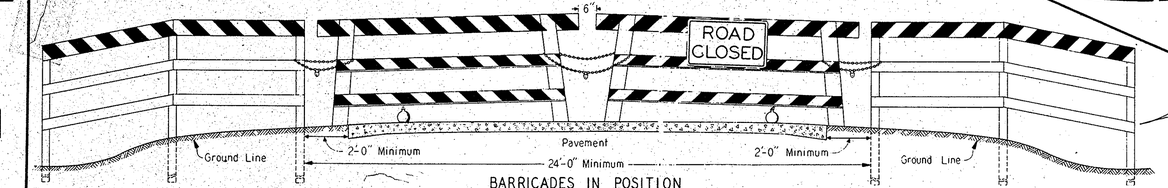
STANDARD SIGN EASEL
SWINGING TYPE



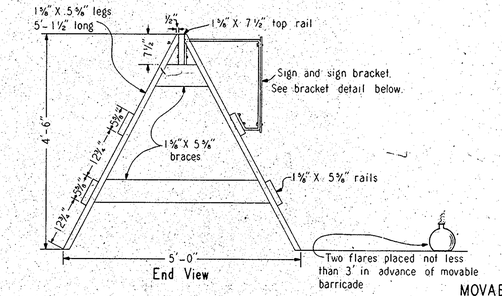
STANDARD PORTABLE SIGN BARRIER

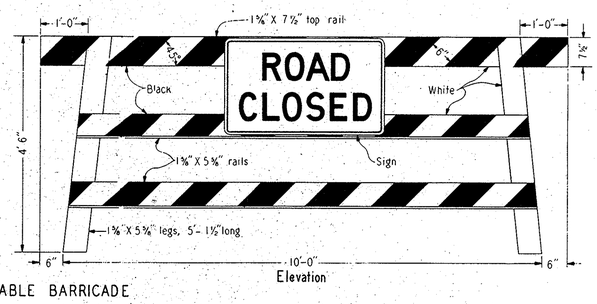


STANDARD BARRICADES

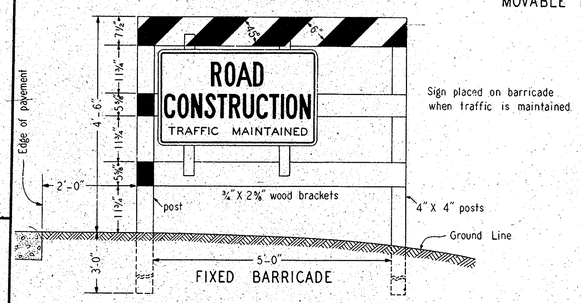


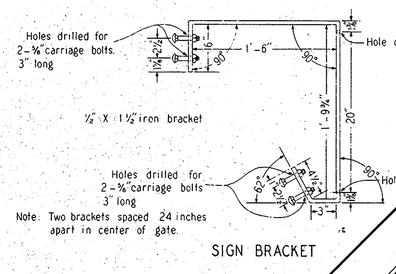
BARRICADES IN POSITION





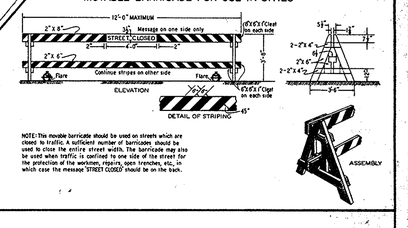
MOVABLE BARRICADE





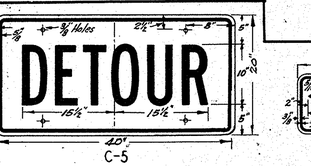
SIGN BRACKET

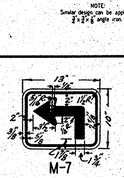
MOVABLE BARRICADE FOR USE IN CITIES

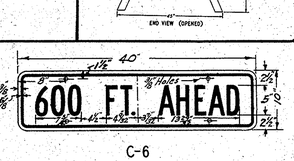


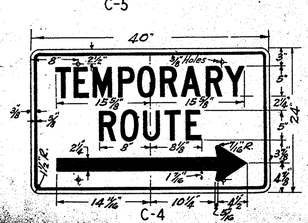
NOTE: This movable barricade should be used on streets which are closed to traffic. A sufficient number of barricades should be used to close the entire street width. The barricade may also be used when traffic is confined to one side of the street for the protection of the workmen, repairs, open trenches, etc., in which case the message STREET CLOSED should be on the back.

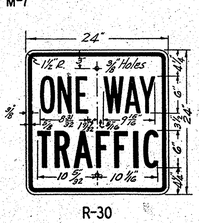
DRAWINGS SHOWING DIMENSIONS OF SIGNS

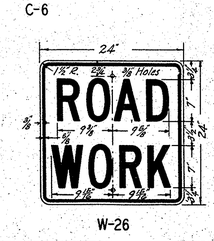


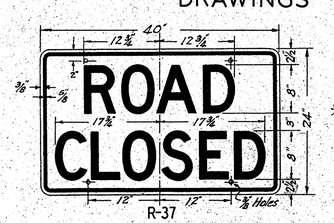


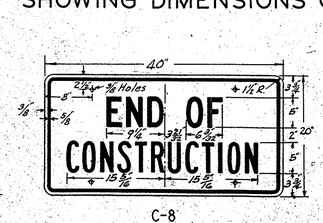




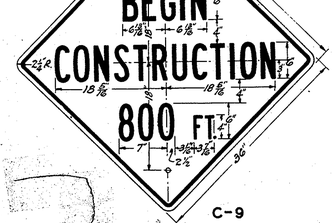












NOTES

ANY CONDITIONS NOT COVERED BY DETAILS AND SIGNS ON THIS DRAWING SHALL CONFORM TO THE LATEST S. C. STANDARD SPECIFICATIONS AND TO THE LATEST S. C. STANDARDS AND SPECIFICATIONS FOR UNIFORM TRAFFIC CONTROL DEVICES. THE LOCATION OF TYPICAL MARKINGS SHOWN HEREON MAY BE VARIED TO CONFORM TO FIELD CONDITIONS.

THE CONTRACTOR SHALL PROVIDE AND ERECT APPROPRIATE SIGNS AND BARRICADES THE FIRST DAY ANY WORK IS PERFORMED ON AT THE TIME HE MOVES ANY MATERIAL OR EQUIPMENT ON TO THE PROJECT, WHICHEVER IS FIRST. HE SHALL MAINTAIN THESE SIGNS THROUGHOUT THE LIFE OF THE PROJECT UNTIL FINAL ACCEPTANCE OF THE CONTRACT, AT WHICH TIME THEY SHALL BE REMOVED.

WHEREVER SURFACING WORK IS BEING PERFORMED ON THE ROADWAY AND ONE-WAY TRAFFIC IS BEING MAINTAINED THROUGH THE SECTION BEING SURFACED, THE STANDARD SIGNS SHALL BE PLACED AND, ALSO, FLAGMEN SHALL BE POSTED AT EACH END OF THE SECTION OF ROAD BEING SURFACED EXCEPT IN CASES WHERE TRAFFIC VOLUME IS LIGHT AND HIGH SPEEDS DO NOT PREVAIL; OR IN CASES WHERE THE SECTION OF ROAD BEING SURFACED IS NOT MORE THAN 100 FEET IN LENGTH AND THE SIGNS ARE CLEARLY VISIBLE FOR A DISTANCE OF 500 FEET.

THE DEPARTMENT WILL ERECT AND MAINTAIN PROPER SIGNS IN ACCORDANCE WITH THE MANUAL FOR UNIFORM CONTROL DEVICES ON ALL DETOURS OR TEMPORARY ROUTES THAT THE CONTRACTOR IS NOT REQUIRED TO MAINTAIN. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AND MAINTAIN PROPER DETOUR SIGNS AT AND ALONG ALL DETOURS FOR WHICH HE IS RESPONSIBLE.

THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN AND RELOCATE, WHERE NECESSARY, ALL REGULATORY, WARNING AND GUIDE SIGNS IN PLACE, OR THOSE THAT MAY BE ERECTED BY THE DEPARTMENT, WITHIN THE LIMITS OF HIS CONTRACT.

BETWEEN THE HOURS OF SUNSET AND SUNRISE, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TWO FLARES OR RED LANTERNS AT EACH BARRICADE, "ROAD CLOSED" SIGN, OBSTRUCTION OR AT SUCH OTHER POINTS AS ARE NECESSARY TO PROTECT THE TRAVELING PUBLIC.

ALL SIGNS SHALL BE REFLECTORIZED EXCEPT THOSE TEMPORARY SIGNS THAT ARE USED ONLY DURING DAYLIGHT HOURS. DRAWINGS SHOWING SIZES OF SIGNS, LETTERS AND NUMERALS ARE DETAILED HEREON. ALL SIGNS SHALL HAVE BLACK LETTERS OR NUMERALS ON A WHITE BACKGROUND EXCEPT THE "ROAD WORK" (W-26), "BEGIN CONSTRUCTION - 800 FT." (C-9) AND "DETOUR" (C-5) SIGNS WHICH SHALL HAVE A YELLOW BACKGROUND.

THE "ROAD CONSTRUCTION - TRAFFIC MAINTAINED" (C-7) SIGN SHALL BE MOUNTED ON A BARRICADE ON EACH SIDE OF THE INTERSECTION FACING TRAFFIC AT ALL IMPORTANT ROAD INTERSECTIONS. ON MAJOR ROUTES BEING CONSTRUCTED, THE BARRICADE SHALL BE ON BOTH SIDES OF THE ROAD AT THE EXTREME LIMITS OF THE PROJECT BUT THE SIGN MAY BE OMITTED ON THE BARRICADE ON THE LEFT SIDE OF ROAD FACING TRAFFIC. THE "END OF CONSTRUCTION" (C-8) SIGN MAY BE PLACED ON THE BACK OF THIS BARRICADE INSTEAD OF ON A POST.

WHEN A BRIDGE IS UNDER CONSTRUCTION AND TRAFFIC IS MAINTAINED, THE WORD "BRIDGE" SHALL BE SUBSTITUTED FOR "ROAD" ON THE "ROAD CONSTRUCTION - TRAFFIC MAINTAINED" SIGN AND THE SIGN ERECTED IN A LIKE MANNER.

DETAILS
SHOWING
STANDARD SIGNS, BARRIERS, LIGHTS, AND BARRICADES TO BE FURNISHED, ERECTED, AND MAINTAINED BY THE CONTRACTOR WHERE APPLICABLE ON ALL ROAD OR BRIDGE CONTRACTS

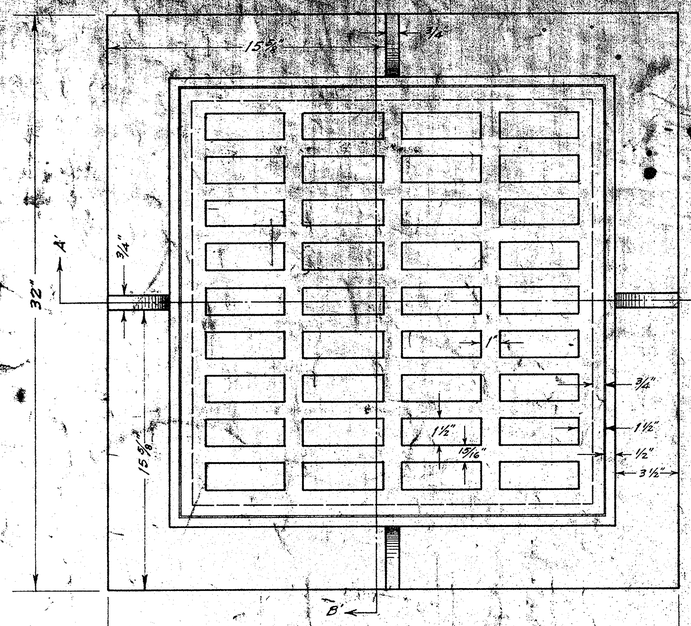
APPROVED — DATE 2/4/63

S.M. Pearman
STATE HIGHWAY ENGINEER

Fed. Road Distr. No.	State	County		Sheet No.	No. of Sheets	Job No.
14	S.C.	Charleston	1307-10	15		

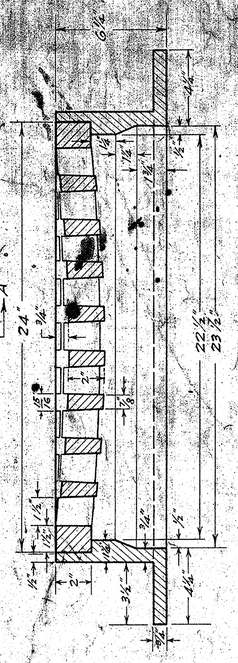
DROP INLET AND CASTING STANDARD

24" X 24" GRATE

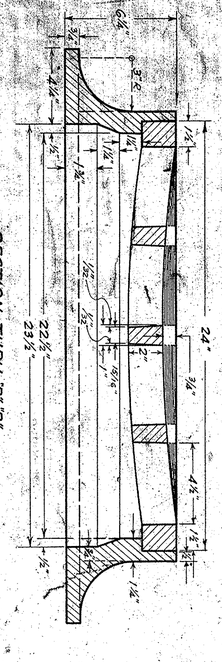


PLAN OF CAST IRON
FRAME WITH GRATE IN PLACE

APPROXIMATE WEIGHTS { FRAME 205 LBS. / GRATE 165 LBS. } TOTAL = 370 LBS.

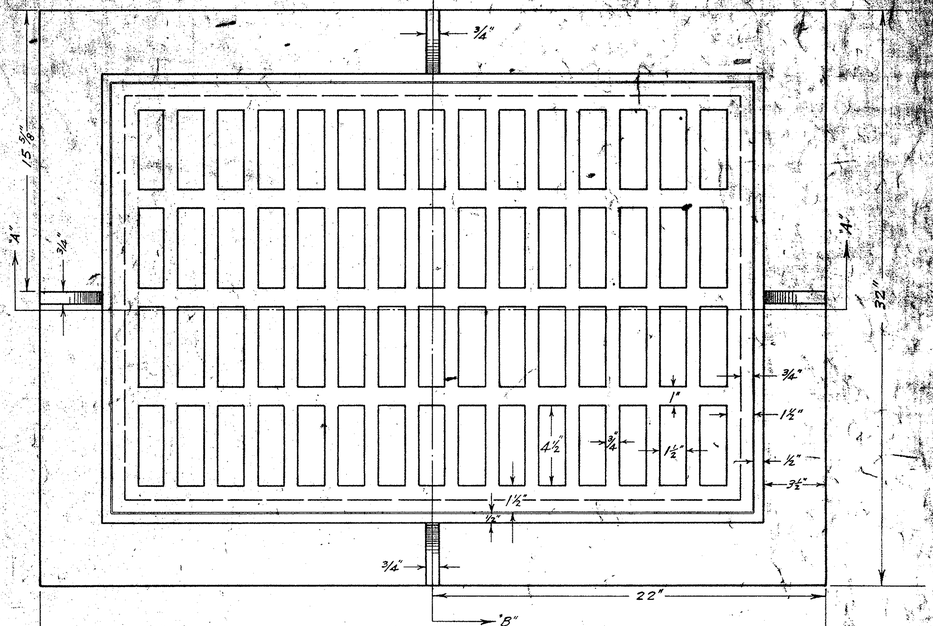


SECTION THRU 'B'-'B'



SECTION THRU 'B'-'B'

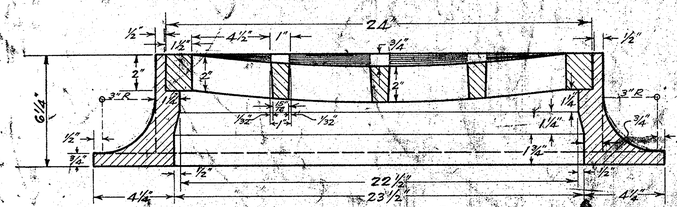
24" X 36" GRATE



PLAN OF CAST IRON
FRAME WITH GRATE IN PLACE

APPROXIMATE WEIGHTS { FRAME 287 LBS. / GRATE 238 LBS. } TOTAL = 525 LBS.

Note: The Drop Inlet will be constructed so that the longest dimension will be parallel to the center line of the road way where practicable.



SECTION THRU A'-A'

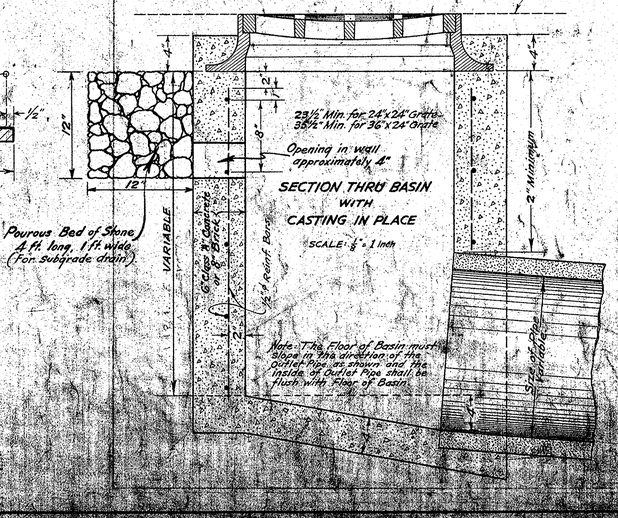
Note: For the construction of BASIN, BRICK MASONRY or Class "A" Conc. may be used. In case of concrete, the walls are to be 6" thick and floor 4" thick. For brick the walls are to be 8" thick and floor 4" thick.

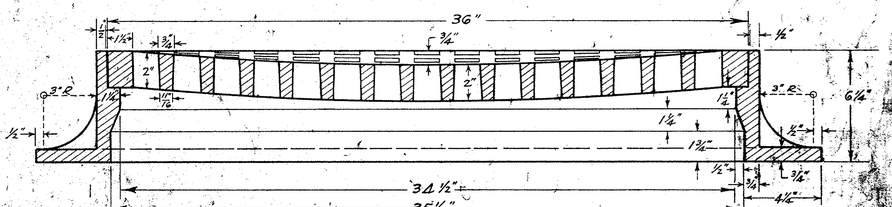
Where walls are constructed with concrete, reinforcement will not be required if basin is constructed in clay soil.

Reinforcing to consist of ½" bars as shown.

PLAN OF BASIN
Showing
ARRANGEMENT OF STEEL

Note: As shown by this drawing the Frame is set level, but the Engineer may set same on slope as required by local drainage conditions. After the Frame is set in its final position, it is to be encased with concrete as shown by drawing.





SECTION THRU 'A'-'A'

STANDARD DESIGN FOR DROP INLET & CASTING

S.C. STATE HIGHWAY DEPT.
COLUMBIA

APPROVED

Secretary and Engineer

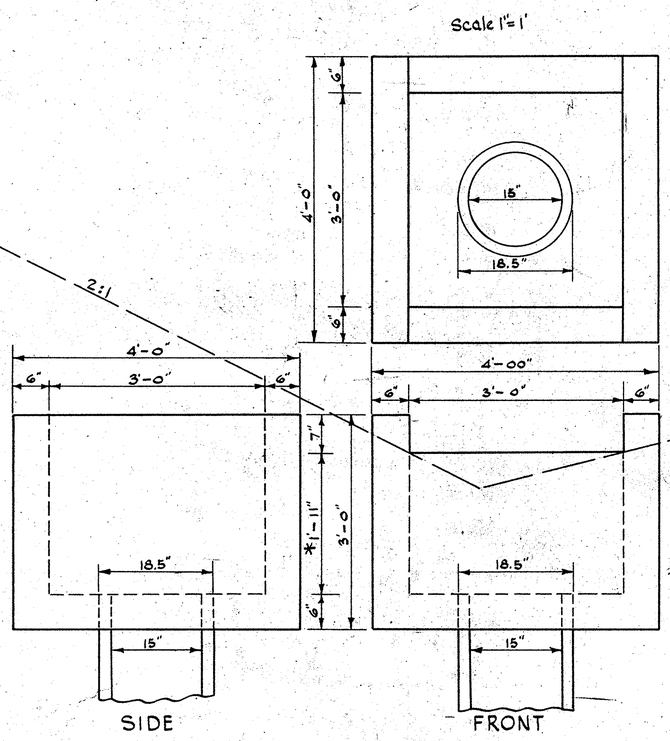
Designed by R.B. Wal. Jr.
Drawn by J.W. Mc.
Checked by T.D. Hunter
Traced by Garland Gore Jr.

DRAWING
F-9

FED ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11.347	I-301-2(7)	29	7	417

445

Scale 1"= 1'



PLAN

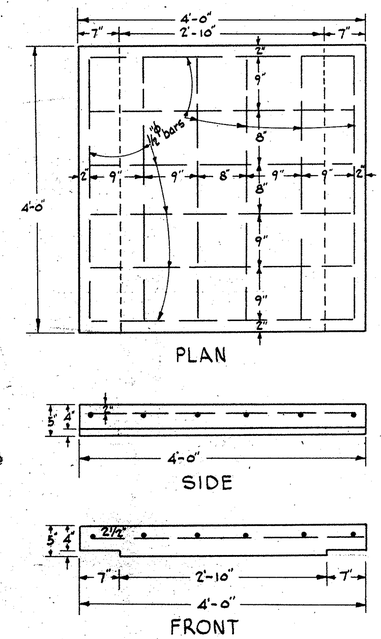
SIDE

FRONT

* This distance may be decreased wherever the headroom is limited on account of the elevation of cross line pipe.

DETAIL OF COVER

Scale 1"= 1'-00"



PLAN

SIDE

FRONT

Use 12 - ½" ϕ Reinf. Steel Bars 3'-8" Long (In Cover)
Total Reinf. Steel = 29 Lbs.
Total Class "A" Conc. = 1.07 Cu. Yd.

NOTES :—

The quantity of Concrete shown above is calculated for minimum depth of Catch Basin as shown in the drawings and allowances made for one line of 15" R.C. Pipe.

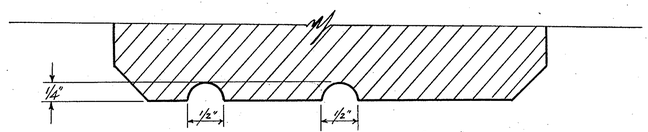
For construction of catch basin either brick masonry or Class "A" Concrete may be used. In case of Concrete, the walls and floor are to be 6" thick as shown in the drawings. (See Section 71 of the Standard Specifications). For Brick, the walls are to be 8" thick and the floor 4" thick (See Section 95 of the Standard Specifications).

STANDARD DESIGN OF CATCH BASIN TYPE 9

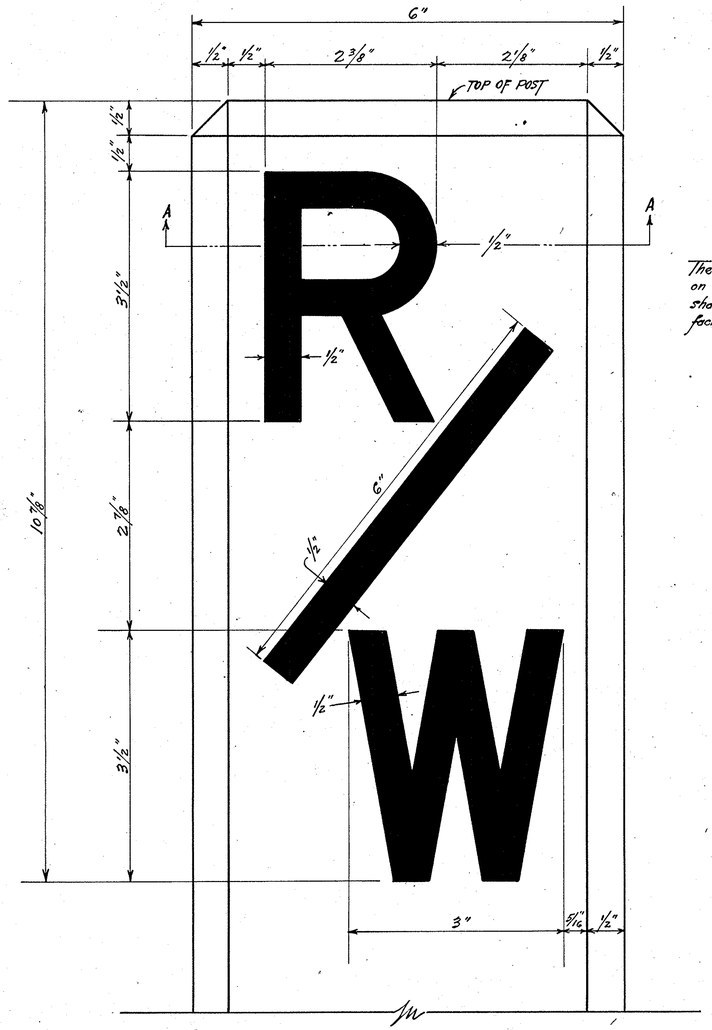
S.C. STATE HIGHWAY DEPT.
COLUMBIA, S.C.

DRAWING A-53

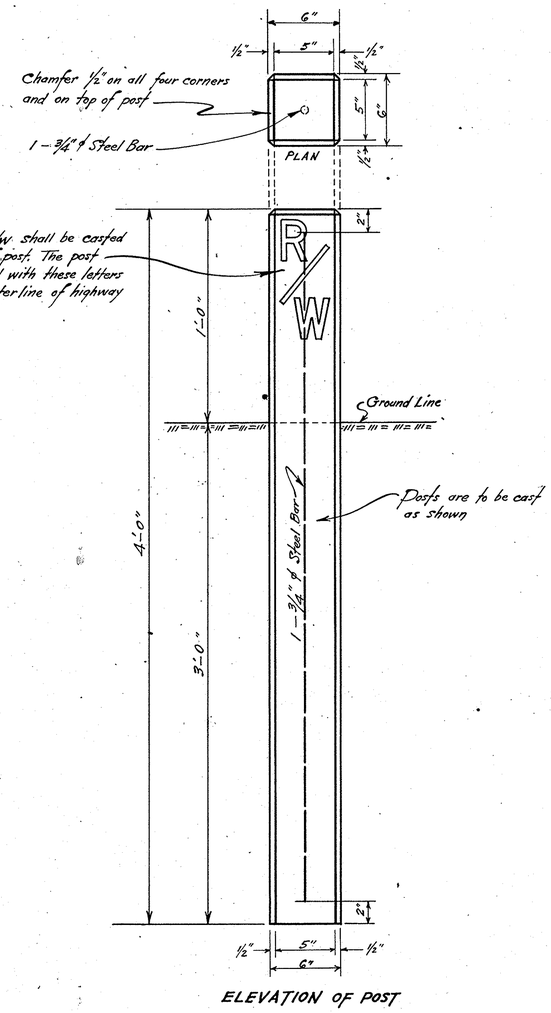
Fed. Road Dm. No.	State	County	Docket No.	F.A.P. No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11.347	I-301-2(7)	29	8	445



SECTION ON LINE A-A SHOWING DEPTH OF "R/W" LETTERS



DETAIL OF LETTERS
(ACTUAL SIZE)



ELEVATION OF POST

GENERAL NOTES:

Concrete Posts are to be pre-cast using Class "A" Concrete as described in Section 71 of the General Specifications and reinforced with one (1) three-quarter (¾") inch round steel bar.

Posts are to be six (6") inches square concrete, chamfered one-half (½") inch on all vertical corners and on the top.

Posts are to be placed three ft. in ground and extend one foot above ground line.

Posts are to be placed on the Right of Way line at all property corners and elsewhere as directed by the Engineer.

SOUTH CAROLINA STATE HIGHWAY DEPT.
COLUMBIA

STANDARD REINFORCED CONCRETE RIGHT-OF-WAY MARKER

APPROVED _____ DATE _____

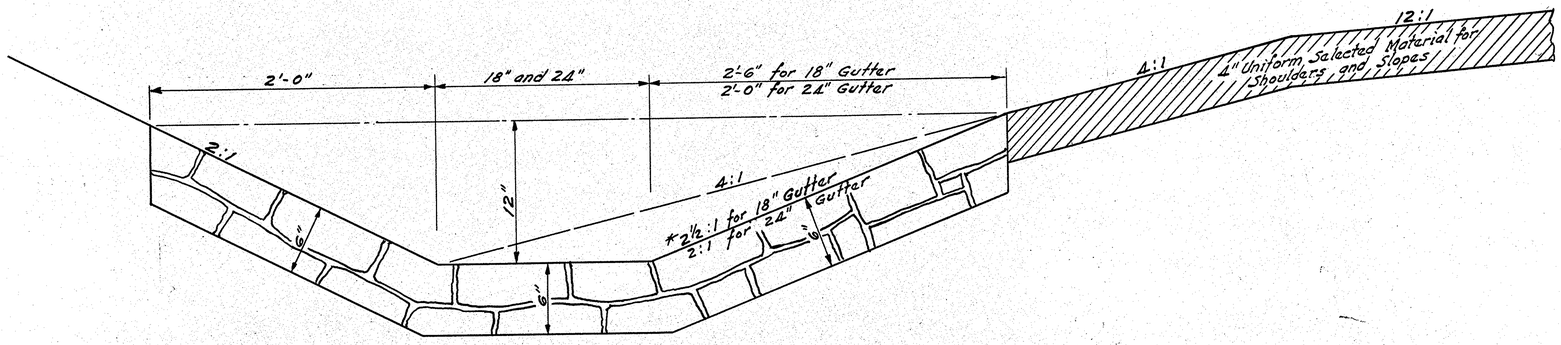
State Highway Engineer

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	FED. AID PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11.347	I-301-2(7) 29		9	447

S.C. STATE HIGHWAY DEPT.
COLUMBIA, S.C.

STANDARD DESIGN
FOR
PORTLAND CEMENT CONCRETE GUTTER
AND
CEMENT RUBBLE MASONRY GUTTER

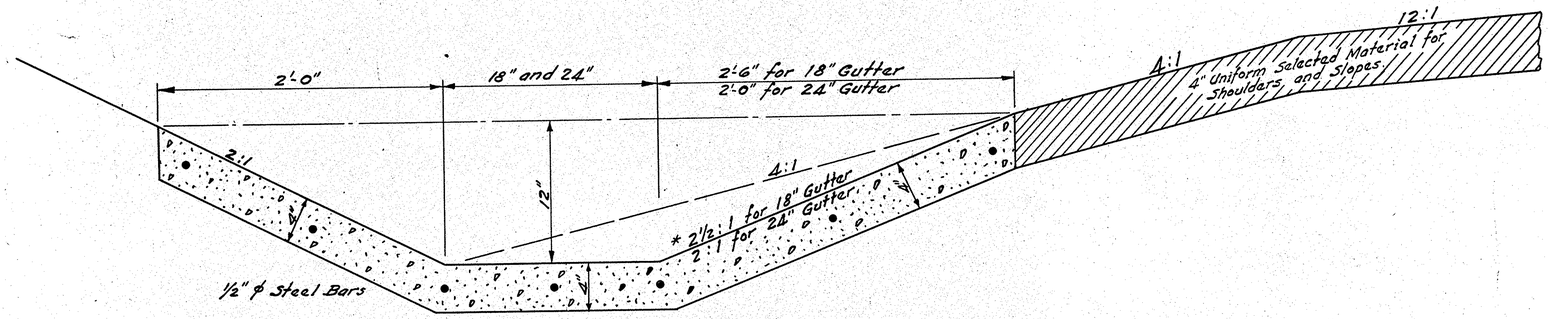
SCALE:- 2" = 1'-0"



Section thru Cement Rubble Masonry
Alternate No. 2.

Area = { 18" = 3.21 sq'
24" = 3.24 sq'

* This slope to be 2:1 where Gutter is constructed in Median Strip



Section thru Concrete
Alternate No. 1

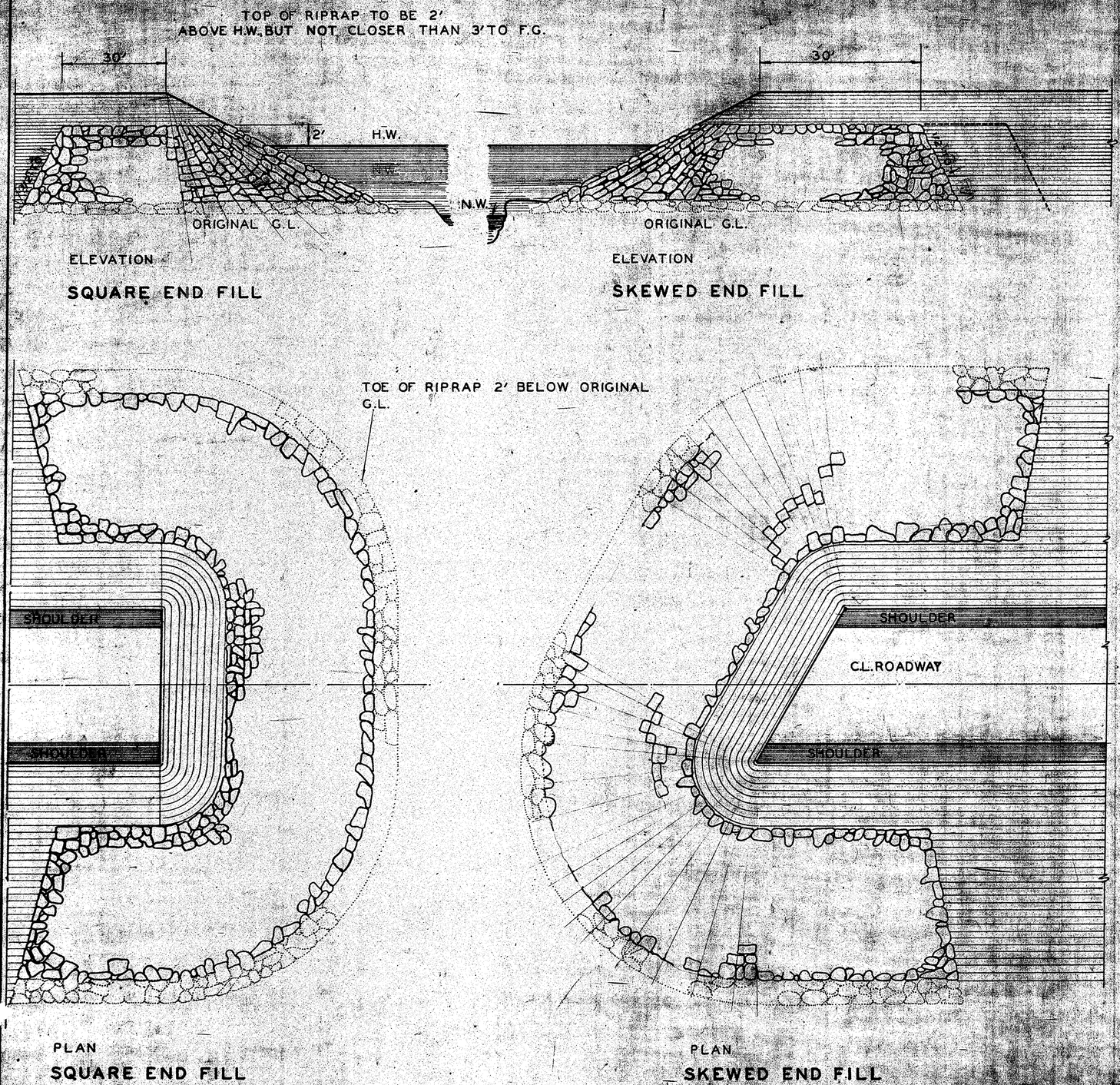
Area = { 18" = 2.14 sq'
24" 2.16 sq'

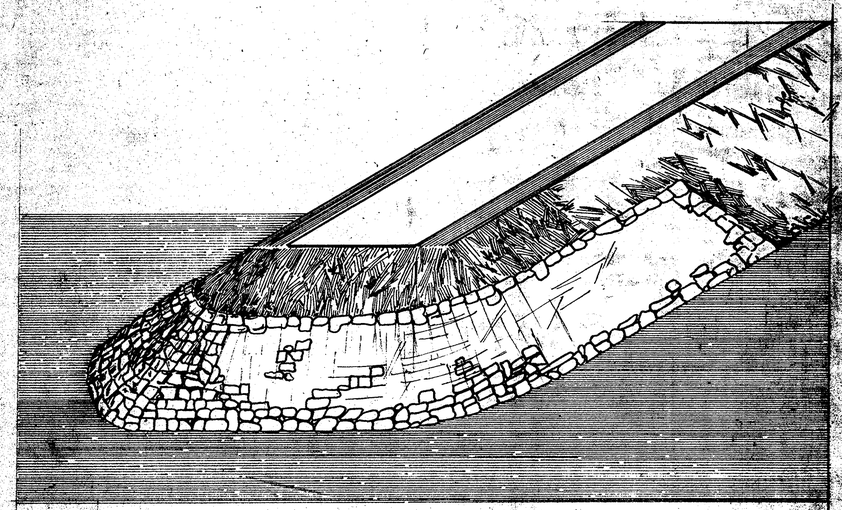
Note: Where the back slope of the roadway ditch is other than 2:1 the position of the gutter should be shifted to fit the back of the gutter to the back slope of the roadway ditch.
Expansion Joints to be 1" thick and shall be placed every 40 feet.
Weep Holes to be placed where directed by the Engineer.

SUMMARY OF GUTTER

STATION TO STATION		LENGTH	SIDE	WIDTH OF BOTTOM

3	S.C.	Cherokee	11.347	29		





ESTIMATED QUANTITIES		
STATION	CU. YDS.	TONS
1700 ft 62 ft Lines Rt. B	650	
1834+00 Frontage Rd. Rt.	30	
TOTAL	680	

S. C. STATE HIGHWAY DEPT.
COLUMBIA, S.C.

DETAIL SHOWING RIPRAP TO BE PLACED ON SLOPES OF EMBANKMENT AT BRIDGE ENDS

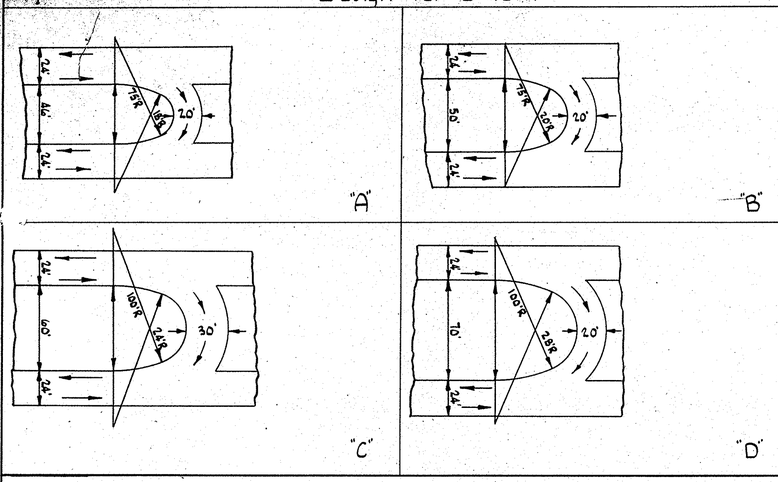
DOCKET NO. 11.347 ROAD ROUTE 29 & 18

COUNTY Cherokee

RIPRAP SHEET

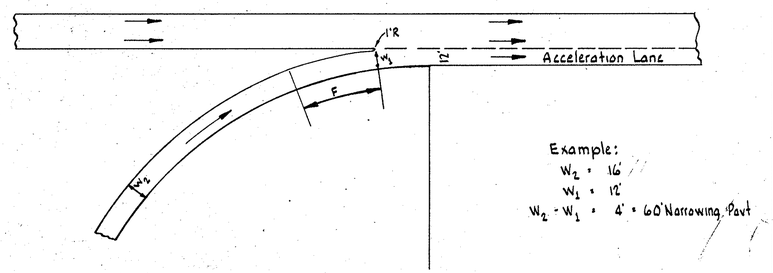
Fed. Aid No.	STATE	COUNTY	DOCKET NO.	PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11.347	I-301-2(7)	29	11	445

Design For U-Turn



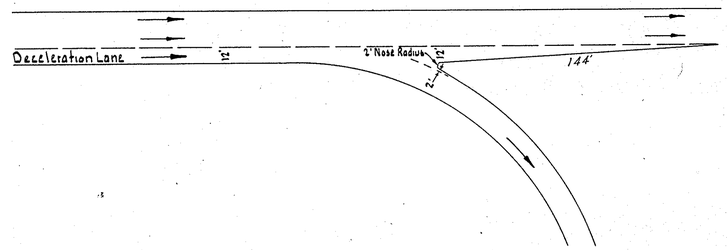
Design For Entrance Terminal (Acceleration Lane)

$W_2 - W_1$ Ramp Width reduction in feet	4	6	8	10	12
F-Length of Pavt. Narrowing in feet.	60	90	120	150	180



Example:
W_2 = 16'
W_1 = 12'
$W_2 - W_1$ = 4' = 60' Narrowing Pavt

Design For Exit Terminal (Deceleration Lane)



Acceleration Lane Lengths (60 M.P.H)

Grades of 2.50% or Less Use Table No. 1
Upgrades " " 2.50% to 4.50% " " " " x Ratio in Table No. 2
" " 4.50% " 6.00% " " " " " " " " " " 3
Downgrades " " 2.50% " 4.50% " " " " " " " " " " 4
" " 4.50% " 6.00% " " " " " " " " " " 5

Radius	M.P.H. on Leg	Table No. 1 Grades of 2.50% or Less	Table No. 2 2.50%-4.50% Upgrade	Table No. 3 4.50%-6.00 Upgrade	Table No. 4 2.50%-4.50% Downgrade	Table No. 5 4.50% to 6.00% Downgrade
90	20.0	225' Taper + 475' 12' Lane + 700 Total	1.40	1.70	0.60	0.50
100	20.8	" " 458' " + 683' "	1.408	1.717		
110	21.7	" " 442' " 667' "	1.417	1.733		
120	22.5	" " 425' " 650' "	1.425	1.750		
130	23.3	" " 408' " 633' "	1.433	1.767		
140	24.2	" " 392' " 617' "	1.442	1.783		
150	25.0	" " 375' " 600' "	1.450	1.800		
230	30.0	" " 275' " 500' "	1.500	1.900		
310	35.0	" " 175' " 400' "	1.500	2.050		
430	40.0	" " 25' " 250' "	1.500	2.200	0.60	0.50

Deceleration Lane Lengths (60 M.P.H)

Grades of 2.50% or Less Use Table No. 1
Upgrades " " 2.50% to 4.50% " " " " x Ratio in Table No. 2
" " 4.50% " 6.00% " " " " " " " " " " 3
Downgrades " " 2.50% " 4.50% " " " " " " " " " " 4
" " 4.50% " 6.00% " " " " " " " " " " 5

Radius	M.P.H. on Leg	Table No. 1 Grades of 2.50% or Less	Table No. 2 2.50%-4.50% Upgrade	Table No. 3 4.50%-6.00% Upgrade	Table No. 4 2.50%-4.50% Downgrade	Table No. 5 4.50%-6.00% Downgrade
90	20.0	225' Taper + 175' 12' Lane + 400 Total	0.9	0.8	1.20	1.35
100	20.8	" " 167' " " = 392' "				
110	21.7	" " 158' " " = 383' "				
120	22.5	" " 150' " " = 375' "				
130	23.3	" " 142' " " = 367' "				
140	24.2	" " 133' " " = 358' "				
150	25.0	" " 125' " " = 350' "				
230	30.0	" " 125' " " = 350' "				
310	35.0	" " 75' " " = 300' "				
430	40.0	" " 25' " " = 250' "	0.9	0.8	1.20	1.35

Design Widths of Pavement For Ramps

Radius on inner edge of Pavement. Feet	Pavement width in feet for: 1 Lane one-way operation no provision for passing			1 Lane one way operation with provision for passing			2 Lane operation-either one way or two way		
	* Design traffic Condition								
	A	B	C	A	B	C	A	B	C
50	16	17	20	21	24	27	30	33	37
75	15	16	18	20	22	25	28	31	34
100	14	16	17	19	21	24	27	30	33
150	13	15	16	18	20	23	26	29	31
200	13	15	16	18	20	22	26	28	29
300	12	15	15	17	19	21	25	27	28
400	12	14	15	17	19	21	25	27	28
500	12	14	15	17	19	21	25	27	27
Tangent	12	14	14	16	18	20	22	24	24

	Width modification regarding edge of pavement treatment:		
No stabilized shoulder	None	None	None
Mountable Curb	None	None	None
Barrier Curb: one side	add 1'	None	add 1'
Barrier Curb: two sides	add 2'	add 1'	add 2'
Stabilized shoulder, one or both sides	None	Deduct shoulder width; minimum pavement width as under case I	Deduct 2' where shoulder is 4' or wider.

* Design Traffic Condition

A- Predominantly P vehicles but some consideration for S.U Trucks.

B- Sufficient SU vehicles to govern design but some consideration for semitrailer vehicles.

C- Sufficient semitrailer C43 or C50 vehicles to govern design

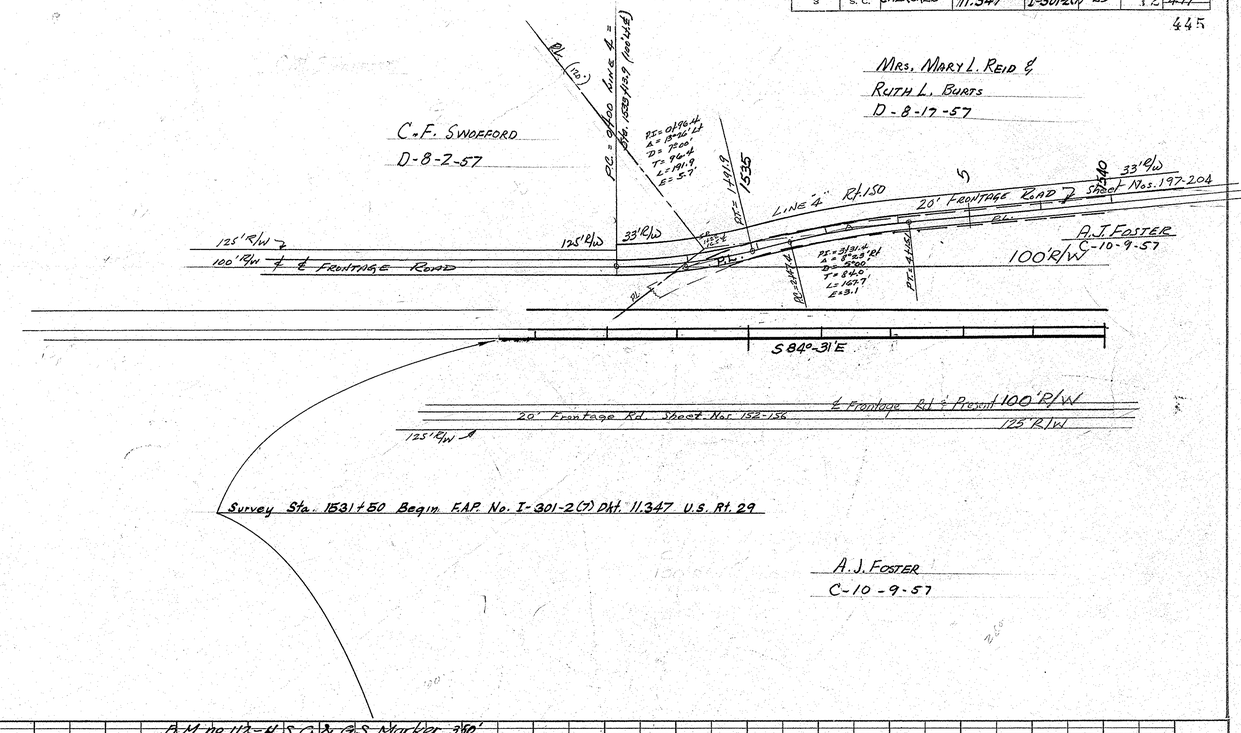
Superelevation

Radius feet	Degree of curve (rounded)	Range in superelevation rate (foot for foot) for intersection curves with design speed, m p h, of: 15	20	25	30	35	40
50	—	.02-.12	—	—	—	—	—
90	64		.02-.12	—	—	—	—
150	38			.04-.12	—	—	—
230	25				.06-.12	—	—
310	18					.08-.12	—
430	13						.09-.12
600	10						.07-.09
1000	6						.05-.06
1500	4						.04-.05
2000	3						.03-.04
3000	2						.02-.03

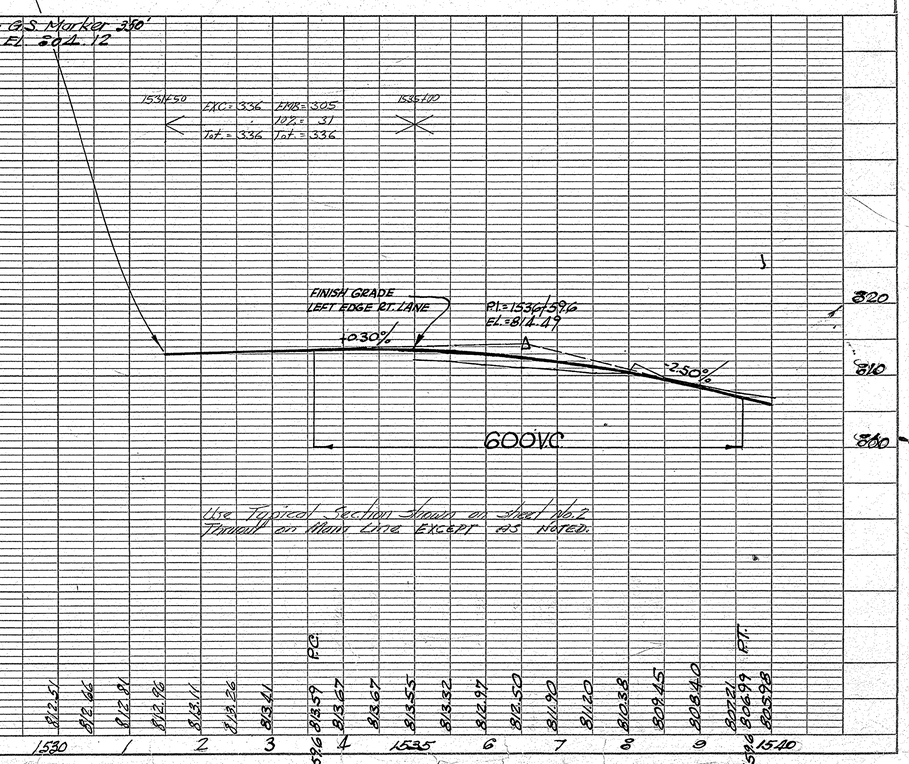
Note: Preferably use superelevation rate in upper third of indicated range.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(7)	29	12	~~417~~

445



PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE



PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTATIONS CHECKED
BY
DATE

Note ~

Changes involving increased cost of project or changes in alignment must be specifically authorized by the State Highway Engineer. District Engineer may authorize minor alterations not in conflict with the Standard Practices of the Department and not involving increases in cost. Forward information on any change in alignment to the Columbia Office as soon as the revision is completed.

All curves are to be superelevated as shown on sheets 4 & 4-A.

The following quantities are not shown in detail on the plans, but are included in the Summary of Estimated Quantities and may be varied during construction as directed by the Engineer:

Excavation	300	C.Y. for Box Culverts.
Overhaul	70,572	C.Y.H.M. for Selected Material for Slopes.
Concrete Gutter	4000	L.F. where directed by the Engineer.
15" R.C. Pipe	120	L.F. for Additional Side Lines.
18" R.C. Pipe	120	L.F. for Additional Side Lines.
4" Tile Underdrain	400	L.F. where directed by the Engineer.
Reset Fences	2000	L.F. where directed by the Engineer.
Right of Way Markers	50	Ea. " " " " "
Reset R/W Markers	100	Ea. " " " " "

CHEROKEE CO.
29
①

PLATE 1 - PLAN - PROFILE - O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO. NEW YORK

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11,347	I-301-2(7)	29	13	447

445

PLAN — SURVEYED — PLOTTED — GRADES CHECKED — R/W & OTHER DET. CHECKED — ALIGNMENT CHECKED — R/W OR WAY CHECKED — NOTE BOOK — NO. — BY — DATE

PROFILE — SURVEYED — PLOTTED — GRADES CHECKED — R/W & OTHER DET. CHECKED — NOTE BOOK — NO. — STRUCTURE NOTATIONS CHECKED — BY — DATE

Rd 86
P.I. 15+94.8
Δ 18° 21' Rt
D = 3° 00'
T = 308.5'
L = 611.7'
E = 24.7'

Mrs. Mary L. Reid & Ruth L. Betts
D. 8-17-57

① Albert B. Cline
D. 10-24-57

② E. H. Dobson Sr. & Mrs. Maude L. Dobson
D. 10-23-57

Carolina Drug

Retain 84'-24" R.C. Pipe
Add 64'-24" R.C. Pipe
Const. Type #9 Catch Basin

In Place 20'-18" R.C. Pipe

Mrs. A. J. Foster
C-10-9-57

Retain 44'-24" R.C. Pipe

Water Main

Retain 52'-18" R.C. Pipe

③ Winnie Elliott Sarratt Bell
D. 10-14-57

2nd Frontage Rd. Sheet No. 152+20.4

FRONTAGE ROAD 2

LINE A

GULF OIL CORP

③ Winnie Elliott Sarratt Bell
D. 10-14-57

⑨ H. Wheeler (Mill) Noen
D. 10-24-57

SER. STA.

CONC. CURB

CONC. CURB

Curve Data Line 4
PI = 23+84.5
Δ = 3° 26' Lt
D = 1° 00'
R = 171.7'
T = 343.3'
E = 2.6'

⑤ James Sarratt
D. 11-1-57

PC = 23+41.2 Line 1

PT = 25+66.1 Line 1

Rt. 150 To Boiling Springs

Tie Equality Only:
Sta. 25+85.3 Line 4 =
Sta. 23+85.2 Line 1

Curve Data Line 1
PI = 25+50.0
Δ = 24° 31' Rt
D = 5° 00'
T = 249.0
L = 490.8
E = 26.7

⑮ Lewis W. Coyle
D. 10-31-57

In Place 20'-15" R.C. Pipe

In Place 20'-15" R.C. Pipe

PI = 15+61.70
Δ = 32° 19' 4"
D = 1° 30'
T = 1106.8'
L = 2154.4'
E = 151.1'

P.I. Is R/W (See Below)

125 R/W

& Frontage Rd. Present 100' R/W

PC = 23+01.0 Line 1

Sheet No. 151+56

Tan. to ℄

Tan. to ℄

Tan. to ℄

Tan. to ℄

S 84° 31' E

100' R/W

125 R/W

℄ Frontage Rd. & Present Rd.

Sheet No. 152+56

145 R/W

110' R/W

100' R/W

Relay 20'-18" R.C. Pipe
Add 4'-18" R.C. Pipe

Mrs. A. J. Foster
C-10-9-57

Place 36'-24" R.C. Pipe

Retain 36'-18" R.C. Pipe

Mace Pennington & W. Mackson Jones
D. 10-16-57

Cemetery

End 18 Surf treat.

Mace Pennington & W. Mackson Jones
D. 10-16-57

Tie Equality Only:
Sta. 1569+30 Lt. 29 =
Sta. 21+15.2 Line

③ Mace Pennington & W. Mackson Jones
D. 10-16-57

④ Abner W. Waters
D. 9-25-57

See Interchange Layout Rt. 150
See Sheet No. 37

Retain 104'-24" R.C. Pipe
P.T. = 17+77.0 Line 1

⑦ James Nathan Elliott
D. 11-1-57

⑫ C.H.& Creola B. Cook
D. 10-30-57

⑬ William Edward Sarratt
D. 10-30-57

⑪ Albert Sarratt
D. 11-1-57

In Place 20'-15" R.C. Pipe

16' Drive ±85' ℄

Crib

Rt. 150

Rt. 150

Rt. 150

FED. ROAD	STATE	COUNTY	PROJECT	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	I-301-2(7)	29	14	~~417~~

445

PLAN — SURVEYED: ; PLOTTED: ; DRAWN BY: ; TRACED BY: ; CHECKED BY: ; DATE:

PROFILE — SURVEYED: ; PLOTTED: ; NOTE BOOK: ; NO.: ; GRADES CHECKED: ; B. M.'S NOTED: ; STRUCTURE NO. ; STATING CHK'D

(Includes R/W for connecting ROAD on RT. opposite Sta 1586+30 as shown)

Retain 52'-24" R.C. Pipe
Add 60'-24" R.C. Pipe
Const. Type #9 C.B.

Retain 60'-18" R.C. Pipe

Place 44'-24" R.C. Pipe

In Place 24'-18" R.C. Pipe

Place 32'-24" R.C. Pipe

Relay 24'-15" Relaid Pipe

In Place 20'-15" R.C. Pipe

Place 20'-15" R.C. Pipe

Place 24'-15" R.C. Pipe

Place 44'-18" R.C. Pipe
Retain 72'-18" R.C. Pipe
Add 64'-18" R.C. Pipe
Const. 2 Type #9 C.B.

Retain 76'-24" R.C. Pipe
Add 48'-24" R.C. Pipe
Const. 2 Type #9 C.B.

Relay 20'-15" R.C. Pipe
Add 4'-15" R.C. Pipe

Retain 32'-18" R.C. Pipe

In Place 20'-15" R.C. Pipe

Place 32'-24" R.C. Pipe

In Place 20'-15" R.C. Pipe

Relay 20'-15" R.C. Pipe
Add 4'-15" R.C. Pipe

Lewis W. Coyle D.10-31-57

W.C. Hamrick D.9-23-57

Edward P. Jefferies D.9-20-57

W.C. Hamrick D.9-23-57

Edward P. Jefferies D.9-20-57

Edward P. Jefferies & W.C. Hamrick Jr. D.9-20-57

W.O. Jolly Sr. & Lillie Jolly D.11-1-57

G.H. Humphries D.11-7-57

C.H. & Cheeka Roark D.10-30-57

(Miss) Bessie Sarratt Et Al. D.10-29-57

Fritz H. Sarratt D.10-28-57

D.D. McIntyre D.10-31-57

Winnie M. McIntyre D.10-31-57

Jack L. McIntyre

G.H. Humphries D.11-7-57

NOTE: AIR SERVICE USED BY CIVIL AIR PATROL

Mile Post #13

Approx. 400' to Frontage Rd Sheet No. 157-180

Present R/W 100'

Frontage Rd Sheet No. 181-198

Frontage Rd Present R/W 100'

Frontage Rd Property Rights

Conc. Block (Skating Rink)

Sign Board (Hotel Carroll)

Storm Pt

Well

Jolly's Bus. Bldg. (Conc. Block)

Gas Line Strip

Entrance

Exit

C.H. Rd. S-193

Road

P.C. = 0+85.9

P.I. = 1588+30.4
Δ = 90°-00'-00"
D = 7°-10'-08"
T = 100.0'
L = 157.08'

P.T. = 2+42.9

P.C. = 1599+49.9

P.T. = 11+17 / 1572+17.7 / 9.40'

P.O.T. = 1574+10.9 / 4.91' / 10.45' / 1" ⌀ Plum / 2" ⌀ Plum

P.O.T. = 1588+80.5 / 4.75' / 7.19' / 1" ⌀ Pine / 2" ⌀ Hickory

P.O.T. = 0 1594+02.1 / 39.32' / 17.87' / 8" ⌀ Oak / 24" ⌀ Oak

P.C. = 1599+49.9 / 77.06' / 31.41'

B.M. no. 16 – Nail in Root of 8" Twin Pine
125' Lt. Sta. 1572+55 – El. 784.45

B.M. no. 17 – Nail in Root of 10" Oak
100' Lt. Sta. 1588+65 – El. 778.07

B.M. no. 18 – Nail in Side of 30" Pine
120' Lt. Sta. 1598+00 – El. 747.78

EXC. = 10,601 EMB. = 9637
Tot. = 10,601 Tot. = 10,601
OVERHAUL = 3200 C.Y.-M.
EMB. = 964

EXC. = 2848 EMB. = 2539
Tot. = 2848 Tot. = 2848
OVERHAUL = NONE
EMB. = 259

Pl. = 1573+00
+0.30%
Finish Grade = ℄ Edge Rt. Lane
-0.96%
-2.13%
600' V.C.
600' V.C.
Pl. = 1590+92
El. = 771.08
D.A. = 8 AC.
C. = 0.5
D.A. = 5 AC.
C. = 0.6

1570 1580 1590 1600

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CHEROKEE CO. 29

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301(27)	29	15	~~17~~

445

PLAN — SURVEYED: DATE; PLOTTED: BY; GRADES CHECKED; R/W & LIMIT CHECKED; RT. OF WAY CHECKED; NOTE BOOK; NO.

PROFILE — SURVEYED: DATE; PLOTTED: BY; GRADES CHECKED; B. M.'S NOTED; STRUCTURE LOCATIONS CHKD.

Sunny Slope Farms, Inc. By: Louis V. Cosentino D.9-20-57

H.H. Humphries D.10.31.57 (26)

G.H. Humphries D.11.7.57 (27)

F.W. Sossaman Jr. D.11.15.57 (27)

A.T. Humphries D.11.5.57. (25)

J.P. & Pearl S. Quinn D.11.5.57 (28)

J.P. Quinn Et Al. D.5.16.59 (Additional R/W) (28-A)

Herbert F. Barnhill D.10.17.57 (30)

Herbert F. Barnhill D.5.19.59 (Additional R/W) (30-A)

National Ring Traveler Co.

Well

Fd. Ent.

Frontage Rd. 1

Frontage Rd. 2

Frontage Rd. 3

Frontage Rd. 4

Co. Rd.

Trail Road

Dairy

Place 48'-18" R.C. Pipe

In Place 20'-15" R.C. Pipe

Place 24'-15" R.C. Pipe

In Place 36'-18" R.C. Pipe

Place 36'-18" R.C. Pipe

Place 40'-15" R.C. Pipe 30° Skew

Retain 72'-18" R.C. Pipe Add 92'-18" R.C. Pipe Const. 2 Type #9 C.B.

In Place 32'-15" R.C. Pipe

Place 32'-18" R.C. Pipe

Place 32'-15" R.C. Pipe

Place 36'-18" R.C. Pipe

Retain 64'-18" R.C. Pipe Add 96'-18" R.C. Pipe Const. 2 Type #9 C.B.

Place 24'-15" R.C. Pipe

Place 76'-18" R.C. Pipe Const. Type #9 C.B.

Place 36'-18" R.C. Pipe

In Place 20'-15" R.C. Pipe

Retain 92'-18" R.C. Pipe Add 48'-18" R.C. Pipe

P.I. = 1608 + 36.3
Δ = 24° - 54' Rt.
D: 1° 30'
T = 8433'
L = 1660'
E = 92.0'

P.I. = 1616+53.8

N 88° - 04' E

Z

P.I. = 1611+50
El. = 727.24

P.I. = 1628+00
El. = 715.36

-2.13 %

-0.72 %

-0.38 %

Finish Gr. LH Edge Rt Lane
Min. 5.2

Finish Grade Left Edge of Right Lane

600' V.C.

300' V.C.

D.A. = 5 AC. C = 0.5

B.M. no. 119 = Nail in Side of D.B. 25' Lt. Sta. 1610+15 = El. 734.58

B.M. no. 120 = Nail in Side of 10" Pine 100' Lt. Sta. 1619+20 = El. 725.79

EXC = 5915 C.Y.
Tot. = 5915 C.Y.
OVERHAUL = 559 C.Y.-M.

EMB = 5377 C.Y.
102 = 538 C.Y.
Tot. = 5915 C.Y.

CHEROKEE CO.
29

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	F-301-2(9)	29	16	47

PLAN — SURVEYED / PLOTTED / NOTE BOOK / NO. — GRADES CHECKED / R-M-Y NOTES / STRUCTURE NOTES CHKD. / RT. OF WAY CHECKED — BY / DATE

PROFILE — SURVEYED / PLOTTED / NOTE BOOK / NO. — GRADES CHECKED / R-M-Y NOTES / STRUCTURE NOTES CHKD. — BY / DATE

(29) Sunny Slope Farms Inc. By: Louis V. Corrigano D. 9-20-57

Retain 52'-18" R.C. Pipe
Add 176'-18" R.C. Pipe
Const. 3 Type #9 C.B.

Place 40'-18" R.C. Pipe

Retain 64'-18" R.C. Pipe
On 30° Skew
Add 108'-18" R.C. Pipe

Place 44'-18" R.C. Pipe

Place 24'-18" R.C. Pipe

Place 40'-24" R.C. Pipe

Retain 64'-24" R.C. Pipe
Add 92'-24" R.C. Pipe
Const. 2 Type #9 C.B.

In Place 24'-18" R.C. Pipe

Retain 72'-15" R.C. Pipe & Catch Basin

Retain 192'-30" R.C. Pipe

1630 1635 1640 1645 1650 1655 P.C. 1655+33.2 1660

100' R/W 110' C/L

℄ Frontage Road - 80'℄ Sheet Nos. 157-180

Peach Orchard

N 88° 04' E

Void

Water Tank

Road 82 To Belton

To Place 44'-24" R.C. Pipe

℄ Frontage Road 66'2

Bit. Surf. Treat. To Place 65'-9" Tile Underdrain

Road 14

Lane Road

SADIE MAE T. MARTIN
SARA TATE MARTIN

LA DEL MOTEL

Place 24'-15" R.C. Pipe

J. G. & DELLA P. LACKEY

Air Conditioned

SHANGRI-LA RESTAURANT

Bit Treat.

Bit Surf.

Amoco

Relay 20'-15" R.C. Pipe
Add 4'-15" R.C. Pipe

(30-A) Herbert J. F. Barnhill D. 5-19-58 (Additional R/W)

(31) Mary Mae Martin Barnhill D. 10-17-57

(32) Mary Mae Martin Barnhill D. 2-3-58 (Additional R/W)

(33) Sadie Mae Martin Et Al D. 10-17-57

Relay 20'-15" R.C. Pipe
Add 4'-15" R.C. Pipe

(33) Sadie Mae Martin Et Al D. 10-17-57

(22) (Mrs.) Nora H. Wheeler D. 10-10-57

(Mrs.) Marie P. Cooper D. 10-17-57

(21) Thurmond D. Gault D. 8-20-57

In Place 20'-15" R.C. Pipe

See Interchange Layout Road 82 (Sheets 66-68)

B.M. no. 121 - Nail in Side of 6" Peach 75' Lt. Sta. 1632+50 - El. 723.86

B.M. no. 122 - Nail in Side of 6" Peach 100' Lt. Sta. 1645+10 - El. 711.81

B.M. no. 129 - Nail in Root of 30" Oak 120' Lt. Sta. 1658+20 - El. 693.21

Pl. = 1632+00
El. = 713.84

-0.33%

300' V.C.

-0.89%

D.A. = 5 Ac.
C. = 0.4

400' V.C.

Pl. = 1640+00
El. = 706.72

Finish Grade Left Edge of Right Lane

-0.72%

D.A. = 8 Ac.
C. = 0.5

D.A. = 12 Ac.
C. = 0.5

D.A. = 27 Ac.
C. = 0.5

EXC. = 14,213
Tot. = 14,213
OVERHAUL = 10,320

EL 718. = 12,925
10% = 1292
Tot. = 14,213
C.Y. Emb.

Void

TIE EQUALITY =
Sta. 1650+00 Mainline Rt. 29 =
Sta. 1650+00 Line 1 Rt. 18 Interchange
See Sheet No. 20

720 710 700 690 680 670

1630 1 2 3 4 5 6 7 8 9 1640 1 2 3 4 5 6 7 8 9 1650 1 2 3 4 5 6 7 8 9 1660

CHEROKEE CO. 29 6

PLATE 1 - PLAN-PROFILE - 1" = 40' H. & 4' V. STANDARD

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	F-301-2(7)	29	17	~~117~~ 445

PLAN — SURVEYED. PLOTTED. ALIGNMENT CHECKED. RT. OF WAY CHECKED. NOTE BOOK NO. DATE BY

PROFILE — SURVEYED. PLOTTED. GRADES CHECKED. B. M.'S NOTED. STRUCTURE NOTATIONS CHKD. NOTE BOOK NO. DATE BY

EDWARD R. JEFFERIES

PAUL LIPSCOMB

LOUIS COURTNEY

MARTHA LOU & JOE DEAN PHILLIPS

LUKE HUSKY

E. R. JEFFERIES

W. D. & MATTIE ESTELLE BLACKWELL

STERLING SILVER

In Place 20'-15" R.C. Pipe

In Place 24'-15" R.C. Pipe Relay

Retain 176'-36" R.C. Pipe & Catch Basin
20'-15" R.C. Pipe From Bottom of C.B. to Top of 36" R.C. Pipe

In Place 20'-18" R.C. Pipe

Retain 48'-18" R.C. Pipe

Retain 44'-15" R.C. Pipe

Retain 39'-18" R.C. Pipe

Retain 114'-24" R.C. Pipe

Tenant House

Southern Bell Tel. & Telegraph Co. Res.

Combination Store & Service Sta. 87'-Front Shed 108'-E-4000 Gal. Gasoline Tanks 168'-Barn

Well

Res.

Drive

100' R/W

Pres. 37½' R/W

37½' R/W Present

65' R/W

P.I. 1669+04.8

P.I. 1677+04

P.I. 1686+64.3

P.I. 1688+26.8

P.I. 1690+72.2

P.I. 1691+08.2

P.I. 1692+72.2

P.I. 1695+25.5

P.I. 1696+39.9

P.I. 1697+12

M. 67°-30' E.

132°-17'

80.75

Field Road

Retain 15" R.C. Pipe & Catch Basin

In Place 36'-24" R.C. Pipe

In Place 28'-15" R.C. Pipe

LAWRENCE F. ALLISON EST.

VOID
See Sheets 66-68

E. R. JEFFERIES & MRS. HARDENIA J. SMITH

In Place 20'-12" R.C. Pipe

In Place 20'-18" R.C. Pipe

Ten House

Mail Box

Hub

P.O.T. 1686+64.3

See Interchange Layout Pt. 18 (Sheets 66-68)

P.M. No. 122 - Nail in Side of P.P. 62' Lt. Sta. 1667+00 - El. 692.04

P.M. No. 123 - Nail in Side of P.P. 62' Lt. Sta. 1677+04 - El. 685.03

NOTE.
FOR MAIN LINE PROFILE SEE SHEET NOs. 20 & 21

1660 1670 1680 1690 700 690 680 670 660

CHEROKEE 29

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.3.47	I-301-2(7)	29	18	445

PLAN — SURVEYED, PLOTTED, PLOTTED CHECKED, ALIGNMENT, PLOT OF WAY CHECKED, NOTE BOOK, NO., BY, DATE

MRS. E. H. LOVELACE

STERLING SILVER

FRED GANT

W. H. McDANIEL

MAGGIE & LUTHER MARTIN

CARROLL WOOD

EARL SIMMONS

T. D. GRUBB

VIRGIL F. RAMSEY

E. R. JEFFERIES &
MRS. HARDENIA J. SMITH

SUSIE LAUGHLIN

Proj. Sta. 1709+10
36½' 29°29' 3" Pine
3" Pine

In Place 27'-15" R.C. Pipe

In Place 20'-15" R.C. Pipe

Retain 42'-18" R.C. Pipe

In Place 16'-15" R.C. Pipe

In Place 20'-15" R.C. Pipe

Woods Fish Camp

Well

Garage

Drive

Gravel Walk

Concrete Walk

Res.

Well House

1690 1695 1700 1705 1710 1715 1720

IN PLACE 20'-15" R.C.

37½' R/W Proj.

55' R/W

75' R/W

24' Conc. Br.

Cherokee Creek

N67°30'E

70'

65' R/W

In Place 32'-18" R.C. Pipe

IN PLACE 20'-18" R.C.

Retain 96'-18" R.C. Pipe

Road

In Place 32'-18" R.C. Pipe

In Place 24'-18" R.C. Pipe

10 VOID Sag

See Interchange Layout Rt. 18 (Sheets 66-68)

B.M. no. 126 - Nail in P.P.
62' Lt. Sta. 1690+75 - El. 662.16

B.M. no. 127 - Nail in Root 10" Hickory
224' Lt. Sta. 1699+75 - El. 610.66

NOTE:
FOR MAIN LINE PROFILE
SEE SHEET NOS. 21 & 22

B.M. no. 128 - Nail in P.P.
115' Lt. Sta. 1705+25 - El. 636.26

B.M. no. 129 - Nail in P.P.
62' Lt. Sta. 1714+20 - El. 704.82

PROFILE — SURVEYED, PLOTTED, PLOTTED CHECKED, B. M.'S NOTED, STRUCTURE ROTATING CHKD., NOTE BOOK, NO., BY, DATE

660 650 640 630 620 610 700 690 680 670

1690 1 2 3 4 5 6 7 8 9 1700 1 2 3 4 5 6 7 8 9 1710 1 2 3 4 5 6 7 8 9 1720

CHEROKEE 29

(7)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(6)	29	19	[illegible]

445

PLAN — SURVEYED, PLOTTED, DESIGN CHECKED, QUANTITY CHECKED, R.L. OF HWY CHECKED — NOTE BOOK — NO. — DATE — BY

PROFILE — SURVEYED, PLOTTED, DESIGN CHECKED, B. M.'S NOTED, STRUCTURE NOTATNS CHKD — NOTE BOOK — NO. — DATE — BY

J. A. MOBLEY

In Place 36'-15" R.C. Pipe

In Place 100'-18" R.C. Pipe

In Place 74'-18" R.C. Pipe

In Place 20'-15" R.C. Pipe

In Place 20'-18" R.C. Pipe

BLANCHE A. McCRAW

A. E. JOLLY

TIE EQUALITY

Store + Service

Gas tanks

Office

Well

Drive

Entrance

Cem. Block Garage

Gin

Hydraulic Cot Lift

Corn Mill

Fence

Barn

County Road

Route 18

SOUTH BOUND LANE RT. 18

NORTH BOUND LANE RT. 18

50' R/W

100' R/W

LINE "A"

LINE "B"

LINE "C"

SOUTH BOUND LANE

NORTH BOUND LANE

ALT. RT. 25

South Bound Lane Rt. 29

North Bound Lane Rt. 29

Frontage Road

Sheet No. 207-210

Sheet No. 197-206

Field Entr.

Farm Road

Well

Entrance

Fence

Drive

Gin

Office

Store

Tanks

Mill

Lift

Barn

Garage

Block

Fence

Entrance

Entrance

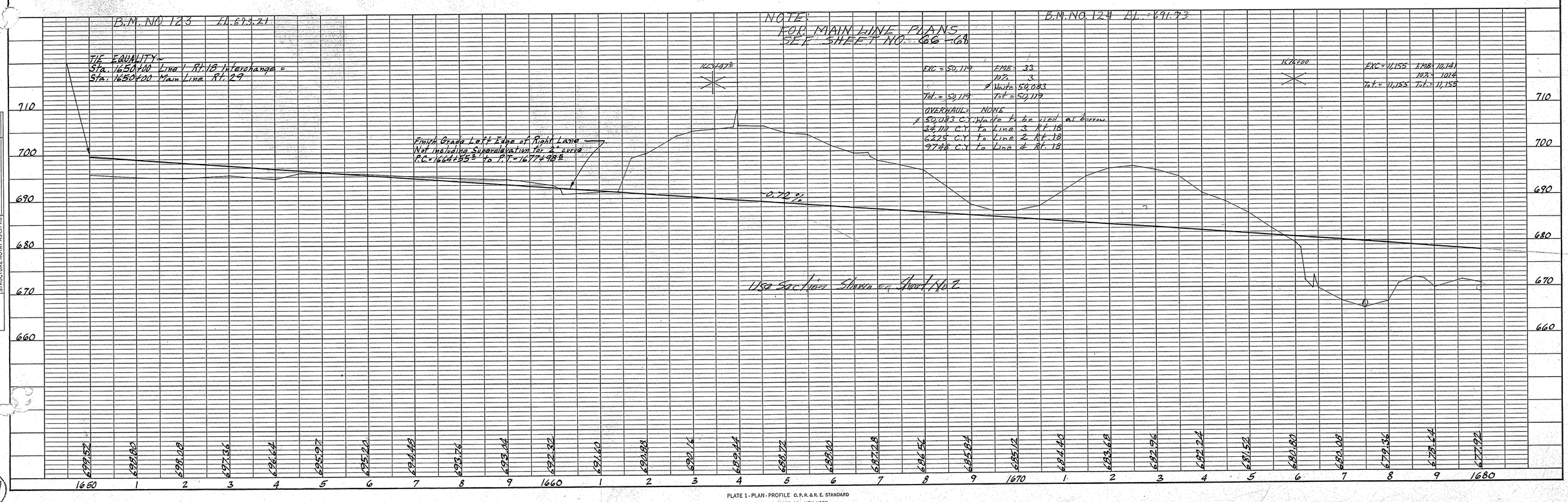
Entrance

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	20	~~417~~ 445

Main Line Profile

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. NOTED
STRUCTURE NOTATNS CH'KD
BY
DATE



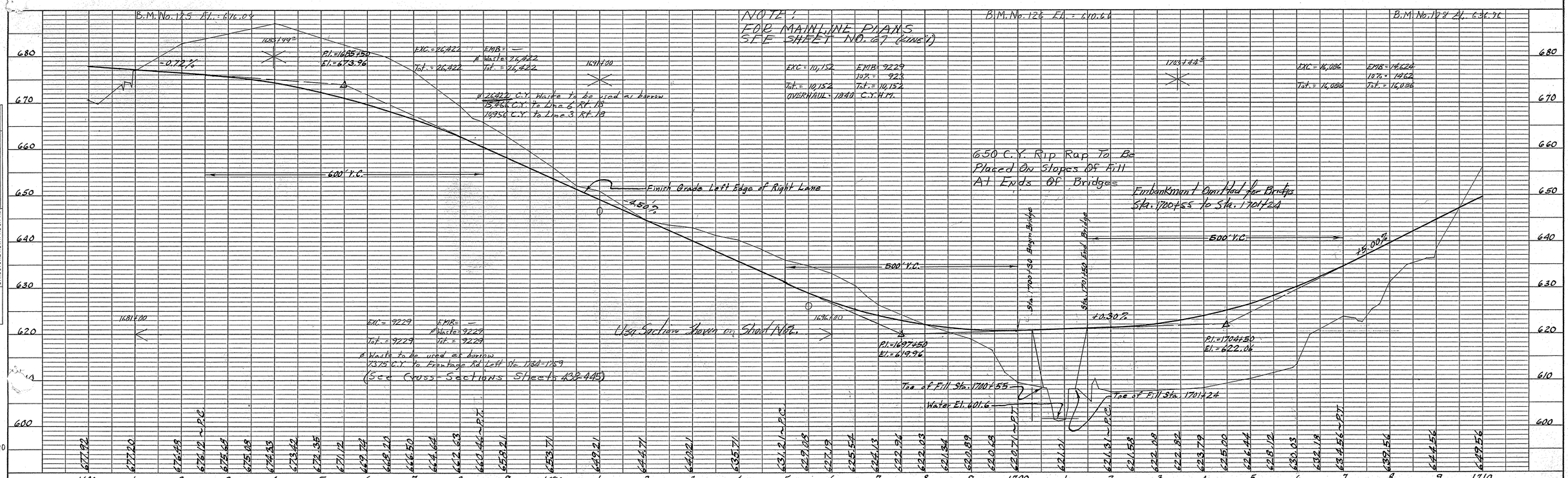
Cherokee Co
U.S. 29
Rt. 18 Int.
Line "1"
Sta. 1650 to Sta. 1680

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	21	~~417~~

Main Line Profile 445

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE



PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

Cherokee Co.
U.S. 29
Rt. Int.
Line "1"
Sta. 1680 + Sta. 1710

2

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	22	417

Main Line Profile 445

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
FINAL FIELD
PLOTTED
NOTE BOOK
GRADES CHECKED
ALIGNMENT CHECKED
NO.
STRUCTURE NOTATIONS CH'KD
BY
DATE

B.M. No. 129 El. = 709.28

B.M. No. 130 El. = 708.94

B.M. No. 131 El. 716.32

NOTE:
FOR MAIN LINE PLANS
SEE SHEET NOS. 67-68

1714+96 ℄
EXC. = 15,278
EMB. = —
Waste 15,278
Tot. = 15,278
Tot. = 15,278
15,278 C.Y. Waste to be used as borrow
1644 C.Y. to Frontage Rd. 11. Sta. 1734± to 1759±
13,634 C.Y. to Main Line Sta. 1763± 1744±

1718+39 ℄

EXC. = 9530
EMB. = 8664
107. = 866
Tot. = 9530
Tot. = 9530
OVERHAUL = 1730 C.Y. 477.

Finish Grade Left Edge of Right Lane
Net including Superelevation for 2° curve
P.C. = 1726+66.1 to P.T. = 1736+21.1

1738+00 ℄

P.I. = 1719+50
El. = 697.06

+5.00%

600' V.C.

+1.14%

400' V.C.

P.I. = 1731+00
El. = 710.16

+1.84%

+1.64%

EQUALITY = 1736+00 Back =
1736+00 Ahead

1737+48.8 ℄ 4.1° 1 ℄
P.I. = 1737+48.8
El. = 711.34

	1710	1	2	3	4	5	6	7	8	9	1720	1	2	3	4	5	6	7	8	9	1730	1	2	3	4	5	6	7	8	9	1740
Ground	659.56	654.54	659.56	664.55	669.56	674.56	679.56	680.04	680.00	679.74	679.25	679.17	679.52	679.69	679.03	699.02	699.83	700.49	701.15	702.19	703.33	704.47	705.61	706.75	707.89	708.48	709.12	709.80	710.54	711.28	712.09	712.94	713.84	714.80	715.68	716.52	717.36	718.19	719.00	721.67	722.00	722.19	723.00	724.53	725.50	725.61	725.47
Grade	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710

Cherokee Co
U.S. RT. 29
Rt. Int.
Line "1"
Sta. 1710 to Sta. 1740

(3) (11)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	23	417

Main Line Profile

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'S NOTED
STRUCTURE NOTATIONS CHKD
BY
DATE

B.M. No. 132 EL. 741.93

B.M. No. 133 EL. 698.95

NOTE:
FOR MAIN LINE PLANS
SEE SHEET NO. 68

EXC. = 7160 EMB. = 6509
Tot. = 7160 Tot. = 7160
OVERHAUL = 1980 C.Y. H.M.

P.I. = 1742+31.6
El. = 731.87

Finish Grade Left Edge of Right Lane

+1.64%

-2.74%

1000' V.C.

TIE EQUALITY~
Sta. 1750+00 Line 1 Rt. 18 Interchange
Sta. 1750+00 Main Line Rt. 29

730
720
710
700

725.97 726.21 726.35 726.37 726.28 726.05 725.73 725.29 724.74 724.07 723.29 722.39 721.38 720.26 719.02 717.67 716.30 714.85 713.32

1740 1 2 3 4 5 6 7 8 9 1750

Cherokee Co
U.S. 29
Rt. 18 Int.
Line "1"
Sta. 1740 to 1750

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(2)	29	2A	4A

445

PLAN — SURVEYED, PLOTTED, CURVES CHECKED, B.M.'S NOTED, RT. OF WAY CHECKED; NOTE BOOK; NO.; DATE; BY

Place 40'-18" R.C. Pipe on 30° skew

Abandoned Tenant House

Place 44'-18" R.C. Pipe on 30° skew

(Mrs) GENEVA R. JOLLY D. 11.19.58 (50-A)

Retain 112'-18" R.C. Pipe on 20° skew
Add 156'-18" R.C. Pipe
Const. 2-Type 9 C.B.'s
Place 4'-15" R.C. Pipe

DUKE POWER Co. By: OFFICIALS D. 11-11-57 (61)
Retain 72'-18" R.C. Pipe
Add 172'-18" R.C. Pipe
Const. 2-Type 9 C.B.'s

A.E. JOLLY C-10-15-57 (50)
IN Place 20'-18" R.C.

(Mrs) BLANCHE A. McCANN D. 11.9.57 (49)

Retain 76'-18" R.C. Pipe on 30° skew
Add 116'-18" R.C. Pipe
Const. Type 9 C.B.

A.E. Jolly 2-16-58 (50)

Place 44'-18" R.C. Pipe on 30° skew

Place 68'-18" R.C. Pipe on 30° skew
Const. Type 9 C.B.

Place 40'-18" R.C. Pipe

Sta. 1763+01.4 Frontage Road 150' Opposite Sta. 1763+00 Rt. 29

DUKE POWER Co. By: OFFICIALS D.-11-11-57 (61)

Frontage Road
Pl. = 1754+50 (125-L)
Δ = 1°41' Rt.
D = None

Frontage Road
Pl. = 1763+01.4
Δ = 1°41' Lt.
D = None

20' Frontage Road

Frontage Road Curve Data:
Pl. = 1777+72.6
Δ = 17°30' Lt.
D = 5°00'
T = 176.4'
L = 350.0'
E = 13.5'

EXCEPTION to Contract:
Sta. 1774+00 to Sta. 1854+00

Entrance to Lake

Drain 100

Drain 150

Drain 60

Drain 40

Drain 48

County Rd.

N 88°05' E

P.C. 1723+79.9

P.C. Frontage Road (Rt) 1775+97.2

P.T. Frontage Road (Rt) 1777+47.2

Note: Frontage Road on Right Sta. 1754+50 to Sta. 1789+80.2 to be Constructed as Dist. 11.347 - F.A.P. I-301-2(2)

P.O.T. 1758+79.3

P.O.T. 1762+03.3

P.O.T. 1779+23.2

P.O.T. 1779+34.2

B.M. no. 133 - Nail in 6" Pine 90' Rt. Sta. 1750+58 - El. 628.85

B.M. no. 134 - Nail in 8" Pine 125' Lt. Sta. 1760+78 - El. 681.02

B.M. no. 135 - Nail in Root of 18" Walnut 100' Lt. Sta. 1770+25 - El. 653.45

B.M. no. 136 - Nail in Root of 8" Oak 85' Rt. Sta. 1777+05 - El. 665.30

EXC = 8081 EMB = 7346
10% = 735
Tot. = 8081 Tot. = 8081
OVERHAUL = 2190 C.Y. H.H.

EXC = 850 EMB = 13,100
# Bor. = 19,060 10% = 1810
S-Tot. = 19,910 S-Tot. = 19,910
Exc. 5425 Emb. 13,100
Tot. 24,885 Tot. 19,825
OVERHAUL = 38,600 C.Y. H.H.
# 19,060 C.Y. Borrow to be obtained from
13,634 Waste Main Line Sta. 1774+ to 1778+
5,926 Waste Frontage Rd. Right Sta. 7+ to 1755+

P.I. = 1767+00
El. = 664.24

Finish Grade Lt. Edge Rt. Lane
-2.92%

400' V.C.

D.H. = 5 A.C. C. = 0.5

-1.74%

+00

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

PROFILE — SURVEYED, PLOTTED, CURVES CHECKED, B.M.'S NOTED, STRUCTURE NO. & TYPE; NOTE BOOK; NO.; DATE; BY

1" = 100'

CHEROKEE CO. 29

(9)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-m-301-2(7)	29	25	445

PLAN — SURVEYED, PLOTTED, GRADES CHECKED, R/W & EASEMENT CHECKED, RT. OF WAY CHECKED. NOTE BOOK NO.

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. M.'S NOTED, STRUCTURE NOTATIONS CHKD. NOTE BOOK NO.

BY DATE

NOTE:
Frontage Road on Right
Sta. 1754+50 to Sta. 1787+80.2
to be constructed as
Dist. 11347 - FAP. I-301-2(7)

Sta. 1783+037 Frontage Road 130' Opposite Sta. 1782+50 Route 29

Frontage Road Curve Data
P.I. = 1787+13.5
Δ = 10°30' Rt.
D = 7°30'
T = 72.20'
L = 144.0'
E = 7.1'
Rc = 765.0'
For S.E. Taper inside edge

P.T. = 1788+80.2

Retain 60'-18" R.C. Pipe

In Place 20'-24" R.C. Pipe

P.I. = 1785+00.6
Δ = 42° 56' Lt.
D = 22.00'
T = 1126.7'
L = 2146.7'
E = 218.6'

Place 60'-18" R.C. Pipe

Place 60'-18" R.C. Pipe

Construct Connection approximately as shown. *Est. Excavation 6,779 C.Y.
Overhaul = 6,643 C.Y. sta.
Use X-Sections - Sheets 210-0 to 210-2
*6,643 C.Y. Borrow to be obtained from waste in balance Frontage Rd. Right Sta. 1774+73 to 1782+65

Duke Power Company
By: Officials
D. 11-11-57

To Broad River Steam Plant (Duke Power Co.)

Proposed R.R. Track

Sta. 1797+95.0

Duke Power Company
By: Officials
D. 11-11-57

N 45° 09' E

N 70° 00' E

800'

P.T. = 1795+20.6

P.I. = 1795+82

E.I. = 580.08

P.I. = 1806+99.4

E.I. = 580.08

400' V.C.

400' V.C.

Finish Grade
Lt. Edge Rt. Lane

-2.92 %

-2.92 %

+0.00 %

+0.66 %

B.M. No. 137 - Nail in 12" Twin Gum
125' Rt. Sta. 1790+00 - El. 583.41

B.M. No. 138 - Nail in 40" ø 20" Oak
100' Lt. Sta. 1797+30 - El. 574.10

EXC. = 58,815 CY. EMB. = 51,143 CY. 10% = 7,672 CY.
Tot. = 58,815 CY. Tot. = 58,815 CY.
OVERHAUL = 50,800 C.Y. sta.

Trees and stumps:
POT. 1780+66 Lt. 18" — 6" Pine, 6" Pine
POT. 1782+61 Rt. 18" — 5" Pine, 7.3', 5" Pine, 9.1'
1" Persimmon
P.C. Frontage Rd. 1785+88.5
15.06'
P.C. Frontage Rd. 1787+80.2
14.42'
6" Pine, 48.1', P.T. 1795+20.6, 6.13', 5" Sweet Gum
POT. 1796+32.4 Rt. 11.3', 11.7' — 5" Gum, 5" Pine
4" Sweet Gum, 3.88', POT. 1803+22.6 Rt., 7.9', 24" Birch
10" Birch, 5.1', 4" Oak, 11.2', POT. 1806+50.9 Rt.

Elevations: 627.65, 624.73, 622.81, 618.89, 615.97, 613.05, 610.13, 607.21, 604.29, 601.37, 598.45, 595.53, 592.61, 590.22 ~ P.C., 588.71, 588.24, 587.00, 585.16, 584.42, 579.27, 582.30, 581.43, 580.89, 580.50, 580.24, 580.11, 580.08 ~ P.T., 580.08, 580.08, 580.08, 580.08, 580.08, 580.08, 580.08 ~ P.C., 580.11, 580.16, 580.27, 580.41, 580.62, 580.82, 581.09, 581.40 ~ P.T., 582.06

Stations: 1780, 1, 2, 3, 4, 5, 6, 7, 8, 9, 1790, 1, 2, +82.2, 3, 4, 5, +82, 6, 7, 8, 9, 1800, 1, 2, 3, 4, 5, 6, 7, 8, 9, 1810

660 650 640 630 620 610 600 590 580 570 560

CHEROKEE CO 29 (10)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	In-301-2(6)	29	26	417

445

8" Birch
10" Cottonwood
35.49'
85.05'
P.O.T. 1813+01 L

P.O.T. 1819+08.3 L
21.74'
763'
30" Sycamore
5" Persimmon

Duke Power Company (51)
By: Officials
D. 11-11-57

Retain 8'x8'x112' R.C. Box Culvert

John S. Mintz, Estate (52)
By: Heirs
D-1-31-58

BROAD RIVER

8+10
120' R/W
110' R/W
1815
2280
1825
1830
1835
1840
+44
110' R/W
100' R/W
110' R/W
100' R/W
110' R/W
120' R/W
N 48°-09' E
1824+10
1817+58
110' R/W
120' R/W
110' R/W
100' R/W
110' R/W
120' R/W
POWER
Mile Post #8
225'
12'
144'
3600
20' Frontage Road
Per X-sections Sheets 231-232
20'
100' R/W
160' R/W
20'
1600
800
12"
18"
15"
20'
160' R/W

Duke Power Company
By: Officials
D. 11-11-57

John S. Mintz, Estate (52)
By: Heirs
D-1-31-58

John S. Mintz, Estate (52)
By: Heirs
D-1-31-58

Place 64'-105" diameter Structural Plate Pipe No. 10 Gage, plus thickness of Spelter coating
Place 30 C.Y. Rip Rap on Slopes of Fill at Ends of Pipe

Joe C. Mintz (53)
D. 11-9-57

P.C. 1831+40.8

1834+70

Note:-
Frontage Road on Right Sta. 1832+00 to Sta. 1834+00 to be constructed under Dock. 11.347, FAP No. I-301-2(7)

POST 1833+84
28.33
54.85'

B.M. no. 139 - Nail in 10" Birch
110' Rt. Sta. 1810+00 - El. 566.36

B.M. no. 140 - Nail in 20" Birch
150' Rt. Sta. 1819+00 - El. 560.57

B.M. no. 141 - Nail in Base of 8" Ash
100' Rt. Sta. 1823+18 - El. 565.86

B.M. no. 142 - Nail in 24" Elm
220' Rt. Sta. 1833+30 - El. 563.04

+04
P.I. = 1820 + 60
El. = 589.04
+71
+72
EXC. = 11,871
EMB. = 15,540
10% = 3,361
Tot. = 11,871
Tot. = 15,271
Finish Grade
Lt. Edge Rt. Lane
+0.66%
-0.66%
100' V.C.
600' V.C.
+3.20%
P.I. = 1836+98.3
El. = 571.84
HW 576.96 (1919)
Toe of Fill
1818+04
Toe of Fill
1823+71

590
580
570
560
550
540

582.06 582.72 583.38 584.04 584.70 585.36 586.02 586.68 587.74 587.01 587.04 588.75 586.14 585.50 584.84 584.18 583.52 582.86 582.20 581.14 580.18 579.52 579.52 579.52 579.27 579.16 579.06 579.50 579.82 580.45 581.16 582.04 583.08 584.28 585.35 586.18

1810 1 2 3 4 5 6 7 8 9 1820 1 2 3 4 5 6 7 8 9 1830 1 2 3 4 5 6 7 8 9 1840

Begin St. Improvement
P.C. 1823+58.75
P.T. 1824+88.75
End St. Improvement
P.C.
P.T.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'S NOTED
STRUCTURE NOTATIONS CHKD

CHEROKEE CO.
29
(11)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(7)	29	29	417

445

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. M.'s NOTED, STRUCTURE NOTATIONS CHKD., NOTE BOOK, NO., BY, DATE

(52) John S. Mintz
By: Heirs
D-1-31-58

Retain 40'-18" R.C. Pipe

In Place 20'-18" R.C. Pipe

Well & Pump House

3-1000 Gallon Storage Tanks

Service Station - 120 Feet ℄

Restaurant 132' from ℄

Pl. 1847+68 - ℄ L. Branch

Retain 72'-18" R.C. Pipe
Add 60'-18" R.C. Pipe
Const. Type 9 C.B.

(52) John S. Mintz, Estate
By: Heirs
D-1-31-58

(53) Joe C. Mintz
D.11-9-57

Retain 72'-24" R.C. Pipe
Add 72'-24" R.C. Pipe
Const. Type 9 C.B.

Retain 4'x6'x164' R.C. Box Culvert
Extend 92' Right 20° Skew
See Sheet 239

(54) S.C. Carlton Est.
By: Heirs
D.11-1-57

Barn 270 Lt.

110' R/W
100' R/W

Frontage Road
Sheet No. 2.11-232

P.I. 1843+71.8
Δ 23°-17' Rt.
D 1°-00'
T 1180.5'
L 2353.3'
E 120.4'

Fill Enlarged

100' R/W
170' R/W
190' R/W
165' R/W
150' R/W
160' R/W
180' R/W

N 68°-26' E

P.I. 1835+98

Retain 88'-30" R.C. Pipe
on 10° Skew

In Place 20'-15" R.C. Pipe

Joe C. Mintz
D.11.9-57

Place 32'-18" R.C. Pipe

℄ L. 7+00

P.T. 1825+98

Place 48'-24" R.C. Pipe

(54) S.C. Carlton Est.
By: Heirs
D.11-1-57

Place 138'-18" R.C. Pipe
Const. 2 Type 9 C.B.

Frontage Road

In Place 20'-18" R.C. Pipe

(52) John S. Mintz, Estate
By: Heirs
D-1-31-58

Pl. 1647+68

5" Persimmon
32.12'
P.O.T. 1847+12.5
19.88'
12" Pine

P.O.T. 1848+70'
10.72'
15.15'
4" Pine
4" Pine

10" Gum
19.36'
P.O.T. 1853+70'
10.12'
3" Pine

8" Pine
16.25'
P.T.
1855+19.4
38.70'
2 6" Gum

10" Oak
17.85'
P.O.T. 1856+86.2
10.19'
6" Gum

P.O.T. 1861+23.4
37.81'
8" Pine
35.93'
8" Sweet Gum

P.O.T. 1862+06.2
12.20'
16.38'
4" Mulberry
10" Sweet Gum

4" Pine
14.10'
10" Pine
7.80'
P.O.T. 1864+46'

P.O.T. 1865+29.6
25.00'
7.19'
10" Sweet Gum
10" Sweet Gum

P.I. 10 1868+55.4
14.18'
35.25'
5" Pine
15" Pine

B.M. no 143 - Nail in Root of 8" Gum
100' Rt. Sta. 1845+00 - El. 615.84

B.M. no 144 - Nail in 6" Pine
125' Rt. Sta. 1852+65 - El. 631.83

B.M. no 145 - Nail in Base of 5" Gum
140' Rt. Sta. 1861+28 - El. 624.30

B.M. no 146 - Nail in Base of 14" Pine
85' Rt. Sta. 1867+30 - El. 610.66

Survey Sta. 1854+00 End Exception to Contract.

Exc. 26,660 C.Y. Emb. 27,384
Shr. 26,660 Tot. 27,660
Overhaul - 13,600 C.Y. H.M.

Exc. 46,069 C.Y. Emb. 41,881
10% 4,188
Tot. 46,069 Tot. 46,069
Overhaul - 12,500 C.Y.S.M.

P.I. = 1850+00
El. = 619.88

+3.30%

-3.00% V.C.

D.A. = 7° AC
C = 0.6

D.A. = 5° AC
C = 0.5

-1.60%

Finish Grade
Lt. Edge Rt. Lane

D.A. = 12° AC
C = 0.5

D.A. = 5° AC
C = 0.6

	1840	1	2	3	4	5	6	7	8	9	1850	1	2	3	4	5	6	7	8	9	1860	1	2	3	4	5	6	7	8	9	1870
Elev.	587.18	590.38	593.58	596.78	599.98	603.18	606.38 ~ P.C.	607.71	609.24	610.52	611.60	612.46	613.33	613.98	614.48	614.83	615.03	615.01	615.20	614.77	614.39	613.86	613.18 ~ P.T.	611.93	610.88	609.38	607.88	606.38	604.88	603.38	601.88	600.38	598.88	597.38	595.88	594.38	592.88	591.38	589.88

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO. NEW YORK

CHEROKEE
29
(12)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(7)	29	28	~~417~~

445

PLAN — SURVEYED, PLOTTED, NOTE BOOK, NO., DATE, BY, ALIGNMENT CHECKED, PROFILE CHECKED, B. M.'s NOTED, STRUCTURE NO(S) AT M's CHECKED

P.O.T. 1871+69.3 — 13.3± — 10" Pine — 10" Pine — 13.33 — 45°± — P.I.

3" Persimmon — 26.21' — P.O.T. 1873+00.0 — 11.53' — 5" Pine

P.O.T. 1870+34.2 — 15.67' — 4" Gum — 21.44 — 6" Pine

8.71 — 6" Pine — 19.33 — P.O.T. 1875+19.8

6" Pine — 59.87 — 10" Pine — 54.56' — P.O.T. 1876+87.2 — T.H. — 45°±

P.O.T. 1887+86.2 — 14.50 — 8" Gum — Res. — 40°± — 11.11 — 6" Gum

Retain 4'X6'x 146' R.C. Box Culvert
Extend 112' Right 20°SKew
See Sheet 240

(64) S.C. Carlton Est.
By: Heirs
D. 11-1-57

Sta. 1873+30.6 (Back)
Sta. 1868+12.6 (Ahead)

Retain 168'-30" R.C. Pipe
on 35° SKew
Add 136'-30" R.C. Pipe Extra Strength

In Place 28'-15" R.C. Pipe
Remove

1879 Loc.

(65) Lyman Hulsey Est.
By: Heirs
D. 11-13-57

Cattle Lane

Drain

1885

180'R/W — 170'R/W — 110'R/W — 100'R/W — 110'R/W — 100'R/W — 125'R/W — 115'R/W — 125'R/W — 115'R/W

1870 — 1875 — 1880 — 1890

Mile Post #7

N68° 26'E — N68° 31'E

100'R/W — 115'R/W — 100'R/W — 160'R/W — 195'R/W — 195'R/W — 175'R/W — 195'R/W — 100'R/W — 115'R/W — 100'R/W — 175'R/W — 195'R/W — 195'R/W — 175'R/W — 150'R/W — 150'R/W — 175'R/W — 170'R/W — 150'R/W — 100'R/W

Edgewater

Frontage Road
Sheet No. 211-232

Frontage Road 1

Place 156'-18" R.C. Pipe
Const. 2 Type 9 C.B.

Relay 20'-18" R.C. Pipe
Add 4'-18" R.C. Pipe

(64) S.C. Carlton Est.
By: Heirs
D. 11-1-57

Relay 20'-15" R.C. Pipe
Add 4'-15" R.C. Pipe

(65) Lyman Hulsey Est.
By: Heirs
D. 11-13-57

Construct 4'x6'x44'-6" R.C. Box Culvert
See Sheet 241A

Retain 4'X6'X80' R.C. Box Culvert
Add 64' Right 30°SKew
See Sheet 241

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, NO., DATE, BY, PROFILE CHECKED, B. M.'s NOTED, STRUCTURE NO(S) AT M's CHECKED

B.M. No. 144 - Nail in Root of 6" Triple Gum
100' Rt of Sta. 1871+27 El. 562.55

B.M. No. 145 - Nail in Root of 8" Swamp Oak
140' Rt of Sta. 1881+25 El. 620.52

1630 — 1620 — 1610 — 1600 — 590 — 580 — 570

EQUALITY @ 1873+30.6 (BACK) = 1868+12.6 (AHEAD)

800' V.C.

11.00%

Finish Grade

PI = 1869+46
Elev. = 582.92

DA = 17 Ac
C = 0.6

PI = 1879+50
Elev. = 623.08

1000' V.C.

-2.00%

DA = 22 Ac
C = 0.5

EXC. 17,782 — EMB. 16,163 — 10% 1617 — TOT. 17,780 — TOT. 17,781 — OVERHAUL 3228 C.Y.-H.M.

DA = 11 Ac
C = 0.6

620 — 610 — 600 — 590 — 580 — 570

1870 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 1880 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 1890

CHEROKEE CO.
29

(13)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
SER CO., NEW YORK

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	F 301-2(7)	29	29	447
			11.335	In-301-2(8)			445

PLAN — SURVEYED: BY, DATE; PLOTTED; CROSS SECTIONS CHECKED; B. M.'s NOTED; ALIGNMENT CHECKED; ALL R.P. AND P.I.'s CHECKED; STRUCTURE NOTATIONS CHKD; NOTE BOOK; NO.

PROFILE — SURVEYED: BY, DATE; PLOTTED; CROSS SECTIONS CHECKED; B. M.'s NOTED; STRUCTURE NOTATIONS CHKD; NOTE BOOK; NO.

To Route 11 & 18

County Road

33' R/W

115' R/W, 1890

100' R/W

R.P. 4 LT'

P.O.T. 1892+60 & 7.9' — Hub

T.P. — 76.53 — 5.56 — P.O.T. of 1900+77.2 — Hub

(55) Lyman Hulsey Est. By: Heirs D. 11.13.57

Retain 40'-18" R.C. Pipe

P.I. Sta. 1892+00

P.I. Sta. 1900+00

Retain 45" R.C. & Catch Basin

W. M. Fraunfelter Jr. Owner 9-25-57

Br. Surf. To Shallow Ditch

Hub — 4.82 — P.O.T. 1901+83.7 — T.P.

P.C. 1903+24.2 — 12" Pine — 40.45' — 60.21' — 4" Oak

TIE EQUALITY @ STA. 1901+19.9 = DIST. 11.294 - ALT. RT. 29
STA. 134+00 = STATE YARD. 932 - RT. no. 5

Retain 76'-15" R.C. Pipe and Catch Basin

Clyde T. Singleton Jr. & William P. Coakley D. 10-22-57

Retain 108'-48" R.C. Pipe

P.O.T. 1913+31.7 — 14.50' — 7.50' — 5" Pine — 5" Pine

Retain 72'-18" R.C. Pipe

1890 1895 1900 1905 1910 1915 1920

100' R/W

Median

25°-00'

25°-01'

24'

200'

N 73°-45' E

1917+25

Curve Data
R.R. no. 29
P.I. 1903+33.5 E
Δ 5°-17 Rt.
D 0°-30'
T 526.5' Z'
L 1056 Z'
E 12.2' Z'

In Place 20'-18" R.C. Pipe

Frontage Road Sheet No. 211-232

150' R/W

125'

110'

Branch

Ditch

P.C. 1901+33.5

Drain

P.T. 1913+31.7

Drive

R/W See Layout

Retain 60'-15" R.C. Pipe & Catch Basin

Retain 7'X1'X 160'-R.C. Box Culvert Extend 99' Right See Sheet 242

See Interchange Layout & Pl. 5 Sheets Nos. 131-150

Retain 4'X6'X 124' R.C. Box Culvert

FOR INTERSECTIONAL R/W SEE SHEET 131

In Place 20'-15" R.C. Pipe Relay

(55) Lyman Hulsey Est. By: Heirs D. 11.12.57

Limestone Investors Inc. By: Officials D. 10.14.57

P.I. Blacksburg

P.C. Main Line

Buffalo Creek

P.O.T. 1917+00 — 55.2' — 72.30' — 6" Pine — 5" Elm

8" Twin Birch — 30.25' — Road 1919+13.8 — 19.62' — 8" Cherry

B.M. no. 146 - Nail in Side of 12" Ash
160' Rt. of Sta. 1894+20 - El. 590.78

B.M. no. 147 - Nail in Side of 6" Oak
150' Lt. of Sta. 1902+66 - El. 598.29

B.M. no. 148 - Nail in Side of 15" Pine
170' Lt. of Sta. 1912+90 - El. 580.10

B.M. no. 149 - Nail in Side of 16" Poplar
100' Rt. of Sta. 1918+50 - El. 586.20

Exception to Contract Sta. 1915+00 to Sta. 1937+25

EXC. 2103 — EMB. 30807
+10% R. 31,785 — +10% 3081
TOT. 33,888 — TOT. 33,888
LESS 31,785 — LESS 31,785
TOT. 2103 — TOT. 2103
OVERHAUL = 127,140 C.Y. H.M.
* OBTAIN 31,785 C.Y. BOR. ROW
FROM Waste Main Line
Sta. 1980+24.1 To Sta. 2010+36.5

2.00%

4.00' V.C.

Finish Grade Lt. Edge Rt. Lane

P.I. = 1892+00
El. = 596.08

-0.44%

DA 297 Ac.
C = 0.6

DA 115 Ac.
C = 0.6

4.00' V.C.

+0.00%

P.I. = 1912+40
El. = 583.08

DA = 5 Ac.
C = 0.5

DA = 7.5 Ac.
C = 0.5

Toe of Fill 1919+52

+00

| | | |

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(7)	29	30	447
			11.335	I-301-2(6)			445

PLAN — SURVEYED, PLOTTED, NOTE BOOK, NO., DRAWING CHECKED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, B. M.'S NOTED, STRUCTURE NO(ATTNS CHKD), BY, DATE

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, NO., DRAWING CHECKED, ALIGNMENT CHECKED, B. M.'S NOTED, STRUCTURE NO(ATTNS CHKD), BY, DATE

(59) Chas. T. Singleton, Jr. & Nizumi Conley D. 10-22-57

(60) G. W. Bridges D. 10-7-57

(61) Minerva B. Wilson D. 9-26-57

(62) W. Preston Porter Est. By Heirs D. 10-14-57

Limestone Investment, Inc. By Officials D. 10-14-57

G. W. Bridges D. 10-7-57

Channel Change

18" Ash 15 42' 12" Ash 19 12 500' R/W — P.O.T. ⌀ 1928+46

3" Oak 14 42' 4 45 3" Oak 500' R/W — P.O.T. ⌀ 1923+66.5

18" Pecan 11 40' — P.O.T. ⌀ 1937+03.4 — 26 75' — 20" Walnut

500' In Place 20'-15" R.C. Pipe

400' Fence

Retain 12'X10'X70' R.C. Box Culvert Extend 44' Right See Sheet 244

In Place 44'-24" R.C. Pipe Remove

110' R/W 100' R/W

1920 1925 1930 1935 1940 1945 1950

N 73°-45' E

1922+85

Buffalo Creek

Field Entrance

In Place 20'-15" R.C. Relay

Place 72'-15" R.C. Pipe Const. Type 9 C.B.

In Place 44'-24" R.C. Pipe Remove

Place 68'-15" R.C. Pipe Const. Type 9 C.B.

Field Road

Farm Road

B.M. no. 180 = Nail in Side of 10" Ash 100' Rt. of Sta. 1927+60 — El. 568.13

B.M. no. 181 = Nail in Side of Tele. Pole 135' Rt. Sta. 1934+75 — El. 505.06

B.M. no. 182 = Nail in Side of Tele. Pole 120' Lt. Sta. 1945+00 — El. 516.75

Survey Sta. 1937+25 End Exception to Contract

Finish Grade Lt. Edge Rt. Lane

+0.00%

574.96

Toe of Fill 1922+53

DA 9.27 AC

C = 0.8

583.08 — 45 583.08 — End Br. — 583.08 — 583.08 — 583.08 — 583.08 — 583.08

590 580 570 560

1920 1 2 3 4 5 6 7 8 9 1930 1 2 3 4 5 6 7 8 9 1940 1 2 3 4 5 6 7 8 9 1950

15 Cherokee 29

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11347	I-301-2(7)	29	31	417

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, NOTE BOOK, R/W CHECKED, NO., RT. OF WAY CHECKED, BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, B. M.'S NOTED, NO., STRUCTURE NO. & TYPE CHECKED, BY, DATE

12 Sec. — 20.7 to 1952+73 ℄ — 27.0 S — 2" Cherry (23) — E.A. Montgomery Est. By: Heiles D. 11-23-57

15" Pine — 6.0' — 20.7 to 1959+20 ℄ — 11.5' S — 16" Pine (64) — L.B. Bridges D. 10-7-57

3" Persimmon — 22.8' — POT to 1962+68 ℄ — 2/11 — 2" Walnut

10" Pine — 2/20' — 20.7 to 1966+50 ℄ — 39' — 10" Pine

3" Pine — 36.9' — 24 — 33 — 3" Pine — POT to 1968+52 ℄

6" Pine — 5 — 20' — POT — 1970+06 ℄ — 88.9' — 8" Pine (60) — G.W. Bridges D. 10-7-57

W. Preston Pearce Est. By: Heiles D. 10-14-57

In Place 32'-24" R.C. Pipe Remove

143.2 ℄ R.R. Road

Retain 76'-36" R.C. Add 40'-36" R.C. Pipe Const. Type 9 C.B.

Fruit Stand 100' ℄ — Drive 17.2 ℄ — Ramp — Ramp

Retain 4'x6'x71' R.C. Box Culvert Extend 59' Right See Sheet 245

Drain

Equality Sta. 1967+56.2 - Dft. no. 11.263 - Rt. no. 29 = Sta. 1970+15.3 ℄ - Southern Railway System Survey

Retain 92'-18" R.C. on 30° Skew Add 72'-18" R.C. Pipe Const. Type 9 C.B.

In Place 20'-15" R.C. Pipe Remove

Field Entrance

To Marion, N.C. — Southern Railway System

County Road

To Blacksburg

Road no. 148 - 18' Bit. Surf.

Remove 40'-24" R.C.

In Place 24'-24" R.C. Remove

Place 64'-15" R.C. Pipe Const. Type 9 C.B.

L.B. Bridges (64) D. 10-7-57

In Place 16'-18" R.C. Pipe Remove

Retain 72'-24" R.C. Pipe Add 60'-24" R.C. Pipe Const. Type 9 C.B.

Retain 52'-18" R.C. Pipe Add 64'-18" R.C. Pipe Const. Type 9 C.B.

G.W. Bridges (60) D. 10-7-57

2" Oak — 4" Cherry — 4.9' — 13 — 26 — POT 1975+58 ℄

Note: See sheet No. 31-B for transition in median Rt. & Lt. of ℄ Sta. 1955+57.0 to Sta. 1979+57.0

100' R/W — 110' R/W — 120' R/W

B.M. no. 153 - Nail in Side of R.P. 100' Lt. Sta. 1951+60 - El. 573.61

B.M. no. 154 - Nail in Side 8" Oak 100' Rt. Sta. 1964+25 - El. 593.77

B.M. no. 155 - Nail in Side of 6" Pine 100' Lt. Sta. 1970+06 - El. 616.87

B.M. no. 156 - Nail in Base of 10" Poplar 30' Lt. Sta. 1979+70 El. 652.13

EXC. 38,875 C.Y. — EMB. 35,391 C.Y. — 10% 3534 C.Y. — TOT. 38,875 C.Y. — OVERHAUL = 39,850 C.Y. H/M.

Finish Grade Left Edge of Right Lane

0+00 % — +0.52 % — 500' V.C. — P.I. = 1953+80, El. = 583.08 — P.C. — P.T.

+4.00 % — 600' V.C. — P.I. = 1961+50, El. = 597.08

Rail Data: 1st Rail - 1967+54.57 El. Base 641.66; 2nd Rail - 1967+59.35 El. Base 641.69

+4.00 % — 600' V.C. — P.I. = 1978+50, El. = 655.08 — +2.38 %

D.A. = 12 H.C. V. = 0.5

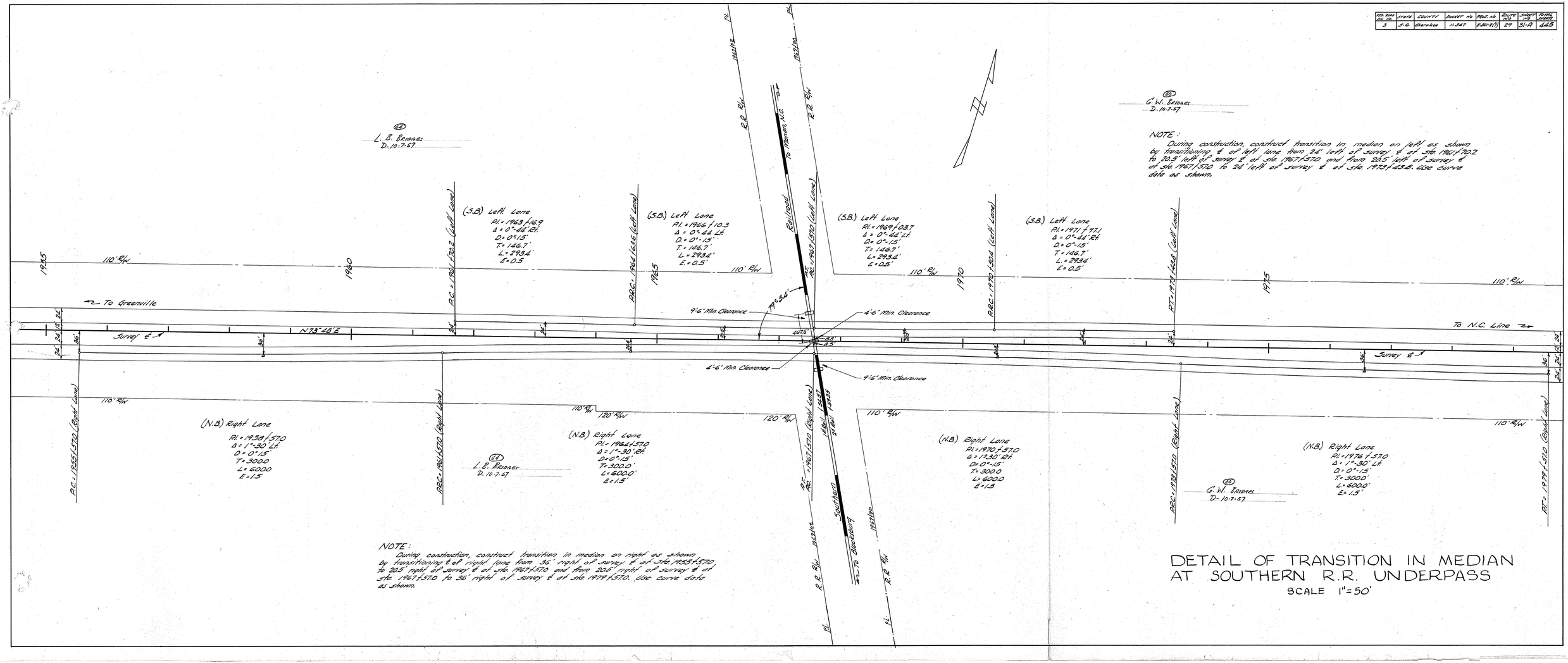
Sta. 583.08 | 583.08 | 583.18 | 583.18 | 583.10 | 583.18 | 583.21 | 583.18 | 583.81 | 583.18 | 583.43 | 583.80 | 584.00 | 584.43 | 584.63 | 584.74 | 585.46 | 585.53 | 585.53 | 584.54 | 584.84 | 586.84 | 586.95 | 587.72 | 588.63 | 589.49 | 590.59 | 591.84 | 593.22 | 595.38 | 597.14 | 599.00 | 601.08 | 603.18 | 605.08 | 607.08 | 609.08 | 611.08 | 613.08 | 615.08 | 617.08 | 619.08 | 621.08 | 623.08 | 625.08 | 627.08 | 629.08 | 631.08 | 633.08 | 635.08 | 637.08 | 639.08 | 641.08 | 643.08 ℄ P.C. | 645.08 | 646.18 | 646.98 | 648.27 | 650.44 | 652.16 | 654.16 | 655.80 | 657.45 | 658.22

Elev. 620 | 610 | 600 | 590 | 580 | 670 | 660 | 650 | 640 | 630 | 620 | 610

1950 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1960 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1970 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1980

PLATE 1 - PLAN - PROFILE O. F. R. & R. E. STANDARD
KEUFFEL & ESSER CO. — NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO	PROJ. NO	ROUTE NO	SHEET NO	TOTAL SHEETS
3	S.C.	Cherokee	11.347	I-301-2(7)	29	31-A	445



DETAIL OF TRANSITION IN MEDIAN AT SOUTHERN R.R. UNDERPASS

SCALE 1" = 50'

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	F-301-2(7)	29	32	447

445

PLAN — SURVEYED, PLOTTED, X-SECTIONS CHECKED, R/W STAKES, R/E OF WAY CHECKED, B. M.'S NOTED, STRUCTURE NOTATIONS CHKD — NOTE BOOK — NO. — BY — DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. M.'S NOTED, STRUCTURE NOTATIONS CHKD — NOTE BOOK — NO. — BY — DATE

1' Hickory 19.75 8" Pine 17.44 POT. ⊙ 1980/69°

POT. ⊙ 1985/78° 34.84 5" Pine 36.79 4" Pine

(65) WORTH J. BLANTON ET AL. D. 11-14-57

Retain 88'-24" R.C. Pipe on 30° Skew Add 72'-24" R.C. Pipe Const. Type 9 C.B.

In Place 20'-15" R.C. Pipe Remove

Retain 100'-18" R.C. Pipe ON 30° Skew Add 72'-18" R.C. Pipe Const. Type 9 C.B.

6" Pine 38.13' 57.35' 10" Pine POT. ⊙ 1992/34°

6" Pine 96.15' POT. ⊙ 1995/88° 88.01' 5" Hickory

(68) L. H. MARTIN D. 9-24-57

Retain 68'-18" R.C. Pipe Add 60'-18" R.C. Pipe Const. Type 9 C.B.

(FOR CONNECTION) In Place 20'-15" R.C. Pipe Remove

(69) JOHN B. LEDFORD D. 9-24-57

Retain 60'-18" R.C. Pipe on 30° Skew Add 80'-18" R.C. Pipe Const. Type 9 C.B.

For Connection See Sheet (69)

(60) (SEE BELOW)

(66) H. C. PENNINGTON ET AL. D. 9-25-57

In Place 20'-18" R.C. Pipe Remove

(60) G. W. BRIDGES D. 10-7-57

(67) JAMES P. HENSON D. 9-24-57

(68) L. H. MARTIN D. 9-24-57

In Place 20'-18" R.C. Pipe Remove

(67) JOHN B. LEDFORD D. 9-24-57

See Plan - Sheet No. 151

10" Gum 28.14' 4" Pine 32.55' POT ⊙ 2003/80°

15" Pine 20.00' 15" Pine 19.52' POT 2005/68°

Old Barn (67) 9.40' 5" Locust 20.55' POT 2007/60°

1980 1985 1990 1995 2000 2005

110' R/W 100' R/W

N. 73°-48 E.

44° 50° 36°

100' R/W 110' R/W

R.R. 141

Road 141

Drain

Ditch

Fence

Creek

Branch

Woods Rd.

Gravel Road

Pine

Oak

Res.

B.M. No. 157 - Nail in Root of 6" Chestnut 20' Lt. Sta. 1985+75 - El. 679.31

B.M. No. 153 - Nail in Base of 3" Pine 100' Lt. Sta. 1990+60 - El. 687.29

B.M. No. 152 - Nail in Base of 10" Poplar 135' Lt. Sta. 1998+25 - El. 721.60

B.M. No. 156 - Nail in Base 3" Chestnut 100' Rt. Sta. 2006+25 - El. 743.12

EXC. 40,650 EMB. 2926
18% 292
WASTE 36,832
TOT. 40,050 TOT. 40,050

OVERHAUL - NONE
USE 31,785 C.Y. WASTE AS BORROW MAINLINE Sta. 1897+86.6 To Sta. 1915+00
USE 5027 C.Y. WASTE AS BORROW LINE "2" Pt. 5

Finish Grade Left Edge of Right Lane

+2.78%

-2.78%

D.H. CMC C.M.P.

NOTE: FOR PROFILE MAIN LINE SEE SHEET NO. 33

710 700 690 680 670 660

750 740 730 720 710 700

659.32 660.54 662.00 663.32 664.81 667.53 670.67 673.16 675.53 677.71 680.49 684.07 687.05 689.83 692.61 695.39 698.17 701.85 703.73 706.51 709.29 712.07 714.85

1980 1 2 3 4 5 6 7 8 9 1990 1 2 3 4 5 6 7 8 9 2000 1 2 3 4 5 6 7 8 9 2010

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD

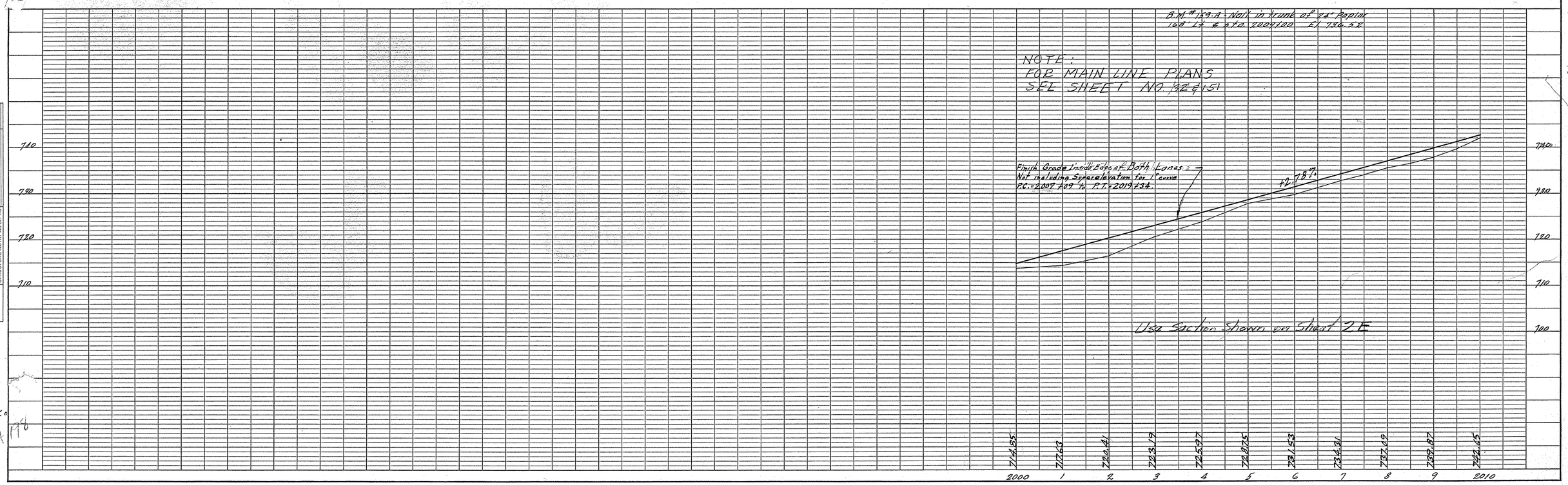
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	330	~~417~~ 445

Main Line Profile

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



Cherokee Co
U.S. Rt. 29 Rt 198
Reloc.
17A

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	34	~~417~~

Main Line Profile 445

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

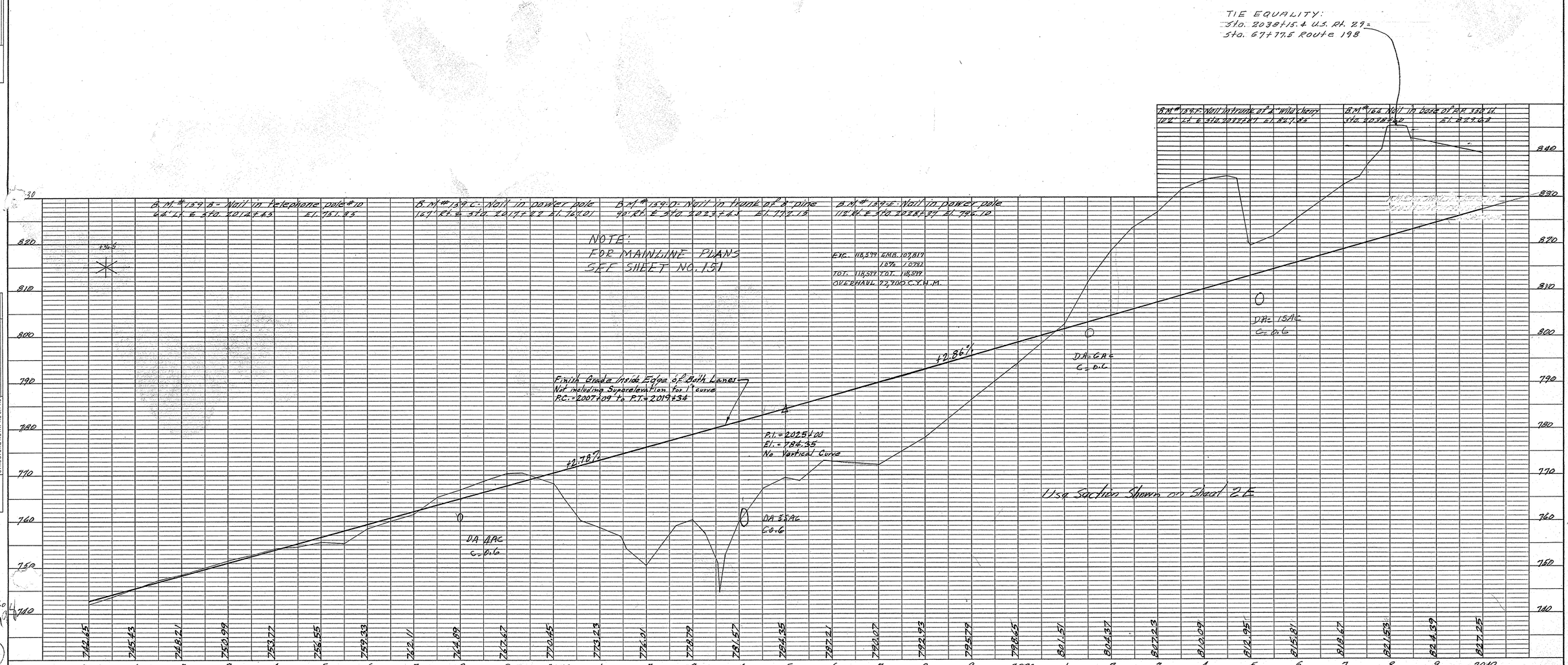


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Cherokee Co.
S. Rt. 29
Loc.
18A

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(17)	29	35	~~417~~ 445

Main line Profile.

448
2.8 C
7.3 C

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
JOB UNIT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
SURVEYED
PLOTTED
JOB UNIT CHECKED
R. M.'s NOTED
STRUCTURE NOTATIONS CHKD
BY
DATE

B.M.# 162-A Nail in pp ABC B-16 225' Rt. ℄ Sta. 2019+20 ± Elev. 828.02

B.M.# 162-B Nail in E pine 6' Rt. ℄ Sta. 2026+81 ± Elev. 837.31

B.M.# 162-C Nail in power pole ABC B-41-94 Rt. ℄ Sta. 2070+29 Elev. 783.16

Pl. = 2051+42.8
El. = 857.07

EXC. 14,331 EMB. 160
10% 16
* WASTE 14,161
TOT. 14,331 TOT. 14,331

EXC. 10,164 EMB. 9,240
10% 924
TOT. 10,164 TOT. 10,164

EXC. 31,626 EMB. 28,751
10% 2875
TOT. 31,626 TOT. 31,626

+2.86%

*Use 27,759 C.Y. Waste as Borrow in line 2" Ft. 5
Use 14,777 C.Y. Waste as Borrow Frontage Rd. Left Sta. 2040+2064
Use 3,000 C.Y. Waste as Borrow to widen fill slopes at Ft. 198
Use 7019 C.Y. Waste as Borrow Frontage Road Right Sta. 2076+50 - 2083+37±

1100' V.C.

-4.19%

Finish Grade Inside Edge of Both Lanes is Not Including Superelevation for D=3.0° curve
P.C. = 2051+95 to P.T. = 2062+83.5 = 2067+29.2

NOTE:
FOR MAINLINE PLANS
SEE SHEET NO. 151

See Section Shown on Sheet 2.E

1200' V.C.

P.I. = 2069+50
El. = 773.63
-3.00%

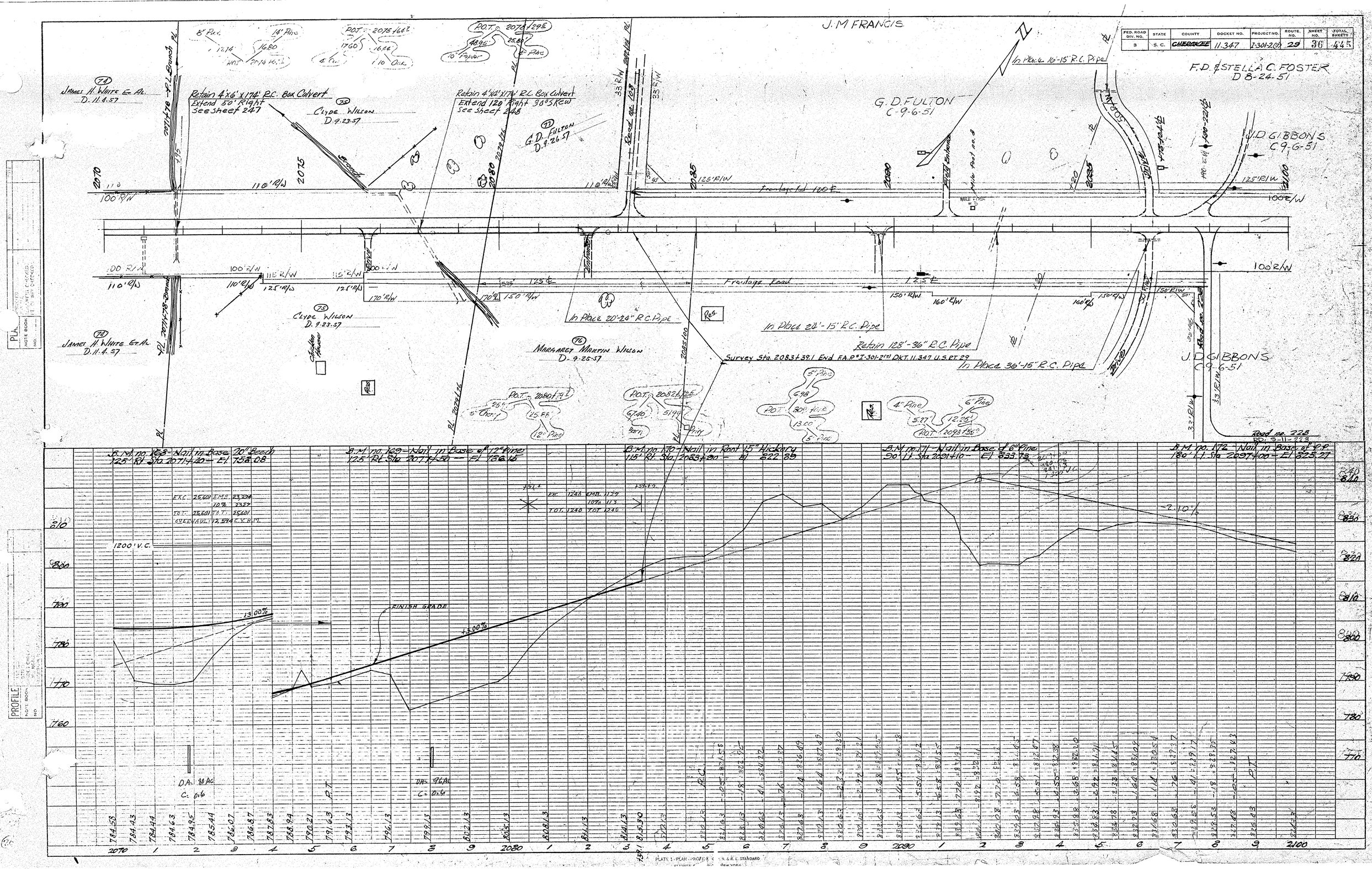
EQUALITY - Sta. 2066+83.5 Back =
Sta. 2067+29.2 Ahead

2040	1	2	3	4	5	6	7	8	9	2050	1	2	3	4	5	6	7	8	9	2060	1	2	3	4	5	6	7	8	9	2070
827.25	830.11	832.97	835.83	838.69	841.36	842.55	842.87	843.03	843.01	842.84	842.50	842.98	843.31	843.29	843.50	843.40	843.94	844.11	844.75	844.98	843.86	842.49	841.44	839.83	838.15	836.30	834.47	832.43	832.11	827.63	823.15	818.67	814.19	809.71	805.23	800.75	800.51	798.58	796.65	794.69	792.96	791.43	790.03	788.79	787.99	787.29	787.29	786.56	785.91	785.32	784.85	784.58

PLATE 1 - PLAN - PROFILE O. P. R. & R. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Cherokee Co.
U.S. Rt. 29
Kelco. 4 lane

(19A)



FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	CHEROKEE	11.347	I-301-2(7)	29	36	445

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11.347	-301-2(1)	29	87	445

DETAIL OF INTERSECTION
US RT. 29 & SC RT. 150
SCALE: 1"=100'

TRANSFERRED TO S. C. STATE HIGHWAY DEPT. BY LIMESTONE COLLEGE – FEE SIMPLE DEED – 12-31-57 (ENTIRE LOT)

Flatten Slopes on Left Sta. 1550+ to 1561+
See Cross Section Sheets # 249 to 253
Est. Exc. = 1,142 C.Y.
Waste to be used as borrow Line 1 Rt. 150 Inter.

Grade Area Between Sta. 1535+00 – 1548+00
Approx. as Shown on Sheet No. 65
Est. Exc. = 39,000 C.Y.
Waste to be used as borrow Line 1 Rt. 150

Place 24"-18" R.C. Pipe
Place 66'-36" R.C. Pipe
Place 66'-18" R.C. Pipe
In Place 20'-18" R.C. Pipe
In Place 44'-24" R.C. Pipe
Remove 36'-18" R.C. Pipe
Remove 36'-15" R.C. Pipe
Place 36'-24" Relaid Pipe
Retain 84'-24" R.C. Pipe Add 4'-18" R.C. Pipe
Retain 84'-24" R.C. Pipe Add 2'-24" R.C. Pipe Const. Type #9 Catch Basin
Retain 84'-18" R.C. Pipe Add 4'-18" R.C. Pipe
Retain 104'-24" R.C. Pipe Add 23'-24" R.C. Pipe Const. Type #9 C.B. Place 22'-18" R.C. Pipe
Retain 80'-18" R.C. Pipe Add 4'-15" R.C. Pipe
Retain 80'-15" R.C. Pipe
Retain 24"-15" R.C. Pipe
Retain 24"-18" R.C. Pipe
Retain 24"-15" R.C. Pipe
Retain 80'-18" R.C. Pipe Add 23'-18" R.C. Pipe Const. Type #9 C.B. Place 66'-18" R.C. Pipe
Relay 80'-18" R.C. Pipe Add 4'-18" R.C. Pipe
Relay 80'-15" R.C. Pipe Add 4'-15" R.C. Pipe
Relay 80'-18" R.C. Pipe Add 4'-18" R.C. Pipe
Relay 80'-15" R.C. Pipe Add 4'-15" R.C. Pipe
Relay 80'-18" R.C. Pipe Add 18'-18" R.C. Pipe Const. Type #9 C.B.
Construct Connection Right of Sta. 1550+ Est. Exc. = 250 C.Y. waste to be used as borrow Line 3 Rt. 150
2-10' Reinf. Conc. Bridge to be Constructed Sta. 20+64.4 to Sta. 22+14.4 Under Separate Cont.
Tie Equality Only: Sta. 23+05.3 Line 4 Sta. 23+86.3 Line 4
Tie Equality Only: Sta. 1299+30.0 Route 29 Sta. 21+75.3 Line 1
Tie Equality Only: Sta. 21+75.3 Line 1 Sta. 1299+30.0 Route 29
Tie Equality Only: Sta. 41+26 Line 1 Sta. 0+00 Line 2
Tie Equality Only: Sta. 0+00 Line 2 Sta. 41+26 Line 1
Remove 24"-18" R.C. Pipe
Remove 32"-18" R.C. Pipe
Remove 24"-15" R.C. Pipe
Remove 24

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	38	~~417~~ 445

Line 1 Rt 150 Int.

PLAN
SURVEYED
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. RT. OF WAY CHECKED
STRUCTURE NO. TAN'S CK'D
BY
DATE

Int 29 & Rt 150

Route 150
Line 1

PROFILE
SURVEYED
PLOTTED
NOTE BOOK GRADES CHECKED
NO. ALIGNMENT CHECKED
STRUCTURE NO. TAN'S CK'D
BY
DATE

B.M. No. 1 - Nail in Power Pole #APB
21' Lt. E Sta. 0-C0+13.5) El.=748.62

B.M. No. 2 - Nail in Power Pole #APD
26' Rt. E Sta. 8+25 El.=772.27

B.M. No. 3 - Nail in Power Pole #AII
141' Lt. E Sta. 20+03 El.=783.86

B.M. No. 4 - Nail in Power Pole #ACD
54' Lt. E Sta. 26+32 El.=777.46

Survey Sta. 1+50 Begin
Line 1 Rt. 29 & 150 Inter.

P.I. = 37+00
El. = 755.34

+3.00%

+0.76%

300' V.C.

100' V.C.

+1.30%

+2.50%

P.I. = 13+00
El. = 770.88

P.I. = ~~2+00~~
El. = ~~750.88~~

P.I. = ~~2+00~~ 7+50
El. = ~~750.88~~ 758.75

Use 40'-52' Section

USE 36' VALLEY GUTTER SECTION STA. 10+00 TO STA. 12+50

USE 40'-52' SECTION STA. 12+50 TO STA. 31+00
USE 2:1 CUT & FILL SLOPES

15" Reinforced Concrete Pipe
150 ft Fill
100 ft Top

EXC. 3182 EMB. 2811
10% 281
TOT. 3182 TOT. 3182
OVERHAUL = 870 C.Y.-M.

EXC. — EMB. 39,618
@ BOR. 43,575 10% 3981
S-TOT. 43,575 S-TOT. 43,575
LESS (8.1%) LESS 28,189
TOT. 15,386 TOT. 15,386

OBTAIN BOR FROM WASTE:
1182 C.Y. From Flattened Slopes in STA. 16+50 - 15+50
313 C.Y. From Frontage Rd. Ex. STA. 15+50 - 15+89
3956 C.Y. From Frontage Rd. Ex. STA. 13+85 - 16+14
22,722 C.Y. From Grading Area Between Frontage Rd. & Main Line STA. 15+38 - 15+89

Toe of Fill = 20+52.2

P.I. = 20+50
El. = 821.88

EXC. 311 EMB. 16,981
@ BOR. 8,375 10% 1699
S-TOT. 10,686 S-TOT. 10,686
LESS 18,375 LESS 18,375
TOT. 311 TOT. 311
OVERHAUL = 38,223 C.Y.-Sta.

OBTAIN BOR FROM WASTE:
1955 C.Y. From Widen Ex. 15+50 - 16+37
4934 C.Y. From Frontage Rd. Ex. 16+37 - 15+38
7224 C.Y. From Grading Area Between Frontage Rd. & Main Line STA. 15+38 - STA. 15+51

Toe of Fill = 27+80.2

Finish Grade

350' V.C.

1000' V.C.

-6.00%

-1.70%

P.I. = 29+25
El. = 769.38

Sta.	Elev.
0	758.44 PC
1	752.25
2	753.47
3	754.50
4	755.35
5	756.01
6	756.48 PT
7	756.64
8	757.24 PC
9	757.70
10	758.32
11	758.84
12	759.09
13	759.02
14	758.82
15	758.41
16	757.81
17	757.02
18	756.03 PT
19	754.78
20	753.29
21	751.58
22	749.65
23	747.50
24	745.15 PC
25	742.60
26	739.85
27	736.90
28	733.75
29	730.41
30	726.87 PT
31	723.13
32	719.19
33	715.05
34	710.71
35	706.18
36	701.45
37	696.52
38	691.39
39	686.06
40	680.53
41	674.80
42	668.87
43	662.74
44	656.41
45	649.88
46	643.15
47	636.22
48	629.09
49	621.76
50	614.23
51	606.50
52	598.57
53	590.44
54	582.11
55	573.58
56	564.85
57	555.92
58	546.79
59	537.46
60	527.93
61	518.20
62	508.27
63	498.14
64	487.81
65	477.28
66	466.55
67	455.62
68	444.49
69	433.16
70	421.63
71	409.90
72	397.97
73	385.84
74	373.51
75	360.98
76	348.25
77	335.32
78	322.19
79	308.86
80	295.33
81	281.60
82	267.67
83	253.54
84	239.21
85	224.68
86	209.95
87	195.02
88	179.89
89	164.56
90	149.03
91	133.30
92	117.37
93	101.24
94	84.91
95	68.38
96	51.65
97	34.72
98	17.59
99	0.26
100	782.73
101	794.73
102	797.28
103	799.54
104	801.48
105	803.13
106	804.48
107	805.55
108	806.28
109	806.73
110	806.77 - Begin Ex. Sta. 20+03.2
111	806.42
112	805.68
113	804.65
114	803.33
115	801.72
116	799.82
117	797.63
118	795.15 - End Ex. Sta. 22+11.2
119	792.38
120	789.32
121	785.97
122	782.33
123	778.40
124	774.19
125	769.68 - PCC
126	765.88
127	762.79
128	760.41
129	758.75
130	757.80
131	757.56
132	758.03
133	759.21
134	761.10
135	763.71
136	767.03
137	771.06
138	775.80
139	781.25
140	787.41
141	794.28
142	801.86
143	810.15
144	819.15
145	828.86
146	839.28
147	850.41
148	862.25
149	874.80
150	888.06
151	902.03
152	916.71
153	932.10
154	948.20
155	965.01
156	982.53
157	1000.76
158	1019.70
159	1039.35
160	1059.71
161	1080.78
162	1102.56
163	1125.05
164	1148.25
165	1172.16
166	1196.78
167	1222.11
168	1248.15
169	1274.90
170	1302.36
171	1330.53
172	1359.41
173	1389.00
174	1419.30
175	1450.31
176	1482.03
177	1514.46
178	1547.60
179	1581.45
180	1616.01
181	1651.28
182	1687.26
183	1723.95
184	1761.35
185	1799.46
186	1838.28
187	1877.81
188	1918.05
189	1959.00
190	2000.66
191	2043.03
192	2086.11
193	2129.90
194	2174.40
195	2219.61
196	2265.53
197	2312.16
198	2359.50
199	2407.55
200	2456.31
201	2505.78
202	2555.96
203	2606.85
204	2658.45
205	2710.76
206	2763.78
207	2817.51
208	2871.95
209	2927.10
210	2982.96
211	3039.53
212	3096.81
213	3154.80
214	3213.50
215	3272.91
216	3333.03
217	3393.86
218	3455.40
219	3517.65
220	3580.61
221	3644.28
222	3708.66
223	3773.75
224	3839.55
225	3906.06
226	3973.28
227	4041.21
228	4109.84
229	4179.19
230	4249.25
231	4320.02
232	4391.50
233	4463.69
234	4536.59
235	4610.20
236	4684.52
237	4759.55
238	4835.29
239	4911.74
240	4988.90
241	5066.77
242	5145.35
243	5224.64
244	5304.64
245	5385.35
246	5466.77
247	5548.90
248	5631.74
249	5715.29
250	5799.55
251	5884.52
252	5970.20
253	6056.59
254	6143.69
255	6231.50
256	6320.02
257	6409.25
258	6499.19
259	6589.84
260	6681.20
261	6773.27
262	6866.05
263	6959.54
264	7053.74
265	7148.65
266	7244.27
267	7340.60
268	7437.64
269	7535.39
270	7633.85
271	7733.02
272	7832.90
273	7933.49
274	8034.79
275	8136.80
276	8239.52
277	8342.95
278	8447.09
279	8551.94
280	8657.50
281	8763.77
282	8870.75
283	8978.44
284	9086.84
285	9195.95
286	9305.77
287	9416.30
288	9527.54
289	9639.49
290	9752.15
291	9865.52
292	9979.60
293	10094.39
294	10209.89
295	10326.10
296	10443.02
297	10560.65
298	10678.99
299	10798.04
300	10917.80

Cherokee
Rt 29 & 150
Line 1
(1)

PLATE 1 - PLAN - PROFILE O.P.R. & R.C. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	301-2(7)	29	39	~~417~~ 445

Line 1 - Rt. 150 Int.

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
R/W NOTED
STRUCTURE NOTATNS CHKD
BY
DATE

Rt 150 Line 1

100

Survey Sta. 31+00 End
Line 1 Rt. 29 & 150 Int.

Finish Grade

770

760

Cherokee Co.
U.S. 29 & 150
Line 1

(2) (1)

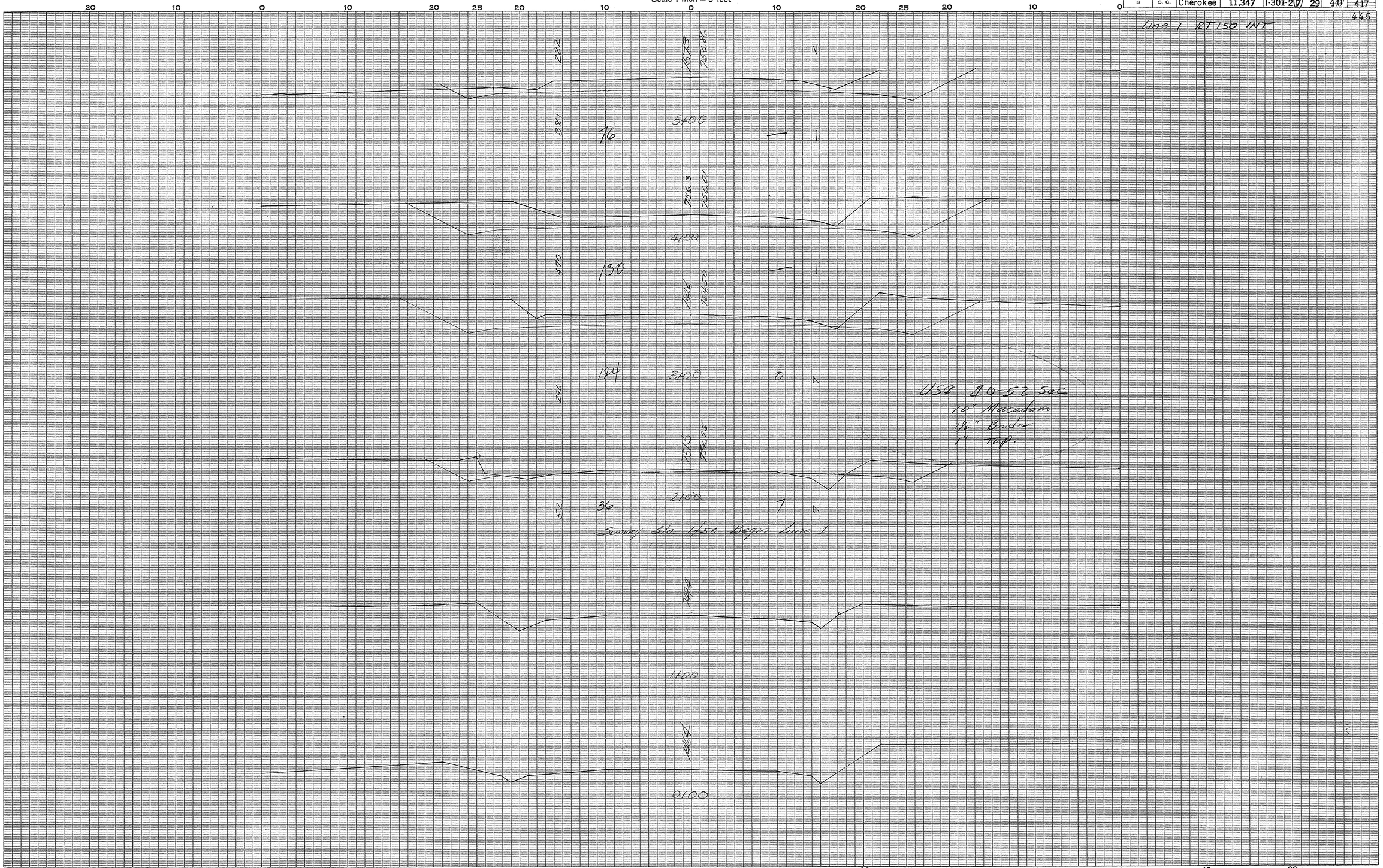
30 1 2 3 4 5

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	40	~~417~~ 445



Cherokee 6

U.S. Rt 29 Interchange Line #1

Rt 150

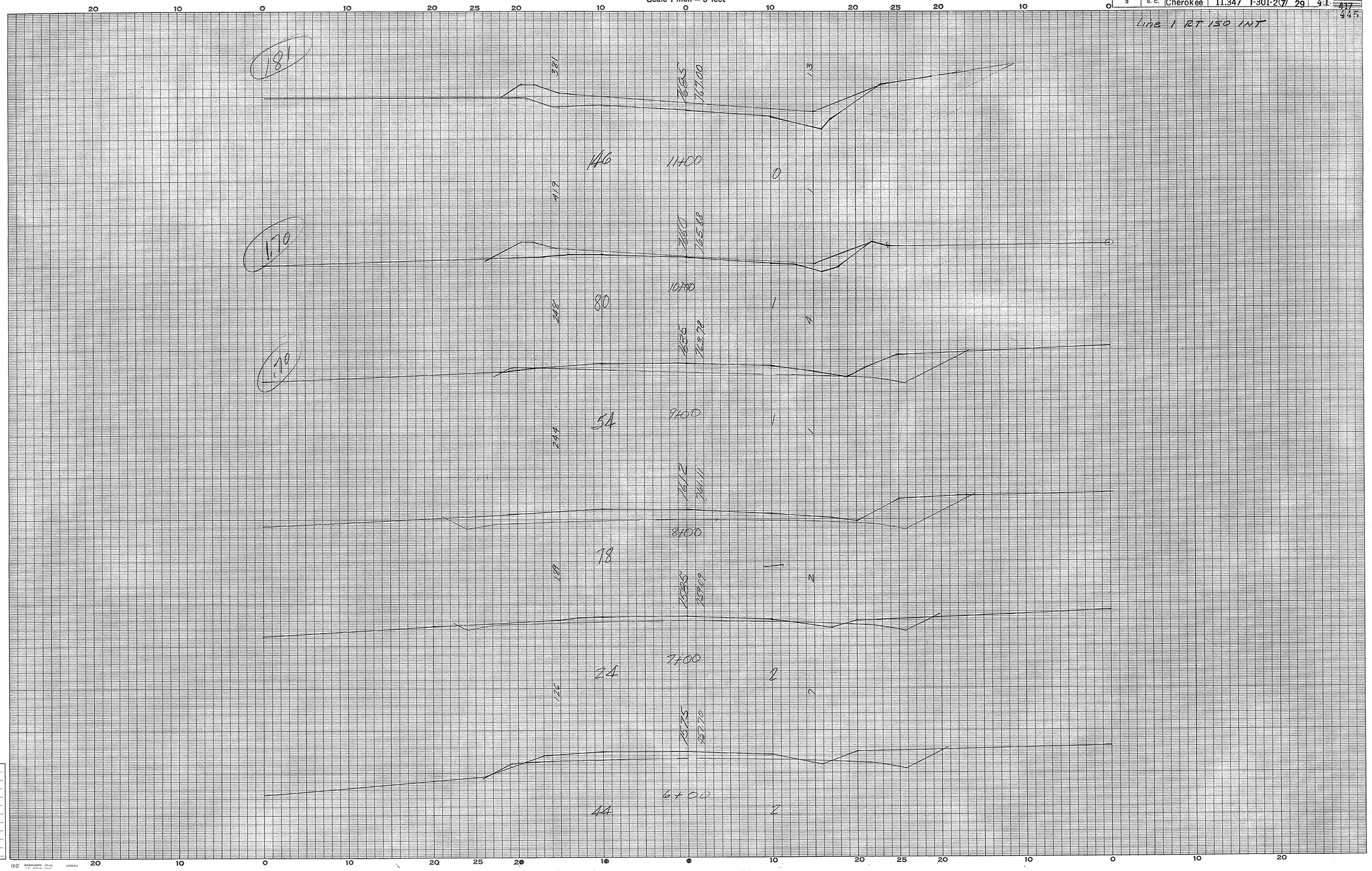
Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

K+E BANKNOTE 1745 60920

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	41	~~417~~ 445



Cherokee
U.S. Rt 29 & 150
interchange
Line 1

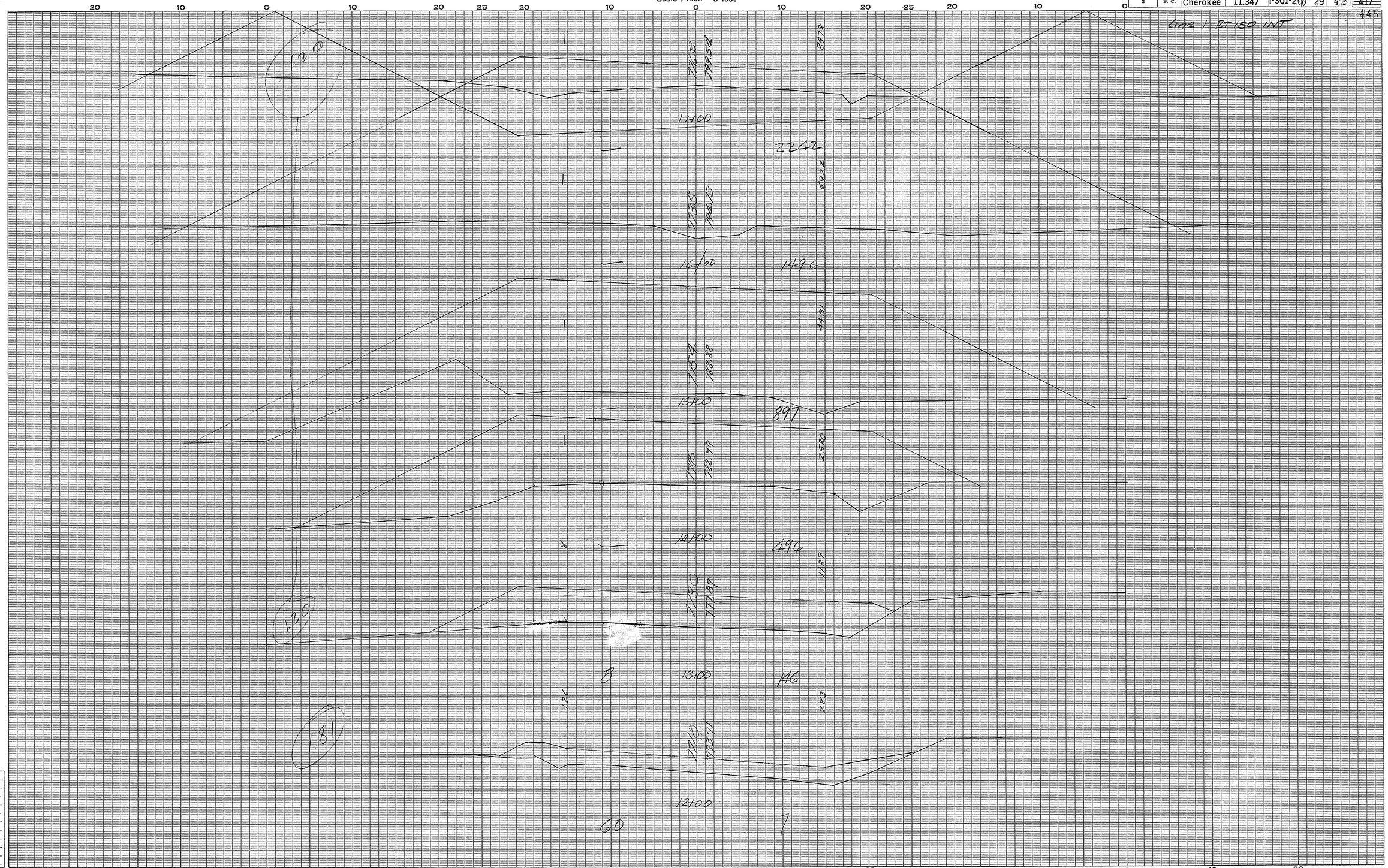
Ground Surface Platted by B.D.
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

2

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	42	~~417~~ 445



Cherokee

USRT 29 & 150 interchange. Line #1

Ground Surface Platted by BD
" " Checked by
Template Sections Revised by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	301-2(7)	29	43	417

445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

Line 1 RT 150 INT

50

54

1300

1968

1298

1400

2336

1800

1764

1880

1814.2

1804.2

1855

1903

1913

1925

1955

1965

1977

1989

2000

2010

2025

2035

2045

2055

2065

2075

2085

2095

2105

2115

2125

2135

2145

2155

2165

2175

2185

2195

2205

2215

2225

2235

2245

2255

2265

2275

2285

2295

2305

2315

2325

2335

2345

2355

2365

2375

2385

2395

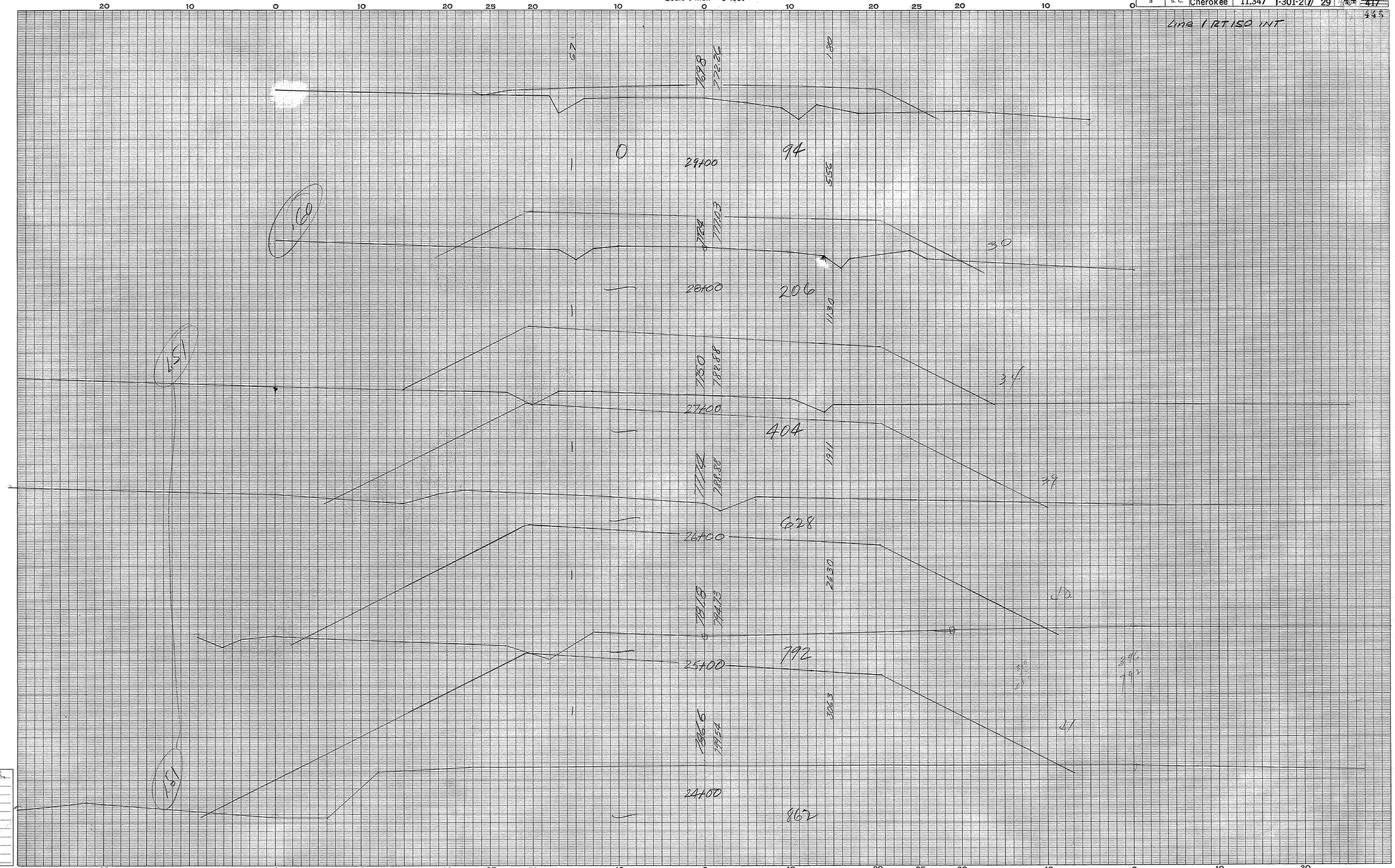
2405

2415

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	44	417



Cherokee
U.S. RT 29 & 150
Interchange
Line #1

Ground Surface Platted by
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

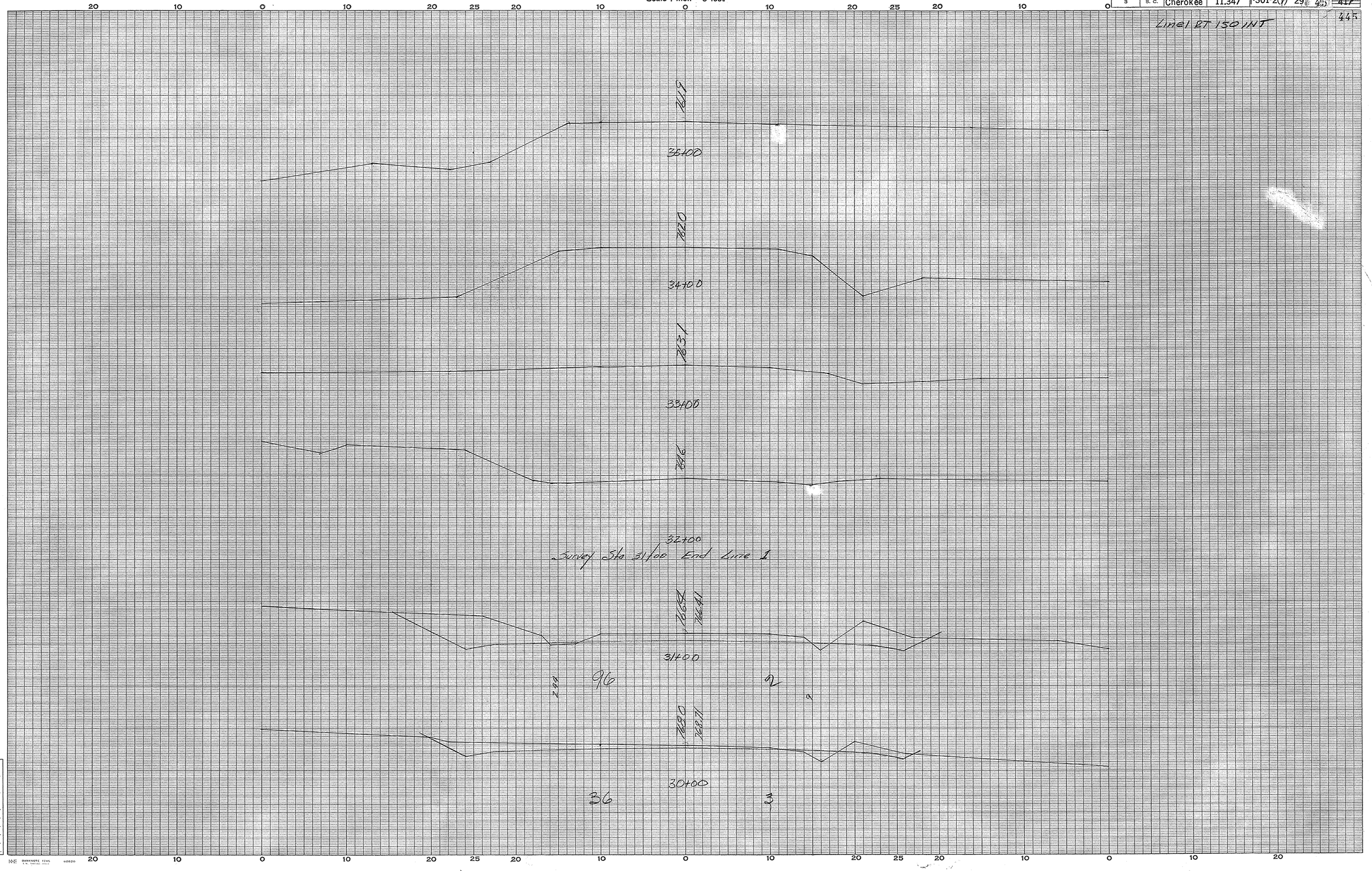
5

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	45	~~417~~ 445

Line 1 RT 150 INT



Cherokee
U.S. RT 29 & 150
Interchange
Line #1.

Ground Surface Platted by BD
" " Checked by
Template Sections [illegible]d by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

6

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	-301-2(7)	29	46 ~~417~~ 445

Line 2 - RT. 150 INT.

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R/W CHECKED — NOTE BOOK — NO. — BY — DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. M.'s NOTED, STRUCTURE NOTATIONS CHK'D — NOTE BOOK — NO. — BY — DATE

Int 29 & 150
Line 2

Cherokee Co.
U.S. 29 & 150
Line 2

(1)

EXC. 109 EMB. 99 10% 10 TOT. 109 TOT. 109 +10.8

EXC. 141 EMB. 128 10% 13 TOT. 141 TOT. 141 +81.1

EXC. 168 EMB. 153 10% 15 TOT. 168 TOT. 168 +30.0

+69.7

SEE FRONTAGE ROAD RIGHT STA. 1593 FOR YARDAGE STA. 1276+2 TO STA. 1577+00

Survey Sta. 19+698 End Line 2 Rt. 18 & 150 Int.

Pl. = 14+50
El. = 791.87

Finish Grade

Survey Sta. 0+10.8 Begin Line 2 Rt. 29 & 150 Int.

Pl. = 5+00
El. = 767.84

Pl. = 10+50
El. = 778.29

+2.39%

+1.90%

-1.42%

-0.88%

300' V.C.

300' V.C.

300' V.C.

Use 26'-32' Section Throut.
20' B.S. 6" Base

To COUNTY Sta. 41+46 Line 1 = Sta. 0+00 Line 2

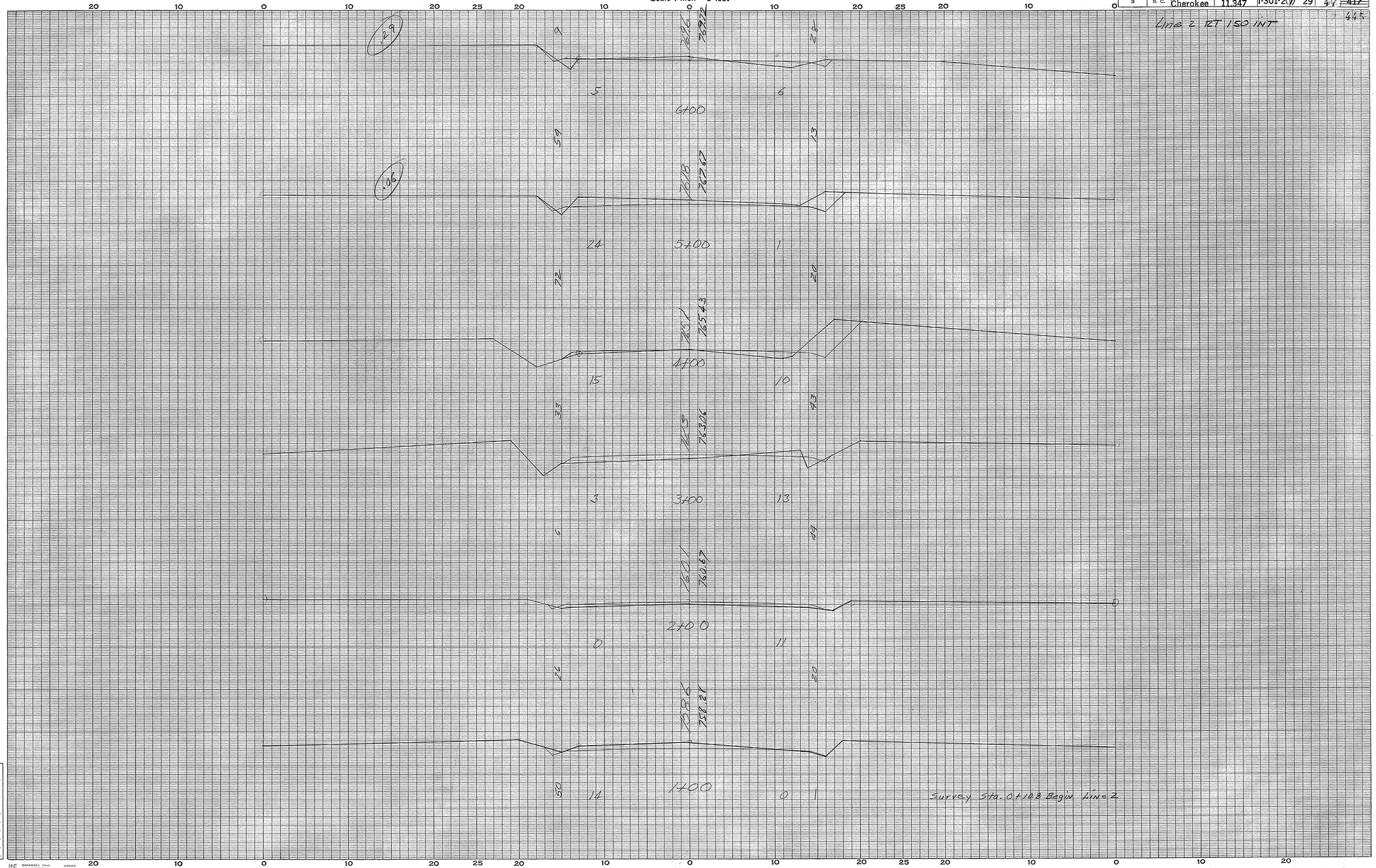
Sta. 15+29.62 Ahead 100' Rt. of Pt. 29 & 150 Int. Back Line 2 = COUNTY Sta. 19+698

| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	47	~~417~~ 445



Cherokee 6
U.S. Rt 29 & 150
Interchange
Line #2

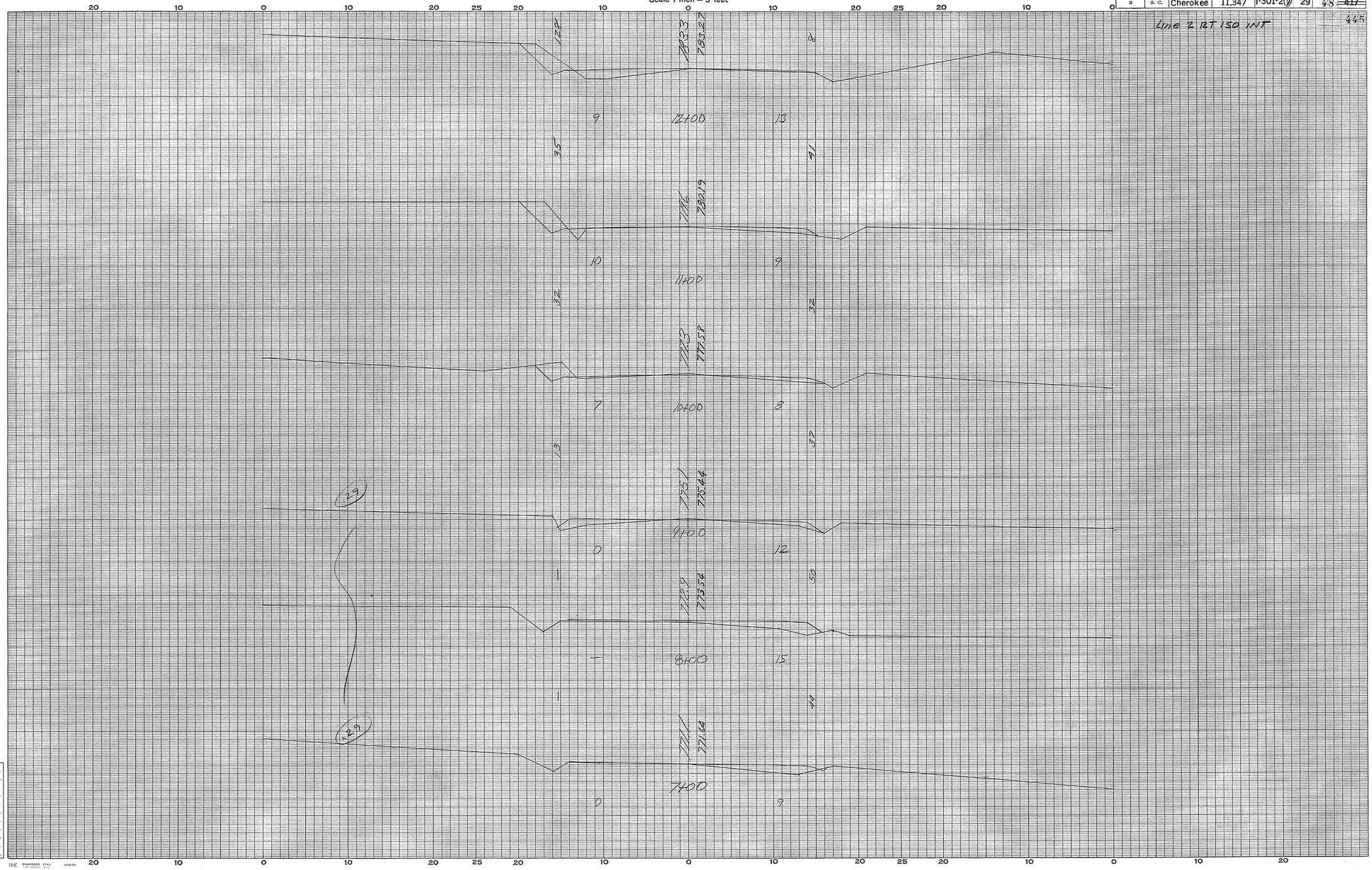
Ground Surface Platted by ...
" " Checked by ...
Template Sections Plotted by ...
" " Checked by ...
Areas by ...
" Checked by ...
Template Sections Revised by ...
" " Checked by ...
Final Areas by ...
" " Checked by ...
Quantities Transferred and Inked by ...

(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	48	~~417~~ 445



Cherokee Co
U.S. Rt 29 & 150
Interchange
Line #2

Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

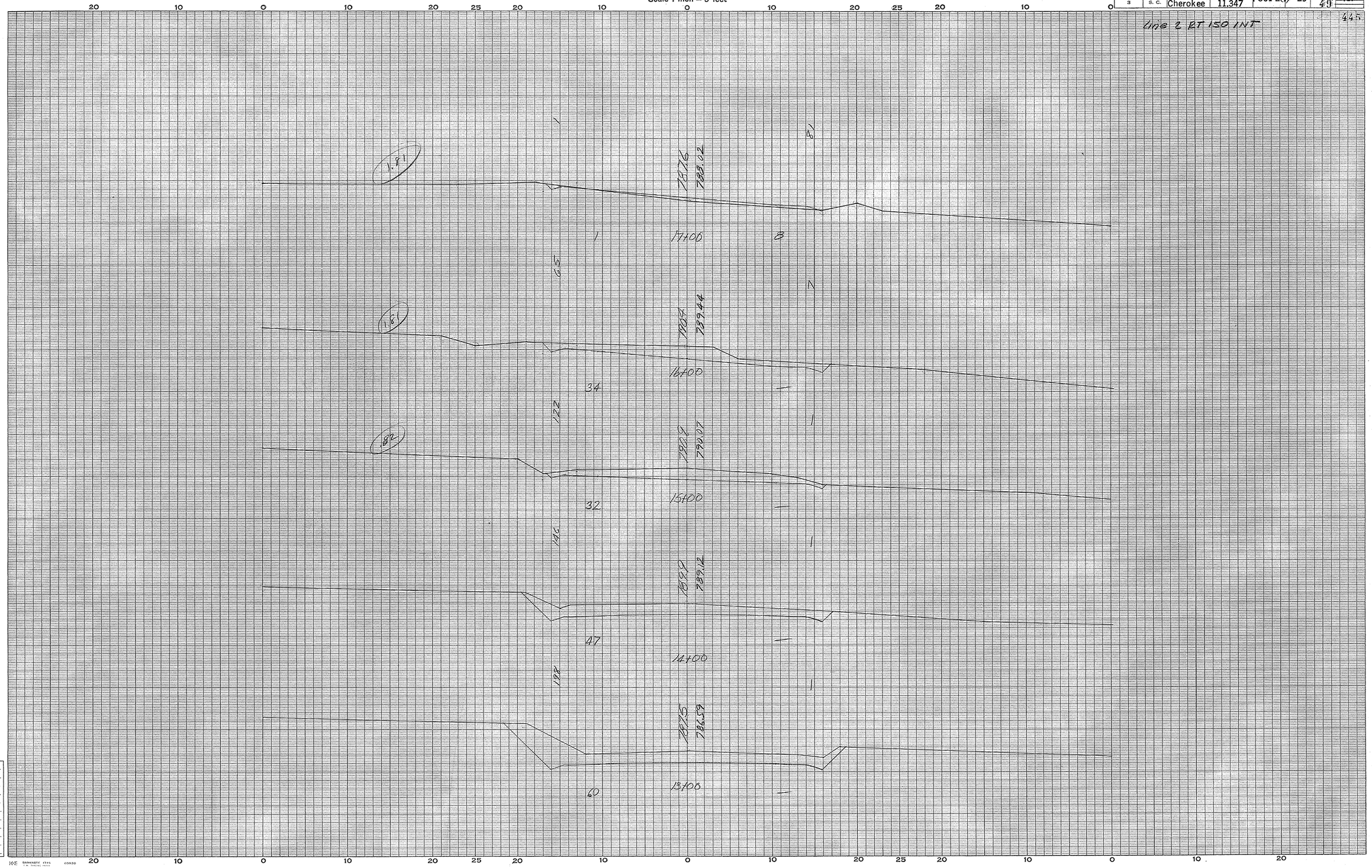
(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	49	417

445



Cherokee Co
U.S. Rt 29 & 150
Interchange
Line 2

Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

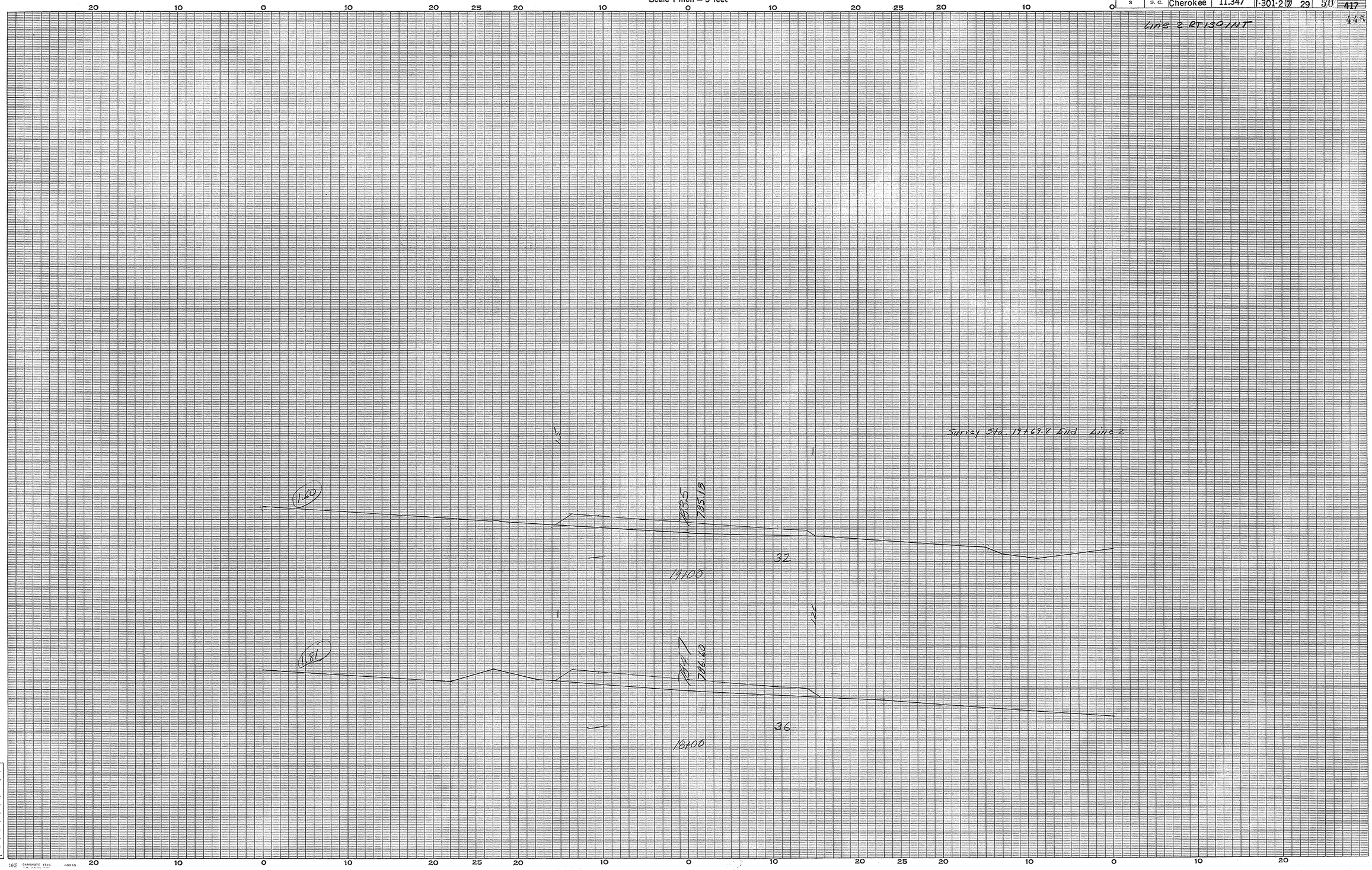
3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	50	417

445



Cherokee Co
U.S. RT 29
Interchange
Line = 2

Ground Surface Platted by BD
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(4)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	51 ~~417~~ 445

Line 3 - Rt. 150 Int.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
B. M. NOTED
STRUCTURE NO. AT N.S. CH. KO
BY
DATE

Cherokee Co.
U.S. 29 & 150
Line 3

Line 3 Rt. 150 Int.

+83.0	EXC.	116	EMB.	105
	10%			11
	TOT.	116	TOT.	116

+121.8				
	EXC.	16	EMB.	502
	@ BOR.	536	10%	30
	S. TOT.	552	S. TOT.	532
	LESS	536	LESS	536
	TOT.	16	TOT.	16
	OVERHAUL = 536 C.Y. H.M.			

+140

OBTAIN BOR. FROM WASTE:
286 C.Y. FROM FRONTAGE RD. RT. STA. 15+31 ± = 15+99 ±
750 C.Y. FROM FRONTAGE RD. RT. CONNECTION

Survey Sta. 1+83 Begin
Line 3 Rt. 29 & 150 Int.

Finish Grade

P.I. = 8+50
El. = 774.4

400' V.C.

-5.09%

+6.81%

0+00%

Survey Sta. 8+90 End
Line 3 Rt. 29 & 150 Int.

50' V.C.

D = 10.0°
C = 01.5'

P.I. = 5+00
El. = 750.4

Use 26'-32' Section Turnout

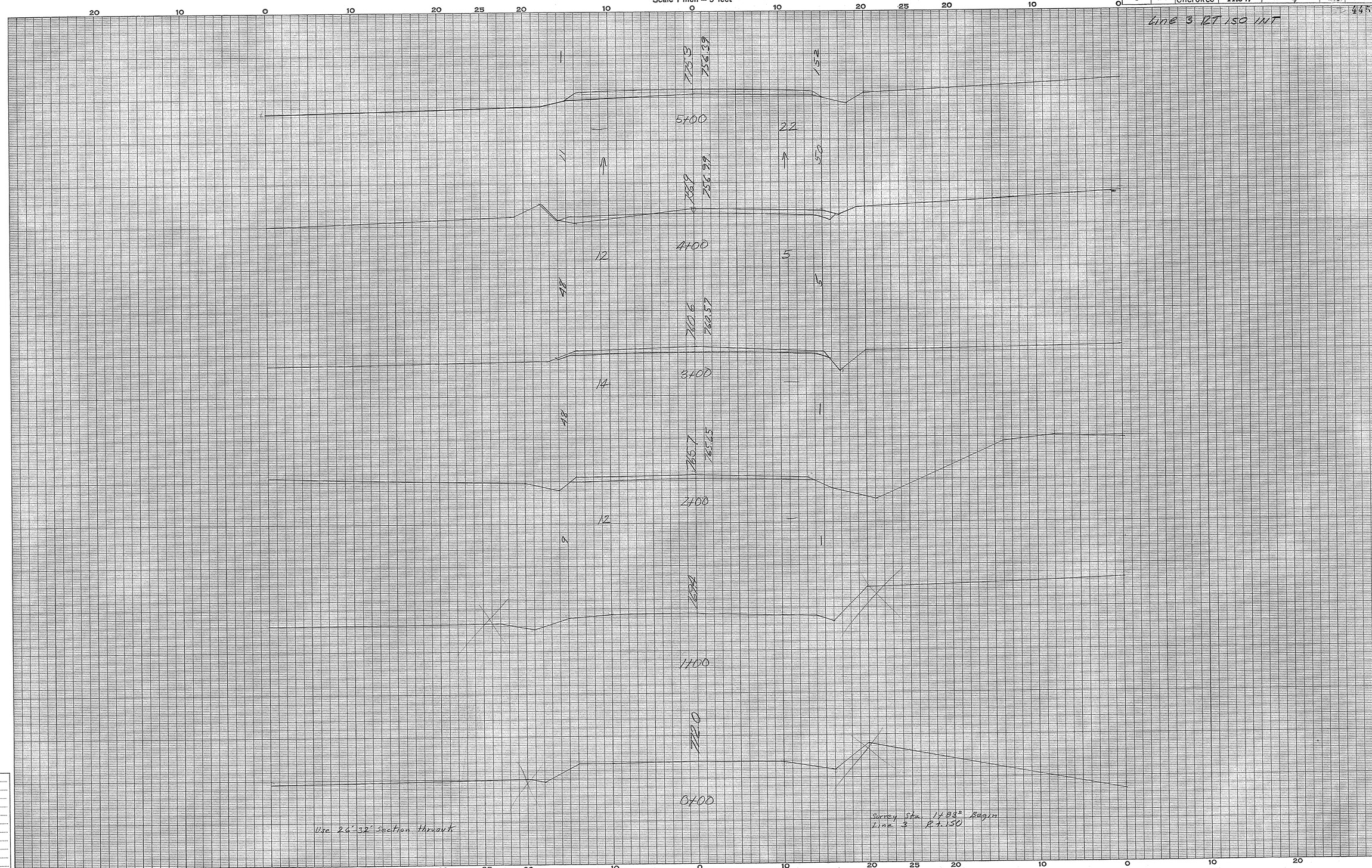
Sta. 9+10.5 Line 3 =
Sta. 10+50.2 Line 1

| | | | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	52	~~417~~ 445



Cherokee
U.S RT 29
Interchange
S.C. Rt 150
Line 3

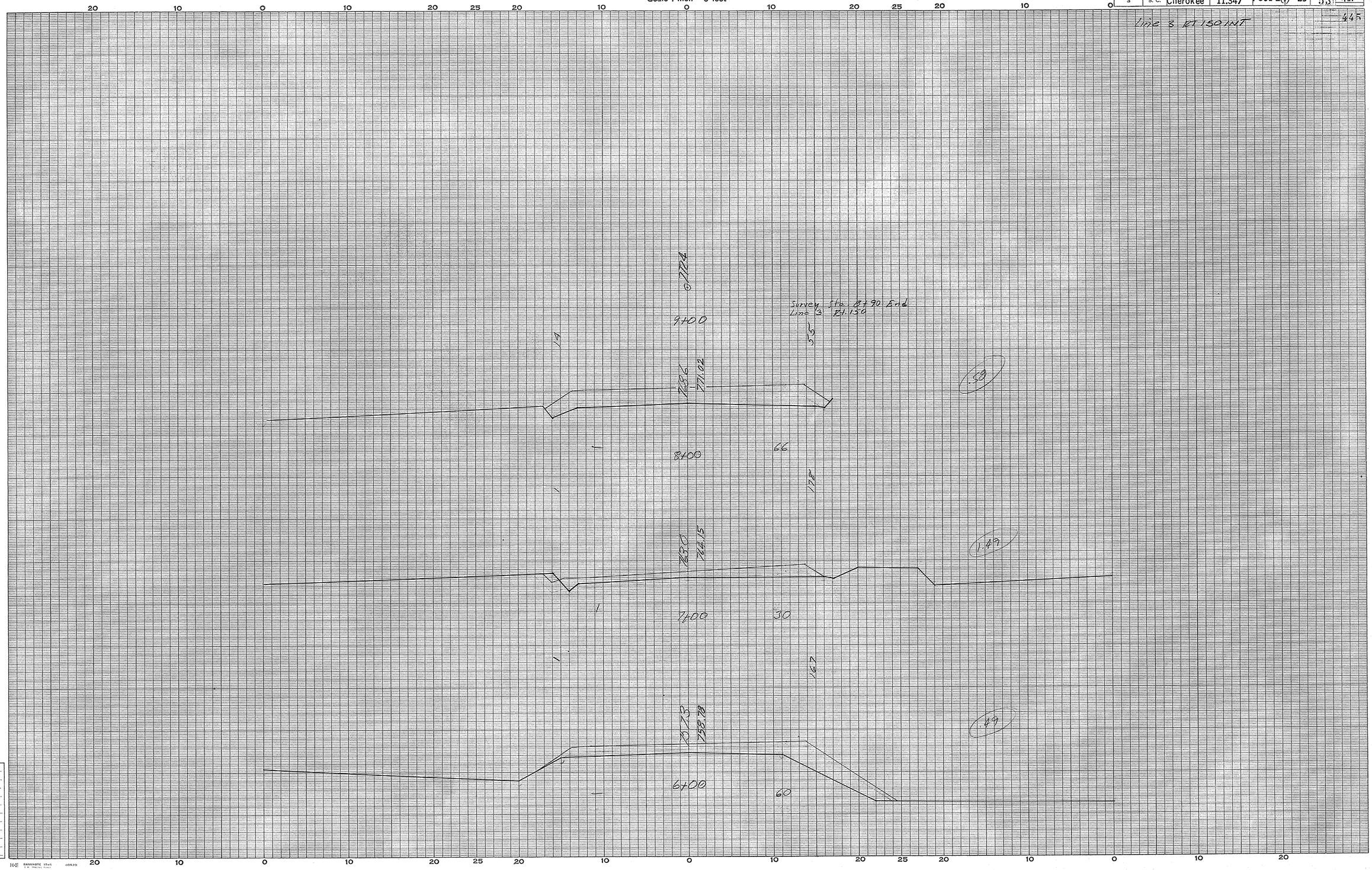
Ground Surface Platted by BAP
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	53	~~417~~ 445



Cherokee
U.S Rt 29
Interchange Rt 150
Line #3

Ground Surface Platted by BD
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	54 ~~47~~	~~47~~ 445

Line 4 - Rt. 150 Int.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
PT. OF INT. CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
CROSS SECTIONS CHECKED
B.M.'S NOTED
STRUCTURE NOTATIONS CHKD

LINE "4" Rt 150 Int.

Survey Sta. 1527+50.5 Begin Line 4 Rt. 29 & 150 Int.

+50.5

EXC. 1230 EMB. 6
10% 1
Ø WASTE 1223
TOT. 1230 TOT. 1230

Ø WASTE TO BE USED AS BOR LINE "J" Rt. 150 STA. 21+80-31+00

P.I. 20+50
EL. = 817.84

11.96%

+0.18%

P.I. = 16+31.50
EL. = 813.89

300' V.C.

350' V.C.

TIE EQUALITY STA. 20+71.8 Line 2 Rt. 29 100' LT. & Rt. 29 =
STA. 1527+50.5 100' LT. & Rt. 29

+17.1

TIE EQUALITY STA. 1533+13.9 100' LT. & Rt. 29 =
Sta. 01+00 Line 4 Rt. 150 Interchange

FINISH GRADE

-0.64%

P.I. = 6+12.5
EL. = 808.44

350' V.C.

-3.78%

400' V.C.

EXC. 6978 EMB. 6344
18% 634
TOT. 6978 TOT. 6978
OVERHAUL 3,782 C.Y.H.M.

Use 26'-32' Section Throughout

+0.78%

P.I. = 13+50
EL. = 779.58

D.A. = 20 M.C.
L. = 0.5

350' V.C.

+6.00%

P.I. = 22+12.5
EL. = 786.40

| | | |

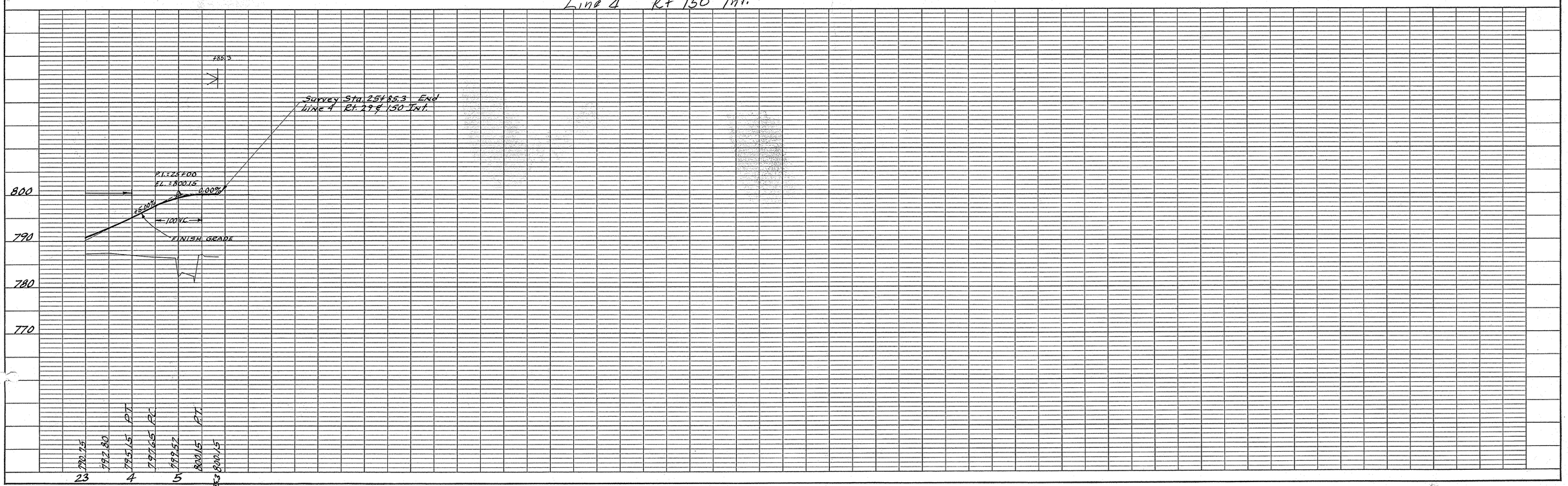
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	55	~~417~~ 445

Line 4 RT. 150 INT.

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

Line 4 Rt 150 Int.



Cherokee Co.
U.S. 29 & 150
Lt.
Line 4
(2) (1)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

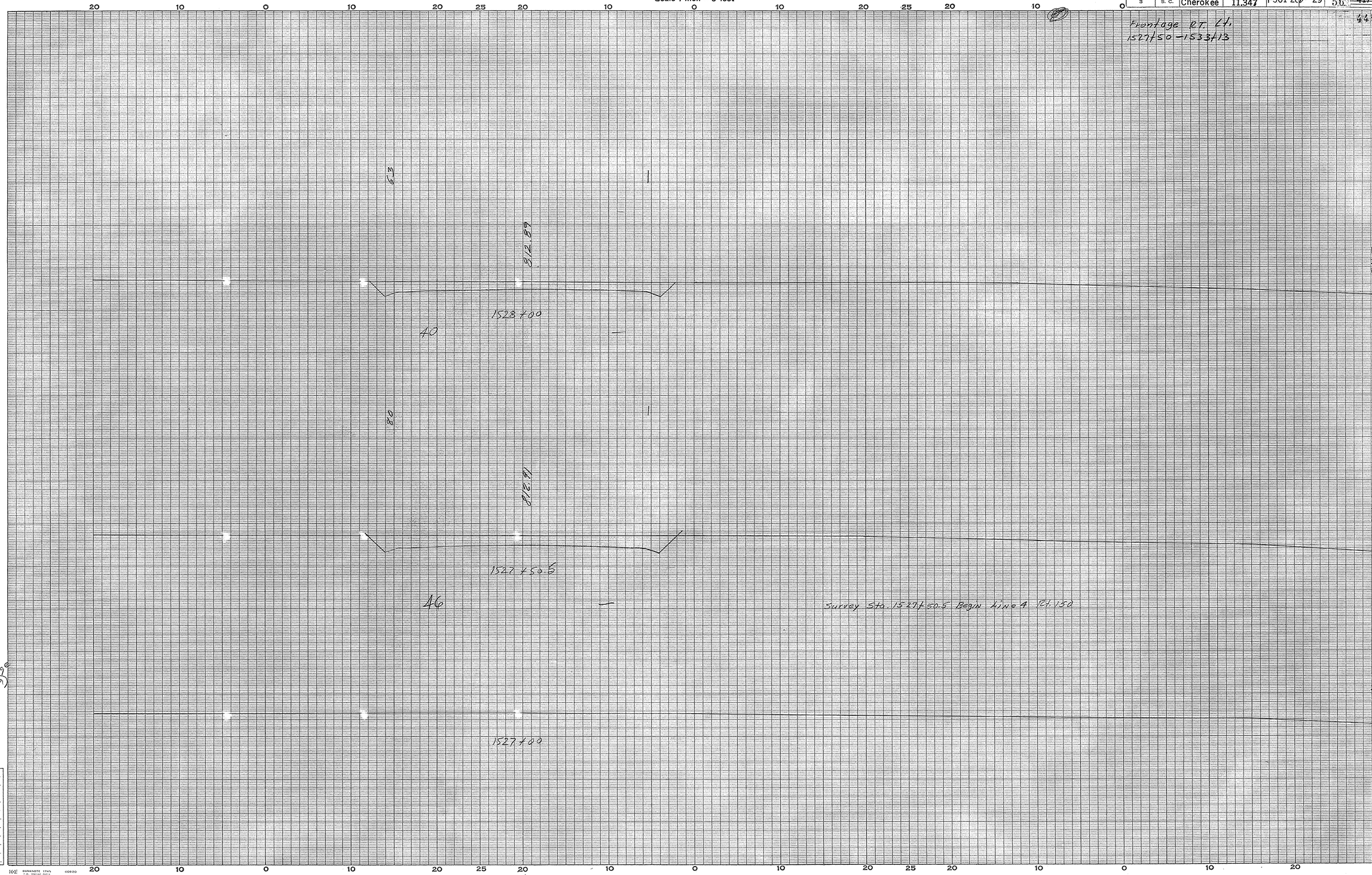
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	56	417

445

Frontage RT. Lt.
1527+50 - 1533+13



Cherokee Co.
Rt 29 & 11 Interchange
(100' Lt ℄ Rt 29)
Frontage Rd

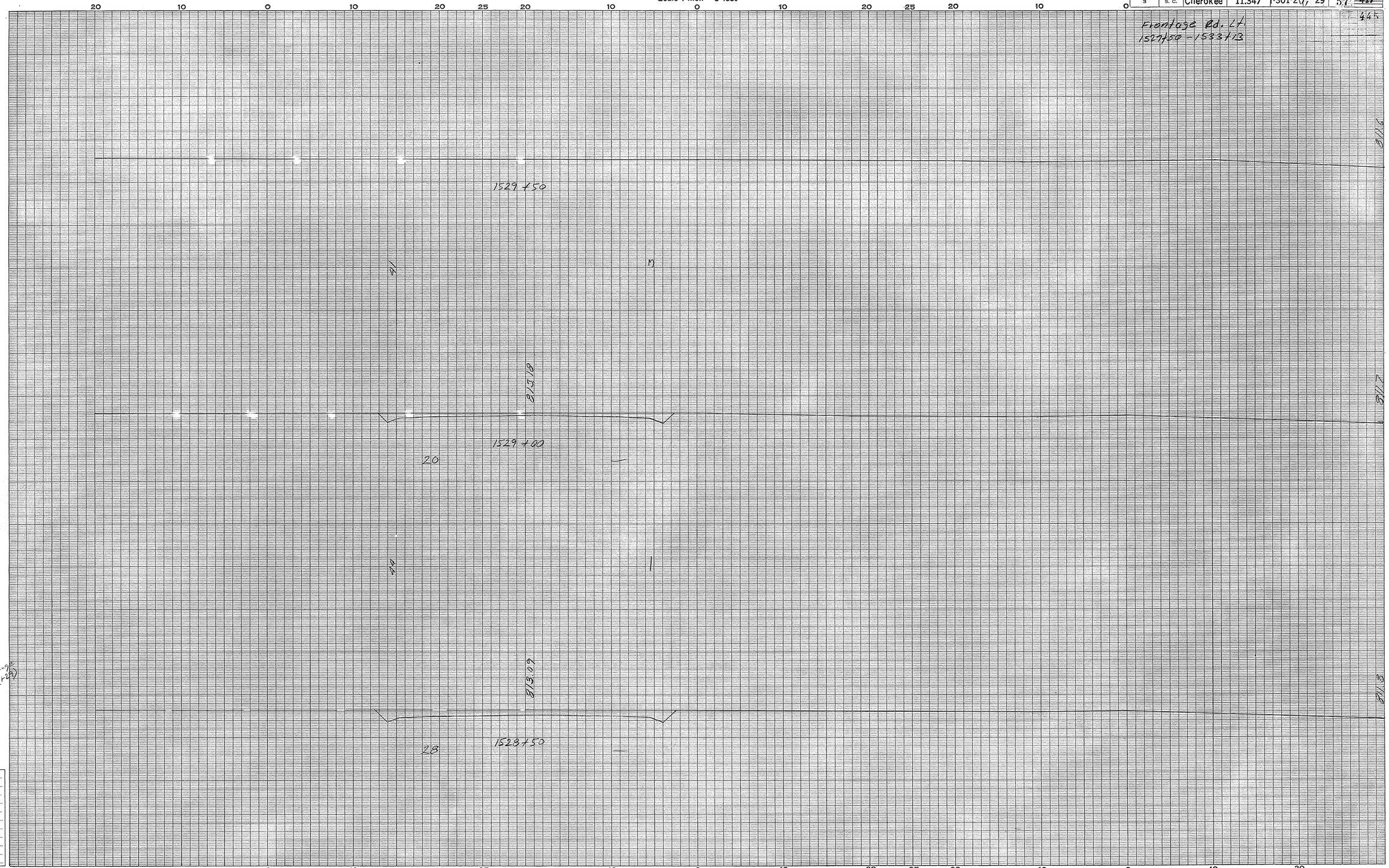
Ground Surface Platted by
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	57	~~417~~ 445



Cherokee Co.
Rt. 29 & 11 Interchange
Frontage Rd. (100' Lt. ℄ Rt 29)

Ground Surface Platted by JR
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

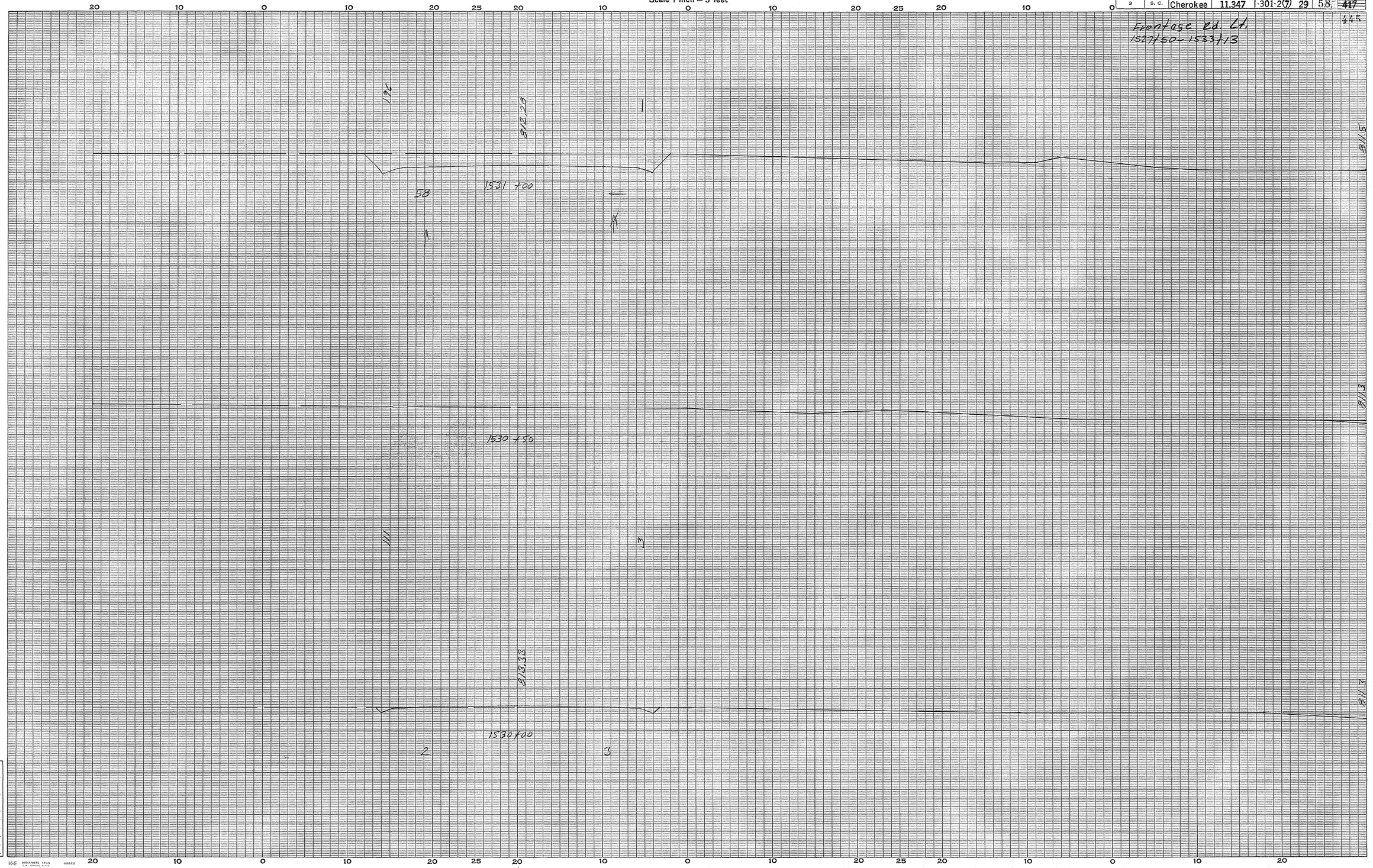
K+E DANKNOTE 1745 60820

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	58	~~417~~ 445



Cherokee Co.
Rt 29 & 11 Interchange
Frontage Rd (100' Lt & Rt 29)

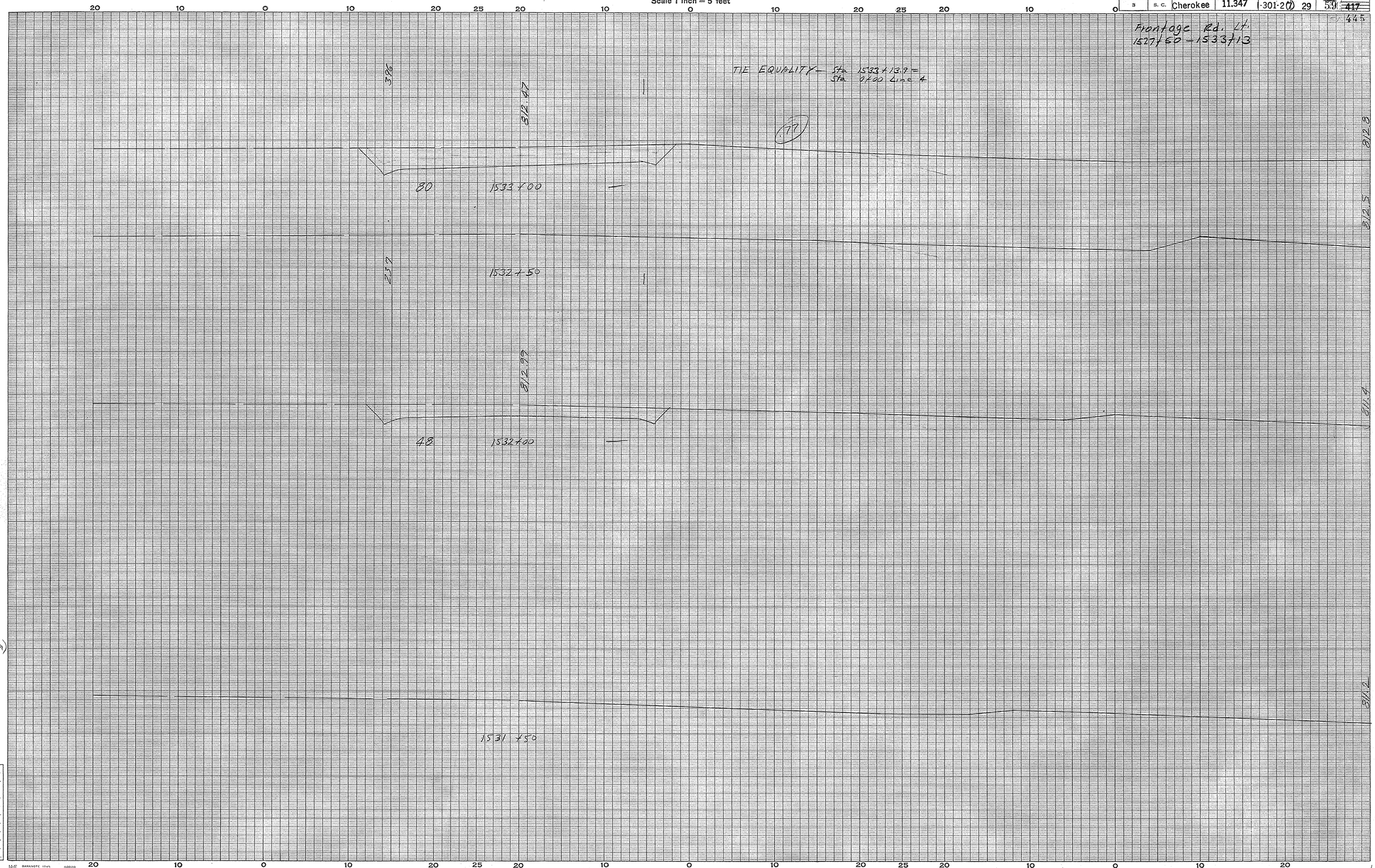
Ground Surface Platted by JG
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(3)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	·301-2(7)	29	59	417



Cherokee Co.
Rt 29 & 11 Interchange
Frontage Rd (100' Lt ℄ Rt 29)

Ground Surface Platted by JB
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(4)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	60	~~417~~ 445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

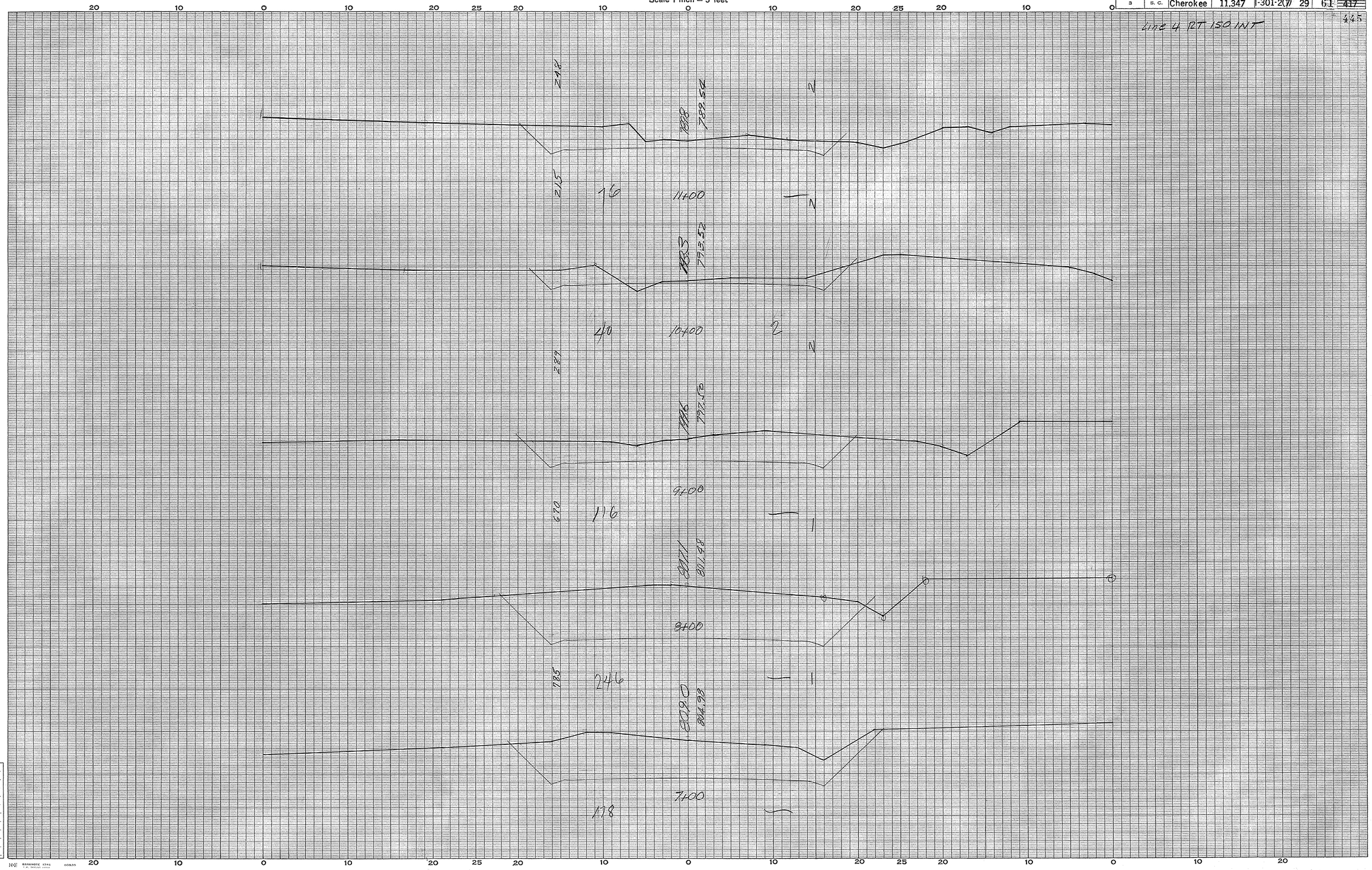
Line 4 RT 150 INT

6+22 — 8+22 — 10+22 — 12+22 — 14+22 — 16+22 — 18+22 — 20+22 — 22+22 — 24+22 — 26+22 — 28+22 — 30+22 — 32+22 — 34+22 — 36+22 — 38+22 — 40+22 — 42+22 — 44+22 —

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	61	~~417~~ 445



Cherokee Co
U.S. RT 29
Interchange
Line #4
RT 150

Ground Surface Platted by FD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

BARKNOTE 1745 60920

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	62	~~417~~ 415

Line 4 RT 150 INT

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

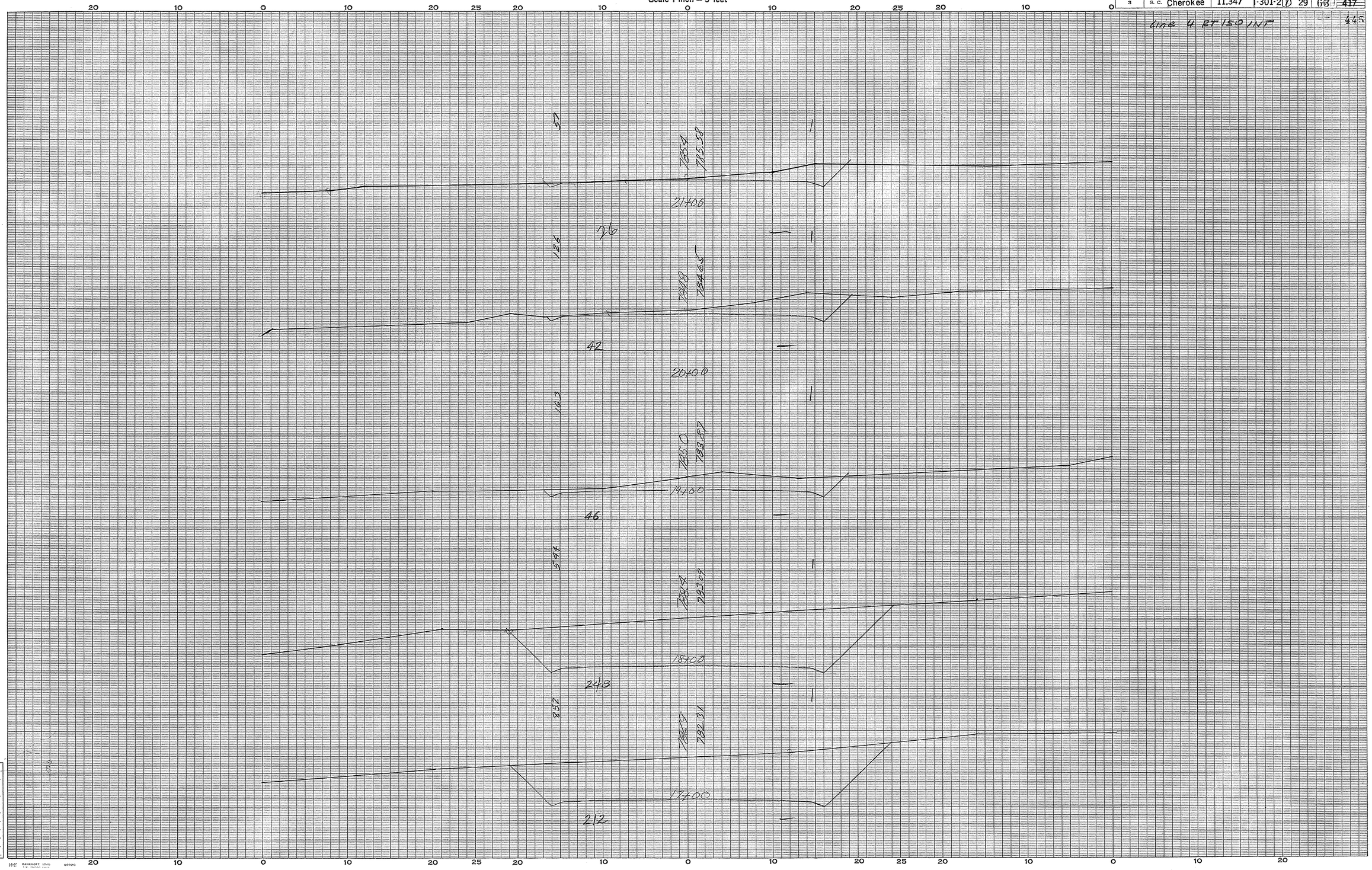
16+00
26
0
LT
1
1
1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	63	~~417~~ 445

Line 4 RT 150 INT



Cherokee Co
U.S. Rt #29
Interchange
Line #4
Rt 150

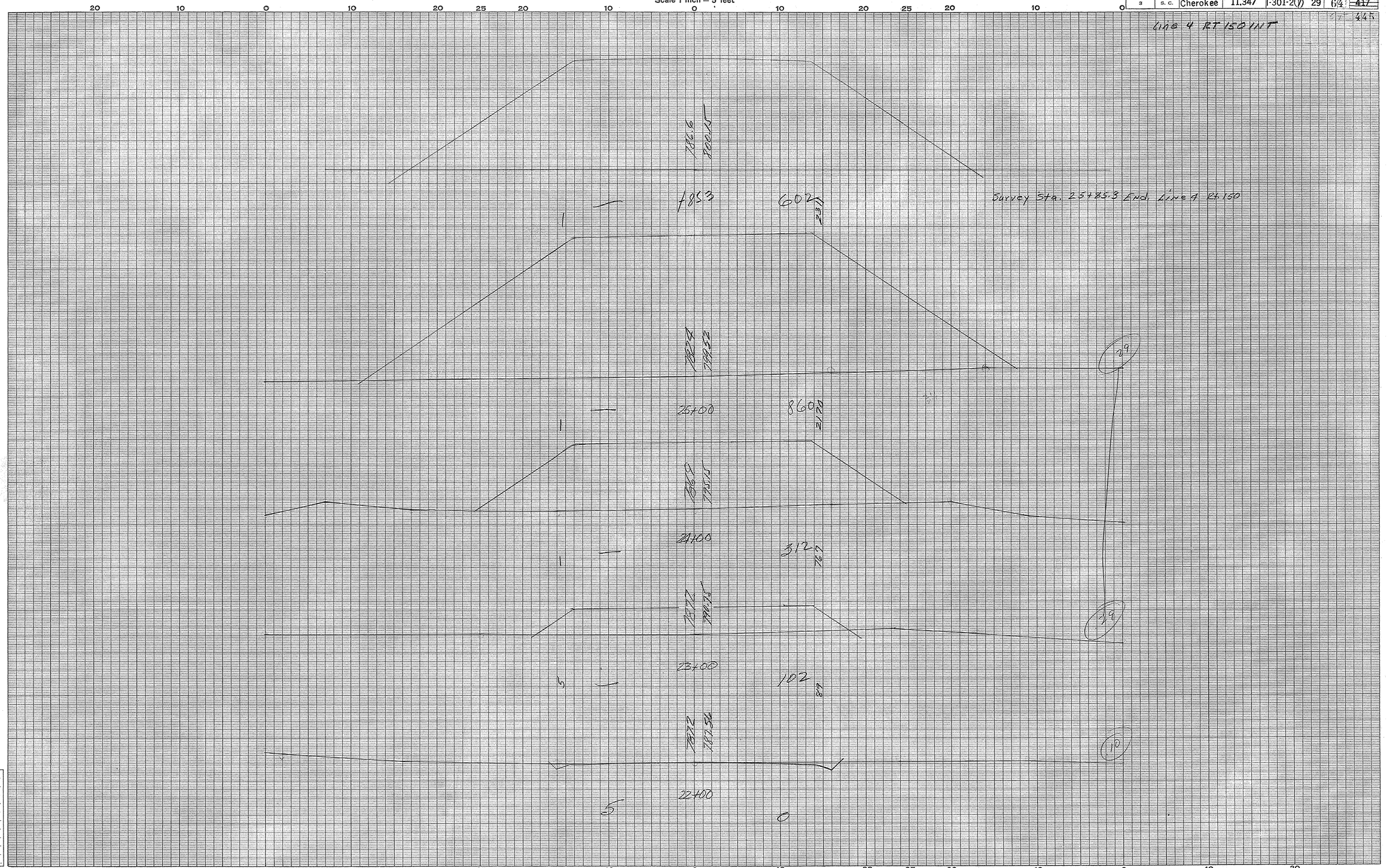
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

4

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	64	~~417~~ 445



Cherokee Co
U.S. Rt 29
Interchange
Line #4

Rt 150

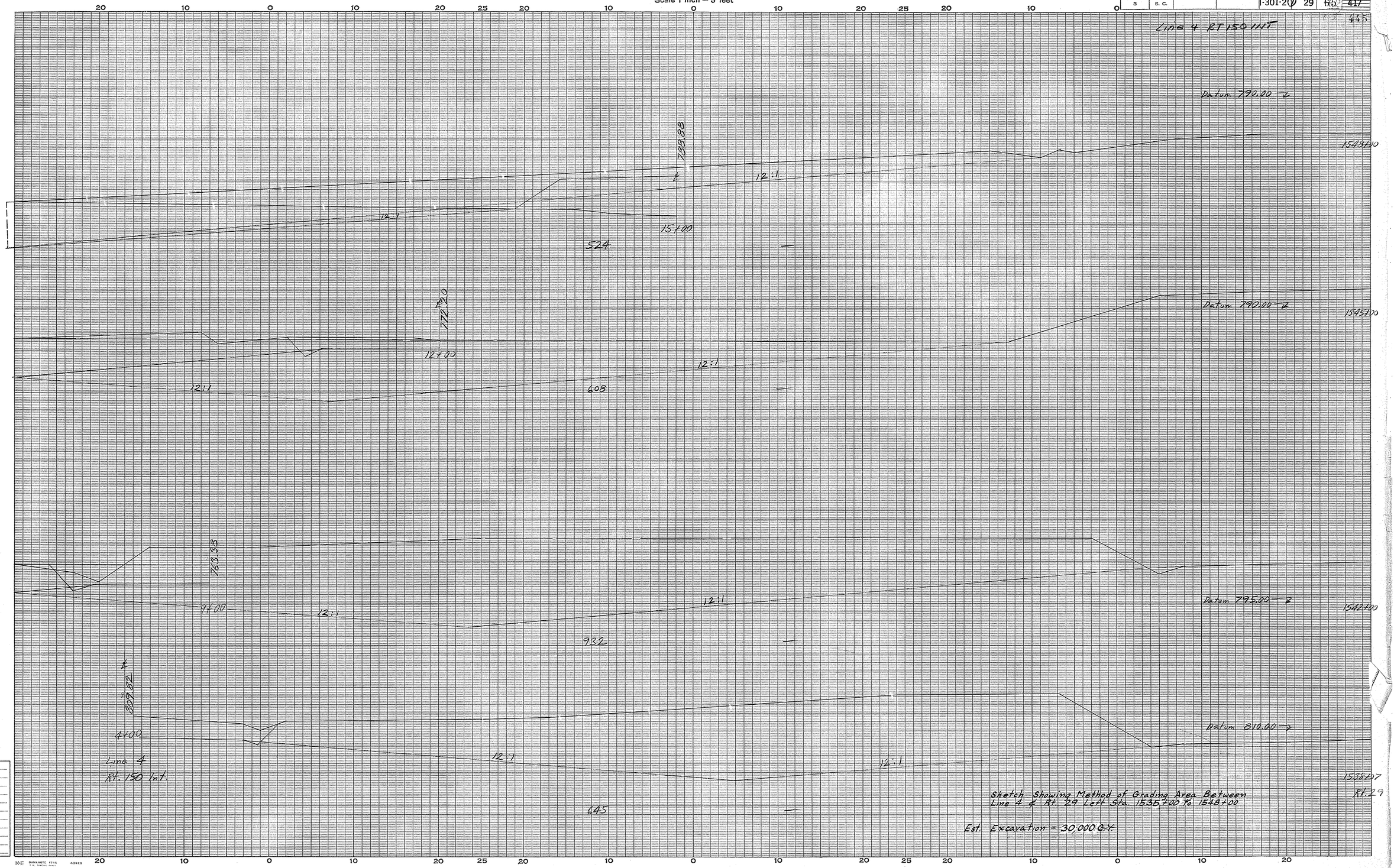
Ground Surface Platted by BD
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

5

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.			I-301-2(7)	29	65	417



Cherokee Co.

Ground Surface Platted by
" " Checked by
Template Sections Drawn by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Areas by
" Checked by
Quantities Transferred and Inked by

Fed. Road Div. No.	State	County	Docket No.	Project No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11.347	I-301-2(7)	29	66	445

DETAIL OF INTERSECTION US RT 29, SC RT 18 & RD 82

SCALE: 1"=100'

DETAIL OF INTERSECTION FOR LINES 3, 7 & 8

(40) TRANSFERRED TO S.C. STATE HIGHWAY DEP'T. BY EDWARD R. JEFFERIES & HARDINIA J. SMITH — FEE SIMPLE DEED - 12-23-57 (ENTIRE LOT)

Sunny Slope Farms, Inc. Et. Louis V. Cosentino D. 1-20-57

Joe Dean & Marena Lou Phillips D. 10-11-57

Edward R. Jefferies Et Al D. 9-20-57

Douglas B. Jefferies Et Al D. 9-20-57

Myrtle A. Shaw Et Al D. 8-57

Bakely Mosley D. 10-12-57

T. C. Ramsey

H. C. Bowler

Shaw Sarratt

T. F. Mulligan Et Al D. 10-10-57

T. Mulligan

D. Gaines D. 10-10-57

Edward P. Wallace D. 10-11-57

Line 1 P.I. = 27+77.6 Δ = 12°-05'-Lt. D = 21°-30' T = 2628' L = 5223' E = 150' Place 78"-18" R.C. Pipe Conn. Type #1 C.B.

Line 3 P.I. = 27+77.6 Δ = 12°-05'-Lt. D = 21°-30' T = 2628' L = 5223' E = 150' Place 78"-18" R.C. Pipe Conn. Type #1 C.B.

Line 3 P.I. = 44+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. = 17+17.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 9 P.I. = 16+64.200 Δ = 20°-35'-Lt. D = 2°-00' T = 518' L = 1028.3' E = 46.8'

Line 10 P.I. = 13+64.2 Δ = 33°-00' D = 10°-00' T = 173.4' L = 330.0' E = 26.2'

Line 10 P.I. = 7+50.4 Δ = 142°-14'-Rt. D = 18°-00' T = 129.2' L = 245.7' E = 23.3'

Line 7 P.I. = 16+71.395 Δ = 26°-52'-Lt. D = 2°-00' T = 1363' L = 2682' E = 182.8'

Line 8 P.I. = 2+80.1 Δ = 36°-19'-Rt. D = 10°-00' T = 160' L = 314.6' E = 13.9'

Line 8 P.I. = 9+80.1 Δ = 36°-19'-Rt. D = 10°-00' T = 160' L = 314.6' E = 13.9'

Line 3 P.I. = 41+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. = 44+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. = 2+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. = 5+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. = 8+77.6 Δ = 15°-30'-Rt. D = 15°-30' T = 3001' L = 6000' E = 222'

Line 3 P.I. =

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.947	I-301-2(7)	29	67	~~417~~ 445

STERLING SILVER

FRED GANT

MRS. E. H. LOVELACE

MAGGIE & LUTHER MARTIN

1680 1685 1690 1695 1700 1705 1710

P.I. = 135

37½' R/W Present R/W from ℄ Part inplace

3 7½' R/W 20' ℄ Survey U.S. Rt. 29 48' N 67°-30' E

PRESENT N.B. LANE 24' South Bound Lane P.I. 2+7

5' 65' R/W

+41+80 ℄

+67-71 ℄

+43-34 ℄

+72-94 ℄

+00-4 ℄ P.T. 1+78 ℄

+90-8 ℄

+46-8 ℄

55' R/W 75' R/W 55' R/W 37½' R/W

3 7½' 5' 75 53' 5' 37½'

℄ Survey U.S. Rt. 29 48' PRESENT N.B. LANE

74' 65' R/W

(14) (See Below) Route 29 N. Bound Lane

Route 18 LINE 3

LINE 1 LINE 3

50' R/W 75' R/W 75' R/W

Pipe 2+63

50+06.0 P.C. 132'-18" R.C. pipe

P.I. 1696+74.1

27°-45'

Place 132'-18" R.C. pipe Construct 2 Type 9 C.B.

Place Concrete Gutter Downspout.

Place 132'-18" R.C. pipe Construct 2 Type 9 C.B.

(14) Edward R. Jefferies & (Wife) Hardenia J. Smith D. 9-20-57

(15) (Wife) Susie Laughlin D. 9-26-57

1699 ± ADC Hebrokee Creek P.I.

12.0' Bridge to be Contructed under Separate Contract Sta. 61+98 to 63+18.

120' Bridge to be Constructed under Separate Contract Sta. 1700+30 to 1701+50.

4600 4500 4400 55100 10

LINE 1

21.0 22.5 P.O.T. 1684+10.8

21.5 P.C. 1688+27.4 19.0

P.I. = 1692+51.1
Δ = 6°-21' Rt.
D = 0°-45'
T = 423.7'
L = 846.7'
E = 11.7'

20.4 15.9 P.I. 1692+51.1

P.T. 1696+74.1 8.2' 8.9'

LINE 3

P.O.T. 47+50.4 25.4' 27.7'

13.6' 21.2' P.C. 50+06.0

P.I. = 54+29.7
Δ = 6°-21' Rt.
D = 0°-45'
T = 423.7'
L = 846.7'
E = 11.7'

7.9' 13.2' P.I. 54+29.7

8" Oak 5.4' P.T. 58+52.7 6.0' 6" Oak

P.O.T. 62+43.8 16.3' 21.5' Fence 8" Willow Post

P.O.T. 66+13.3 4.3' 4.0' 8" 5" Cotton Wood Cottonwood

P.O.T. 68+91.5 14.0' 9.8' 10" Pine 6" Pine

P.O.T. 69+51.5 26.3' 23.5' 15" Oak 8" Oak

NOTE:
FOR MAIN LINE PROFILE (LINE "1")
SEE SHEET NO. 21

FOR LINE 3 PROFILE
SEE SHEET NOS. 76 & 77

PLAN
SURVEYED BY
PLOTTED DATE
NOTE BOOK CROSS SECTIONS CHECKED.
NO. ALIGNMENT CHECKED.
RT. OF WAY CHECKED.

PROFILE
SURVEYED BY
PLOTTED DATE
NOTE BOOK CROSS SECTIONS CHECKED.
NO. B. M.'s NOTED.
STRUCTURE NOTATIONS CH'KD

03 Rt. 29 ℄ 1+88 Begin Project Lines 1 & 3

2 11-A

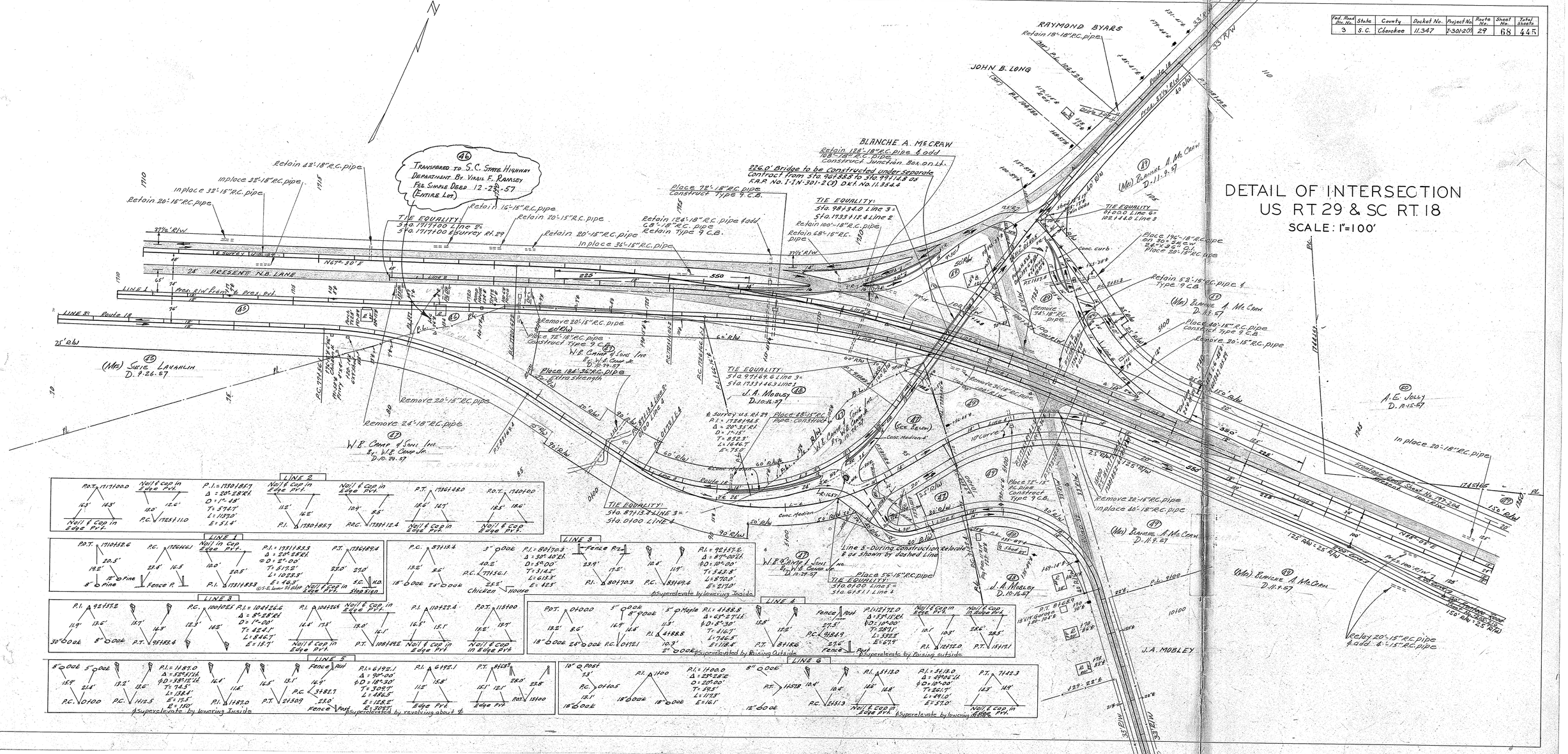
1690

Line 3

Fed. Road Div. No.	State	County	Docket No.	Project No.	Route No.	Sheet No.	Total Sheets
3	S.C.	Cherokee	11.347	F-301-2(7)	29	68	445

DETAIL OF INTERSECTION US RT. 29 & SC RT. 18

SCALE: 1"=100'


RAYMOND BYARS
Retain 18'-18" R.C. pipe
JOHN B. LONG
BLANCHE A. McCRAW
Retain 128'-18" R.C. pipe & add
Construct Junction Box on Lt.
226.0' Bridge to be Constructed under Separate Contract from Sta. 967+88.8 to Sta. 969+14.8 on F.A.P. No. F-IN-301-2(3) Dkt. No. 11.354-A
Place 78'-18" R.C. pipe
Construct Type 9 C.B.
Retain 124'-18" R.C. pipe & add
C.B.-18" R.C. pipe
Retain Type 9 C.B.
Retain 42'-18" R.C. pipe
In place 38'-18" R.C. pipe
In place 32'-15" R.C. pipe
Retain 20'-15" R.C. pipe
Retain 16'-15" R.C. pipe
Retain 68'-15" R.C. pipe
In place 36'-15" R.C. pipe
Retain 100'-18" R.C. pipe
TIE EQUALITY:
Sta. 1717+00 Line 2 =
Sta. 1717+00 Surrey Rt. 29
TIE EQUALITY:
Sta. 98+34.0 Line 3 =
Sta. 1733+12.4 Line 2
TIE EQUALITY:
Sta. 97+67.6 Line 3 =
Sta. 1733+63 Line 1
TIE EQUALITY:
Sta. 87+13.3 Line 3 =
Sta. 0+00 Line 4
TIE EQUALITY:
Sta. 61+11 Line 6 =
Sta. 0+00 Line 5
TIE EQUALITY:
Sta. 0+00.0 Line 6 =
Sta. 102+44.0 Line 3
(46) Transferred to S.C. State Highway Department By Virgil F. Ramsey Fee Simple Deed 12-27-57 (Entire Lot)
(45) Route 18
24' PRESENT N.B. LANE
Proj. R/W from Proj. pvt.
Net Pt. 30' E
37½' R/W
(42) (Mrs.) Susie Lavanlin D. 9-26-57
(41) W.B. Camp & Sons Inc. By W.B. Camp Jr. D.O.D. 9-9-57
(40) J.A. Mobley D. 10-11-57
(39) (See Below)
(38) J.A. Mobley D. 10-11-57
(37) (Mrs.) Blanche A. McCraw D. 11-9-57
(36) (Mrs.) Blanche A. McCraw D. 11-9-57
(35) (Mrs.) Blanche A. McCraw D. 11-9-57
(34) A.E. Jolly D. 10-15-57
(33) (Mrs.) Blanche A. McCraw D. 11-9-57
(32) J.A. Mobley D. 10-16-57
(31) J.A. Mobley
Remove 20'-15" R.C. pipe
Add 6'-15" R.C. pipe
Remove 24'-18" R.C. pipe
Remove 20'-15" R.C. pipe
Remove 36'-18" R.C. pipe
Remove 74'-18" R.C. pipe
Remove 20'-15" R.C. pipe
Remove 20'-15" R.C. pipe
Remove 20'-18" R.C. pipe
Place 184'-36" R.C. pipe Extra Strength
Place 18'-15" R.C. pipe Construct
Place 196'-18" R.C. pipe on 30° Skew
Place 20'-18" R.C. pipe
Retain 52'-18" R.C. pipe & Type 9 C.B.
Place 40'-15" R.C. pipe Construct Type 9 C.B.
Place 56'-15" R.C. pipe
Place 72'-12" R.C. pipe Construct Type 9 C.B.
In place 20'-18" R.C. pipe
Relay 20'-15" R.C. pipe & add 6'-15" R.C. pipe
Line 5 - During Construction Relocate & as shown by dashed Line
Conc. Median
Conc. curb
Conc. Median-4"
Fence Post
Fence Post
Fence Post

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	69	445

Line 2 RT. 18 Int.

PLAN
SURVEYED
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK GRADES CHECKED
NO. B. M.'s NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE

LINE 2 Rt.18 Intersection See Sheet 68

Survey Sta 1717+00 Begin Line "2" Ct. 29 ℄ Rt. 18 Int.

P.I. = 1718+73
El. = 709.86

+1.60%

1050' V.C.

+0.56%

FINISH GRADE

EXC. 638 EMB. 6239
BOR. 6225 Top. 624
TOT. 6863 SUB. 6863
Inter 6863 Sub 6863
Tot. - 0 0
OVERHAUL = 12,450 C.Y.M.M.

P Borrow to be obtained from waste 6225 C.Y. Main Line Sta. 1663+ to 1676+

D.P. = 5 A.C. C. = 0.5

D.P. = 5 A.C. C. = 0.5

350' V.C.

+1.96%

P.I. = 1731+75
El. = 712.11

EXC. 853 EMB. 776
Top. 77
TOT. 853 TOT. 853

Survey Sta. 1740+00 End Line "2" Ct. 29 ℄ Rt. 18 Int.

Sta. 1733+12.4 Line 2 Rt. 18 = Sta. 98+34.0 Line 3

Sta. 1736+49.2 Lt. 3 =
Sta. 1736+49.2 Rt. 3

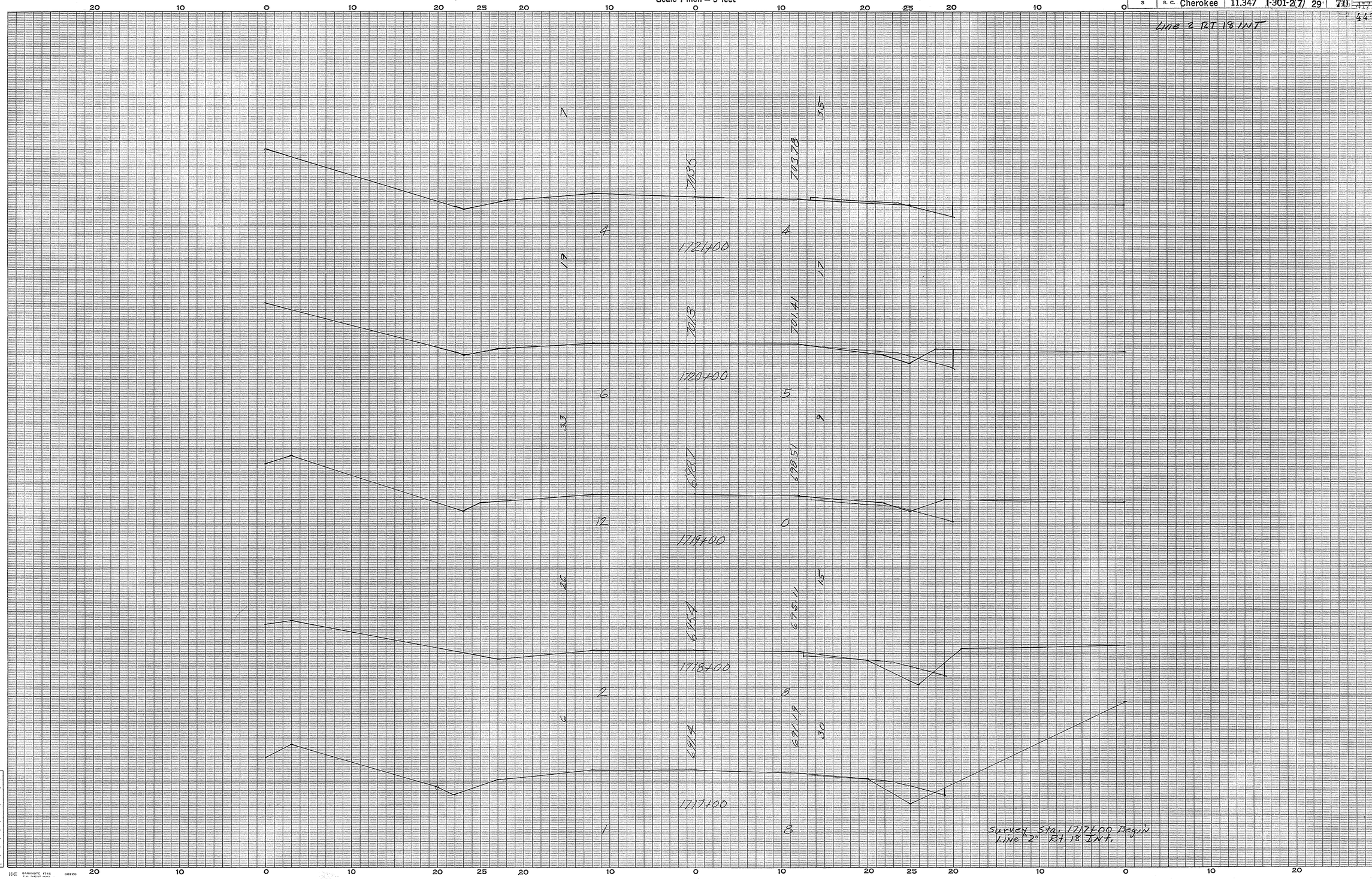
See Sheet No. 2 Left For Typical Section

| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	70	~~417~~ 445



Cherokee Co
Int Of Rt 29 & 18
Line #2

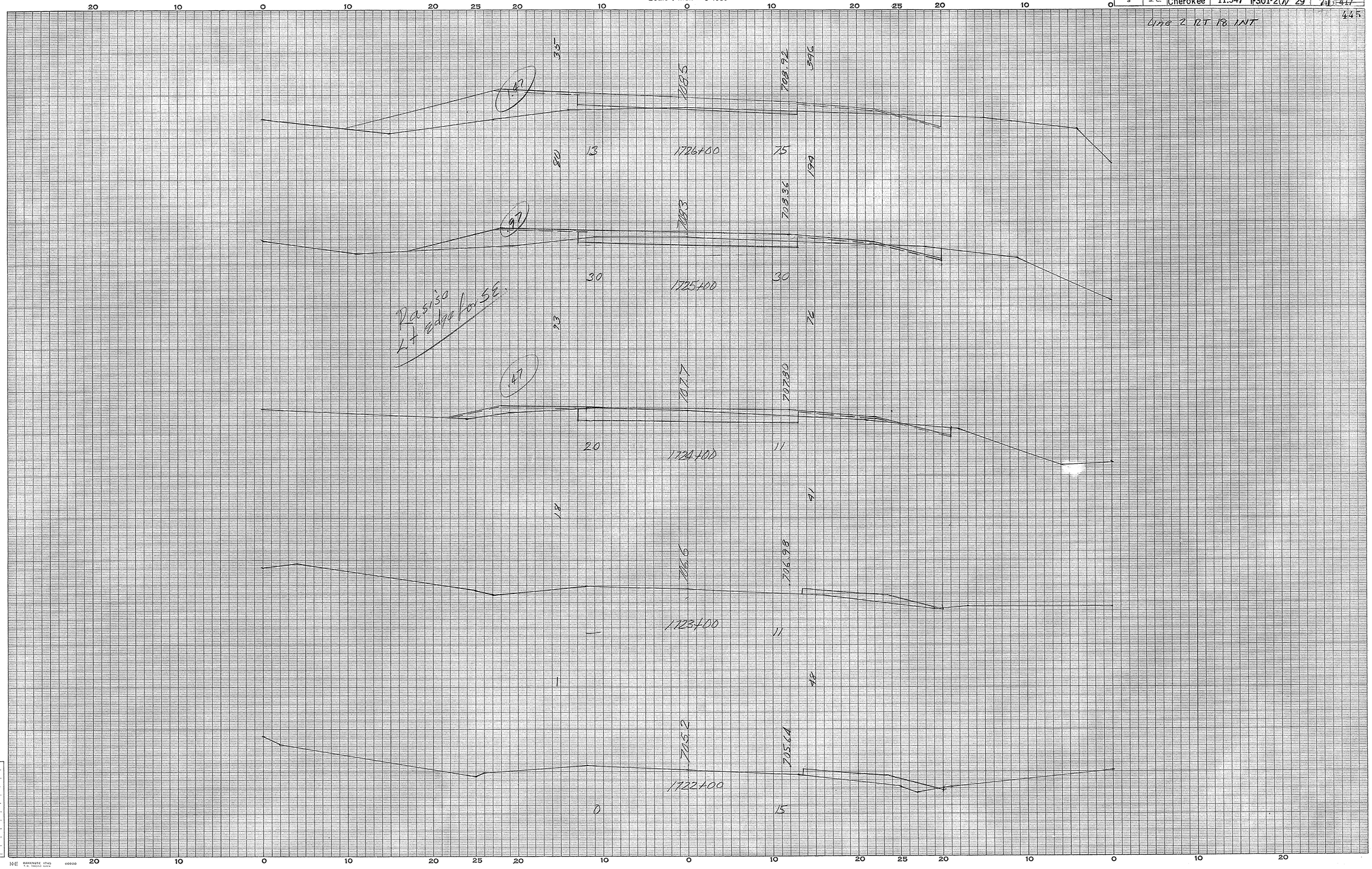
Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	71	~~417~~ 445



Cherokee Co
Int. Of Rt 29 & 18
Line #2

Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

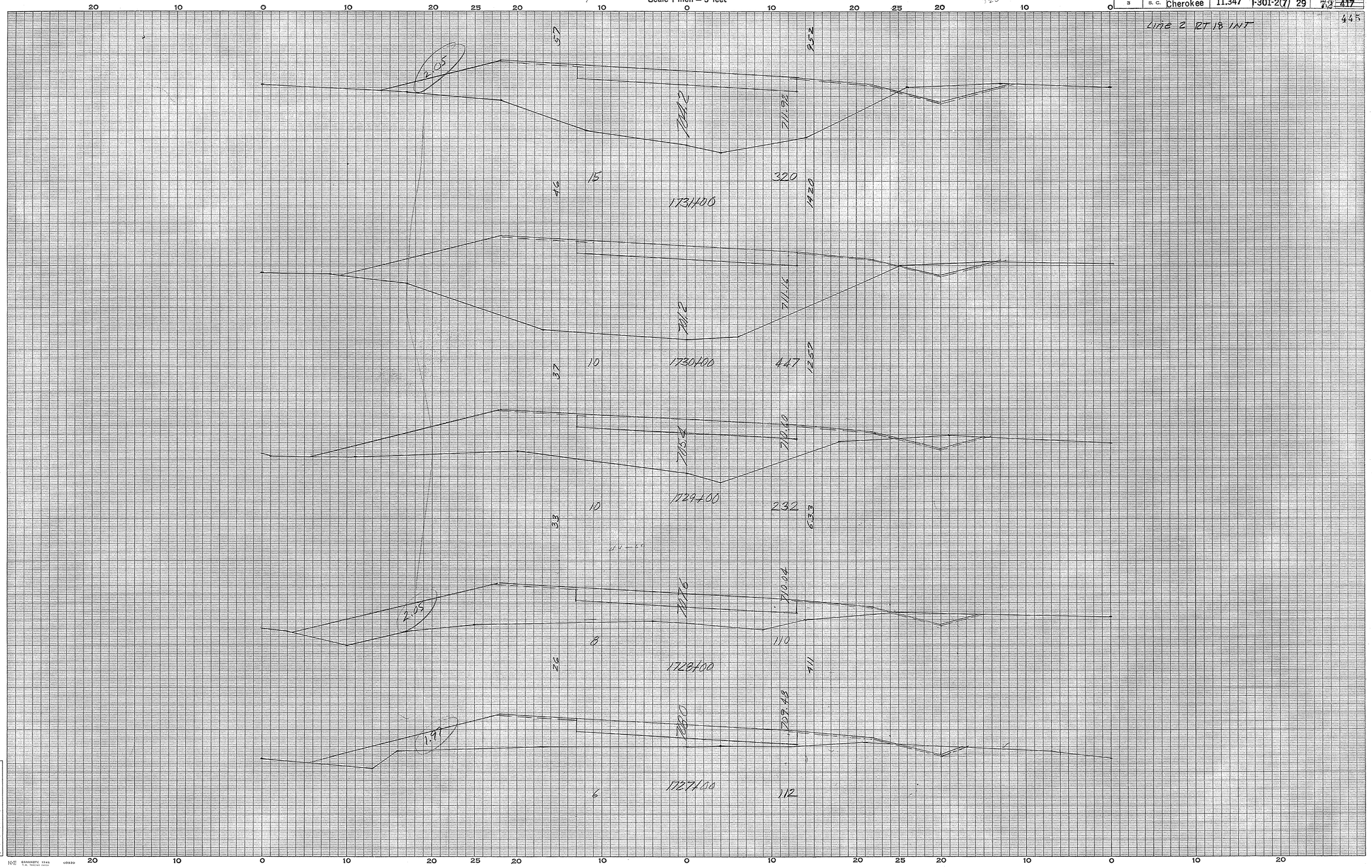
(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	72	417

445



Cherokee Co
Int of Rt 29 & 18
Line # 2

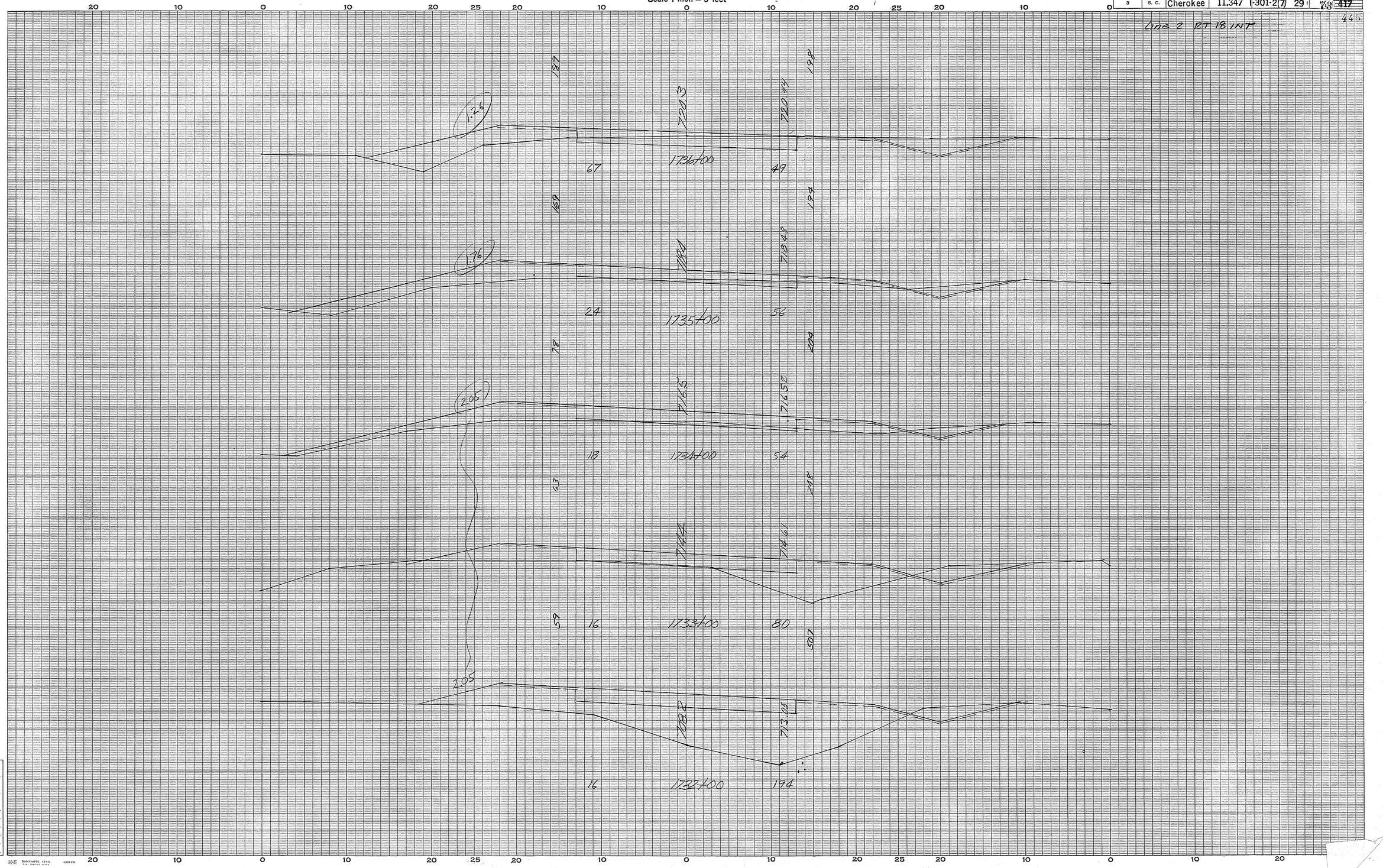
Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	73	~~417~~ 445



Cherokee
Int OS Rt 29 & 18
Line #2

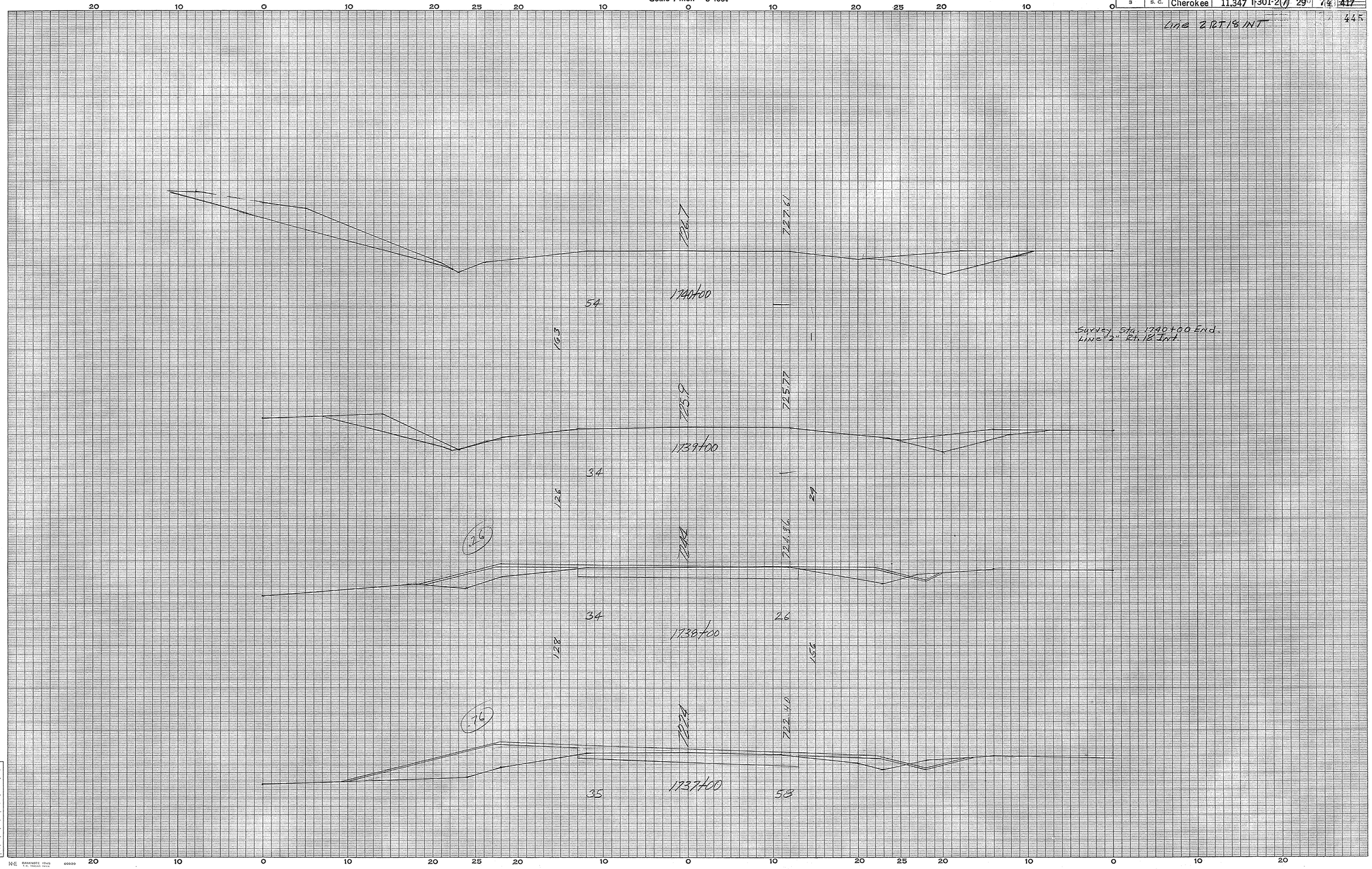
Ground Surface Platted by BD
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

4

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	74	~~417~~ 445



Cherokee Co
Int Of Rt 29 & 18
Line #2

Ground Surface Platted by R.D.
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Template Sections [illegible]d by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

5

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	75	445

Line 3 - RT. 18 int.

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

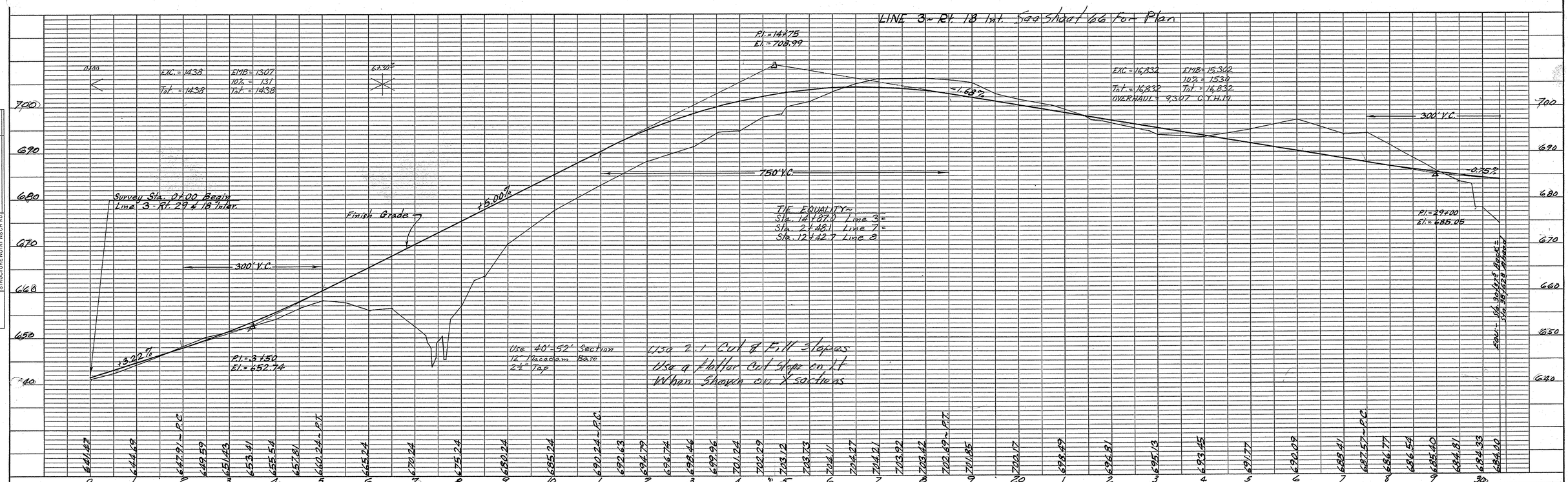


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.327	I-301-2(7)	29	76	445

Line 3 RT. 18 INT.

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
PT. OF TANT CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT
STRUCTURE NOTATNS CH'KD
BY
DATE

Line 3 - Route 18 Int. See Sheet No. 66

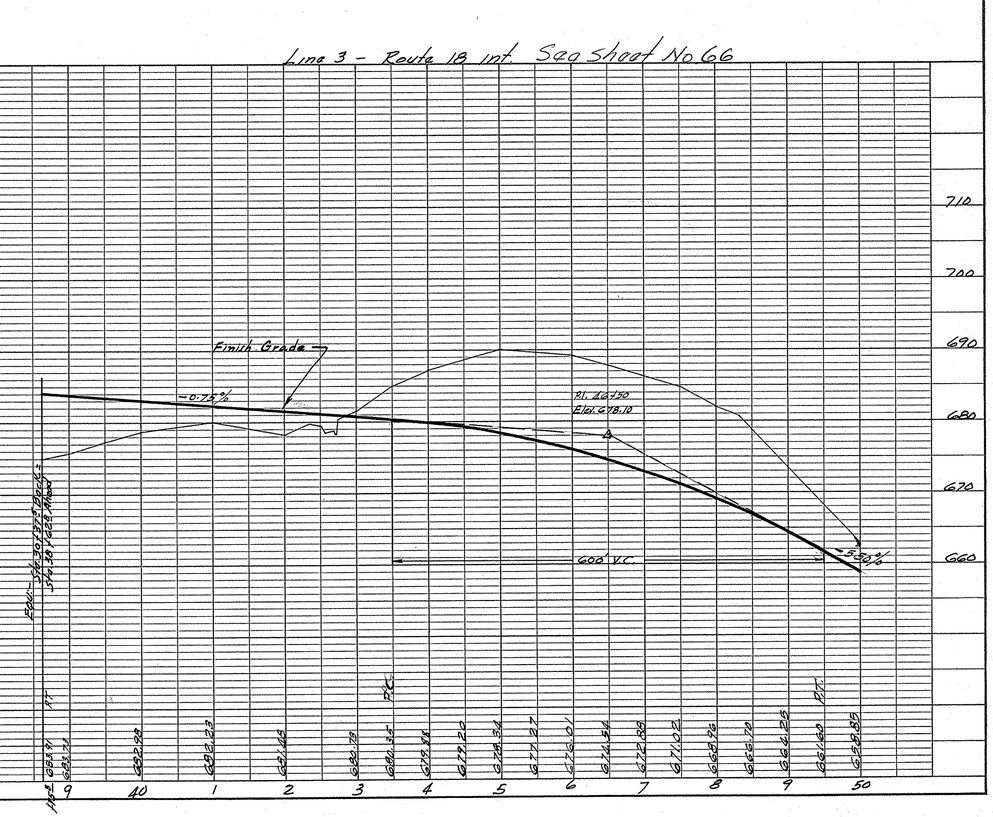


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

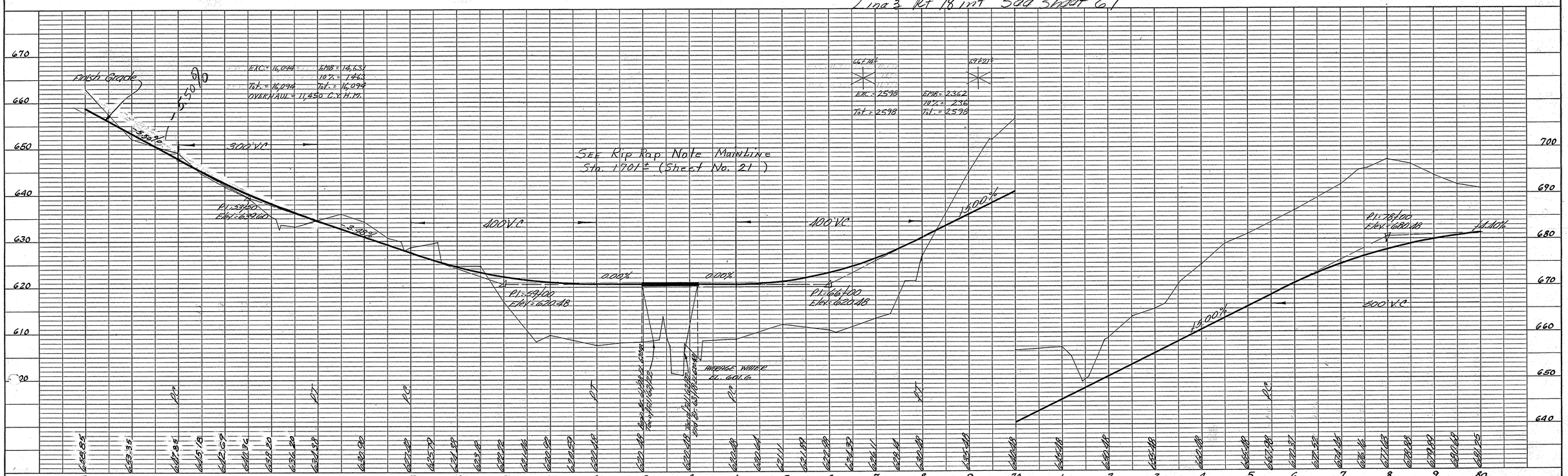
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	77	~~417~~ 445

Line 3 RT. 18 int.

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

Line 3 Rt 18 int See Sheet 67



Cherokee Co.
U.S. 29 & Rt. 18
Int.
Line "3"

(2)

(3)

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	78	417 445

Line 3 RT. 18 INT.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NO. AT THIS CP
BY
DATE

Line 3 Rt 18
See Sheet 68

B.M. No 128 Marlin Power Pole
115' Lt Sta. 1708+85 Main Line Rt 29
Elev. 636.96

B.M. 129 Elev. 704.28
B.M. 130 Elev. 708.94

B.M. 131 Elev. 716.32

B.M. 132 Nail in 18" Hickory
110' Lt Sta. 1743+25 Elev. 721.93

EXC. = 62,050 EMB. = 56,409
Tot = 62,050 Tot. = 62,050
OVERHAUL = 39,500 C.Y.H.M.

Sta. 37+13.4 Line 3 =
Sta. 0+00 Line 4

400' V.C.

Finish Grade
-10.46%

P.I. 38+80.00
Elev. = 684.00

Sta. 97+69 Line 3 =
Sta. 1733+46.3 Line 1

Sta. 98+34.01 Line 3 =
Sta. 1733+12.4 Line 2

9° 51' 54"

T = 78.9
L = 156.6

EXC. = EMB. = 19,040
D Bor. = 19,044 102. = 1904
S-Tot. = 20,944 S-Tot. 20,944
Less 20,744 Less 20,744
Tot. = 0 Tot. = 0
OVERHAUL 41,888 C.Y.H.M.
D Obtain Borrow from
19,944 C.Y. waste Main Line
Sta. 1663 - 1676

Begin 10" C.M.P.

End 10" C.M.P.

725' V.C.

Sta. 102+49.01 Line 3 =
Sta. 0+00 Line 6

EXC. = 567 EMB. 22,435 P.I. = 115+00
D Bor. = 24,122 102. 2244 Elev. = 719.73
S-Tot. = 24,689 S-Tot 24,689
Less 24,122 Less 24,122
Tot. = 567 Tot. = 567
OVERHAUL = 48,244 C.Y.H.M.
D Borrow to be obtained from
10,958 C.Y. waste Main Line Sta. 1634 ± to 1691 ±
13,166 C.Y. waste Main Line Sta. 1663 ± to 1676 ±

300' V.C.

-3.78%

-2.22%

Survey Sta. 108+00 End
Line 3" U.S. Et. 29 & Rt. 18 Int.

720
710
700
690
680
670
660
650
640

80 1 2 3 4 5 6 7 8 9 90 1 2 3 4 5 6 7 8 9 100 1 2 3 4 5 6 7 8 9 110

Cherokee Co.
U.S. 29 & Rt. 18 Int.
Line "3"

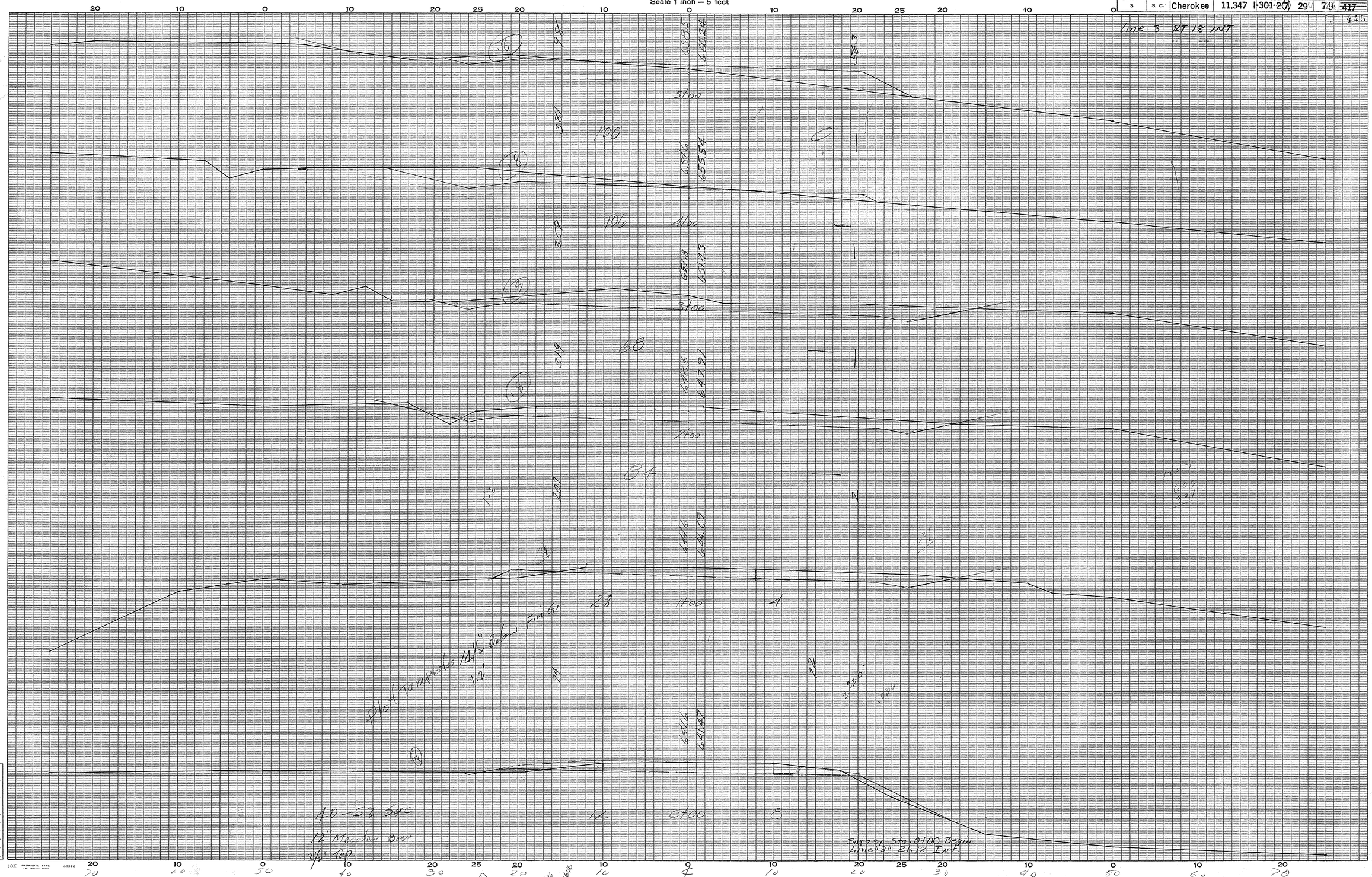
(2)
(4)

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	79	417



Cherokee

Rt-29 & Rt 18

Line 3

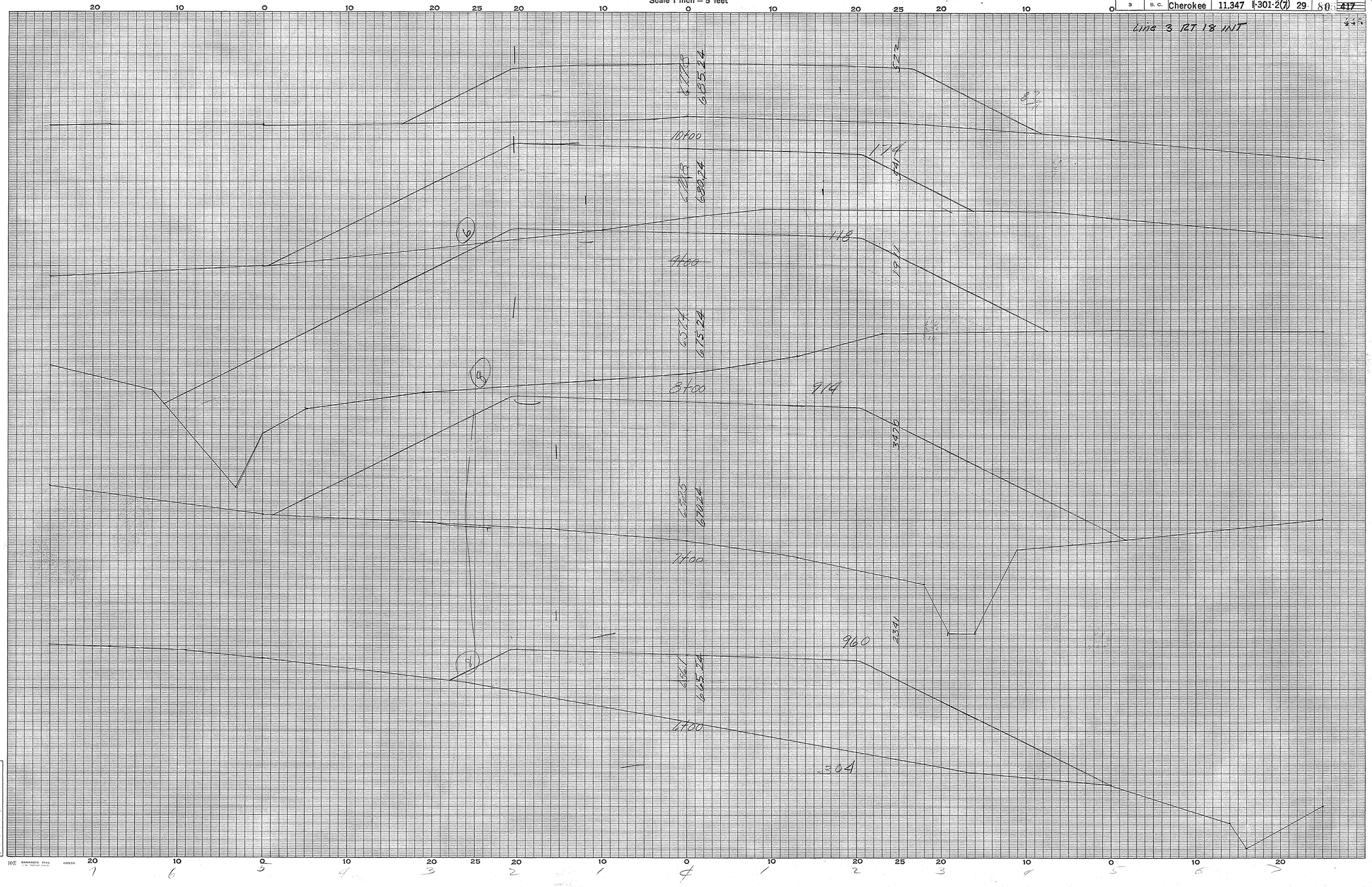
Ground Surface Platted by E.T.Z.
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

①

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	80	417



Rt 29 & Rt 18

Line 3 · Reloc

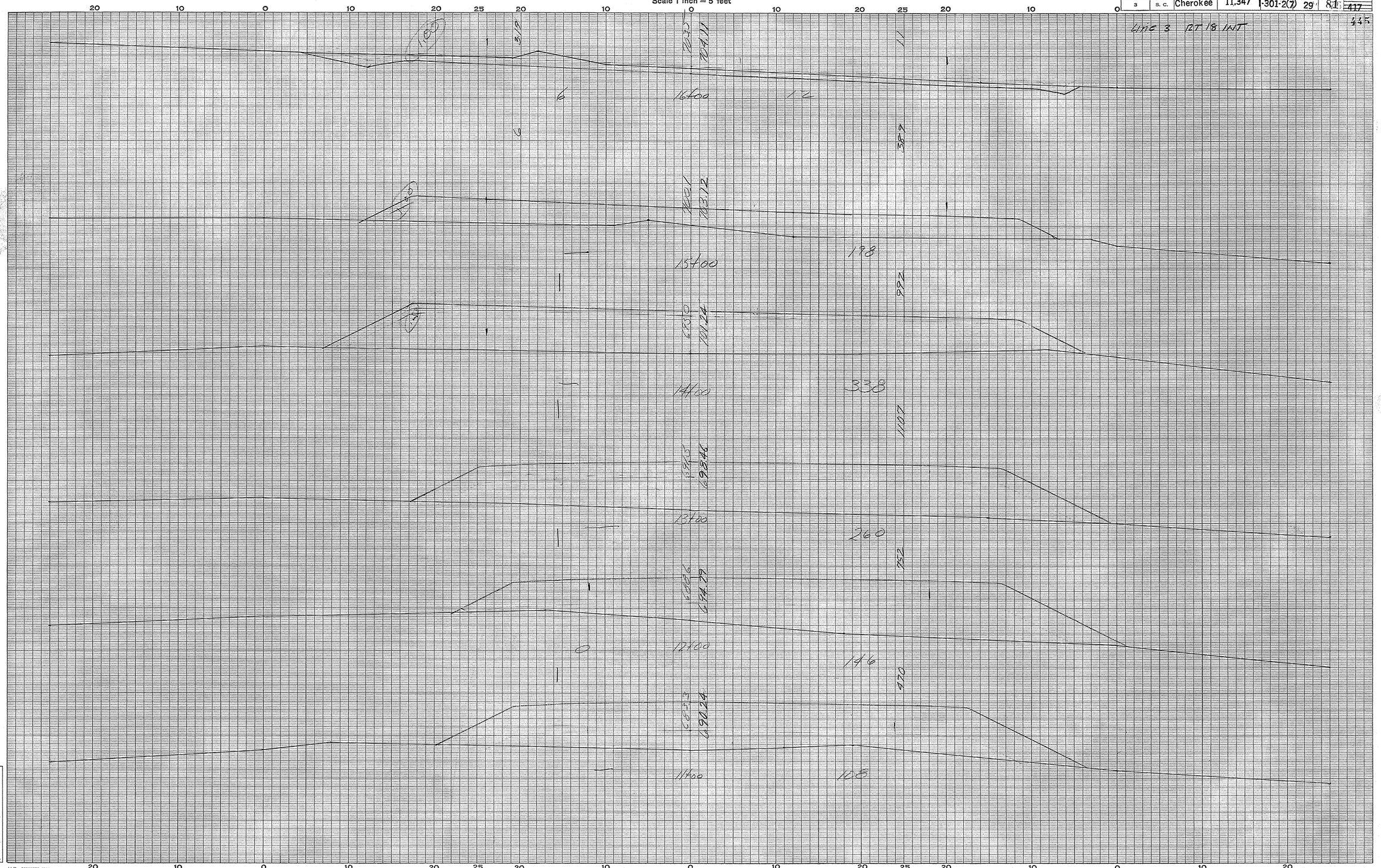
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	81	417



Rt 29 & Rt 18

Line 3

Ground Surface Platted by E.J.Z.
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(3)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	82	417

445

Line 3 RT 18 INT

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

257 1782 1843 1849

21+00

D

1

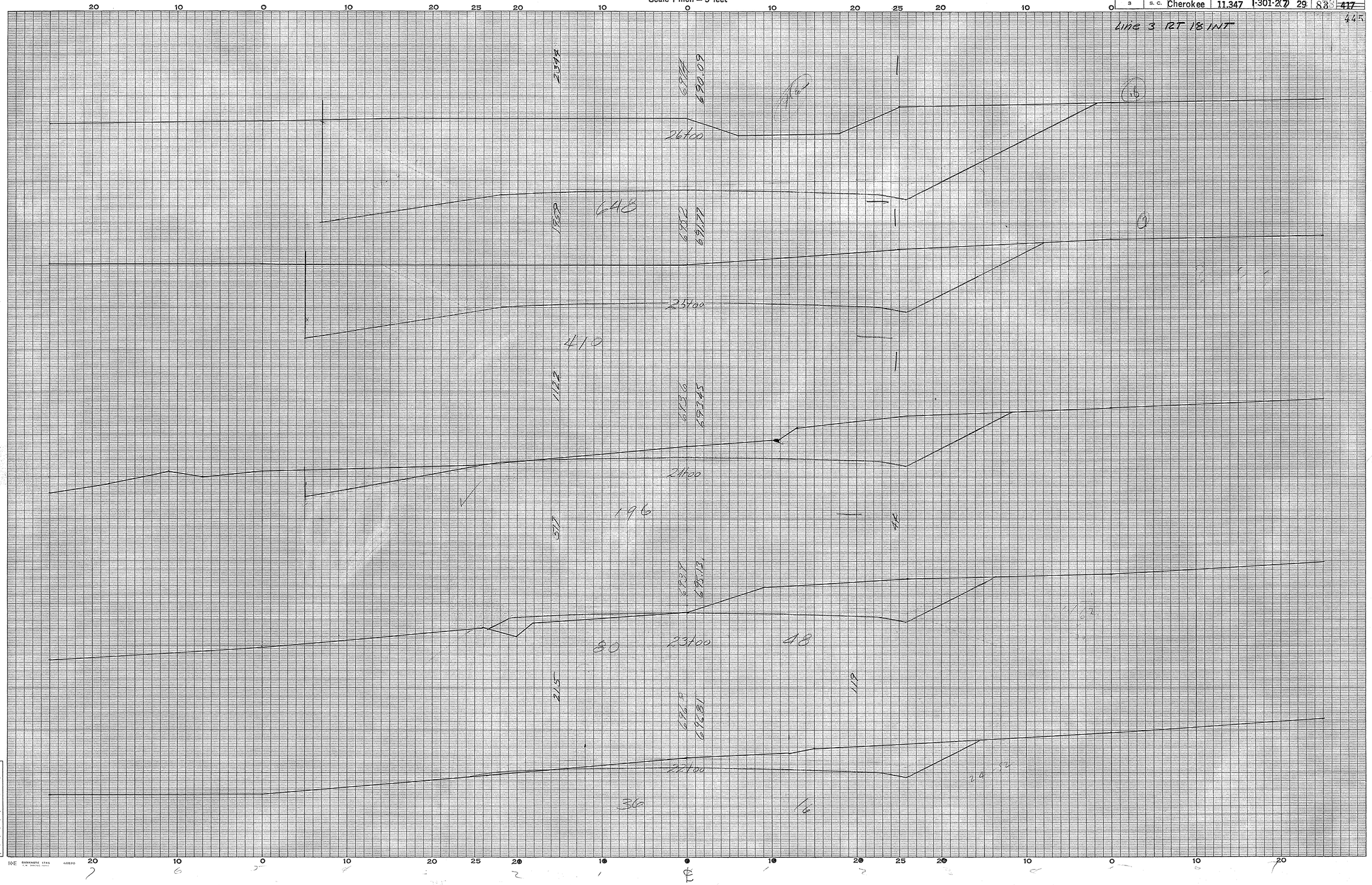
1

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	83	417



Cherokee

Rt 29 & Rt 18

Line 3

Ground Surface Platted by.....
" " Checked by.....
Template Sections Plotted by.....
" " Checked by.....
Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

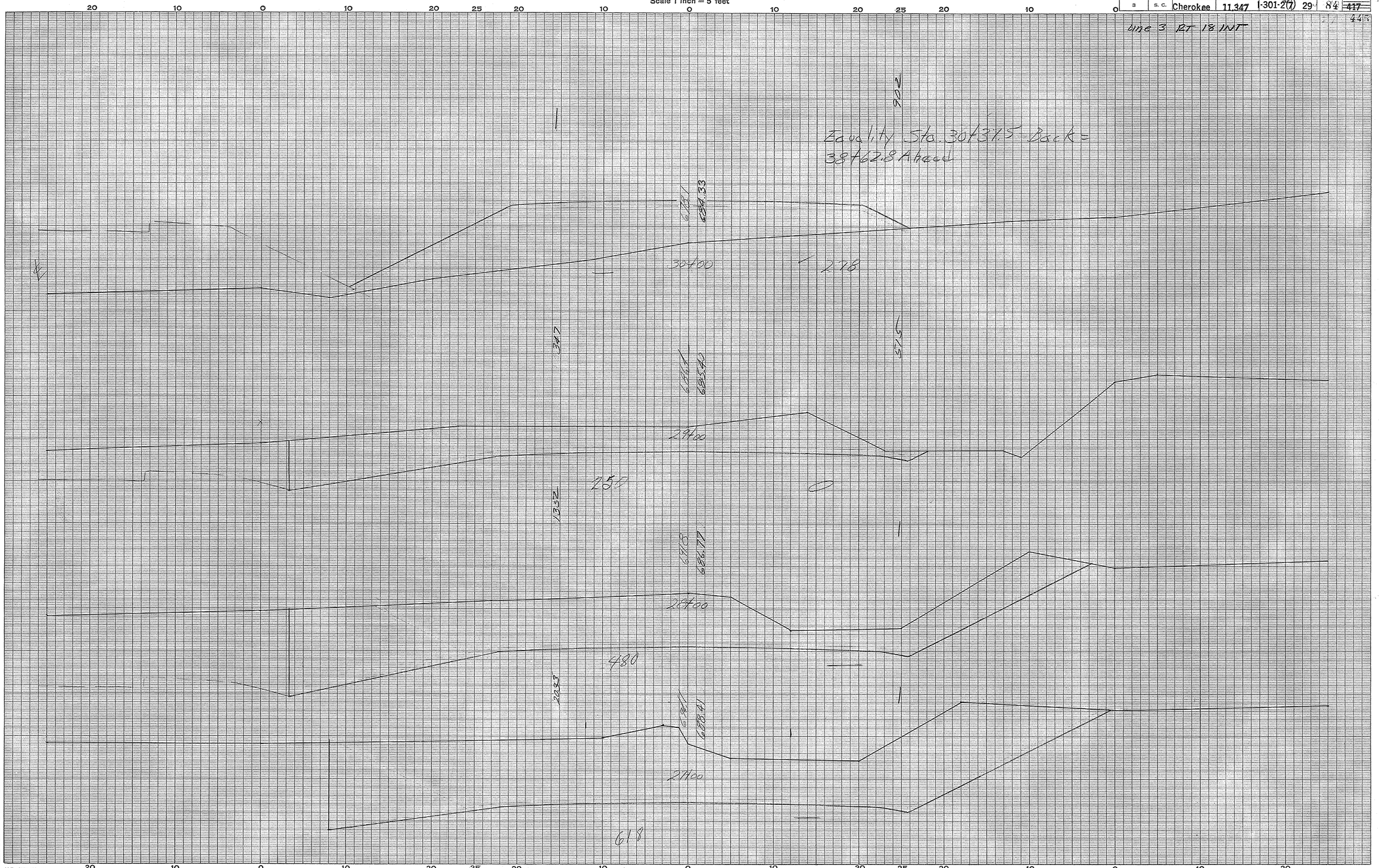
5

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	84	~~417~~ 445

Line 3 RT 18 INT



R+29 & R+18

Line 3

Ground Surface Platted by.....
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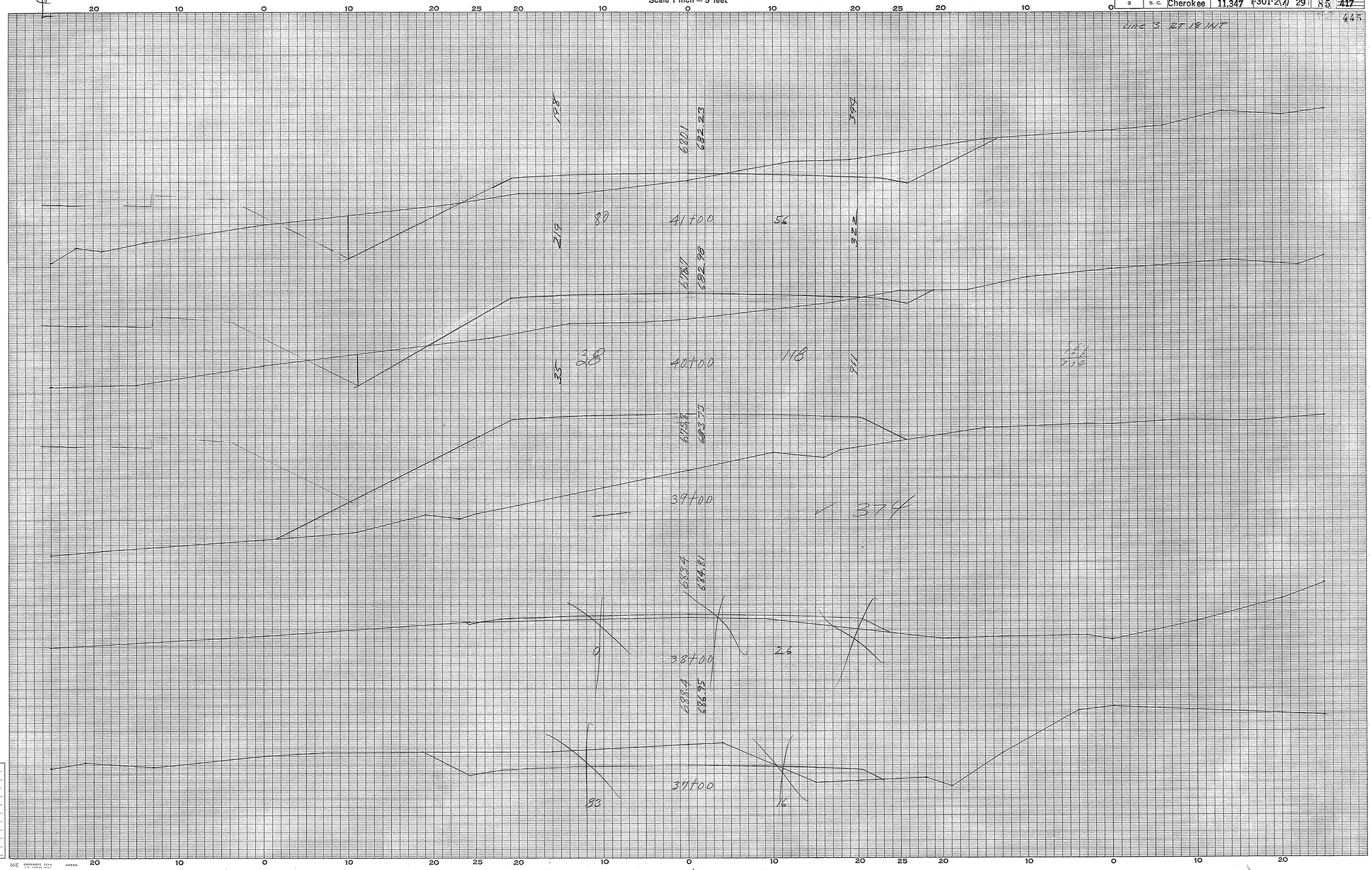
Template Sections Platted by.....
" " Checked by.....
Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

6

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	85	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Platted by.....
" " Checked by.....
Template Sections Plotted by.....
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Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

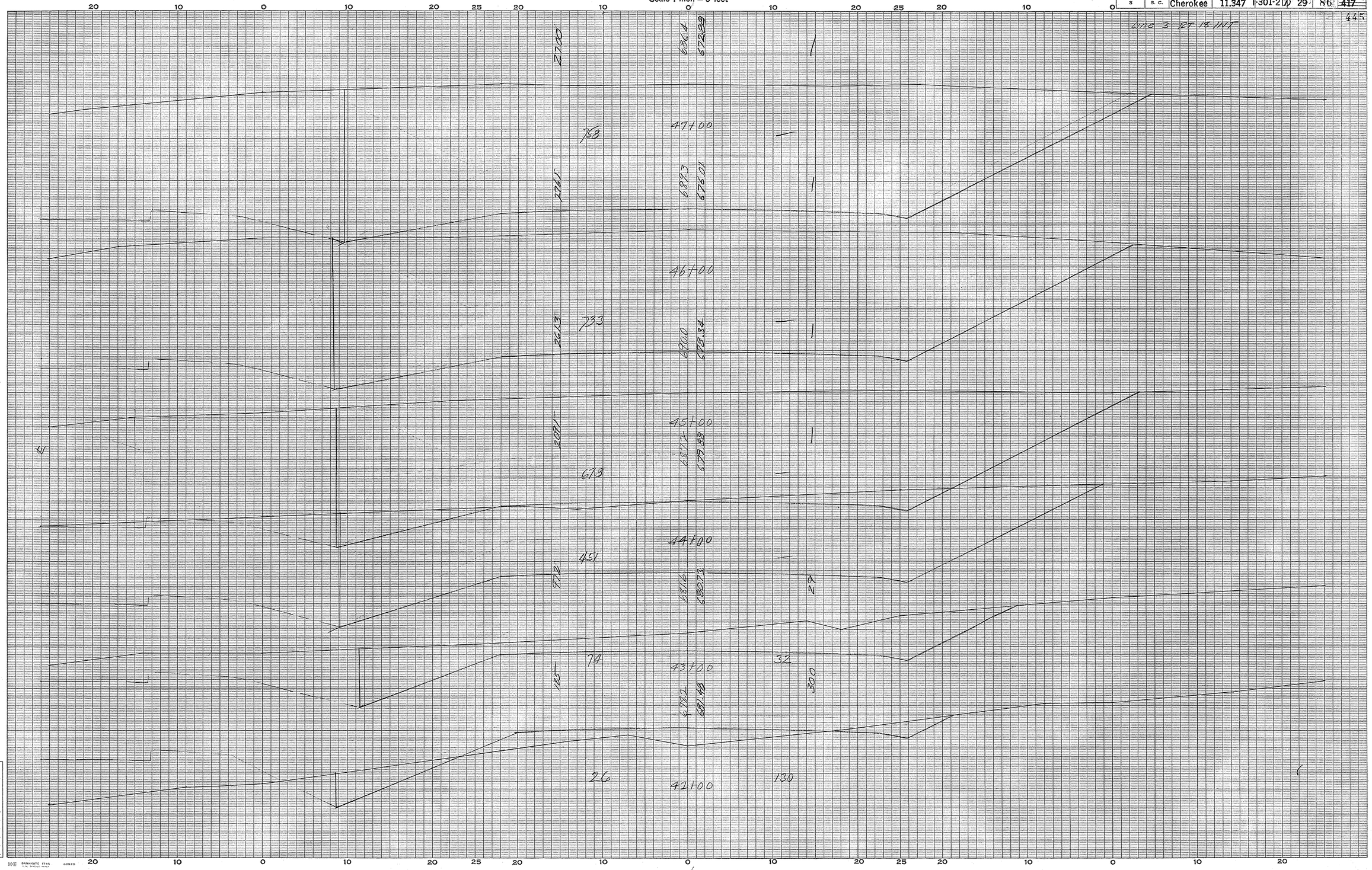
(8)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	86	417

445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

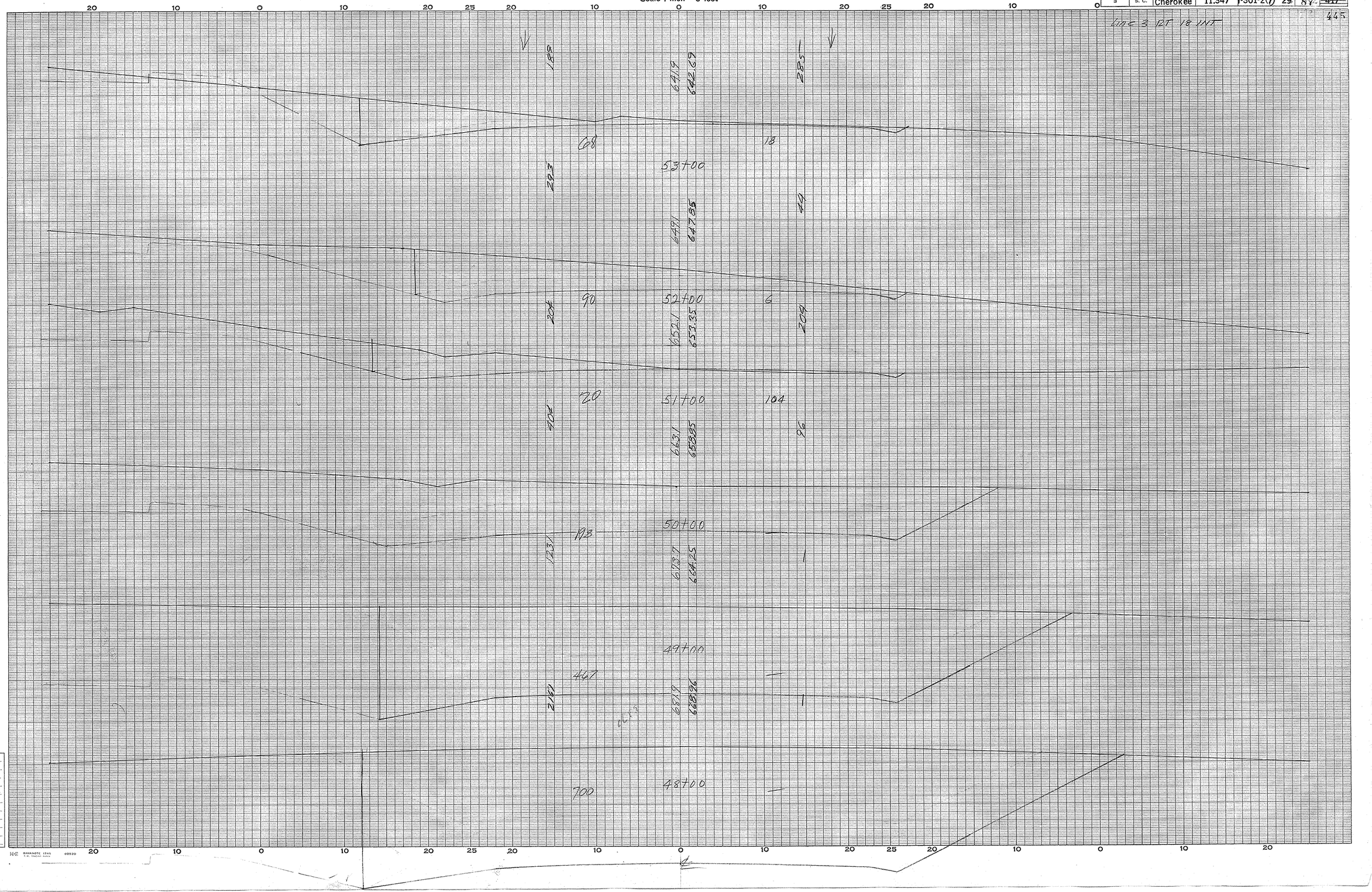
Ground Surface Platted by
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	87	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

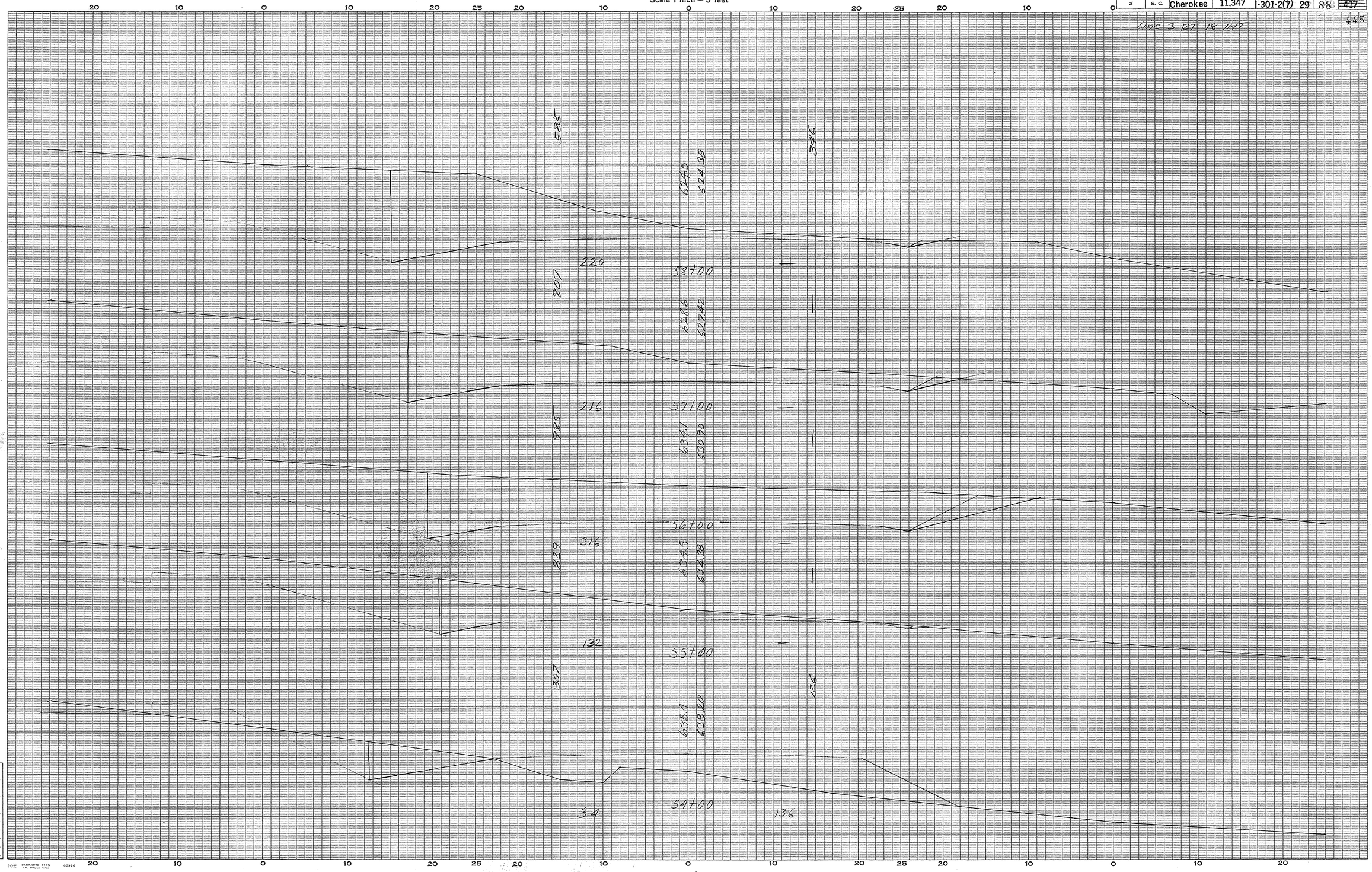
Ground Surface Platted by.....
" " Checked by.....
Template Sections Plotted by.....
" " Checked by.....
Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(10)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	88	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

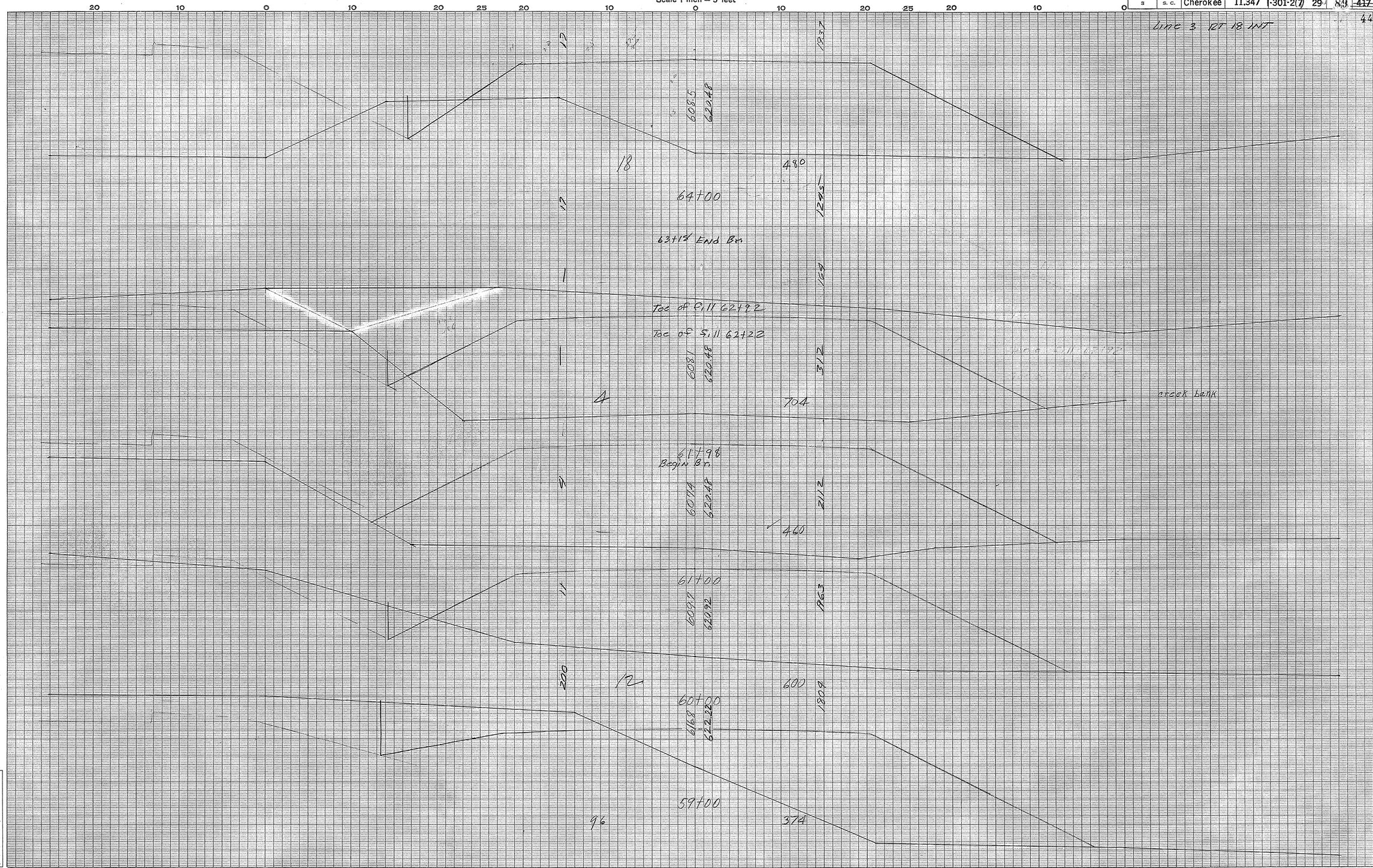
Ground Surface Platted by
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(11)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	89	417



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Platted by.....
" " Checked by.....
Template Sections Plotted by.....
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Areas by.....
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Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
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Quantities Transferred and Inked by.....

(12)

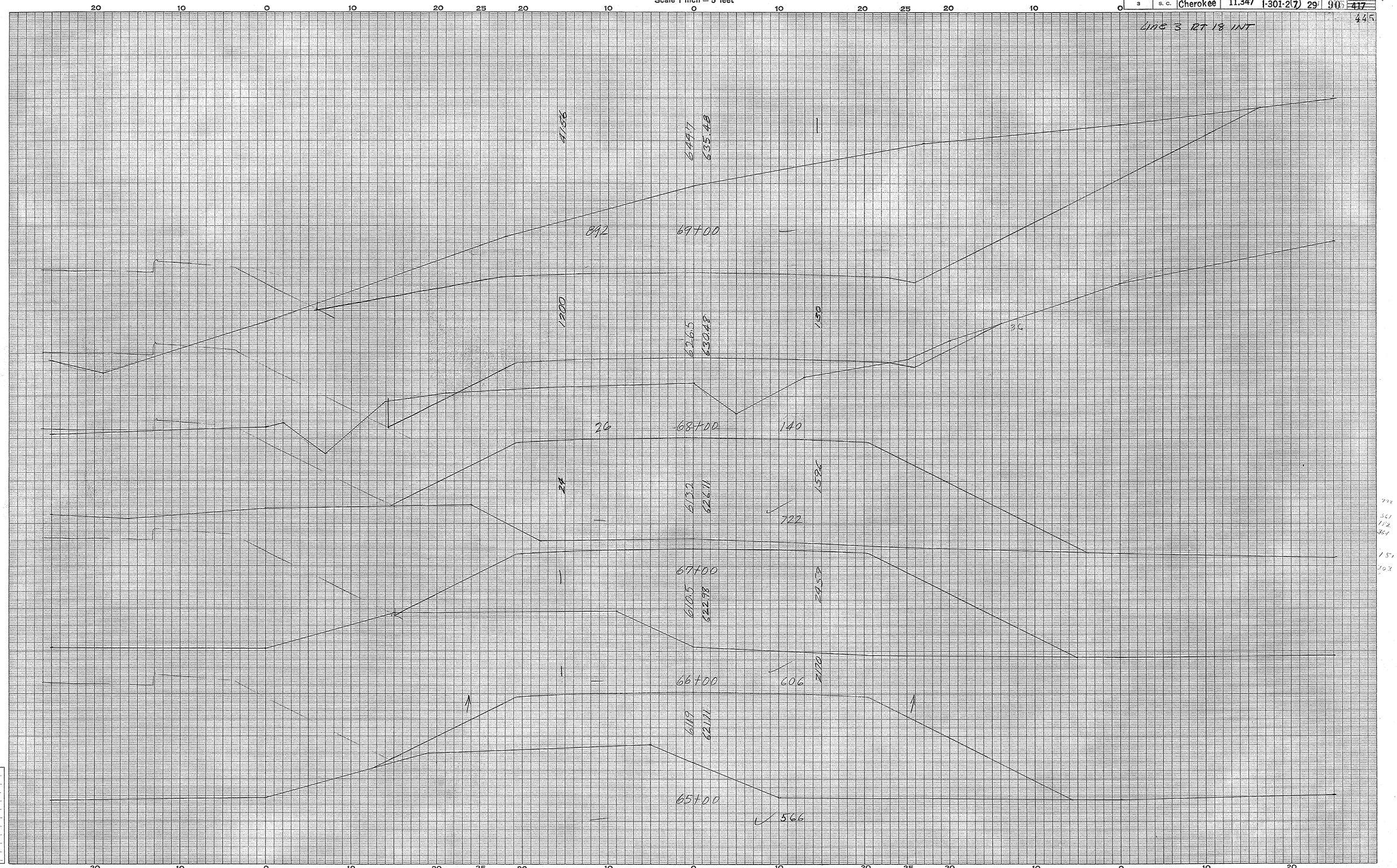
4

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	90	417

445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Platted by.....
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Template Sections Platted by.....
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Areas by.....
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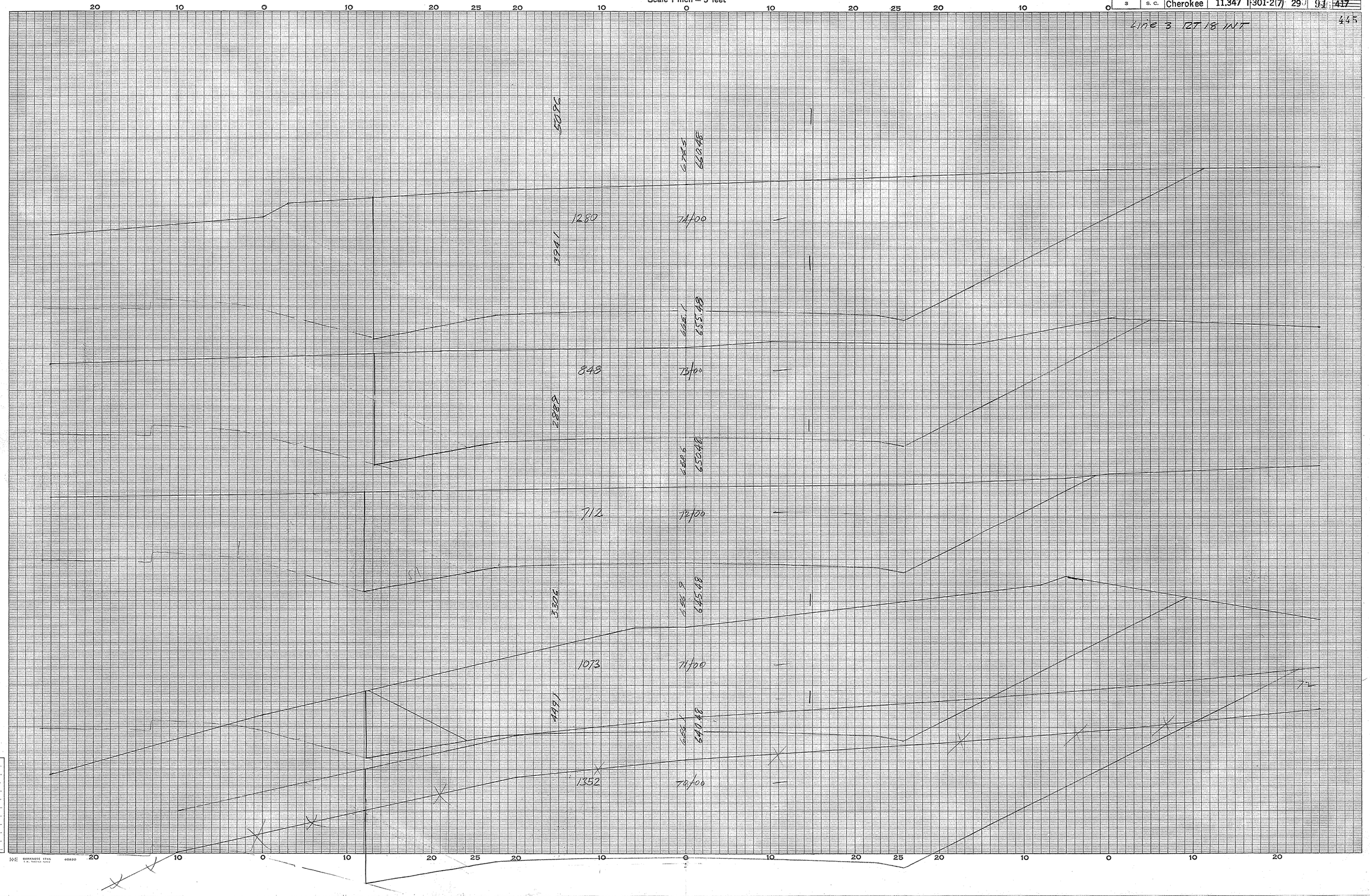
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(13)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	91	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & RT. 18
Line 3

Ground Surface Platted by.....
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Template Sections Plotted by.....
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Areas by.....
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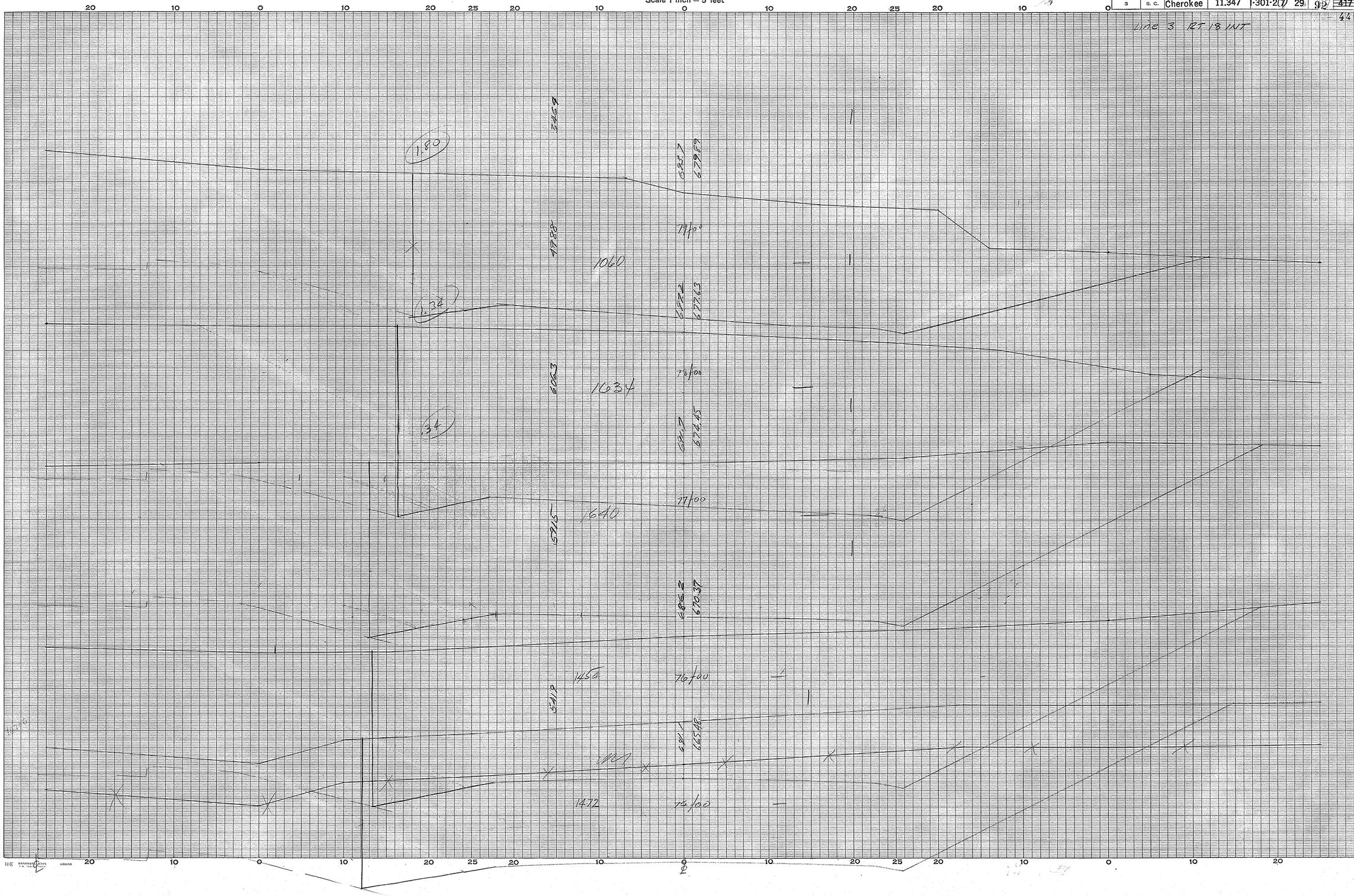
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(14)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	92	~~417~~ 445



Cherokee Co
Int. Rt. 29 & RT. 18
Line 3

Ground Surface Platted by.....
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Template Sections Pl[illegible] by.....
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Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
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Quantities Transferred and Inked by.....

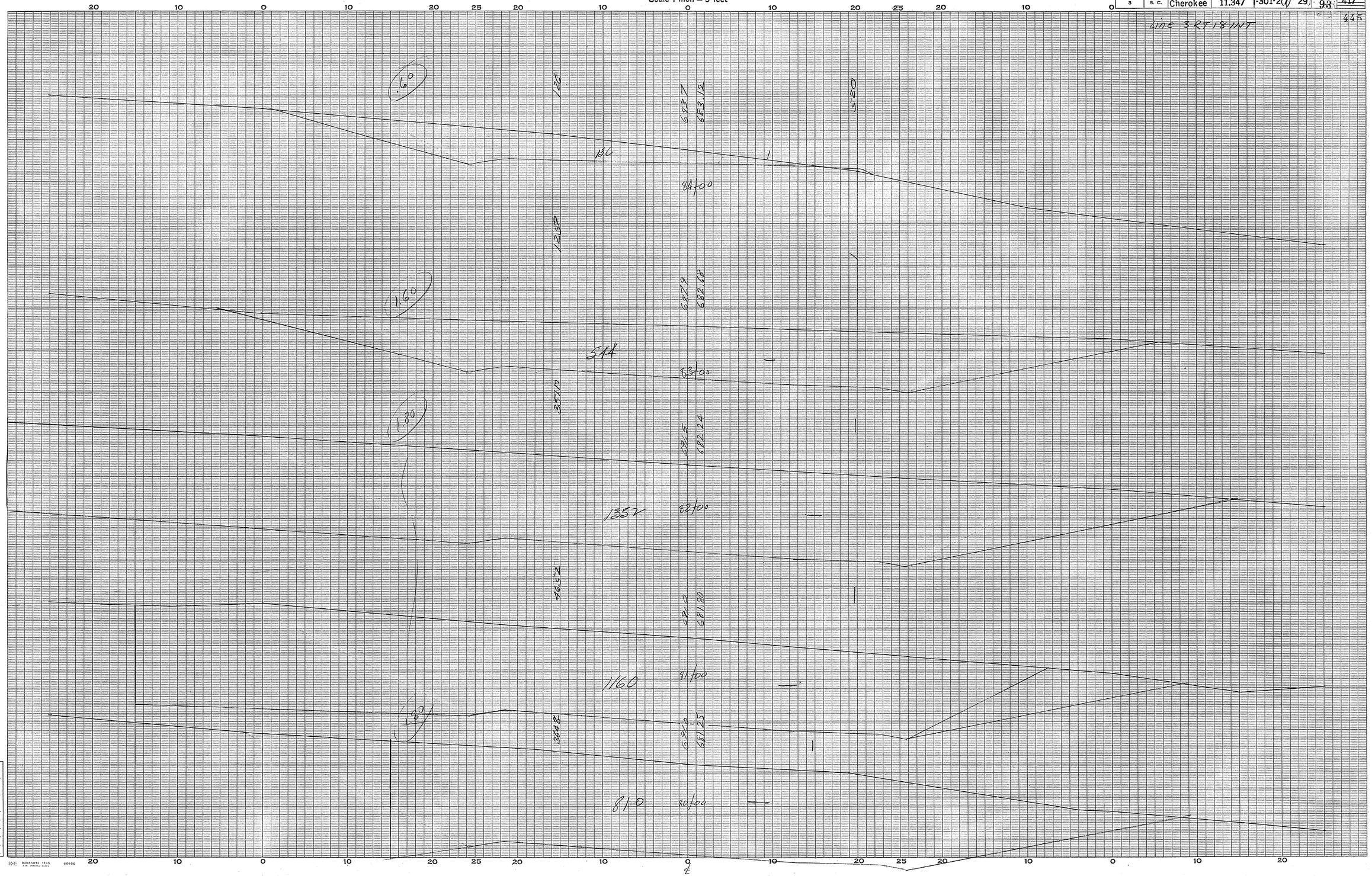
15

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	93	417

445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3.

Ground Surface Platted by.....
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Template Sections Platted by.....
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Areas by.....
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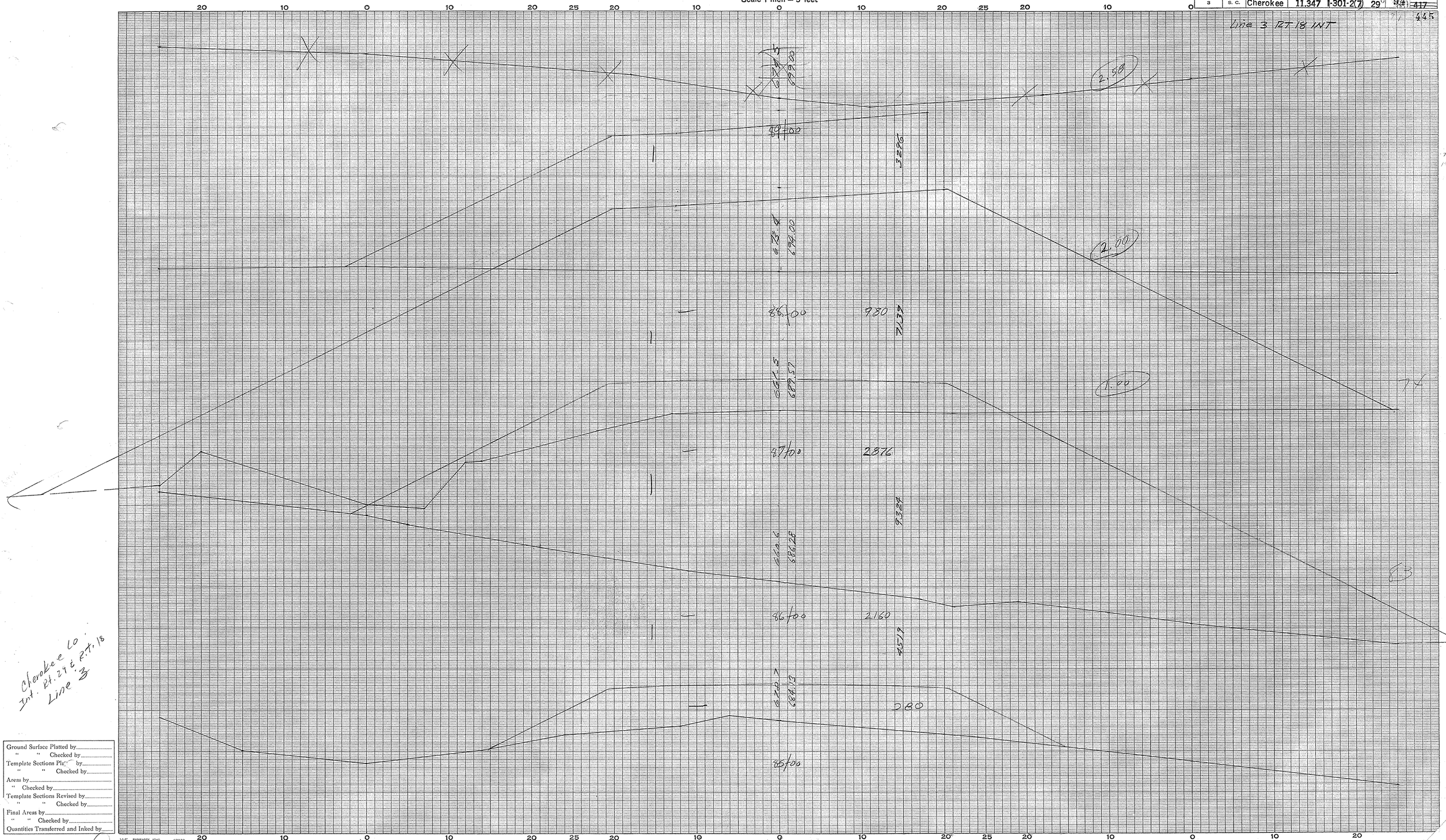
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

16

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	94	417



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Platted by
" " Checked by
Template Sections Platted by
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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

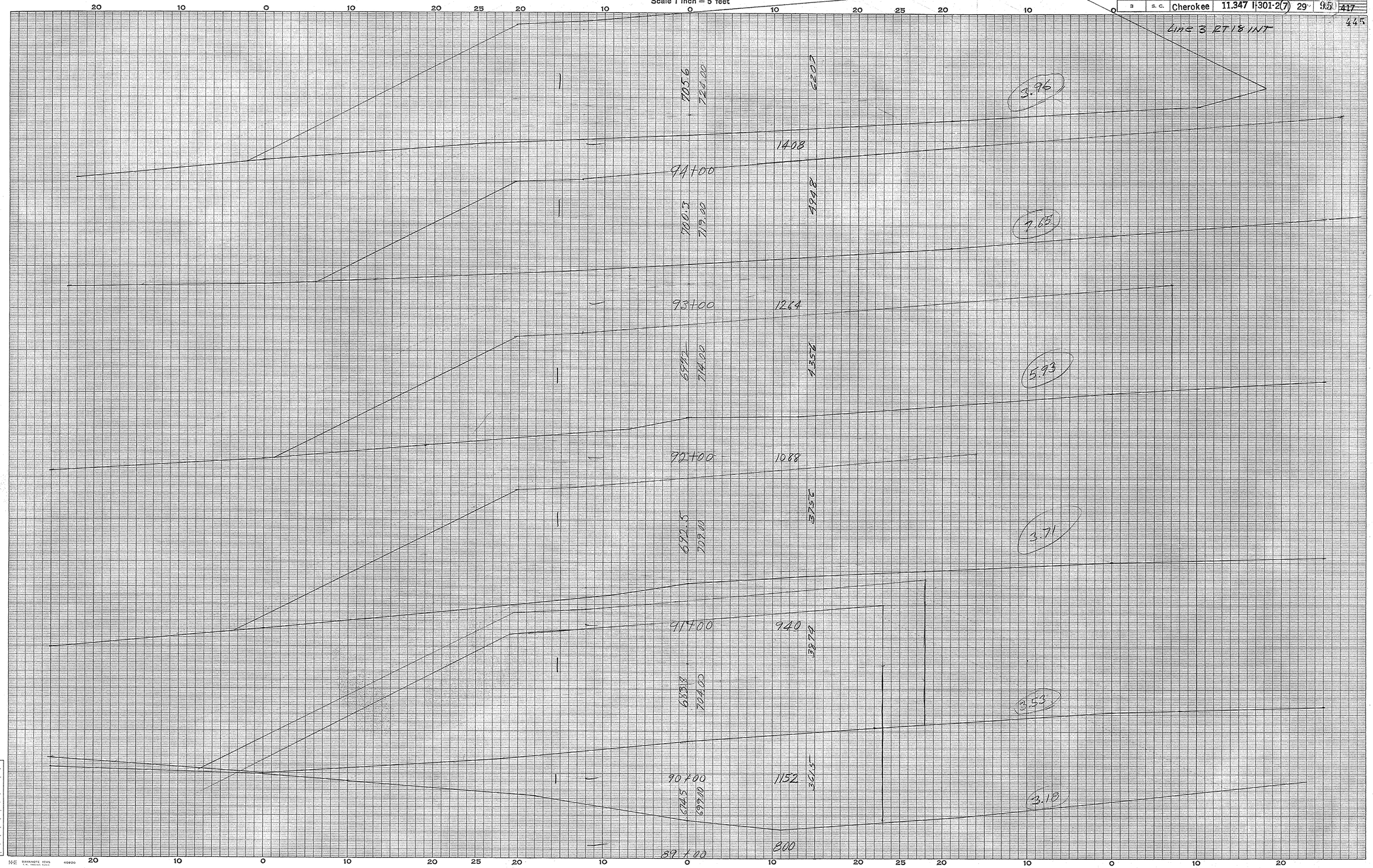
17

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	95	417

445



Cherokee Co
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Plted by
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Template Sections at by
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Areas by
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Template Sections Rvised by
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Final Areas by
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Quantities Transferred an Inked by

(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	96	~~417~~ 445

Line 3 RT 18 INT

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

1

1165 7262.50

1

1005 7244.40

1

1

1

6811 7351.28

3811

1

1004 7338.85

1

1058 7288.91

1

1

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	92	~~417~~

Line 3 RT 18 INT

445

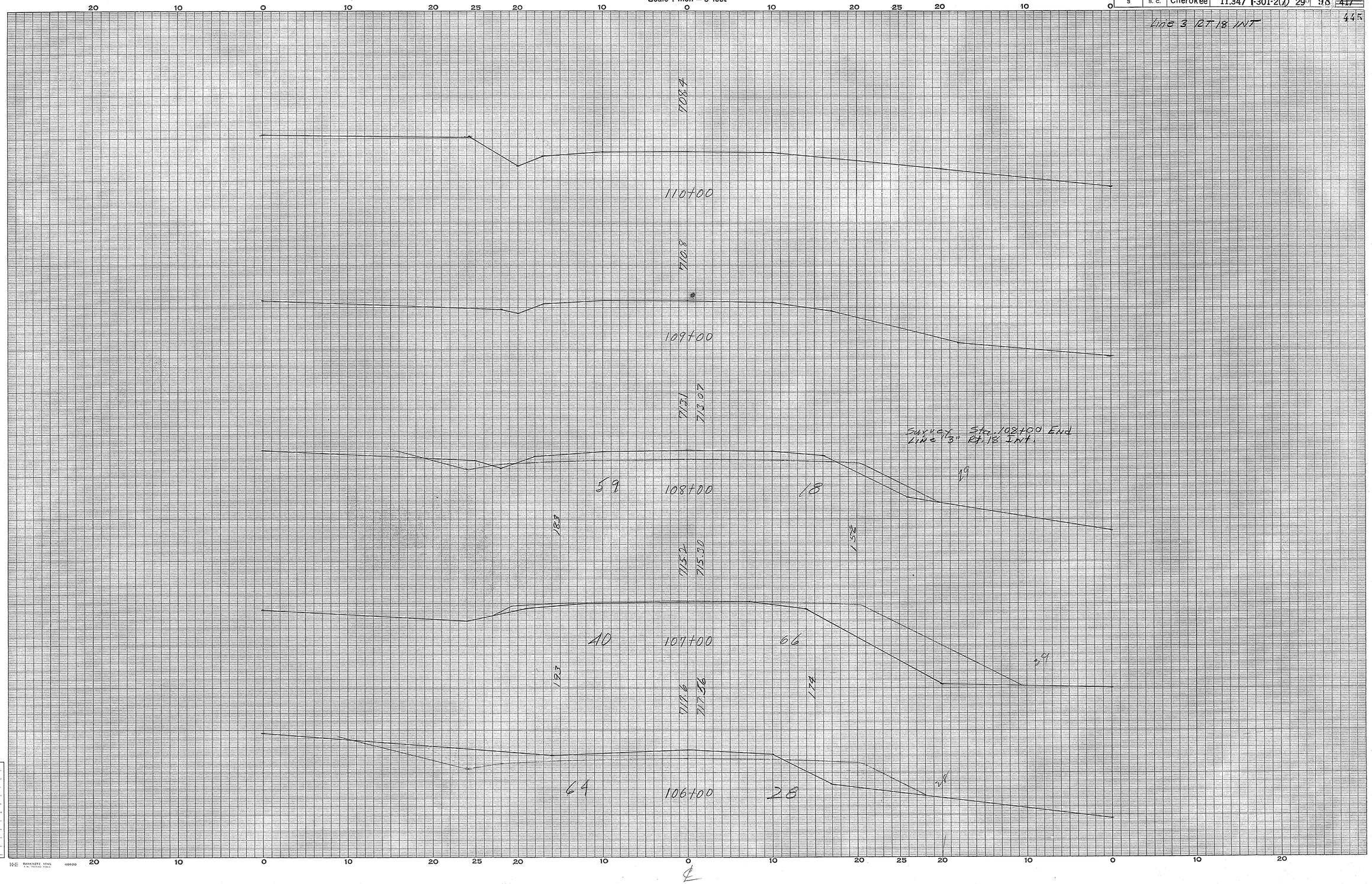
20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

105+00 — 26 — 18 — 55 — 1192 — 1194 — 1196 — 1198 — 1200 — 1202 — 1204 — 1206 — 1208 — 1210 — 1212 — 1214 — 1216 — 1218 — 1220 — 1222 — 1224 — 1226 — 1228 — 1230 —

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	98	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 3

Ground Surface Platted by.....
" " Checked by.....
Template Sections Pla[illegible] by.....
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Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(21)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	99	~~417~~ 445

Line 4 Rt 18 Int.

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTATIONS CHKD
BY
DATE

See Sheet 68

Line "4" RT. 18 Int.

B.M. No. 131 EL. 716.32

B.M. No. 132. EL. = 742.08

C.T. 6.70

EXC. 3 EMB. 24,017
@ BOT. 26,416 70% 2402
S-TOT. 26,419 S-TOT. 26,419
TOT. 26,419 TOT. 26,419
OVERHAUL 2,627.0 C.Y.M.

@ Borrow to be obtained from
15,278 C.Y. waste Line 9 Rt. 18
7,948 C.Y. " Main Line Sta. 1663 - 1676
1,390 C.Y. " Line 5 Rt. 18

Sta. 1725 Line "9"
Sta. 0+35 Line 5

P.I. = 27+50
EL. = 732.17

EXC. 915 EMB. 832
10% 83
TOT. 915 TOT. 915

200' V.C.
500' V.C.
1000' V.C.
-3.69%
+1.84%
+6.00%

P.I. = 27+00
EL. = 715.20
D.H. = 4 H.C.
C = 0.5

Survey Sta. 1700 Begin
Line "4" Rt. 29 ℄ Rt. 18 Int.

FINISH GRADE

THE EQUALITY
STA. 0+00 LINE 4 =
STA. 27+00 LINE 9 =

Survey Sta. 1541.71 End
Line "4" Rt. 29 ℄ Rt. 18 Int.

See Sheet 2A for Section

THE EQUALITY
STA. 0+00 LINE 4 =
STA. 27+00 LINE 9 =

THE MATHEWS ℄ MT. HOPE

780
720
710
700
690
680
670
660

0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 9 1140

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Rt. 18
Line 4 95

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	-301-2(7)	29	100	~~417~~ 445

Line 5 Rt. 18 Int.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
PLANS CHECKED
B. M.'s NOTED
STRUCTURE NOTATIONS CHKD
BY
DATE

Sag Sheet 68
Line "5" Rt. 18 Int.

B.M. No. 131 El. 716.32

B.M. # 131 A.H. El. 726.39

Survey Sta. 0+30 Begin Line "5" Rt. 29¢ Ct. 18 Int

Sta. 1+00 Line "5" Sta. 7+28 Frontage Rd.

300' V.C.

-0.08%

+0.08%

FINISH GRADE

Pl. 1+00 El. = 725.94

Pl. = 6+50 El. = 732.30

500' V.C.

-2.76%

Survey Sta. 10+00 End Line "5" Rt. 29¢ Ct. 18 Int.

USE 10-52

2-11 Slopes

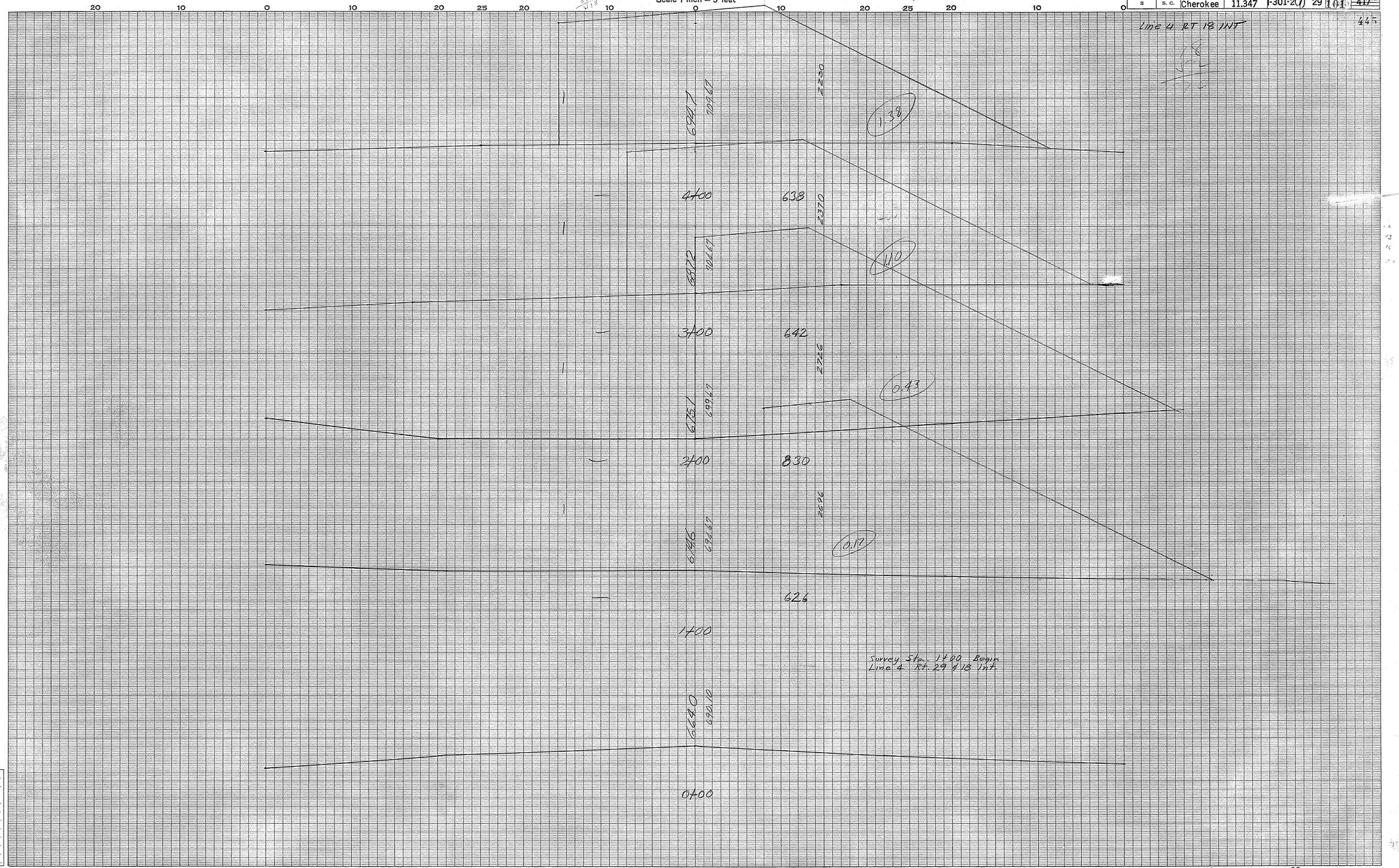
THE FOUNDATION SHALL BE POURED LINE & GRADE

| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	101	417



Cherokee Co
U.S RT 29 & SC 18
Line # 4

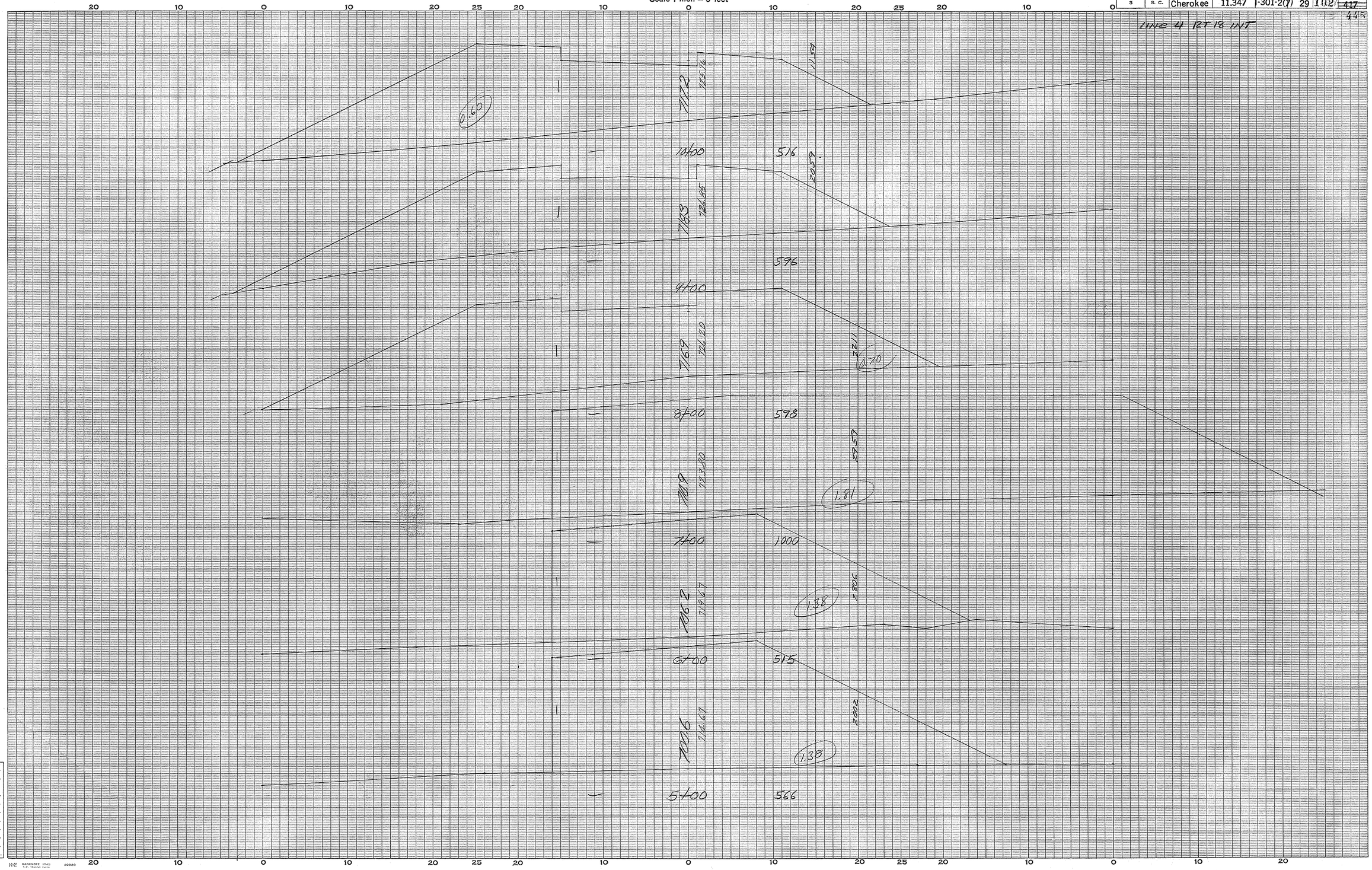
Ground Surface Platted by BD
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	102	~~417~~ 445



Cherokee Co
Int. Rt 18 & US Rt 29
Line #4

Ground Surface Platted by BD
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Template Sections Platted by
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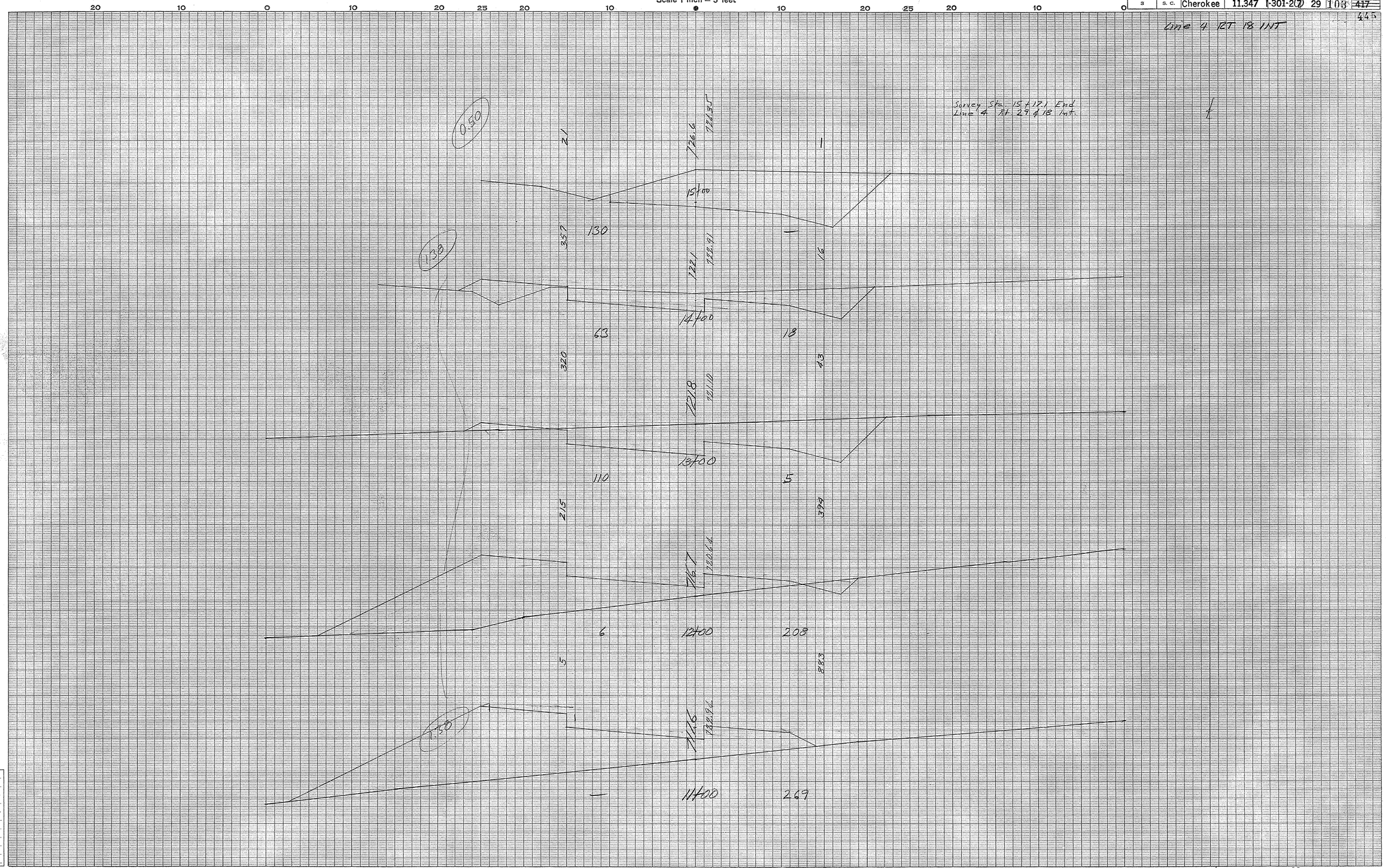
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	103	~~417~~ 445



Cherokee Co
Int Rt 29 & S.C. Rt 18
Line #4

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Areas by .....
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Template Sections Revised by .....
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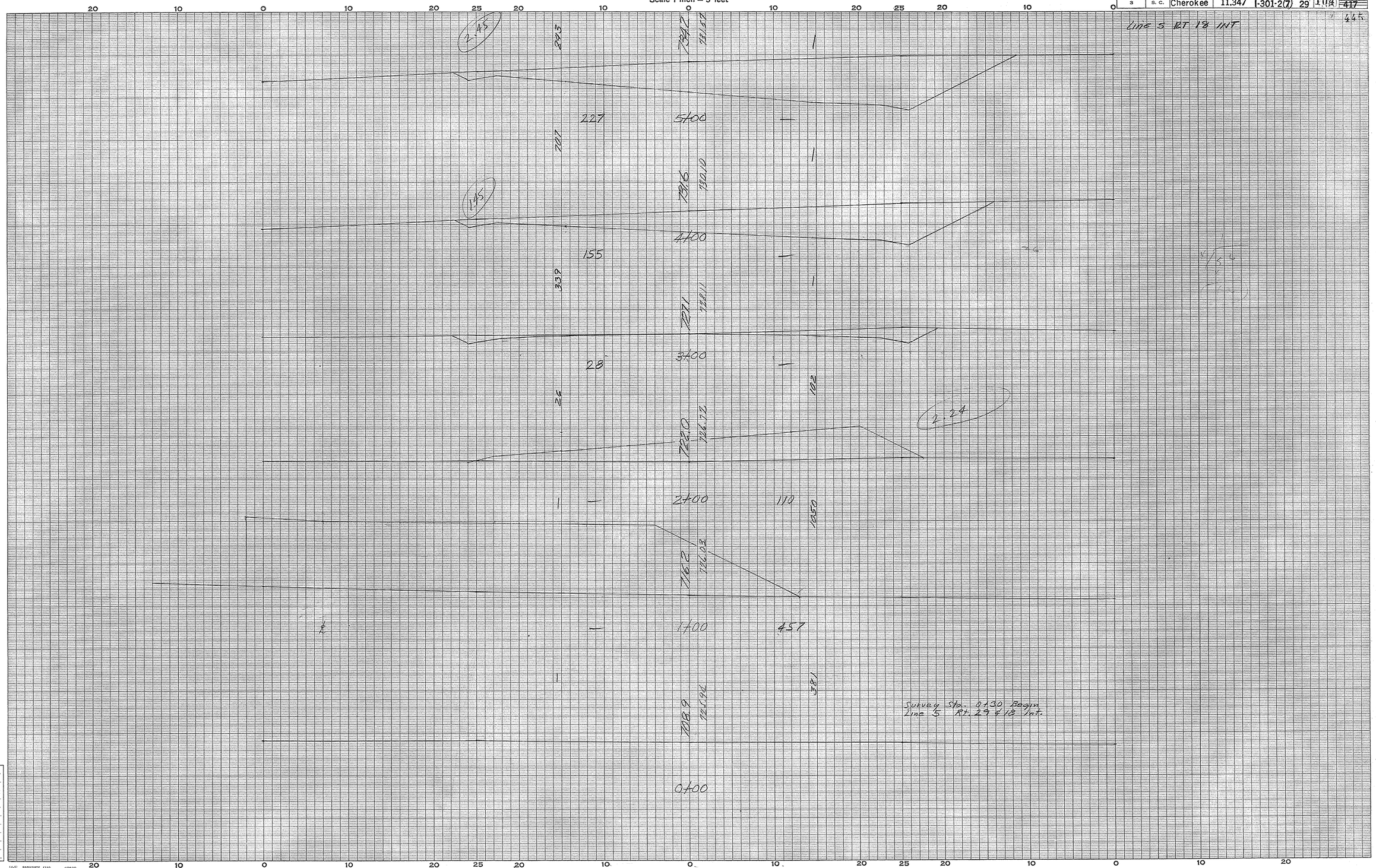
Quantities Transferred and Inked by .....

(3)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	104	417



Cherokee Co
Int of US Rt 29 & S.C. 18.
Line #5

Ground Surface Platted by B.D
" " Checked by
Template Sections Platted by
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Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

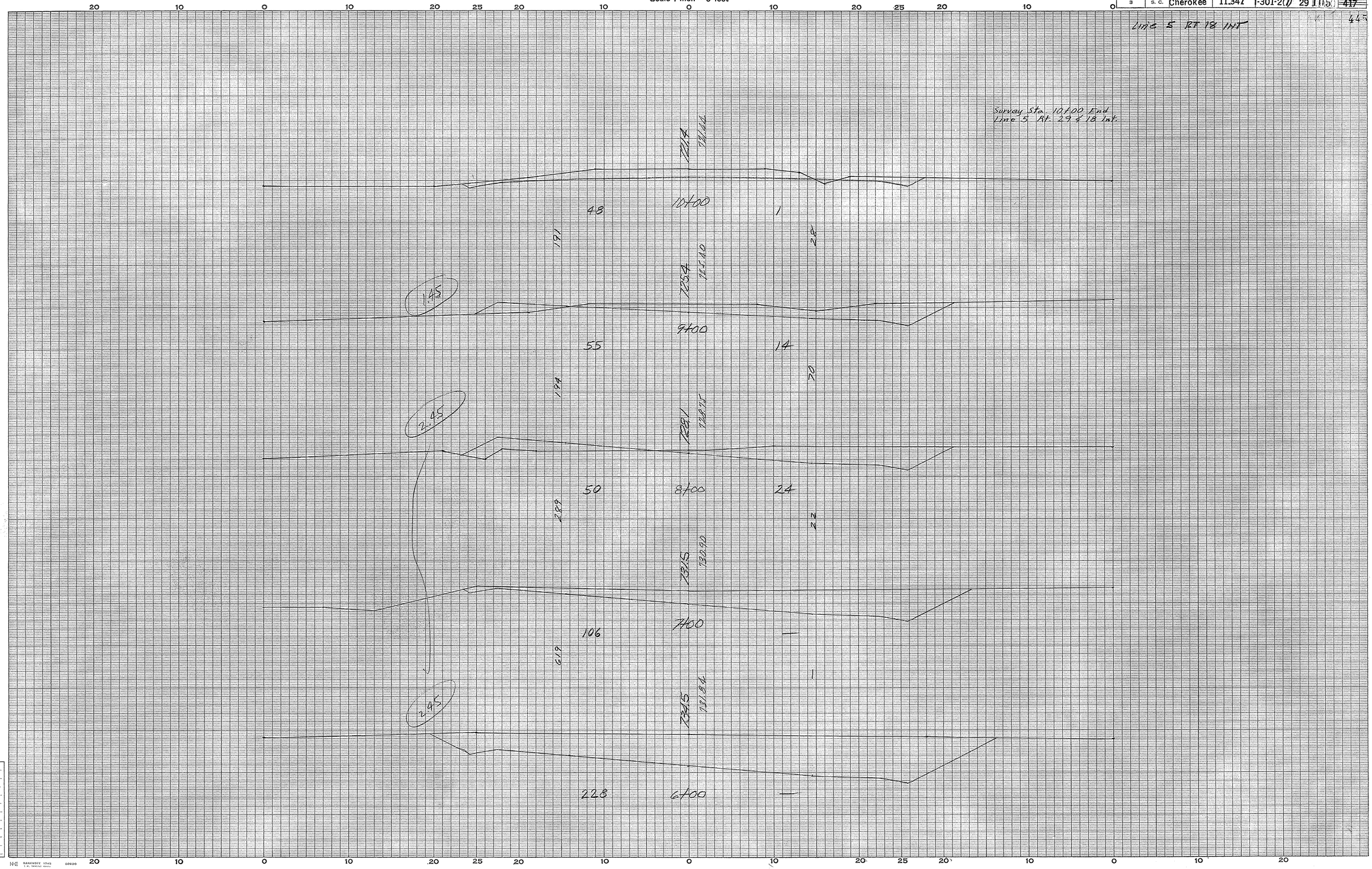
Line 5

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	105	~~417~~ 445



Cherokee Co
Int U.S RT 29 & S.C 18
Line #5

Ground Surface Platted by BD
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Template Sections Platted by
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Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	106	417 445

Line 6 RT. 18 INT.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
ALIGNMENT CHECKED
NO.
PT. OF VAL CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
GRADES CHECKED
NO.
B. M.'S NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE

B.M. No. 131 El. 716.32
0+10
BVC 15+00
EVC 15+20
BVT 17+23
EVT 17+43
tot 123
EMB 15.857
15.848
17.233
17.223
tot 123

Survey Sta. 0+10 Begin
Line 6 Rt. 18 ≠ 29 Int.
OVERHAUL = 34,640 C.Y.M.M.
N. Borrow to be obtained from
1854 C.Y. Waste Main Line Sta. 1+81± to 10+96±
5,446 C.Y. Waste Main Line Sta. 11+81± to 14+91±

Finish Grade
400' V.C.
-1.16%
+0.40%
P.I. = 4+00
El. = 724.77
D.A. = 5A
C = 0.5

Survey Sta. 7+42⅔ End
Line 6 Rt. 29 ≠ 18 Int.

EXC. = 300
Tot. = 300

B.M. No. V-132 El. 742.09
17+11 205

EMB = 127
DIA = 25
Tot. = 300

Survey Sta. 17+41+00 End
Line 6 Rt. 29 ≠ 18 Int.

Sta. 7+42⅔ Line 6 Rt. 29 ~ Sta. 7+42⅔ Line 6 Rt. 18 Int.

Sta. 17+41 Rt. 29

730
720
710
700

725.41 725.25 725.19~gc 725.56 725.18 725.59 725.55 725.41 725.37 725.42 725.55~pvt. 725.97 726.18 EQUALITY 726.44 726.35

0 1 2 3 4 5 6 7 1741 3 4 5 6 7 8 9 10 11

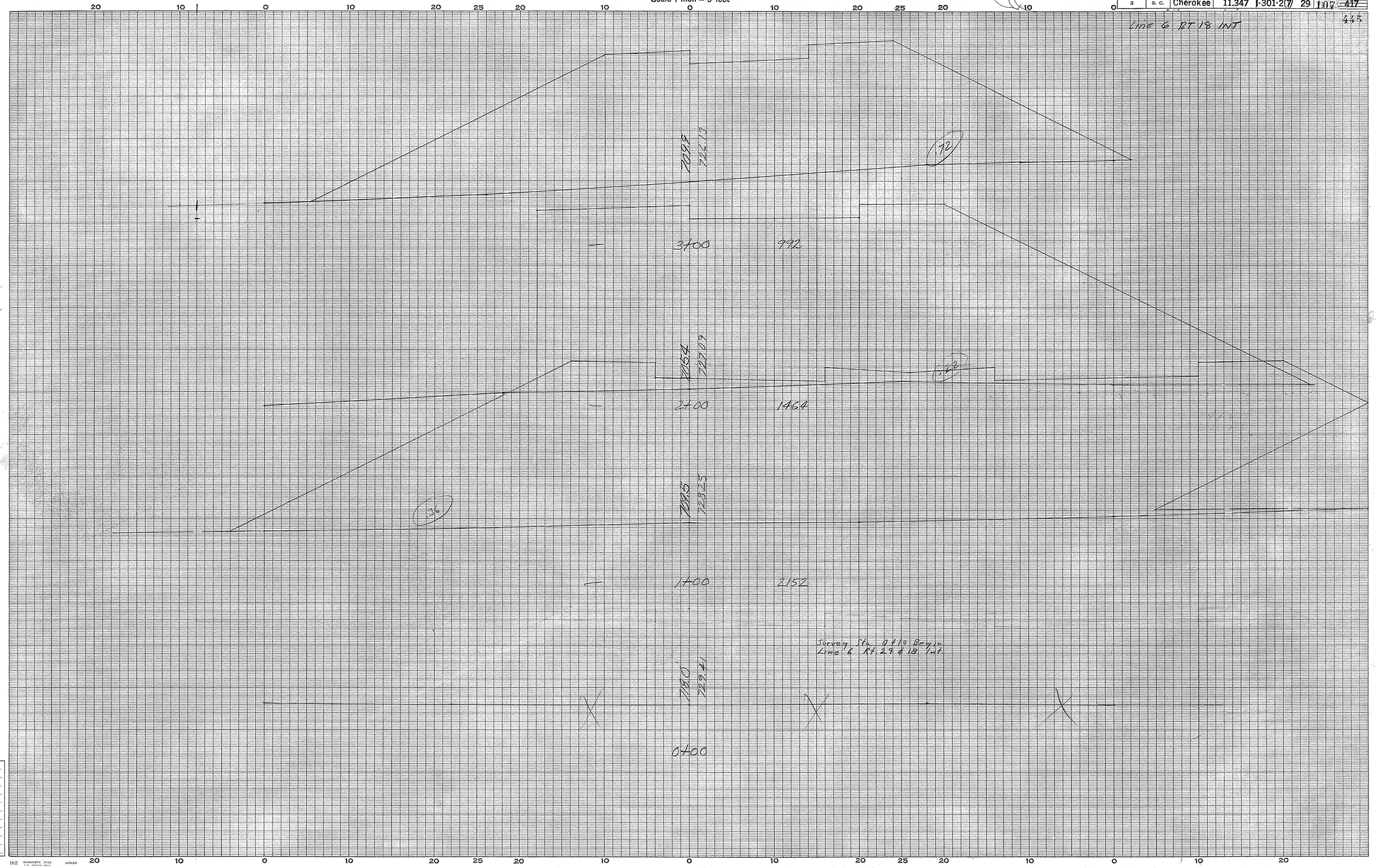
Cherokee Co.
U.S. 29 - Rt. 18
Int.
Line "6"
Sta. 0+00 to Sta. 7+42⅔ & 17+41

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	107	~~417~~ 445



53
186
90
196

Cherokee Co
Int USRt 29 & SC 18
Line #6

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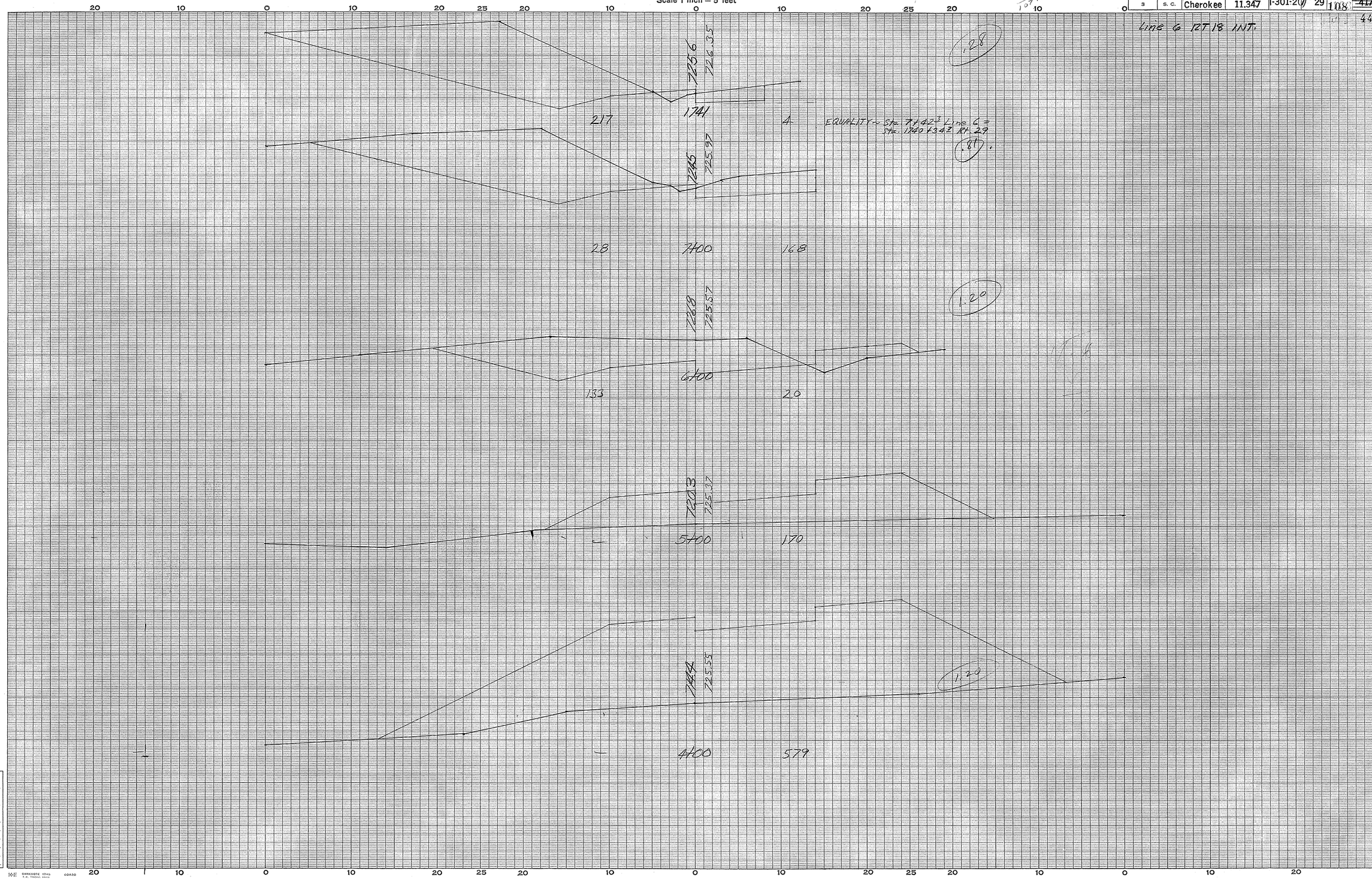
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

7

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	108	~~417~~ 445



Cherokee Co
Int U.S. Rt 29 & SC 18
Line # 6

Ground Surface Platted by BD
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Template Sections Platted by
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Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	100	~~417~~ 445

Line 7 RT. 18 INT.

PLAN — SURVEYED — BY — DATE
PLOTTED
NOTE BOOK — PROFILE CHECKED
NO. — ALIGNMENT CHECKED
B. M.'s NOTED
RT. OF WAY CHECKED
STRUCTURE NOTATIONS CHKD.

Road 82

Line 7 Rt 18 Int.

Sq Sheet 66

B.M. No. 123 ~ Nail in Root 30" Oak
160' Lt Sta. 1658+90 El.= 693.21

Sta 2+48 = Line 7 =
Sta. 14+87 = Line 8 =
Sta. 12+72 = Line 9 +1312

Sta 6+21 Line 7 =
Sta. 7+61 = Line 9

Line 7 Rt 18 Int.
Sta. 8+79 = Line 7 =
Sta. 7+81 Line 10

B.M. No. 8 ~ Rd. 82 ~ Nail in 10" Oak 80' Rt.
Sta. 81+50 El.= 672.44

Survey Sta. 2+75 Begin
Line 7 Rt. 29 ± Rd. 82.

Borrow to be obtained from
746 C.Y. waste Line 9 Rt. 13
76 C.Y. waste Line 10 Rt. 18
398 C.Y. waste Line 10 Frontage Rd.

EXC.= 1220 EMB.= 1168
# Bor.= 1220 Vol.= 111
S-Tot.= 1220 S-Tot.= 1220
Less = 1220 Less = 1220
Tot = 0 Tot = 0
OVERHAUL = 1220 C.Y.H.H.

P.I. = 5+50
El. = 715.62

Toe of Fill = 4+81.9
LVA = 3 FT.
C.= 0.5

450' V.C.

Sta. 2+75 = BEGIN CONSTRUCTION Line 3 =
Sta. 2+75 Line 7

Use 32'-40' Section
10" Base

Sta 6+21 Line 7 =
Sta. 7+61 = Line 9

EXC.= EMB.= 2032
# Bor.= 2235 Vol.= 203
S-Tot.= 2235 S-Tot.= 2235
Less = 2235 Less = 2235
Tot.= 0 Tot = 0
OVERHAUL = 2235 C.Y.H.H.

+0.00%

Borrow to be obtained from
2235 C.Y. waste Line 10 Rt. 18

300' V.C.

EXC.= 3385 EMB.= 3077
# Bor.= 308
S-Tot.= 3385 S-Tot.= 3385
OVERHAUL = 1524 C.Y.H.H.

Finish Grade

-0.38%

P.I. = 9+25
El. = 700.62

P.I. = 18+50
El. = 697.10

300' V.C.

+3.18%

24+00

Survey Sta. 24+00 End
Line 7

Sta. 24+00 = END CONSTRUCTION Line 3 =
Sta. 24+00 Line 7

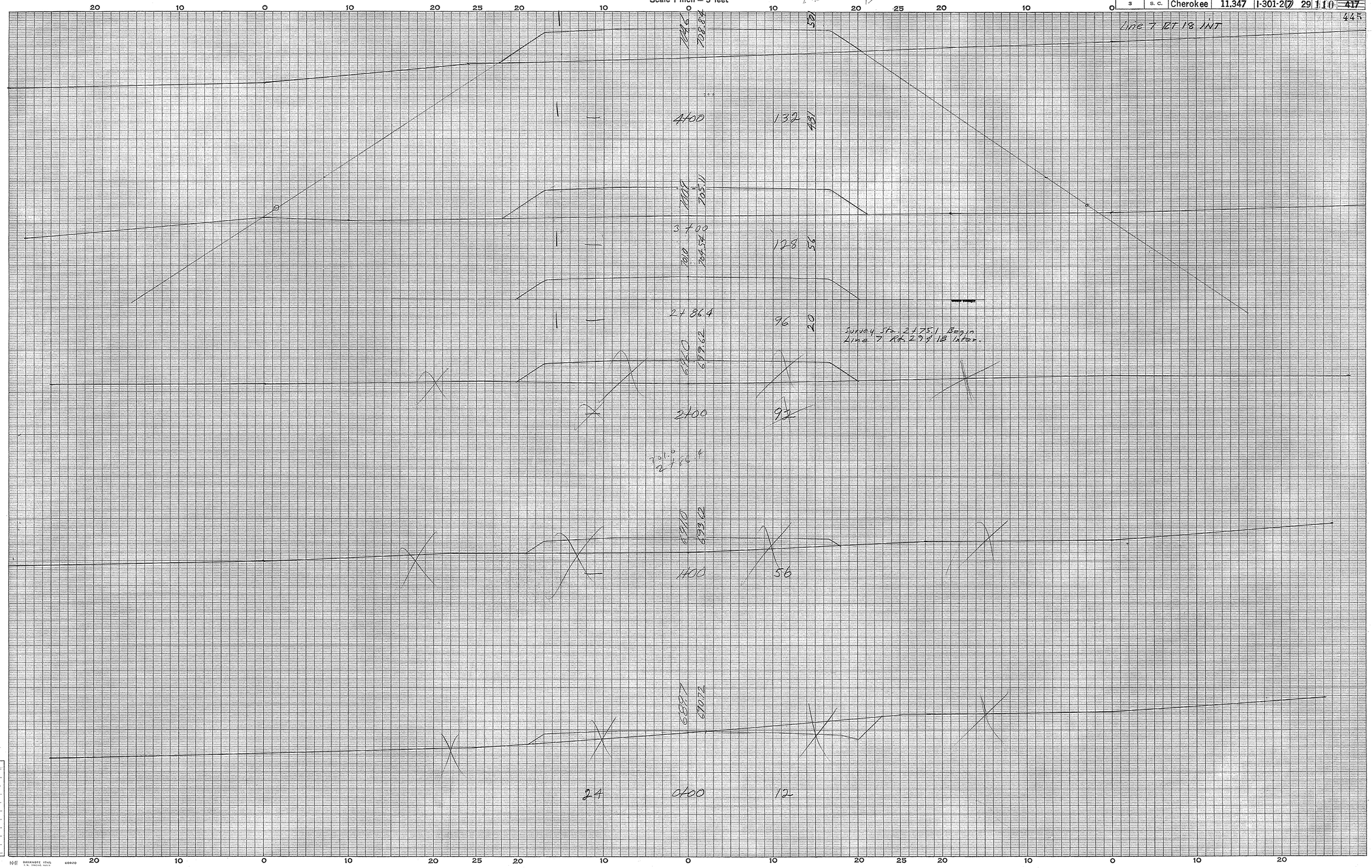
Use 32'-40' Section

| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	110	~~417~~ 445



Cherokee Co
Int USBT 29 S.C 18
Line #7

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Template Sections Platted by
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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

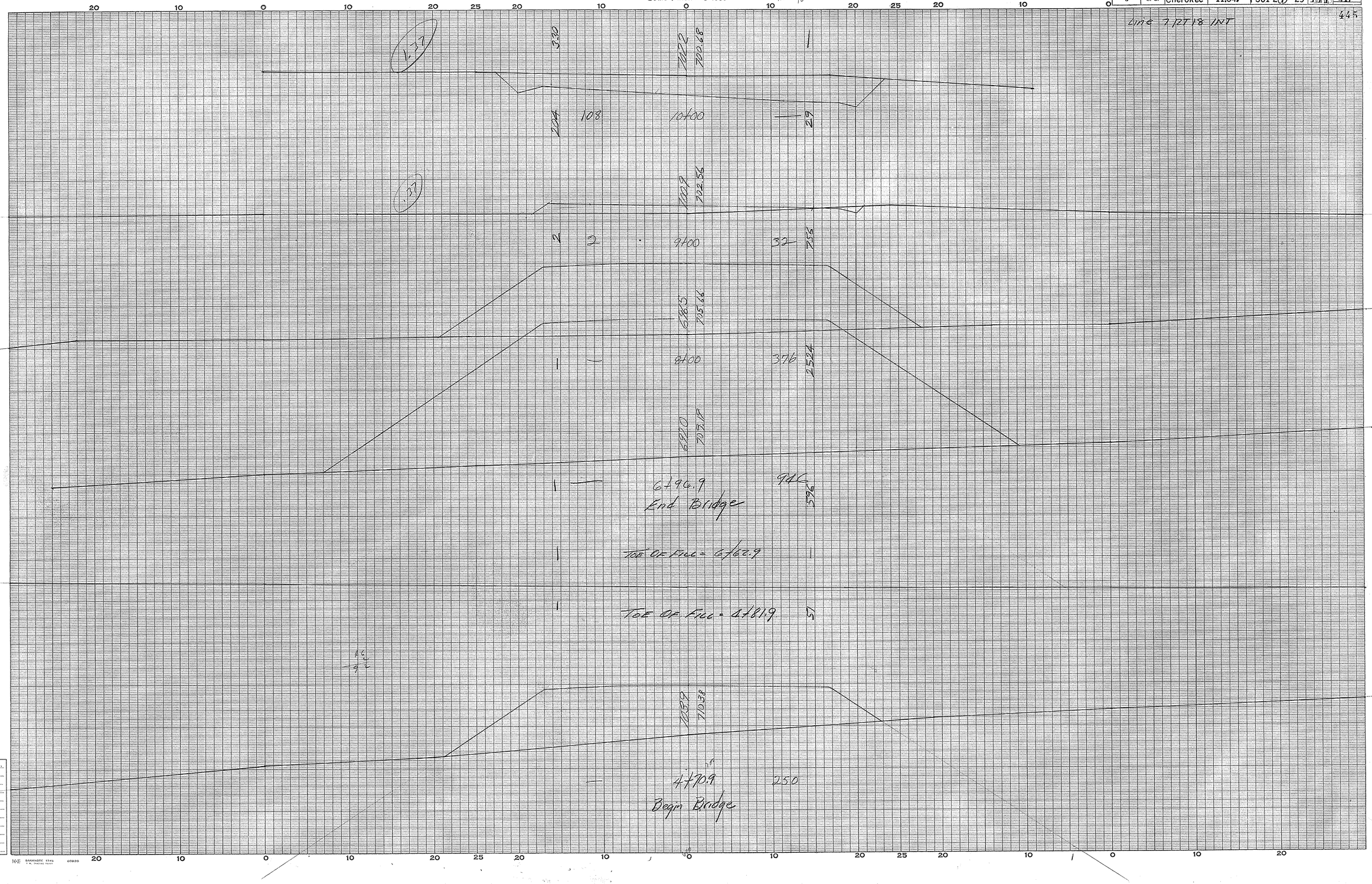
1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	111	417

445



Cherokee Co
Int U.S. Rt 29 S.C. 18
Line #7

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Areas by
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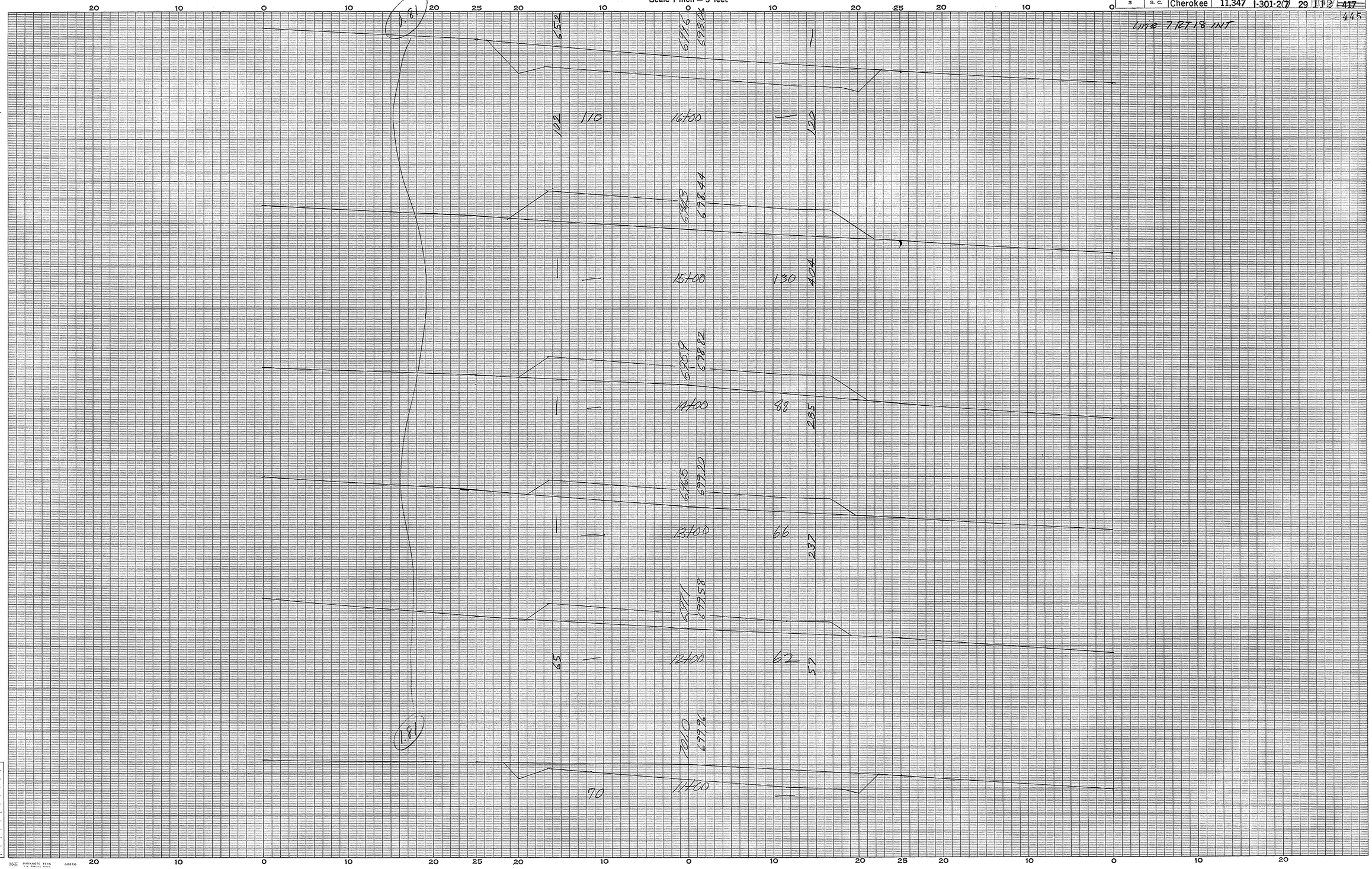
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

2

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	112	~~417~~ 445



Cherokee Co.
Int U.S. RT 29 & S.C. 18
Line #7

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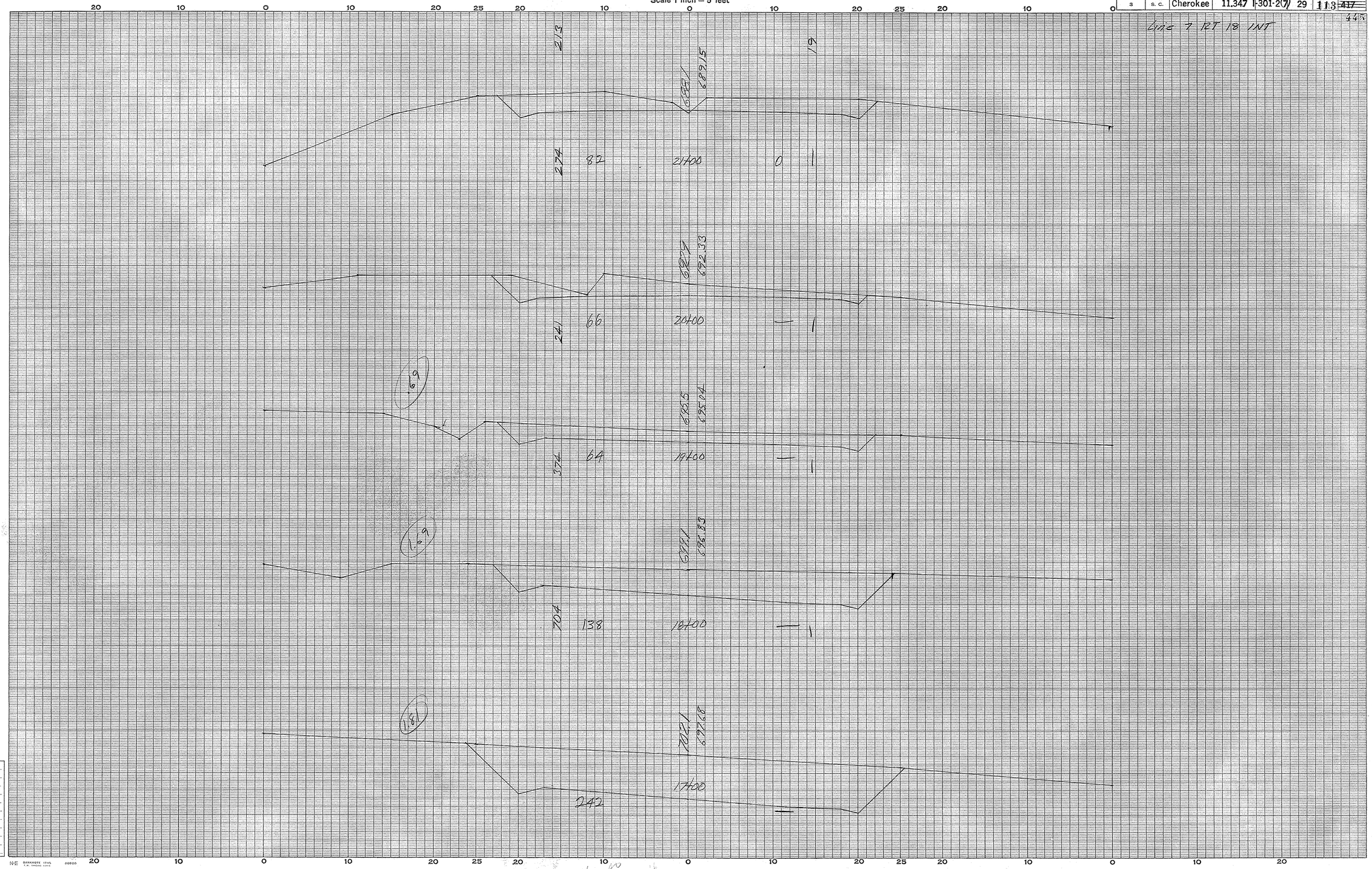
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	113	~~417~~ 445



Cherokee Co
Int U.S. Rt 29 & S.C. 18
Line # 7

Ground Surface Platted by BD
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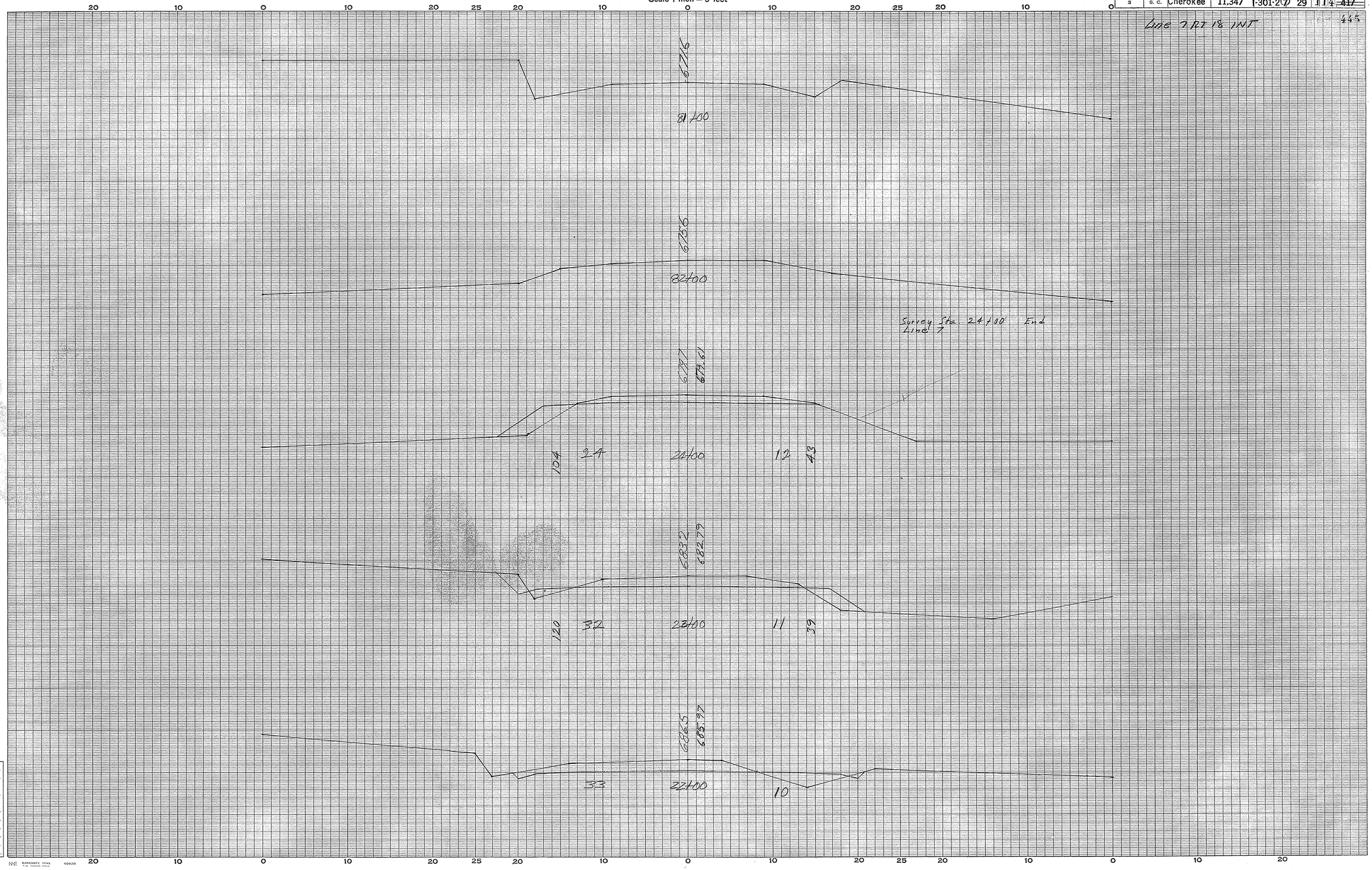
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(4)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	114	~~417~~ 445



Cherokee Co
Int US RT 29 & S.C 18
Line #7

Ground Surface Platted by BD
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Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

5

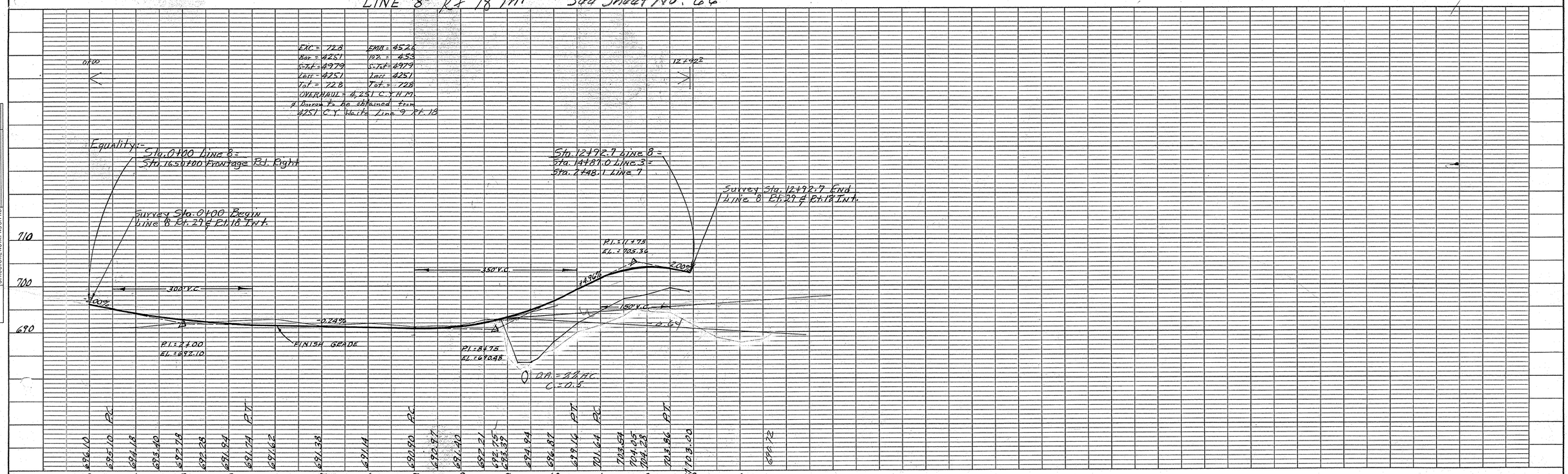
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	115	~~417~~ 445

Line 8 RT. 18 INT.

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

LINE "8" Rt 18 int See Sheet No. 66



Line 8 Rt 18 int. Cherokee Co

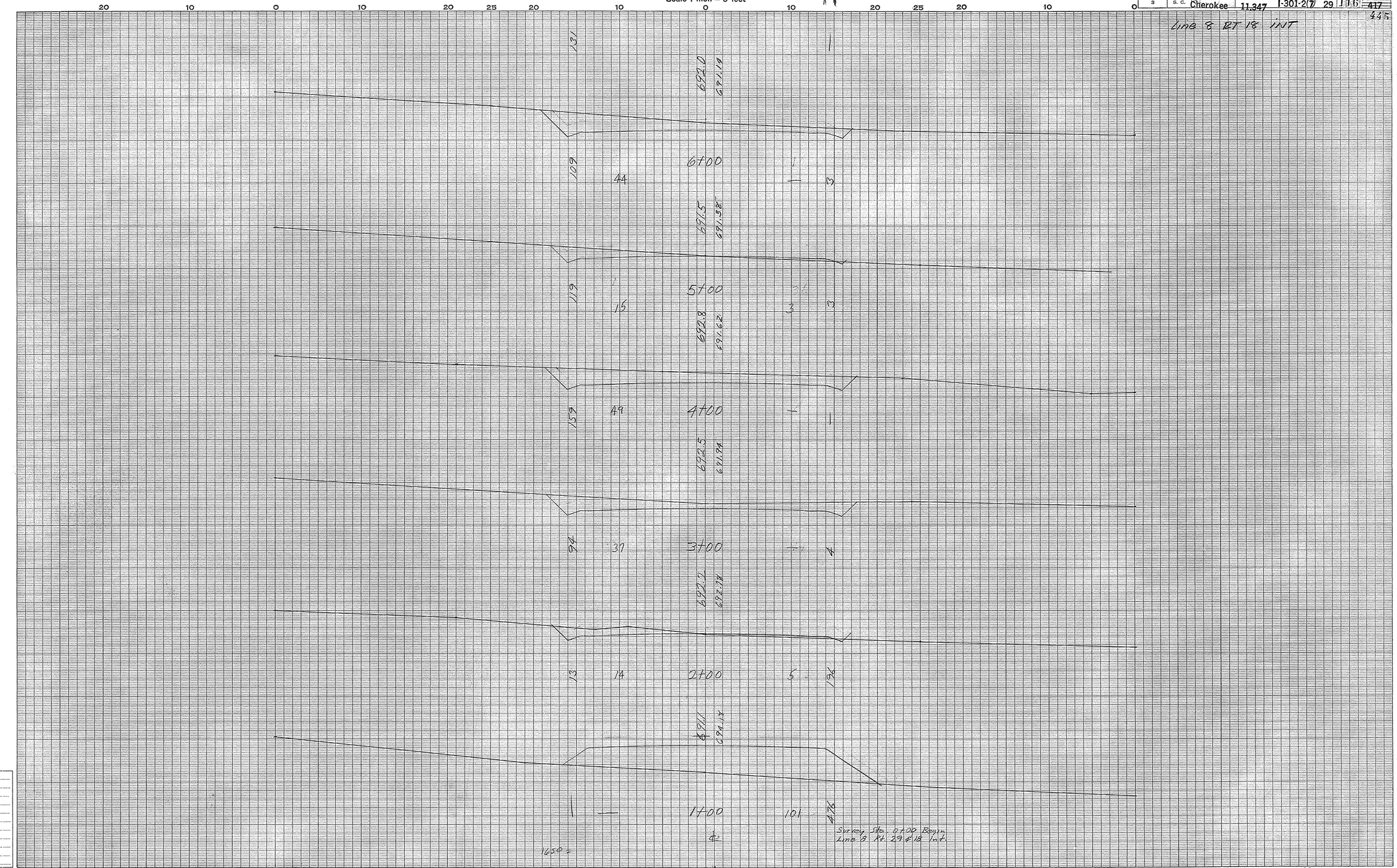
2

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	116	417 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 8

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Template Sections Platted by.....
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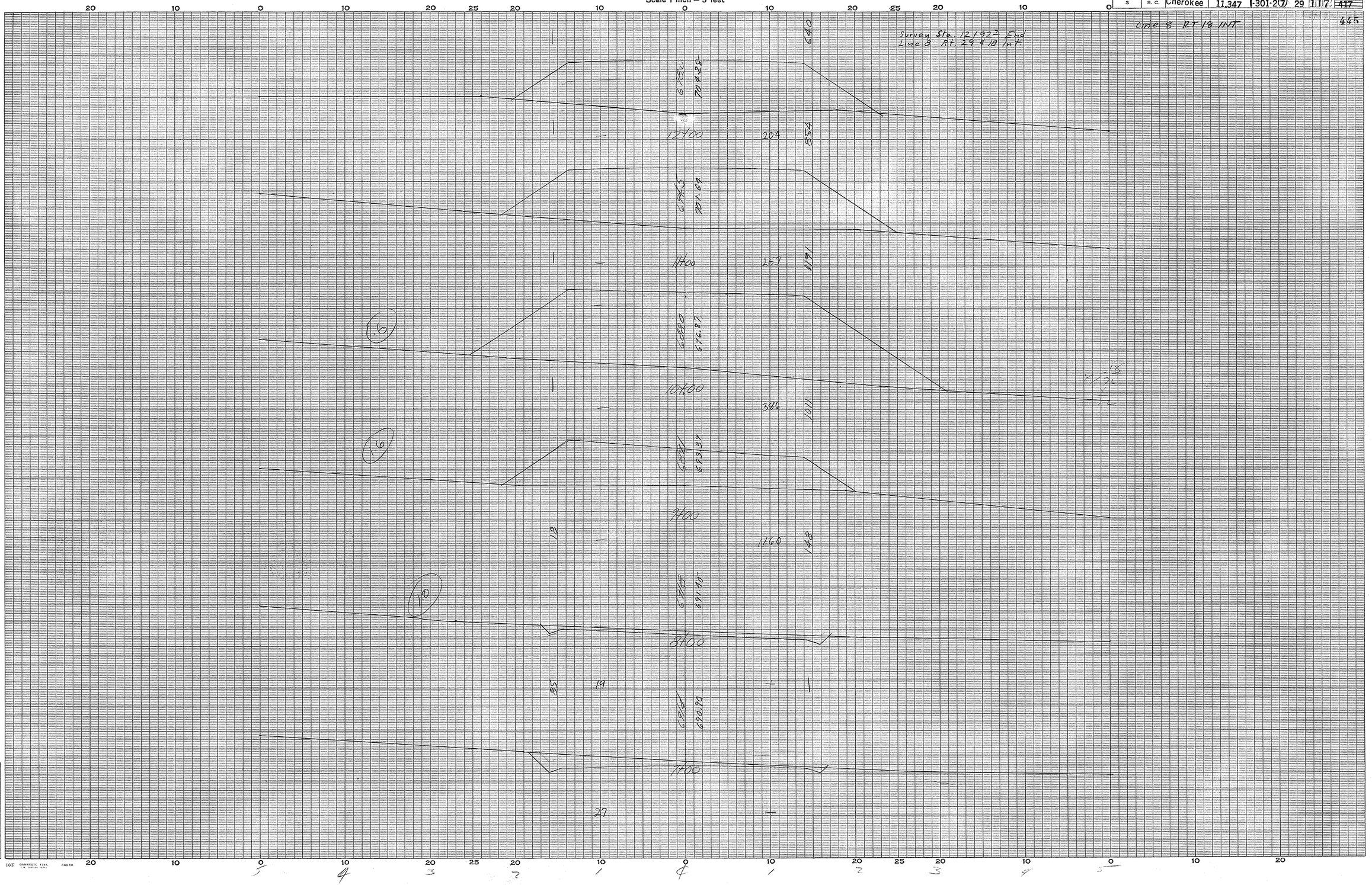
Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	117	~~417~~ 445



Charokee

Rt 29 & Rt 18

Line 8

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Template Sections Platted by.....
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Areas by.....
" Checked by.....
Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
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Quantities Transferred and Inked by.....

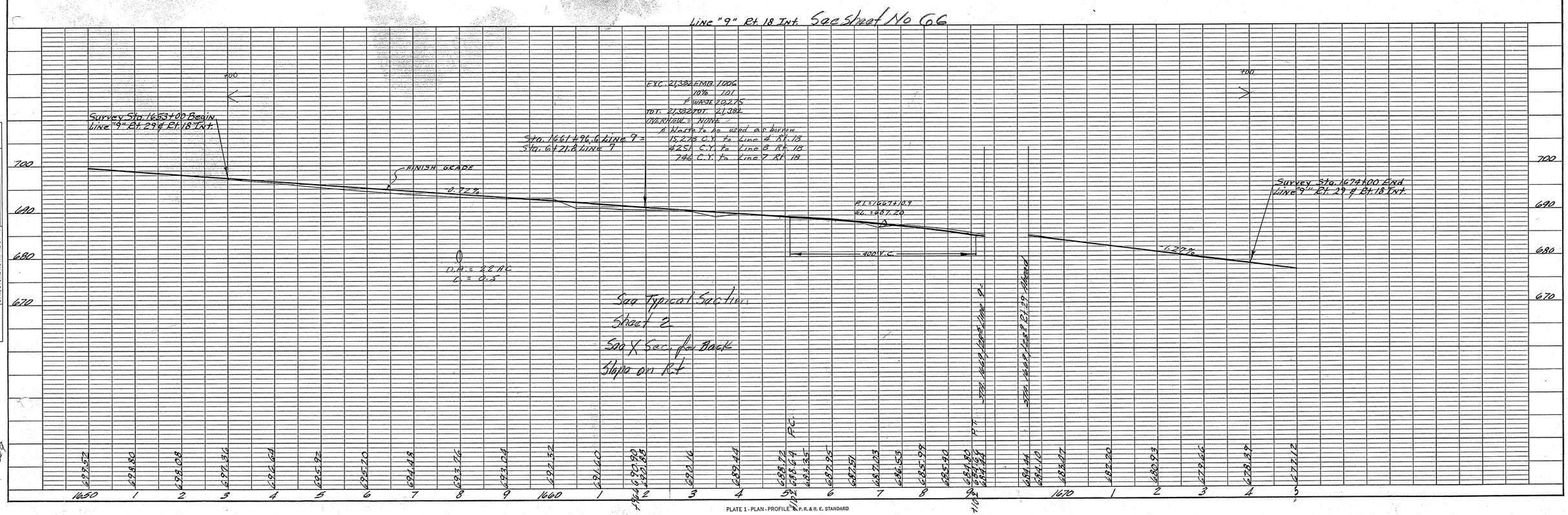
1

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	118	~~417~~ 445

Line 9 Rt. 18 Int.

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. NOTED
STRUCTURE NOTATIONS CH'KD
BY
DATE



Line 9 Rt 18 Int Cherokee

2

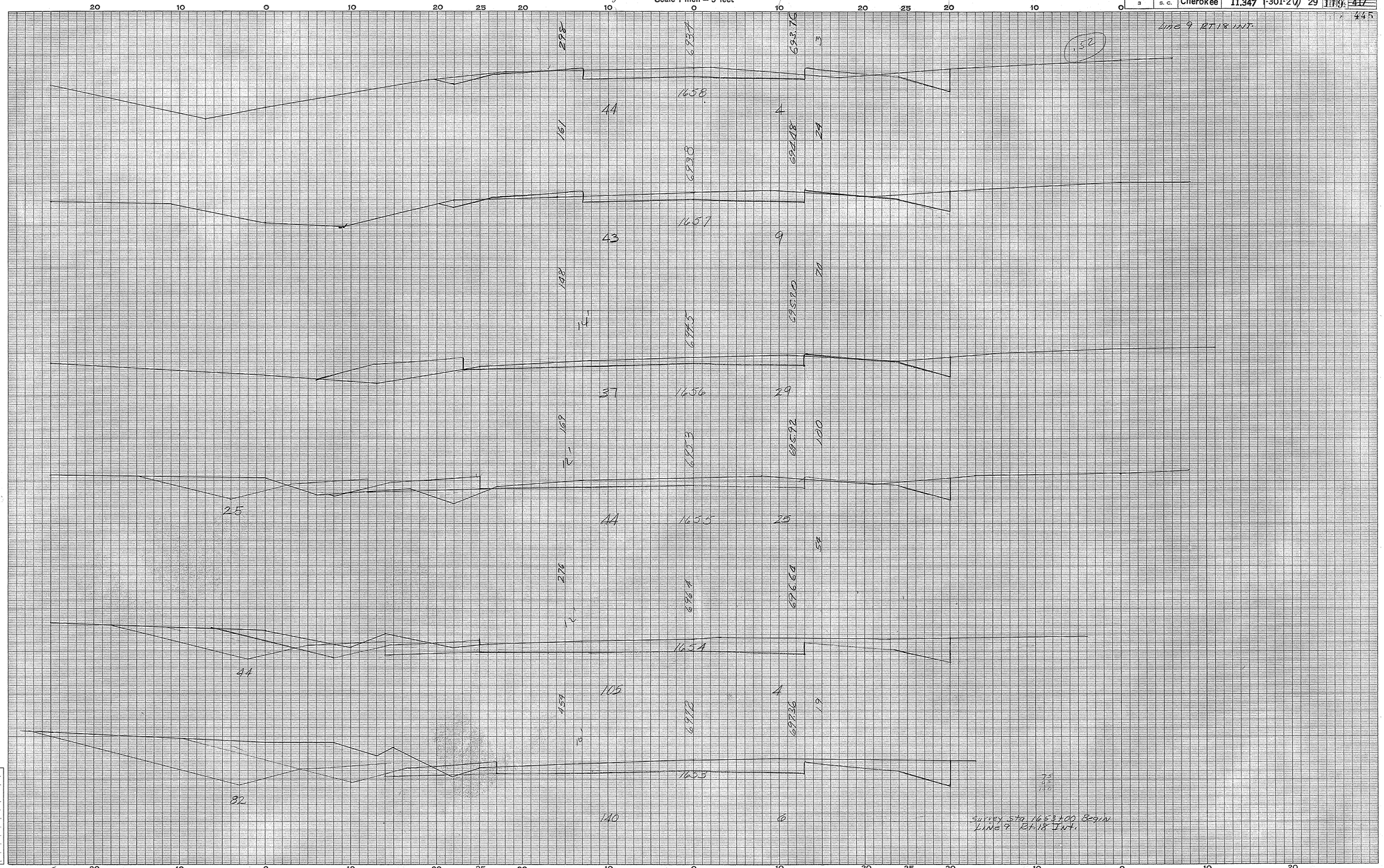
PLATE 1 - PLAN - PROFILE & P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	119	417

445



Cherokee Co
U.S. 29 & S.C. 18
Line 9

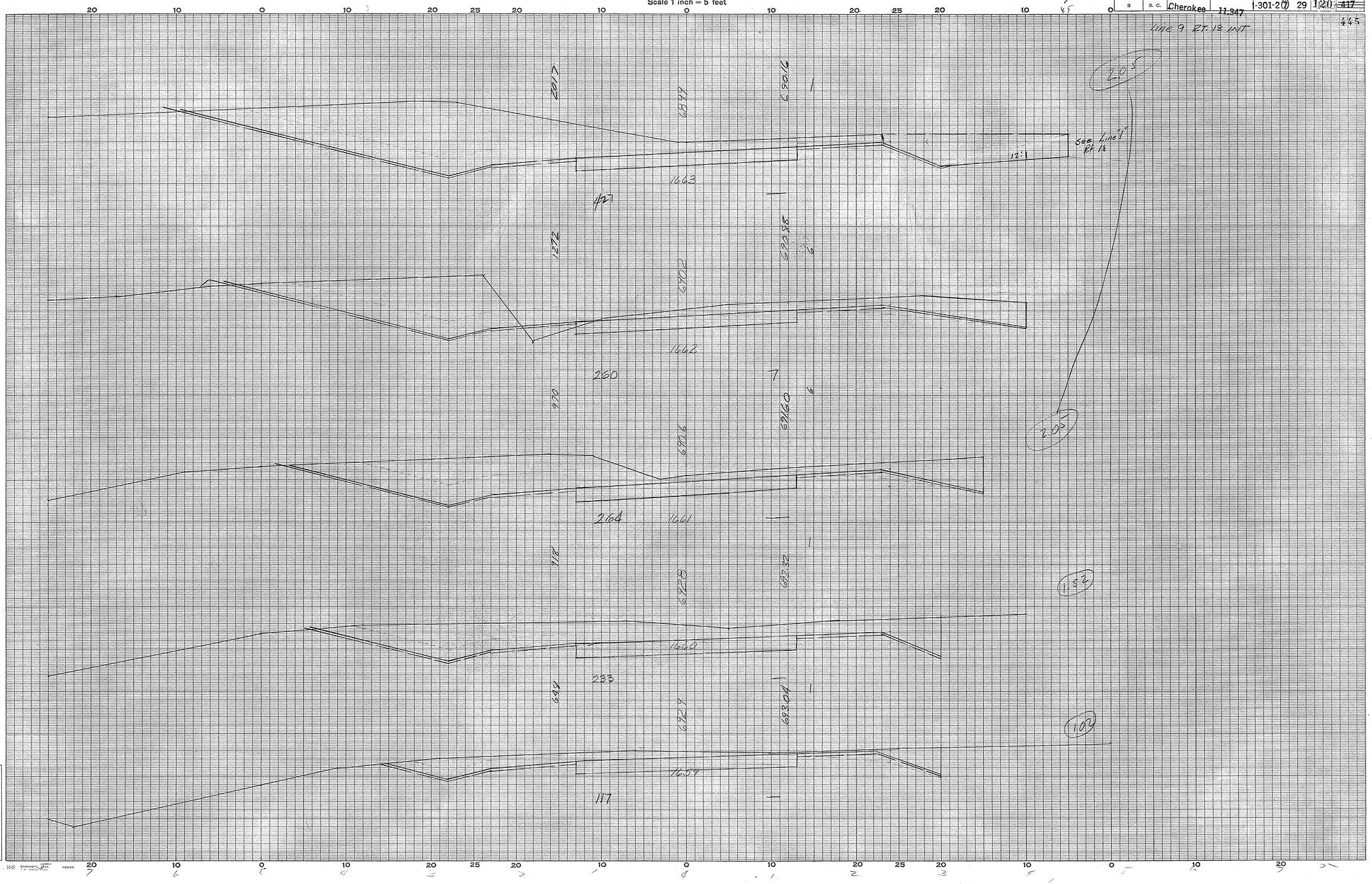
Ground Surface Platted by E.J.Z.
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	120	~~417~~ 445



Cherokee Co
U.S. 29 & S.C. 18
Line 9

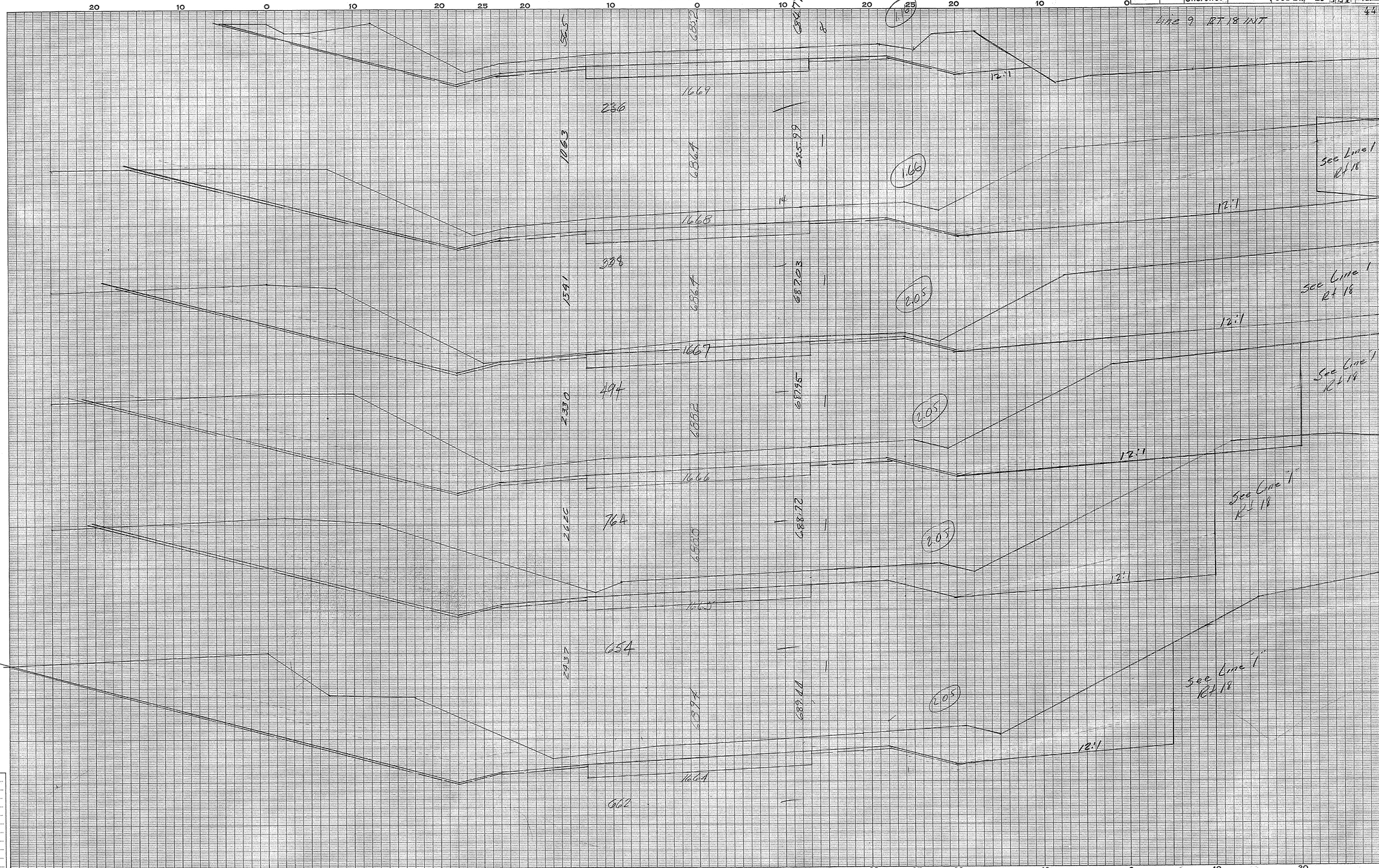
Ground Surface Platted by C.J.Z.
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	121	~~417~~ 445



Cherokee Co
U.S. 29 & S.C 18
Line 9

Ground Surface Platted by E.J.Z.
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Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	122	417

445

Line 9 Rt 18 Int

Survey Sta. 1674+00 End Line "9" Rt 18 Int.

Cemetery

See Line 1 Rt 18

Cherokee Co
U.S. 29 & SC 18
Line 9

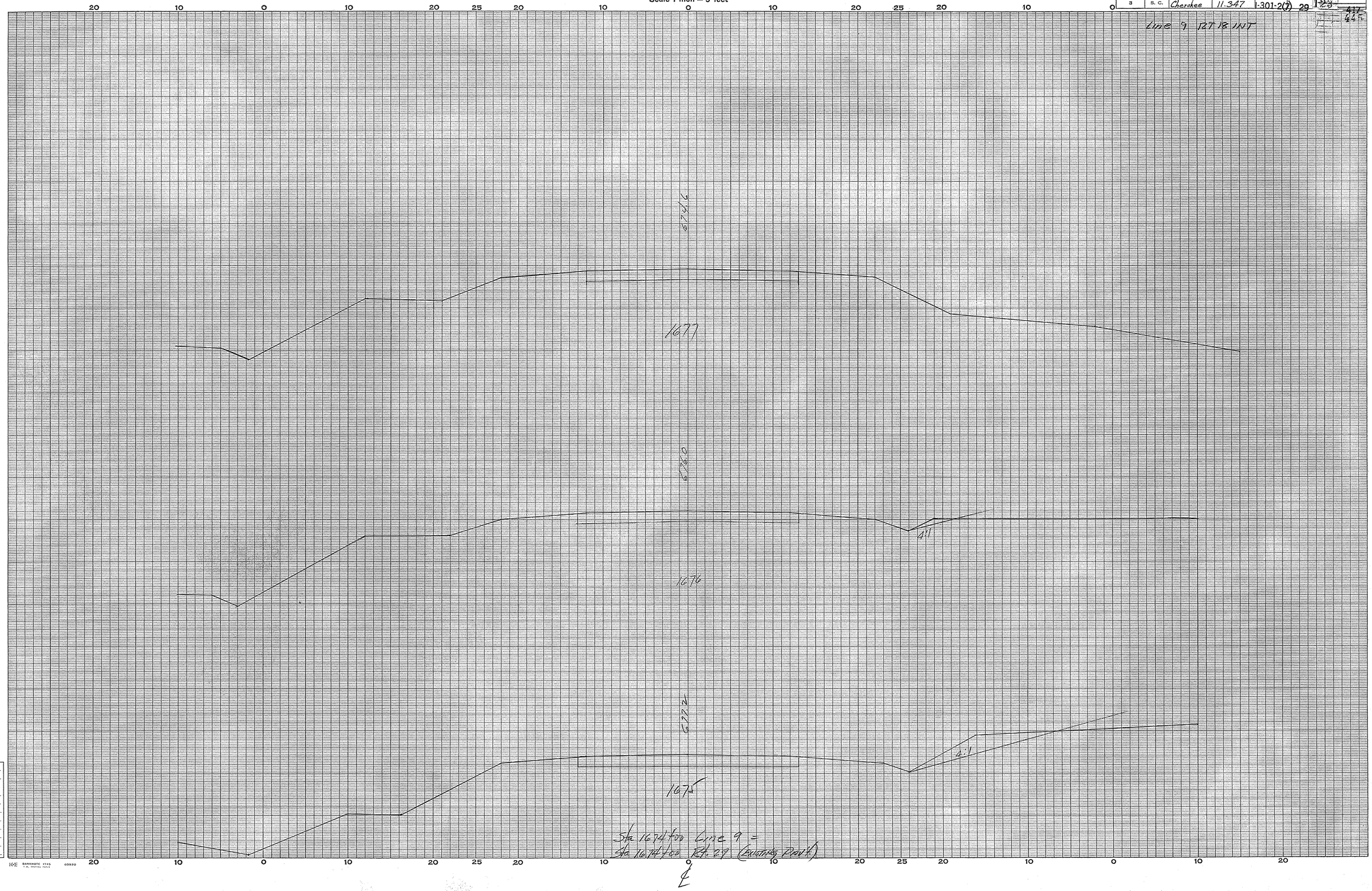
Ground Surface Platted by E.J.E.
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

BANKNOTE 17-07 60920

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	123	417



Line 9

Ground Surface Platted by
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Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(5)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	124	~~417~~ 445

Line 10 RT. 18 INT.

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

2

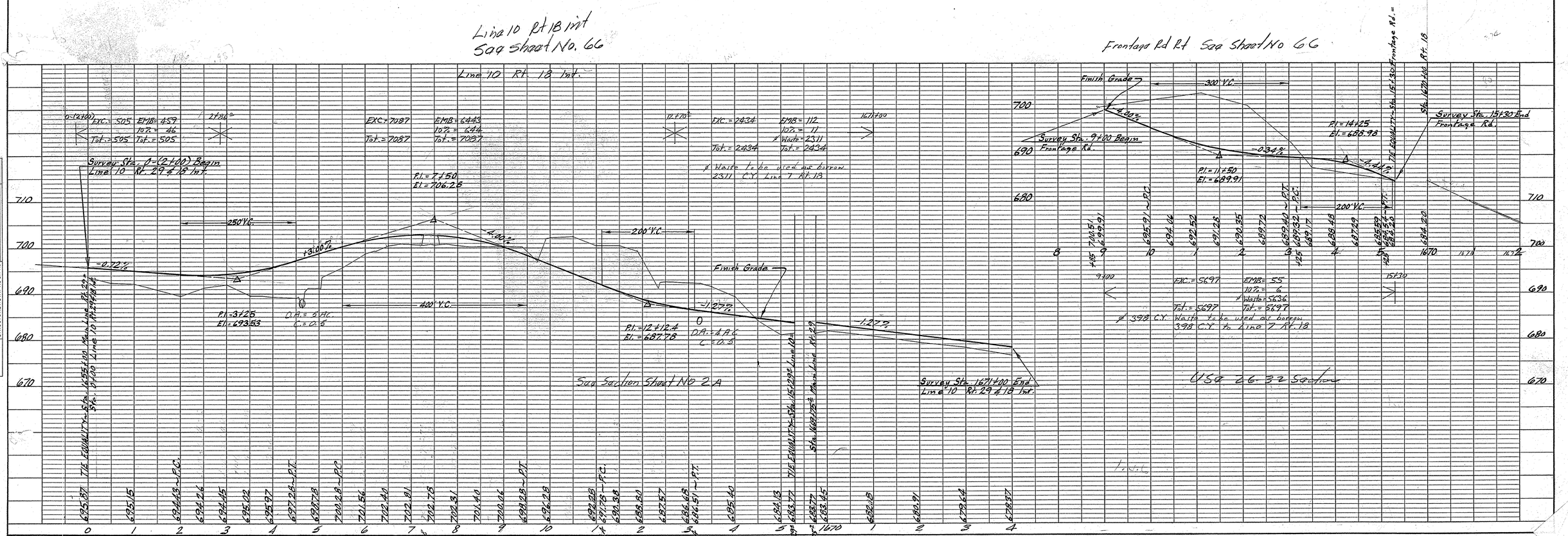
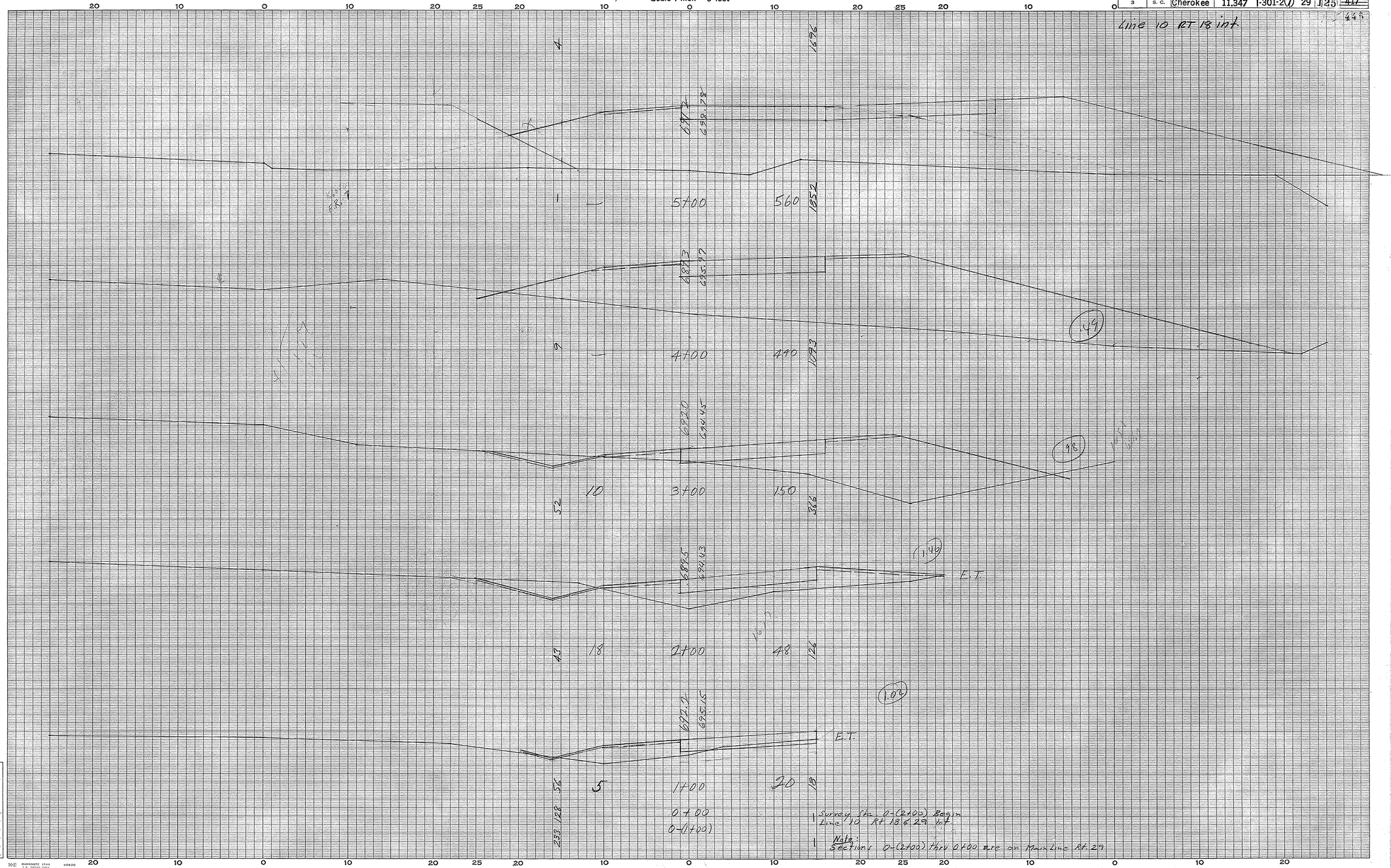


PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	125	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 10

2

Ground Surface Platted by
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Template Sections Platted by
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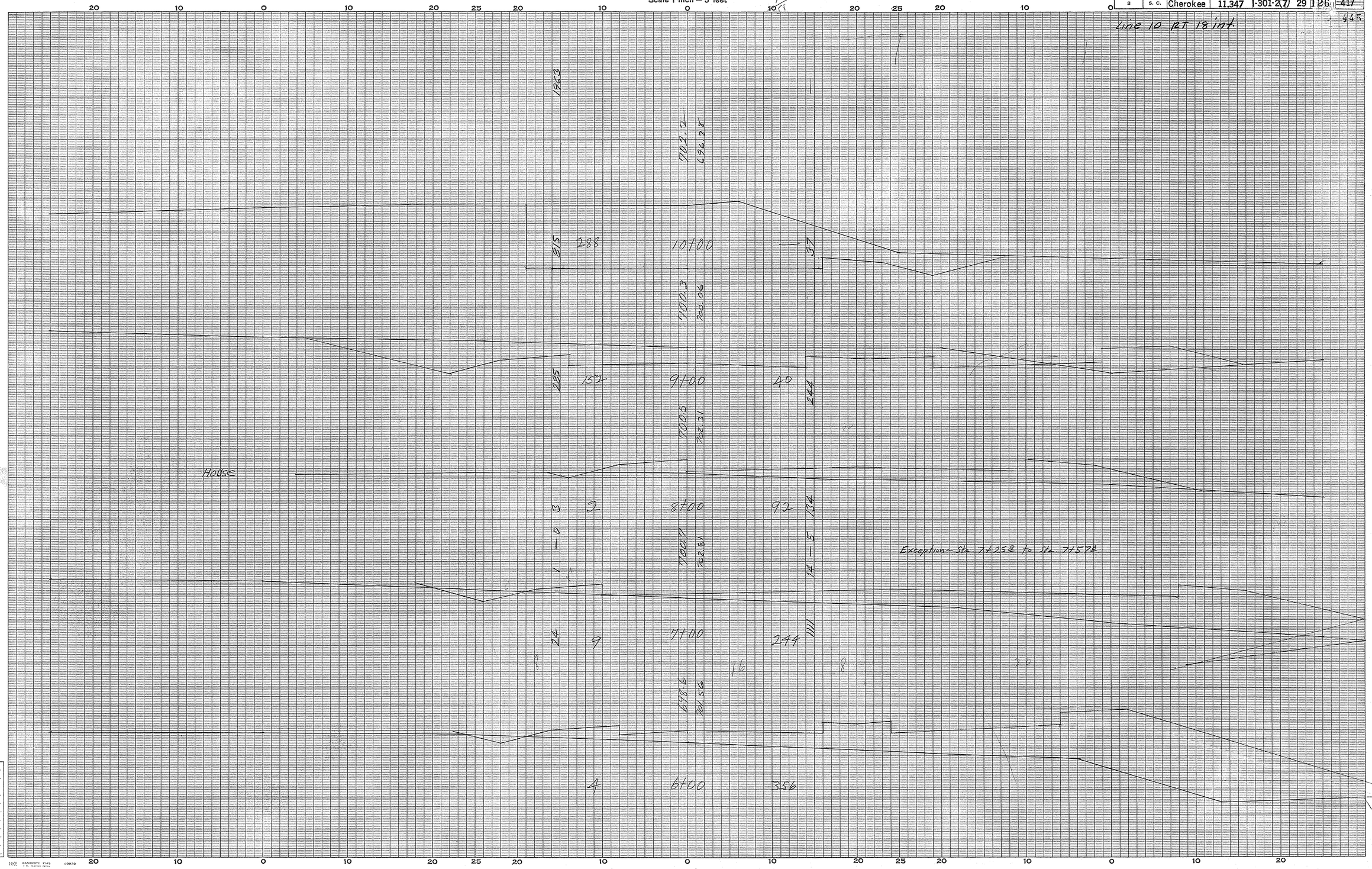
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	126	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt. 18
Line 10

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Areas by.....
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Template Sections Revised by.....
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Final Areas by.....
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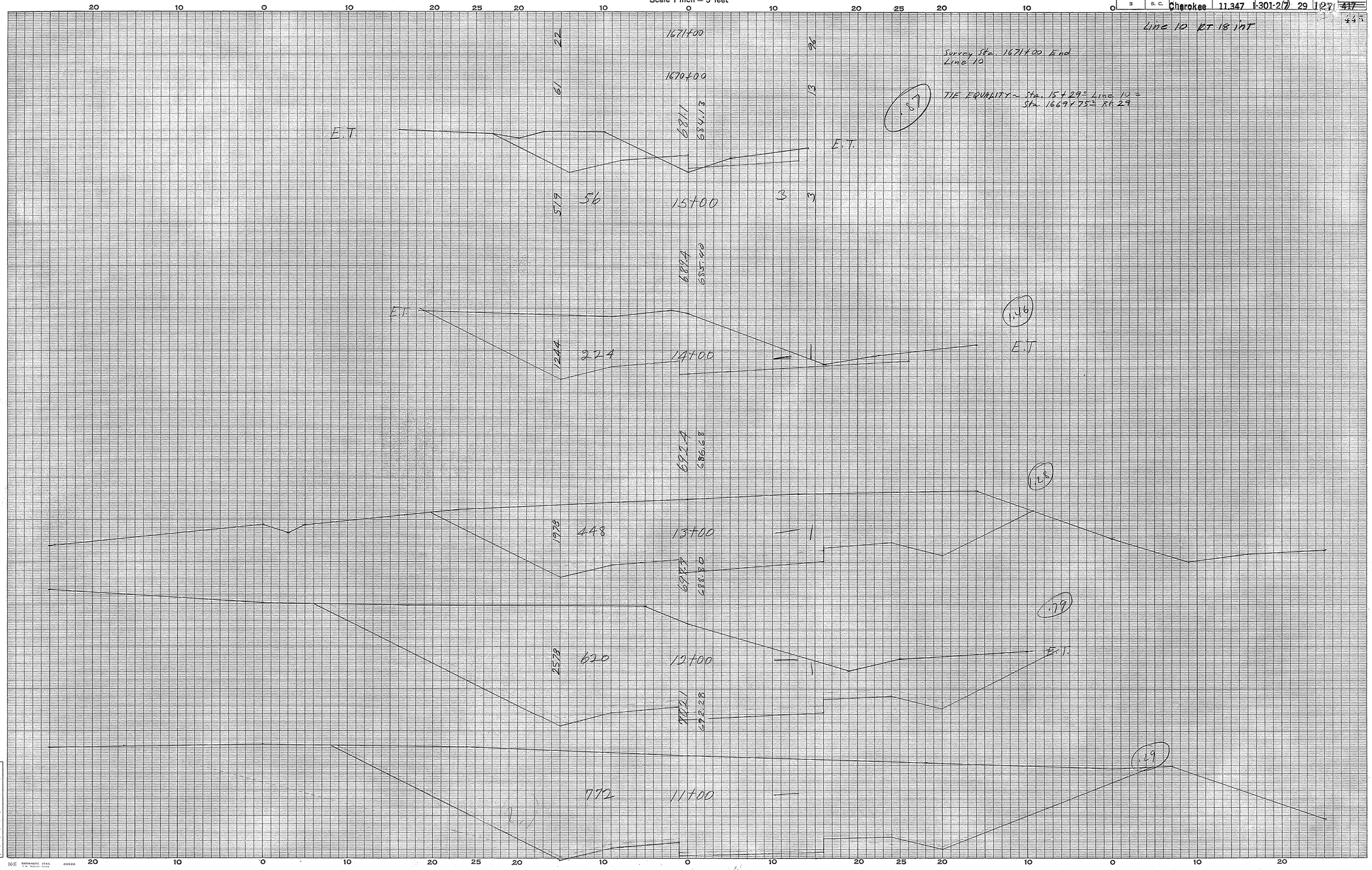
Quantities Transferred and Inked by.....

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	127	~~417~~ 445



Cherokee Co.
Int. Rt. 29 & Rt 18
Line 10

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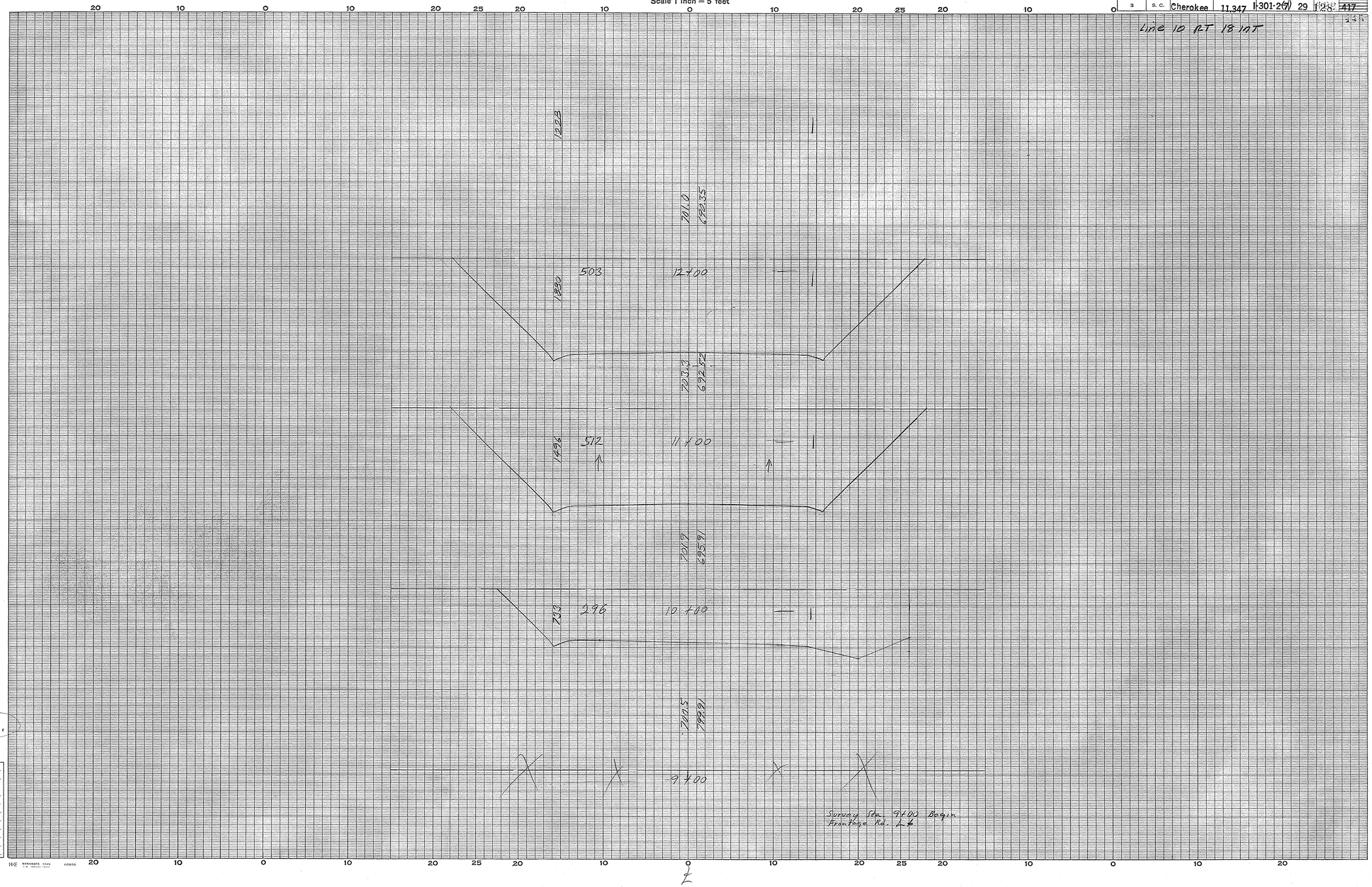
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(3)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	128	417



Cherokee Co.
Frontage Rd. Lt.
Rt. 29 & 18 Int.

Line 10 Frontage Rd.

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Final Areas by.....
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Quantities Transferred and Inked by.....

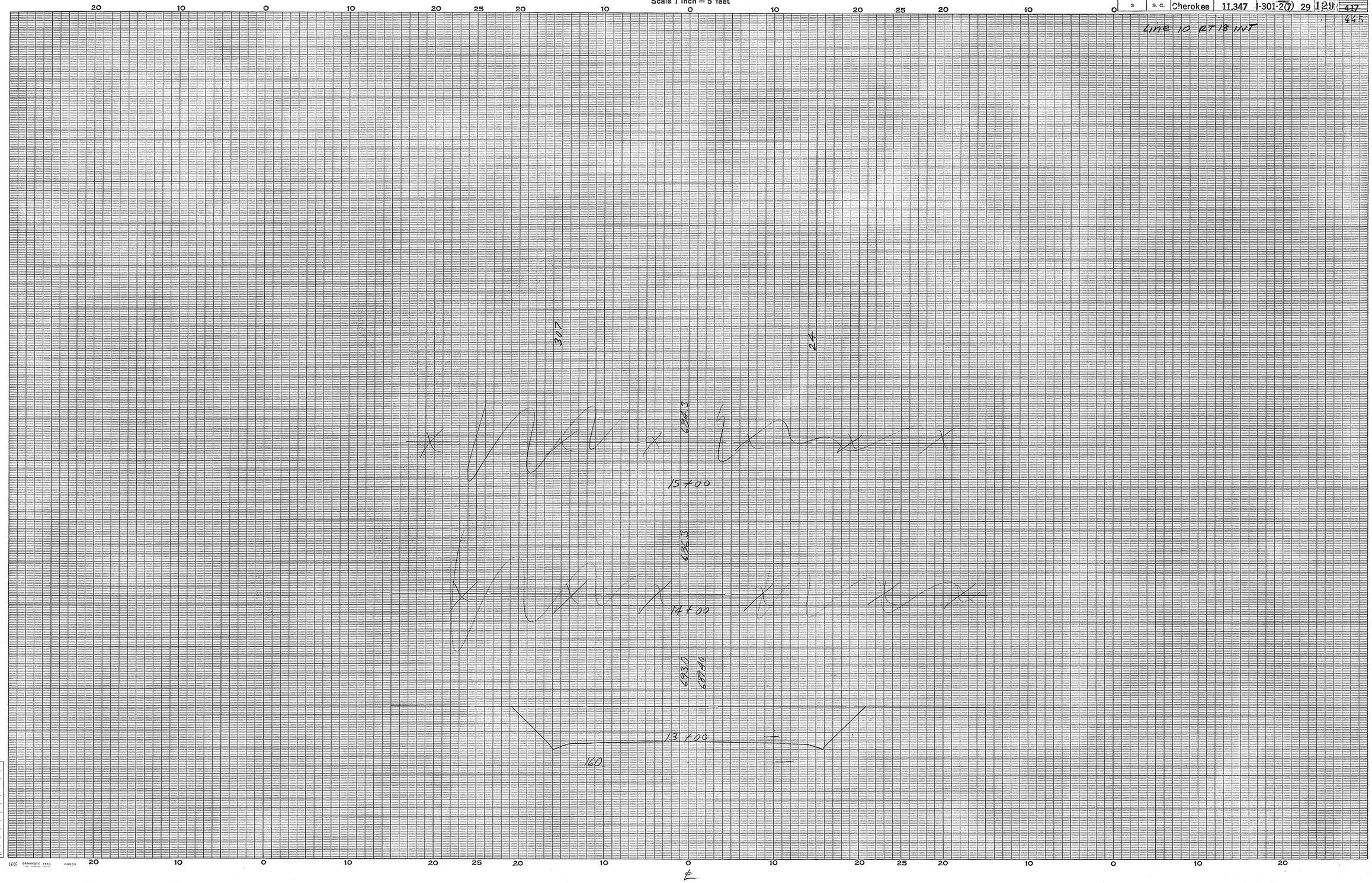
(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	129	417

445



Cherokee Co.
Frontage Rd. Lt.
Rt. 29 & 18 Int.

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Final Areas by.....
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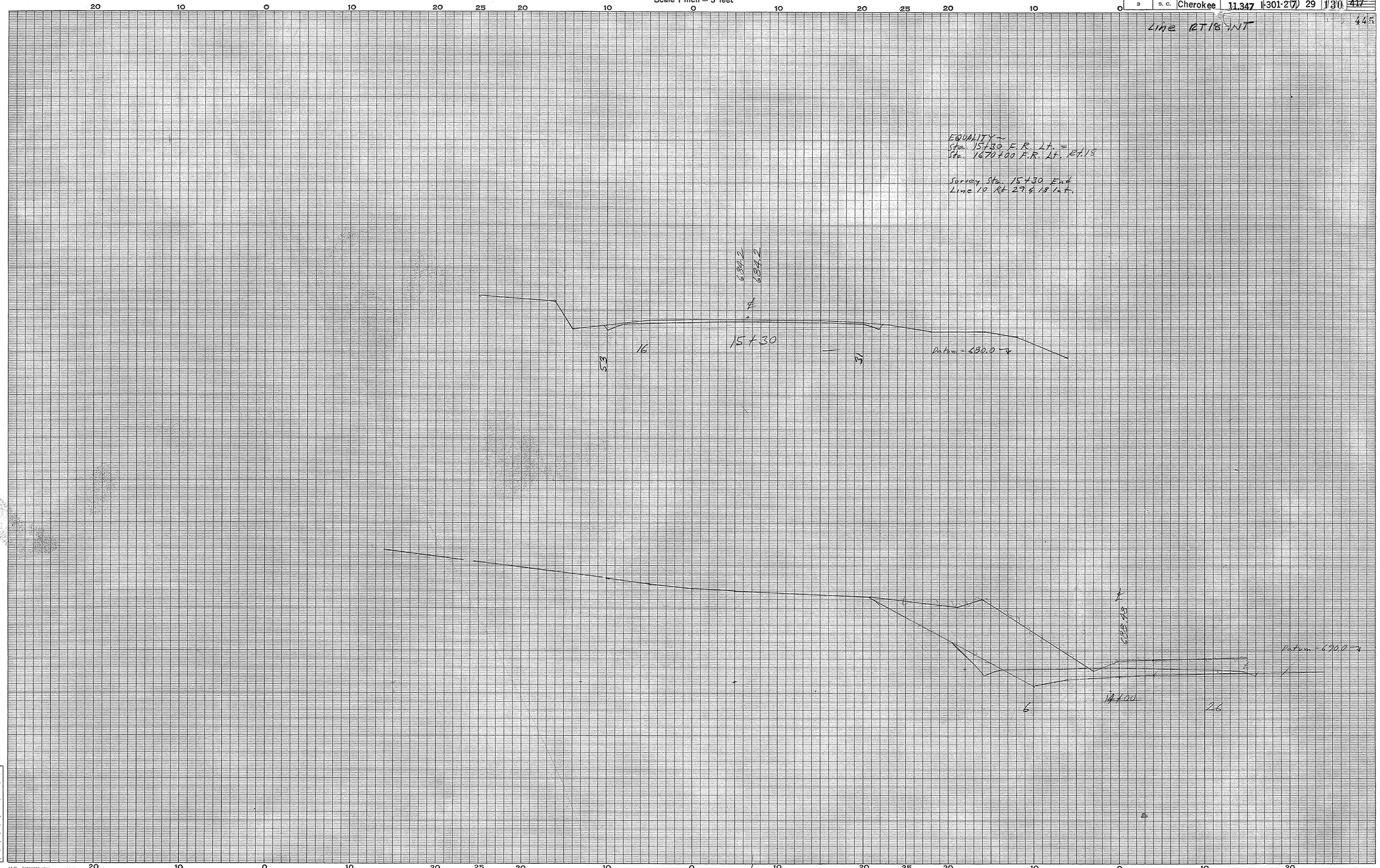
Quantities Transferred and Inked by.....

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	130	~~417~~ 445



Cherokee Co.
Frontage Rd. Lt.
Rt. 29 & 18 Int.

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Areas by.....
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Template Sections Revised by.....
" " Checked by.....
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

3

Fed. Road Proj. No.	State	County	Docket No.	Project No.	Route No.	Sheet No.	Total Sheets
3	SC	CHEROKEE	11.347	1301-2 (1)	29	131	445

DETAIL OF INTERSECTION
US RT. 29 & SC RT. 5
SCALE: 1"=100'

P.T. 1501+60.1
1501+62.0 End Line 1

CLYDE T. SINGLETON, SR.
P.L. 144+88

P.C.C. 1441+50

E.R. JASON Et Al
D. 9-26-57

Inplace 18" C.M. pipe
place 60'-18" R.C. pipe
on 30° Skew

HATTIE M. TURNER

P.C. 1411+61

VERNON L. & RUTH H. KITE
163-98.5%

Clyde T. Singleton, Jr. & William P. Corkery
D. 10-22-57

Lynnah Hulsey Et. by Heirs
D. 9-26-57

Retain 12" pipe

Place 136'-18" R.C. Pipe-2-36° Bends
Const. Type 9 Earth Basin

TIE EQUALITY:
STA. 1511+34 LINE 3=
STA. 1364+73.8 LINE 1

Retain 76'-15" R.C. pipe & C.B.
add 96'-15" R.C. pipe
Construct Type 1 C.B.

During Construction Relocate & by shifting
12' Rt. as shown by dashed line below.

2100' Bridge to be Constructed under Separate
Contract from Sta. 1321+99.99 to Sta. 1341+99.99 on
F.A.P. No. I-177-3(1)2 & (3) D.E.T. No. 11.345.5

TIE EQUALITY:
STA. 1331+99.0 LINE 1=
STA. 1901+37.2 U.S. Rt. 29

Retain A'x6'x24' R.C. Box Culvert
Ext. to Right See Sheet 283

Const. A'x6'x48' R.C. Box Culvert
See Sheet No. 283-B

Place 60'-18" R.C. pipe
Place 60'-18" R.C. pipe

Inplace 40'-18" R.C. pipe

Retain 108'-48" R.C. pipe & add 168'-48" R.C. pipe

Clyde T. Singleton Jr. & William P. Corkery
D. 10-22-57

Retain 60'-15" R.C. pipe, C.B. & add 12'-15" R.C. pipe

Stub for Elec. Stop Sign
190+76.2

Elec. Stop Sign
189+38.2 Rt.

Retain 7'X7'x162' R.C. Box Culvert
Extend 93' Right & 96' Left
Sheet No. 242 & 242-A

Place 36'-18" R.C. pipe

Relay 20'-18" R.C. pipe & add 4'-18" R.C. pipe

Place 84'-18" R.C. pipe
Construct Type 9 C.B.

Frontage Road Sheet No. 211-232
1301 R/W

Lymon Hulsey Et. by Heirs
D. 11-13-57

TIE EQUALITY:
STA. 1901+11.6 U.S. Rt. 29=
STA. 134+00.5 Rt. 5

LIMESTONE INVESTORS CO. GREENVILLE, S.C.

Construct Ramp Est. 250 C.Y.

Construct 6'x6'x120' R.C. Box Culvert
Skew 15° to Const. Line 2
Curve Data Survey & U.S. 29
P.I. = 1908+53.2
Δ = 5°-17' Rt.
D = 0°-30'
T = 528.8'
L = 1056.7'
E = 12.2'

Place 20'-15" R.C. pipe

Place 68'-15" R.C. pipe
24° Skew D.I.

LIMESTONE INVESTORS, Inc.
by Owners
D. 11-13-57

Remove 20'-15" R.C. pipe

Retain 72'-18" R.C. pipe & add 148'-18" R.C. pipe
Construct S. Type 9 C.B.
Place 4'-15" R.C. pipe

Elevation 30 inches above ground 1937+25

LINE 2

P.C. 0+00	P.I. = 0+82.5	P.T. 1+64.2				
51.5'	Δ = 13°-08' Rt.	62.8'	88.5'			
34.5'	D = 8°-00'					
6" Gum	T = 82.5'					
	L = 164.2'					
	E = 4.1'					

LINE 2

P.T. 1+64.2		P.I. = 6+19.8		P.O.T. 8+64.5		P.I. = 14+36.6		P.C. 13+07.6		Nail & Stopper Edge P.T. Rt. 29	P.T. 15+64.3
62.8'	88.5'	32.0'		36.2'	22.0'	Δ = 12°-59' Rt.		14.1'	33.4'	78.8' 78.8'	43.0' 39.4'
		P.I. Δ 6+19.8 = 13°-19'-00" Lt.		4" Pecan	4" Pecan	D = 5°-00'					
		29.9'				T = 128.9'				P.I. = 14+36.5	
						L = 256.7'					
						E = 7.2'					

LINE 1

Edge Pvt. Rt. 5		P.I. = 1301+50.5		Et. 5 Sign		P.T. 132		P.I. 1901+37.2 Et. 29 = 133+99.0 Et. 5		Nail & Stopper Edge Pvt.	P.I. = 1411+85.7
14.4'	17.9'	Δ = 3°-00' Et.		51.6'		30.5'	31.2'	7.1'	95.9'	40.0'	Δ = 45°-32' Rt.
P.C. 1279+00.4		D = 15.00'		P.I. 1302+50.5				Signal Light Post		P.C. 1411+16.1	D = 17°-30'
		T = 150.1'		54.7'							T = 169.6'
		L = 300.0'									L = 338.9'
		E = 2.0'									E = 3.8'

LINE 3

P.C. 0+00		P.I. = 5+55.4		P.I. = 8+55.6		Ken Culin Hollow		P.T. 11+23.5		P.I. 15+13.4		P.I. = 21+26.7							
31.7'		R.O.T. 0+00		Δ = 45°-27' Lt.		39.4'	76.1'	34.5'		77.1'	27.8'	30.5'							
22.4'		22.3'	27.1'	D = 8°-00'				R.O.T. 14+24.5		P.O.T. 15+41.4	T = 95.2'								
				T = 300.2'		P.I. 8+55.6		31.7'		Nail & Stopper Edge Rt. 5	L = 189.2'	D = 8°-00'							
				L = 568.1'							E = 6.3'	T = 95.2'							
				E = 60.3'						25.0'		L = 189.2'							
												E = 6.3'							
P.I. = 23+33.9		P.C. 22+20.7		P.I. = 23+00.5				P.T. 25+52.9		P.C. 26+49		P.I. = 27+21.7		8" Pine	6" Pine	P.I. = 29+60.1			
Δ = 19°-07' Rt.		62.9'	66.9'	Δ = 19°-04' Lt.				49.7'		49.7'		Δ = 25°-28' Rt.		23.9'	11.3'	Δ = 28°-48' Lt.			
D = 9°-29.7'				D = 18°-00'				42.1'	78.7'		21.8'	D = 36°-00'				D = 16°-00'			
T = 113.2'		P.C. 24+14.0	77.5'	T = 53.5'		P.I. Δ 25+00.5 = 19°-04' Lt.						T = 72.7'		P.T. 29+88.4		T = 81.7'			
L = 226.3'			84.1'	L = 105.9'					12" Pine		10" Poplar	L = 135.2'				L = 1600'			
E = 0.6'		P.R.C. 24+47.0		E = 4.5'		33.5'			8" Poplar			E = 12.6'				E = 10.3'			

LINE 1

P.I. M2+85.7		P.C.C. 144+55		Curve Data Existing Et. 5				Fence Post											
46.6'	73.0'	35.6'	52.8'	P.I. = 141+79.5															
18" Oak	12" Pine	8" Pine	8" Pine	Δ = 13°-16' Et.				35.0'	29.1'										
				D = 0°-45'															
				T = 890.8'				P.T. 150+60.4 = 150+62.0											
				L = 1773.3'															
				E = 51.7'															

LINE 3

4" Pine		4" Pine		P.I. = 29+60.1				P.T. 30+38.4											
17.9'	22.7'			19.4'	18.1'			4.5'	15.0'										
P.C. 28+78.4				Nail & Stopper Edge U.S. Rt. 29				Nail & Stopper Ahead of U.S. Rt. 29											

Route 5

U.S. Rt. 29

N 68°-31' E

N 73°-48' E

Line 1

Line 2

Line 3

100' R/W

110' R/W

120' R/W

125' R/W

140' R/W

150' R/W

170' R/W

480'

1708' R/W

0400

5100

10400

15100

15400

19100

19400

1835

1890

1900

1920

1935

3900

6400

+00

+100

+200

+300

+400

+500

+600

+700

+800

+900

+1000

+1100

+1200

+1300

+1400

+1500

+1600

+1700

+1800

+1900

+2000

+2100

+2200

+2300

+2400

+2500

+2600

+2700

+2800

+2900

+3000

+3100

+3200

+3300

+3400

+3500

+3600

+3700

+3800

+3900

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	132	~~417~~ 445

Line 1 RT. 5 INT

PLAN — SURVEYED, PLOTTED, NOTE BOOK, NO., ALIGNMENT CHECKED, RT. OF WAY CHECKED, BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, BY, DATE, STRUCTURE NO. & TYPE, STRUCTURE NO. & TYPE CH'KD

Route 5 See Sheet 131
LINE "1"

B.M. No. "X" on South End of Abutment of Bull Neals Creek Bridge
Lt. 3 Lt. Sta. 123+71.4 Rt. 5
Elev. 589.87

B.M. No. 1 Nail in Power Pole No. 840
Rt. Lt. Sta. 1401+88 Rt. 29 Elev. 592.83

B.M. No. 2A Nail in 10" Pine
45' Rt. Sta. 1417+34 (Rt. 5) Elev. 625.12

B.M. No. 3A. Nail in Phone Pole #9
17' Lt. Sta. 1429+23 (Rt. 5) Elev. 638.81

+13.9 | +12.0 | +16.0 | +11.1 | +10

EXC. — EMB. 13,108
B.O.R. 14,419 10% 1,311
S/TOT. 14,419 S/TOT. 14,419
LESS 14,419 LESS 14,419
TOT. — TOT. —
OVERHAUL: 2,338 C.Y.M.M.
Obtain 14,419 C.Y. Borrow from 14,419 C.Y. Waste Sta. 1842+00 to 1825+00 Frontage Rd. Right

EXC. 38 EMB. 12,639
B.O.R. 13865 10% 1264
S/TOT. 13903 S/TOT. 13903
LESS 13865 LESS 13865
TOT. 38 TOT. 38
OVERHAUL: 2,730 C.Y.M.M.
Obtain 13,865 C.Y. Borrow from 13,865 C.Y. Waste Sta. 1842+00 to 1851 Frontage Rd. Right

EXC. 1258 EMB. 1194
10% 119
TOT. 1258 TOT. 1258

Sta. 1337+99.0 Line "1" = Sta. 1401+31.2 Main Line

Survey Sta. 1274+39 Begin Line "1" Rt. 29 & Rt. 5 Int.

300' V.C.

-6.00%

0.48%

P.I. = 1337+00
El. = 613.87

600' V.C.

-3.18%

+1.00%

FINISH GRADE

O.A. = 5 Ac.
C = 0.6

P.I. = 1397+00
El. = 607.87

Survey Sta. 1435+00 End Line "1" Rt. 29 & Rt. 5 Int.

45 Sta. 150 Deg. Back: Sta. 1504+24 Ahead

P.I. = 1299+00
El. = 581.87

500' V.C.

Begin Rdwy. Fill Sta. 1339+76.55

End Rdwy. Fill Sta. 1344+76.55

TOE OF FILL 1334+22

TOE OF FILL 1349+50

Use 40'-52 Section
10" Macadam Base
1½" Binder
1" Top

2:1 Slopes

P.C. 582.62 582.62 | 582.70 | 583.53 | 585.06 | 581.28 | 578.22 | 573.87 | 571.64 | 600.87 | 603.84 | 606.27 | 606.71 | P.C. 611.51 | 611.64 | 611.87 | P.T. 610.87 | 610.46 | 610.32 | 610.22 | 610.15 | 610.26 | 610.54 | 611.01 | 611.63 | 612.42 | 613.42 | 614.58 | 615.91 | 617.41 | P.T. 620.59 | 622.10 | 624.95

Sta. 1243 | 4 | 5 | 6 | 7 | Sta. 1338 | 8 | 9 | 130 | 1 | 2 | 3 | Sta. 1438 | 4 | 5 | 6 | 7 | 8 | 9 | 140 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 150

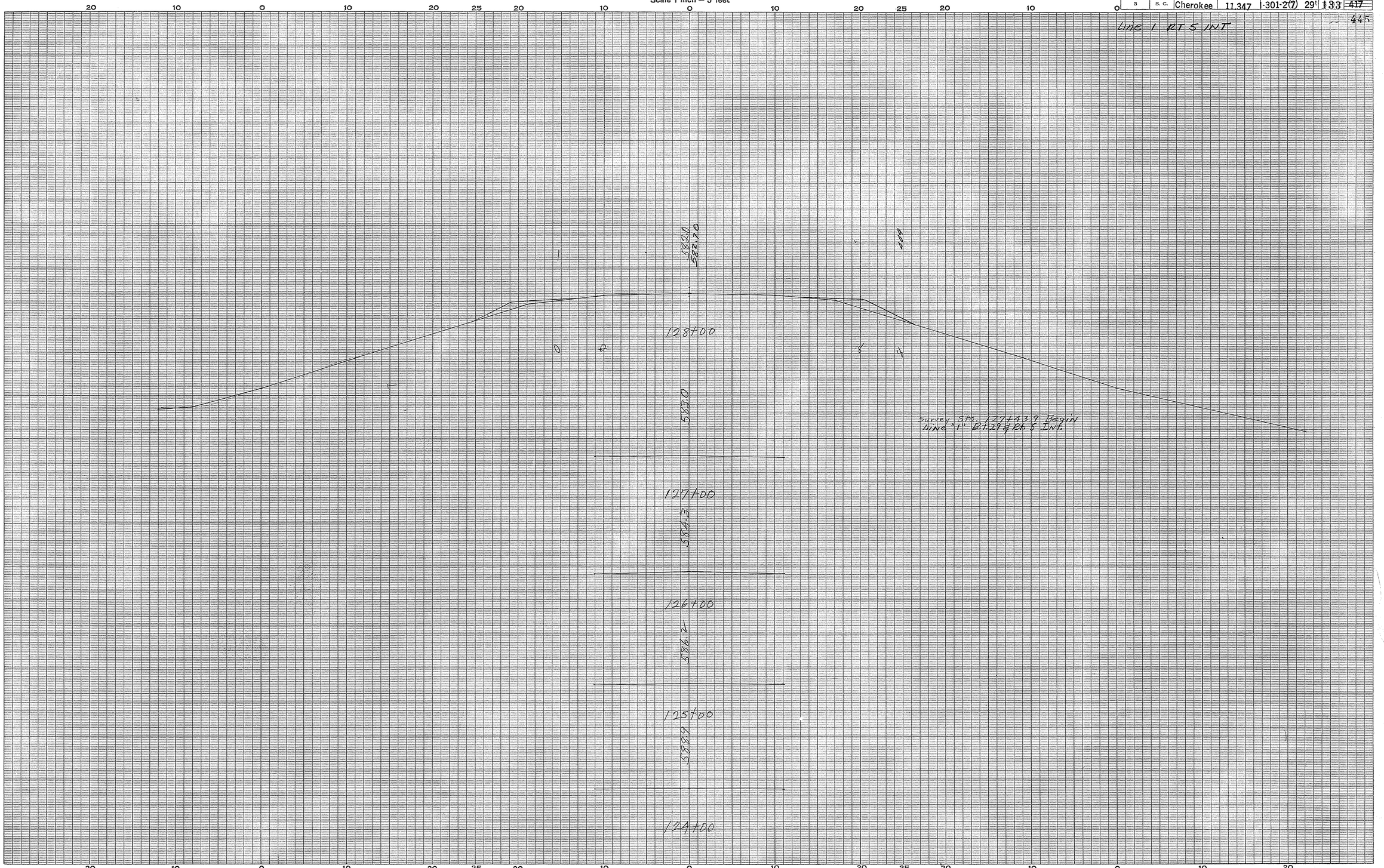
Route 5
Cherokee Co.
U.S. 29 & Rt. 5
Crossing
Line "1"
3

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	133	~~417~~ 445



Cherokee Co.
Rts. 29 & 5 Int.
Line 1

Ground Surface Platted by J.W.H.
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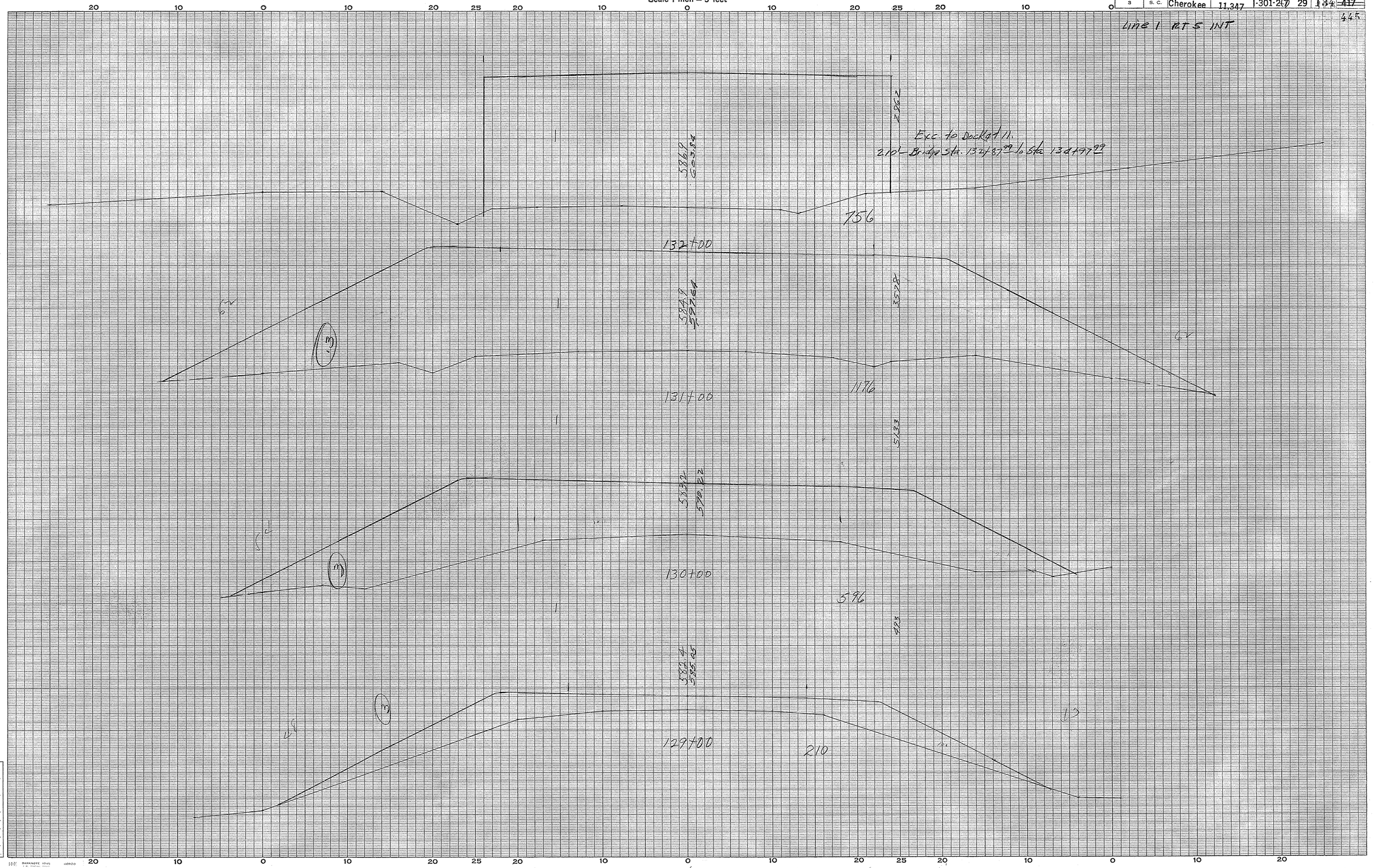
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

①

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	1-301-2(7)	29	134	~~417~~ 445



Cherokee Co.
Rts. 29 & 5 Int.
Line 1

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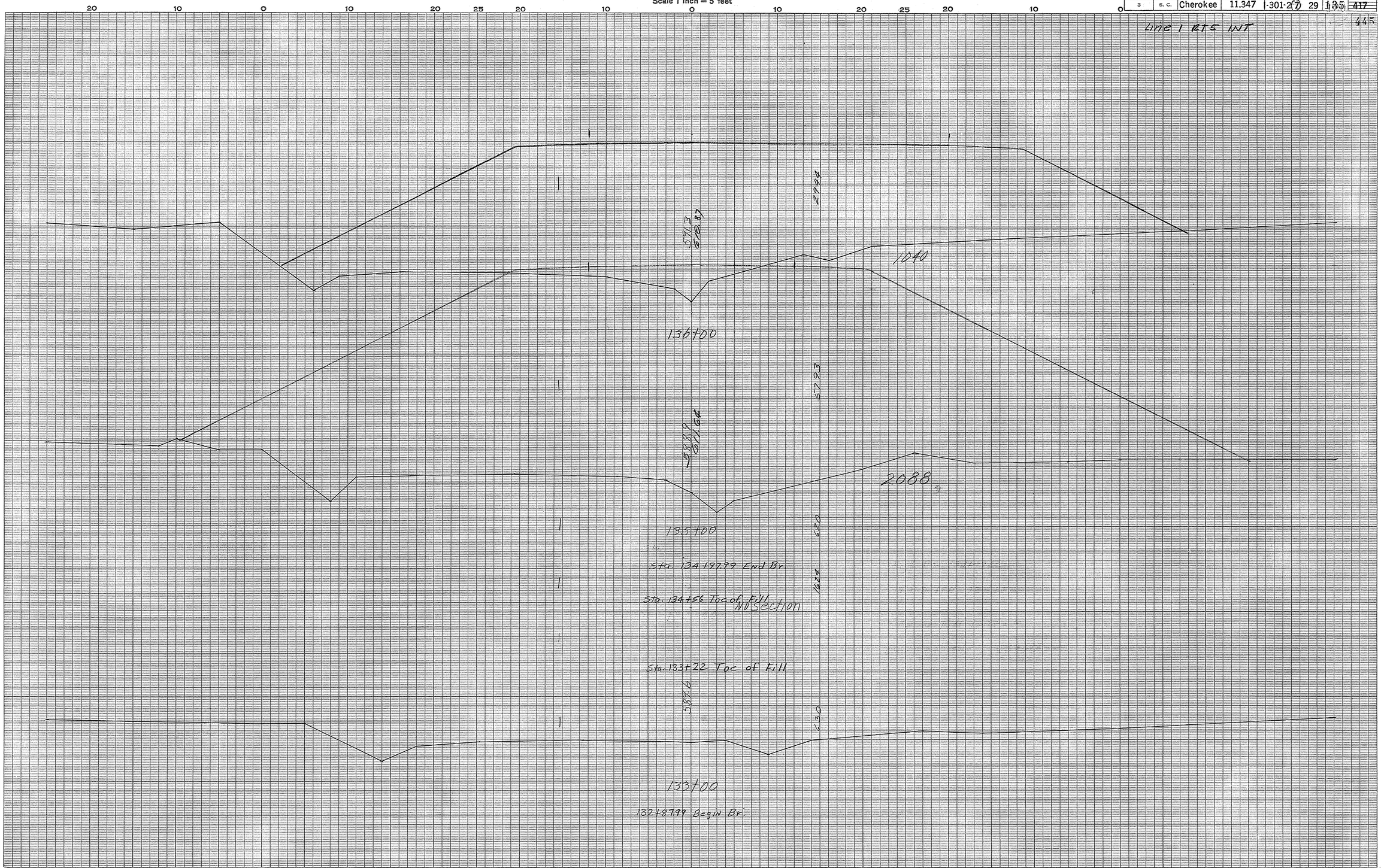
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	135	~~417~~ 445



Cherokee Co.
Rts. 29 & 5 Int.
Line 1

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CROSS SECTIONS

Scale 1 inch = 5 feet

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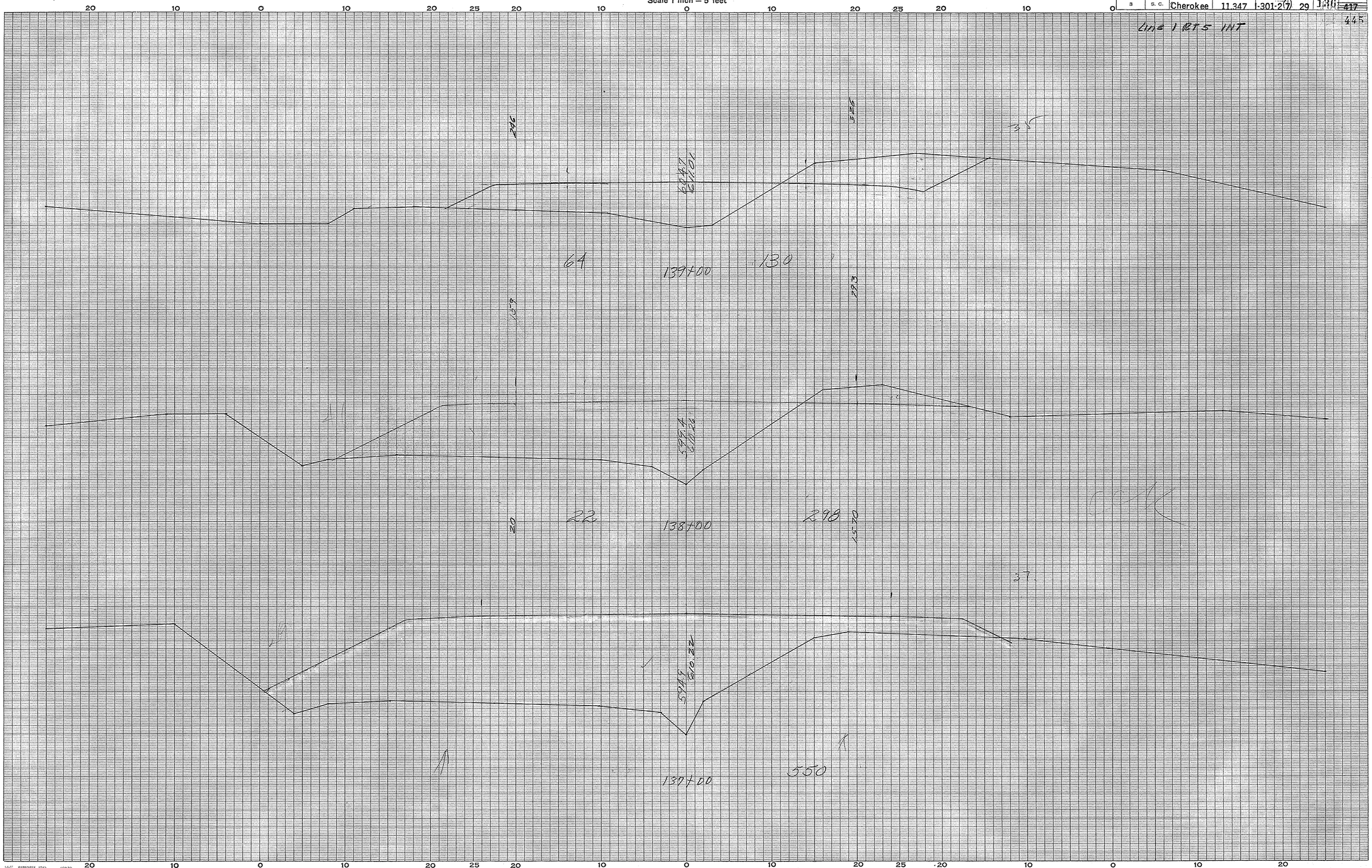
3	S. C.	Cherokee	11,347	-301-2(7)	29	136	~~417~~ 445



Cherokee Co
RTS. 29 & 5 Int.
Line 1

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Areas by
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Final Areas by
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Quantities Transferred and Inked by

(4)

CROSS SECTIONS

Scale 1 inch = 5 feet

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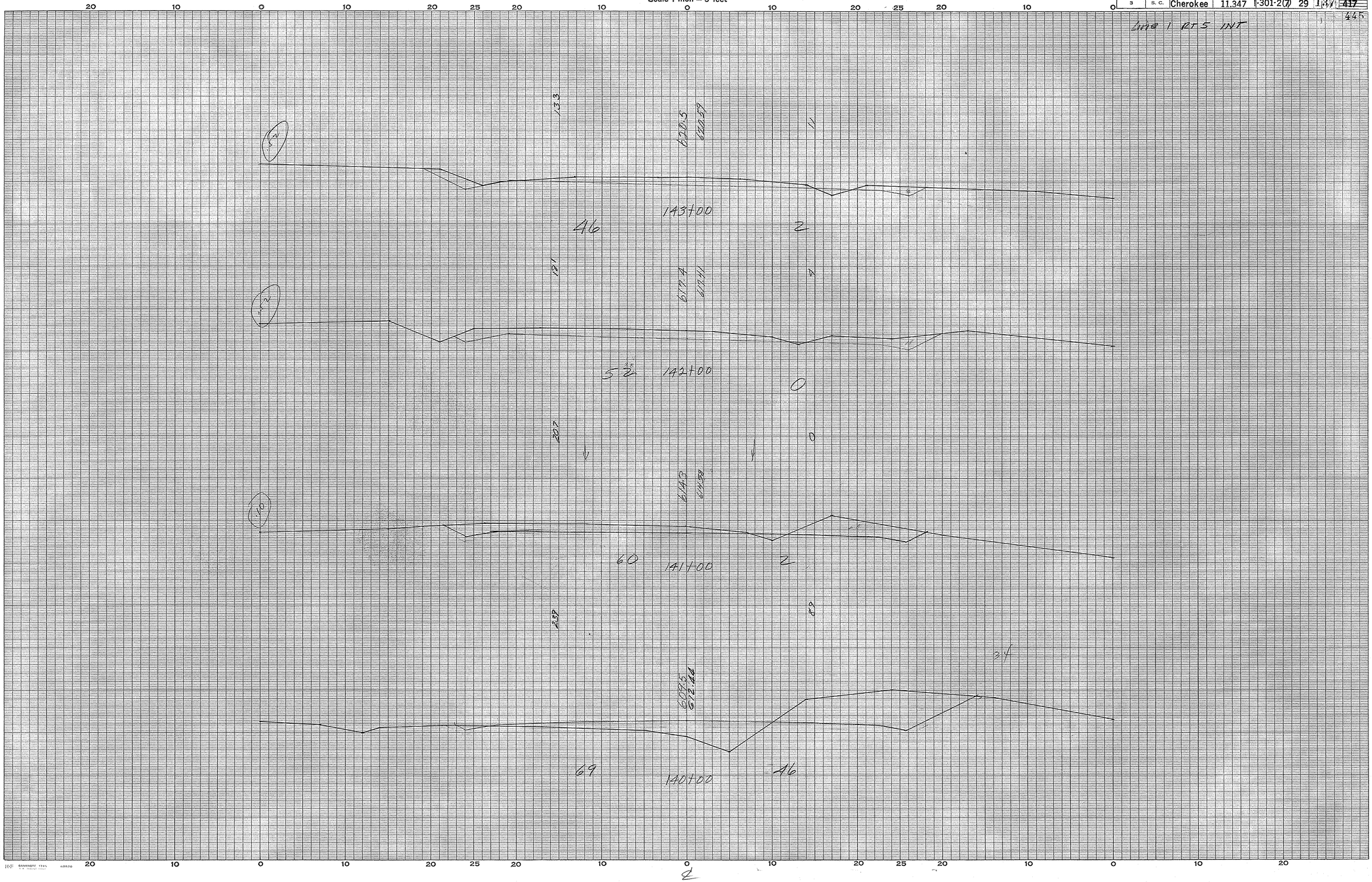
3	S. C.	Cherokee	11.347	I-301-2(7)	29	137	~~417~~ 445



Cherokee Co
RTS. 29 & 5 Int.
Line 1

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Quantities Transferred and Inked by

(5)

CROSS SECTIONS

Scale 1 inch = 5 feet

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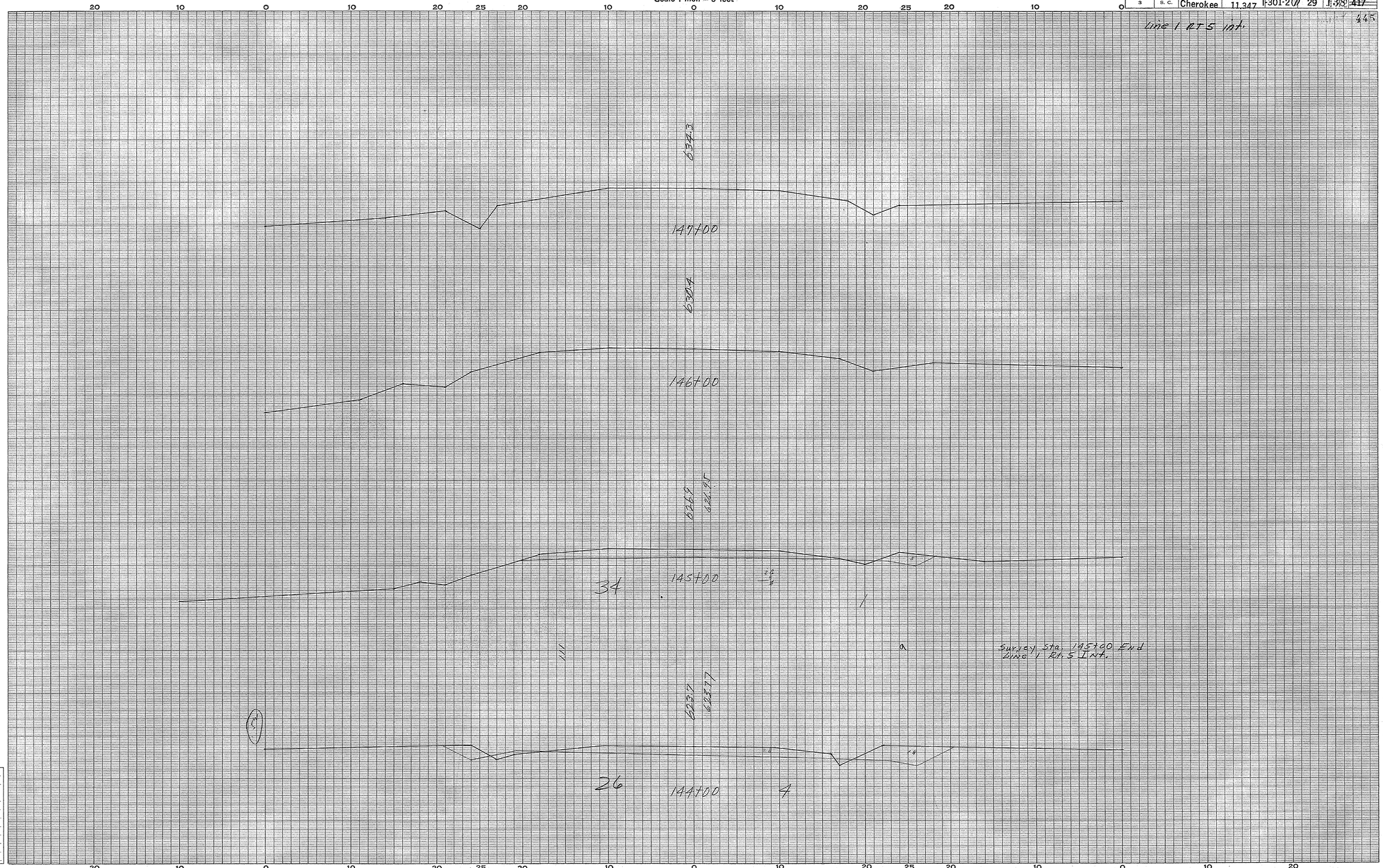
3	S. C.	Cherokee	11,347	I-301-2(7)	29	138	~~417~~ 445



Cherokee Co.
Rts. 29 & 5 Int.
Line 1

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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

(6)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	130	~~417~~ 445

Line 2 RT. 5 INT.

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
PROFILE CHECKED
GRADES & N.S. NOTED
STRUCTURE NOTATIONS CHECKED
BY R.B.B.
DATE 5/25/53

Sag Sheet 131

Line 2 Rt. 5 Int.

Survey Sta. 0+00 Begin "Line "2"
Rt. 29 & Rt. 5 Intersection

Sta. 0+00 Line "2" =
Sta. 1894+67.5 Main Line

300' V.C.

-0.66%

P.I. = 3+00
El. = 592.39

+3.64%

200' V.C.

+1.66%

P.I. = 5+50
El. = 601.49

EXC. 139 EMB. 35,381
BOR. 38,785 TOP. 3528
S-TOT. 38,919 S-TOT. 38,919
LESS 38,785 LESS 38,785
TOT. 139 TOT. 139
OVERHAUL = 170,781 C.Y.M.M.

Sta. 1+94.8 Line "2" =
Sta. 131+99.99 Line 1

P.I. = 8+50
El. = 601.26

200' V.C.

FINISH GRADE

-3.84%

300' V.C.

-0.66%

P.I. = 12+30
El. = 585.10

D.A. = 4 AC
C. = 0.5

Obtain 38,785 C.Y. Borrow from
5979 C.Y. Waste Sta. 1887+00 to 1875+00
Frontage Rd. Right
5047 C.Y. Waste Sta. 1930+00 to 2010+00 Main Line
27759 C.Y. Waste Sta. 2042+00 to 2048+00 Main Line

Survey Sta. 15+64.3 End
Line "2" Rt. 29 & Rt. 5 Int.

Sta. 15+64.3 Line "2"
Sta. 1910+08.6 Main Line

Sag Sheet 2-A

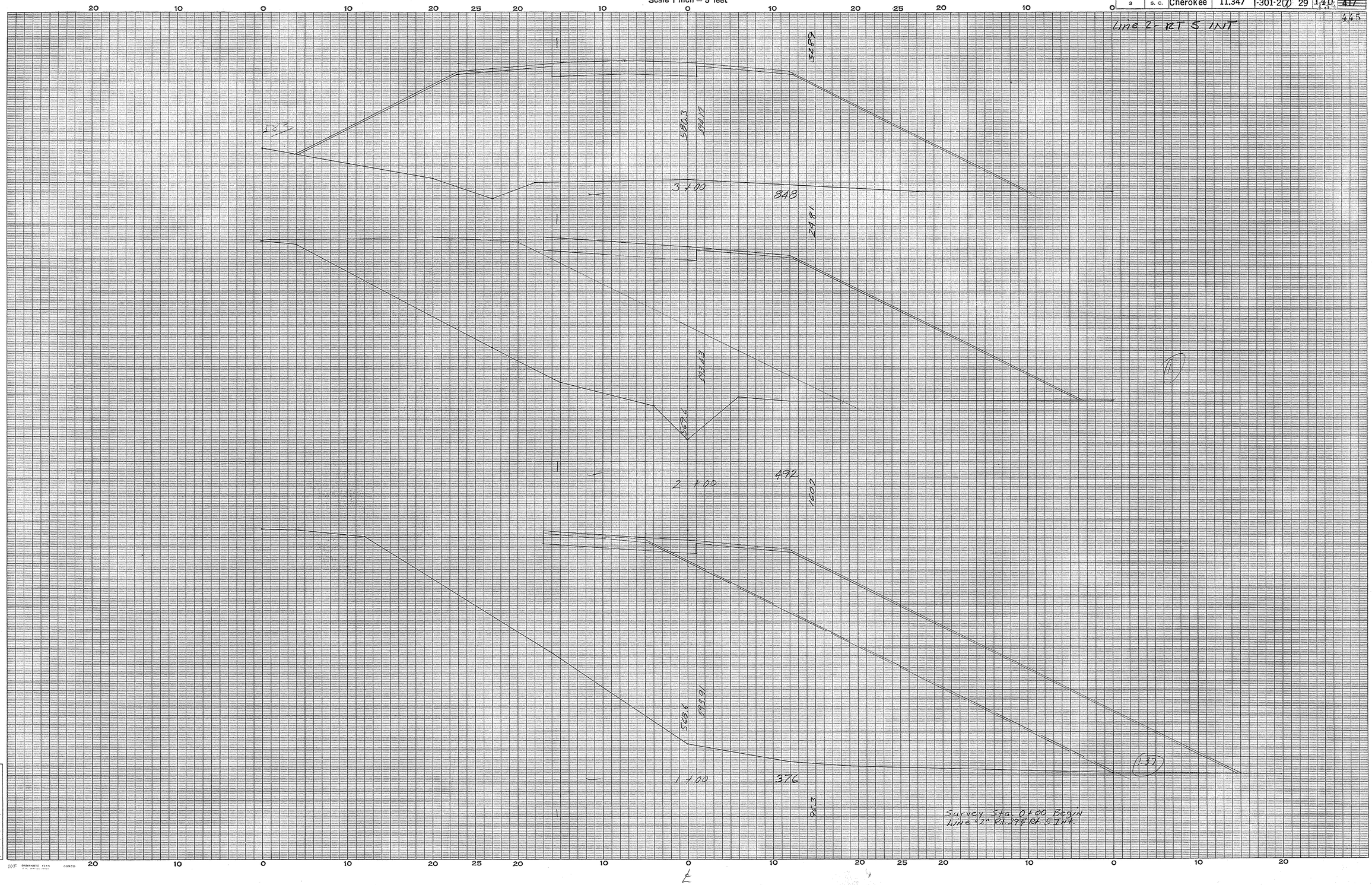
+00 +64.3

| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	140	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Interchange
Line 2

3

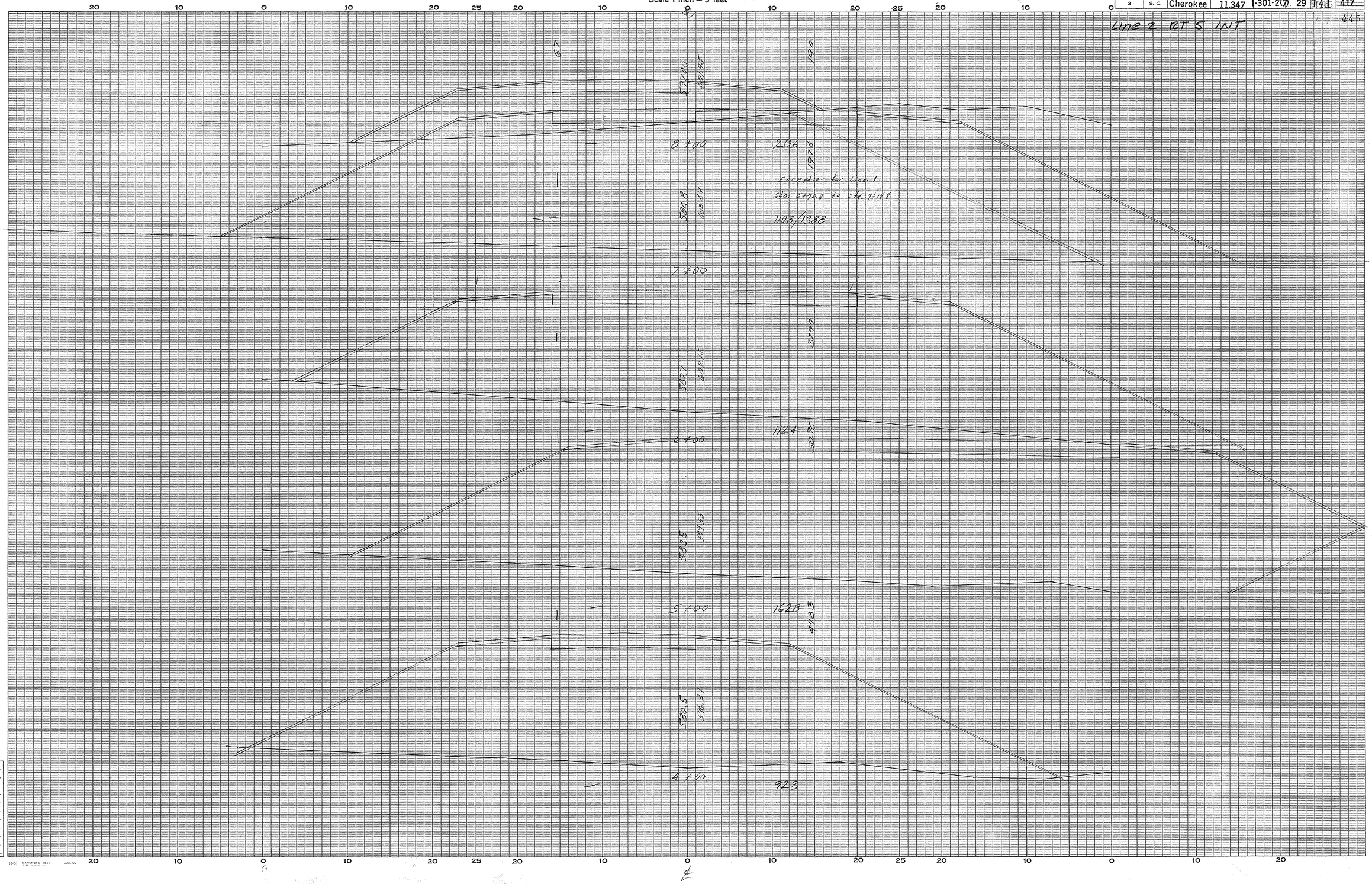
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	141	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Int.
Line 2

Ground Surface Platted by J.T.
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

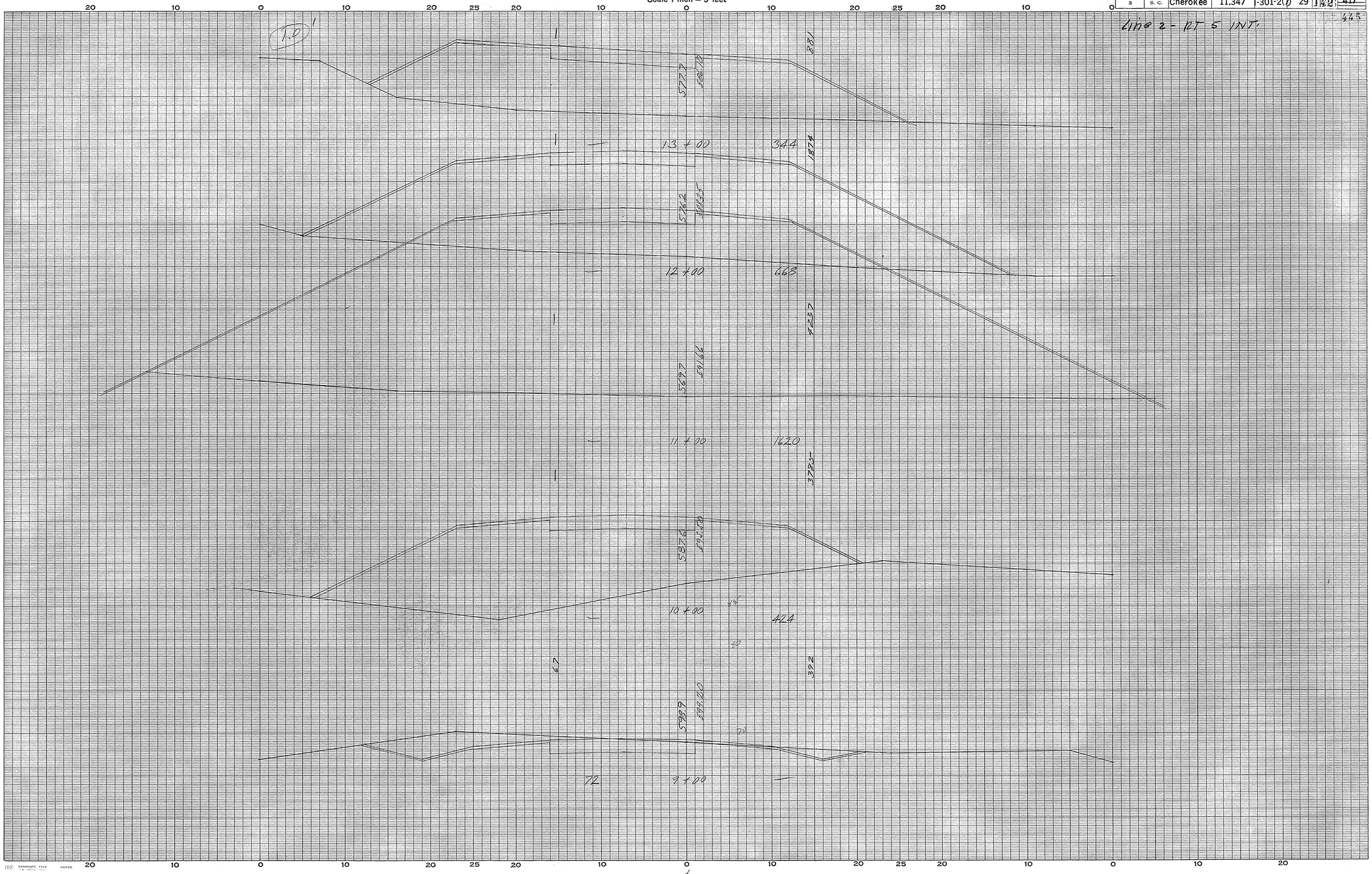
(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	142	417

445



Cherokee Co. Int.
Rt. 29 & 5
Line 2

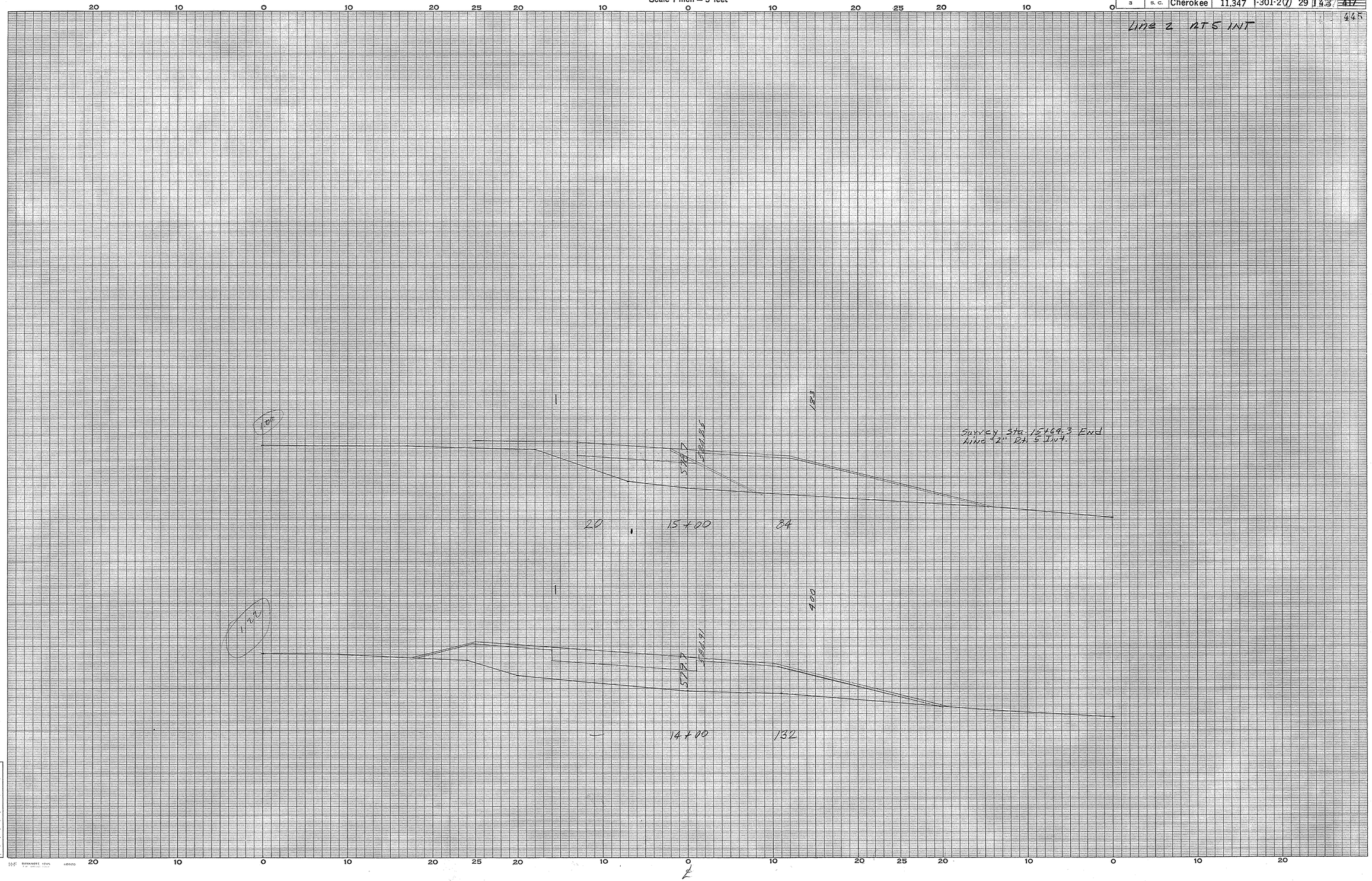
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(3)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	143	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Int.
Line 2

Ground Surface Platted by JS
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

4

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	144	~~417~~ 445

Line 3 RT. 5 INT.

PLAN
SURVEYED BY DATE
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. PT. OF INT. CHECKED
STRUCTURE NO. ATTN'S CHKD

PROFILE
SURVEYED P.D.R. 6/57
PLOTTED
NOTE BOOK GRADES CHECKED
NO. STRUCTURE NO. ATTN'S CHKD

Line 3 Rt 5 int
See Sheet No. 131.

Line 3 Rt. 5 Int.

Survey Sta 3+00 Begin Line "3" Rt. 29 & Rt. 5 Int.

EXC. 98 EMB. 89
10% 9
TOT. 98 TOT. 98

EOC. Fill

FINISH GRADE

-7.88%

150' V.C.

P.I. = 8+78
EL. = 582.25

EXC. 20 EMB. 53725
@ Ldg. 59,078 10% 5373
Strip 59,078 Fill 53,698
Less 59,078 Cls 53,698
Tot. 20 Tot. 20
OVERHAUL = 118,156 C.Y.H.M.
@ Obtain 59,078 C.Y. Borrow From 59,078 C.Y. Waste Sta. 1851 ± to 1875 ± From Page Rd. Right
Sta. 15+16.4 Line "3"
Sta. 136+73.8 Line "1"

+2.28%

200' V.C.

P.I. = 13+50
EL. = 607.33

+.42%

+.70%

P.I. = 16+50
EL. = 607.81

200' V.C.

-5.40%

See Section Sheet 2-A

300' V.C.

P.I. = 19+50
EL. = 587.99

-0.42%

EOC. Fill

EXC. 2391 EMB. 2174
10% 217
TOT. 2391 TOT. 2391

738.4

P.I. = 23+50
EL. = 588.32

300' V.C.

-1.59%

300' V.C.

P.I. = 27+00
EL. = 582.91

D.A. = 75 P.C.
C = 0.5°

0.00%

Survey Sta. 30+38.4 End Line "3" Rt. 29 & Rt. 5 Int.

Cherokee Co.
U.S. 29 & Rt. 5
Crossing
Line "3"

3

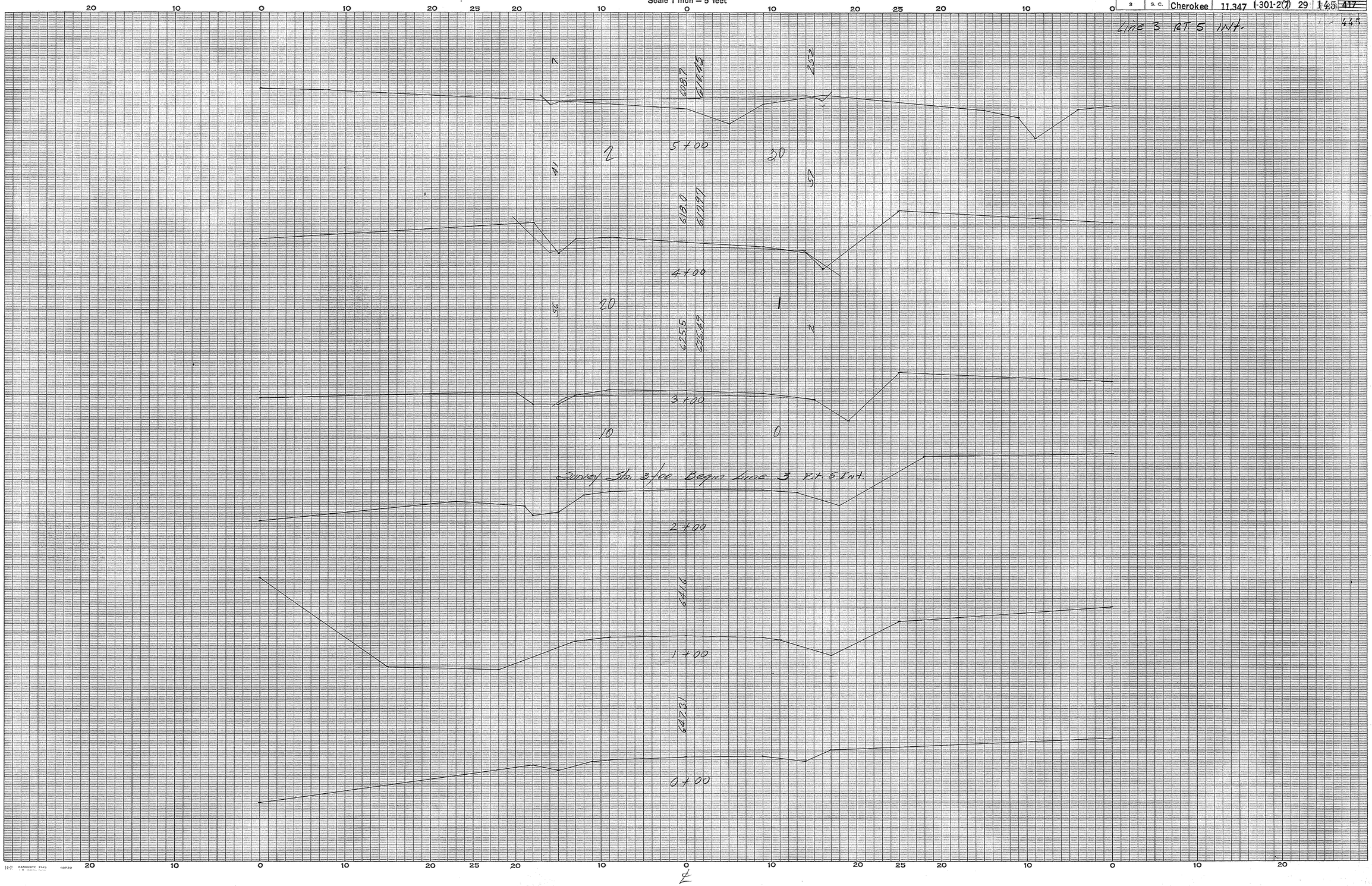
PLATE 1 - PLAN - PROFILE - S.C.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	145	~~417~~ 445

Line 3 RT. 5 Int.



Cherokee Co.
Rt. 29 & 5 Int.
Line 3

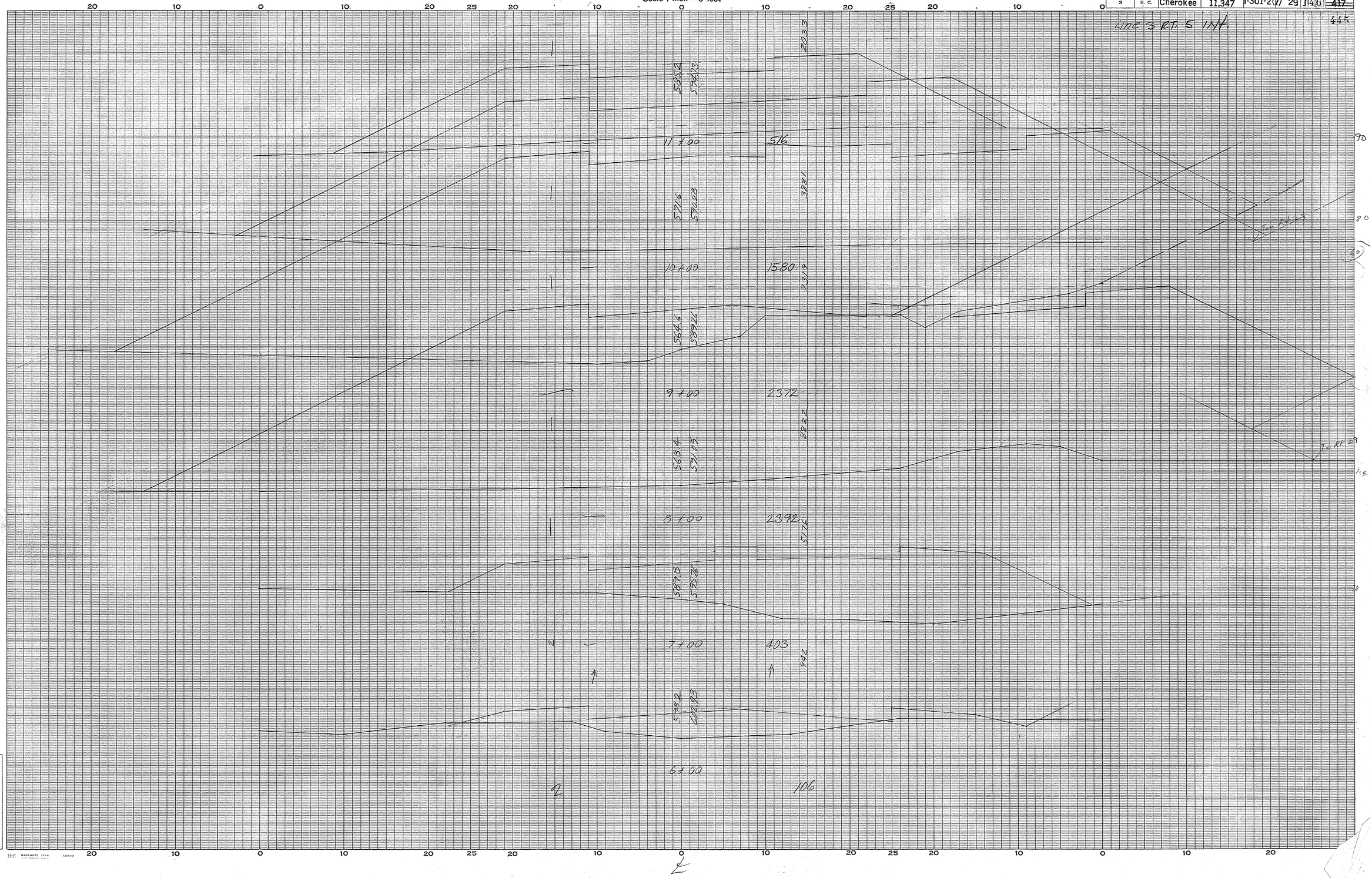
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3 1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	1-4(6)	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Int.
Line 3

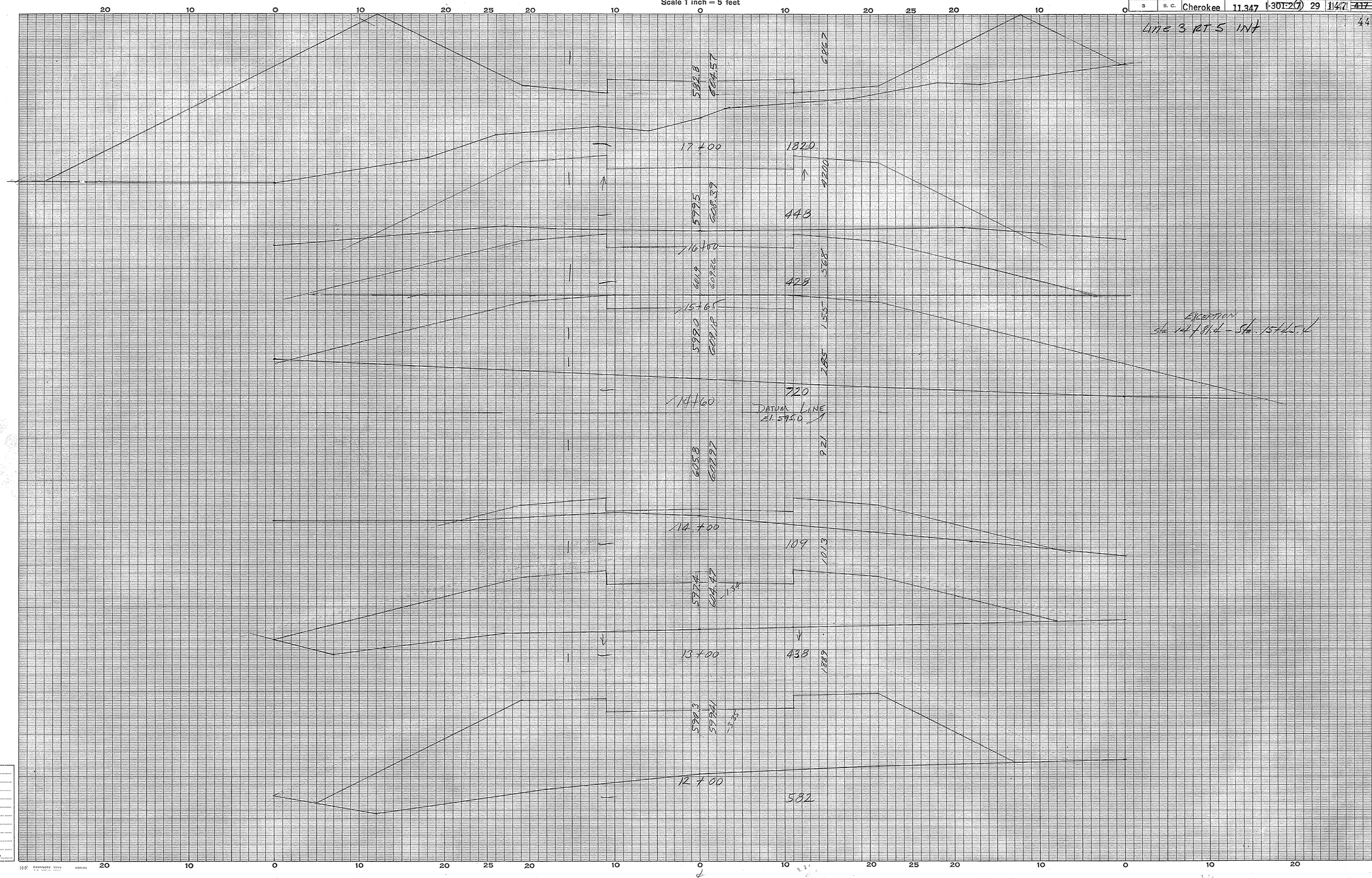
Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	147	~~417~~ 445



Cherokee Co
Rt. 29 & 5 Int.
Line 3

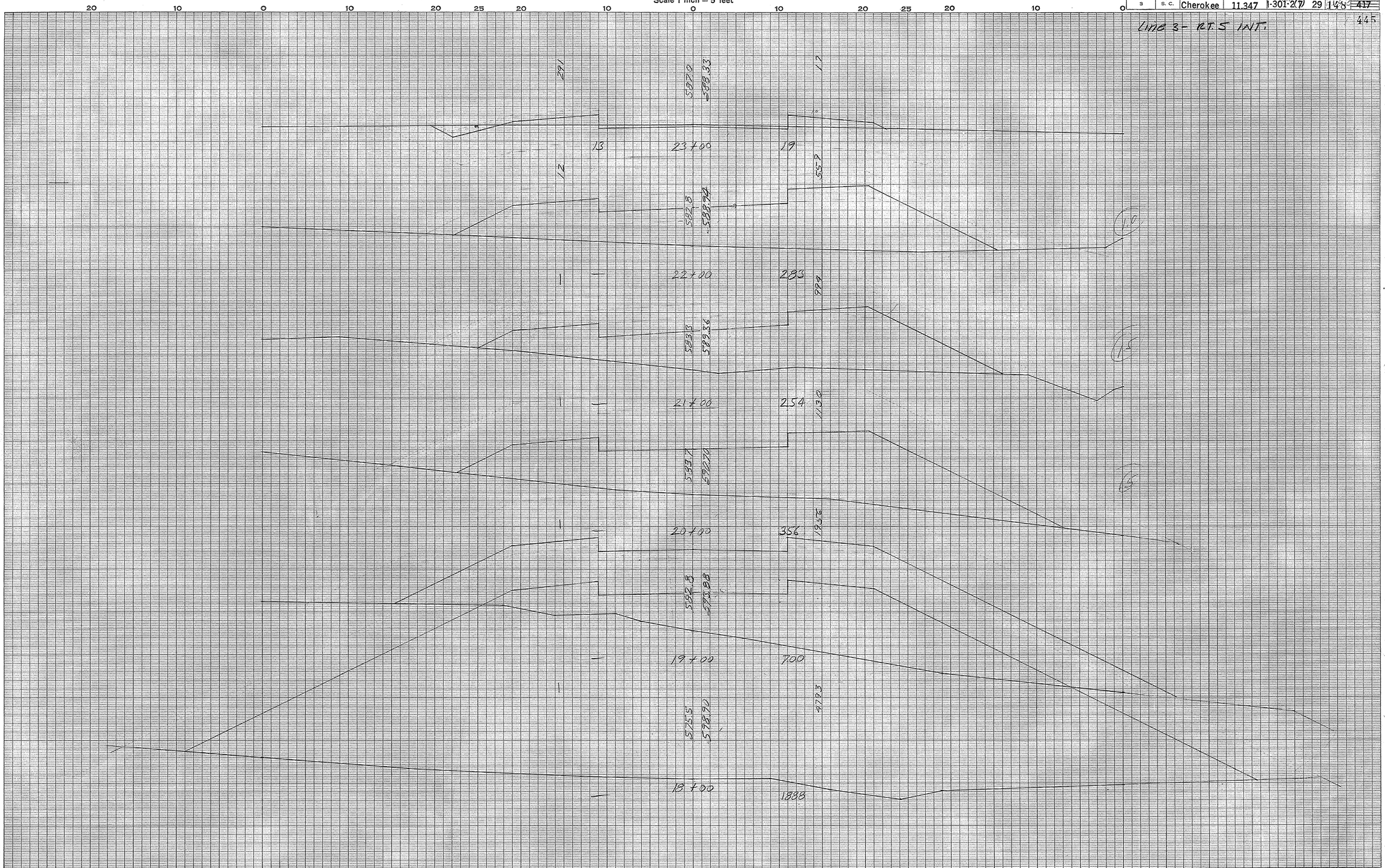
Ground Surface Platted by JB
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

3

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	1-301-2(7)	29	148	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Int.
Line 3

Ground Surface Platted by JF
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

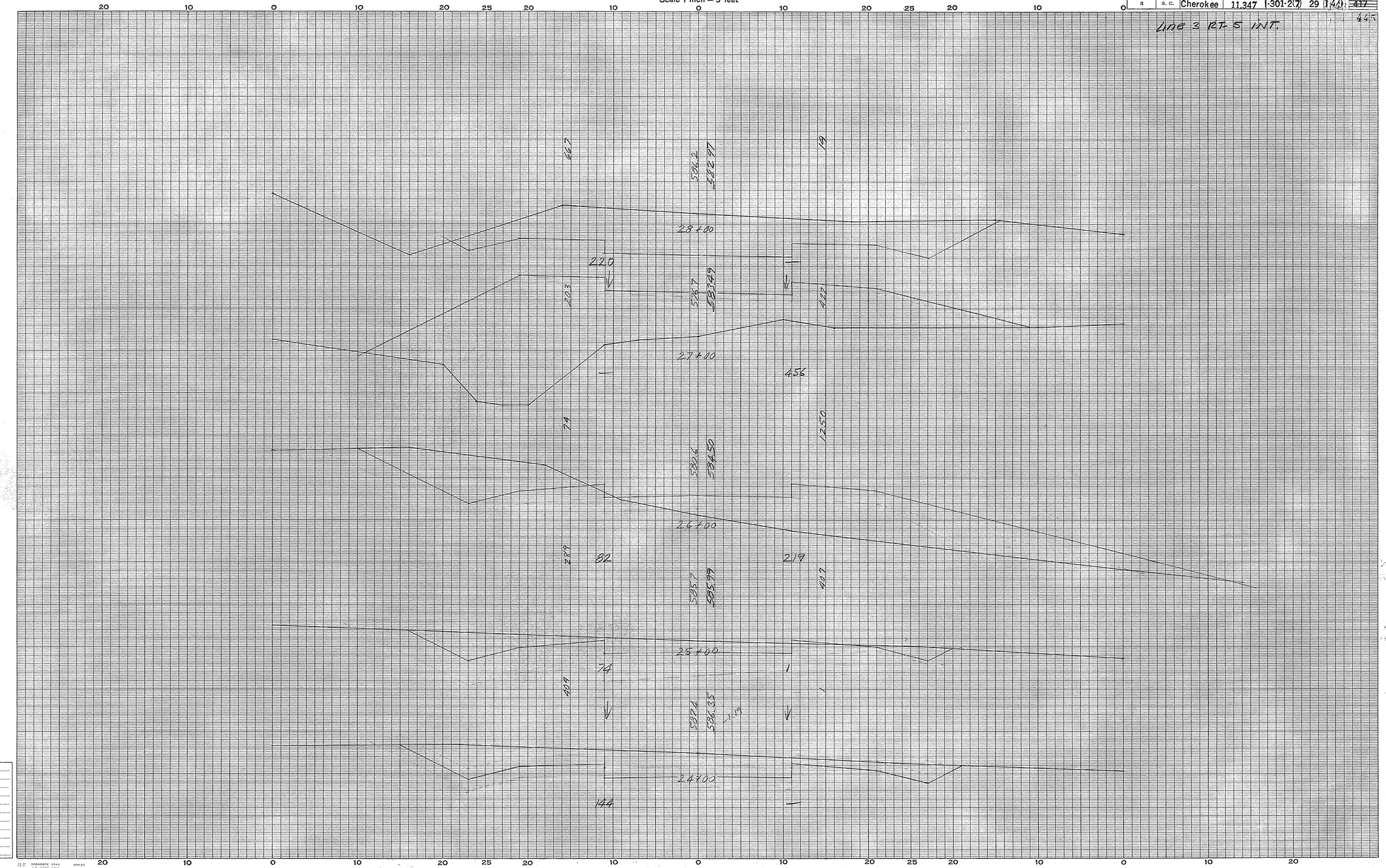
(4)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	149	~~417~~ 445

Line 3 RT. 5 INT.



Cherokee Co.
Rt. 29 & 5 Int.
Line 3

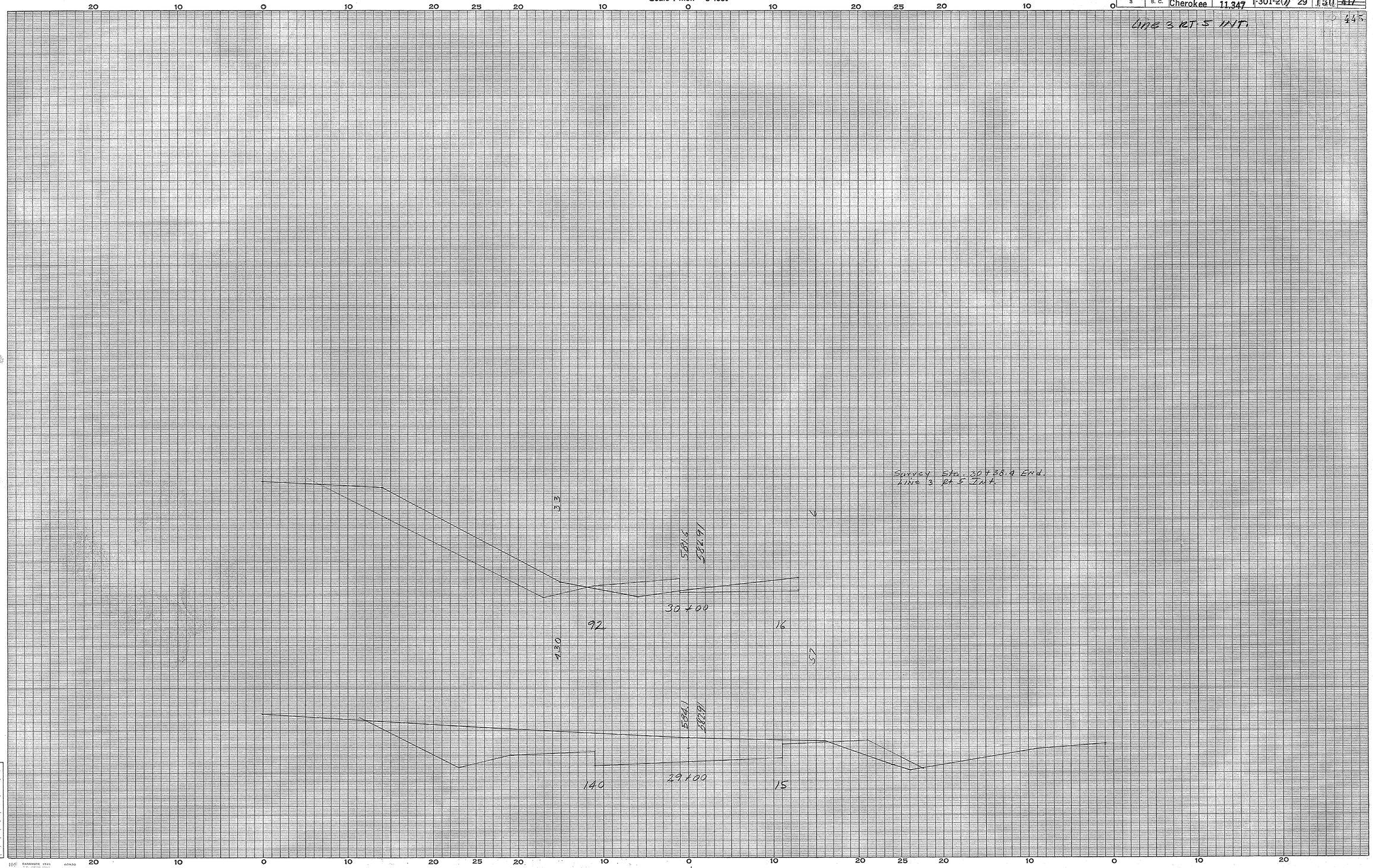
Ground Surface Platted by
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

5

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	150	~~417~~ 445



Cherokee Co.
Rt. 29 & 5 Int.
Line 3

Ground Surface Platted by JJ
" " Checked by
Template Sections Plotted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(6)

Old Route No.	Old No.	Date		Docket No.	Project No.	Route	Phase	Total Sheets
3	2 C	C		1-2-67	1501-029	29	1	44

R/198

DETAIL OF INTERSECTION US RT. 29 & SC RT 198

SCALE: 1"=100'

Construct Connection Approx. 125' Storm

Place 66-18" R.C. Pipe

Place 66-18" R.C. Pipe on 30° Skew Const. Type 9 C.B.

Remove 72-24" R.C. Pipe

Reblain 108-36" R.C. Extra Strength on 45° Skew Add 76-36" R.C. Extra Strength Const. Type 9 C.B. Add 60-36" R.C. Pipe

Place 66-18" R.C. Pipe Const. Type 9 C.B.

Place 90-18" R.C. Pipe on 30° Skew Const. 24'X36' D.I.

Place 260-18" R.C. Pipe on 30° Skew Const. 2 Type 9 C.B.'s Const. 24'X36' D.I.

Place 104-36" R.C. Pipe Extra Strength Const. 1 Type 9 C.B.

Place 154-36" R.C. Pipe on 30° Skew

TIE FOR UTILITY Sta. 237+53 Rt. Sta. 239+78.4 Rt. 80.69

Place 74-18" R.C. Pipe

Place 72-30" R.C. Pipe

Relay 100-24" R.C. Pipe Adj. 172'-3" R.C. Pipe Const. 2 Type 9 C.B. Const. 24'X30" D.I.

Place 36-4" Tile Underdrain

Place 98-18" R.C. Pipe Const. Type 9 C.B.

Place 1-24" R.C. Pipe

Remove 20-24" R.C. Pipe

Place 66-18" R.C. Pipe Const. Type 9 C.B.

Remove 101-24" R.C. Pipe

Relain 4'X4'X5.83'CY Catch Basin Extend 0.17'-4'-11.17' External Free Stone 2.49

Relain 72-30" R.C. Pipe

Relain 150'-42" R.C. Pipe

Relain 25'-18" R.C. Pipe

Relay 50'-18" R.C. Pipe

Relain 151'-30" R.C. Pipe

Relain 75'-18" R.C. Pipe

Place 1900 CY Waste to be obtained from Borrow Site 2.0 Mi. to Sta. 238+00 Rt. 2.0 Mi.

Place 7900 CY Waste to widen Shoulders as req'd. The total to be obtained from Borrow Site 2.0 Mi. to Sta. 238+00 Rt. 2.0 Mi. to be addressed

Remove 22-18" R.C. Pipe

To Place 22'-18" R.C. Pipe

Relain 75'-18" R.C. Pipe

Place 60'-18" R.C. Pipe Const. Type 9 C.B.

Relain 75'-18" R.C. Pipe

Remove 74'-24" R.C. Pipe

Remove 72'-24" R.C. Pipe

Relain 108'-42" R.C. Pipe

Relain 75'-18" R.C. Pipe

Relay 50'-18" R.C. Pipe

To Place 22'-18" R.C. Pipe

Relain 75'-18" R.C. Pipe

Place 66-18" R.C. Pipe Const. Type 9 C.B.

Place 66-18" R.C. Pipe

Place 66-18" R.C. Pipe

Place 66-18" R.C. Pipe

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	152	417 ~~445~~

Frontage Rd. Right.
Sta. 1531+47 to 1557+00

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE

Frontage Road Right

Survey Sta. 1531+47.5 Begin Frontage Rd Right

EXC. 5352 EMB. A30
10% 93
WASTE 4879
TOT. 5352 TOT. 5352
OVERHAUL - NONE
4274 C.Y. WASTE TO BE USED AS BORROW MAINLINE STA. 1558+93.8 - STA. 1563+01.5
286 C.Y. WASTE TO BE USED AS BORROW LINE "3" Pt. 150
317 C.Y. WASTE TO BE USED AS BORROW LINE "1" Pt. 150

ESTIMATED EXCAVATION 750 C.Y.
Waste to be used as Borrow
Line "3" Pt 150

Survey Sta 1557+00 End Frontage Road Right

400' V.C.
P.I. = 1535+80
EL. = 815.43
+1.54%
-1.32%
400' V.C.
FINISH GRADE
P.I. = 1540+30
EL. = 809.83
-3.48%
400' V.C.
300' V.C.
P.I. = 1545+00
EL. = 788.20
-0.48%
200' V.C.
+0.20%
P.I. = 1551+50
EL. = 785.08

Use 32'-40' Section
10" Macadam
1½" Top
1" Binder
2:1 Slopes

Sheet 2-C

Frontage Rd. Rt.
1532 to Sta 1549

5

PLATE 1 - PLAN - PROFILE O.P.R. & R. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	1301-27)	29	152-A	445

Profile Rt. 198
See Sheet No. 151

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R & R WORK
STRUCTURE NOTATIONS CH'KD
NOTE BOOK
NO.
BY
DATE

Rt. 198

Tie Equality
Sta. 20+38.7 C/L U.S. Rt. 29 =
Sta. 61+79.5 S.C. Rt. 198

165'

839.3

860
850
840
830

60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 75

Cherokee Co.
Rt. 198
over
U.S. Rt. 29

4

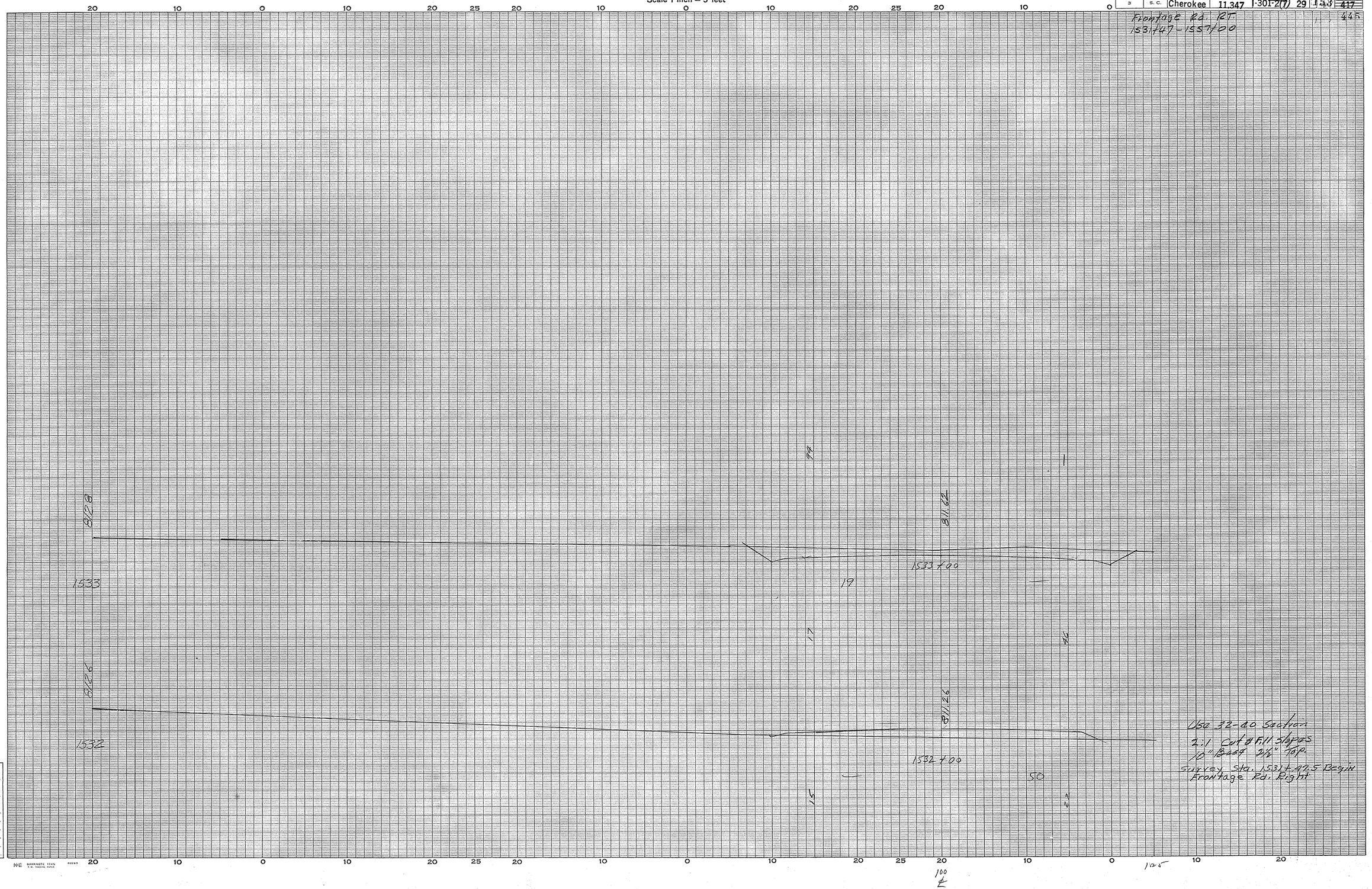
PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	153	417

Frontage Rd. RT.
1531+47 - 1557+00



Frontage Rd Rt
U.S. Rt 29
Cherokee Co
Rt. 11 To 18

Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" Checked by
Quantities Transferred and Inked by

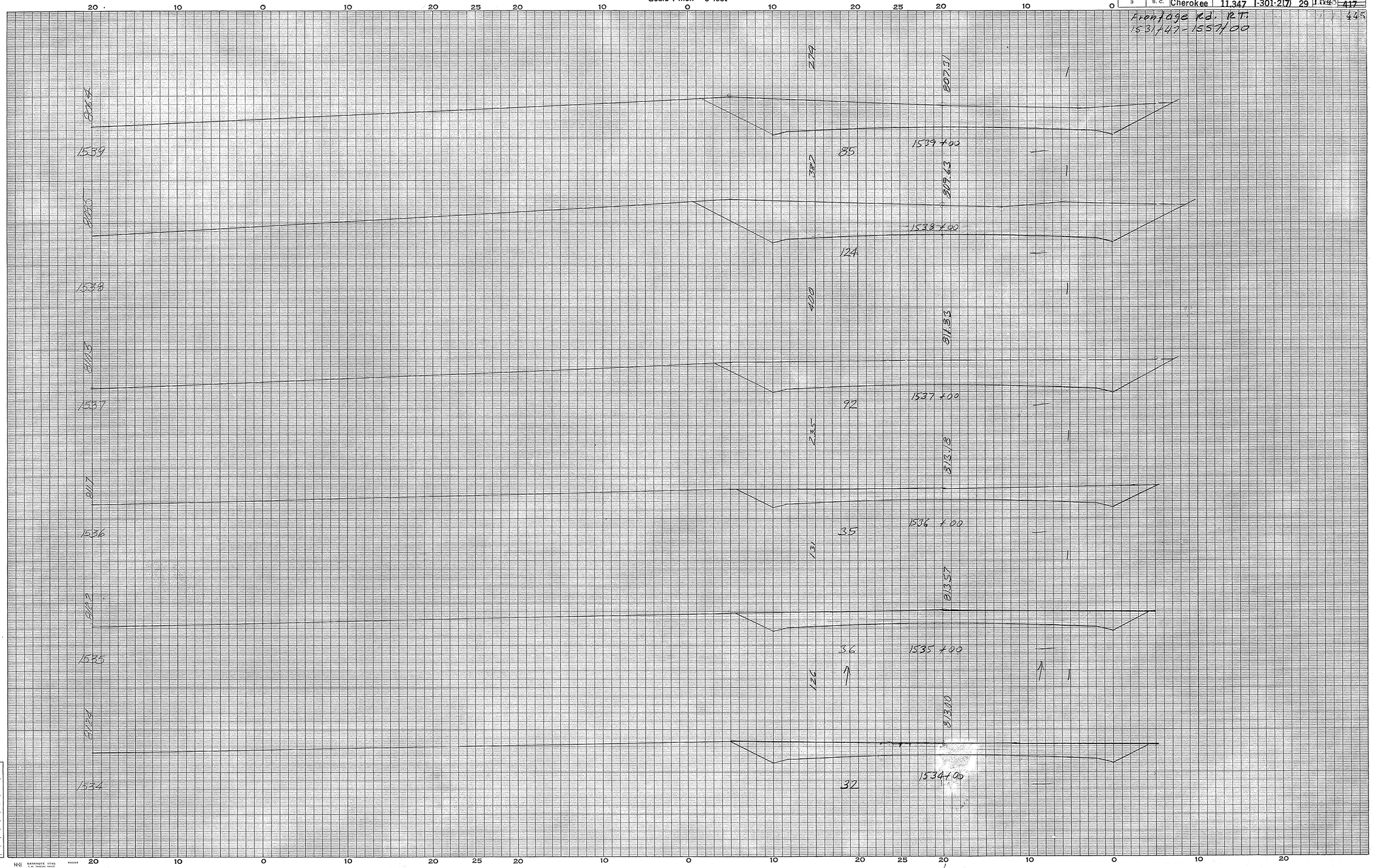
1-

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	154	417

Frontage Rd. RT.
1531+47 - 1557+00



Frontage Rd. Rt.
Cherokee Co
Rt 1 Inc 48
(1)

Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

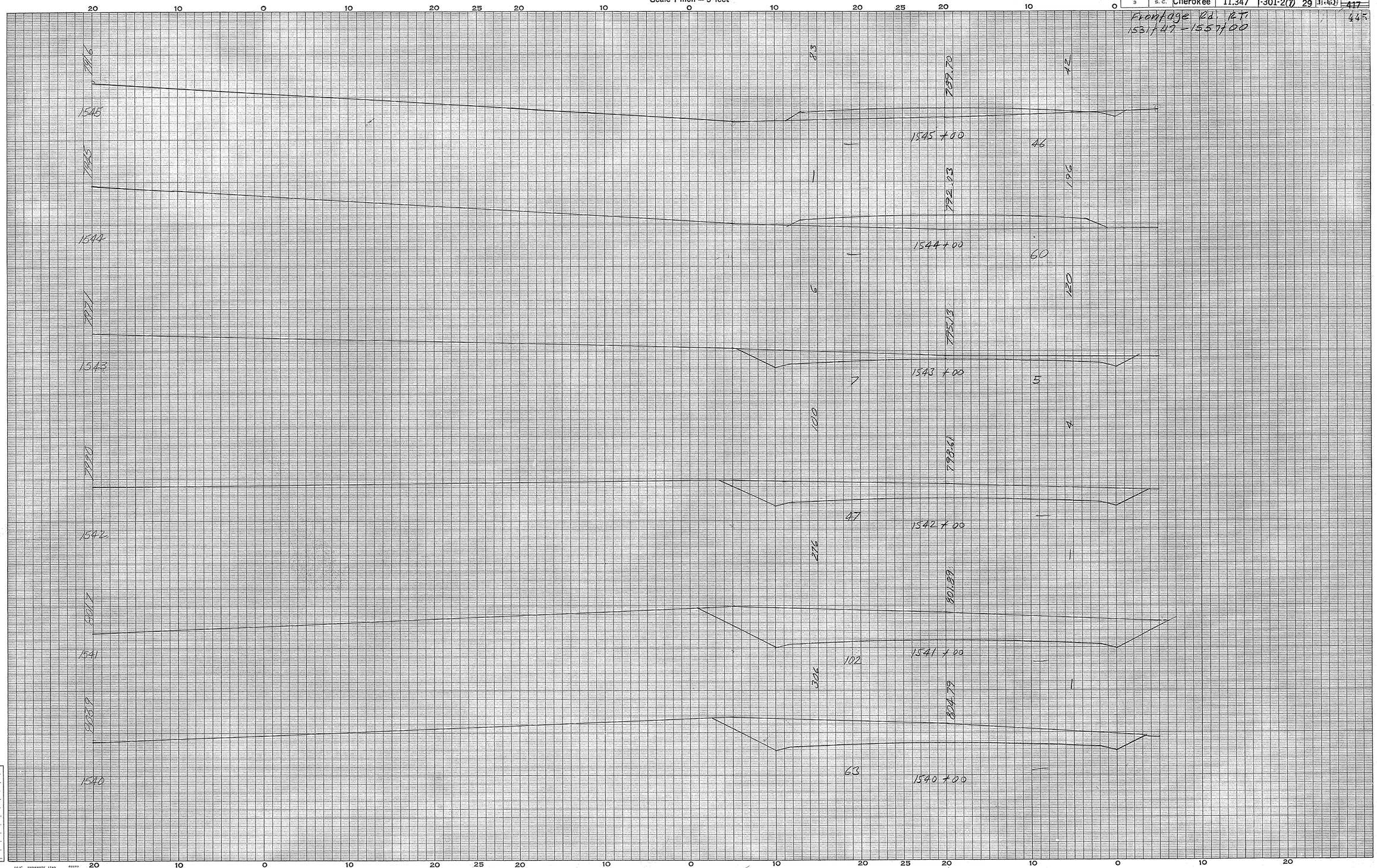
(5) (1A)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	155	417

Frontage Rd. RT.
1531+47 - 1557+00



Frontage Rd Rt
Cherokee Co
Rt# 11-18

(2)

Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(5)

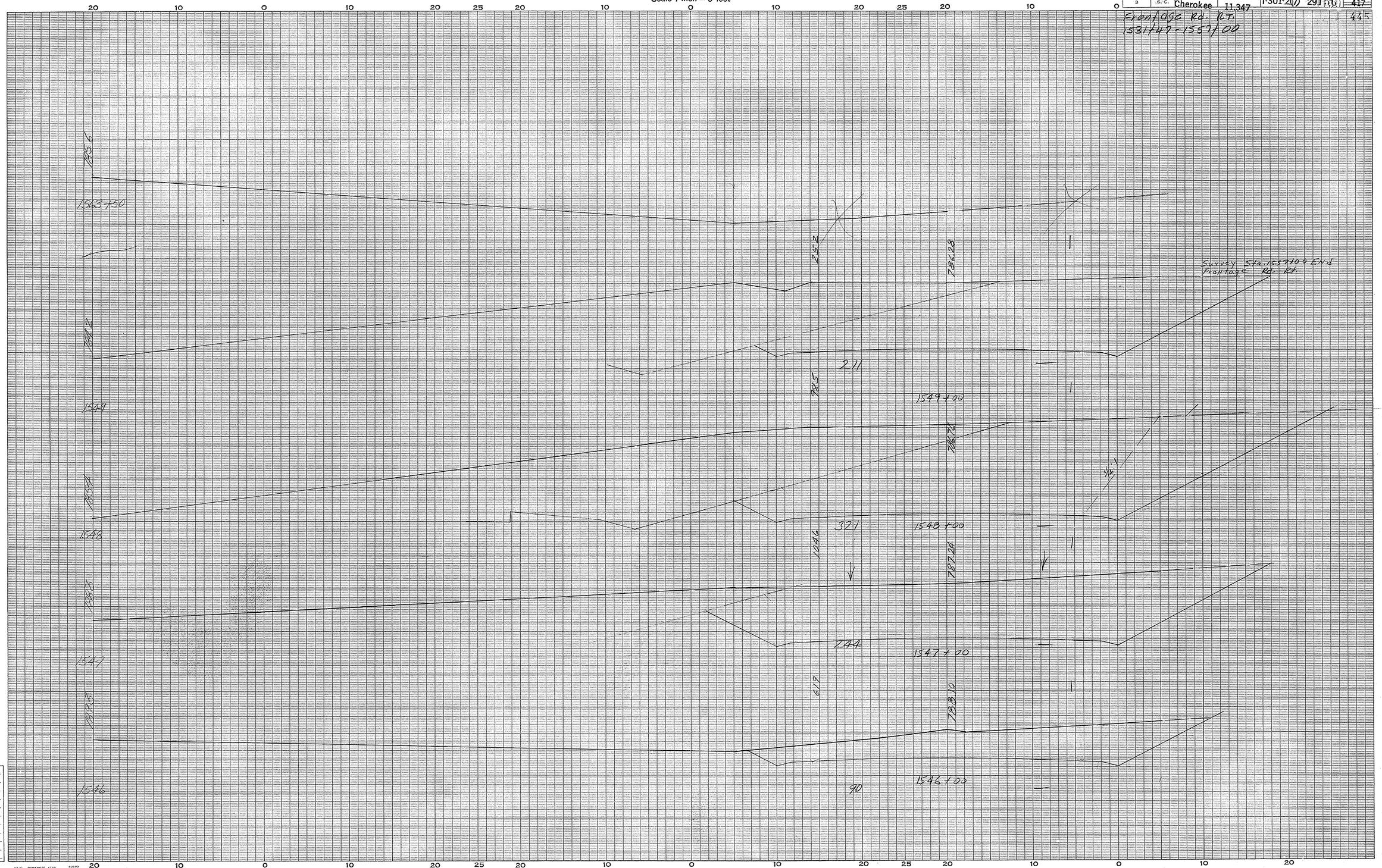
75

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11,347	I-301-2(7)	29	156	417

Frontage Rd. Rt.
1531+47-1557+00



Frontage Rd Rt
Cherokee Co
Routes 11-18
(3)

Ground Surface Platted by
" " Checked by
Template Sections Platted by
" " Checked by
Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

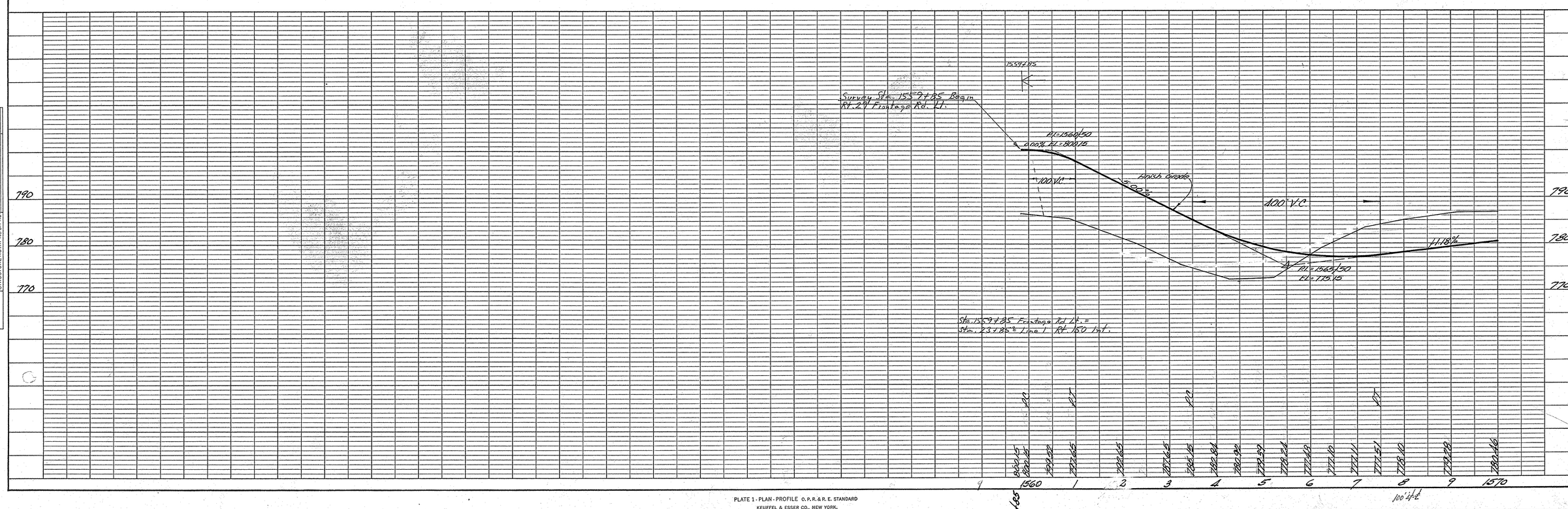
(5)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	1-301-2(7)	29	157	~~417~~ 445

Frontage Rd. Lt. 1559+85 to 1660+75

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



Cherokee
Rt. 29
Lt. Frontage Rd.
1

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	158	~~417~~ 445

Frontage Rd. Left
1559+85 to 1660+75

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

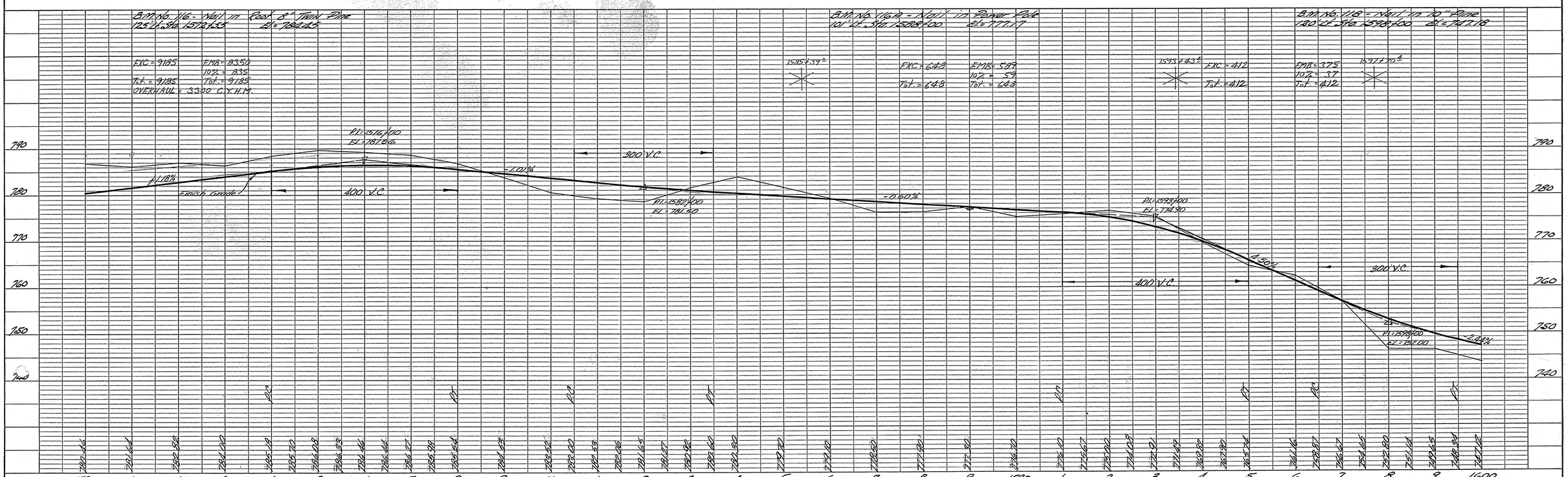


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

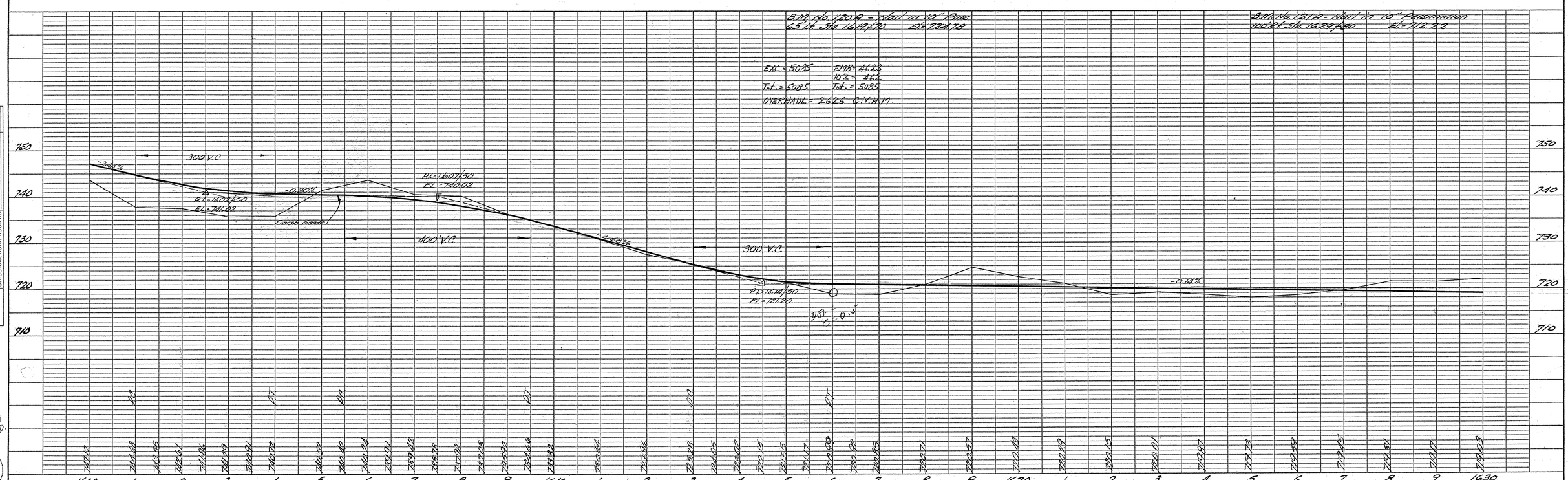
Cherokee
Rd. 29
Lt. Frontage Rd.
(2) (7)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	159	~~417~~ 445

Frontage Rd. Left.
1559+85 to 1660+75

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



80' Lt. ℄

Cherokee
Rt. 29
Lt. Frontage Rd.
(3) (7)

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-30T-2(7)	29	160	~~417~~ 445

Frontage Rd. Left
1559+85 to 1660+75

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

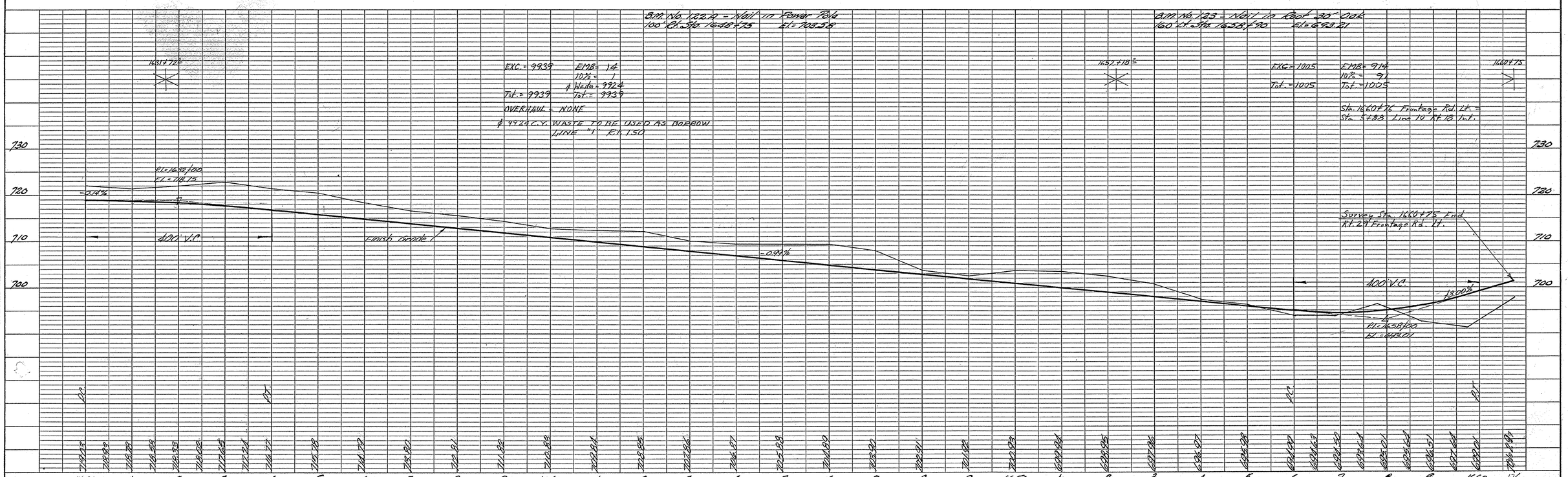


PLATE 1 - PLAN - PROFILE O.P.R.& R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

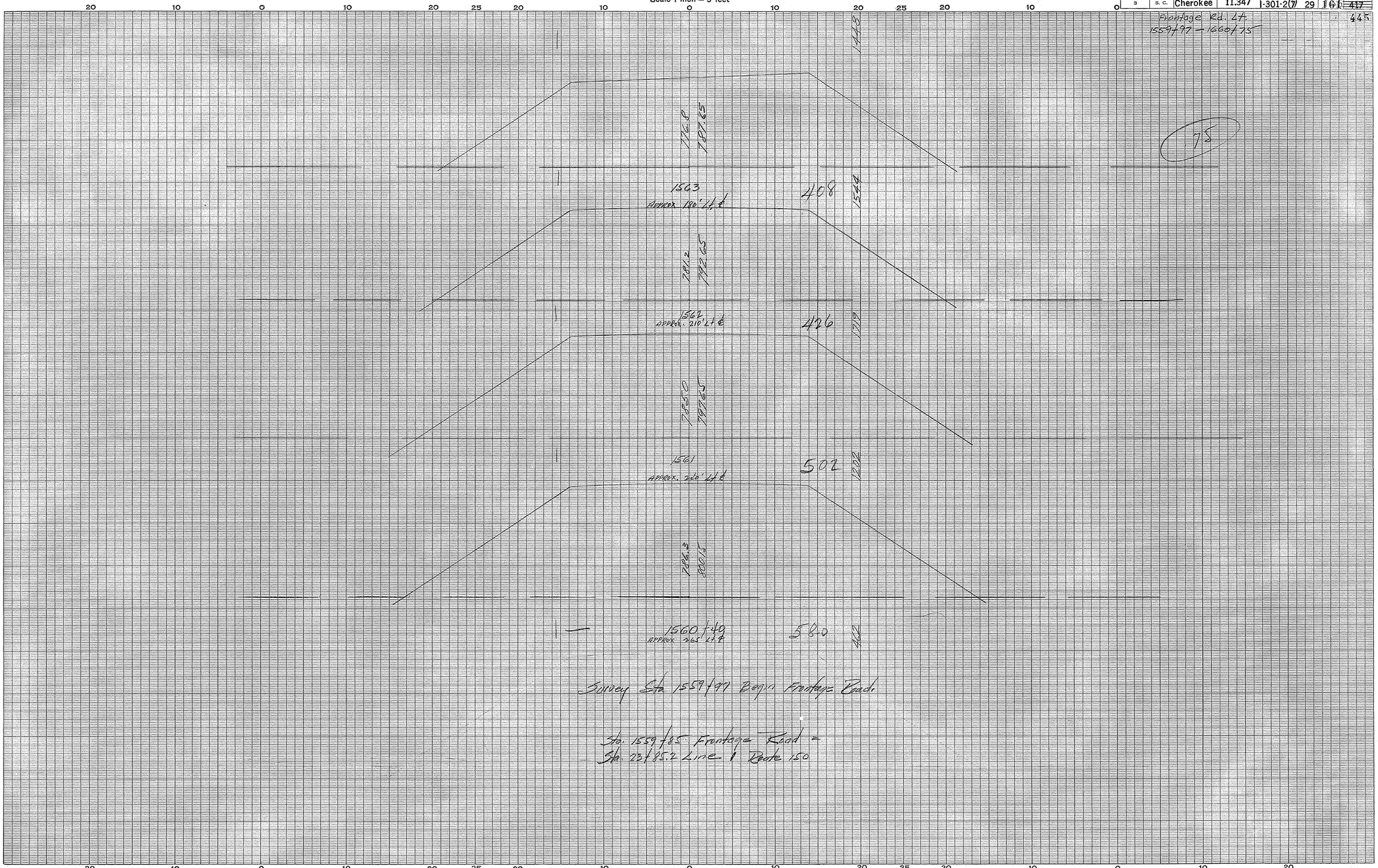
Cherokee Rt. 29 Lt. Frontage Rd.

(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	161	~~417~~ 445



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Template Sections Revised by.....
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Final Areas by.....
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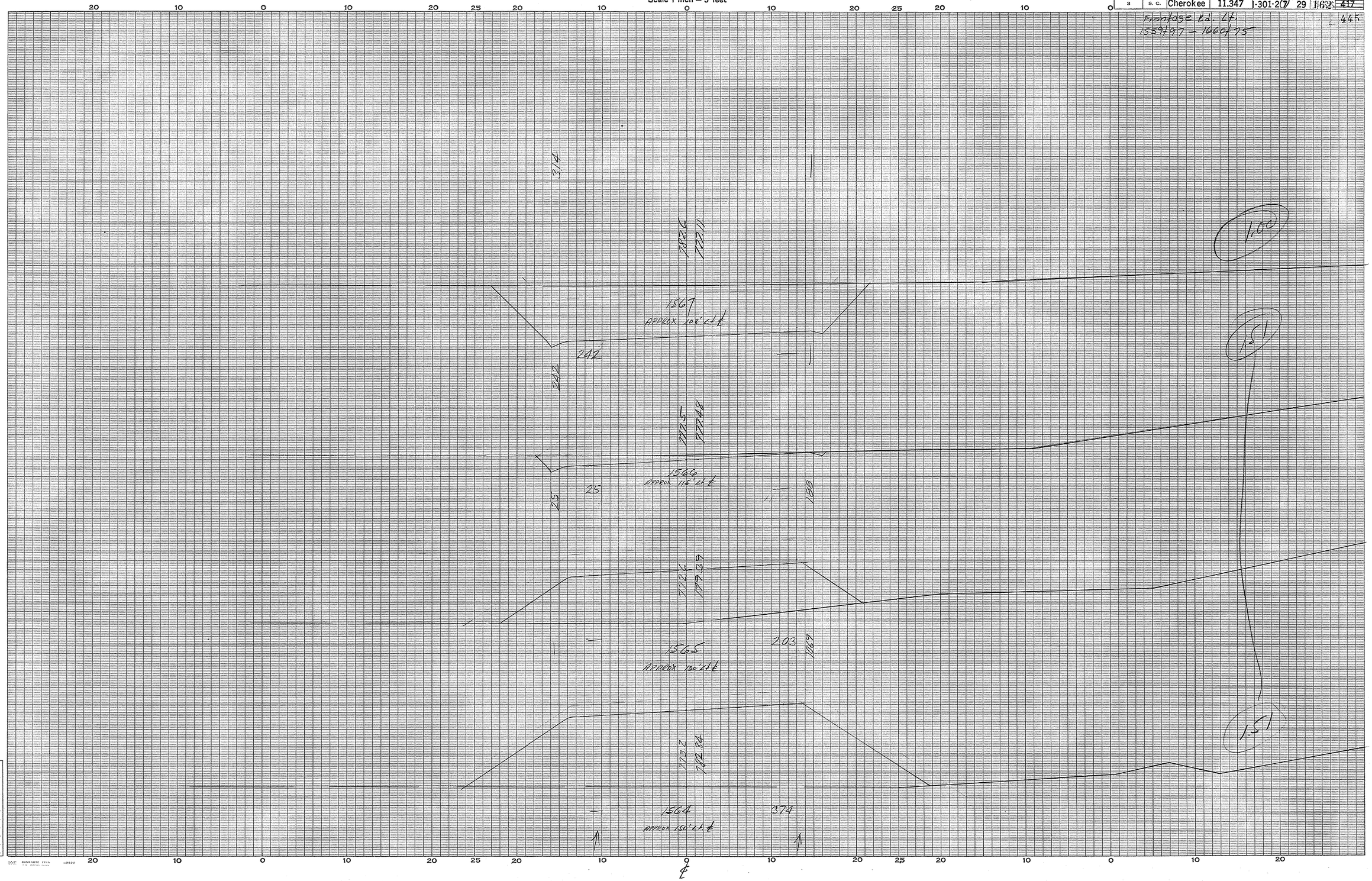
Quantities Transferred and Inked by.....

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	162	417



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Final Areas by
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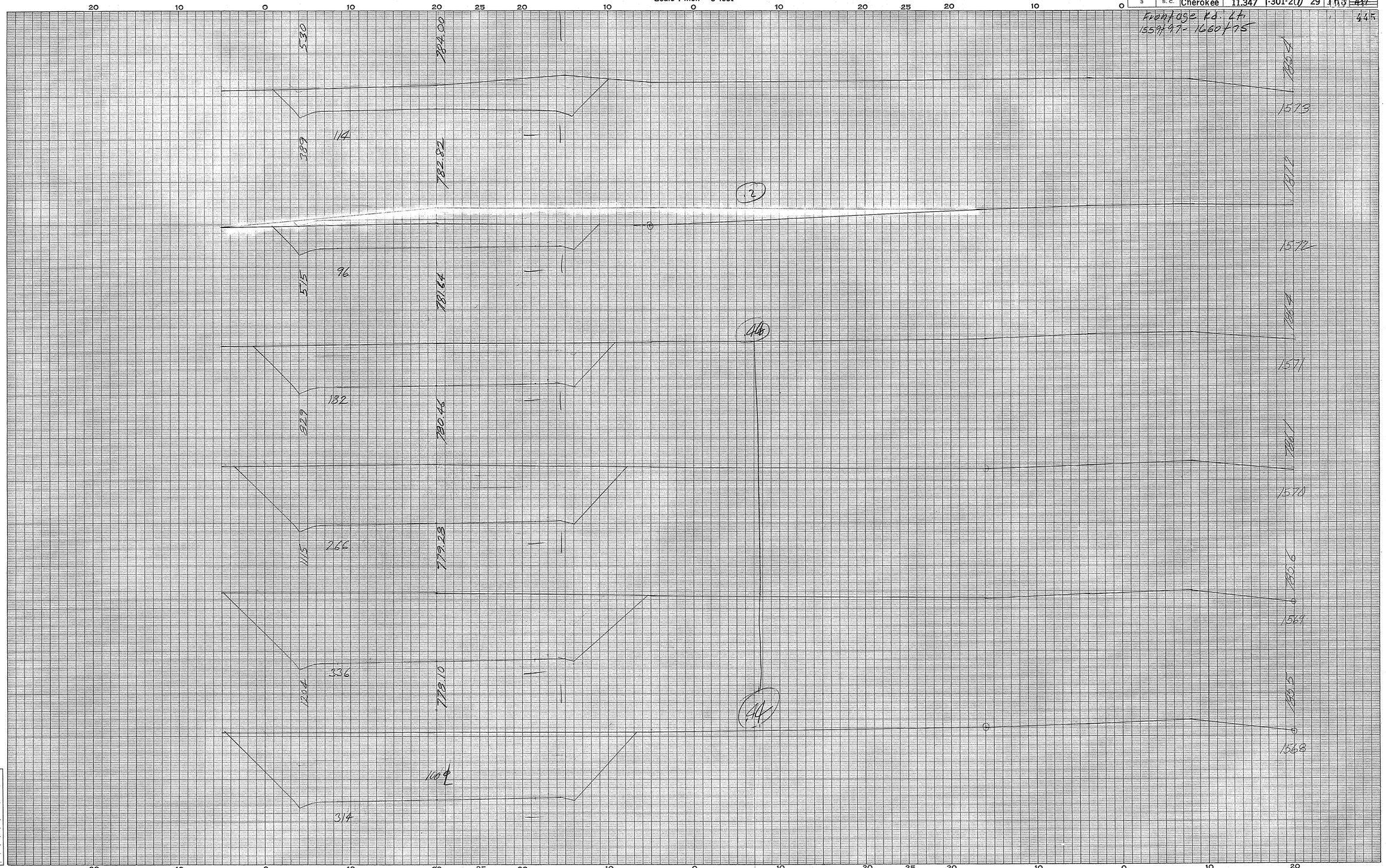
Quantities Transferred and Inked by

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	163	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Left
Cherokee Co
Routes 11 to 18
2

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

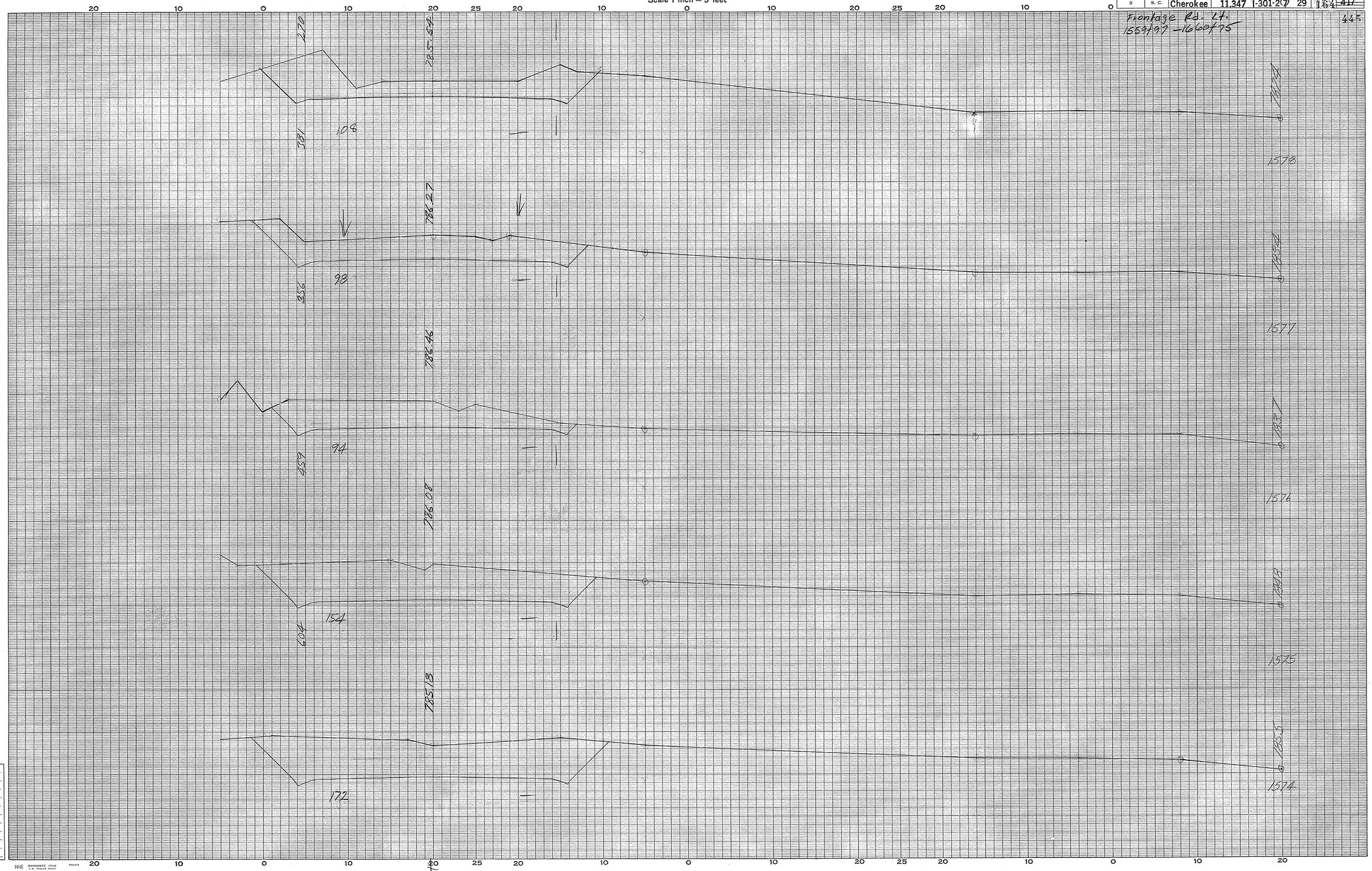
1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	164	~~417~~ 445

Frontage Rd. Lt.
1559+97 – 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(3)

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

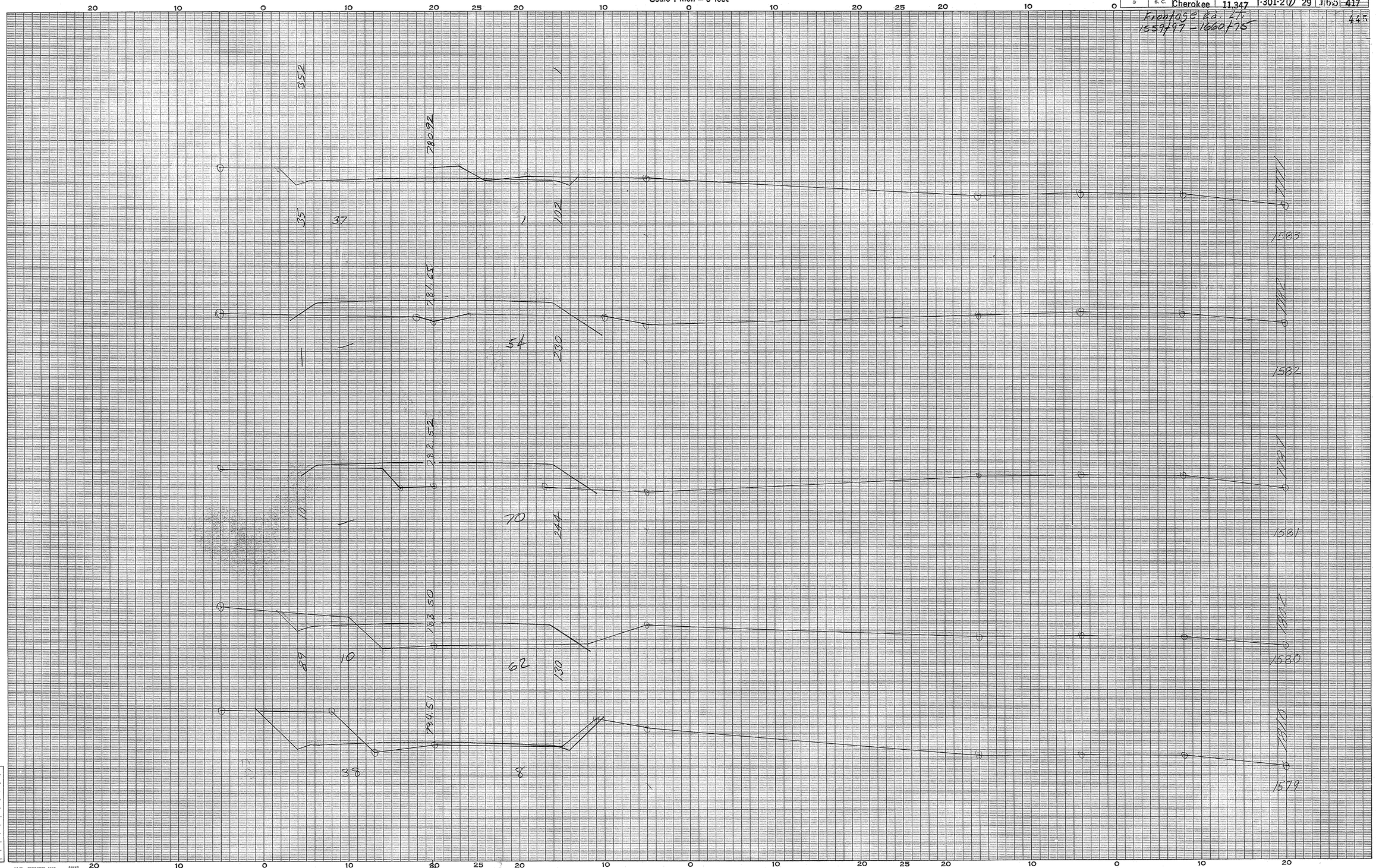
(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	165	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(4)

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

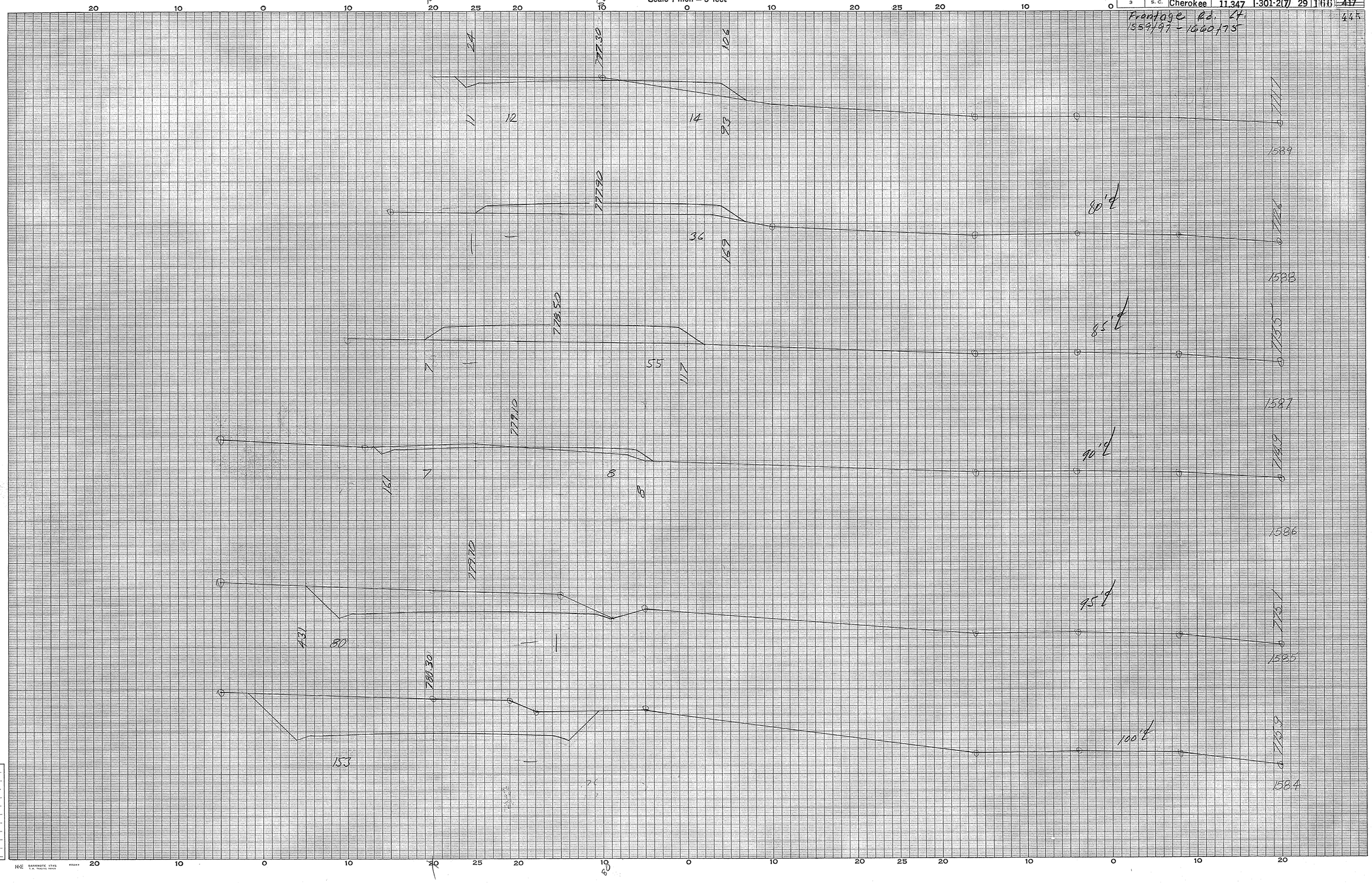
(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	166	~~417~~ 445

Frontage Rd. Lt.
1559/97 - 1660/75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(5)

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

(7)

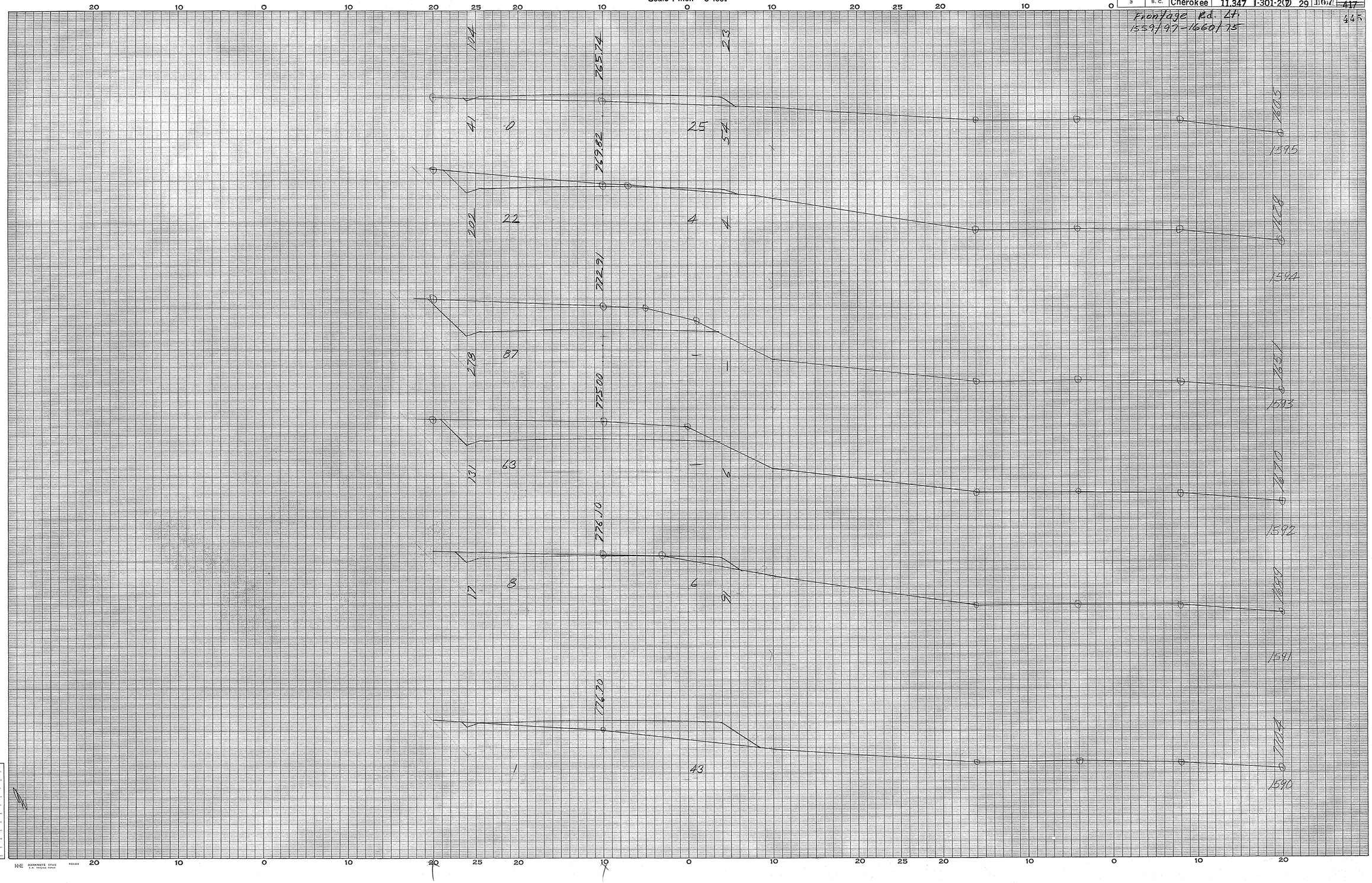
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	167	417

Frontage Rd. Lt.
1559/97-1660/75

445



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
6

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Final Areas by
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Quantities Transferred and Inked by

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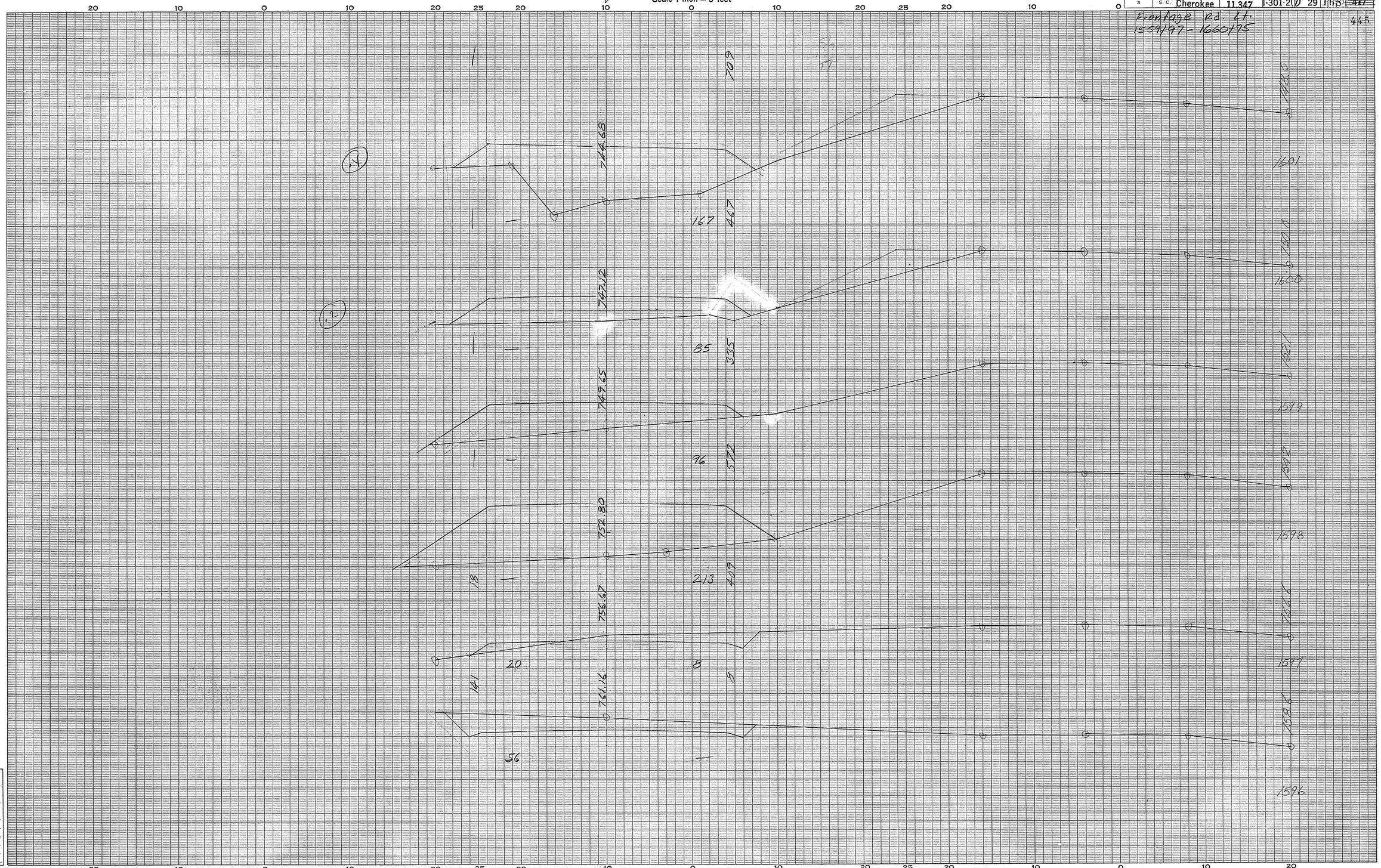
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	168	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(7)

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Final Areas by
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Quantities Transferred and Inked by

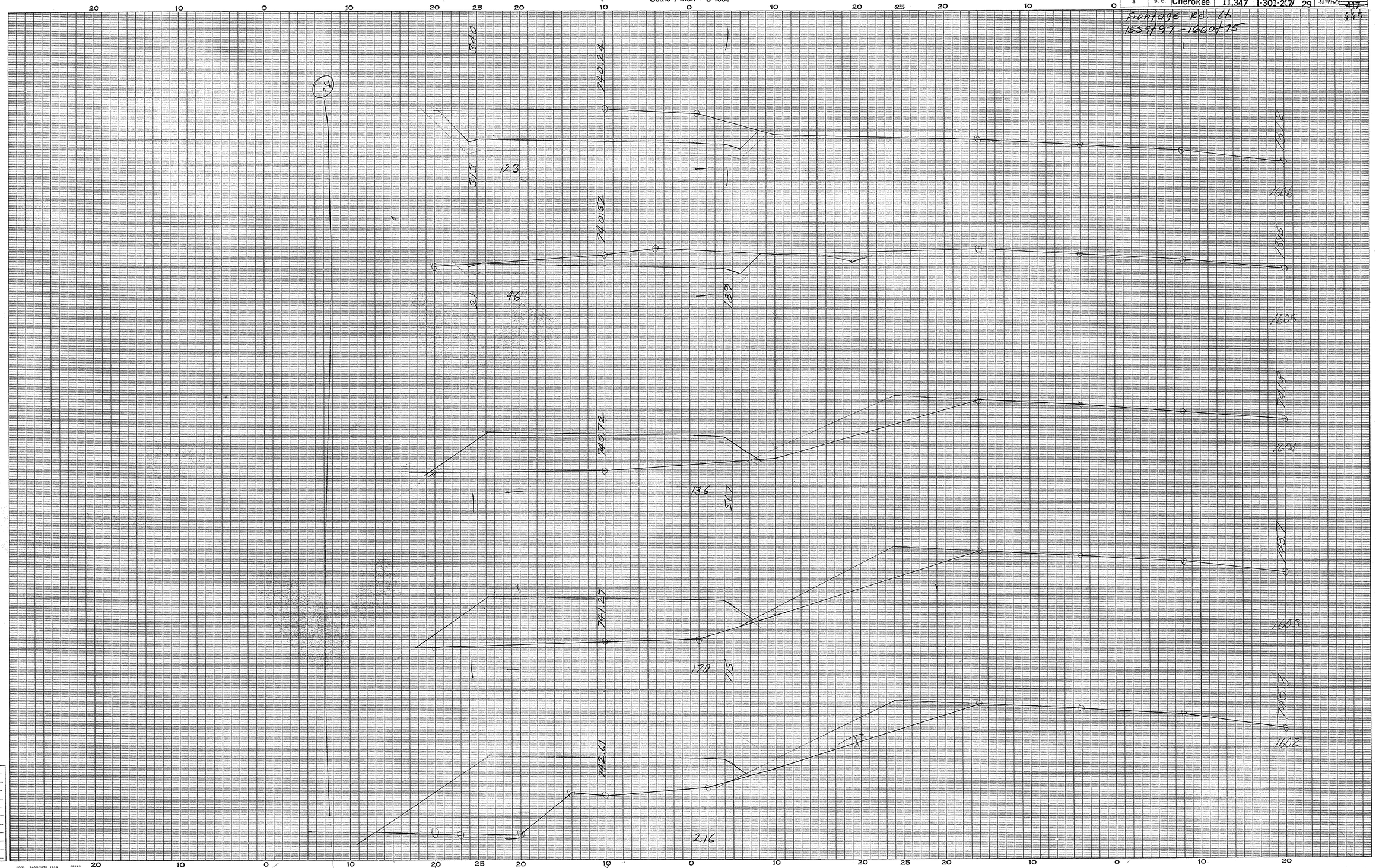
(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	169	~~417~~ 445

Frontage Rd. Lt.
1559+97 – 1660+75



Frontage Rd Lt
Cherokee Co
Pts 11 To 18
(8)

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

(7)

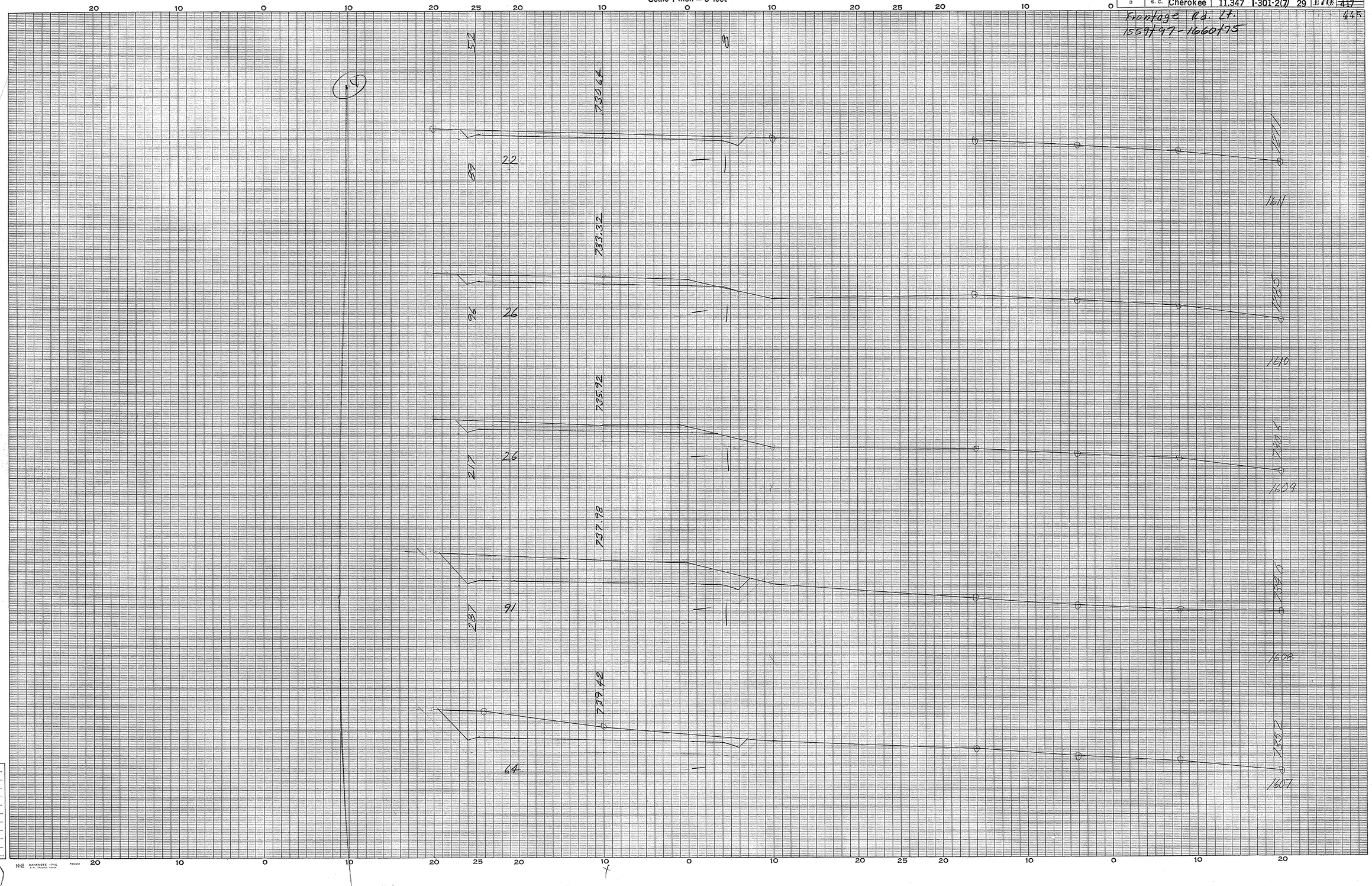
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	170	417

Frontage Rd. Lt.
1559+97 - 1660+75

445



Frontage Rd Lt
Cherokee Co
Rts 11 to 18
9

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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

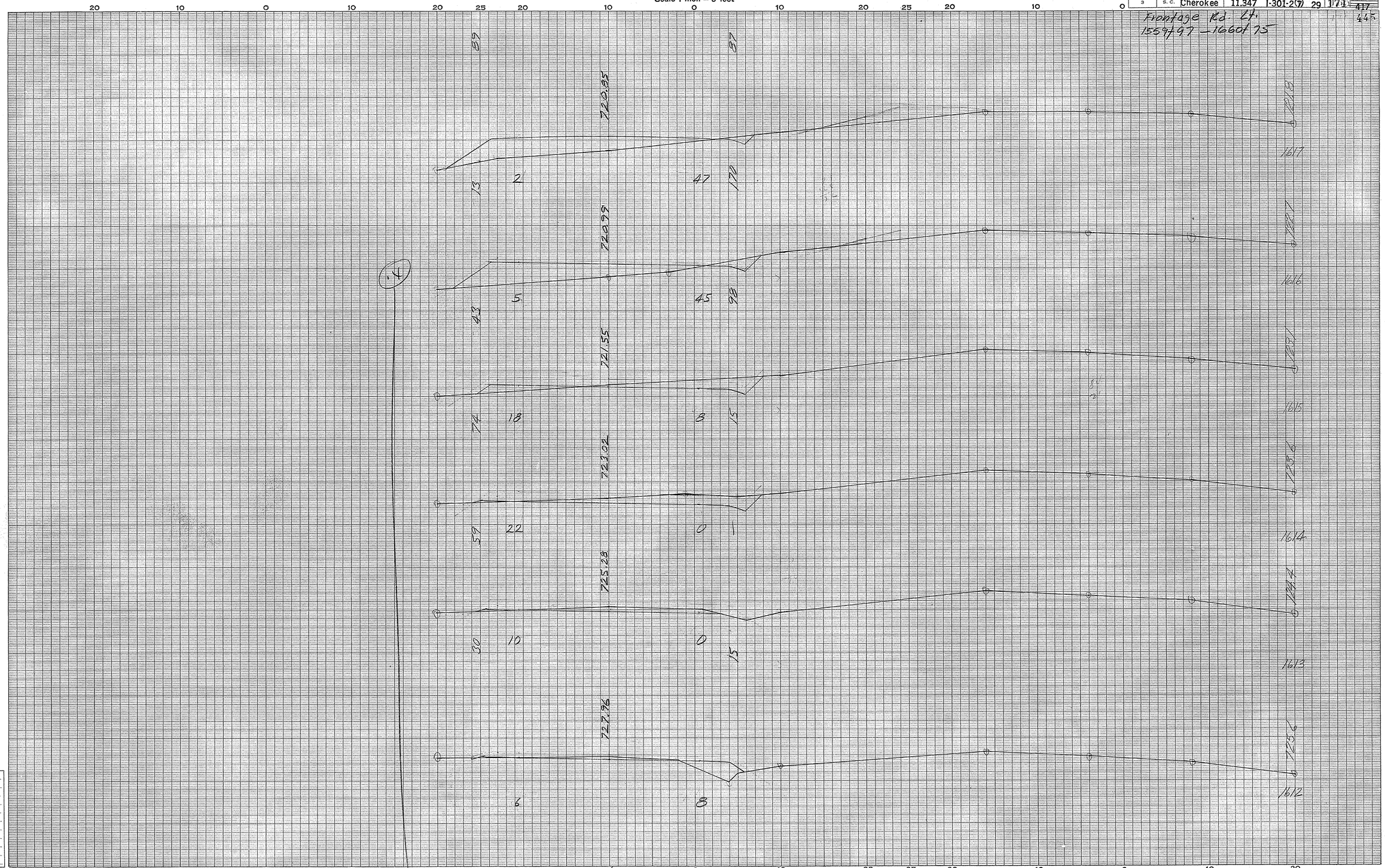
7

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	171	417

Frontage Rd. Lt.
1559+97 – 1660+75



Frontage Rd Lt
Cherokee Co
Pts 11 to 18
10

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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

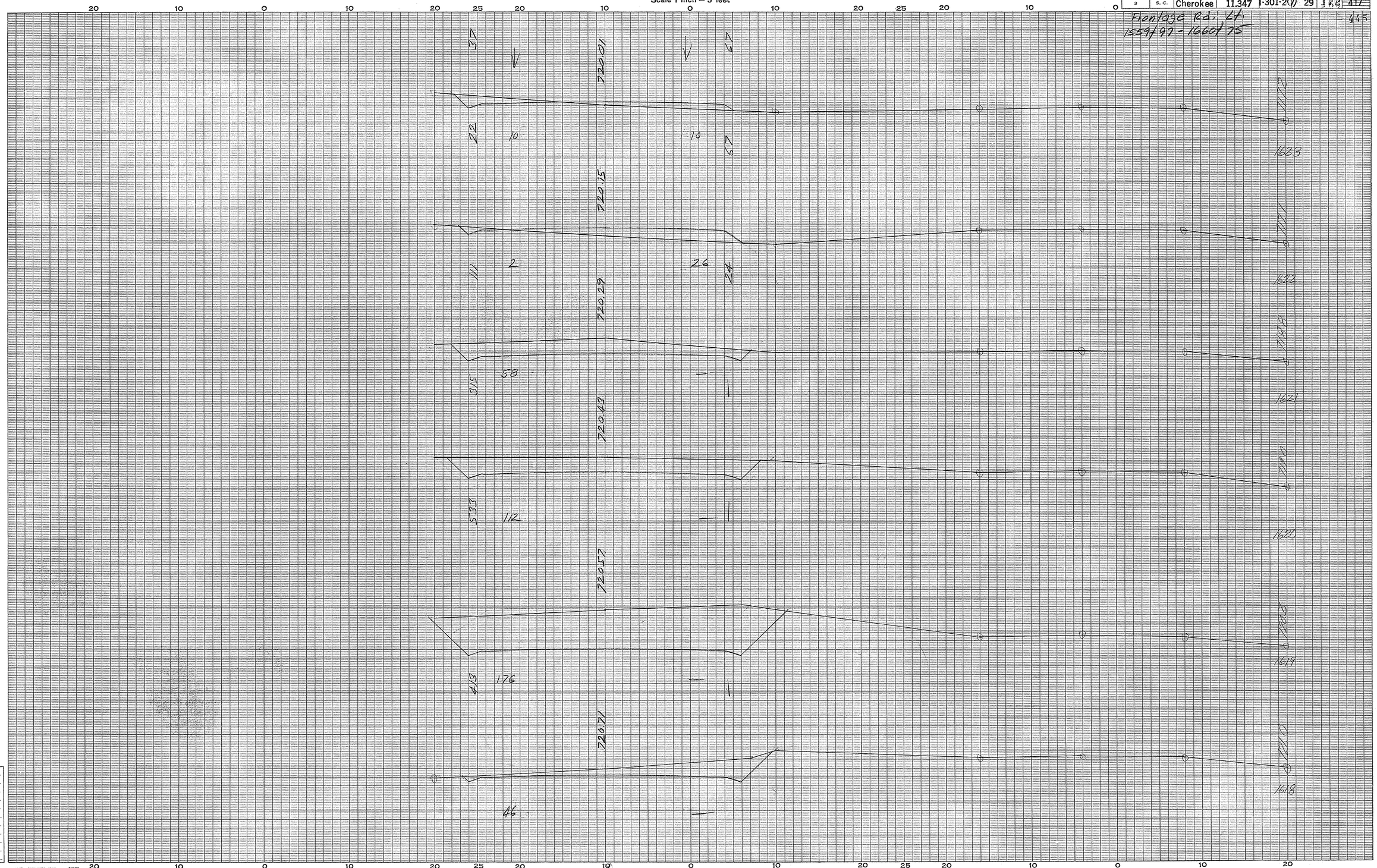
7

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	172	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18

(11)

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Final Areas by
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Quantities Transferred and Inked by

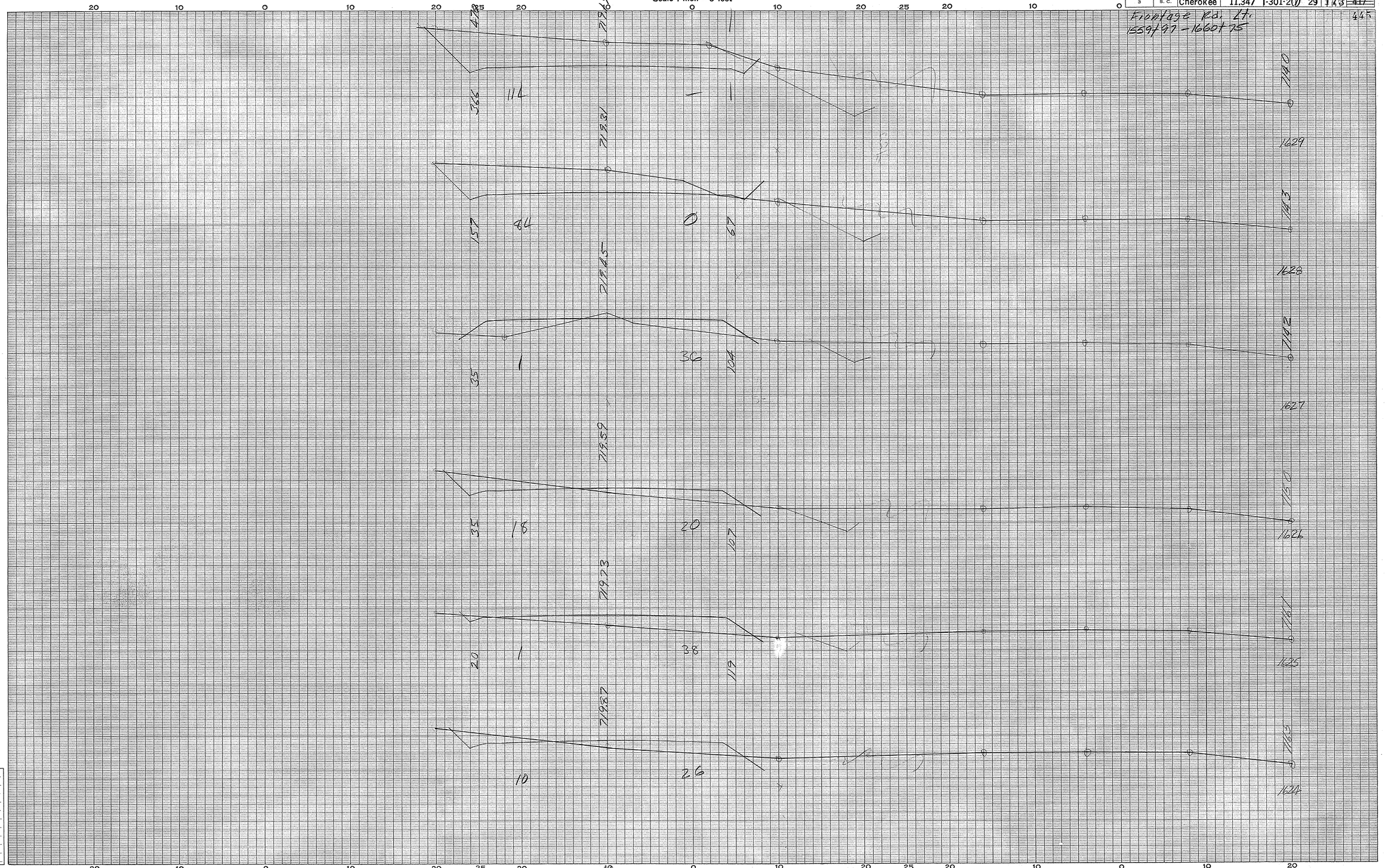
(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	173	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 to 18
(12)

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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

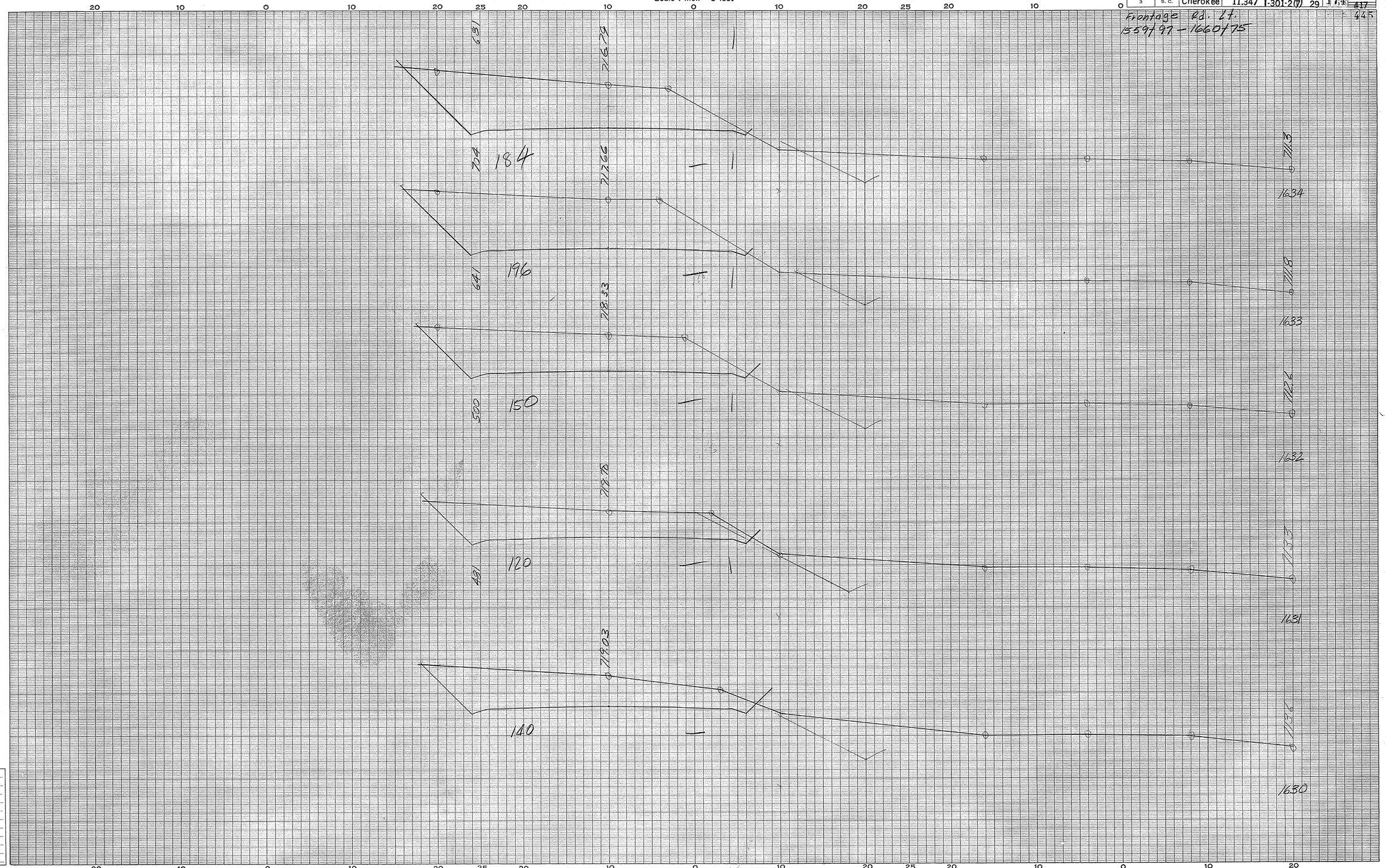
(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	174	417

Frontage Rd. Lt.
1559/97 – 1660/75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(13)

Ground Surface Platted by
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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

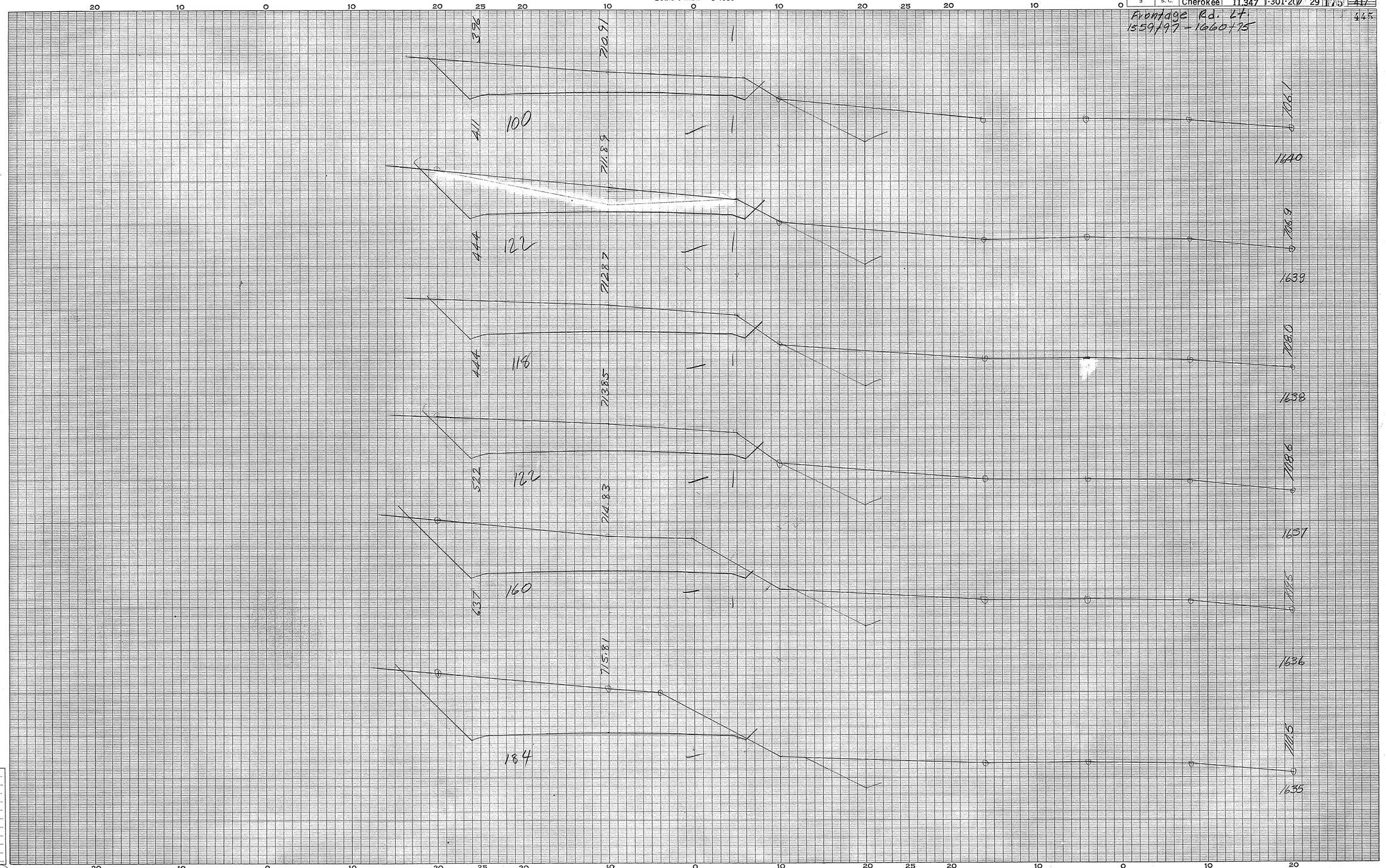
(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	175	~~417~~ 445

Frontage Rd. Lt.
1559+97 - 1660+75



Frontage Rd Lt.
Cherokee Co
Pts 11 To 18
(14)

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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	176 ~~417~~	

Frontage Rd. Lt.
1559+97 – 1660+75

445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

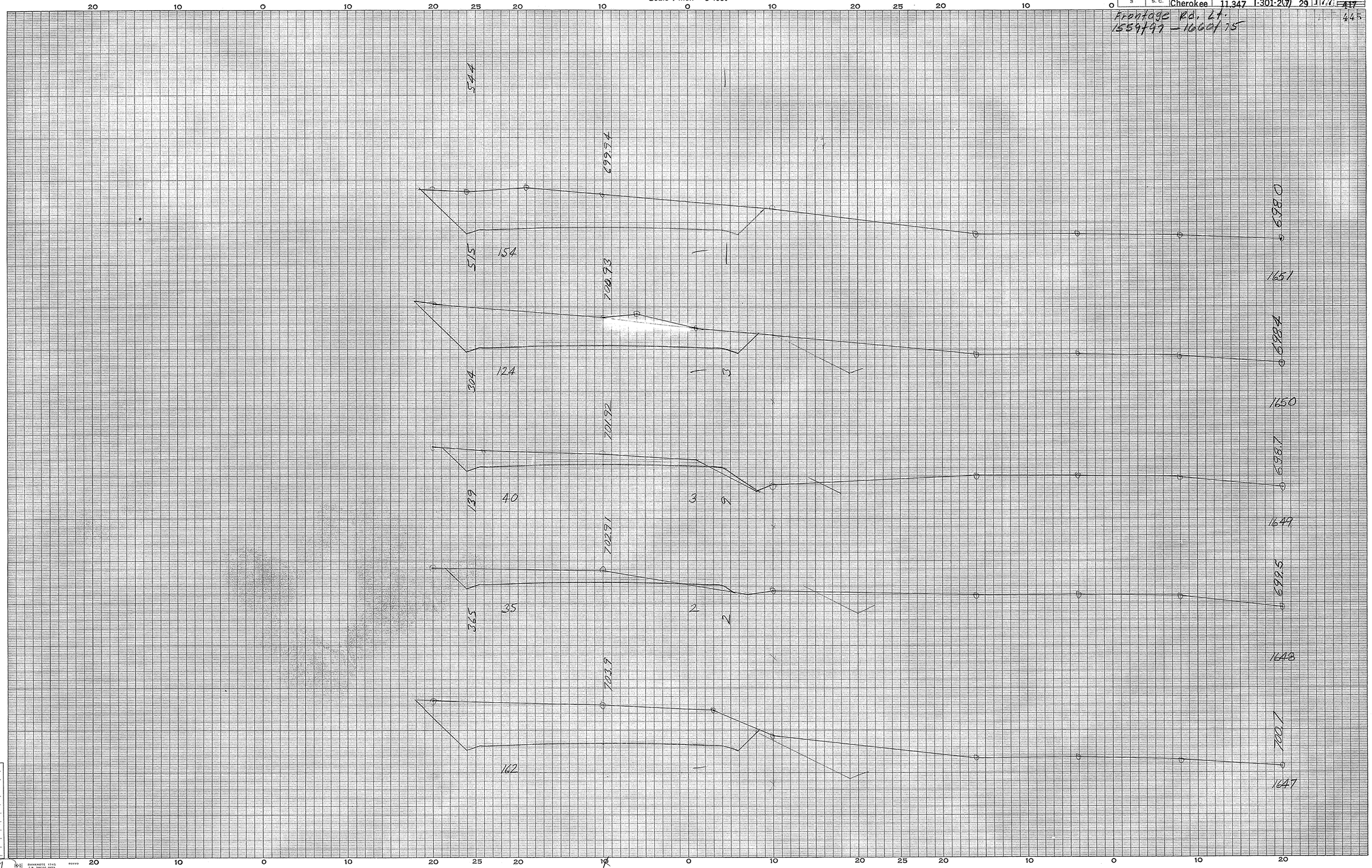
611 591 166 — 1 — 1 — 1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	177	~~417~~ 445

Frontage Rd. Lt.
1559+97 – 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 to 18
(16)

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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

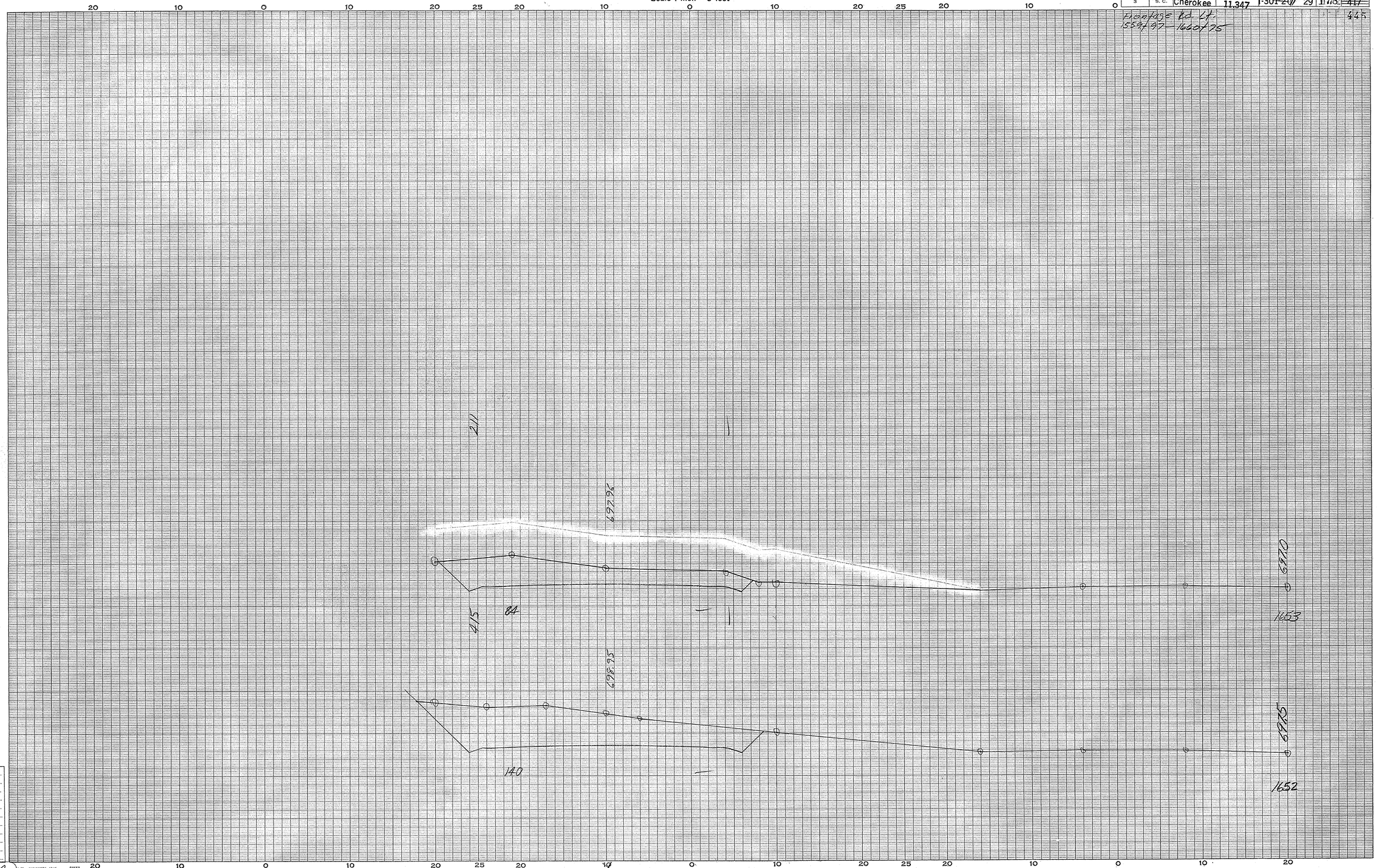
(17)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	178	~~417~~ 445

Frontage Rd. Lt.
1559+97 — 1660+75



Frontage Rd Lt
Cherokee Co
Rts 11 To 18
(17)

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Final Areas by.....
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Quantities Transferred and Inked by.....

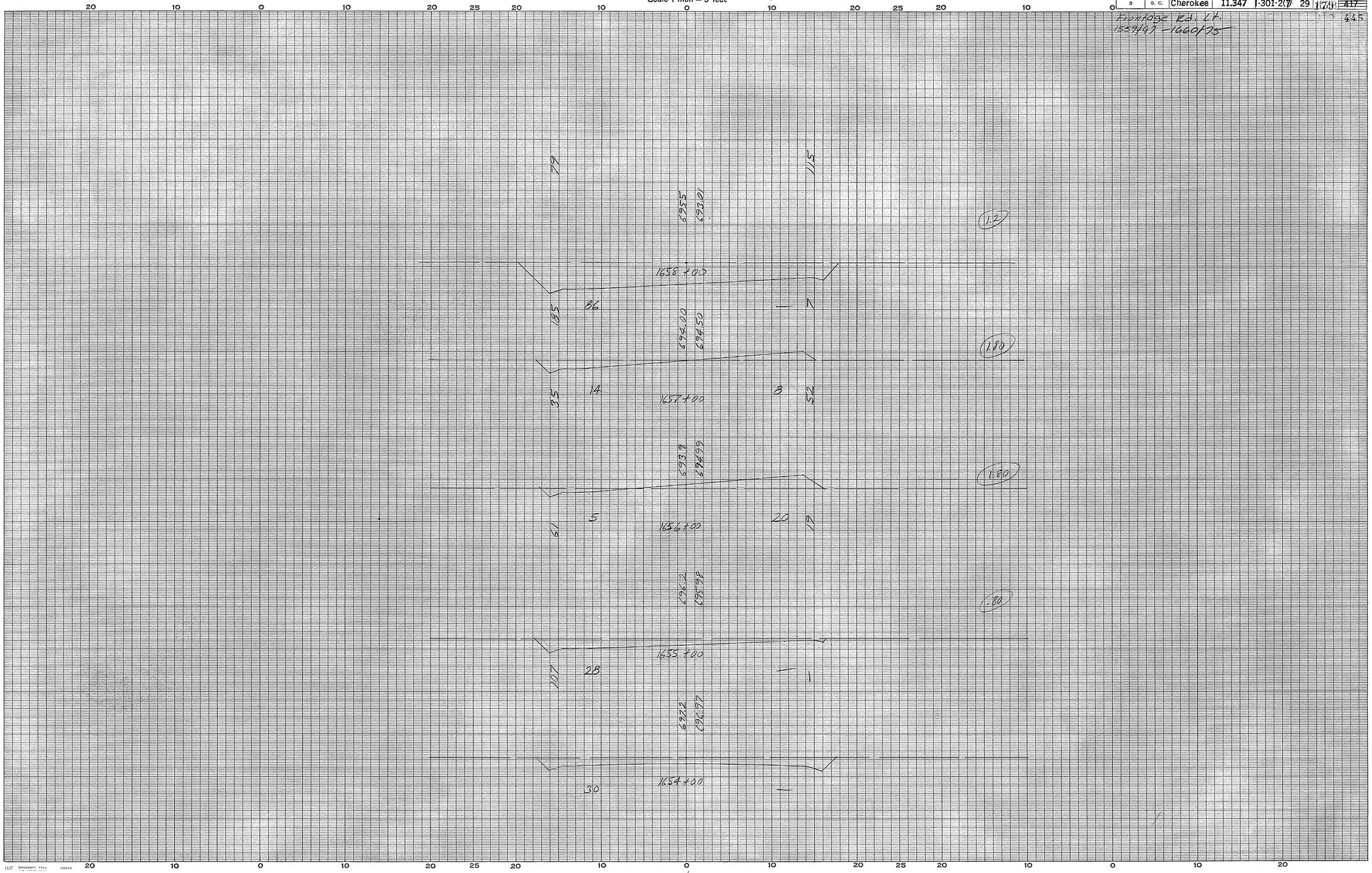
(17)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	179	~~417~~ 445

Frontage Rd. Lt.
1559/97 - 1660/75



Rt 29
Frontage Rd. Left

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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

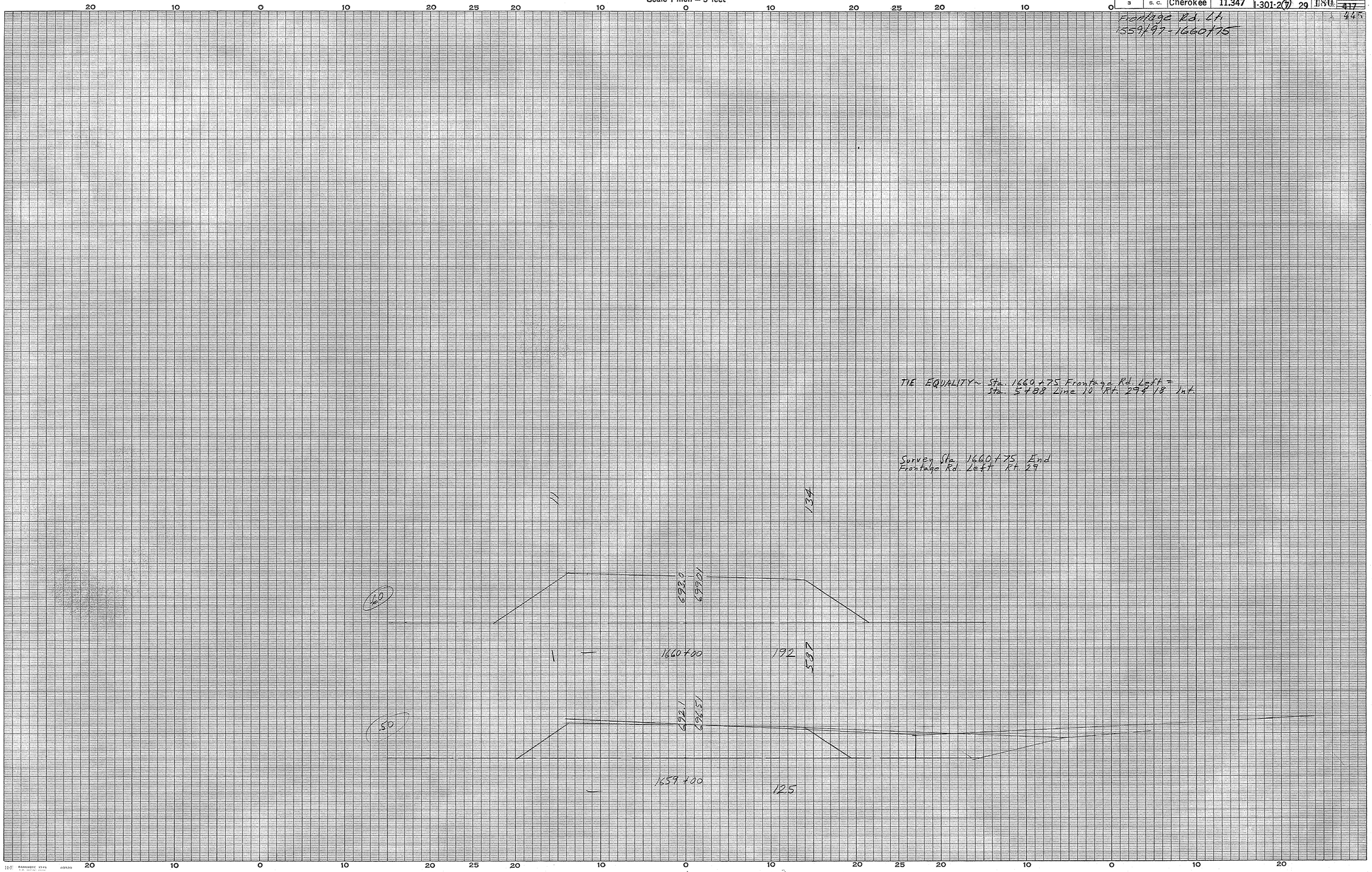
(18)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	180	417

Frontage Rd. Lt.
1559+97 - 1660+75



Rt. 29
Frontage Rd. Left

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Areas by JG
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

19

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	181	417 445

Frontage Rd. Right
Sta. 1573+96 to 1650+00

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
R.I. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
NOTE BOOK
NO.
R.I. OF WAY CHECKED
STRUCTURE NOTATNS CH'KD
BY
DATE

B.M. No. 116 - Nail in Root 8" Twin Pine
125' Lt. Sta. 1572+85 El. = 784.25

B.M. No. 117 - Nail in Power Pole
101' Lt. Sta. 1588+00 El. = 777.17

B.M. No. 118 - Nail in 10" Pine
120' Lt. Sta. 1598+00 El. = 769.18

EXC. 188.7 EMB. 171.5
10% 17.1
TOT. 188.7 TOT. 188.7
OVERHAUL 475 C.Y.H.M.

+14.8
EXC. 69.5 EMB. 63.2
10% 6.3
TOT. 69.5 TOT. 69.5

+14.1

Survey Sta. 1573+96.1 Begin
Frontage Road Right

-1.42%

300' V.C.

P.I. = 1575+50
El. = 782.00

FINISH GRADE

-0.88%

P.I. = 1595+00
El. = 769.84

400' V.C.

-2.98%

Use 26'-32' Section Throuout

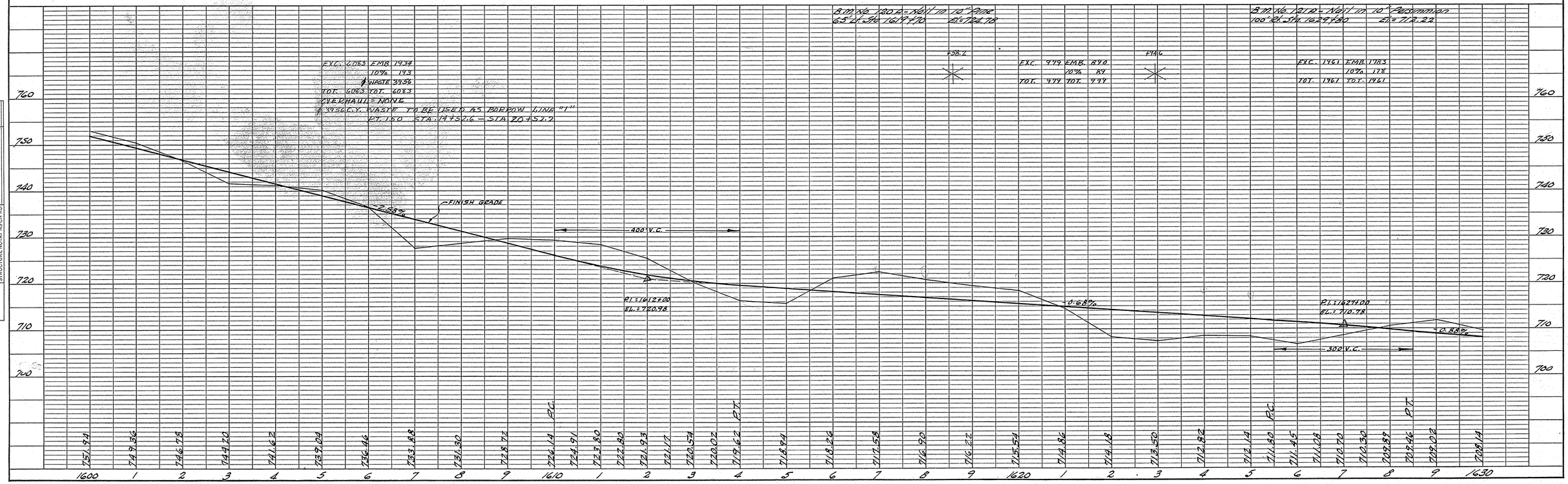
| | | |

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	I-301-2(7)	29	182	417

Frontage Rd. Right. 445
1573+96 to 1650+00

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
R.O.W. CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R.O.W. NOTED
NOTE BOOK
NO.
STRUCTURE NOTATIONS CHKD
BY
DATE



Cherokee
Rt. 29
Rt. Frontage Rd
(2) (6)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	I-301-2(7)	29	183	417

Frontage Rd. Right.
1573+96 to 1650+00

445

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
AS OF PAVI CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
AS NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE

B.M. No. 1224 - Nail in Power Pole
100 Lt. Sta. 1648+75 El. = 703.38

101.9

EXC. 3149 EMB. 2863
10% 286
TOT. 3149 TOT. 3149
OVERHAUL = 191 C.Y. H.M.

Sta. 1650+00 Frontage Rd. Rt. 26° =
Sta. 0700 Line B Rt. 18° Intersection

Survey Sta. 1650+00 End
Frontage Road Right

720
710
700
690

FINISH GRADE
-0.88%
300' V.C.
P.I. = 1638+00
EL. = 701.10
-0.10%
P.I. = 1648+00
EL. = 700.10
-2.00%
300' V.C.

1630	1	2	3	4	5	6	7	8	9	1640	1	2	3	4	5	6	7	8	9	1650 = 0+00 Line B Rt. 18°
708.14	707.26	706.38	705.50	704.62	703.74	702.86	702.42 PC	702.01	701.67	701.38	701.18	701.03	700.95	700.90	700.80	700.70	700.60	700.50	700.40	700.30	700.25 PC	700.12	699.83	699.32	698.78	698.02	697.40 PT	696.10
										100' Rt. ℄										86° Rt. ℄						86° Lt. ℄	

PLATE 1 - PLAN - PROFILE O.P.R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Cherokee
Rt. 29
Rt. Frontage Rd.

3 6

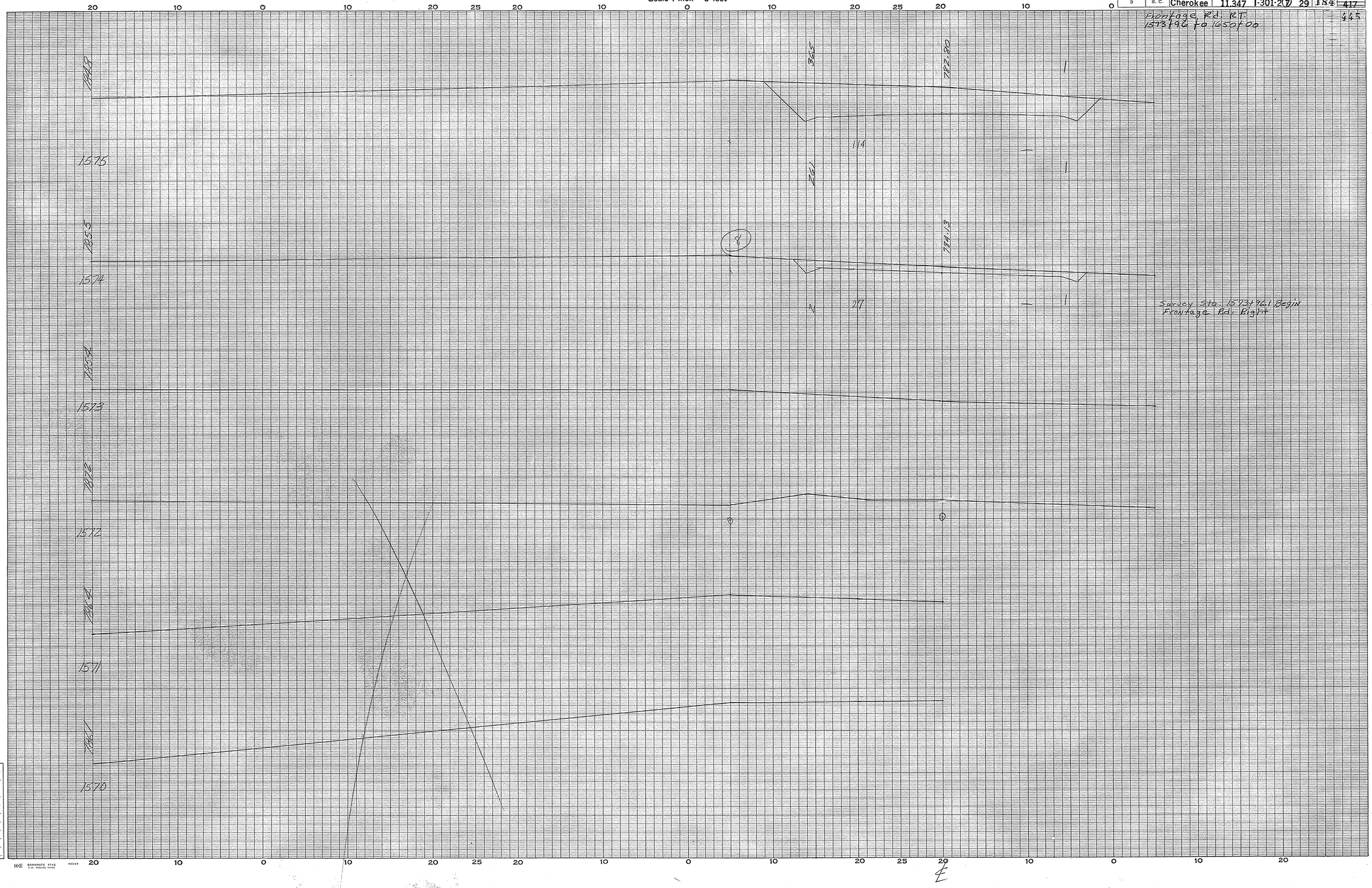
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	184	417

445

Frontage Rd. RT.
1573+96 to 1650+00



Frontage Rd. Rt
Cherokee Co
Routes 11-18
(5)

Ground Surface Platted by.....
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Template Sections Platted by.....
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Areas by.....
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Template Sections Revised by.....
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Final Areas by.....
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Quantities Transferred and Inked by.....

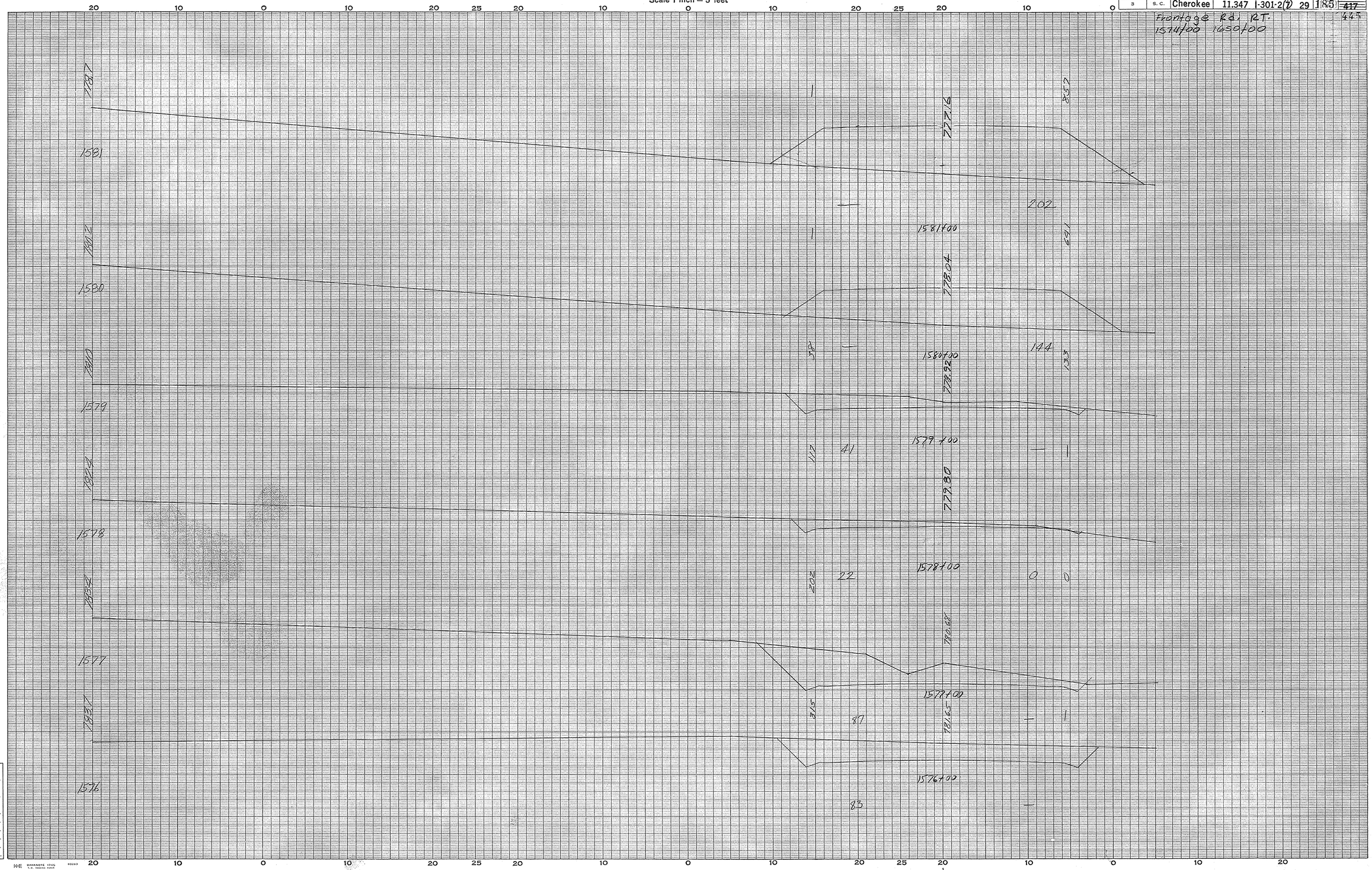
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	185	~~417~~ 445

Frontage Rd. RT.
1574+00 1650+00



Frontage Rd Rt
Cherokee Co
Routes 11-18
(6)

Ground Surface Platted by
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Template Sections Platted by
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Areas by
" Checked by
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

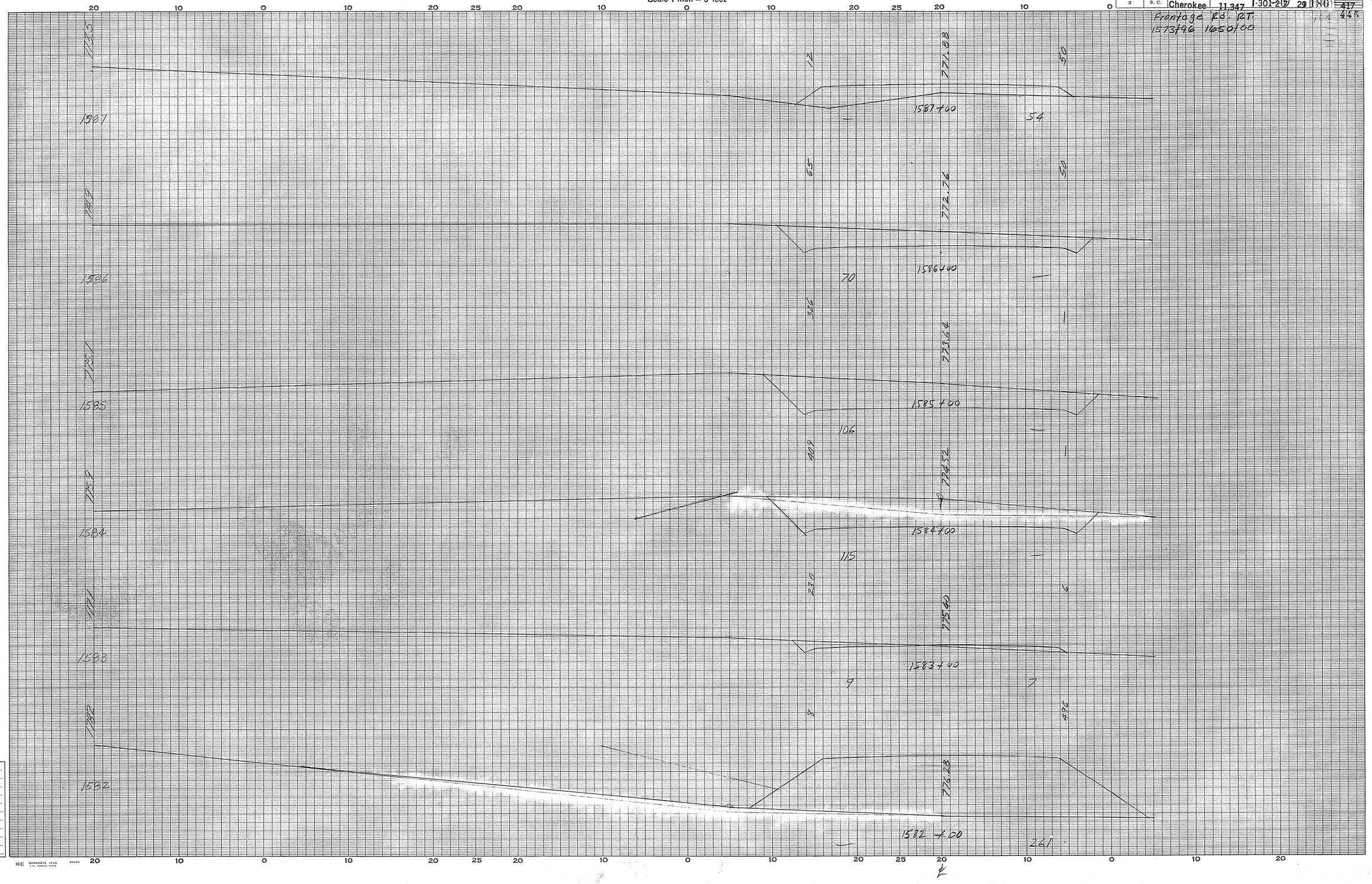
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	186	417

Frontage Rd. RT.
1573/96 1650/00



Frontage Rd RT
Cherokee Co
Rates 1+18
(7)

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Template Sections Revised by.....
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Final Areas by.....
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Quantities Transferred and Inked by.....

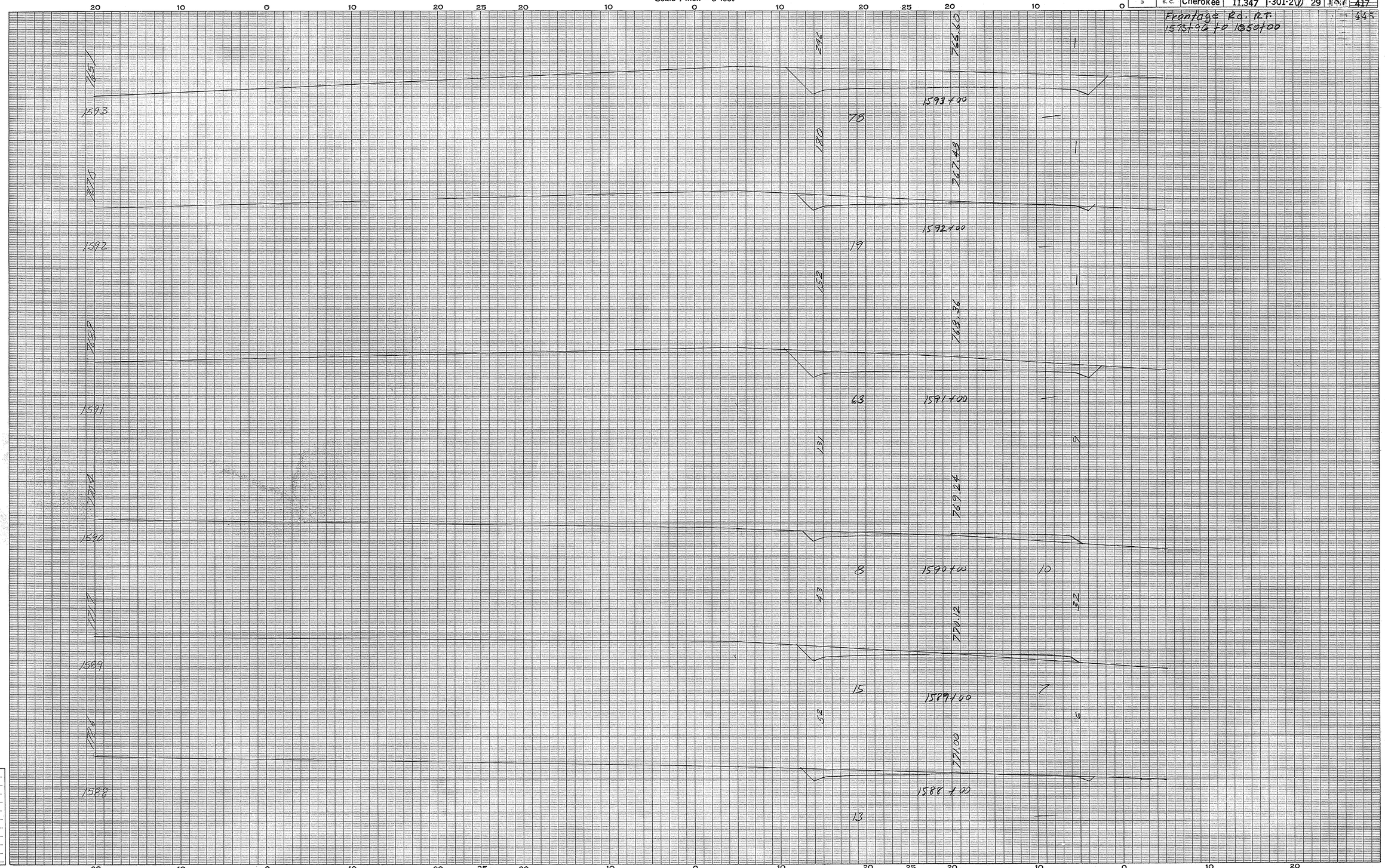
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	187	~~417~~ 445

Frontage Rd. RT.
1573+96 to 1850+00



Frontage Rd Rt
Cherokee Co
Routes 11 & 18
8

Ground Surface Platted by
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Template Sections Revised by
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Final Areas by
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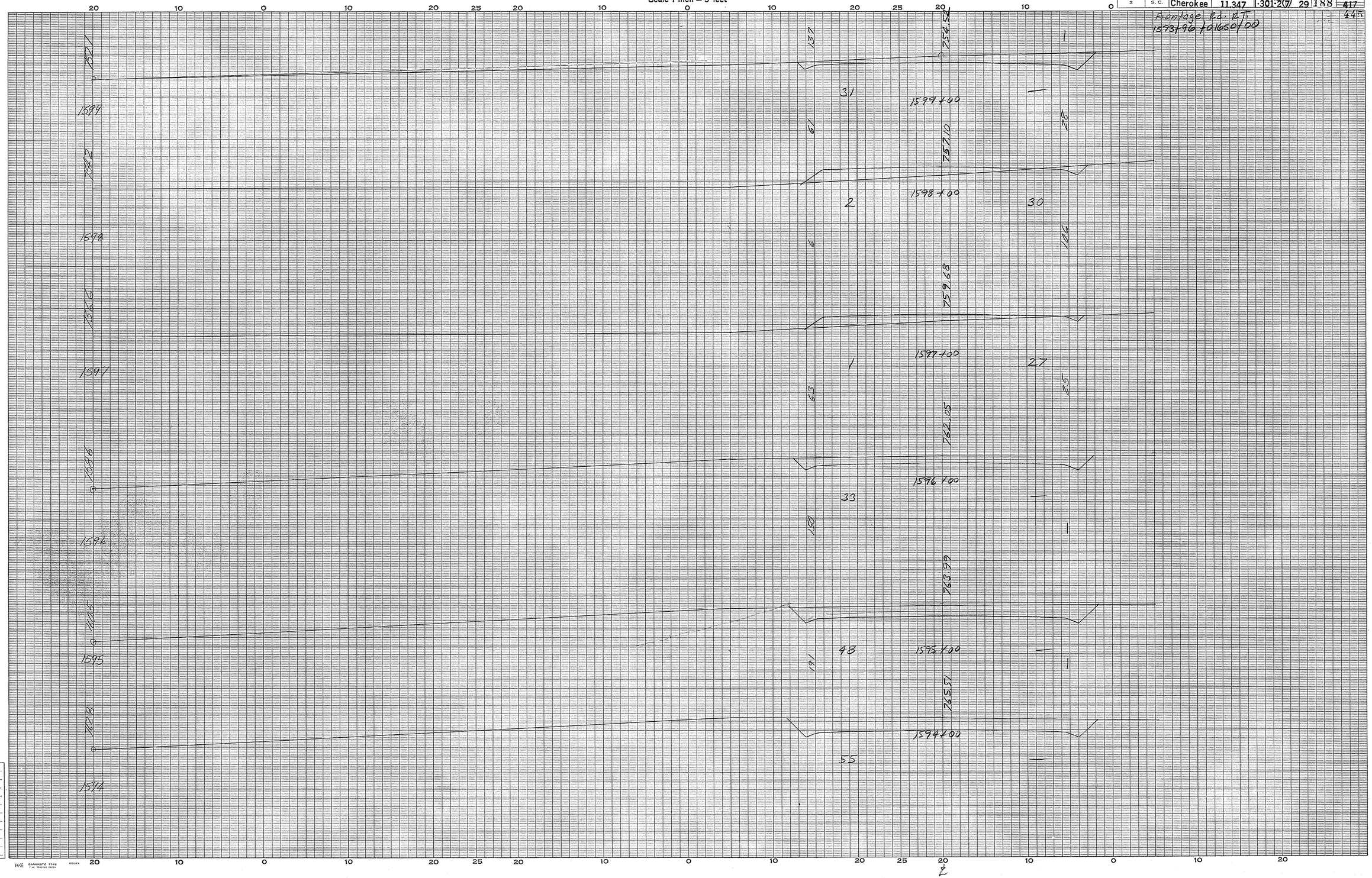
Quantities Transferred and Inked by

6

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	188	~~417~~ 445



Frontage Rd Rt
Cherokee Co
Rt 11 to 18
(9)

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Template Sections Revised by.....
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Final Areas by.....
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Quantities Transferred and Inked by.....

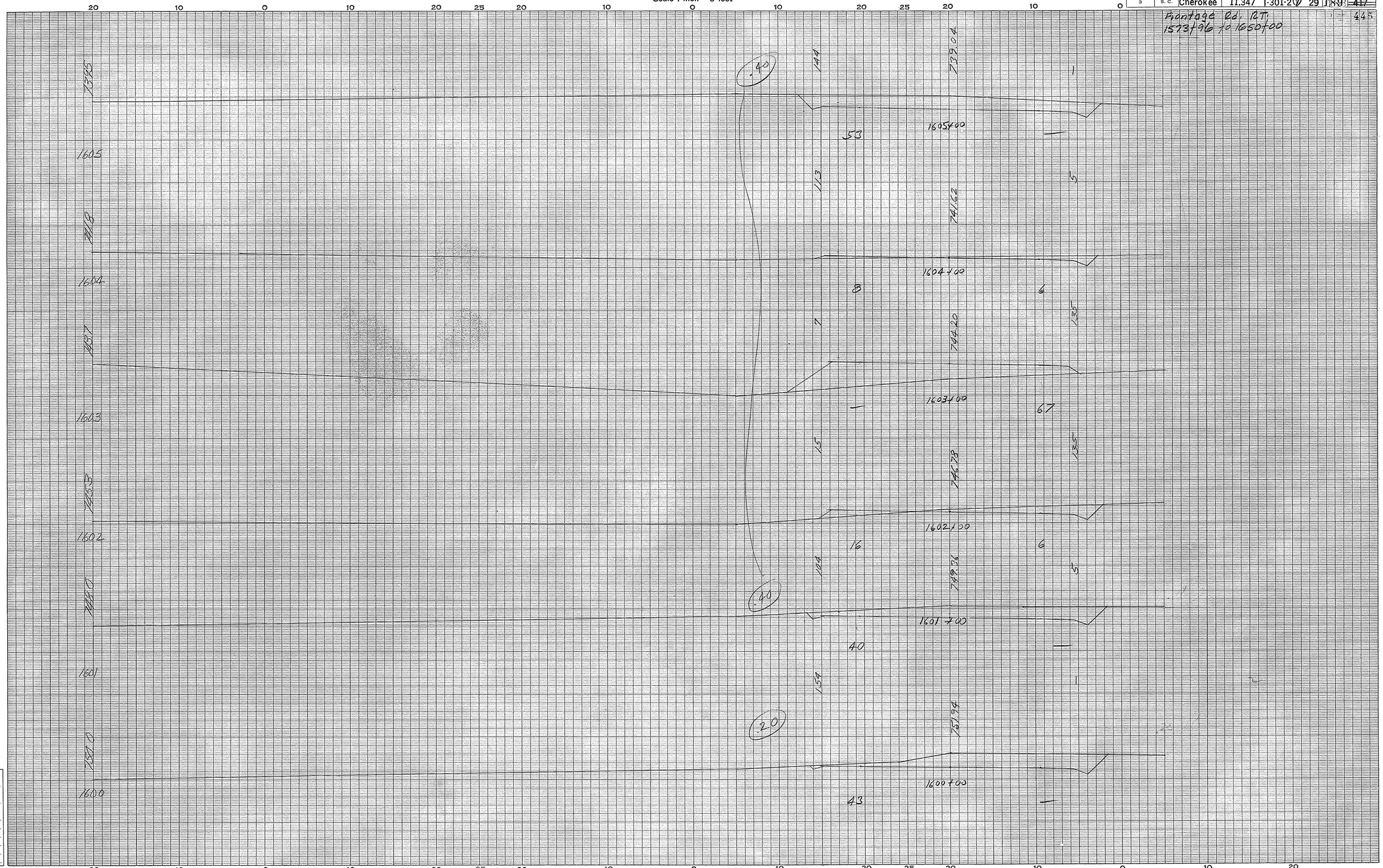
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	189	~~417~~ 445

Frontage Rd. RT.
1573+96 to 1650+00



Frontage Rdbt
Cherokee Co
Routes 11 to 18

(10)

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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

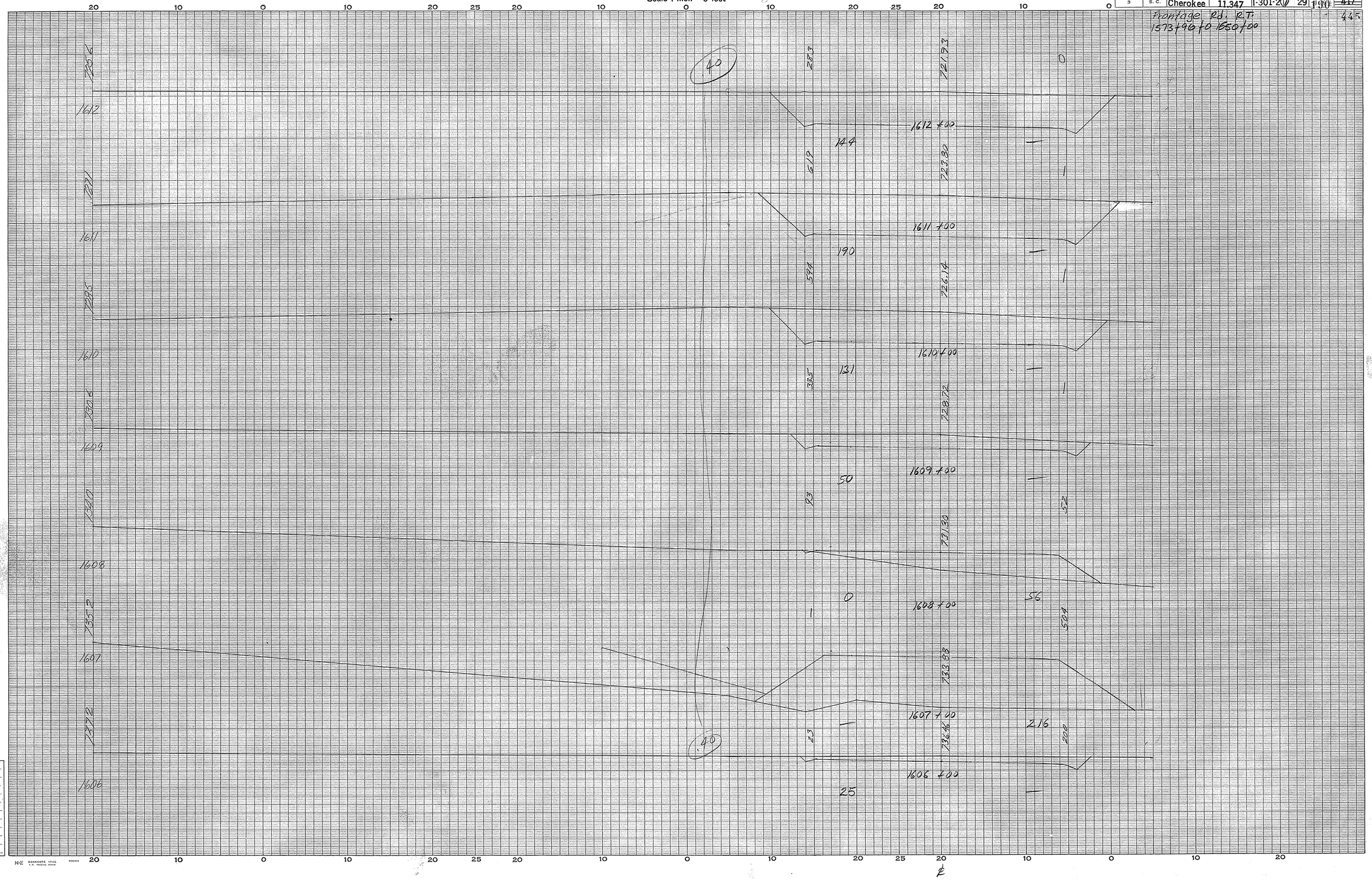
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	190	~~417~~ 445

Frontage Rd. RT.
1573+96 to 1650+00



Frontage Rd RT
Cherokee Co
Routes 11 to 18

Ground Surface Platted by
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Areas by
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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

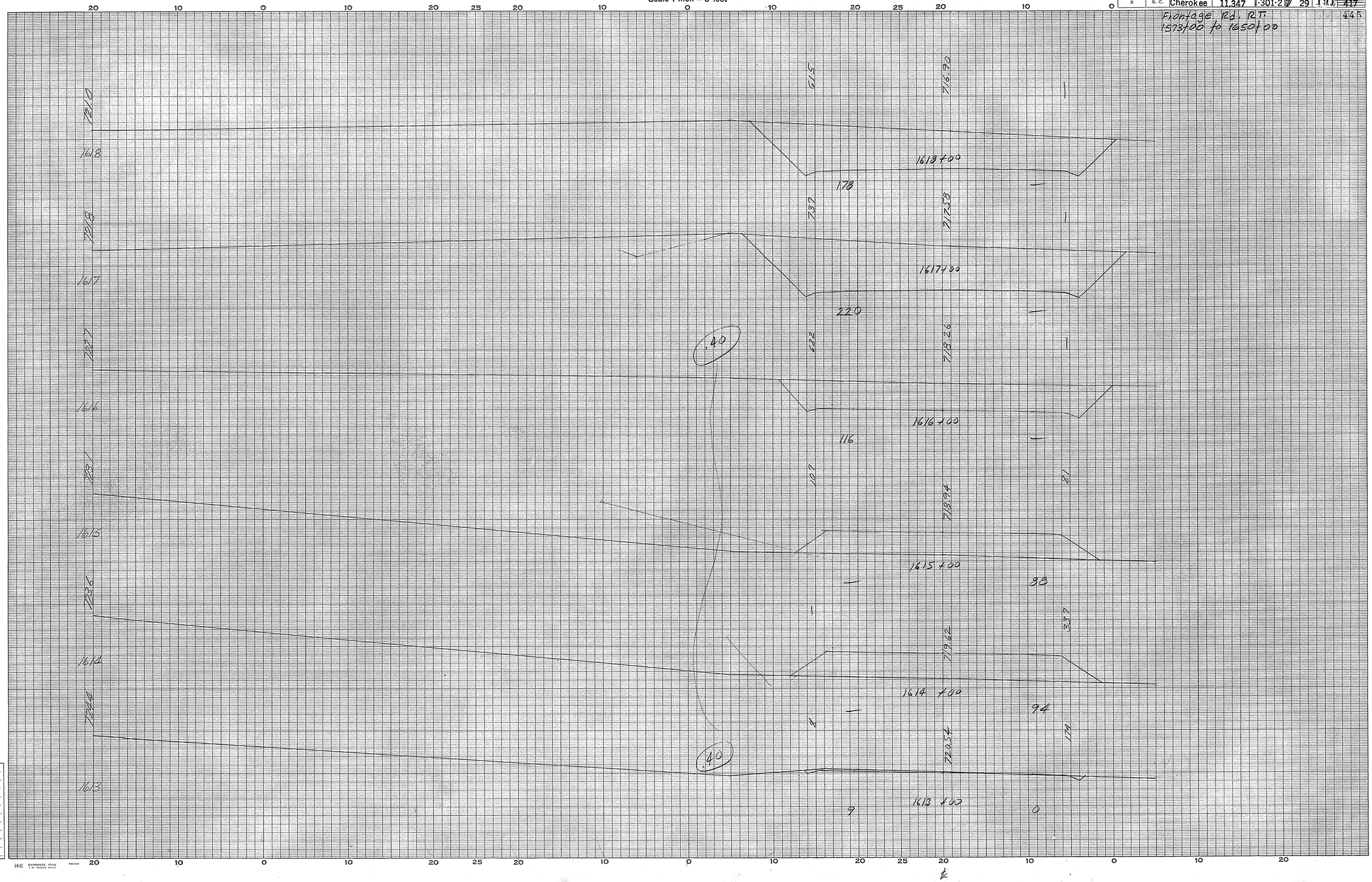
6

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2	29	191	~~417~~ 445

Frontage Rd. RT.
1573+00 to 1650+00



Frontage Rd Lt
Cherokee Co
Routes 11 to 18
(12)

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Final Areas by.....
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Quantities Transferred and Inked by.....

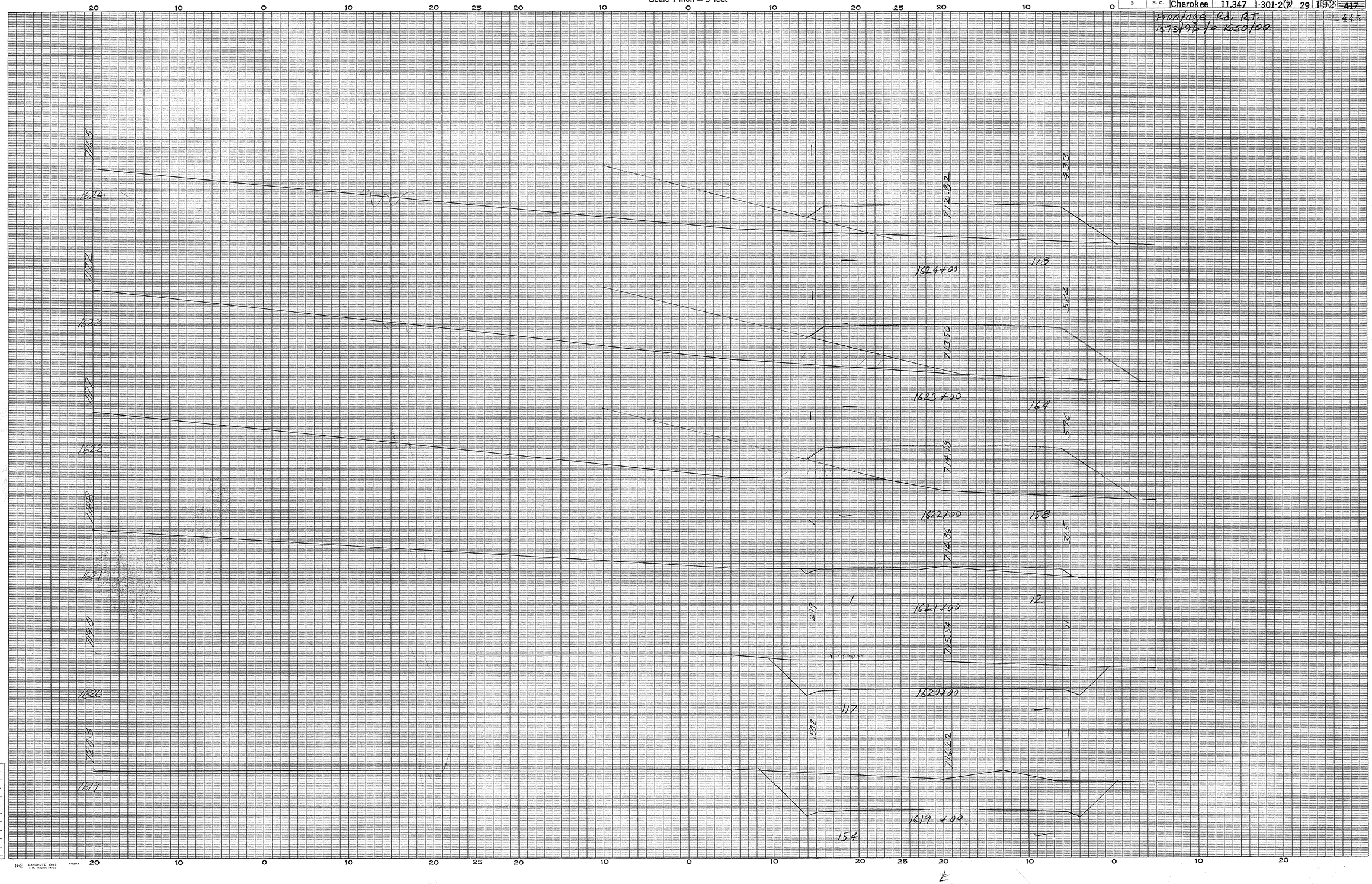
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	192	~~417~~ 445

Frontage Rd. RT.
1573+96 to 1650+00



Frontage Rd Rt
Cherokee Co
Routes 11 to 18
(13)

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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

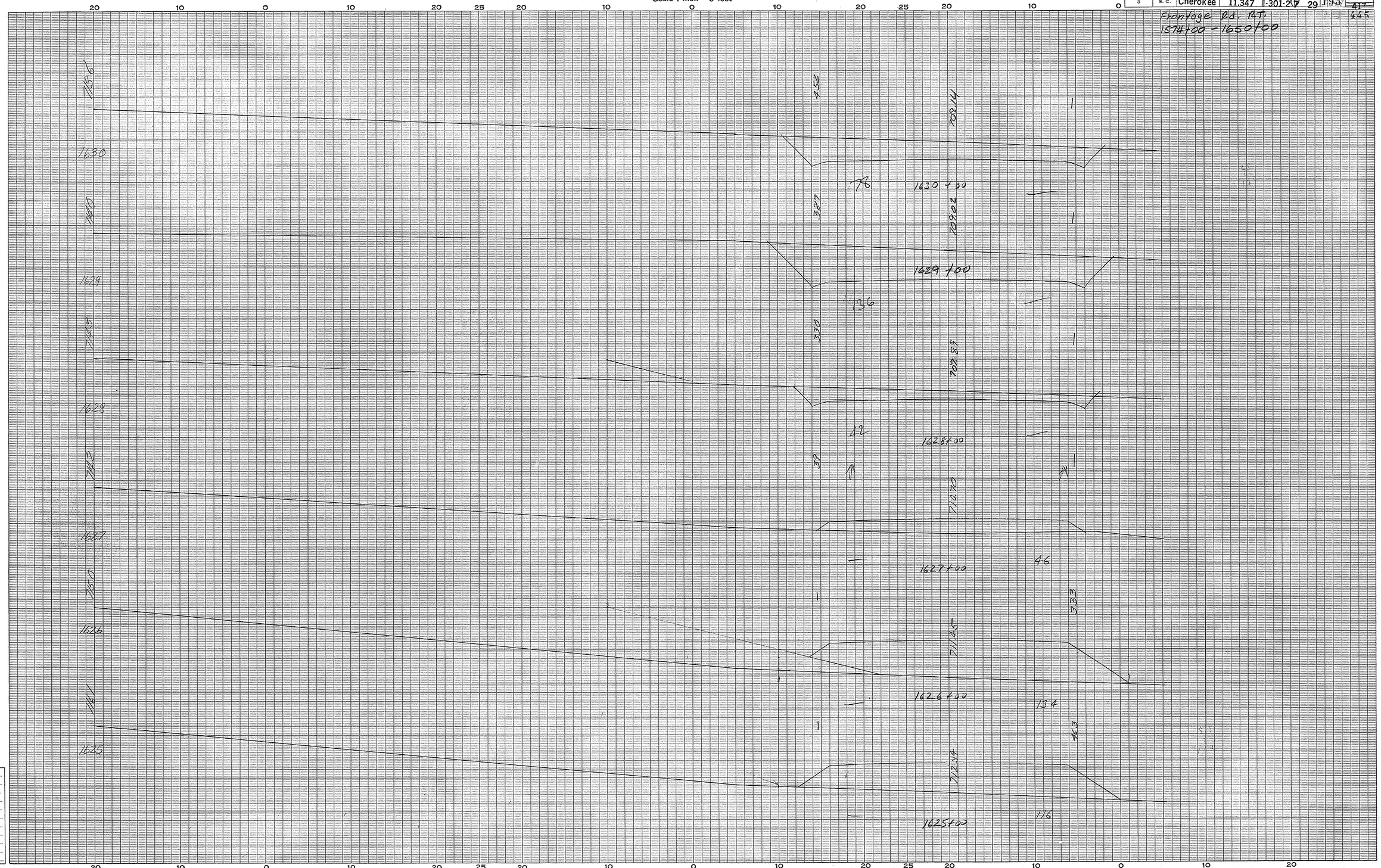
(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	193	417

Frontage Rd. RT.
1574+00 - 1650+00



Frontage Rd Rt
Cherokee Co
Routes 11 To 18

14

Ground Surface Platted by
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Template Sections Revised by
" " Checked by
Final Areas by
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Quantities Transferred and Inked by

6

100

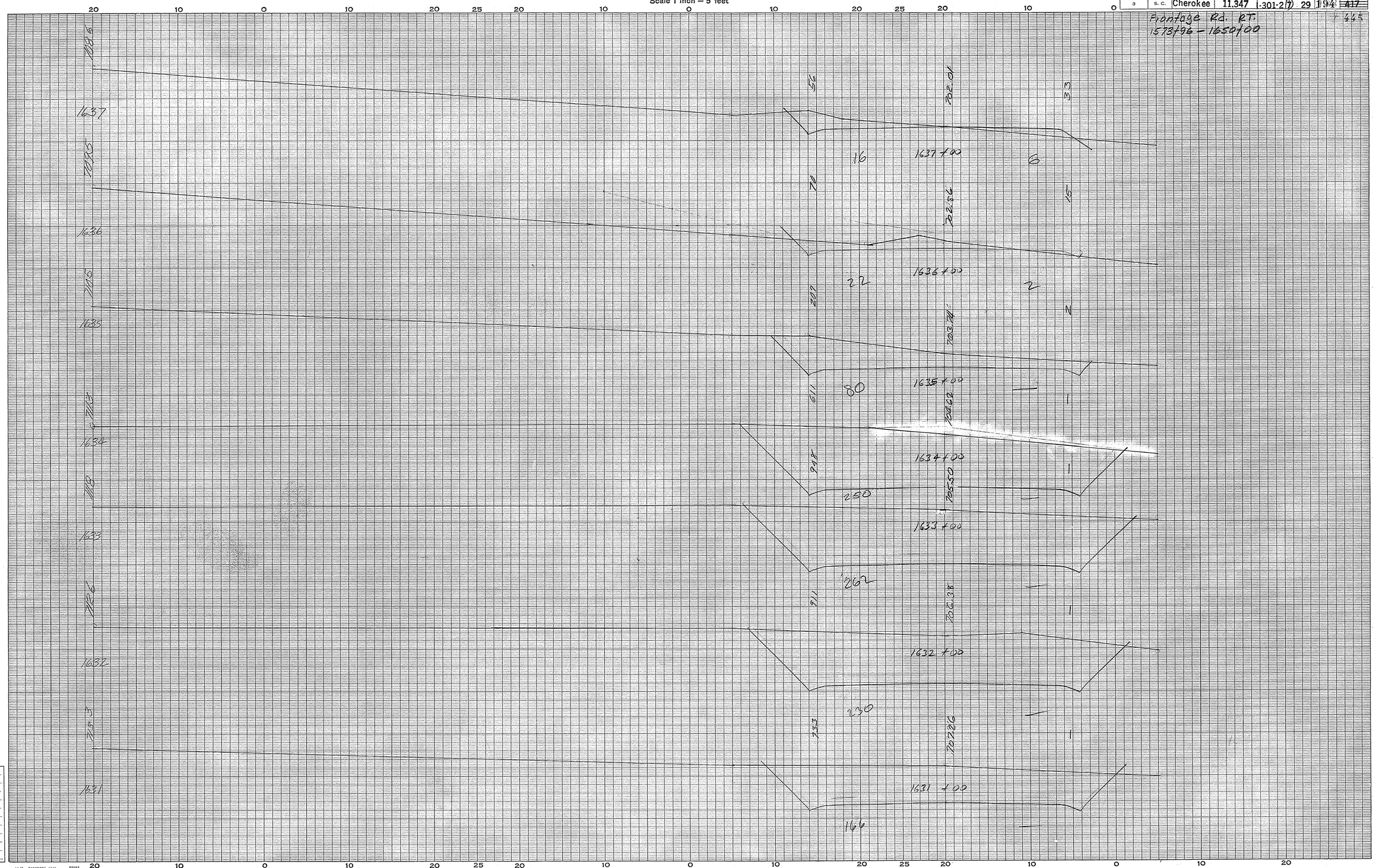
120

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	194	~~417~~ 445

Frontage Rd. RT.
1573+96 – 1650+00



Frontage Rd Rt
Cherokee Co
Routes 11 to 18
(15)

Ground Surface Platted by
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Areas by
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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	195	~~417~~ 445

Frontage Rd. RT.
1573+96 — 1650+00



Frontage Rd. RT
Cherokee Co
Routes 11 To 18
(16)

Ground Surface Platted by
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Template Sections Platted by
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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
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Quantities Transferred and Inked by

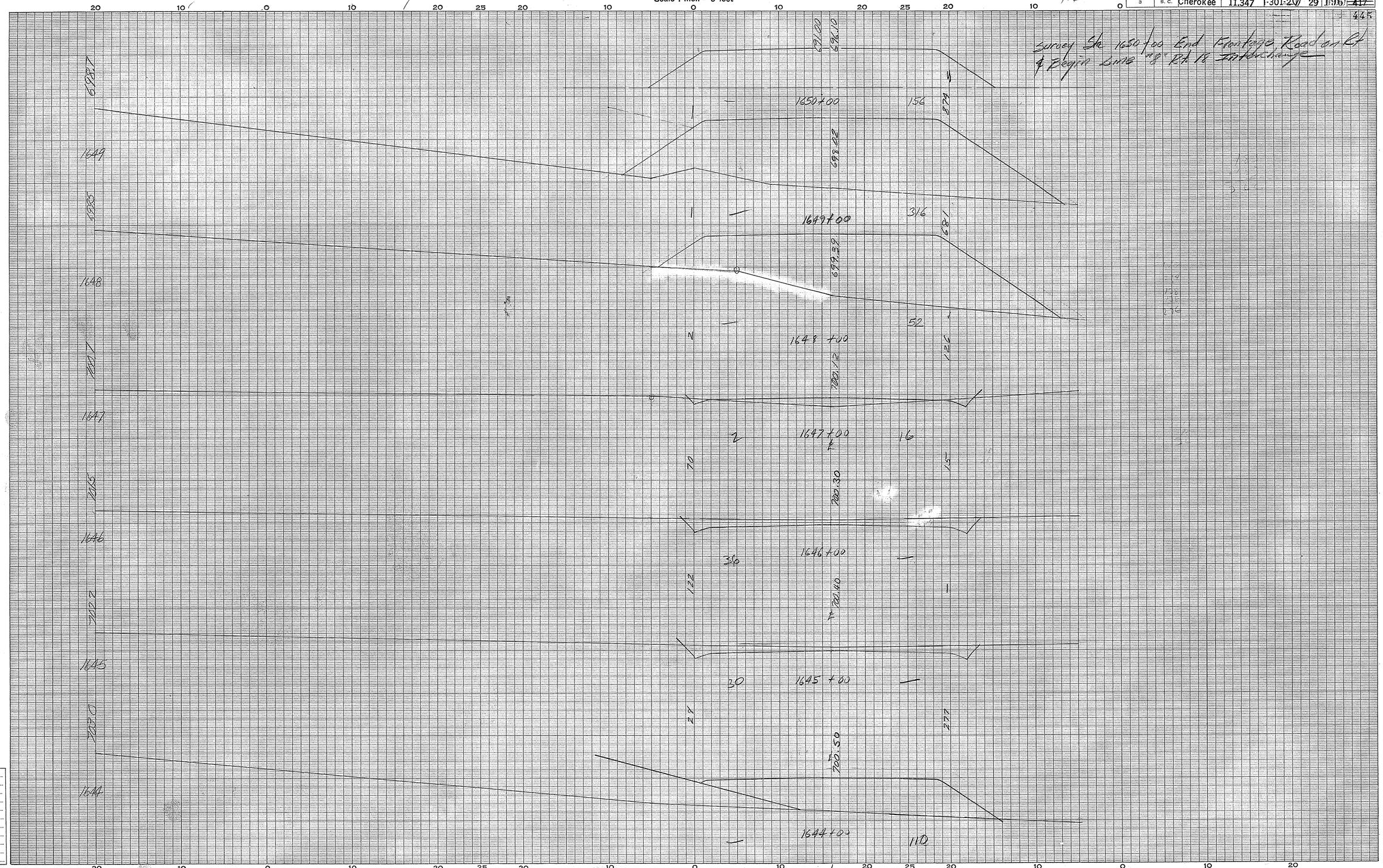
(6)

100' ℄ — 1640

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	196	~~417~~ 445



Frontage Rd Rt
Cherokee Co
Route 11 To 18

(19)

Ground Surface Platted by
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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

(6)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	197	~~417~~ 445

Frontage Rd. Left
1734+50 to 1759+00

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

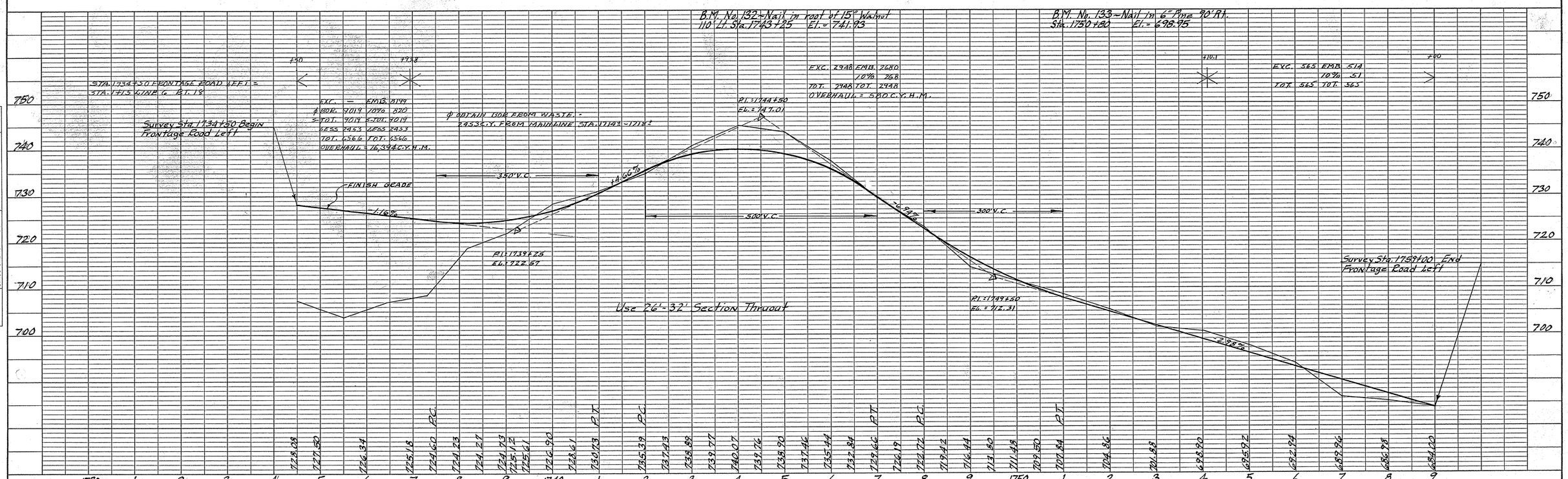


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

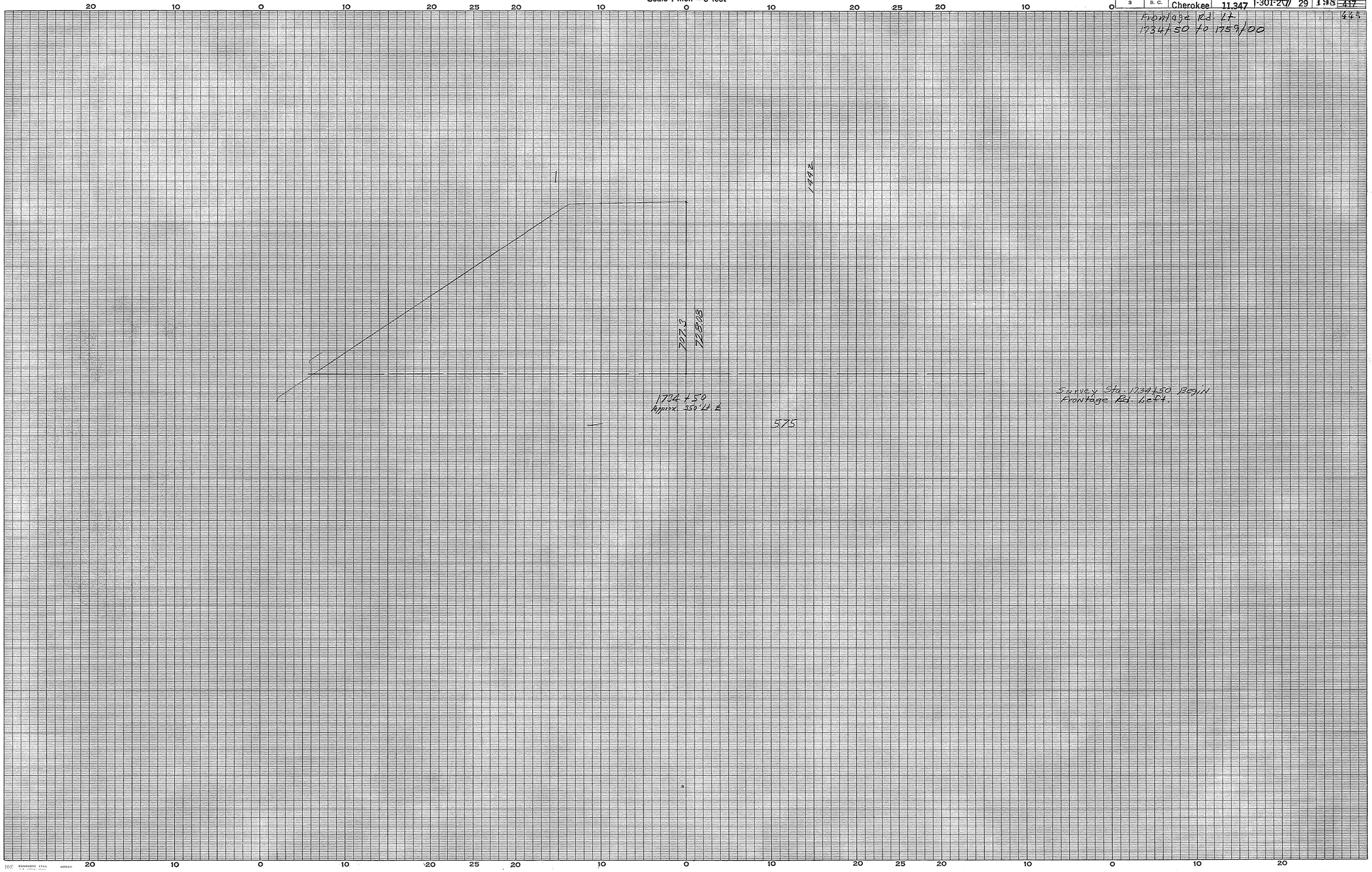
Rt. 29
Cherokee Co
Frontage Rd
Lt
(9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	198	~~417~~ 445

Frontage Rd. Lt.
1734+50 to 1759+00



Cherokee Co
Rt. 29 Frontage Rd. Lt.

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Areas by
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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

A-1

9

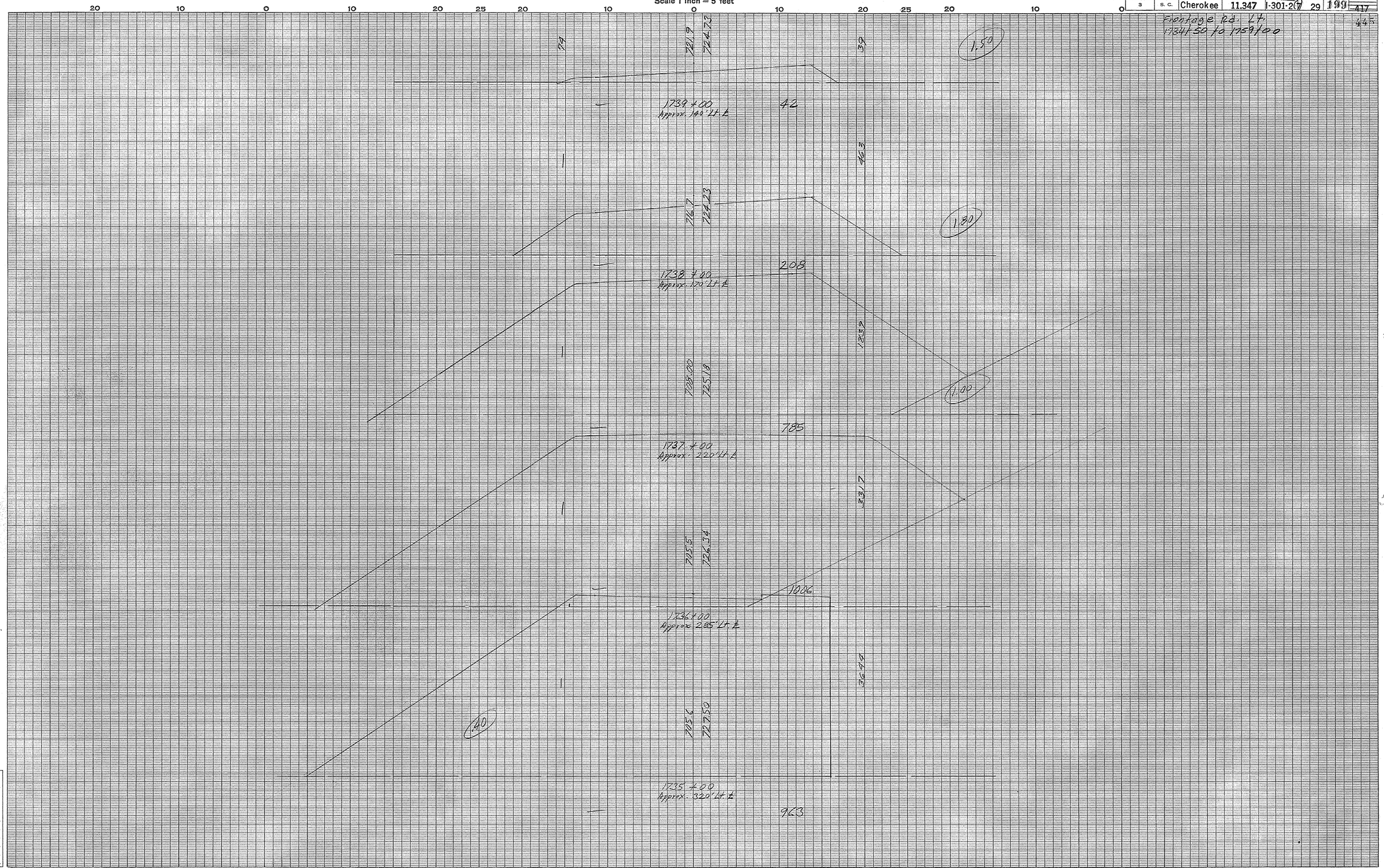
CROSS SECTIONS

Scale 1 inch = 5 feet

Cresto

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	199	417

Frontage Rd. Lt.
1734+50 to 1759+00



Cherokee Co.
Rt. 29 Frontage Rd. Lt.

Ground Surface Platted by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

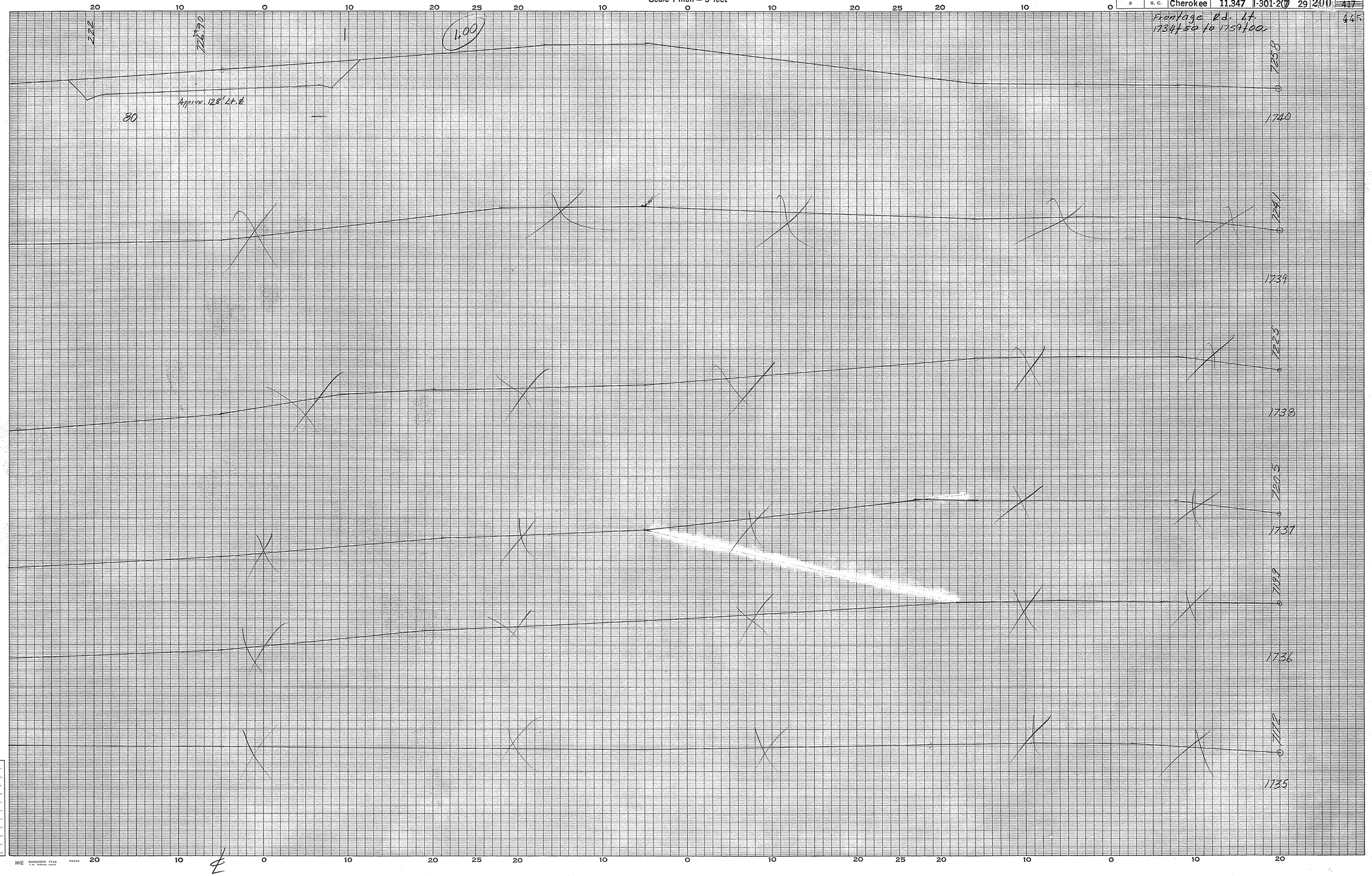
A-2 (9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	200	~~417~~ 445

Frontage Rd. Lt.
1734+50 to 1759+00.



Cherokee Co.
Rt #29.
Frontage Rd. Lt.
(1)

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Final Areas by.....
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Quantities Transferred and Inked by.....

(9)

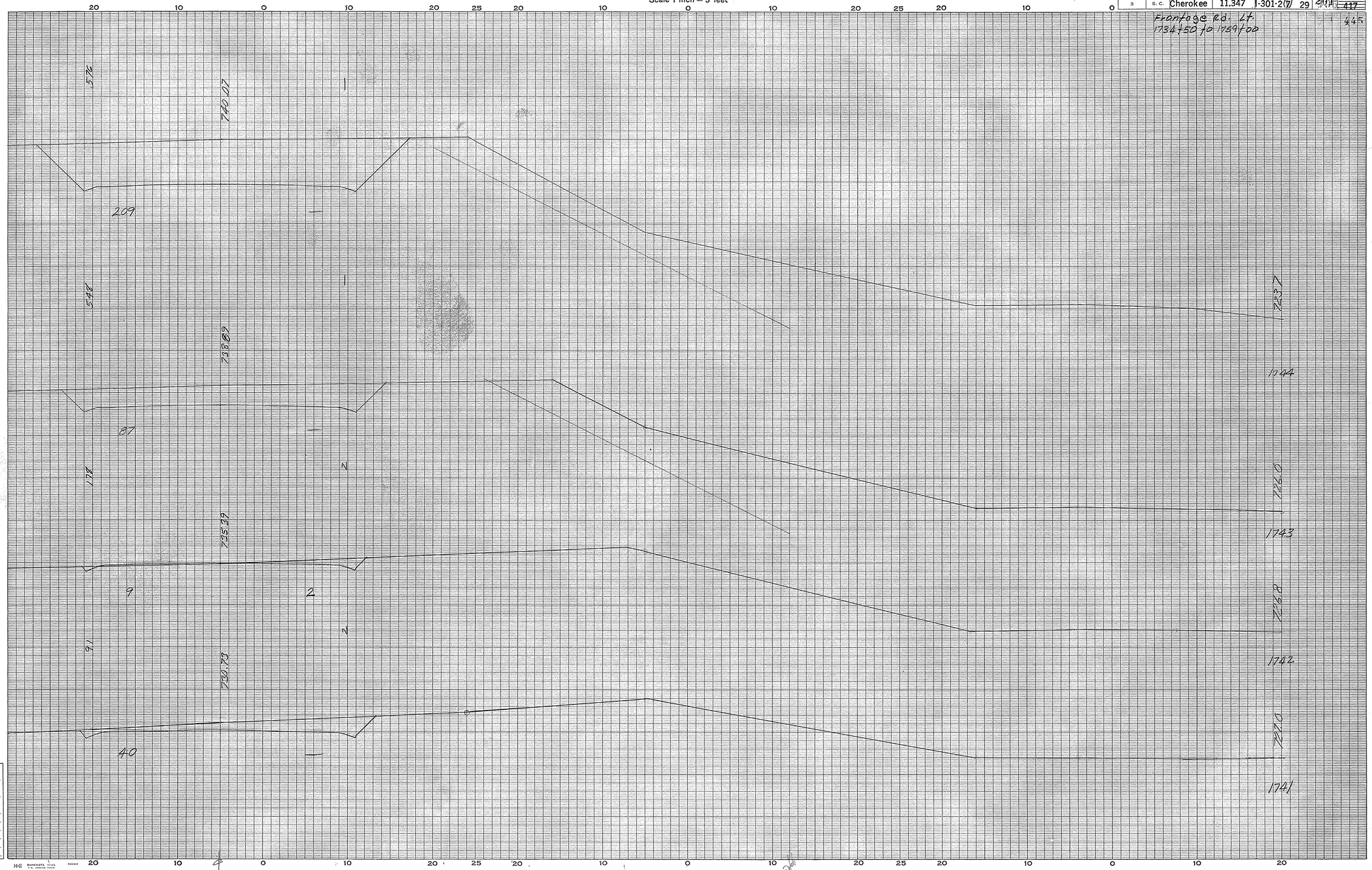
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	201	417

Frontage Rd. Lt.
1734+50 to 1759+00

445



Rt#29 Cherokee Co Frontage Rd Lt.

(2)

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Areas by
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Template Sections Revised by
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Final Areas by
" " Checked by
Quantities Transferred and Inked by

(9)

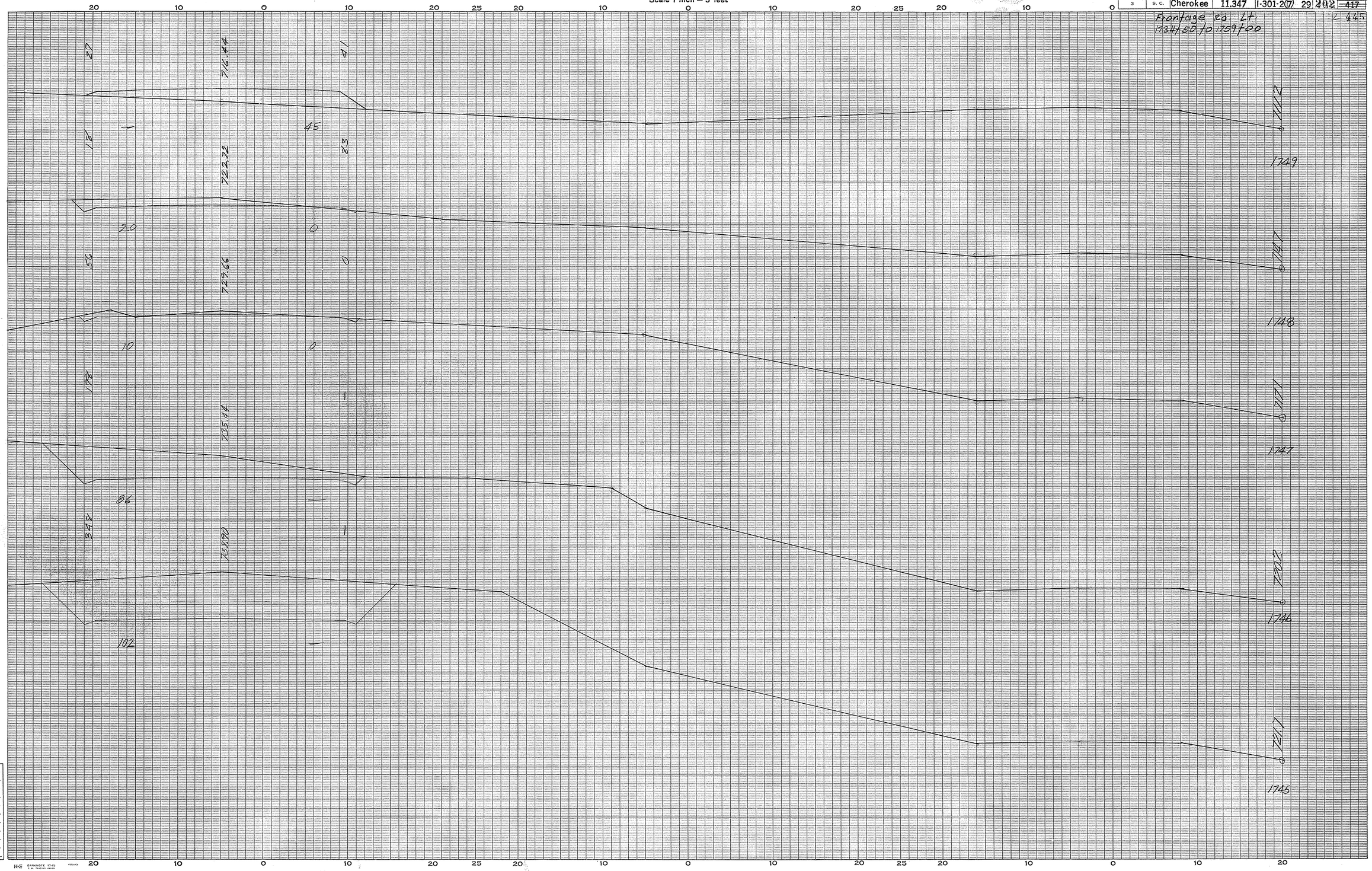
100

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	202	~~417~~ 445

Frontage Rd. Lt
1734+50 to 1759+00



Rt #29
Cherokee Co
Frontage Rd Lt
(3)

Ground Surface Platted by
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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	203	417

Frontage Rd. Lt.
1734+50 to 1769+00

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

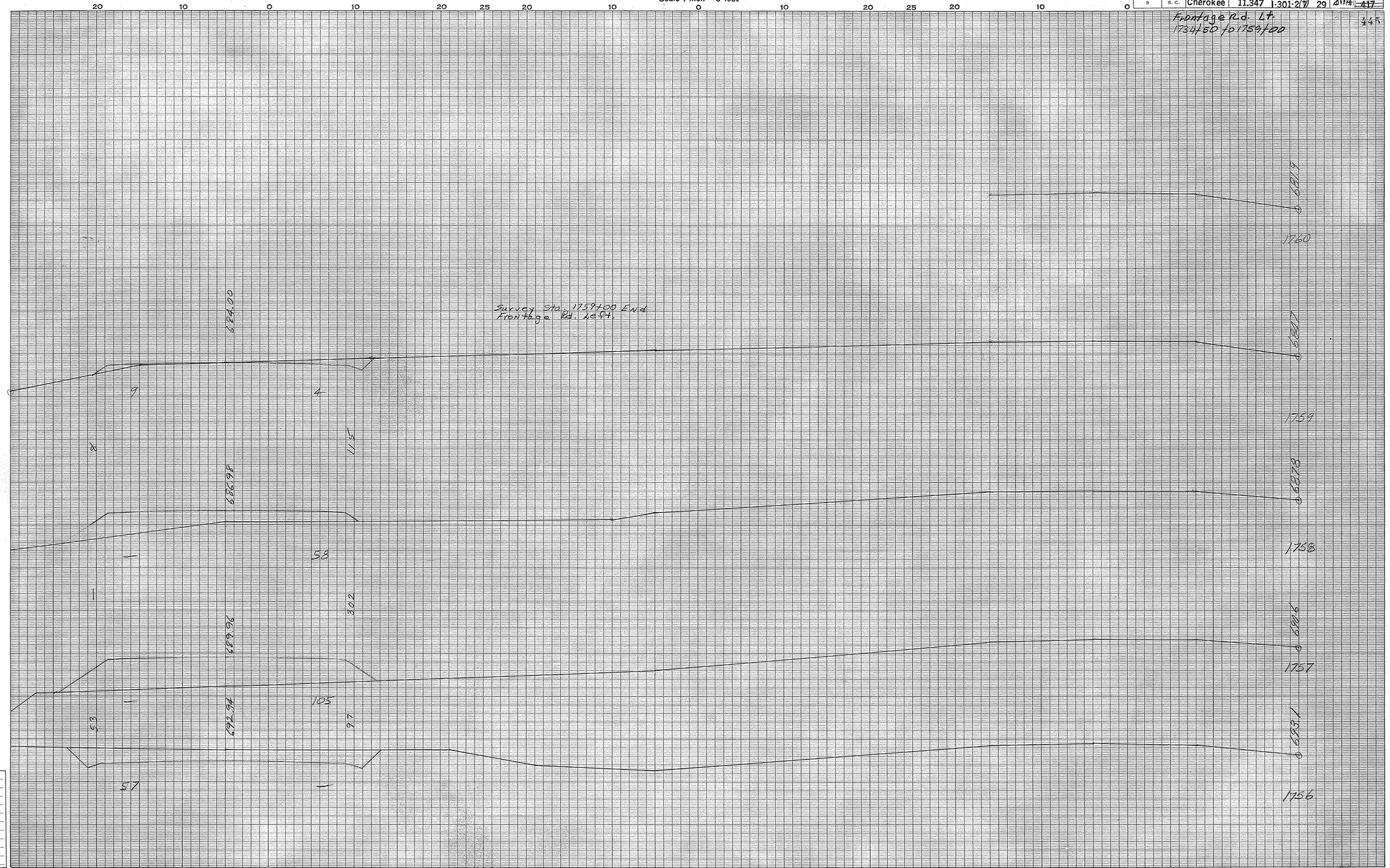
| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	204	~~417~~ 445

Frontage Rd. Lt.
1734+50 to 1759+00



Rt #29
Cherokee Co
Frontage Rd
Lt.

(5)

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Areas by
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Template Sections Revised by
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Final Areas by
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Quantities Transferred and Inked by

(9)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	215	417 445

Frontage Rd. Right.
7+68 to 17+54+55

PLAN
SURVEYED BY DATE
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. RT. OF WAY CHECKED

PROFILE
SURVEYED BY DATE
PLOTTED
NOTE BOOK GRADES CHECKED
NO. B. M.'s NOTED
STRUCTURE NOTATIONS CHECKED

B.M.#132 Nail in Root 15" Walnut
110'N Sta 1713+25 El.=741.93

B.M.#133 Nail in 6" Pine
90'Rt. Sta 1750+80 El.=689.75

Survey Sta. 7+68 Begin Frontage Rd. Right

EXC.=1116 Tot.=1116
EMB.=1015 10%=101 Tot.=1116

P.I.=9+00
El.=725.86

-0.10%

-0.70%

300' V.C.

P.I.=14+00
El.=722.26

Sta. 7+25 Line A (C.L.H.) = Sta. 7+25 Line L = Sta. 7+25 Frontage Rd. Right

THE EQUALITY - Sta. 1+00 Line L = Sta. 7+25 Frontage Rd. Right

Sta. 17+39+49.2

+2.96%

Sta. 17+38+85.2 Frontage Rd. Rt.

Sta. 15+17.1 Frontage Rd. Rt.

EXC.=5426
Tot.=5426
P.I.=17+42.50
El.=736.52

EMB.=—
8 Waste=5426
Tot.=5426

8 5426 C.Y. Waste to be used as borrow Line A Sta. 1+00 to 11+57.1

600' V.C.

Sta. 17+46+52.5

-5.54%

EXC.=1169
Tot.=1169

EMB.=1063
10%=106
Tot.=1169

300' V.C.

P.I.=17+49.50
El.=697.04

-1.74%

Finish Grade

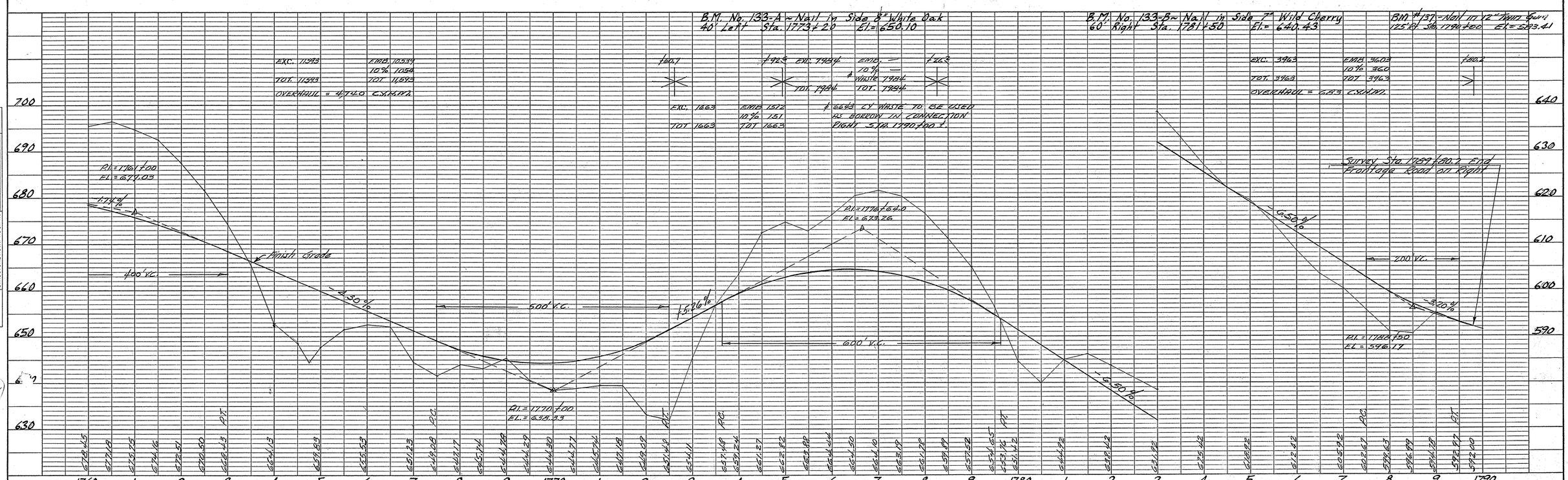
Survey Sta. 17+54+55 End Frontage Rd. Right

| | | |

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	205-A	445

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. & NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



Cherokee Co.
Rt. 29
Frontage Rd. (Rt)

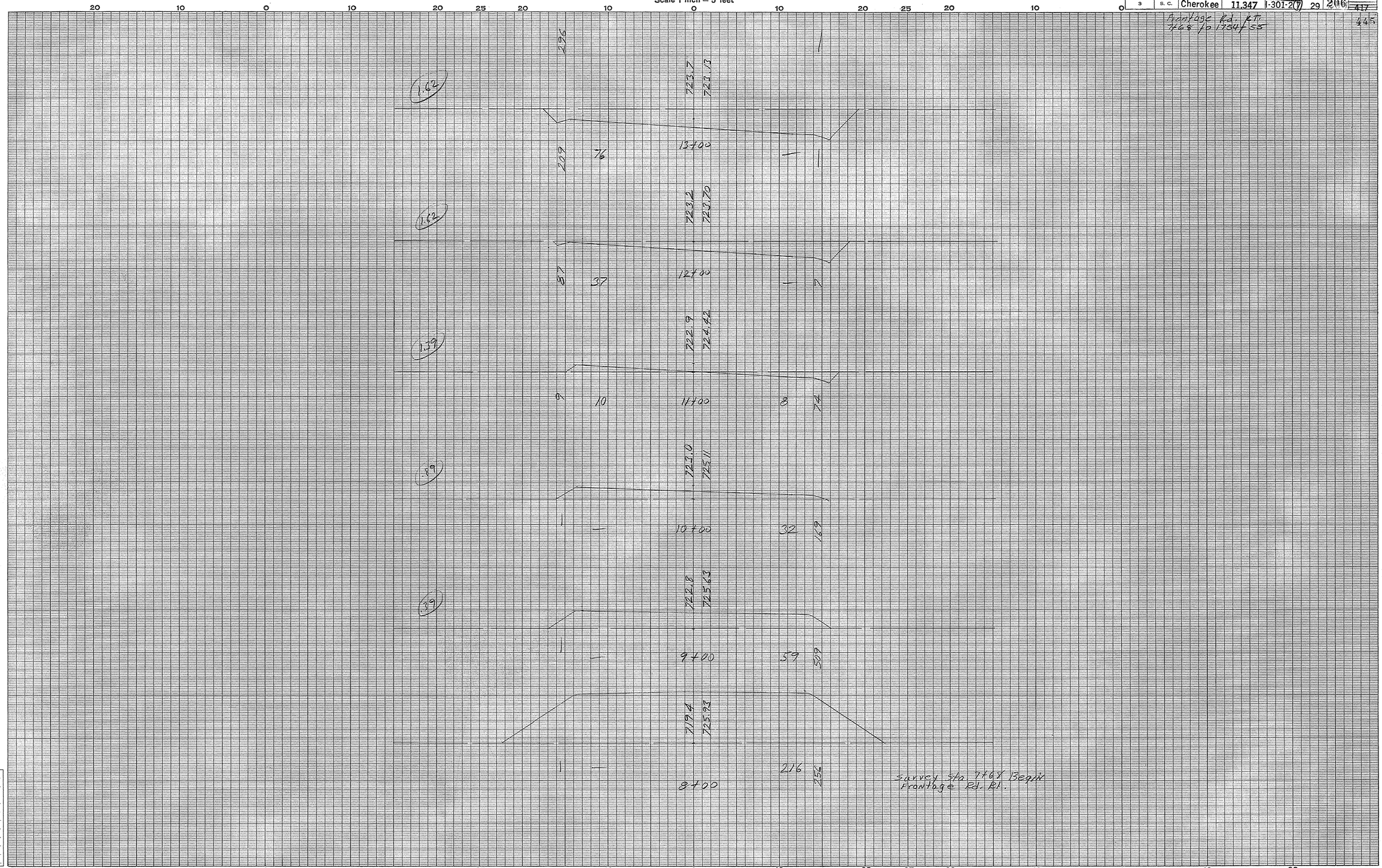
PLATE 1 - PLAN - PROFILE. O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	206	417

Frontage Rd. Rt.
7+68 to 1754+55



Cherokee Co
Frontage Rd. Right

A-1

Ground Surface Platted by JH
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Areas by
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Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

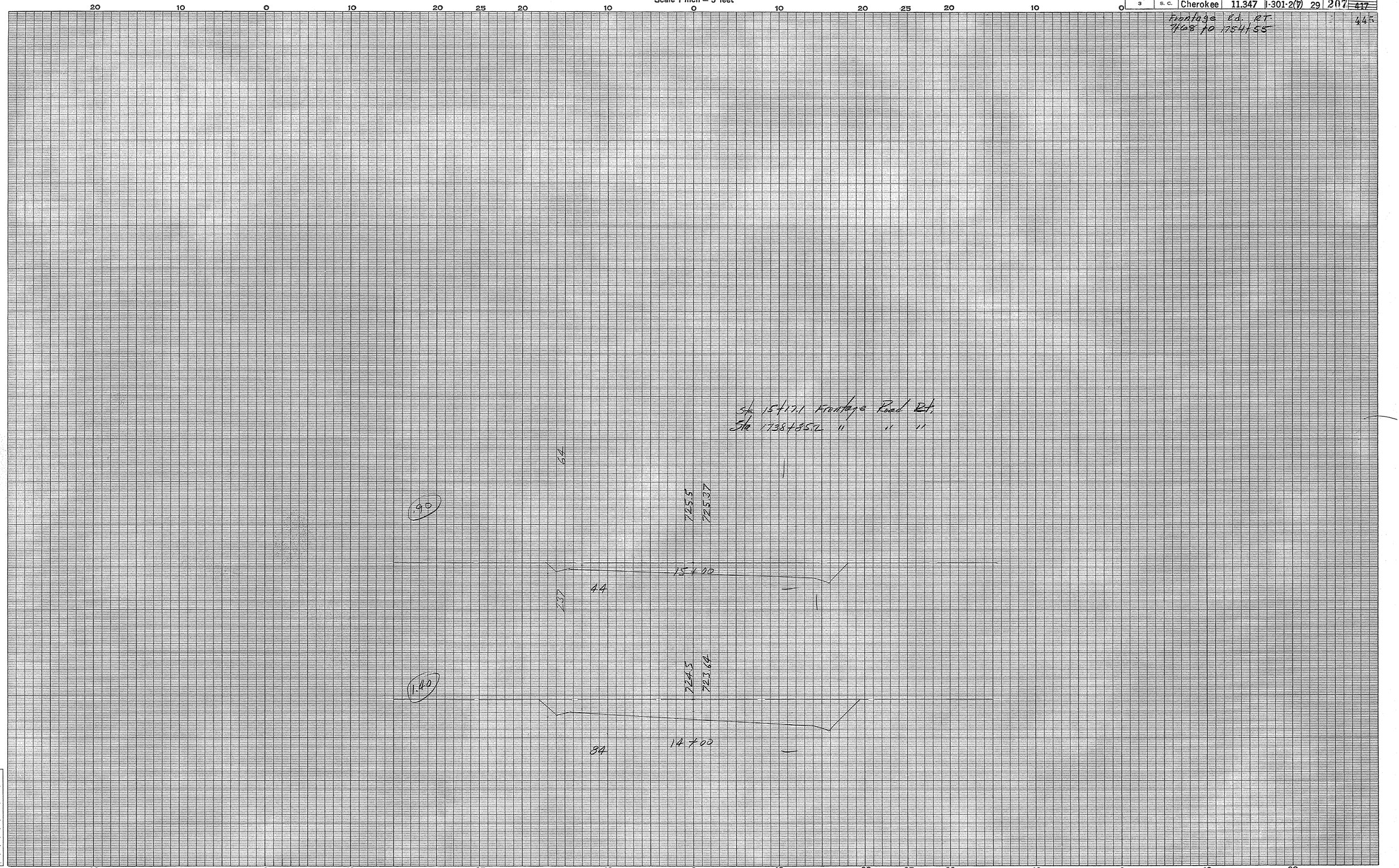
8

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	207	~~417~~ 445

Frontage Rd. RT.
7468 to 1754+55



Cherokee Co
Frontage Rd. Right
A-2

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Quantities Transferred and Inked by

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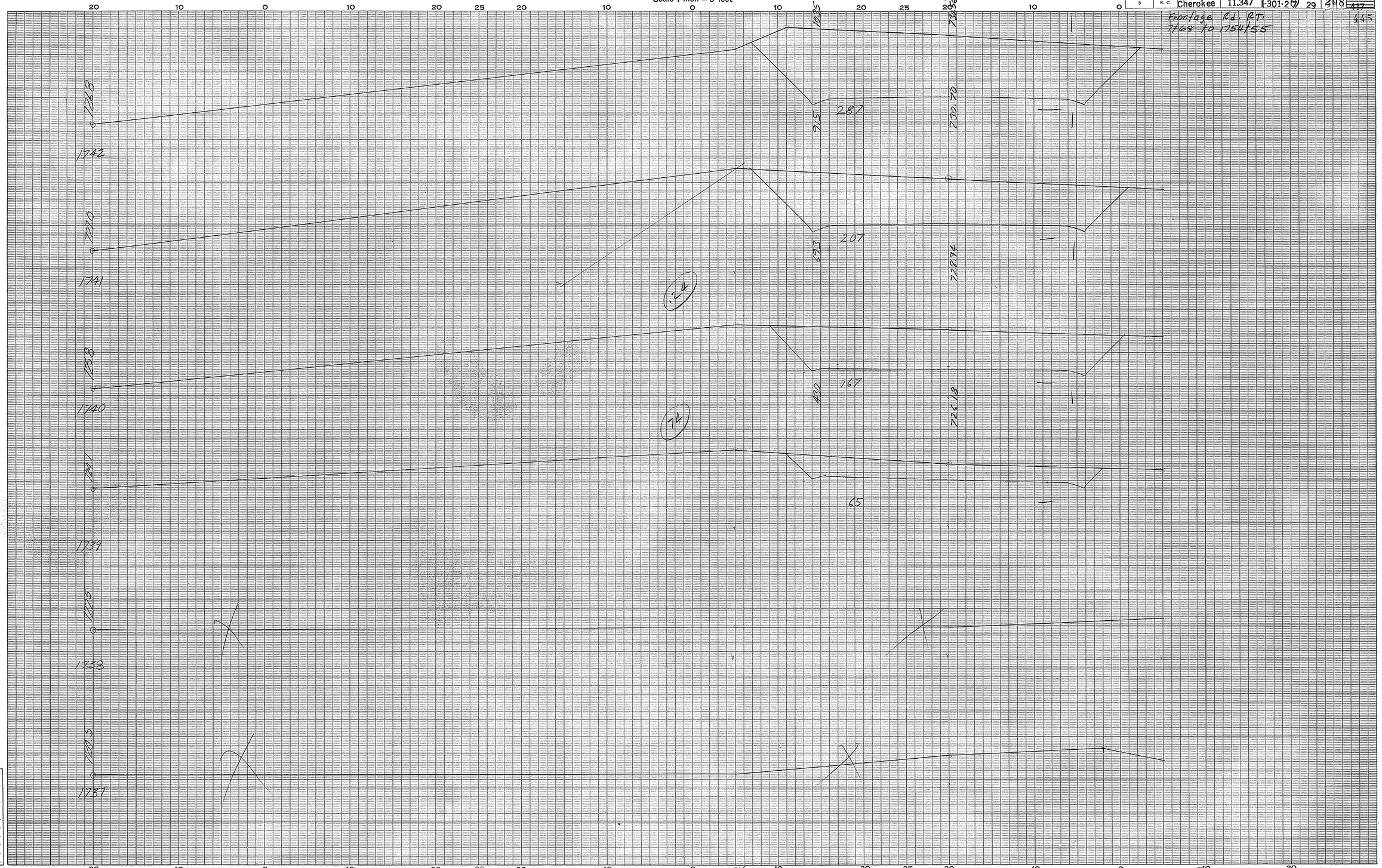
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	208	~~417~~ 445

Frontage Rd. RT.
7+68 to 1754+55



Rt#29
Cherokee Co
Frontage Rt Rt
(1)

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Final Areas by
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Quantities Transferred and Inked by

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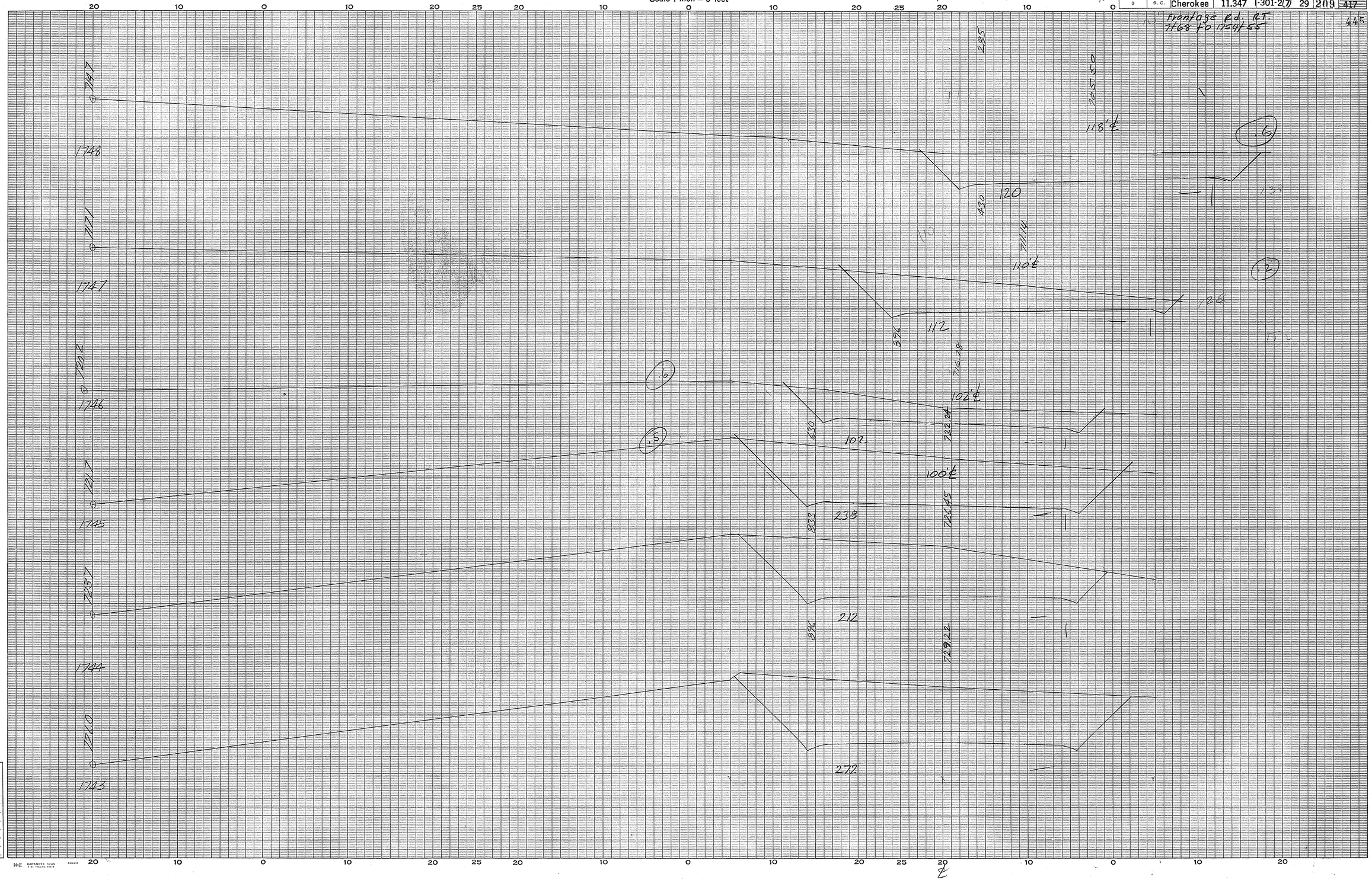
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	209	~~417~~ 445

Frontage Rd. RT.
7+68 to 1754+55



Rt #29
Cherokee Co.
Frontage Rd Rt.
(2)

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Areas by
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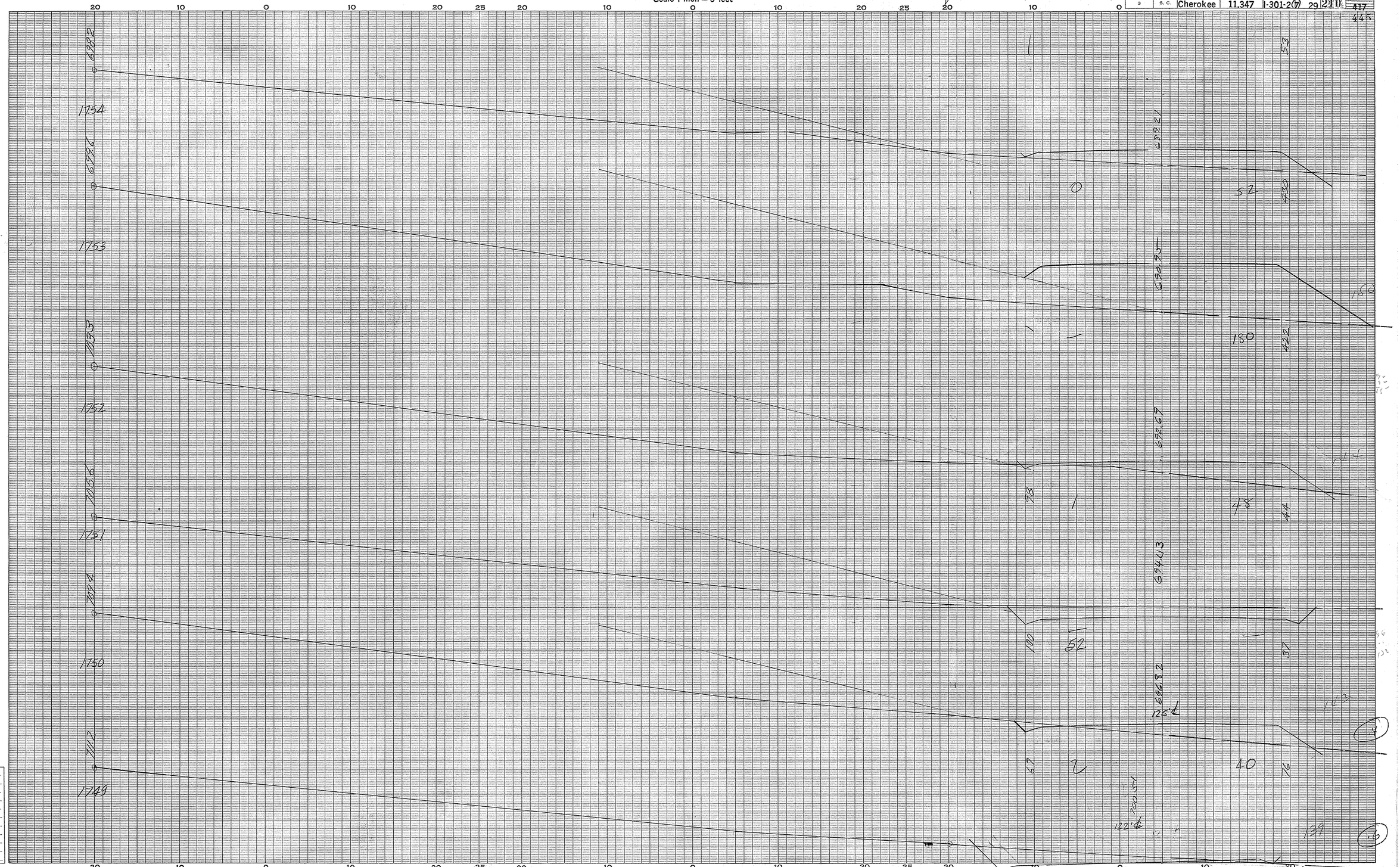
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(8)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	210	417



RT#29 Cherokee Co Frontage Rd Ext. (5)

Ground Surface Platted by
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Areas by
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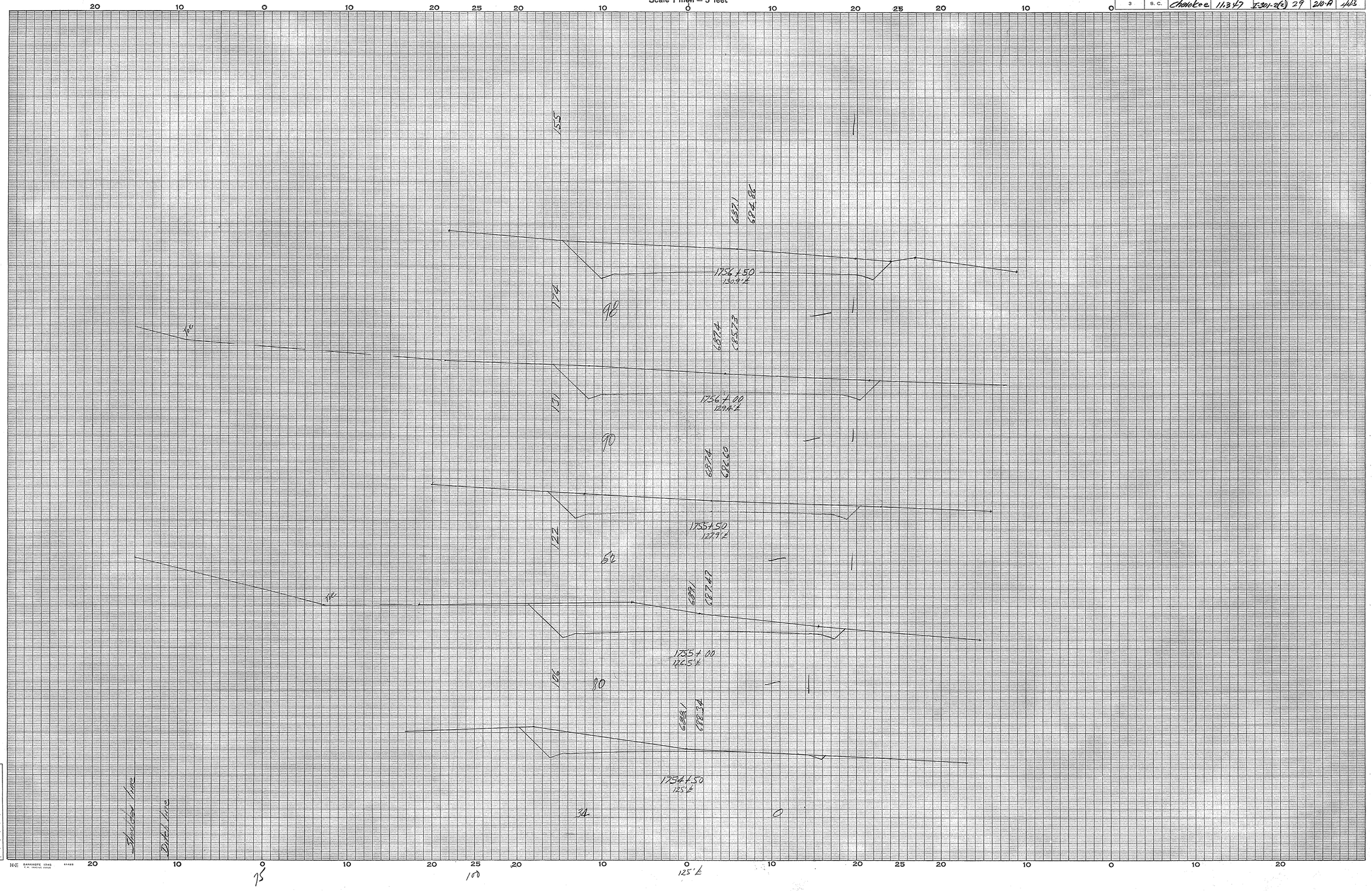
Template Sections Revised by
" " Checked by
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(8)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	I-301-2(2)	29	210-A	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

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Template Sections Revised by.....
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Final Areas by.....
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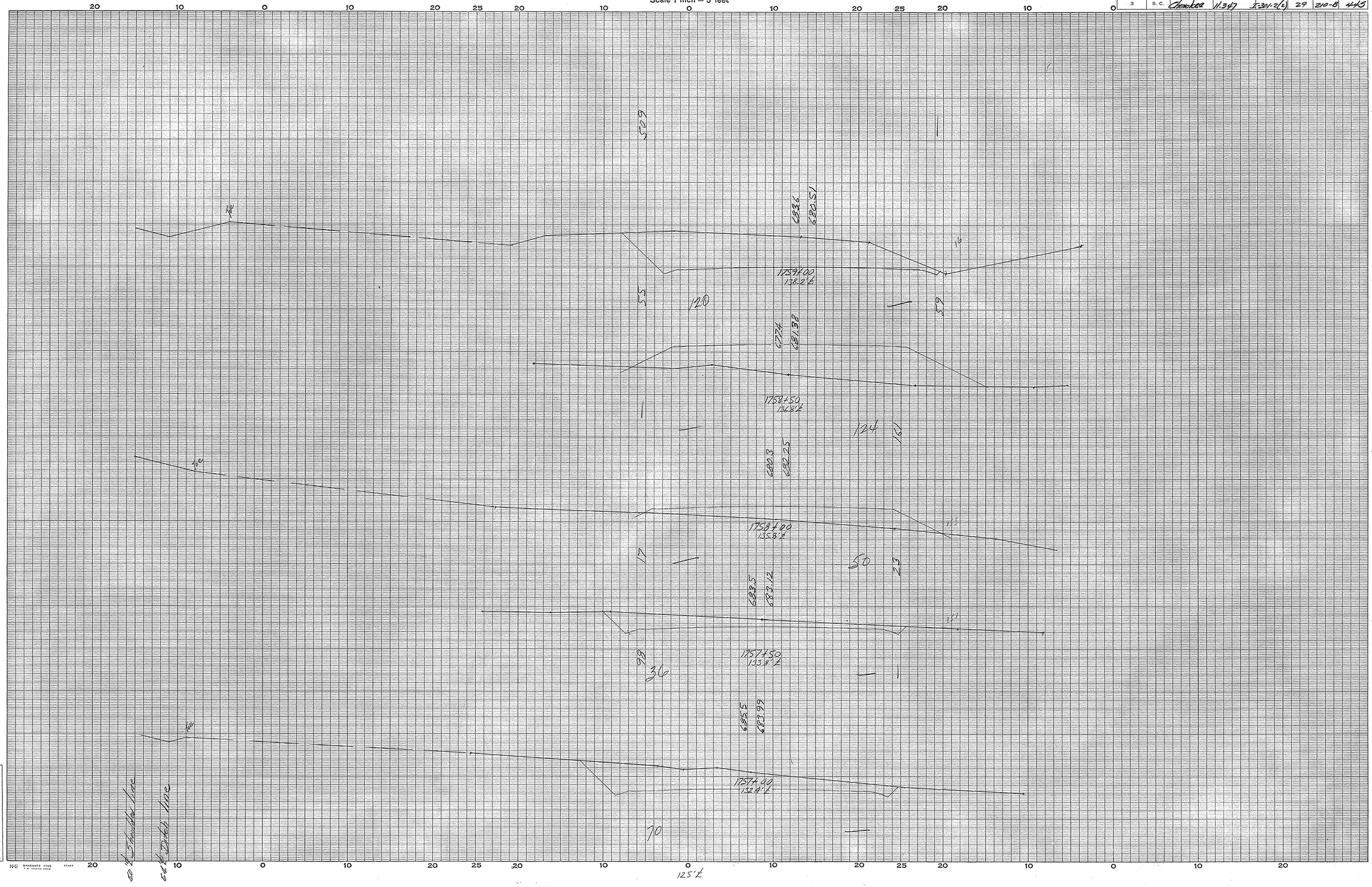
Quantities Transferred and Inked by.....

(4)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-B	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by
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Final Areas by
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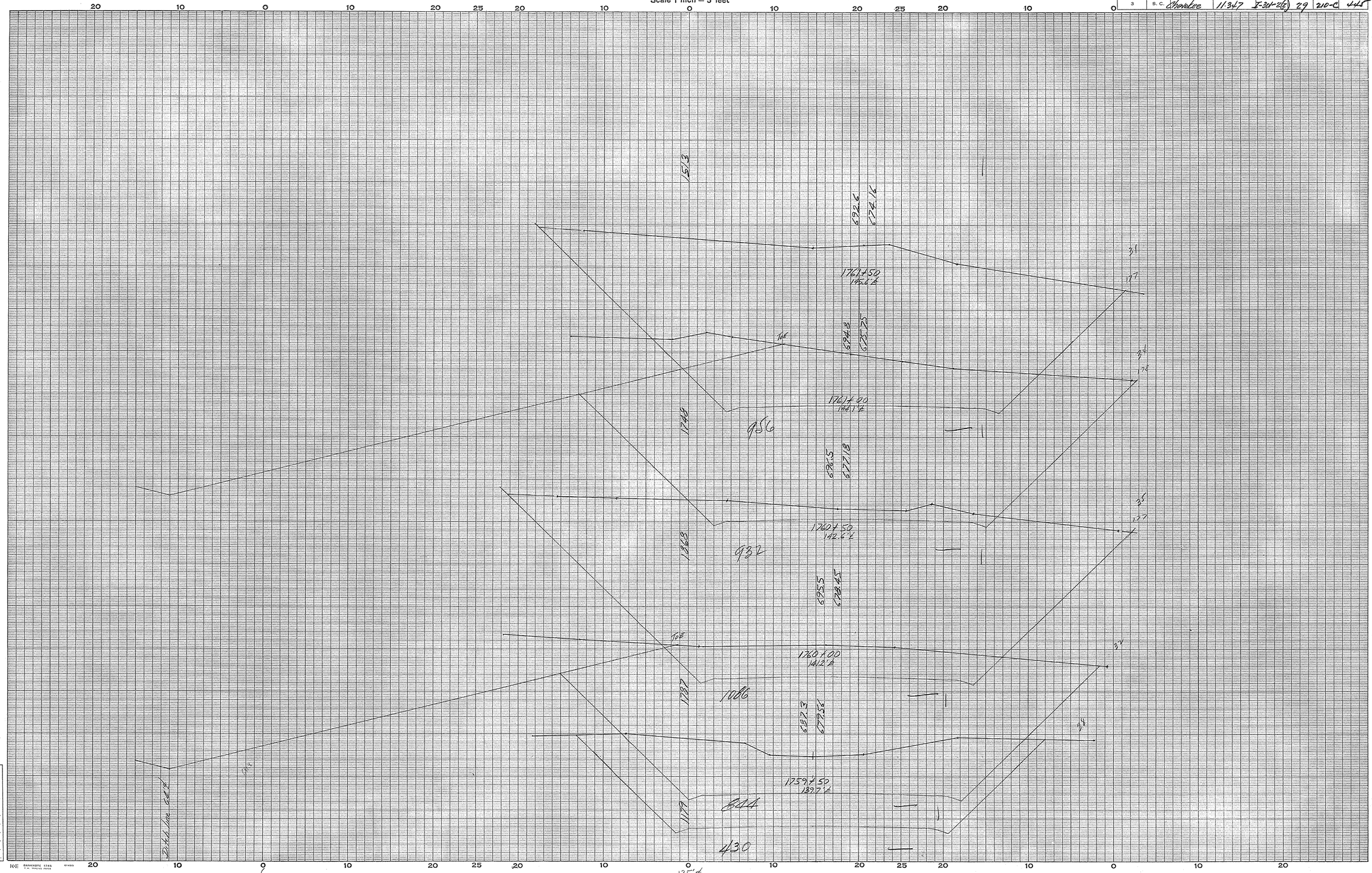
Quantities Transferred and Inked by

(5)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-C	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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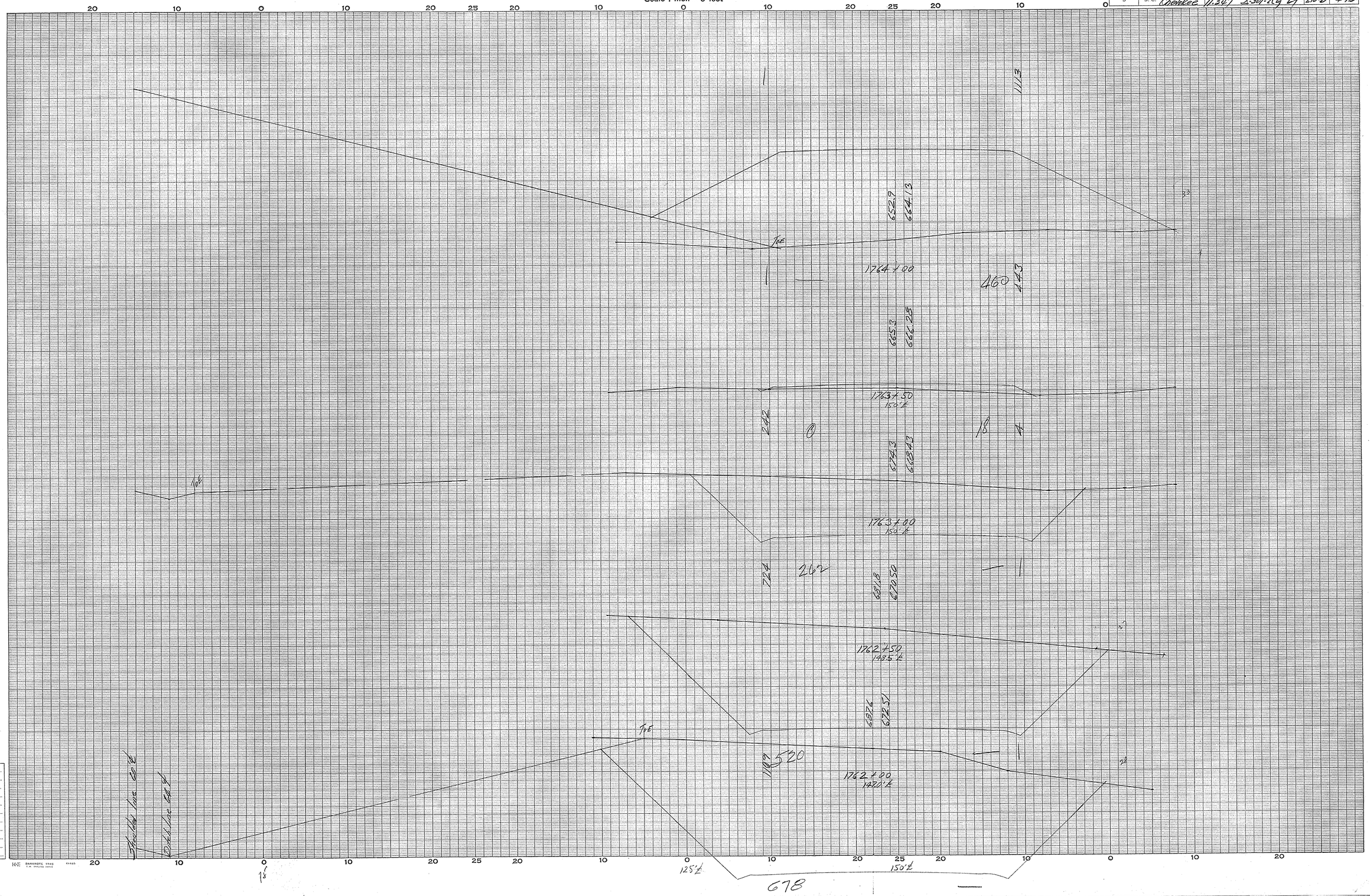
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(6)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-D	445



Cherokee Co
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by
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Template Sections Revised by
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Final Areas by
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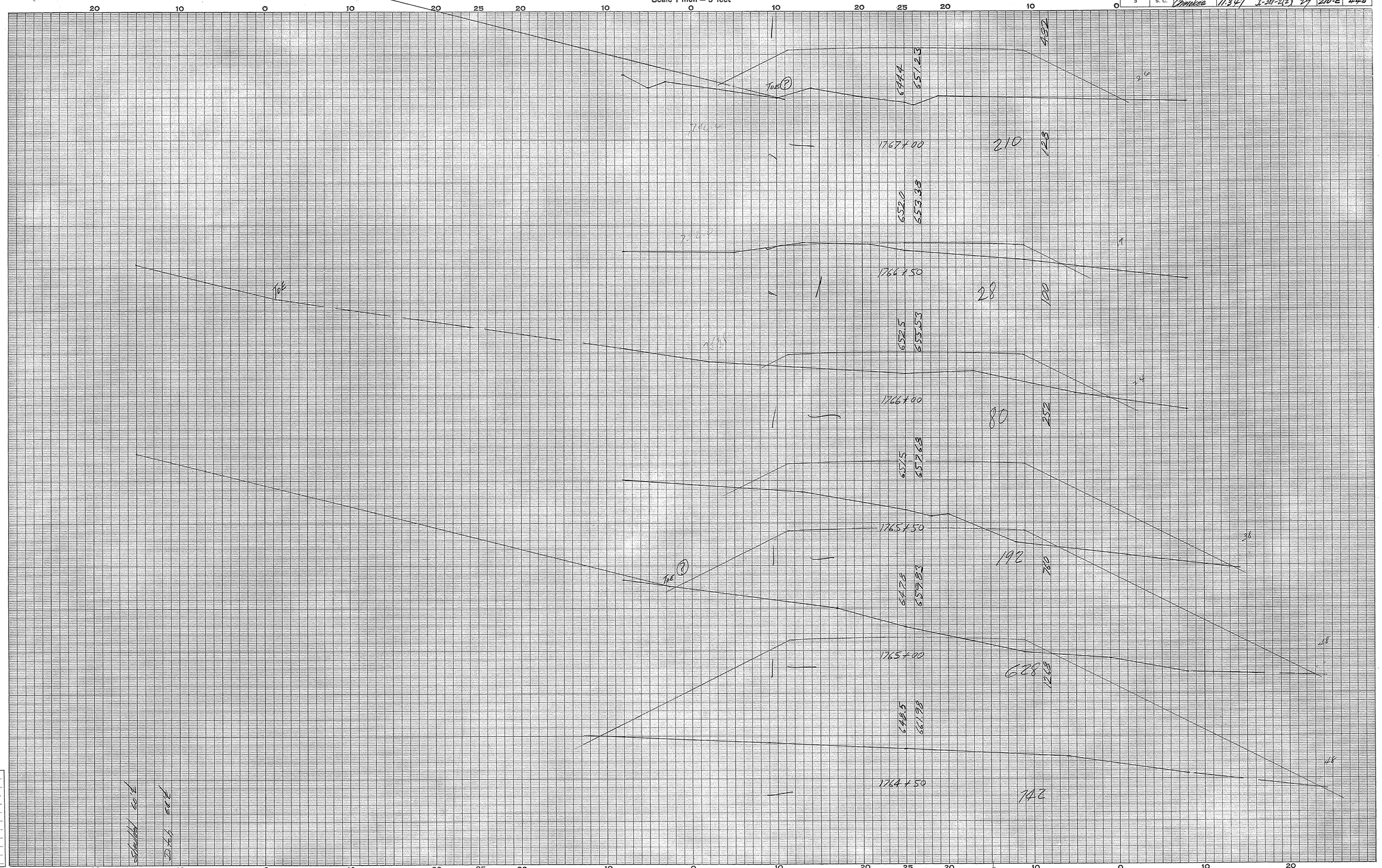
Quantities Transferred and Inked by

(7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	I-301-2(2)	29	210-E	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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Final Areas by.....
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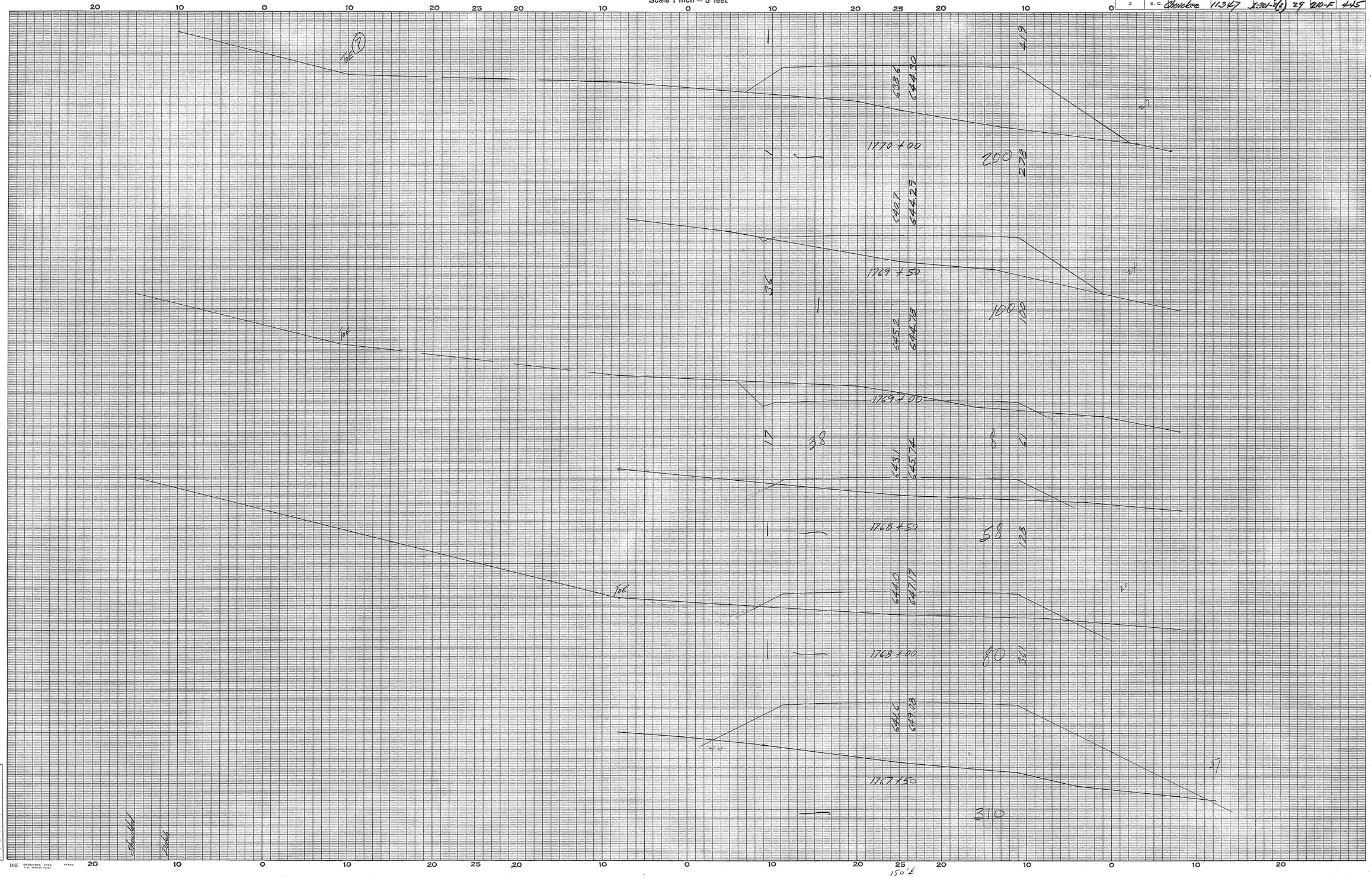
Quantities Transferred and Inked by.....

(8)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	I-301-2(2)	29	210-F	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by
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Template Sections Revised by
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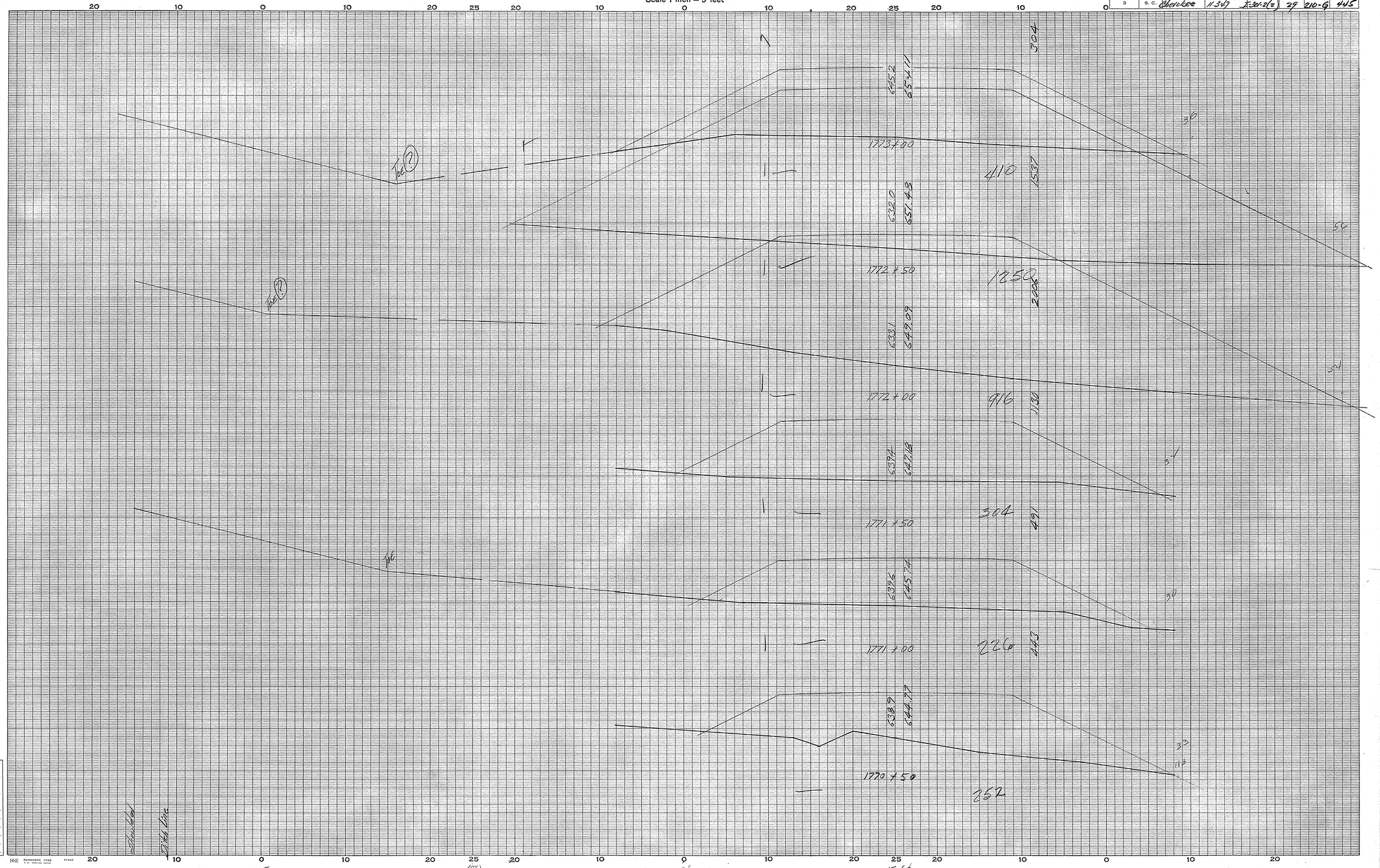
Final Areas by
" " Checked by
Quantities Transferred and Inked by

(9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-G	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by
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Template Sections Revised by
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Quantities Transferred and Inked by

(10)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	2301-26	29	210-H	445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

Cherokee Co.
Rt. 29
Frontage Rd. (Right)

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Quantities Transferred and Inked by	

11

78

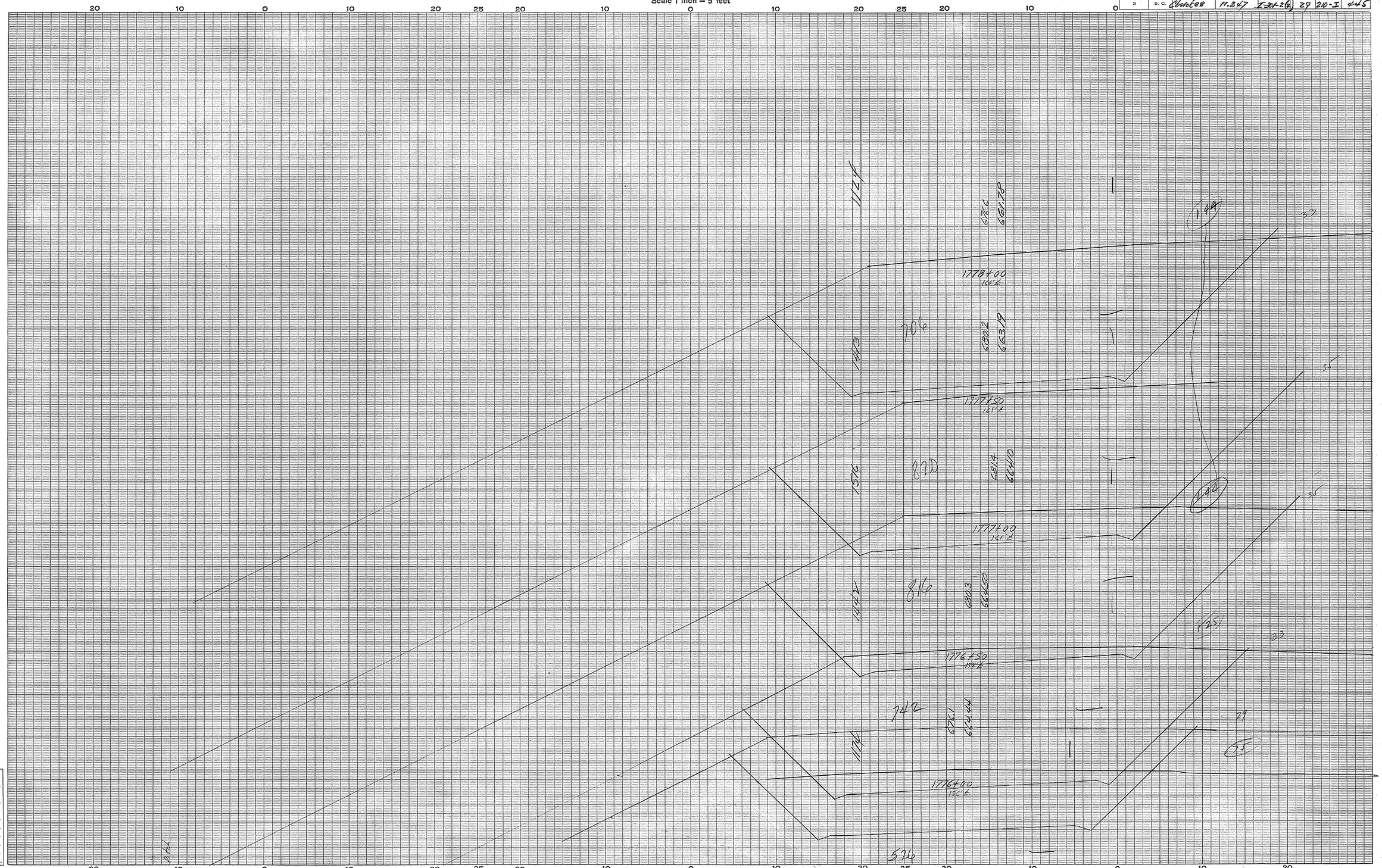
20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

150'E

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Chester	11.347	I-301-2(2)	29	210-I	445



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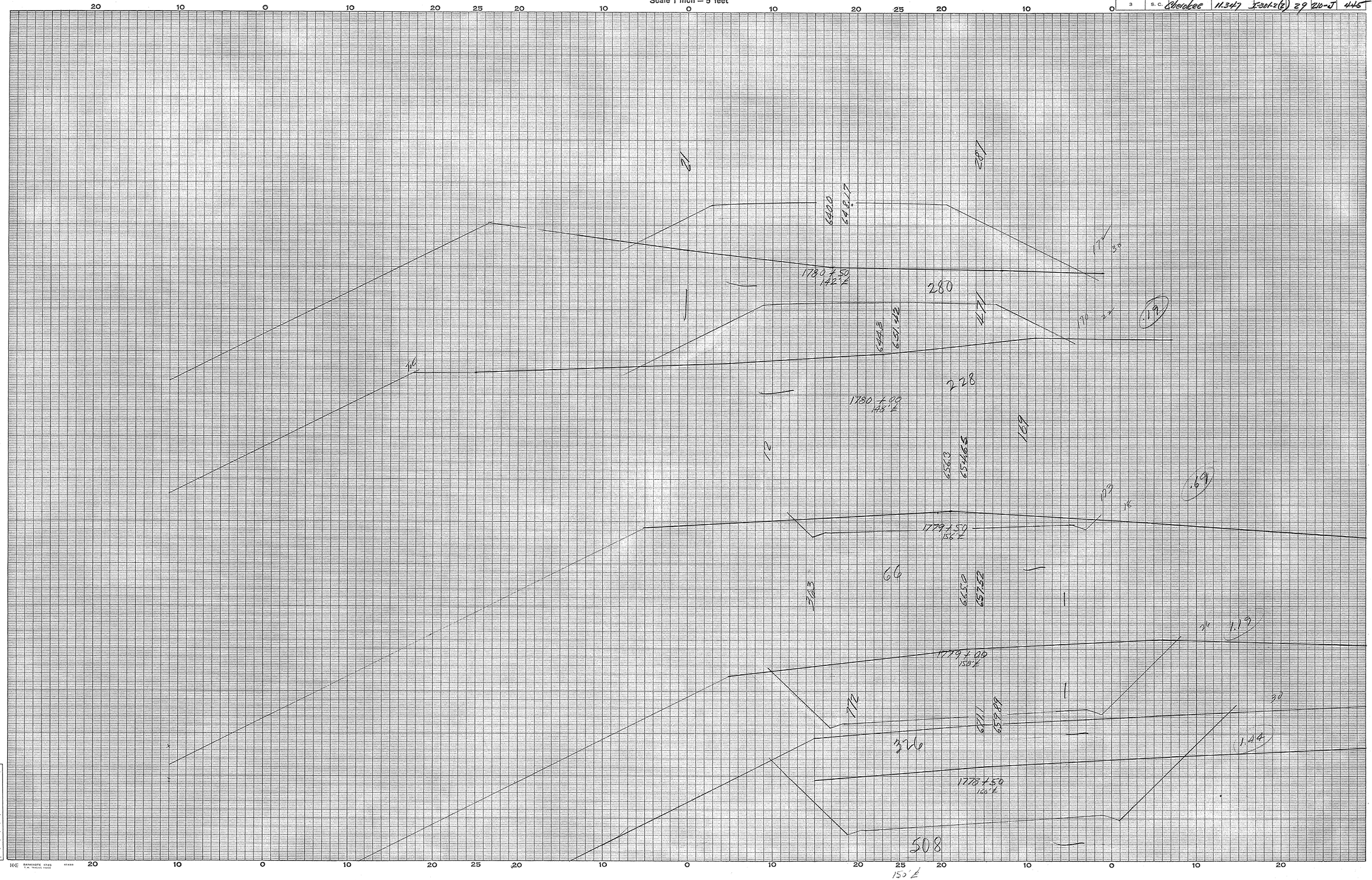
Quantities Transferred and Inked by.....

(12)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-J	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

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Template Sections Revised by.....
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Final Areas by.....
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Quantities Transferred and Inked by.....

13

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11347	F301-2(2)	29	210-K	445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

Cherokee Co
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by	
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Template Sections Revised by	
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Quantities Transferred and Inked by	

14

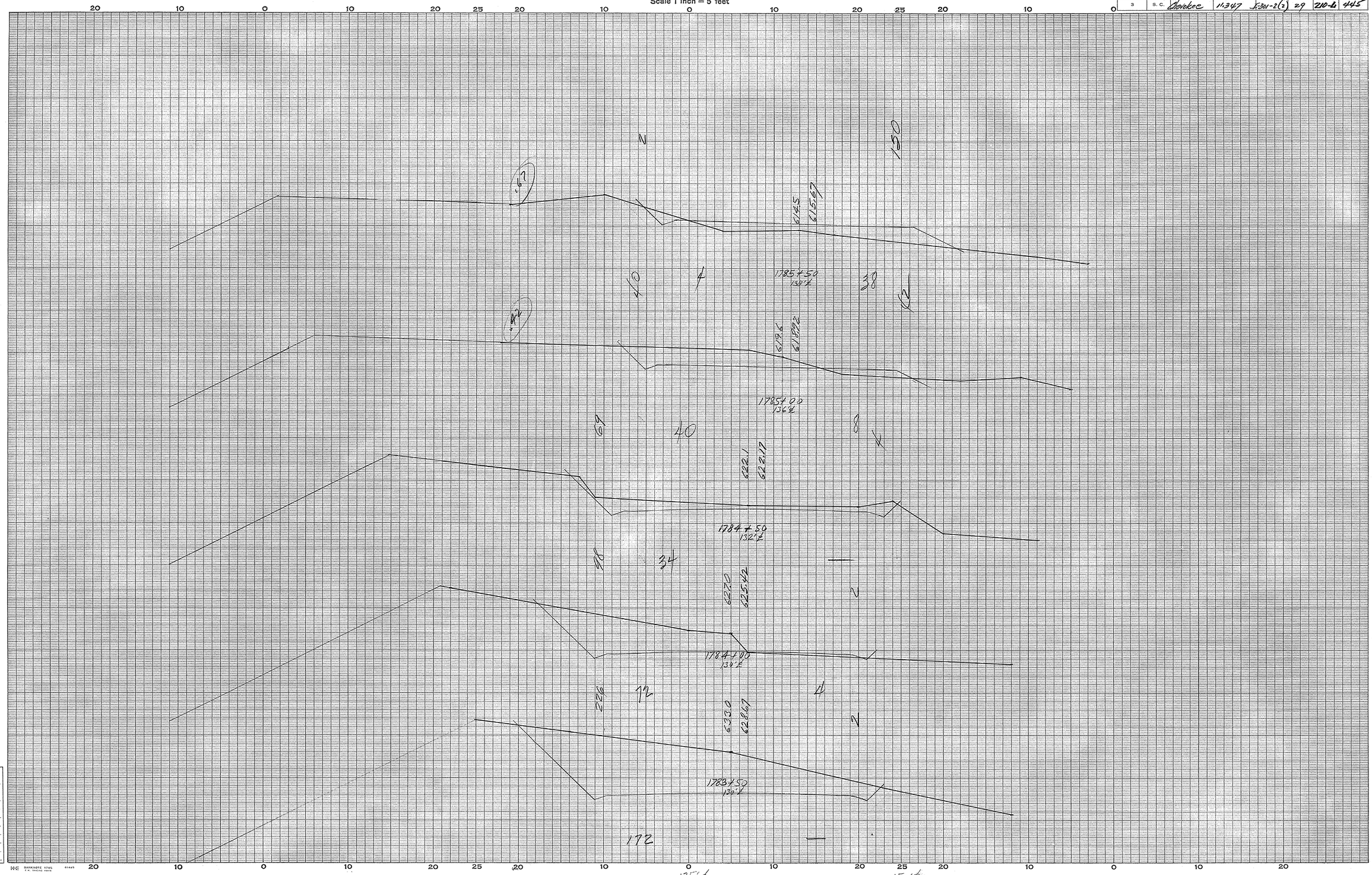
BANKNOTE 1745 R.M. TRACING PAPER 41485

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	F-301-2(2)	29	210-L	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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Final Areas by.....
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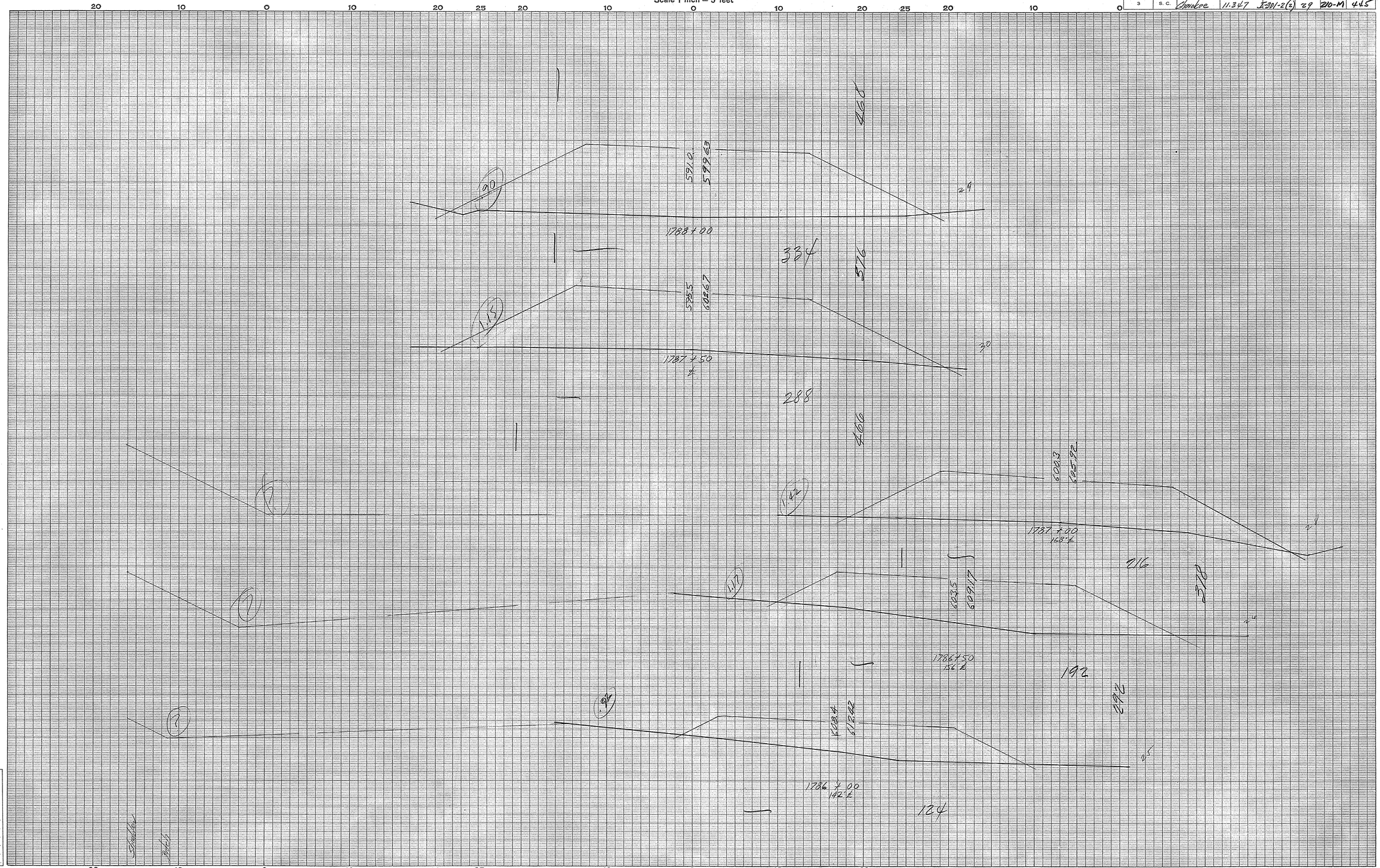
Quantities Transferred and Inked by.....

15

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-M	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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Quantities Transferred and Inked by.....

(16)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-N	445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

Survey Sta. 1789+80 End Frontage Rd. Right Rt. 29

1789+50

1789+00

1788+50

Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by	
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Areas by	
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Template Sections Revised by	
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Final Areas by	
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Quantities Transferred and Inked by	

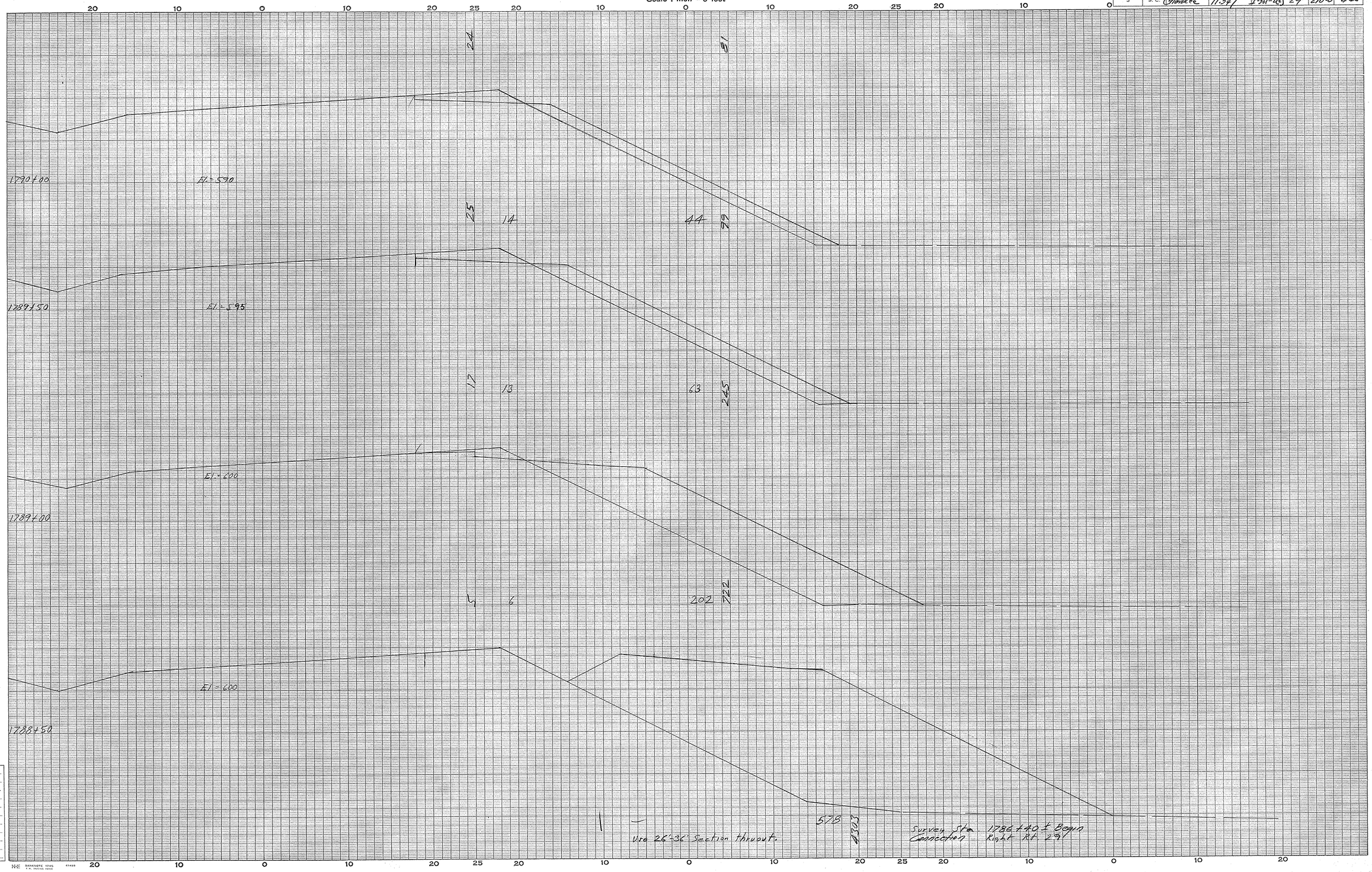
(17)

BANKNOTE 1745 41485

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-0	445



Cherokee Co.
Rt. 29
Frontage Rd.-(Right)

Ground Surface Platted by.....
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Areas by.....
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Template Sections Revised by.....
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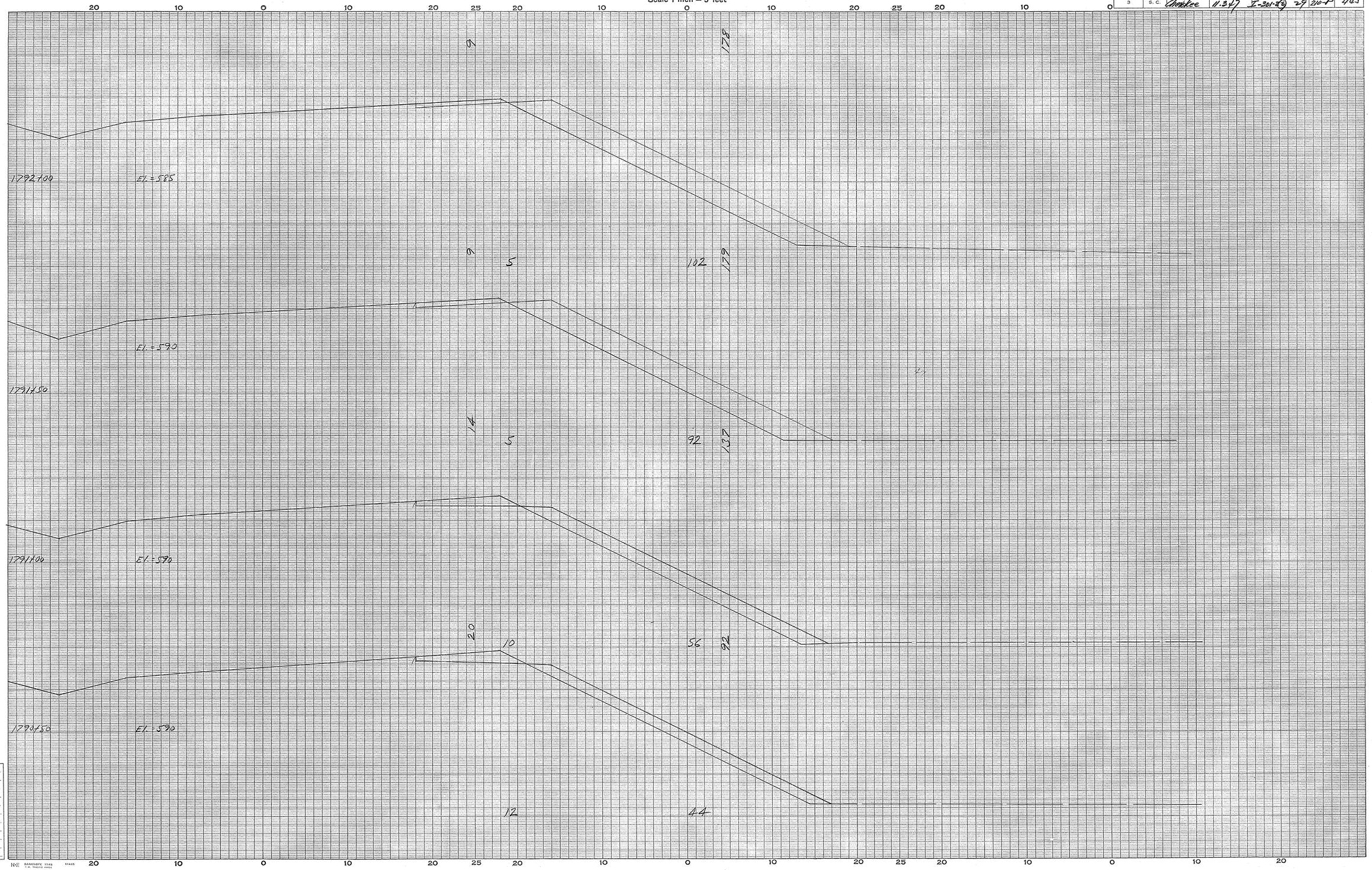
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(1)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-P	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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Areas by.....
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Template Sections Revised by.....
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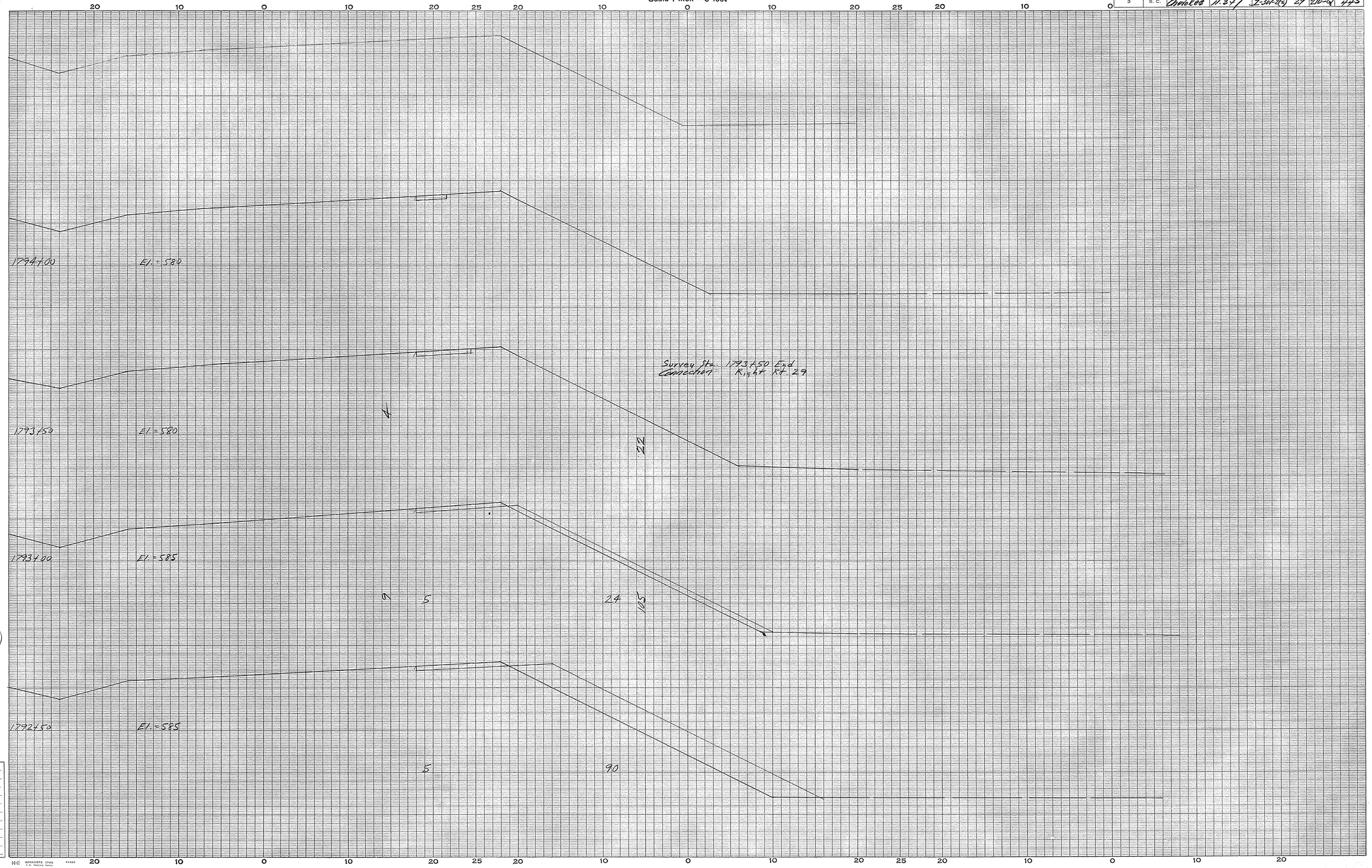
Final Areas by.....
" " Checked by.....
Quantities Transferred and Inked by.....

(2)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(2)	29	210-Q	445



Cherokee Co.
Rt. 29
Frontage Rd. (Right)

Ground Surface Platted by.....
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Areas by.....
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Template Sections Revised by.....
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Final Areas by.....
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Quantities Transferred and Inked by.....

(3)

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	211	~~417~~ 445

Frontage Rd. Right
1832+00 to 1899+00

NOTE:
Frontage Road on right Sta 1832+00± to Sta. 1854+00 to be constructed under Dkt. 11,347, FAP No I-301-2(7)

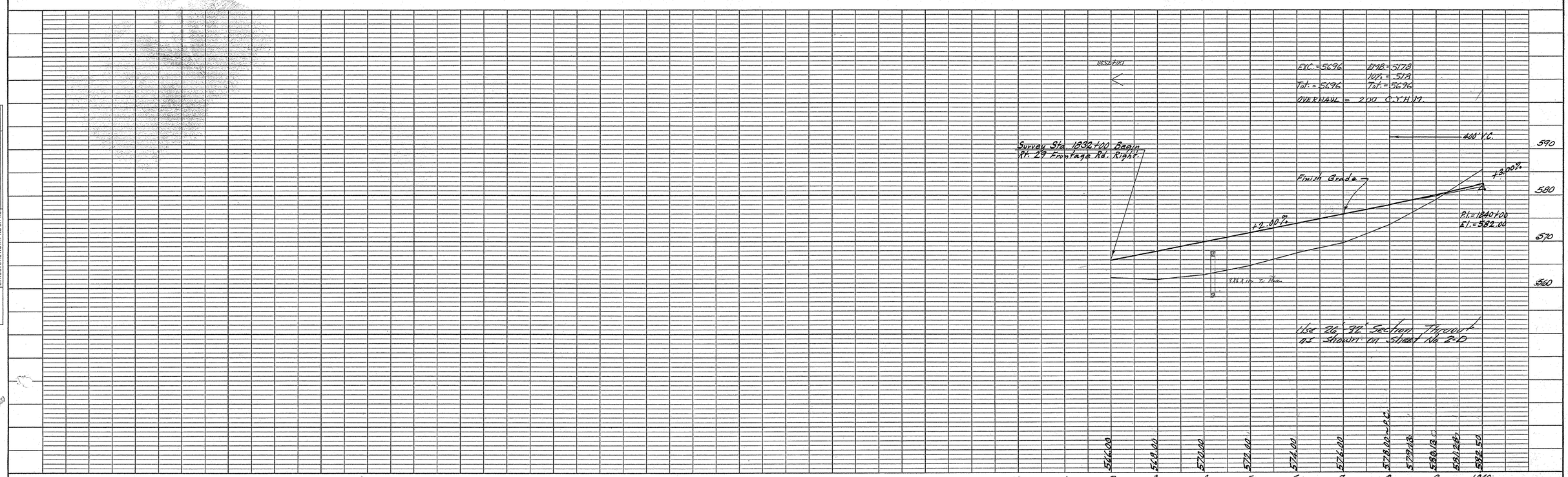


PLATE 1 - PLAN - PROFILE O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
NOTE BOOK
NO.
BY
DATE

Cherokee County
Route 29
Frontage Road
Rt. Sta 1832+00 - 1901+00

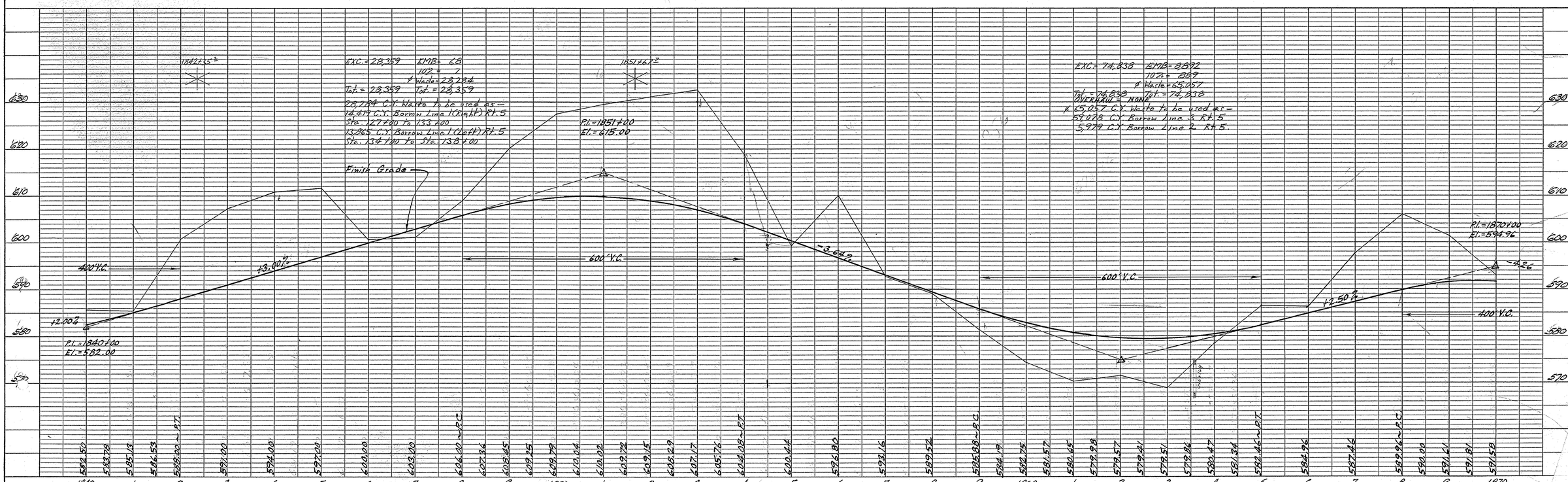
10

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	212	~~417~~ 445

Frontage Rd. Right
1832+00 to 1899+00

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTATNS CH'KD
BY
DATE



Cherokee County
Route 29
Frontage Road
Rt. Sta. 1831+00 - 1900+
(10)

PLATE 1 - PLAN - PROFILE O.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	213	~~417~~ 445

Frontage Rd. Right
1832+00 to 1899+00

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

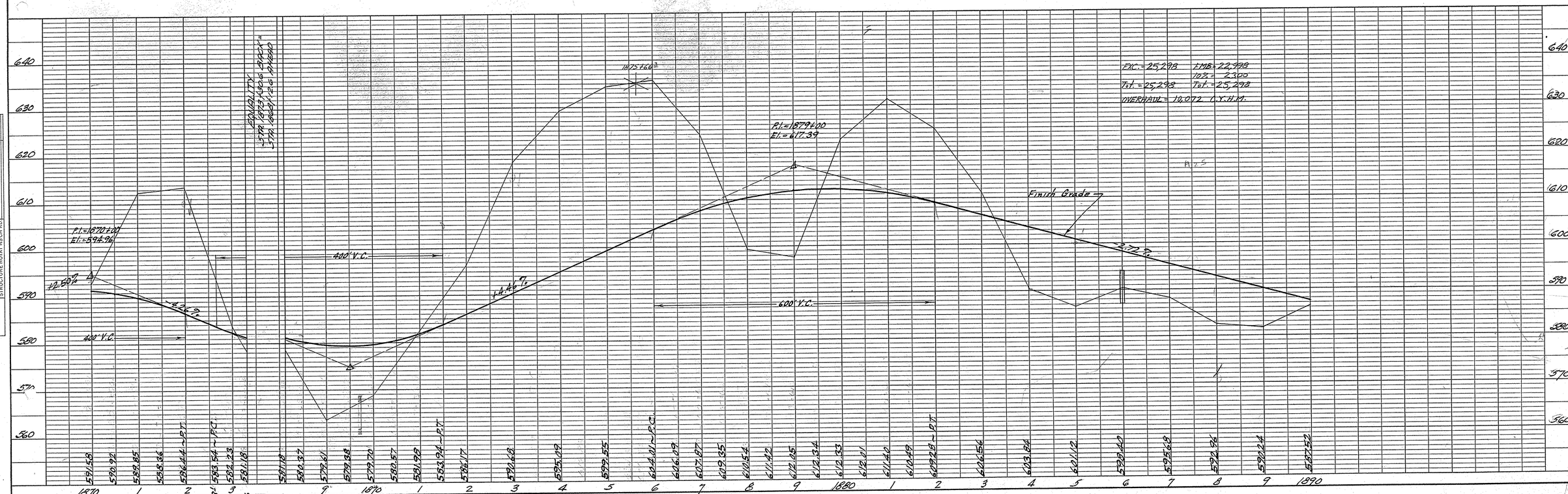


PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

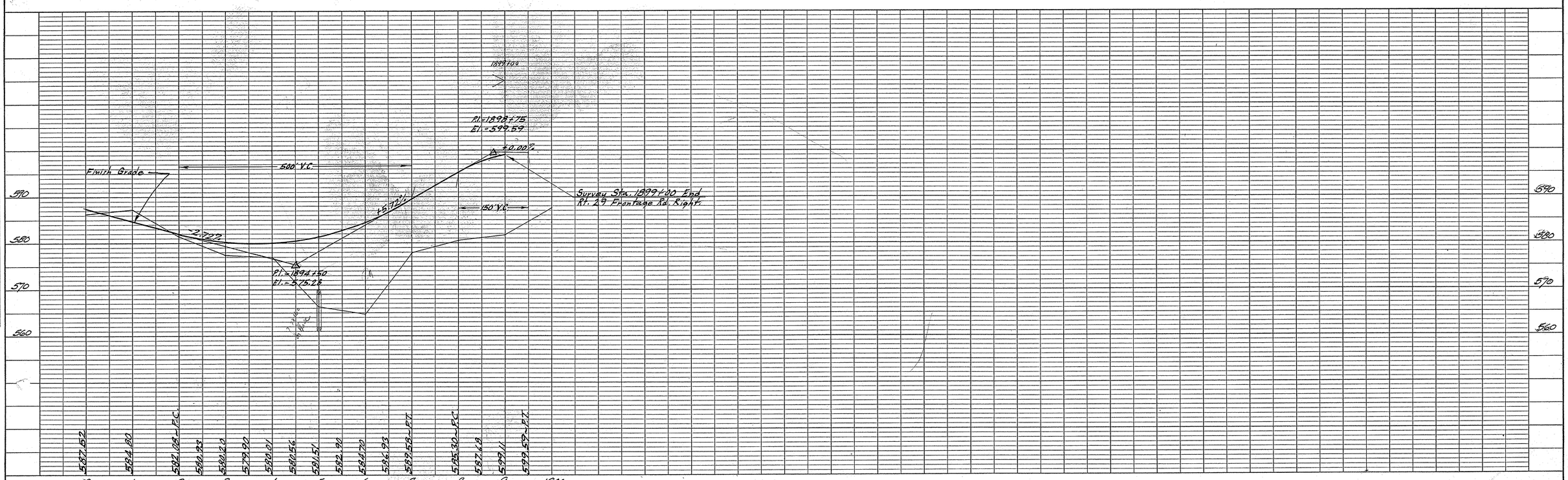
Cherokee
Rt. 1832-1900
10

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	214	~~417~~ 445

Frontage Rd. Right
1832+00 to 1899+00

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



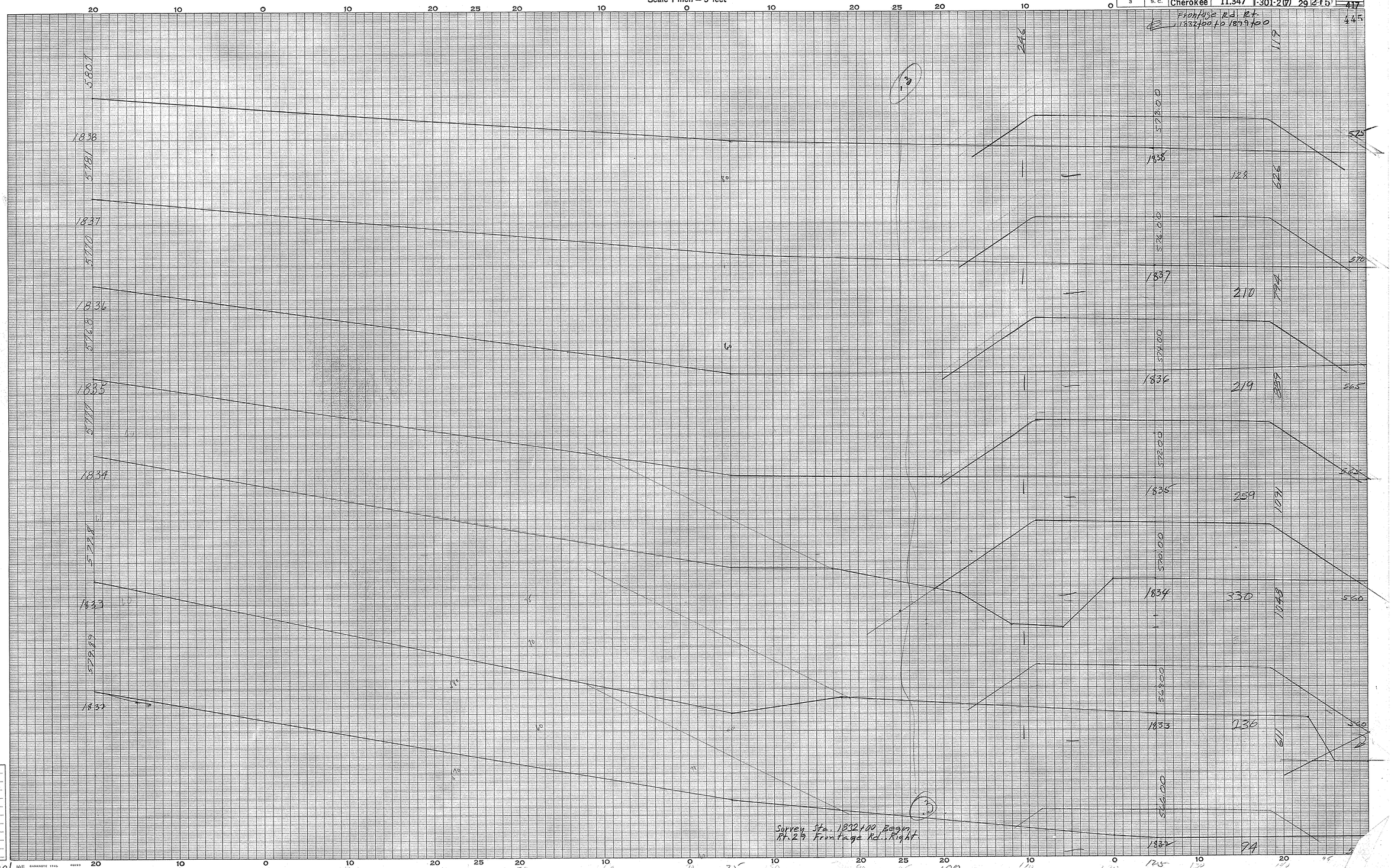
Check Frontage Rd Rt. 1832-1900
10

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	215	417



Frontage Rd. Right.
Cherokee
29

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Quantities Transferred and Inked by

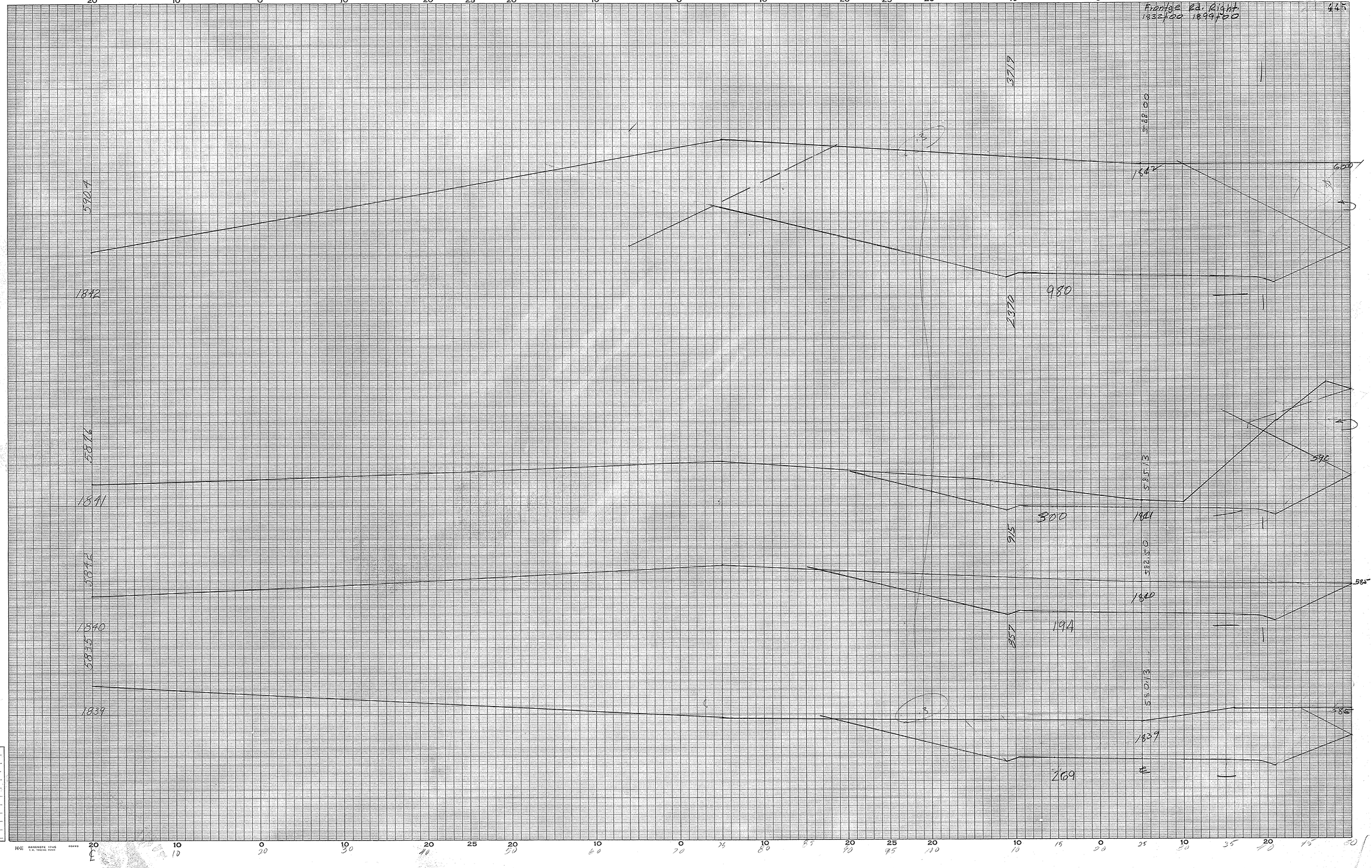
1 1832 to 1901

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	216	417

Frontage Rd. Right
1332+00 1899+00



Frontage Rd Right
Cherokee

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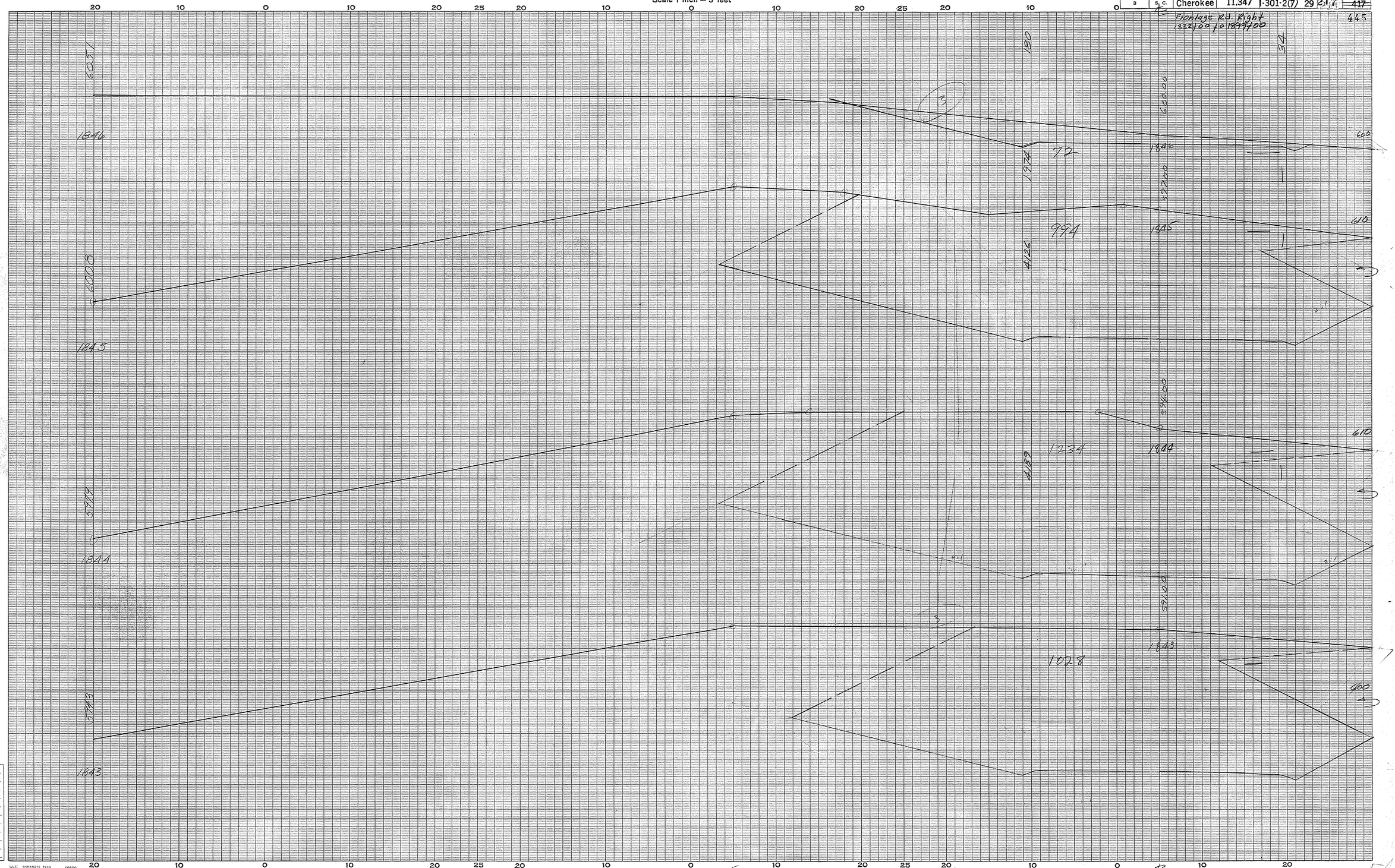
KE BANKNOTE 1746 60493

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	217	417



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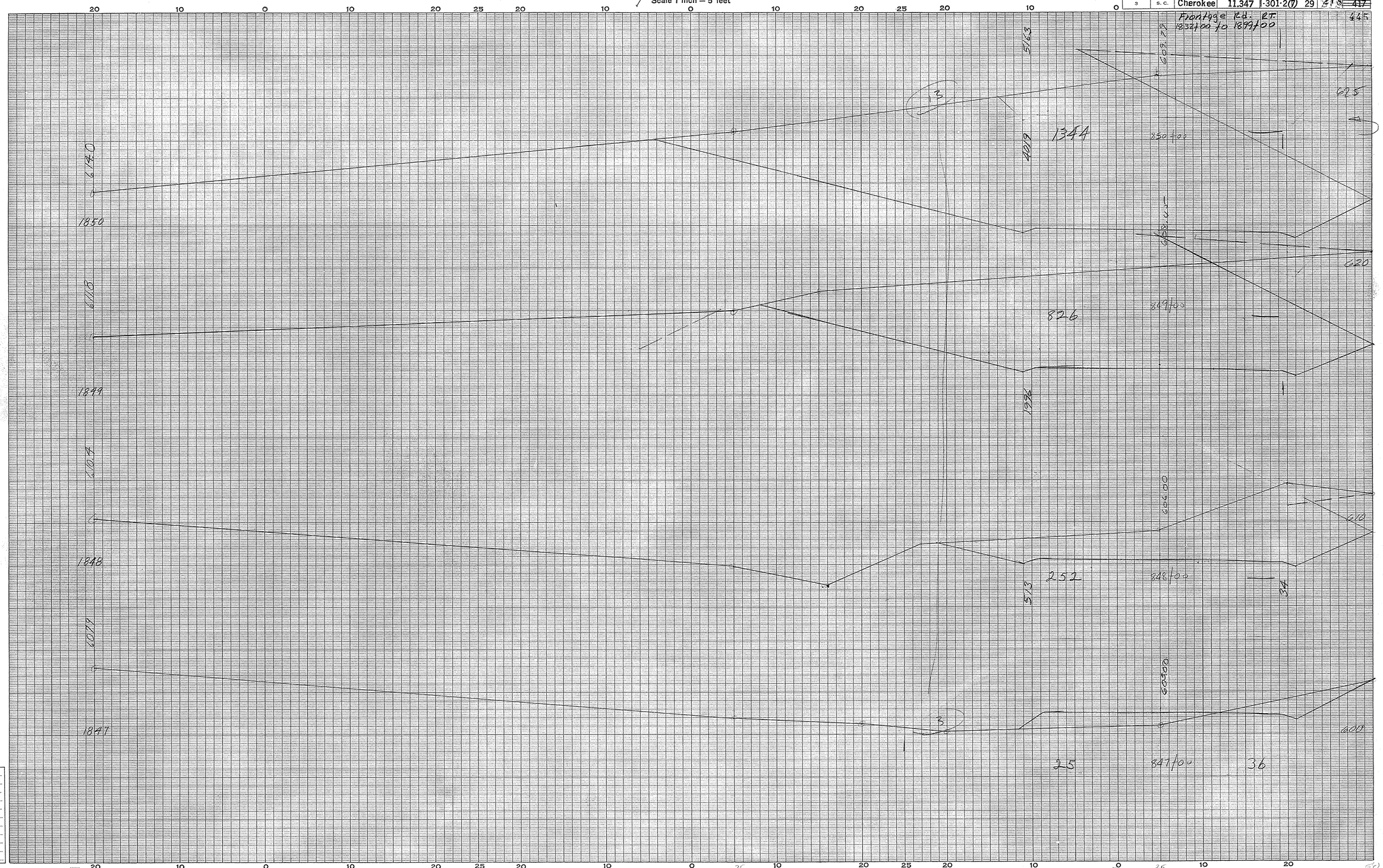
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	218	417



Frontage Rd Right

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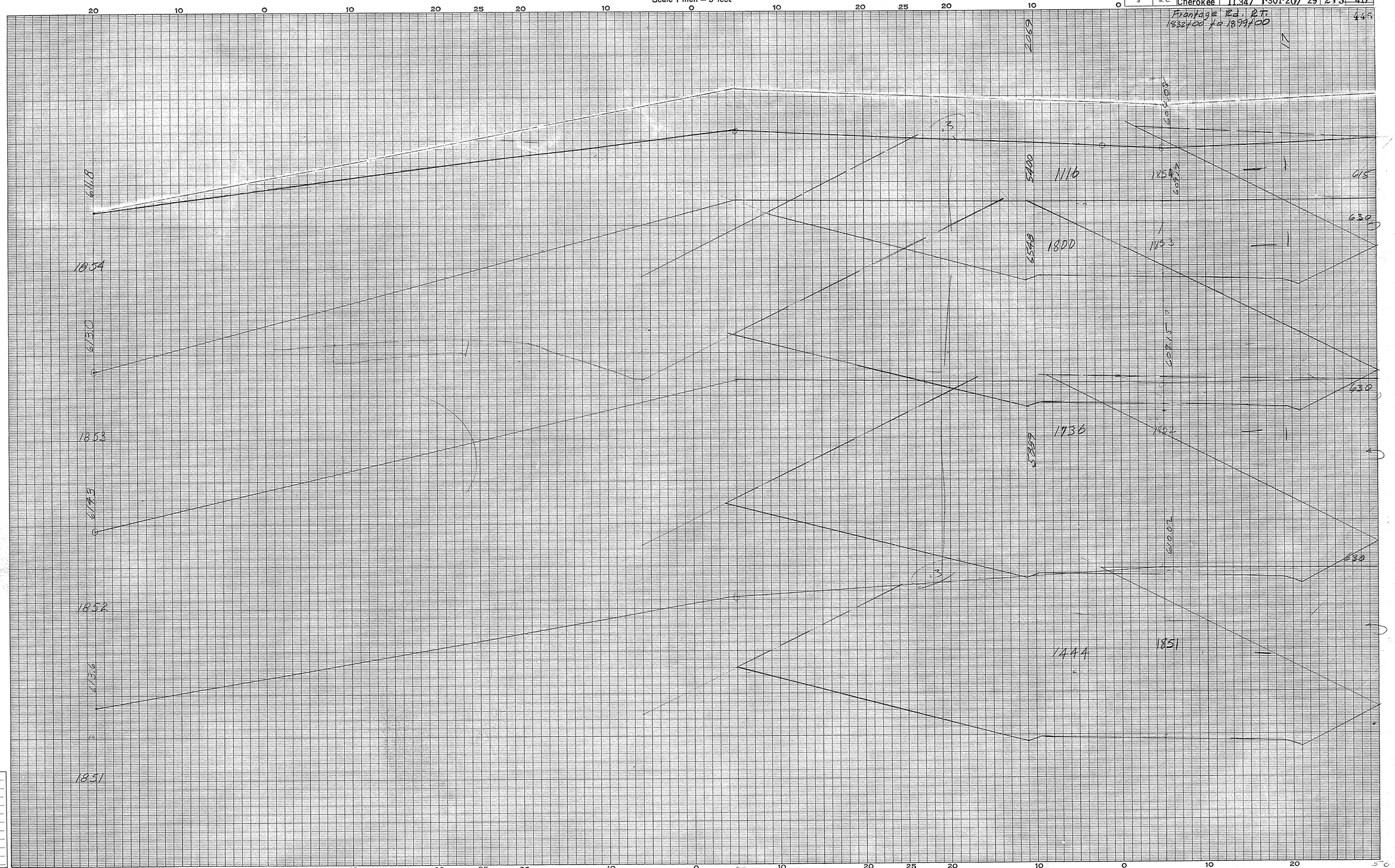
(10) (4)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	219	417



Frontage Rd Right

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Quantities Transferred and Inked by

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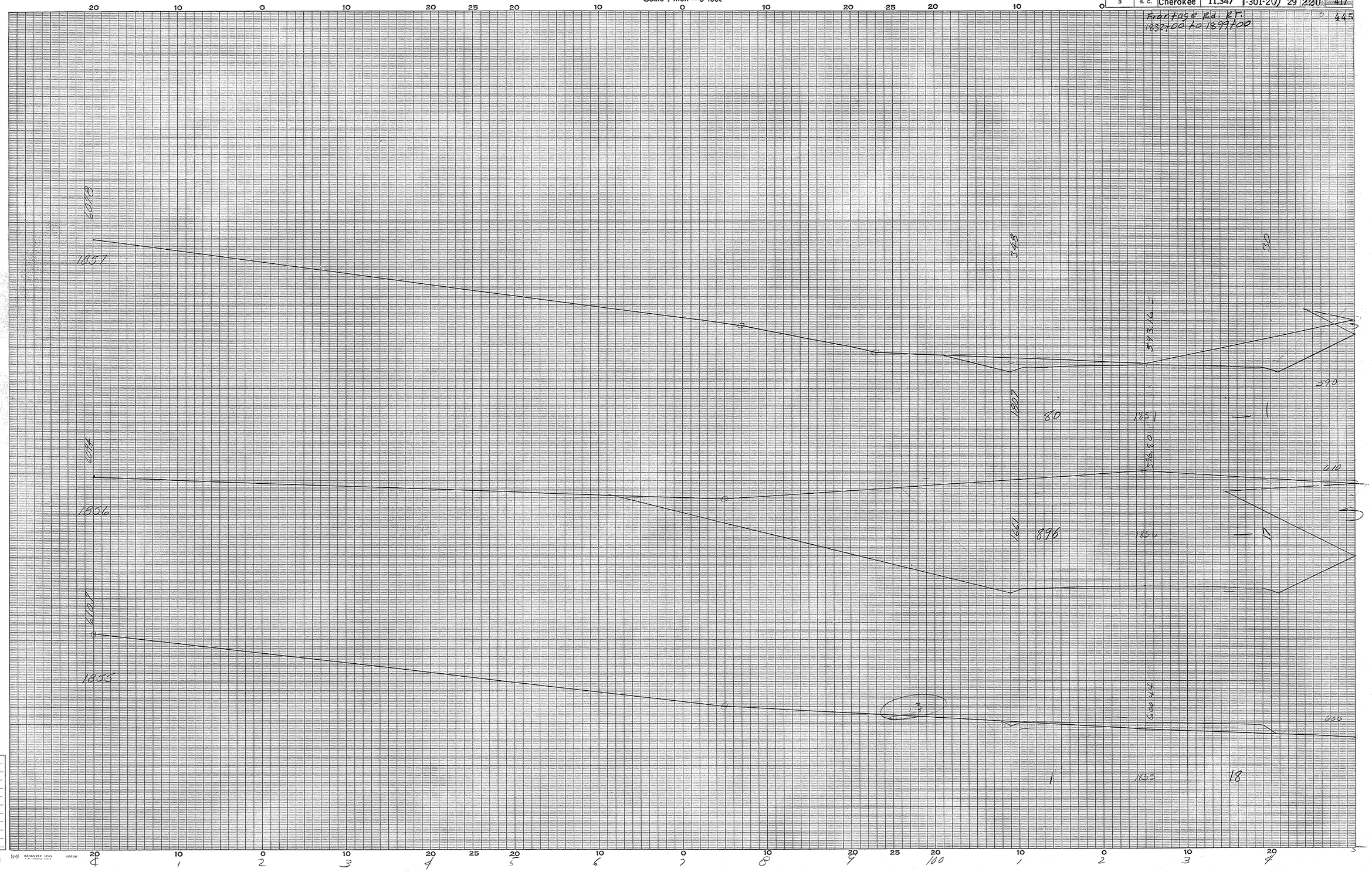
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	220	~~417~~



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Quantities Transferred and Inked by

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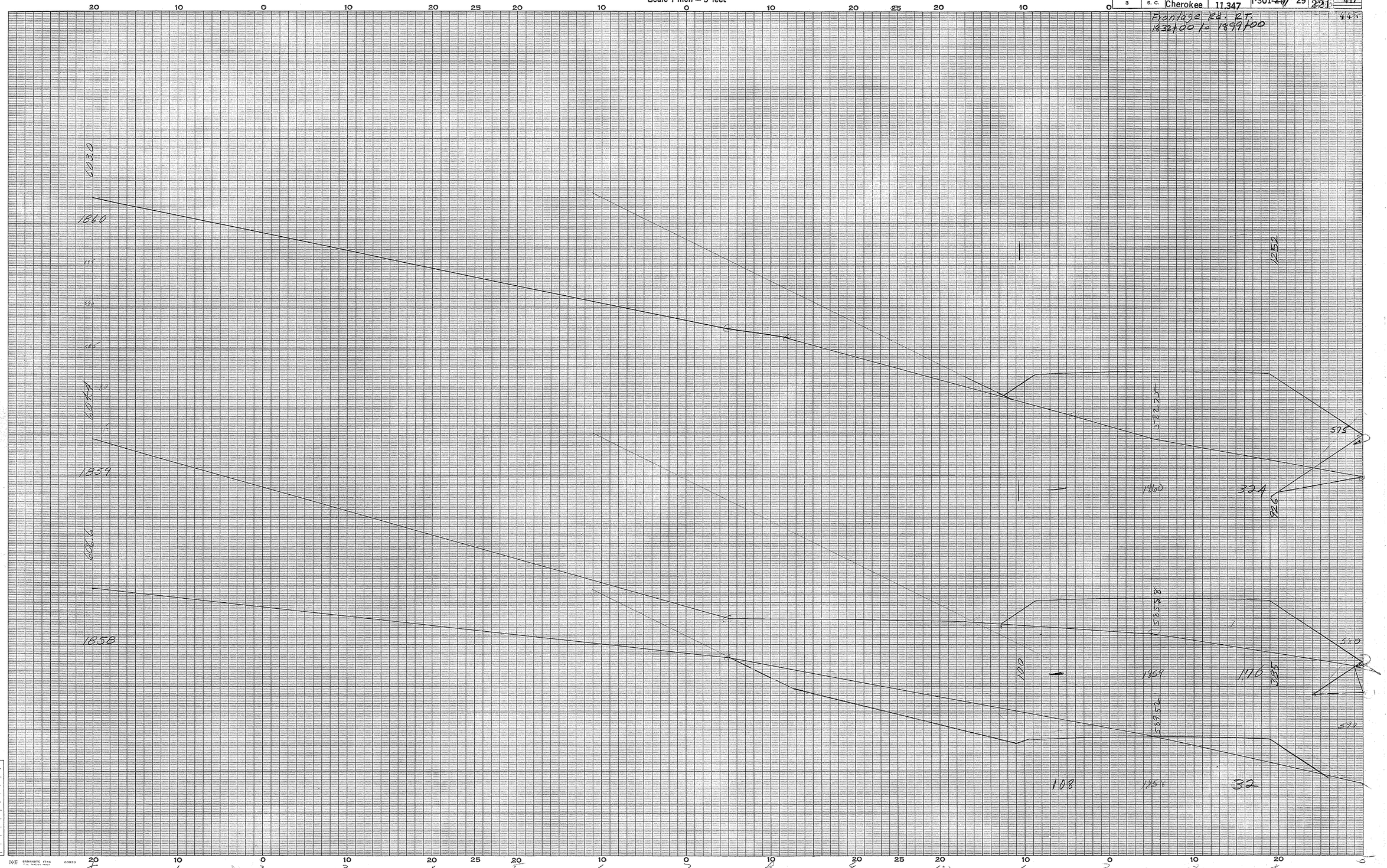
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	221	~~417~~ 445



Frontage Rd. Rt.

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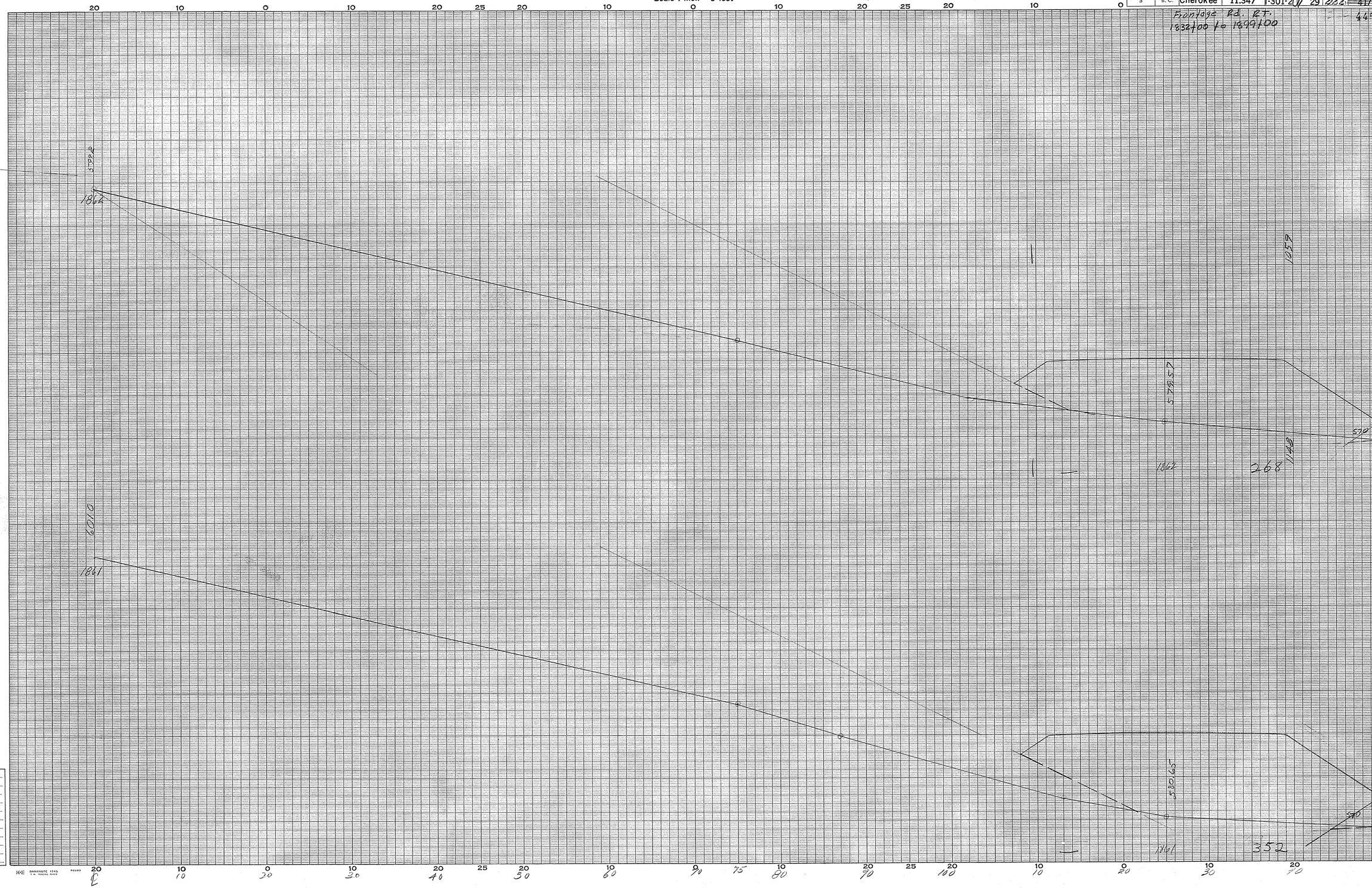
(10) (7)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	222	~~417~~ 445

Frontage Rd. Rt.
1832+00 to 1899+00



Frontage Rd. Right

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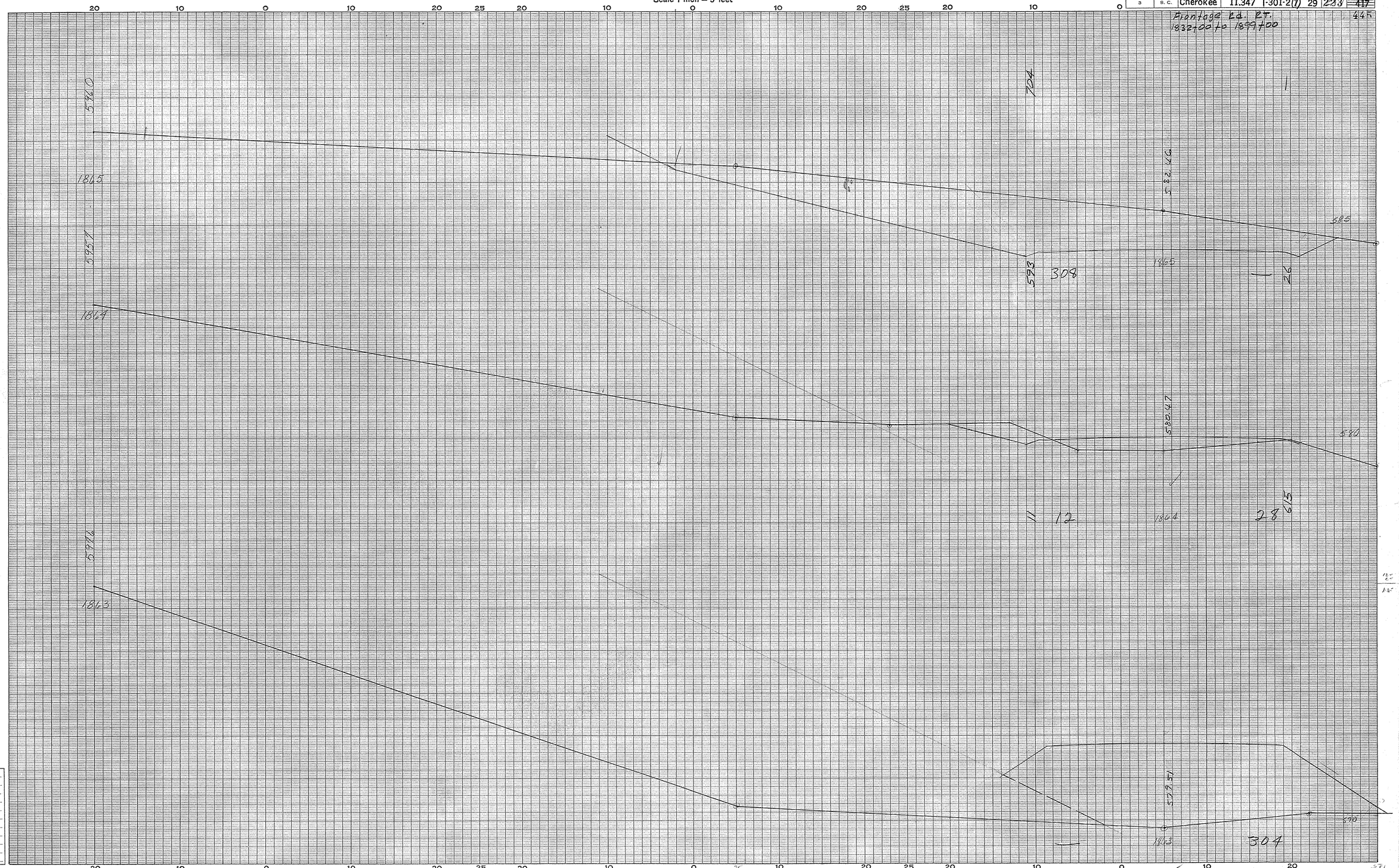
(10) (8)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	223	~~417~~ 445

Frontage Rd. RT.
1832+00 to 1899+00



Frontage Rd Right

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Final Areas by
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Quantities Transferred and Inked by

(10) (9)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	224	417

Frontage Rd Rt
18321.00 to 18997.00

445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5% 5.5%

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	225	417
							445

Frontage Rd. RT.
1832+00 TO 1899+00

Equality:
STA. 1273+30.6 Back =
STA. 1308+12.6 Ahead

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

Frontage Rd. Rt.

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Quantities Transferred and Inked by

(10) (11)

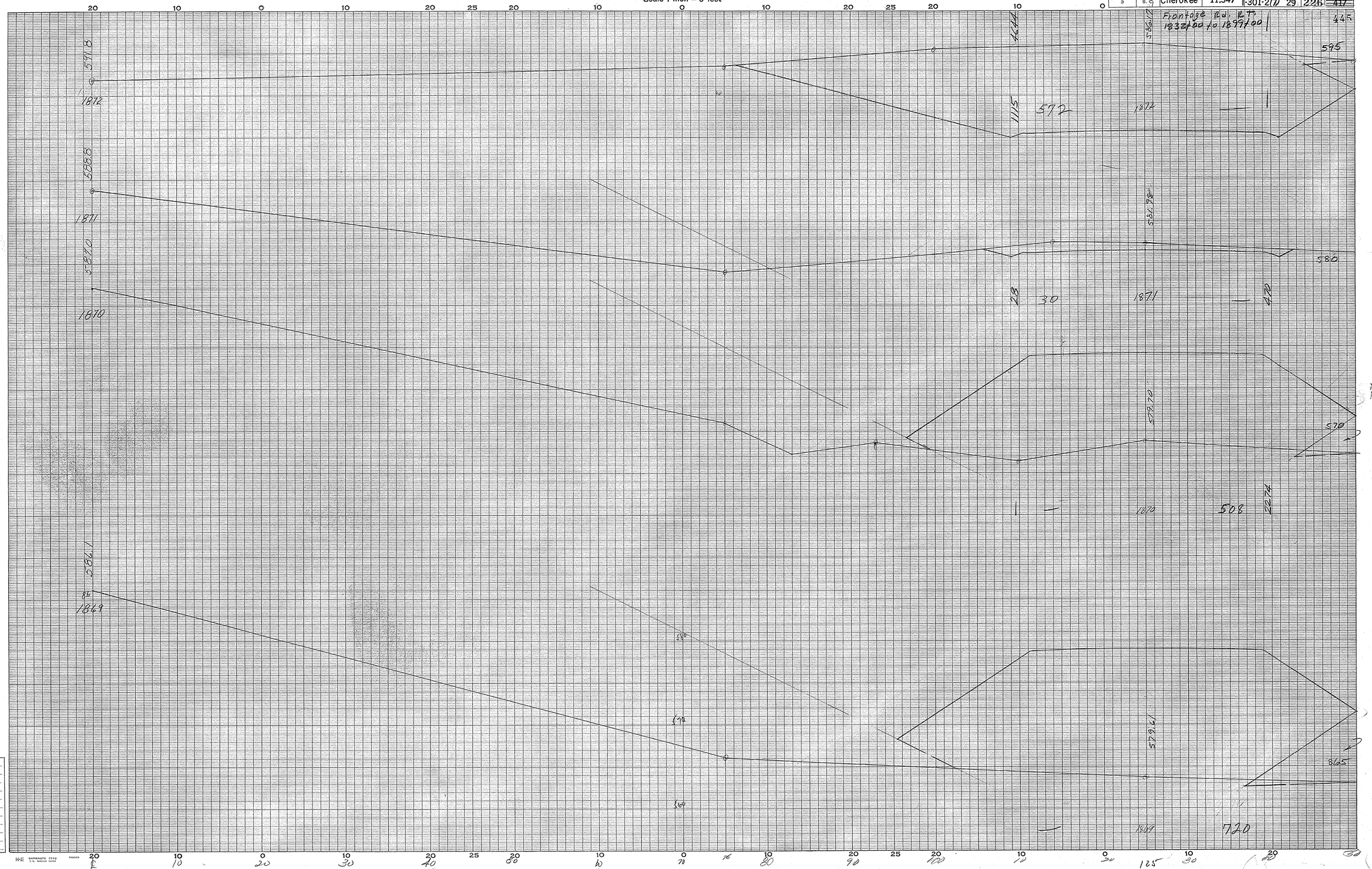
K-E BANKNOTE 1745 60920

4 1 2 3 4 5 6 7 8 9 10 1 2 3 4

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Cherokee	11.347	I-301-2(7)	29	226	417



Frontage Rd. Right
Cherokee

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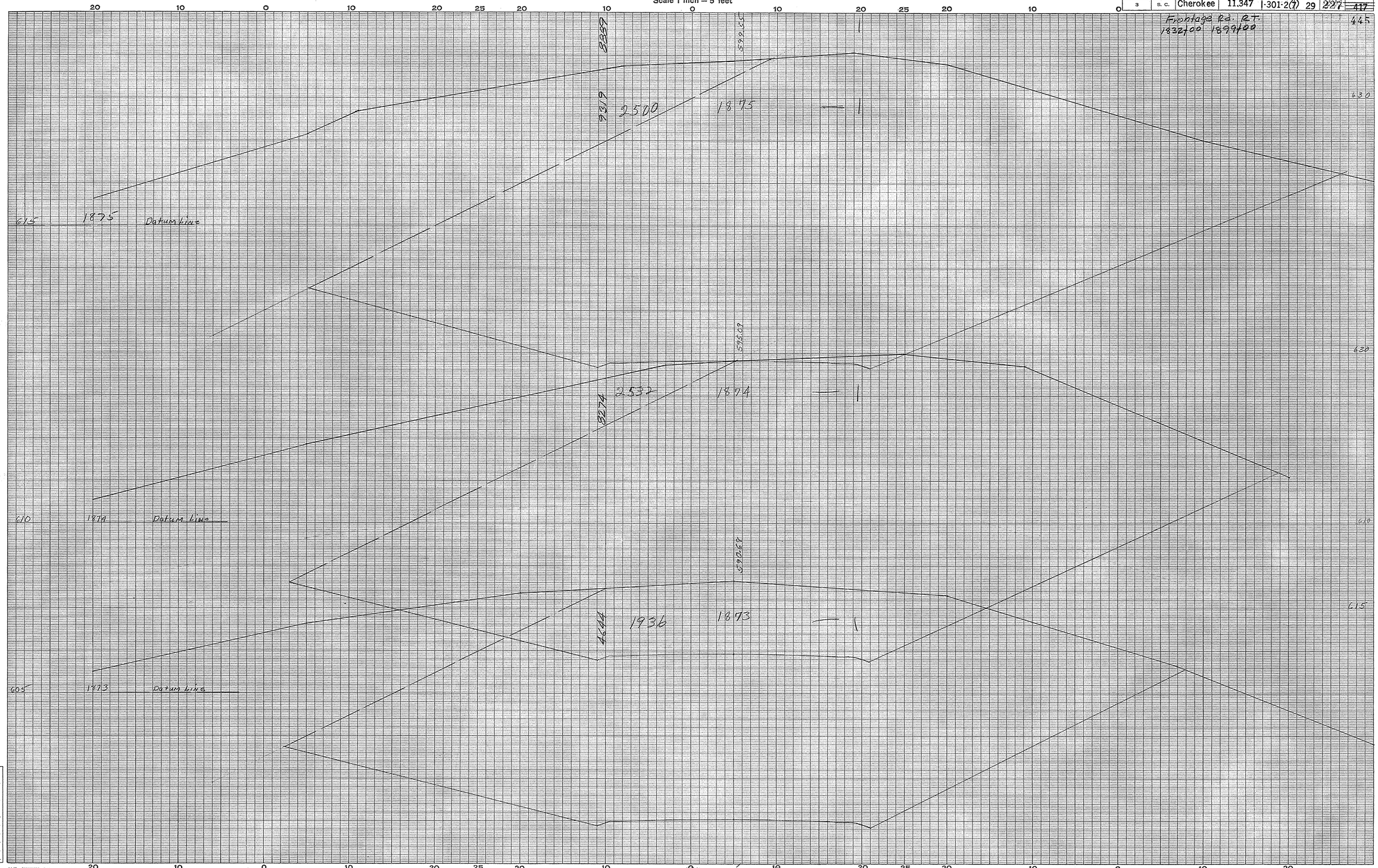
Quantities Transferred and Inked by

(10) (12)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	-301-2(7)	29	227	417



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(13)

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	298	417

Frontage Rd. RT
1822+00 1899+00

445

20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20 25 20 10 0 10 20

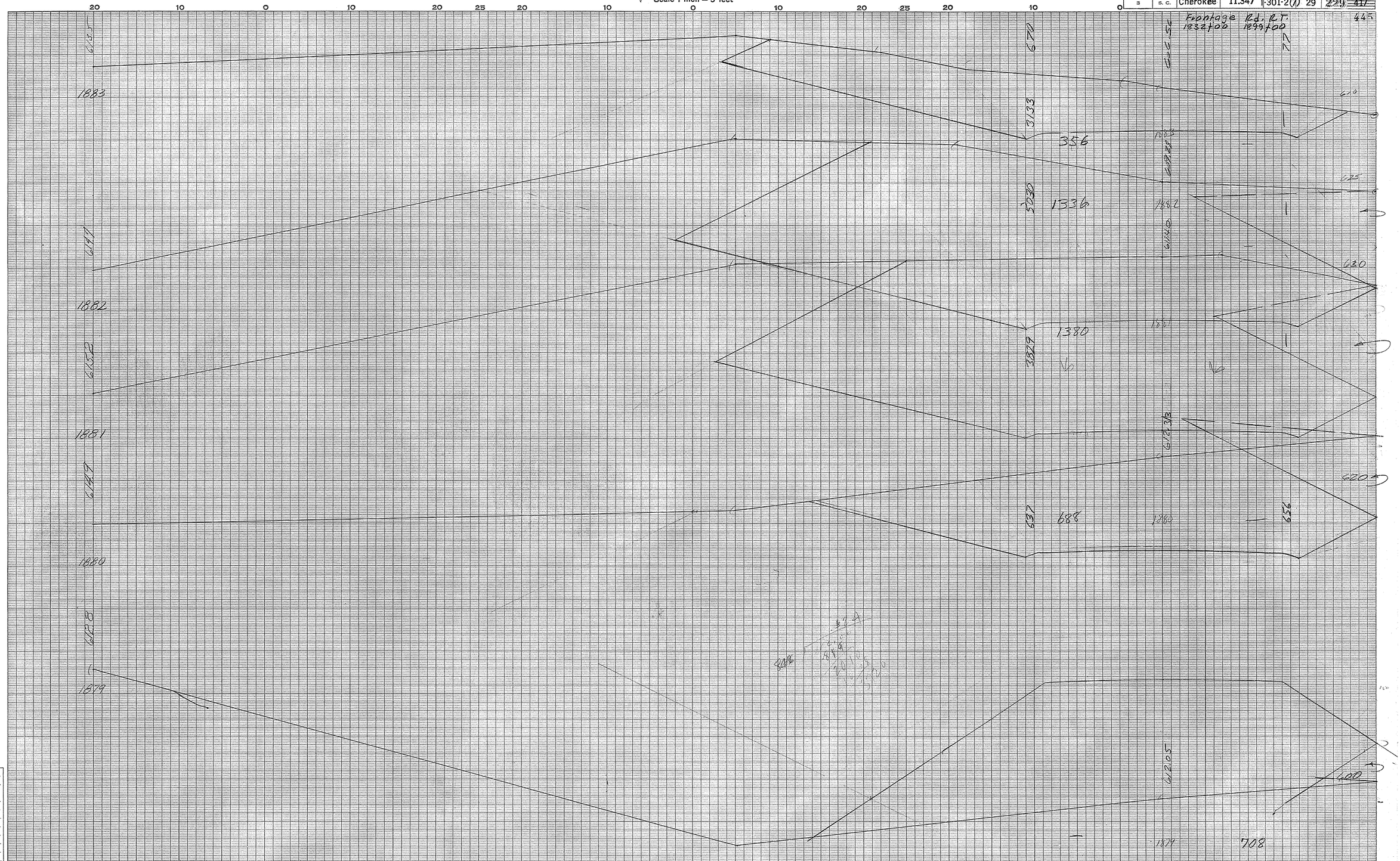
0 1179 1878

1 1 1

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	229	~~417~~



Frontage Rd Rt

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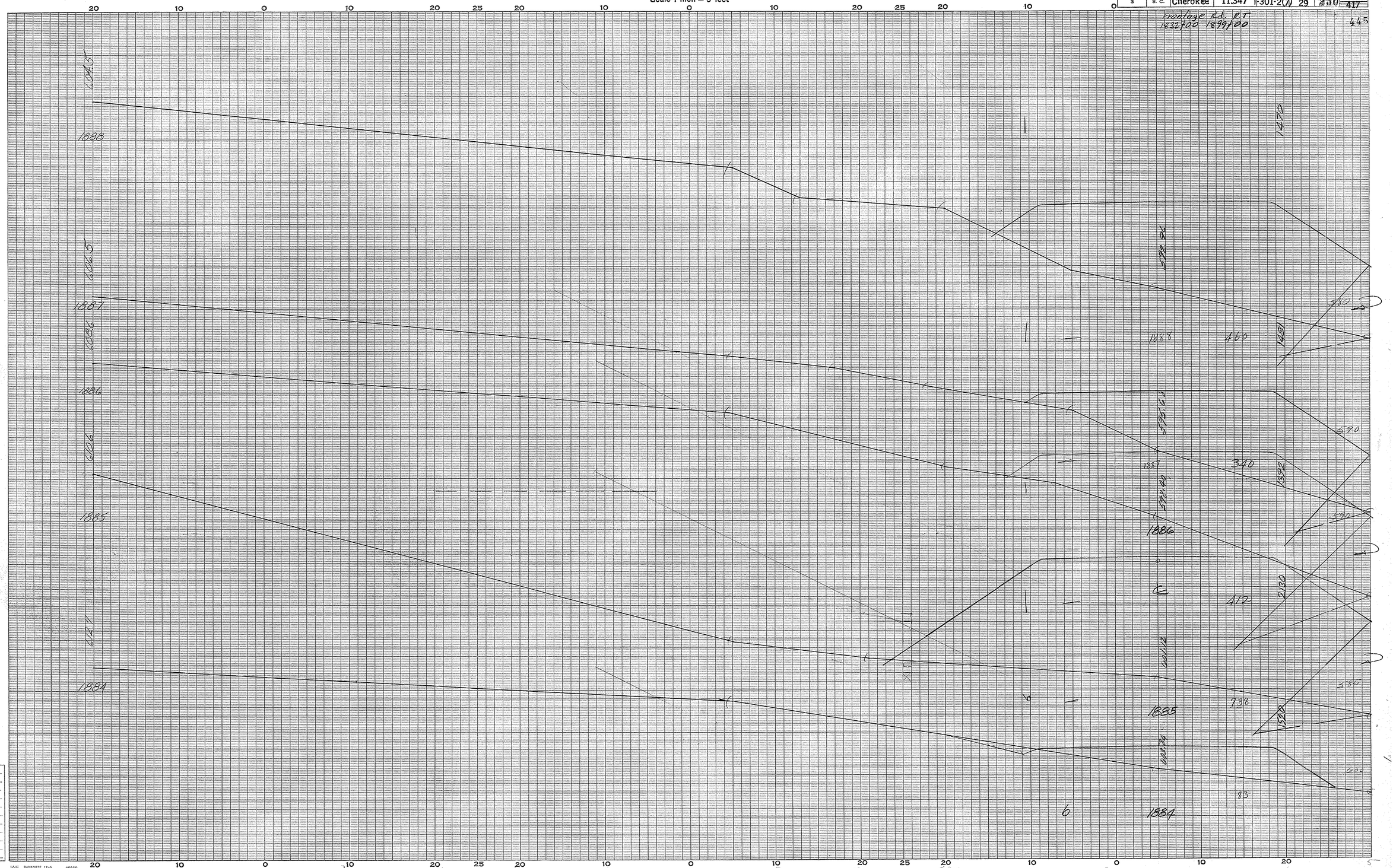
(10) ~~X~~ 15

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	230	417



Frontage Rd. Rt.

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Quantities Transferred and Inked by

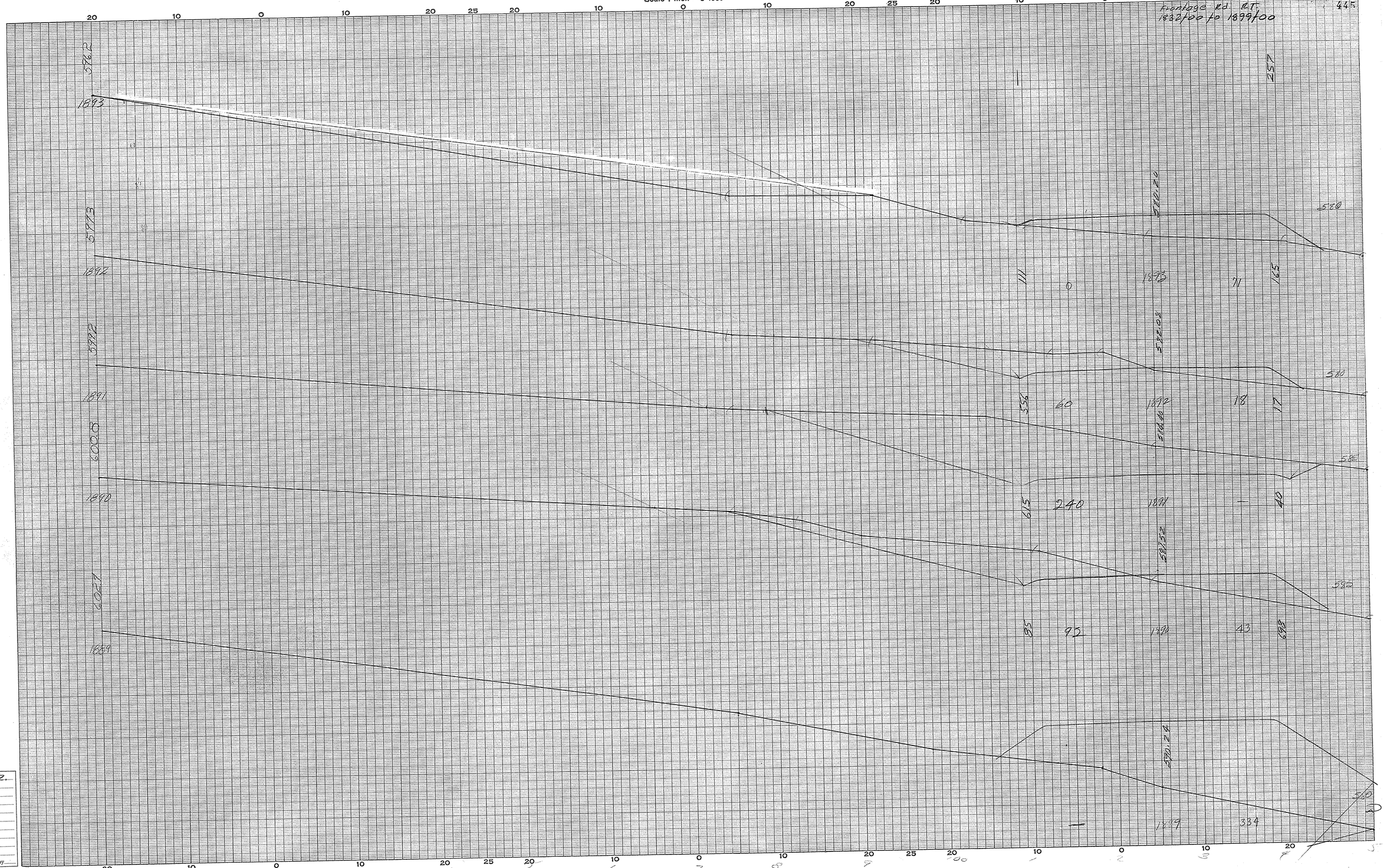
(10) (16)

CROSS SECTIONS

Scale 1 inch = 5 feet

Div. No.	S. C.						
3	Cherokee	11,347	1-301-2(7)	29	231	~~417~~ 445

Frontage Rd. Rt.
1832+00 to 1899+00



Frontage Rd. Rt

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Quantities Transferred and Inked by

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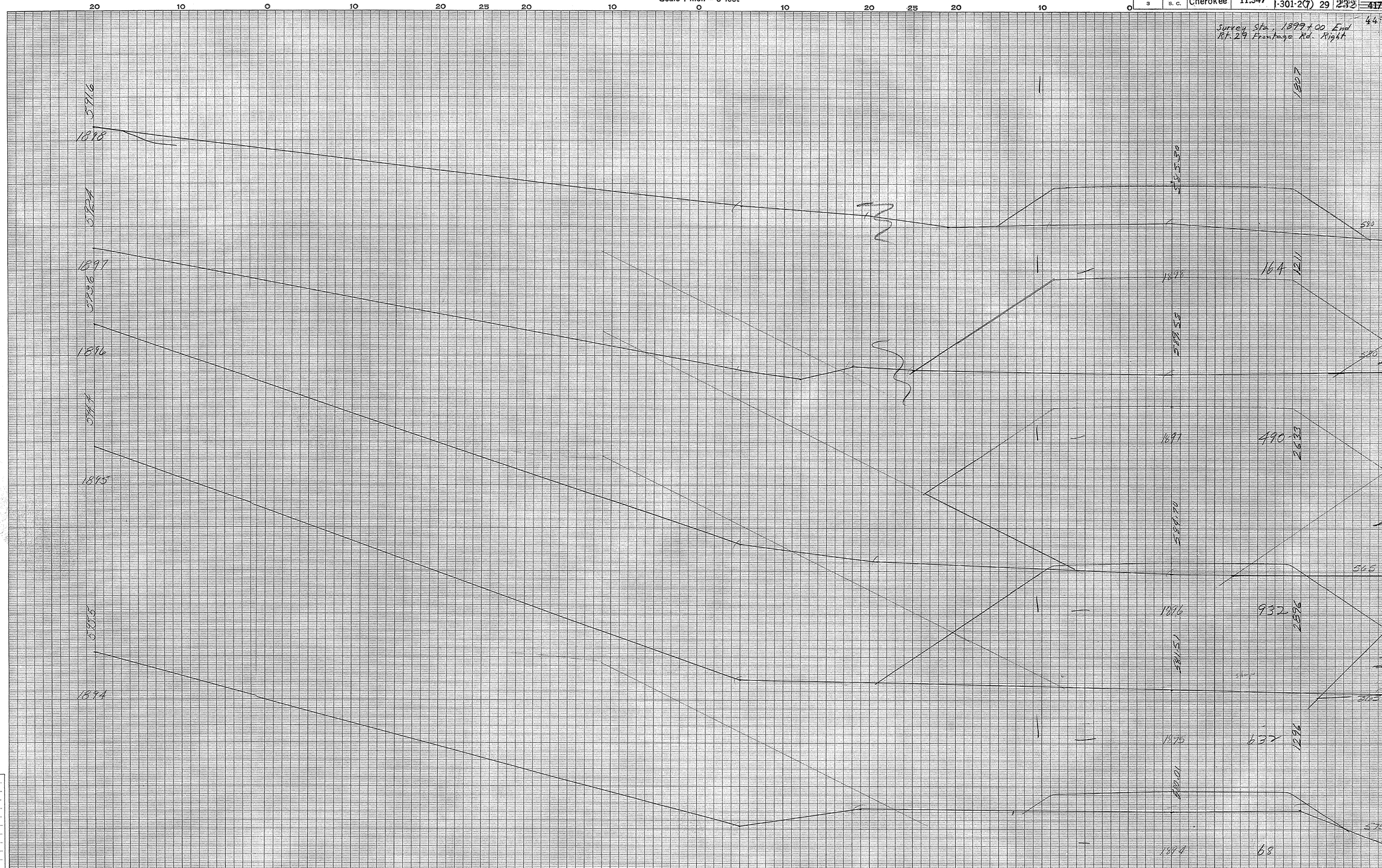
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	232	417



Frontage Rd Rt

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Quantities Transferred and Inked by

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FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	-301-2(7)	29	233	~~417~~ 445

Frontage Rd. Left
2009+00 to 2039+00

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

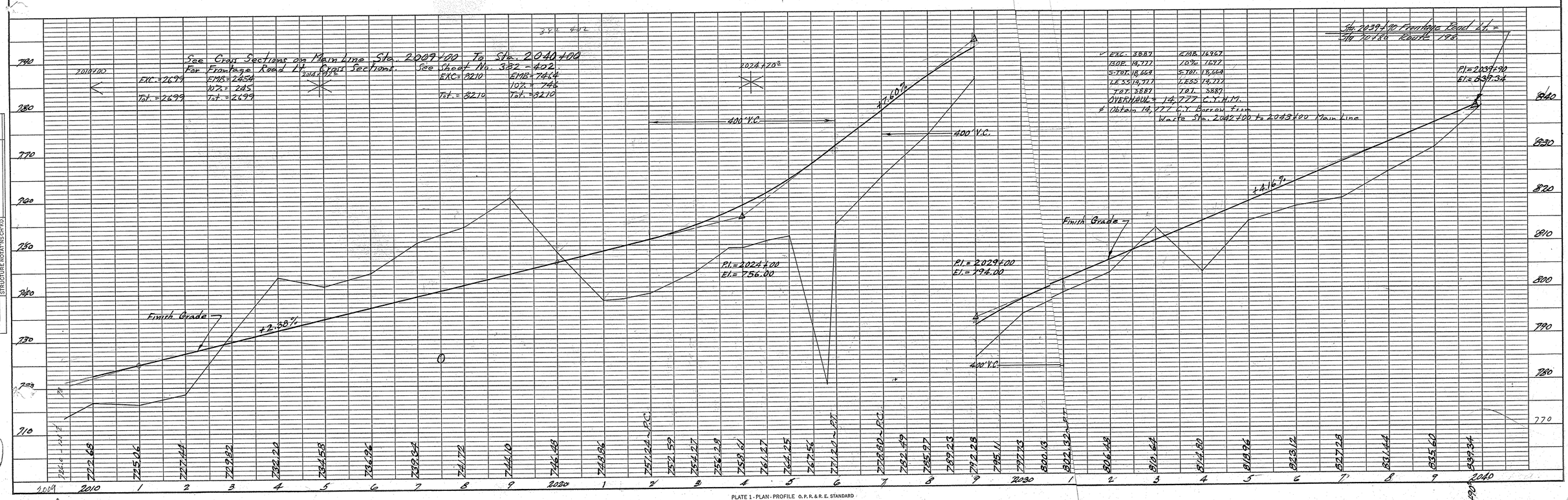


PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

Cherokee County
Frontage Road
Lt. Sta. 2009+00 - 2040
11
1 of 1

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	301-2(7)	29	284	~~417~~ 445

Frontage Rd. Left
2039+85 to 2060+00

PLAN
SURVEYED
PLOTTED
LOCATION SHEET CHECKED
R/W SHEET CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
E. M. & T. NOTED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK
NO.
BY
DATE

Cherokee County
Frontage Road
2062
Ft. 4+920
12
181

See Main Line X-Sections Sta. 2040+00 to Sta. 2060+00
For Frontage Rd. Lt. X-Sections

Obtain 3000 C.Y. Borrow For
Widening Fill Slopes Right Sta. 2040+00
from 3000 C.Y. Waste Sta. 2042+00 to 2048+00
Main Line

2044+21 E

P.I. = 2045+00
El. = 858.00

EXC. = 4076
Tot. = 4076
OVERHAUL = 20 C.Y. H.M.

EMB = 3705
10% = 371
Tot. = 4076

Finish Grade

2055+00

-2.00%

P.I. = 2052+50
El. = 845.00

+3.50%

400' V.C.

-6.00%

Vert. at Sta. 2054+00 = 4.0ft

300' V.C.

Sta. 2039+85 Frontage Road Lt. =
Sta. 70+40 Route 178

	839.98	840.50	841.00	847.50	851.00 P.C.	852.58	853.81	854.71	855.25	855.46	855.31	854.83	854.00 P.T.	852.00	850.00	848.00	846.00 P.C.	844.83	843.33	841.50	839.33	836.83	834.00 P.T.	832.00
860																								
850																								
840																								
830																								
820																								
810																								
800																								
	2040	1	2	3	4	5	6	7	8	9	2050	1	2	3	4	5	6	7	8	9	2060			

1" = 100'

PLATE 1 - PLAN - PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(6)	29	235	445

Frontage Rd. Right
2076+50 to 2083+39.1

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
R.R. NOTED
STRUCTURE NOTATNS CH'KD
BY
DATE

+50

EXC.	761	EMB.	7013
BOR.	7019	10%	701
S.TOT.	7780	S.TOT.	7780
LESS	7019	LESS	7019
TOT.	761	TOT.	761

OVERHAUL = 7019 C.Y. H.M.

+391

7019 C.Y. BORROW TO BE OBTAINED
FROM WASTE ON MAIN LINE
HAUL ROUTE 7.6 ± to Sta. 2084+75.4

Survey Sta. 2076+50 Begin Frontage Road Right

Finish Grade

Survey Sta. 2083+39.1 End Frontage Road Right

-3.00%

300' V.C.

+6.0%

PI = 2079+00
El = 790.50

Use 26'-52' Section Throughout

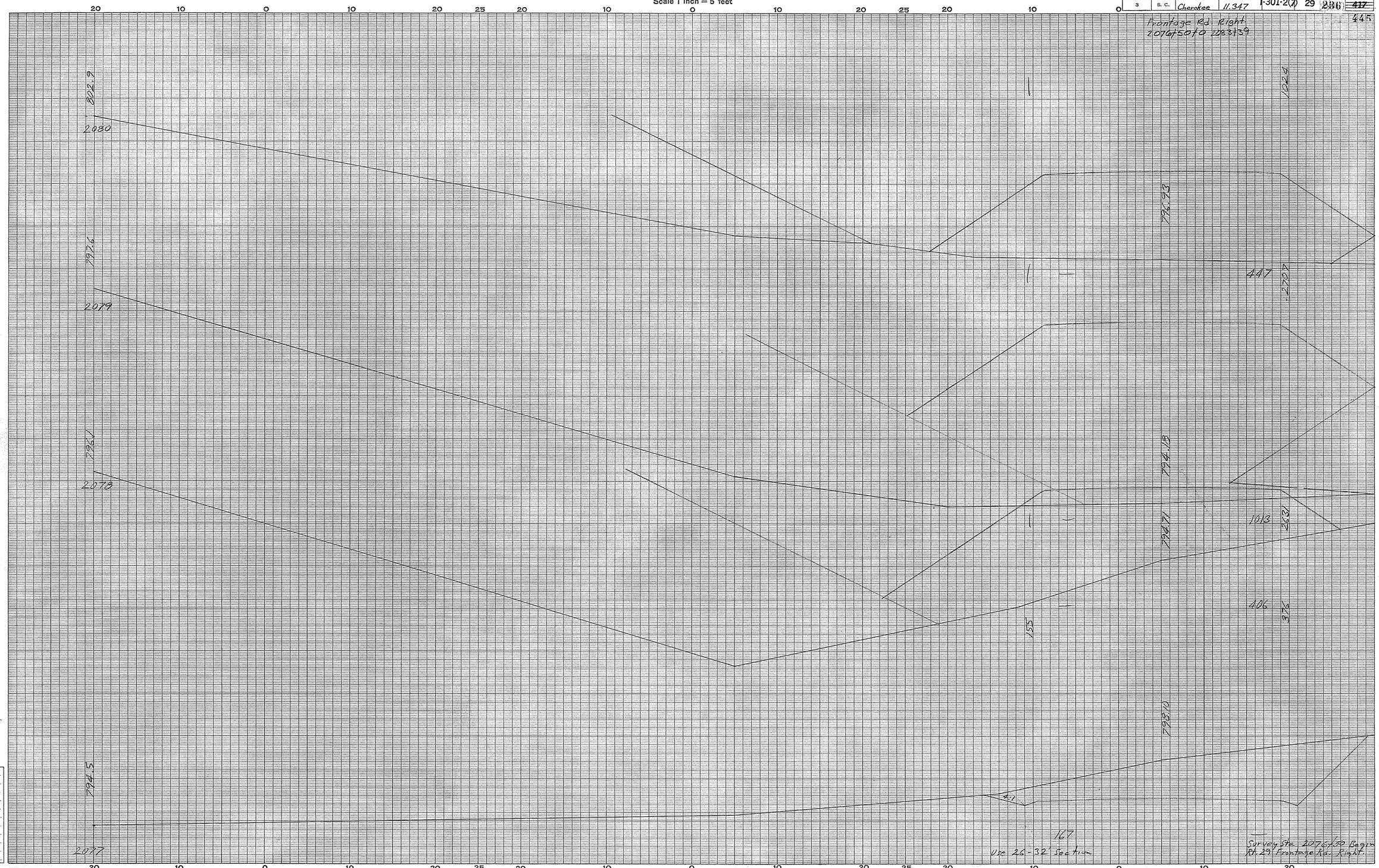
| | | |

CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11.347	I-301-2(7)	29	236	~~417~~ 445

Frontage Rd Right
2076+50 to 2083+39



Frontage Rd. Right.
Rt. 29
2077 to 2098
Cherokee Co.

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Final Areas by
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Quantities Transferred and Inked by

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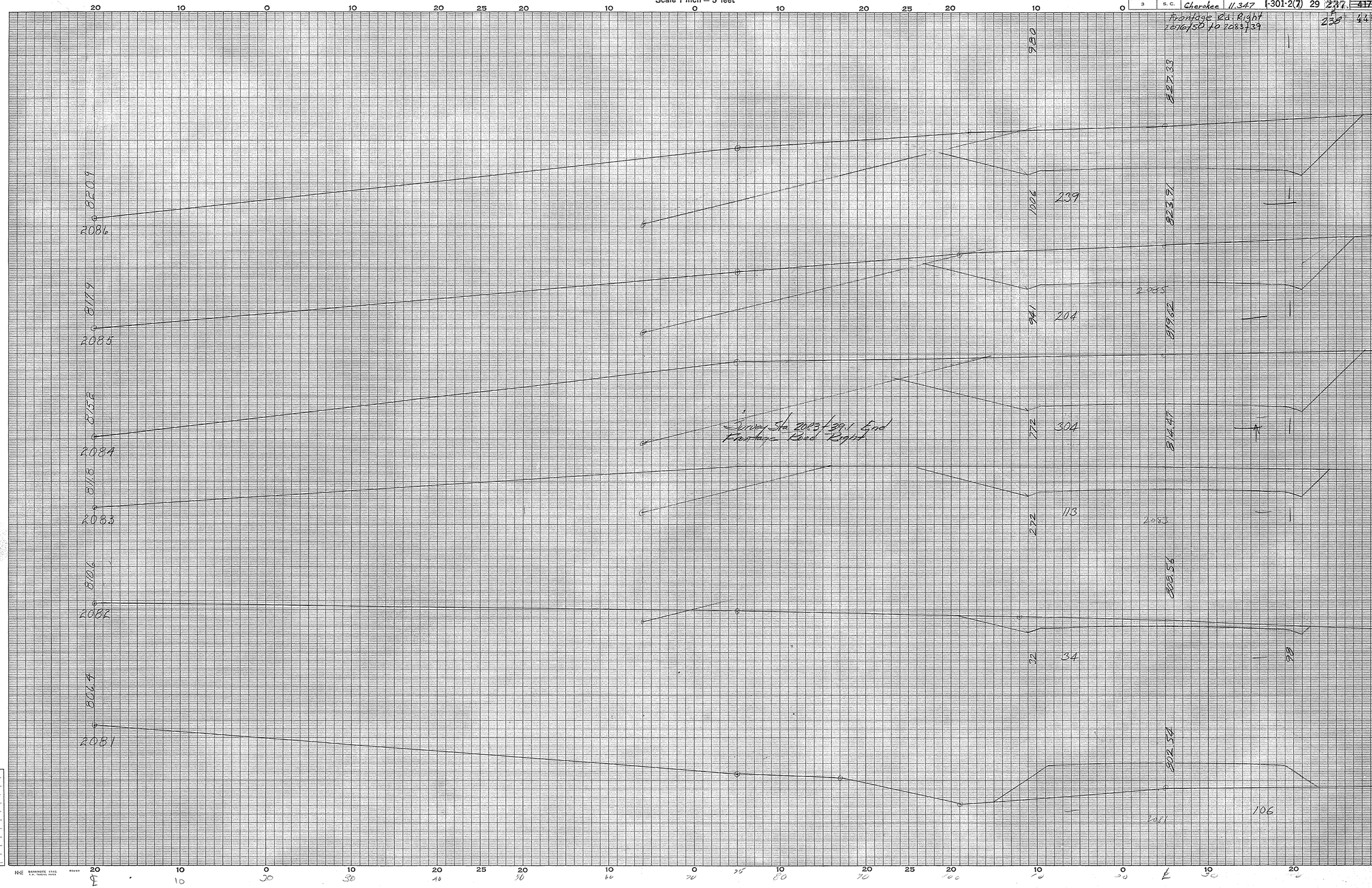
CROSS SECTIONS

Scale 1 inch = 5 feet

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S. C.	Cherokee	11,347	I-301-2(7)	29	237	417

Frontage Rd. Right
2076+50 to 2083+39



Cherokee Co.
Frontage Rd. Right

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Final Areas by
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Quantities Transferred and Inked by

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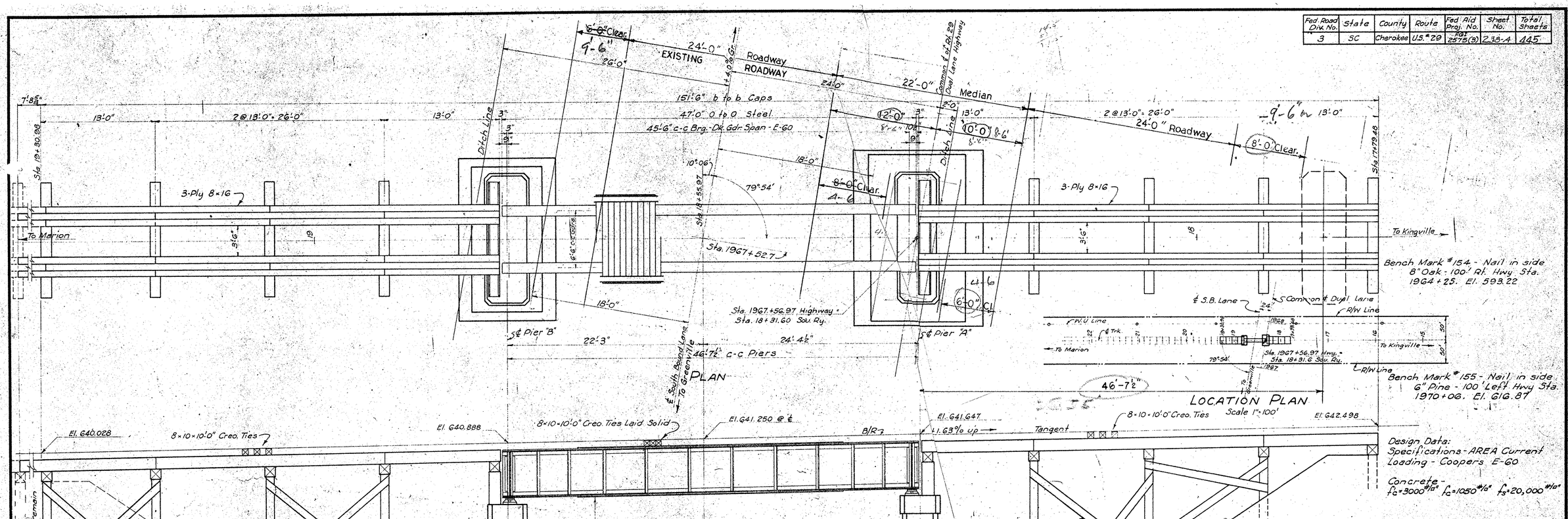
Fed. Road Div. No.	State	County	Route	Fed. Aid Proj. No.	Sheet No.	Total Sheets
3	SC	Cherokee	U.S. #29	RSH 2575(3)	238-A	445



Bench Mark #154 - Nail in side 8" Oak - 100' Rt. Hwy Sta. 1964+25. El. 593.22

Bench Mark #155 - Nail in side 6" Pine - 100' Left Hwy Sta. 1970+06. El. 616.87

Design Data:
Specifications - AREA Current
Loading - Coopers E-60

Concrete - $f'_c = 3000$ #/□" $f_c = 1050$ #/□" $f_s = 20{,}000$ #/□"

LIST OF DRAWINGS

General Plan - This sheet	
Design Sheet for Steel Gdr. -	Dwg. No. 7842
Detail of Concrete Piers -	" " 7843
Falsework-1st Stage & Timber Appr's. -	" " 7844
Detail of Timber Deck -	" " 7845
Falsework-2nd Stage & Bills of Mat'l. -	" " 7852

Approved by _____ Br. Engr. Date _____

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT
State Docket

SUMMARY OF QUANTITIES (ESTIMATED)

	Concrete Class "A" Cu. Yds.	Reinf. Steel lbs.		Excavation Wet & Dry Cu. Yds.	
Pier "A"	93.43	4112		90	
Pier "B"	73.76	2867		60	
Superstructure					
Total	167.19	6979		150 *	

*Includes excavation below normal roadway excavation only.

DIVISION OF WORK

Southern Railway will furnish all materials and labor necessary to install and remove falsework, to construct underpass and creosoted timber approaches, except excavation and reinforced concrete piers.

All materials and labor necessary for Unclassified Excavation, Structure excavation and construction of reinforced concrete piers will be furnished by the Contractor.

General Notes:
All material and workmanship shall be in accordance with Standard Specifications for Highway Construction, S.C. State Highway Dept., Mar. 15, 1939, except as noted below or elsewhere on the plans, or in the "Special Provisions."

1. Creosoted Deck - See Dwg. No. 7845
2. Steel Superstructure - See Dwg. No. 7842
3. Reinforced Concrete - All concrete to be Class "A," compacted by Mechanical Vibration. No constr. jts. or chamfers will be permitted except as shown on the plans. Surface finish to be in accordance with Specifications. Reinforcing Steel shall be deformed bars. Structural Grade or rail steel not permitted. Dimensions relating to erection of reinforcing steel are to bar centers unless otherwise noted.
4. Inspection - Mill and shop inspection of structural steel span and timber by Southern Railway Co.
5. Control of Work - Work involved in the construction of the underpass shall be under the supervision of and satisfactory to the Southern Railway Co.

General Notes (cont'd)
6. Markings - No identification markings are to be placed on structure other than one standard emblem or monogram on outside of each gdr. The emblems or monograms, if placed, are to be placed by the Ry. Co. at no expense to the Hwy. Dept.
7. Non-Pay Items - Only items shown in the proposal as pay items will be paid for. Compensation for all labor, material, tools, equipment, and incidentals for the entire contract shall be included in the unit prices bid for pay items.
8. All cost of excavating for the structure below the normal roadway excavation line and backfilling to this line shall be included in the unit price bid for wet and dry excavation.

File	B-2672
AFE	100097
Survey	Hwy. Dept.

MARK	DATE	BY	DESCRIPTION
R1	7-19-52	TFC	Revised "Quantities" and "Division of Work"

REVISIONS

SOUTHERN RAILWAY SYSTEM
EASTERN LINES

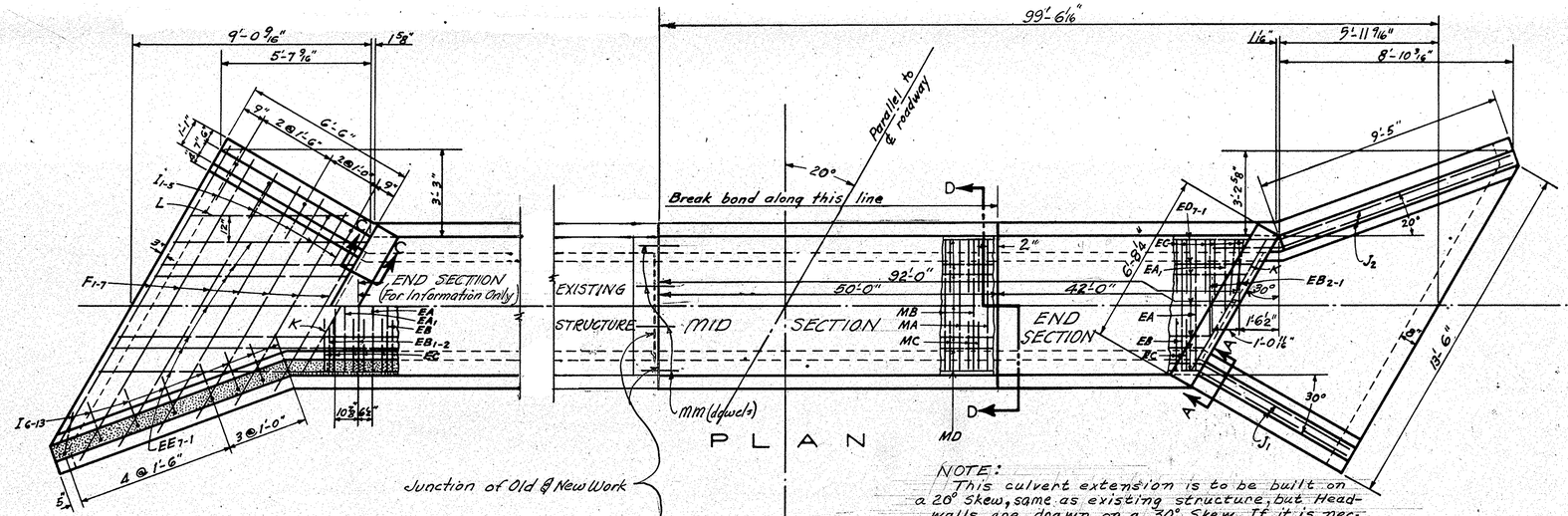
OFFICE OF CHIEF ENGINEER, M. W. & S. CHARLOTTE, N. C.

GENERAL PLAN FOR HIGHWAY UNDERPASS ON U.S. ROUTE #29 (NEAR) BLACKSBURG, S.C.

DES.	TFC	M.P.	SB 141.35	SCALE	1"=10'
DR.	TFC			FILE NO.	B-2672
TR.	TFC	VAL. SEC.		DATE	9-19-51
CH.	EOC			DWG. NO.	7841

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
13	S.C.	Cherokee	11.347	29	239	445



CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

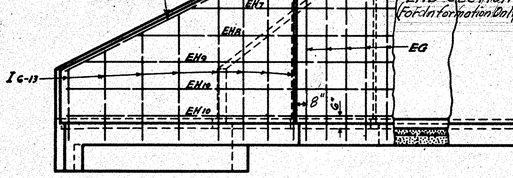
STEEL SCHEDULE

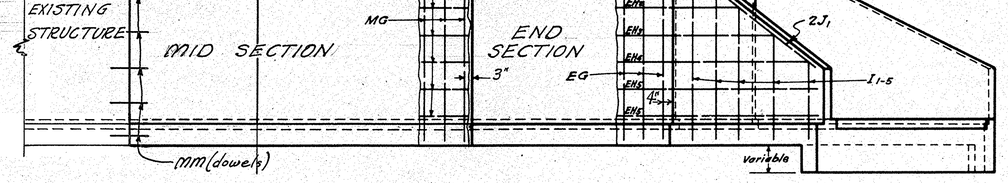
MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
MID SECTION					
MA	94	½" ℄	9'-9"	13" c. to c.	T & B Slabs
MB	92	¾" ℄	5'-0"	"	"
MC	368	⅝" ℄	4'-3"	As Shown	Corners
MD	12	½" ℄	49'-8"	"	T & B Slabs
MG	194	½" ℄	7'-0"	9" Stag'd.	Side Walls
MH	12	½" ℄	49'-8"	12" Stag'd.	"
NM	16	¾" ℄	1'-6"	As Shown	Dowels
END SECTION					
EA	76	½" ℄	9'-9"	13" C. to c.	T & B Slabs
EA1	2	½" ℄	5'-8"	"	"
EB	74	¾" ℄	5'-0"	"	"
EB1	2	¾" ℄	3'-9"	"	"
EB2	2	¾" ℄	1'-10"	"	"
EC	304	⅝" ℄	4'-3"	As Shown	Corners
ED1	1	½" ℄	40'-0"	"	Top Slab
ED2	1	½" ℄	40'-6"	"	"
ED3	1	½" ℄	40'-9"	"	"
ED4	1	½" ℄	41'-5"	"	"
ED5	1	½" ℄	42'-1"	"	"
ED6	1	½" ℄	42'-4"	"	"
ED7	1	½" ℄	42'-9"	"	"
EE1	1	½" ℄	47'-8"	"	Bot Slab
EE2	1	½" ℄	48'-2"	"	"
EE3	1	½" ℄	48'-5"	"	"
EE4	1	½" ℄	49'-1"	"	"
EE5	1	½" ℄	49'-9"	"	"
EE6	1	½" ℄	50'-0"	"	"
EE7	1	½" ℄	50'-3"	"	"
F1	1	½" ℄	13'-3"	12" c. to c.	Apron
F2	1	½" ℄	13'-3"	"	"
F3	1	½" ℄	12'-0"	"	"
F4	1	½" ℄	10'-10"	"	"
F5	1	½" ℄	9'-8"	"	"
F6	1	½" ℄	8'-2"	"	"
F7	1	½" ℄	7'-3"	"	"
EG	112	½" ℄	7'-0"	9" Stag'd.	Side Walls
EH1	1	½" ℄	41'-8"	12" Stag'd.	"
EH2	1	½" ℄	43'-2"	"	"
EH3	1	½" ℄	44'-8"	"	"
EH4	1	½" ℄	45'-7"	"	"
EH5	2	½" ℄	46'-8"	"	"
EH6	1	½" ℄	95'-2"	"	"
EH7	1	½" ℄	47'-4"	"	"
EH8	1	½" ℄	49'-6"	"	"
EH9	1	½" ℄	51'-8"	"	"
EH10	2	½" ℄	52'-6"	"	"
I1	1	½" ℄	4'-4"	As Shown	Short Wing
I2	1	½" ℄	5'-4"	"	"
I3	1	½" ℄	6'-4"	"	"
I4	1	½" ℄	7'-0"	"	"
I5	1	½" ℄	7'-8"	"	"
I6	1	½" ℄	4'-1"	"	Long Wing
I7	1	½" ℄	4'-9"	"	"
I8	1	½" ℄	5'-5"	"	"
I9	1	½" ℄	6'-1"	"	"
I10	1	½" ℄	6'-10"	"	"
I11	1	½" ℄	7'-3"	"	"
I12	1	½" ℄	7'-9"	"	"
I13	1	½" ℄	8'-3"	"	"
J1	2	⅝" ℄	10'-0"	"	Short Wing
J2	2	⅝" ℄	13'-0"	"	Long Wing
K	2	¾" ℄	5'-9"	"	T & B Slabs
L	1	½" ℄	6'-0"	"	Apron

QUANTITIES	MID SEC.	END SEC.
CLASS "A" CONCRETE	30.0 C.Y.	28.9 C.Y.
REINFORCING STEEL	4,460 LBS.	3,922 LBS.

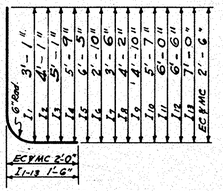
TOTAL QUANTITIES	
CLASS "A" CONCRETE	58.9 CU. YDS.
REINFORCING STEEL	8,382 LBS.

	MID. SEC.	END SEC.
CONCRETE P.F.L. BARREL	0.5998	0.5998 CU.YD.
EXCAV. P.F.L. P.F.D. BARREL	0.3827	0.3827 CU.YD.
CONC. P.F.D. CUT-OFF WALL (I-END)		0.3524 CU.YD.

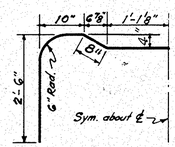




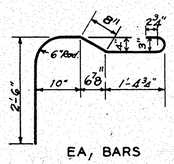
ELEVATION



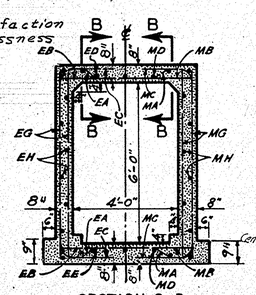
EC, MC, & I_{1-13} BARS



EA or MA BARS



EA, BARS



SECTION D-D

NOTES:
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged due to his carelessness or negligence.
All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

NOTES:- (Cont'd)
Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1949 - f_s = 20,000 #/in.², f_c = 1,200 #/in.², n = 10, v = 90 #/in.², u = 225 #/in.², Culvert designed for H20-S16 loading and 25' (max.) earth fill
Center of Main reinforcing steel shall be placed 2" from the surface.
All concrete shall be class "A".
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT
REINFORCED BOX TYPE

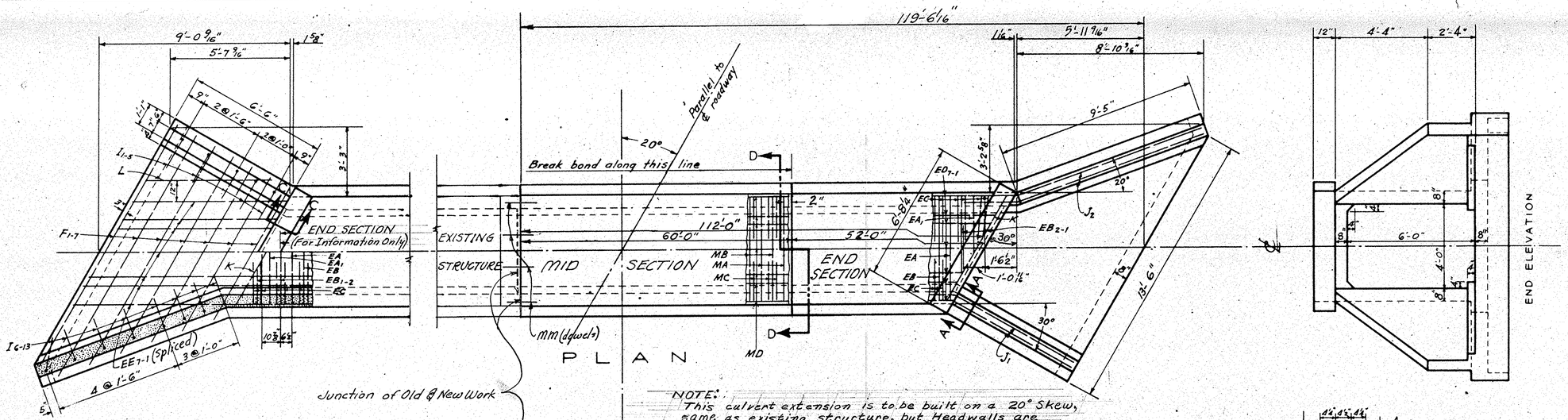
4'x6' SKEWED 20°
EXTEND 92'-0" Rt.
STA. NO. 1863 + 59.
S.C. DOCKET NO. 11.347 Cherokee COUNTY
ROUTE NO. 29 DATE 7-16-57

B1.46 f25 s 20 Rev

Des. C.E.S. 11-42 Ch. W.B.B., 12-42
Tr. C.W.M. 11-43 Ch. W.B.B., 1-43 Revised and Checked by: W.B.B., G.K.B. + W.R.T. 12-45

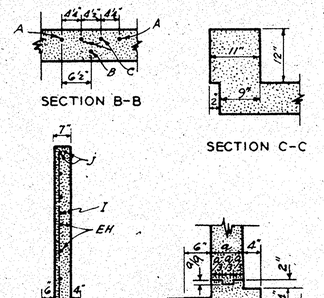
Adapted by: G.K.B. 7-57
Checked by: W.B.B. 7-57

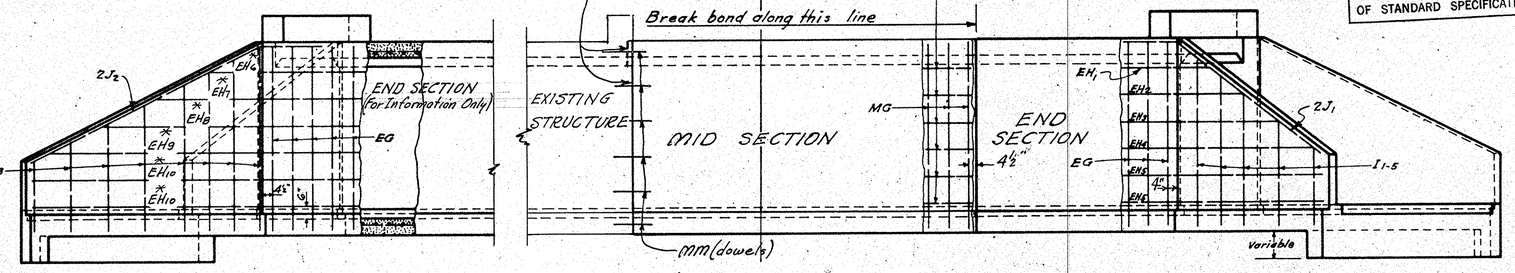
FED ROAD DIV. NO	STATE	COUNTY	DOCKET NO.	ROUTE NO	SHEET NO	TOTAL SHEETS
3	S.C	Cherokee	11.347	29	240	445



NOTE:
This culvert extension is to be built on a 20° Skew, same as existing structure, but Headwalls are drawn on a 30° Skew. If it is necessary for Headwalls to be parallel with ℄ of Roadway adjustments are to be made in the field.

CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 71D28 OF STANDARD SPECIFICATIONS.

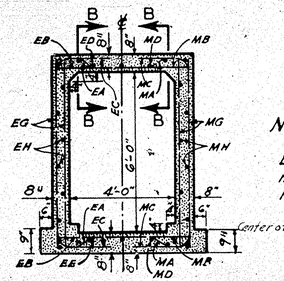




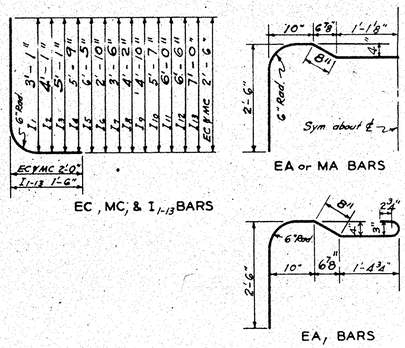
* EH6-10 Bars are Spliced

ELEVATION

NOTES:
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.
All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.
This culvert designed for H15-S12 Live Load and Full Dead Load.
The stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect
Maximum Fill Height in accordance with 1949 A.A.S.H.O. Spec.: 21.5.



SECTION D-D



NOTES:-(Cont'd)
Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1941 - f_s = 20,000 #/in², f_c = 1,000 #/in² n=10, v=90 #/in² u=150 #/in². Culvert designed for H15 loading and 15' (max.) earth fill
Center of Main reinforcing steel shall be placed 2" from the surface.
All concrete shall be class "A". *(Except fs).
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

STEEL SCHEDULE

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
MID SECTION					
MA	112	½" ℄	9'-8"	13" c to c	T & B Slabs
MB	110	½" ℄	5'-0"	"	"
MC	440	⅝" ℄	4'-3"	As Shown	Corners
MD	14	½" ℄	59'-8"	"	T & B Slabs
MG	160	½" ℄	7'-0"	9" Stagd	Side Walls
MH	12	½" ℄	59'-8"	12" Stagd	"
MM	16	¾" ℄	1'-6"	As Shown	Dowels
END SECTION					
EA	94	½" ℄	9'-9"	13" c to c	T & B Slabs
EA1	2	½" ℄	5'-8"	"	"
EB	92	½" ℄	5'-0"	"	"
EB1	2	½" ℄	3'-9"	"	"
EB2	2	½" ℄	1'-10"	"	"
EC	376	⅝" ℄	4'-3"	As Shown	Corners
ED1	1	½" ℄	50'-0"	"	Top Slab
ED2	1	½" ℄	50'-6"	"	"
ED3	1	½" ℄	50'-9"	"	"
ED4	1	½" ℄	51'-5"	"	"
ED5	1	½" ℄	52'-1"	"	"
ED6	1	½" ℄	52'-4"	"	"
ED7	1	½" ℄	52'-9"	"	"
EE1	2	½" ℄	29'-11"	"	Bot Slab
EE2	2	½" ℄	30'-1"	"	"
EE3	2	½" ℄	30'-3"	"	"
EE4	2	½" ℄	30'-7"	"	"
EE5	2	½" ℄	30'-11"	"	"
EE6	2	½" ℄	31'-1"	"	"
EE7	2	½" ℄	31'-5"	"	"
E1	1	½" ℄	13'-3"	12" c to c	Apron
E2	1	½" ℄	13'-3"	"	"
E3	1	½" ℄	12'-0"	"	"
E4	1	½" ℄	10'-10"	"	"
E5	1	½" ℄	9'-9"	"	"
E6	1	½" ℄	8'-5"	"	"
E7	1	½" ℄	7'-3"	"	"
EG	138	½" ℄	7'-0"	9" Stagd	Side Walls
EH1	1	½" ℄	51'-8"	12" Stagd	"
EH2	1	½" ℄	53'-2"	"	"
EH3	1	½" ℄	54'-8"	"	"
EH4	1	½" ℄	56'-2"	"	"
EH5	2	½" ℄	56'-8"	"	"
EH6	2	½" ℄	28'-7"	"	"
EH7	2	½" ℄	29'-9"	"	"
EH8	2	½" ℄	30'-10"	"	"
EH9	2	½" ℄	31'-11"	"	"
EH10	4	½" ℄	32'-4"	"	"
I1	1	½" ℄	4'-4"	As Shown	Short Wing
I2	1	½" ℄	5'-4"	"	"
I3	1	½" ℄	6'-4"	"	"
I4	1	½" ℄	7'-0"	"	"
I5	1	½" ℄	7'-8"	"	"
I6	1	½" ℄	4'-1"	"	Long Wing
I7	1	½" ℄	4'-9"	"	"
I8	1	½" ℄	5'-5"	"	"
I9	1	½" ℄	6'-1"	"	"
I10	1	½" ℄	6'-10"	"	"
I11	1	½" ℄	7'-3"	"	"
I12	1	½" ℄	7'-9"	"	"
I13	1	½" ℄	8'-3"	"	"
J1	2	⅝" ℄	10'-0"	"	Short Wing
J2	2	⅝" ℄	13'-0"	"	Long Wing
K	2	⅜" ℄	5'-9"	"	T & B Slabs
L	1	½" ℄	6'-0"	"	Apron

QUANTITIES	MID SEC.	END SEC.
CLASS "A" CONCRETE	36.0 C.Y.	34.9 C.Y.
REINFORCING STEEL	4,868 LBS.	4414 LBS.

TOTAL QUANTITIES	
CLASS "A" CONCRETE	70.9 CU.YDS.
REINFORCING STEEL	9,282 LBS.

	MID. SEC	END SEC
CONCRETE P.F.L. BARREL	0.5998	0.5998 CU.YD.
EXCAV P.F.L., P.F.D. BARREL	0.3827	0.3827 CU.YD.
CONC. P.F.D. CUT-OFF WALL (1-END)		0.3524 CU.YD.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

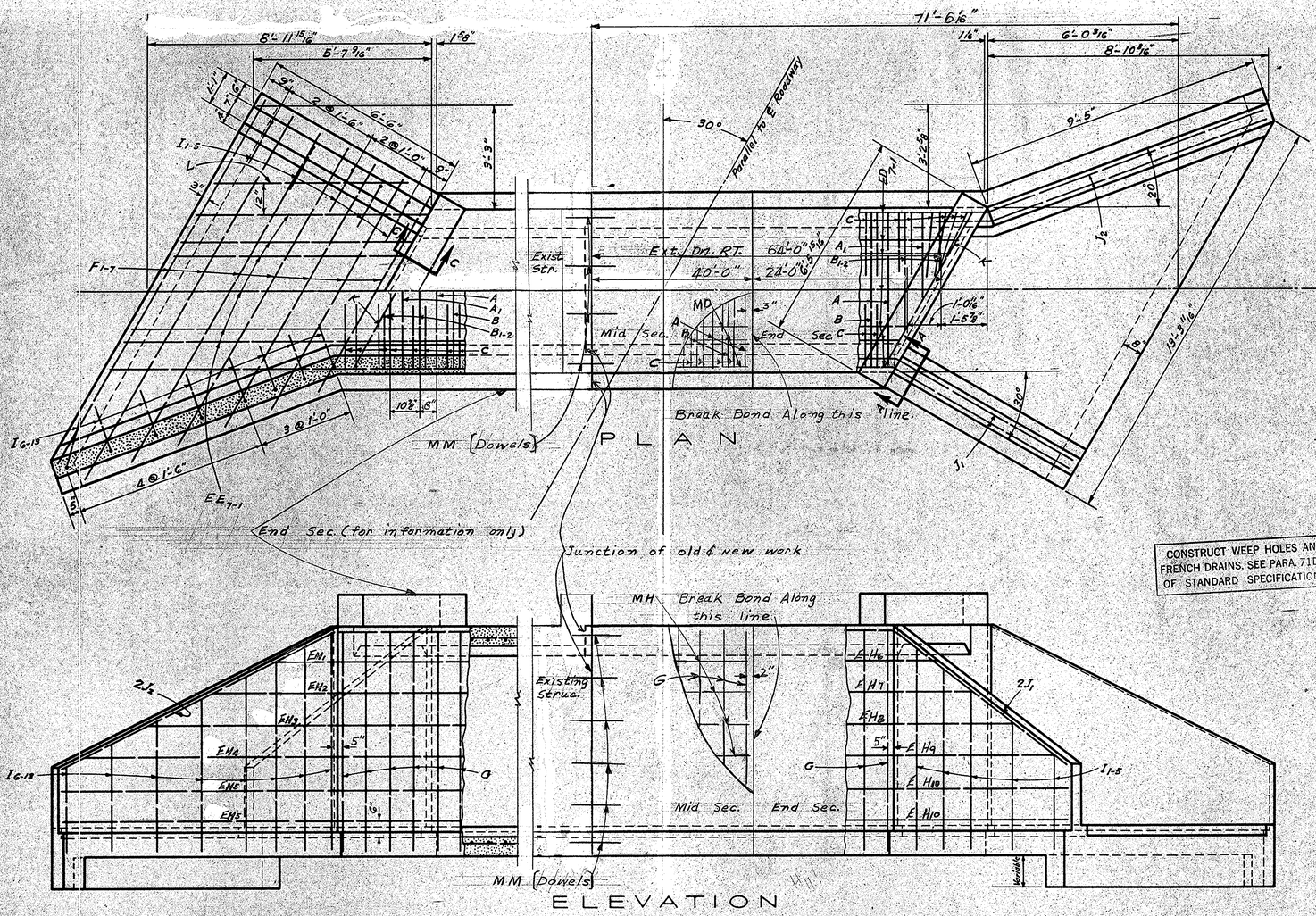
CONCRETE CULVERT
REINFORCED BOX TYPE

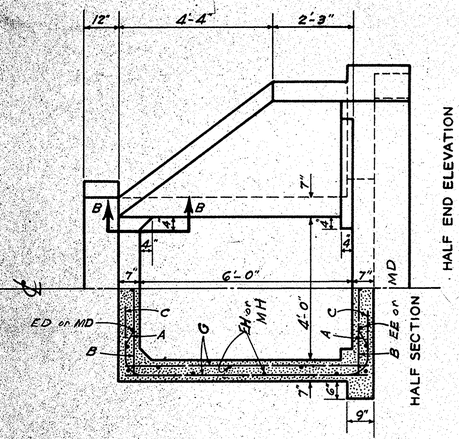
4'x6' SKEWED 20°
EXTEND 112'-0" Rt.
STA. NO. 1869+74
S.C. DOCKET NO. 11.347 Cherokee COUNTY
ROUTE NO. 29 DATE 7-16-57
B1.46 f 15 s 20 Rev

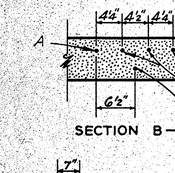
Des. C.E.S. 11-42 Ch. W.B.B. 12-42
Tr. C.W.M. 1-43 Ch. W.B.B. 1-43
Revised and Checked by: W.B.B., G.K.B., + W.R.T. 12-45

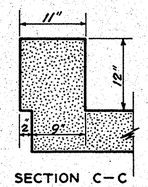
Adapted by: G.K.B. 7-57
Checked by: W.B.B. 7-57

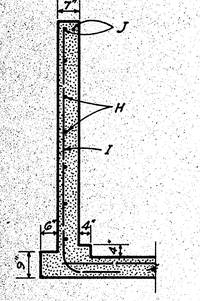
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	241	445

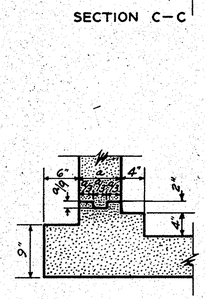


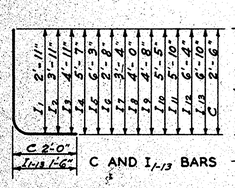


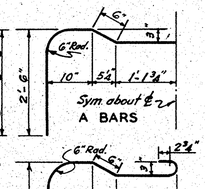


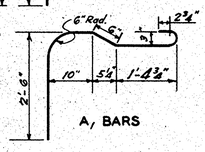












STEEL SCHEDULE Mid & End Sect.					
MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
A	116	½"ϕ	9'-6"	18" c.to c.	T. & B. Slabs
A1	2	½"ϕ	5'-5"	"	"
B	116	½"ϕ	4'-10"	"	"
B1	2	½"ϕ	3'-7"	"	"
B2	2	½"ϕ	1'-9"	"	"
C	476	5/8"ϕ	4'-3"	As Shown	Corners
MD	14	½"ϕ	39'-8"	"	T. & B. Slabs at Mid. Sec.
F1	1	½"ϕ	13'-1"	12" c.to c.	Apron
F2	1	½"ϕ	13'-1"	"	"
F3	1	½"ϕ	11'-10"	"	"
F4	1	½"ϕ	10'-8"	"	"
F5	1	½"ϕ	9'-6"	"	"
F6	1	½"ϕ	8'-3"	"	"
F7	1	½"ϕ	7'-1"	"	"
G	172	½"ϕ	6'-10"	9" Stag'd	Side Walls
MH	12	½"ϕ	39'-8"	12" Stag'd	Side w. Mid Sec.
EH1	1	½"ϕ	27'-0"	"	S.W. & Long Wing
EH2	1	½"ϕ	29'-2"	"	"
EH3	1	½"ϕ	31'-4"	"	"
EH4	1	½"ϕ	33'-6"	"	"
EH5	2	½"ϕ	34'-4"	"	"
I1	1	½"ϕ	4'-2"	As Shown	Short Wing
I2	1	½"ϕ	5'-2"	"	"
I3	1	½"ϕ	6'-2"	"	"
I4	1	½"ϕ	6'-10"	"	"
I5	1	½"ϕ	7'-6"	"	"
I6	1	½"ϕ	3'-11"	"	Long Wing
I7	1	½"ϕ	4'-7"	"	"
I8	1	½"ϕ	5'-3"	"	"
I9	1	½"ϕ	5'-11"	"	"
I10	1	½"ϕ	6'-8"	"	"
I11	1	½"ϕ	7'-1"	"	"
I12	1	½"ϕ	7'-7"	"	"
I13	1	½"ϕ	8'-1"	"	"
J1	2	5/8"ϕ	10'-0"	"	Short Wing
J2	2	5/8"ϕ	13'-0"	"	Long Wing
K	2	¾"ϕ	5'-7"	"	T. & B. Slabs
L	1	½"ϕ	6'-0"	"	Apron
MM	16	⅝"ϕ	1'-6"	"	Dowels
ED1-7	1 ea.	1"ϕ 2"ϕ	22'-9" to 22'-9" Vary by 5¾"	"	Top Slab
EH6	1	½"ϕ	23'-6"	12" Stag'd	Short Wing Side Wall
EH7	1	½"ϕ	25'-0"	"	"
EH8	1	½"ϕ	26'-6"	"	"
EH9	1	½"ϕ	28'-0"	"	"
EH10	2	½"ϕ	28'-6"	"	"
EE1	1	½"ϕ	29'-8"	As Shown	Bot. Slab
EE2	1	½"ϕ	30'-2"	"	"
EE3	1	½"ϕ	30'-8"	"	"
EE4	1	½"ϕ	31'-1"	"	"
EE5	1	½"ϕ	31'-6"	"	"
EE6	1	½"ϕ	32'-0"	"	"
EE7	1	½"ϕ	32'-5"	"	"

TOTAL QUANTITIES		
CLASS "A" CONCRETE	36.9	CU.YD.
REINFORCING STEEL	5,404	LBS.

CONCRETE P.F.L. BARREL ..... 0.5226 cu.Yd.
CONCRETE P.F.D. Cut-off Wall (1-End) 0.3476 cu.Yd.
EXCAVATION P.F.D., P.F.L. BARREL ..... 0.3766 cu.Yd.

CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

NOTES:
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged due to his carelessness or negligence.
This culvert designed for H15-S12 Live Load and Full Dead Load.
The stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications.
All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

NOTES:-
Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1941* - fs = 20,000 #/in.² fc = 1,000 #/in.², n = 10, v = 90 #/in.², u = 150 #/in.², H15 loading, 10 ft. Earth fill (max). * (Except fs).
Center of Main reinforcing steel shall be 2" from the surface.
All concrete shall be class "A".
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT
REINFORCED BOX TYPE

4'x 6' C SKEWED 30°
Ext. 64'-0" on Right
STA. NO. 885+15

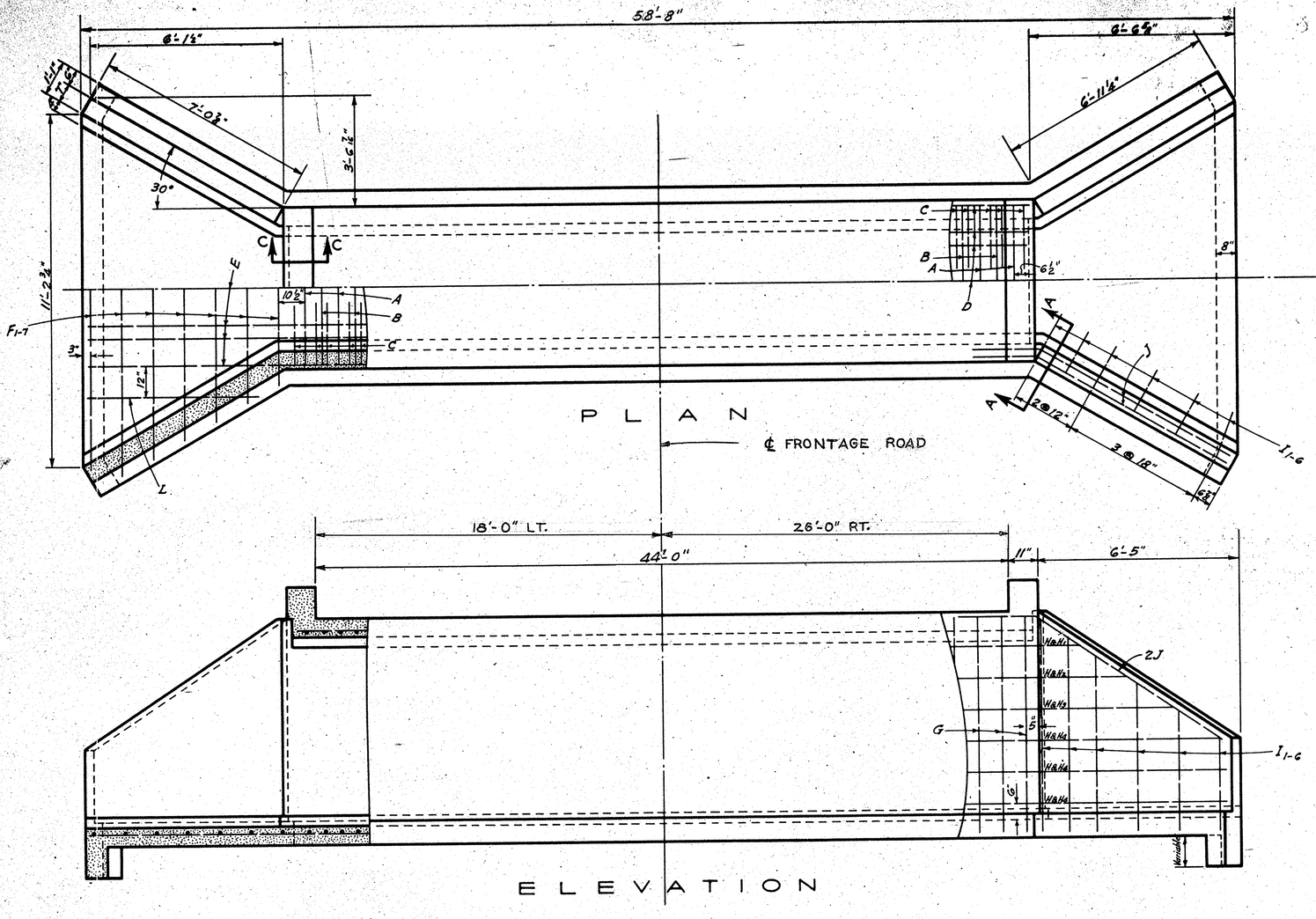
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY, 57

B 1.46 S 30

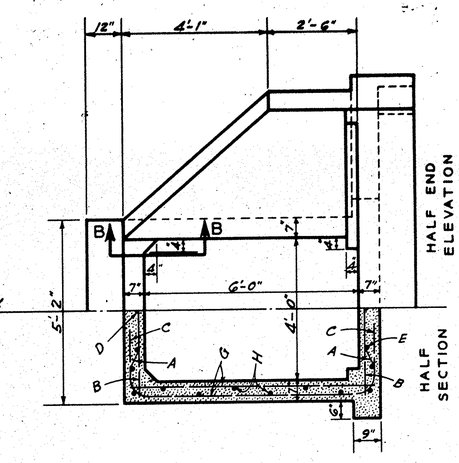
Des. C.E.S. 10-42 Ch. W.B.B., 11-42
Tr. C.W.M. 12-42 Ch. W.B.B., 12-42
C-Bars Revised W.B.B. 4-46
Checked M.S.H. 4-46

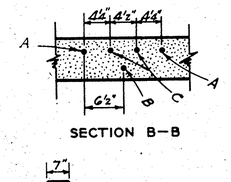
Adapted A.R.G. 7-57
Checked W.B.B. 7-57

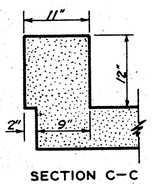
FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	RT. NO.	SHEET NO.	TOTAL SHEETS
13	S.C.	CHEROKEE	11.347	29	241A	445

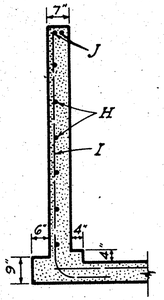


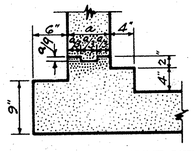
CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 71D28 OF STANDARD SPECIFICATIONS.

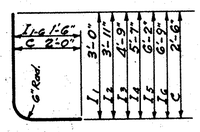




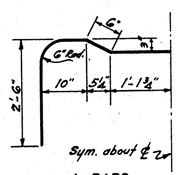








C & I-6 BARS



A BARS

STEEL SCHEDULE

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
A	84	½"	9'-6"	13" c. to c.	T. & B. Slabs
B	82	½"	4'-10"	"	"
C	336	⅝"	4'-3"	As Shown	Corners
D	14	½"	23'-7	"	Top Slab
E	14	½"	30'-2"	"	Bot. Slab
F1	2	½"	11'-5"	12" c. to c.	Apron
F2	2	½"	11'-10"	"	"
F3	2	½"	10'-9"	"	"
F4	2	½"	9'-7"	"	"
F5	2	½"	8'-5"	"	"
F6	2	½"	7'-3"	"	"
F7	2	½"	6'-1"	"	"
G	122	½"	6'-10"	9" Stagd.	Side Walls
H	12	½"	22'-0"	12" Stagd.	"
H1	2	½"	28'-11"	"	"
H2	2	½"	32'-5"	"	"
H3	2	½"	35'-10"	"	"
H4	6	½"	39'-3"	"	"
I1	4	½"	4'-3"	As Shown	Wings
I2	4	½"	5'-2"	"	"
I3	4	½"	6'-0"	"	"
I4	4	½"	6'-10"	"	"
I5	4	½"	7'-5"	"	"
I6	4	½"	8'-0"	"	"
J	8	⅝"	10'-0"	"	"
L	4	½"	5'-5"	"	Apron

TOTAL QUANTITIES

CLASS "A" CONCRETE	30.10	CU. YD.
REINFORCING STEEL	4,097	LB.

Concrete P.F.L. Barrel _____ 0.5226 Cu. Yd.
Concrete P.F.D. Cut-off Wall (1-End) _____ 0.3200 Cu. Yd.
Excavation P.F.D., P.F.L. Barrel _____ 0.3766 Cu. Yd.

Notes Continued:
This Culvert Designed for H15-S12 Live Load and Full Dead Load. The Stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect.

NOTES:-
Specifications: "Standard Specifications for Highway Bridges, A.A.S.H.O. 1941" f_s = 20,000 #/in², f_c = 1,000 #/in², n = 10, v = 90 #/in², u = 150 #/in², H15 loading, 10' earth fill (max).
Center of Main reinforcing steel shall be placed 2" from the surface.
All concrete shall be class "A".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Chamfer all exposed edges ¾".
Structural grade reinforcing steel not permitted *(Except I6)
All dimensions relative to reinforcing steel are to centers of bars.

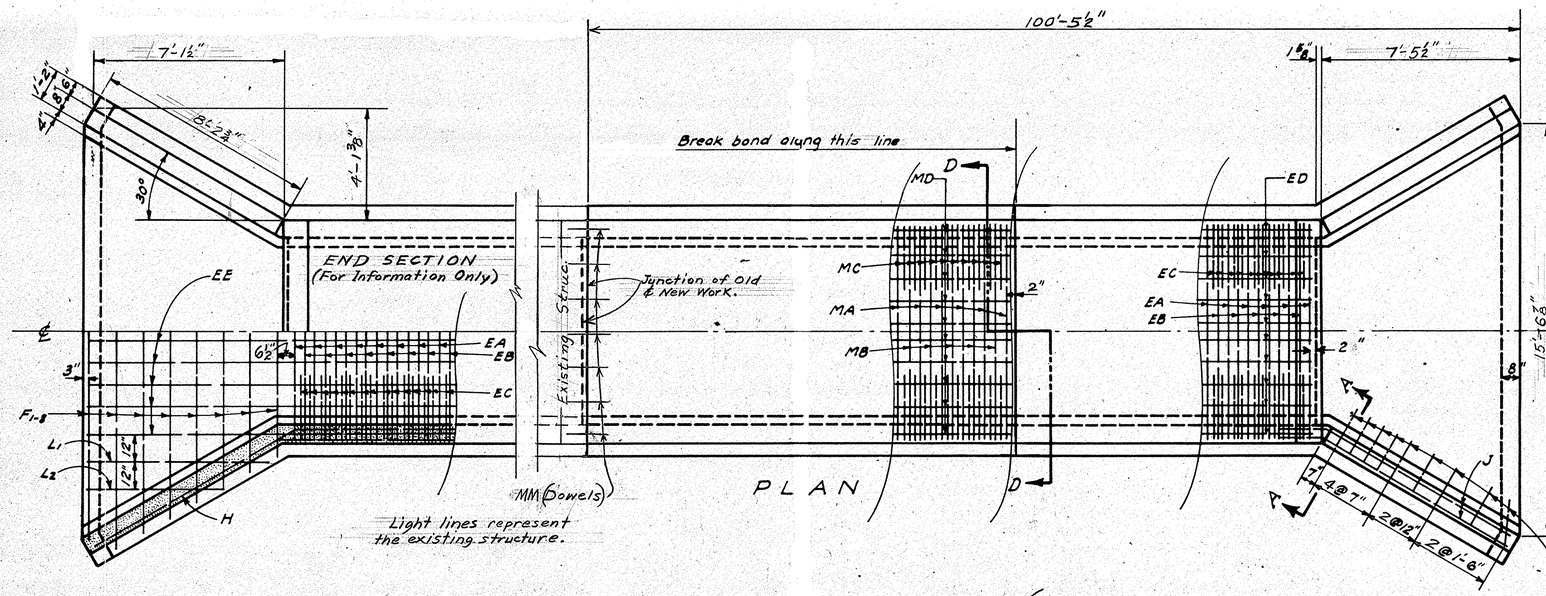
S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

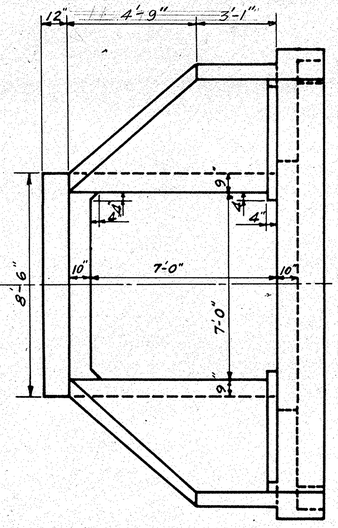
CONCRETE CULVERT
REINFORCED BOX TYPE
4' x 6' x 44'-0"

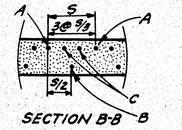
STA. NO. 1886+00
S.C. DOCKET NO. 11.347 COUNTY CHEROKEE
ROUTE NO. 29 DATE
B 1.46

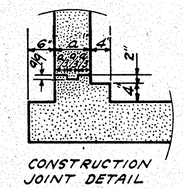
Des. C.E.S. 10-42 Ch. W.B.B. 11-42
Tr. C.W.M. 11-42 Ch. W.B.B. 12-42
Adapted W.R.T. 7-44
Checked G.K.B. 7-44

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	242	445







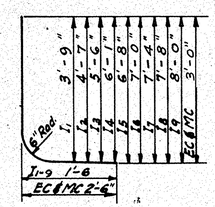


STEEL SCHEDULE					
MARK	NO	SIZE	LENGTH	SPACING	LOCATION
MID SECTION					
MA	126	3/4" ϕ	14'-0"	9½" C to C	T & B Slab.
MB	126	7/8" ϕ	8'-2"	9½" C to C	T & B Slab.
MC	504	5/8" ϕ	5'-3"	as shown	Corners.
MD	20	½" ϕ	49'-8"	" "	T & B Slab.
MG1	120	5/8" ϕ	8'-4"	10" C to C	Sidewalls
MH	14	½" ϕ	49'-8"	12" Stagd	"
MG2	68	½" ϕ	8'-4"	18" C to C	"
MM	24	3/4" ϕ	1'-6"	As Shown	Dowels
END SECTION					
EA	108	3/4" ϕ	14'-0"	9½" C to C	T & B Slab
EB	108	7/8" ϕ	8'-2"	"	"
EC	432	5/8" ϕ	5'-3"	As Shown	Corners
ED	10	2" ϕ	42'-6"	"	Top Slab
EE	10	1¼" ϕ	50'-1"	"	Bot. Slab
F1	1	2½" ϕ	15'-11"	12" C to C.	Apron
F2	1	2" ϕ	16'-5"	"	"
F3	1	1½" ϕ	15'-4"	"	"
F4	1	1½" ϕ	14'-2"	"	"
F5	1	1½" ϕ	13'-1"	"	"
F6	1	1½" ϕ	11'-10"	"	"
F7	1	1½" ϕ	10'-9"	"	"
F8	1	1½" ϕ	9'-7"	"	"
EG1	104	5/8" ϕ	8'-4"	10" C. to C.	Sidewalls
EH1	2	1½" ϕ	44'-10"	12" Stagd	S.W. & Wings
EH2	2	2" ϕ	46'-5"	"	"
EH3	2	1½" ϕ	48'-4"	"	"
EH4	2	1½" ϕ	49'-10"	"	"
EH5	6	1½" ϕ	51'-1"	"	"
I1	2	1½" ϕ	5'-0"	As Shown	Wings
I2	2	1½" ϕ	5'-10"	"	"
I3	2	1½" ϕ	6'-9"	"	"
I4	2	1½" ϕ	7'-4"	"	"
I5	2	1½" ϕ	7'-11"	"	"
I6	2	1½" ϕ	8'-3"	"	"
I7	2	1½" ϕ	8'-7"	"	"
I8	2	1½" ϕ	8'-11"	"	"
I9	2	1½" ϕ	9'-3"	"	"
J	4	5/8" ϕ	11'-6"	"	"
L1	2	1½" ϕ	6'-6"	"	Apron
L2	2	1½" ϕ	4'-9"	"	"
EG2	58	1½" ϕ	8'-4"	18" c. to c.	Sidewall

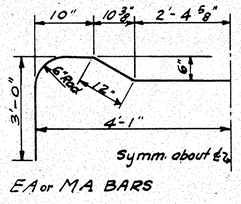
QUANTITIES	MID SEC.	END SEC.
CLASS "A" CONCRETE	47.8 C.Y.	46.9 C.Y.S.
REINFORCING STEEL	10,116 LBS.	8,968 LBS.

TOTAL QUANTITIES	
CLASS "A" CONCRETE	94.7 CU.YDS.
REINFORCING STEEL	19,084 LBS.

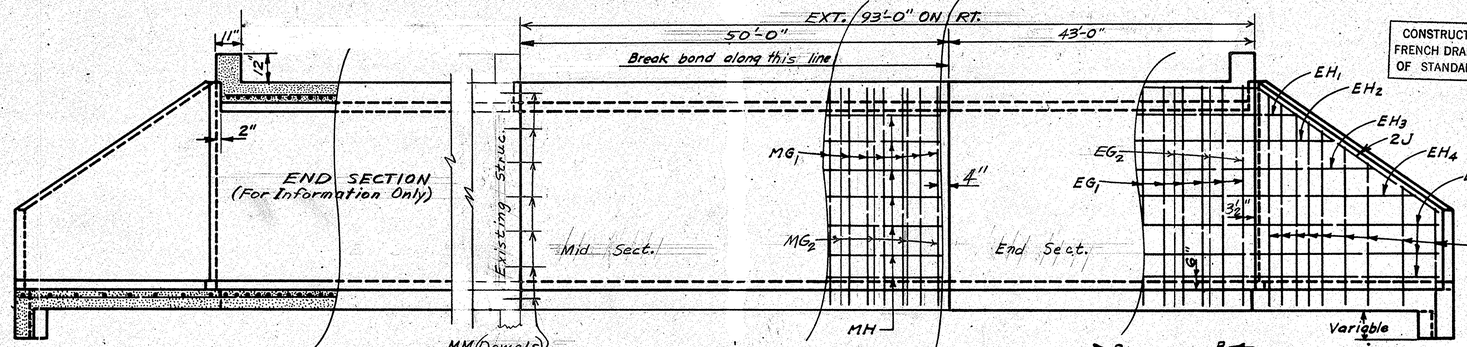
	MID SEC	END SEC.
CONCRETE P.F.L. BARREL	0.9568	0.9568 C.Y.
EXCAV. P.F.D., P.F.L. BARREL	0.5000	0.5000 C.Y.
CONC. P.F.D., CUT-OFF WALL (END)	-----	0.4933 C.Y.

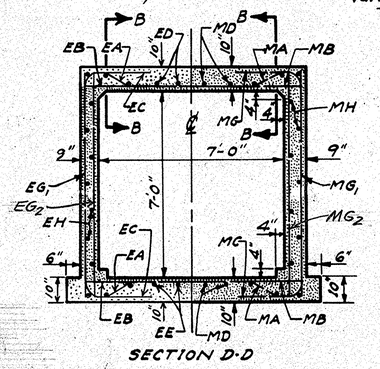


EC, MC & I-9 BARS



EA or MA BARS





CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

NOTES:—
All dimensions relative to reinforcing steel are to centers of bars.
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.
All costs of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

NOTES:-(Cont'd)

Specifications:- "Standard Specifications for Highway Bridges," A.A.S.H.O. 1949, f_s = 20,000 #/in², f_c = 1200 #/in², n = 10. V = 90 #/in², u = 225 #/in². Culvert designed for H20-S16 loading and 25' (max.) earth fill.

All concrete shall be Class "A".
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Center of Main reinforcing steel shall be placed 2" from the surface.
Structural grade reinforcing steel not permitted.

S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

REINFORCED BOX TYPE
7'X 7' EXT. 93'-0" ON RT.
STA. NO. 1895+00

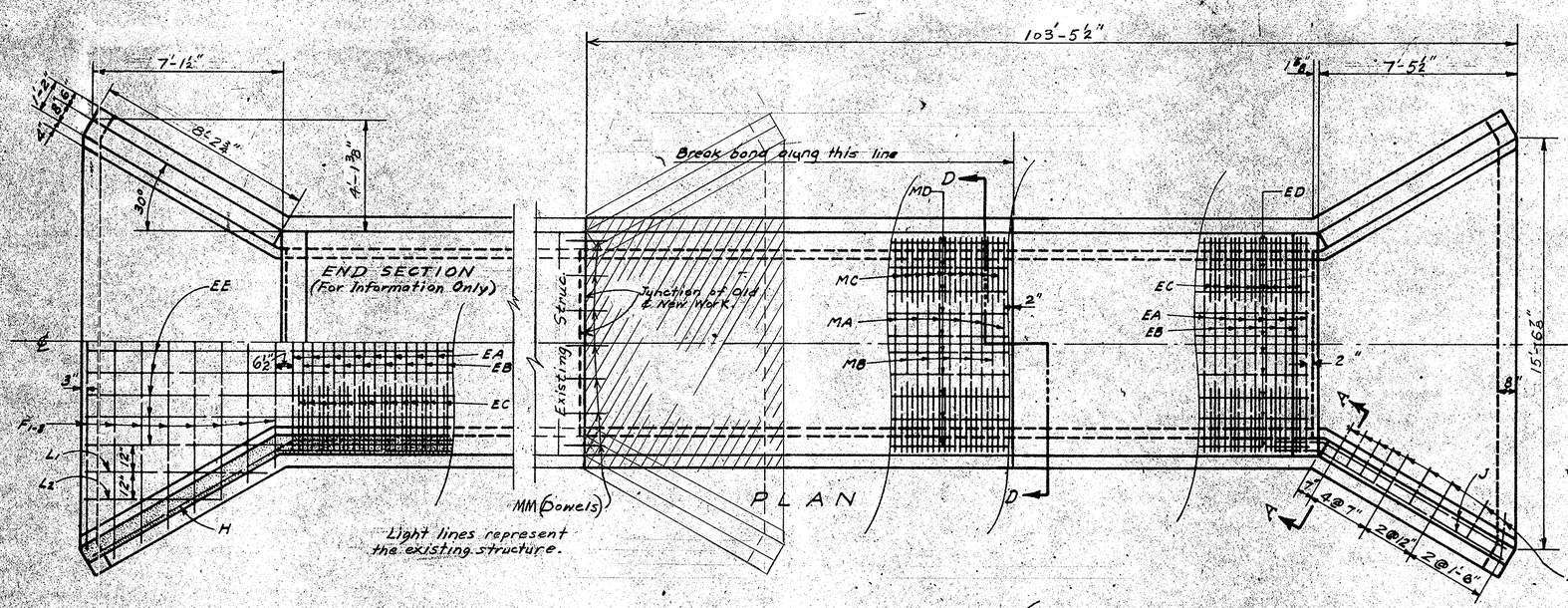
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY 57

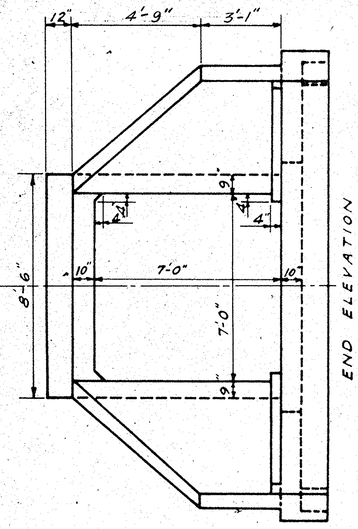
B1.77 f 25 Rev.

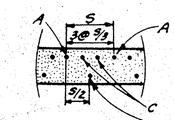
Adapted from Dock. 11.294 & B1.77 f 15 Rev. By W.B.B. 7-57
Checked by: G.K.B.

DES. C.E.S. - 3-43 Chd. W.B.B. 3-43 Chd. W.B. 6-43. Revised By: W.B.B. 3-46
Traced, T.K.D. & A.T.C. - 5-43 Chd. W.B. 6-43. Checked By: B.M.C. 4-46

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	242-A	445







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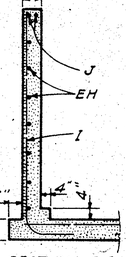
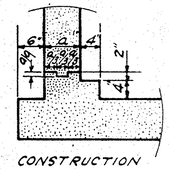


SECTION A-A



CONSTRUCTION JOINT DETAIL

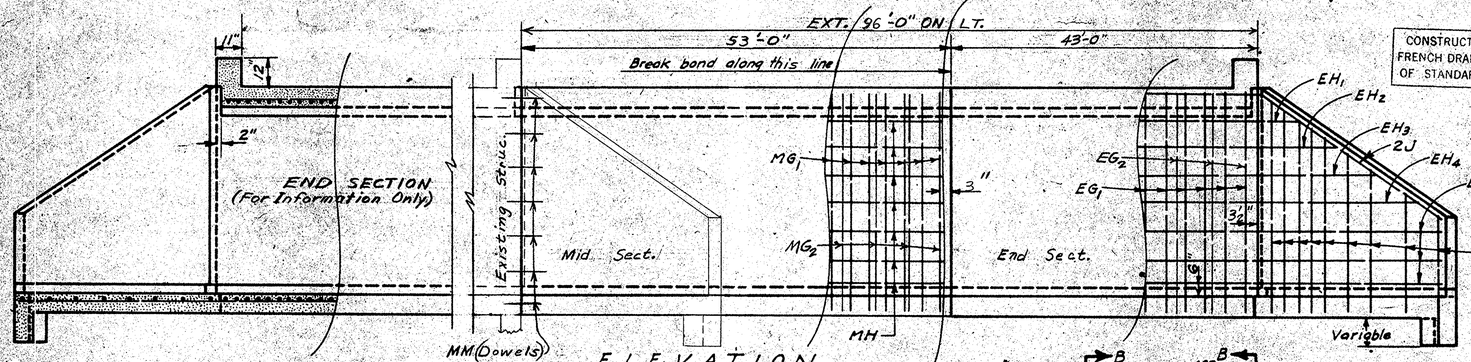
STEEL SCHEDULE

MARK NO	SIZE	LENGTH	SPACING	LOCATION
MID SECTION				
MA	134	3/4" ø 14'-0"	9½" C to C	T & B Slab
MB	134	7/8" ø 8'-2"	9½" C to C	T & B Slab
MC	536	5/8" ø 5'-3"	as shown	Corners.
MD	20	½" ø 52'-8"	" "	T & B Slab.
MG1	128	5/8" ø 8'-4"	10" C to C	Sidewalls
MH	14	½" ø 52'-8"	12" Staggd	"
MG2	72	½" ø 8'-4"	18" C to C	"
MM	24	3/4" ø 1'-6"	As Shown	Dowels
END SECTION				
EA	108	3/4" ø 14'-0"	9½" C to C	T & B Slab
EB	108	7/8" ø 8'-2"	"	"
EC	432	5/8" ø 5'-3"	As Shown	Corners
ED	10	2" ø 42'-6"	"	Top Slab
EE	10	½" ø 50'-1"	"	Bot. Slab
F1	1	1¼" ø 15'-11"	12" C to C	Apron
F2	1	2" ø 16'-5"	"	"
F3	1	½" ø 15'-4"	"	"
F4	1	½" ø 14'-2"	"	"
F5	1	½" ø 13'-1"	"	"
F6	1	½" ø 11'-10"	"	"
F7	1	½" ø 10'-9"	"	"
F8	1	½" ø 9'-7"	"	"
EG1	104	5/8" ø 8'-4"	10" C. to C.	Side Walls
EH1	2	2" ø 44'-10"	12" Staggd	S.W. & Wings
EH2	2	2" ø 46'-5"	"	"
EH3	2	1½" ø 48'-4"	"	"
EH4	2	2" ø 49'-10"	"	"
EH5	6	2" ø 51'-1"	"	"
I1	2	2" ø 5'-0"	As Shown	Wings
I2	2	2" ø 5'-10"	"	"
I3	2	2" ø 6'-9"	"	"
I4	2	2" ø 7'-4"	"	"
I5	2	2" ø 7'-11"	"	"
I6	2	2" ø 8'-3"	"	"
I7	2	2" ø 8'-7"	"	"
I8	2	2" ø 8'-11"	"	"
I9	2	2" ø 9'-3"	"	"
J	4	5/8" ø 11'-6"	"	"
L1	2	2" ø 6'-6"	"	Apron
L2	2	2" ø 4'-9"	"	"
EG2	58	12" ø 8'-4"	18" C. to C.	Sidewall

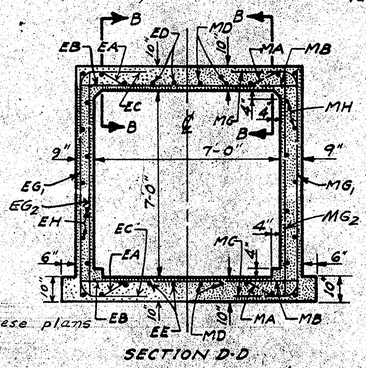
QUANTITIES	MID SEC.	END SEC.
CLASS "A" CONCRETE	50.7 C.Y.	46.9 C.YS.
REINFORCING STEEL	10,753 LBS	8,968 LBS.

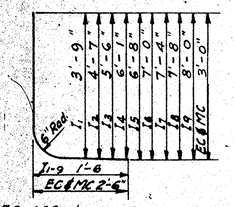
TOTAL QUANTITIES	
CLASS "A" CONCRETE	97.6 CU.YDS.
REINFORCING STEEL	19,721 LBS.

	MID SEC.	END SEC.
CONCRETE P.F.L. BARREL	0.9568	0.9568 C.Y.
EXCAV. P.F.D., P.F.L. BARREL	0.5000	0.5000 C.Y.
CONC. P.F.D., CUT-OFF WALL (END)		0.4333 C.Y.

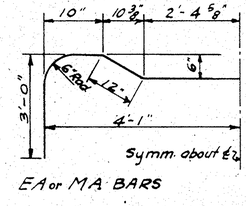


CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710 28 OF STANDARD SPECIFICATIONS.





EC, MC & I-9 BARS



EA or MA BARS

NOTES:—
All dimensions relative to reinforcing steel are to centers of bars.
Work to be done consists of removing the designated portions of the existing structure and extending in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.
All costs of removing the designated portions of existing structure, drilling and chipping, are to be included in the unit price bid for Class "A" Concrete.

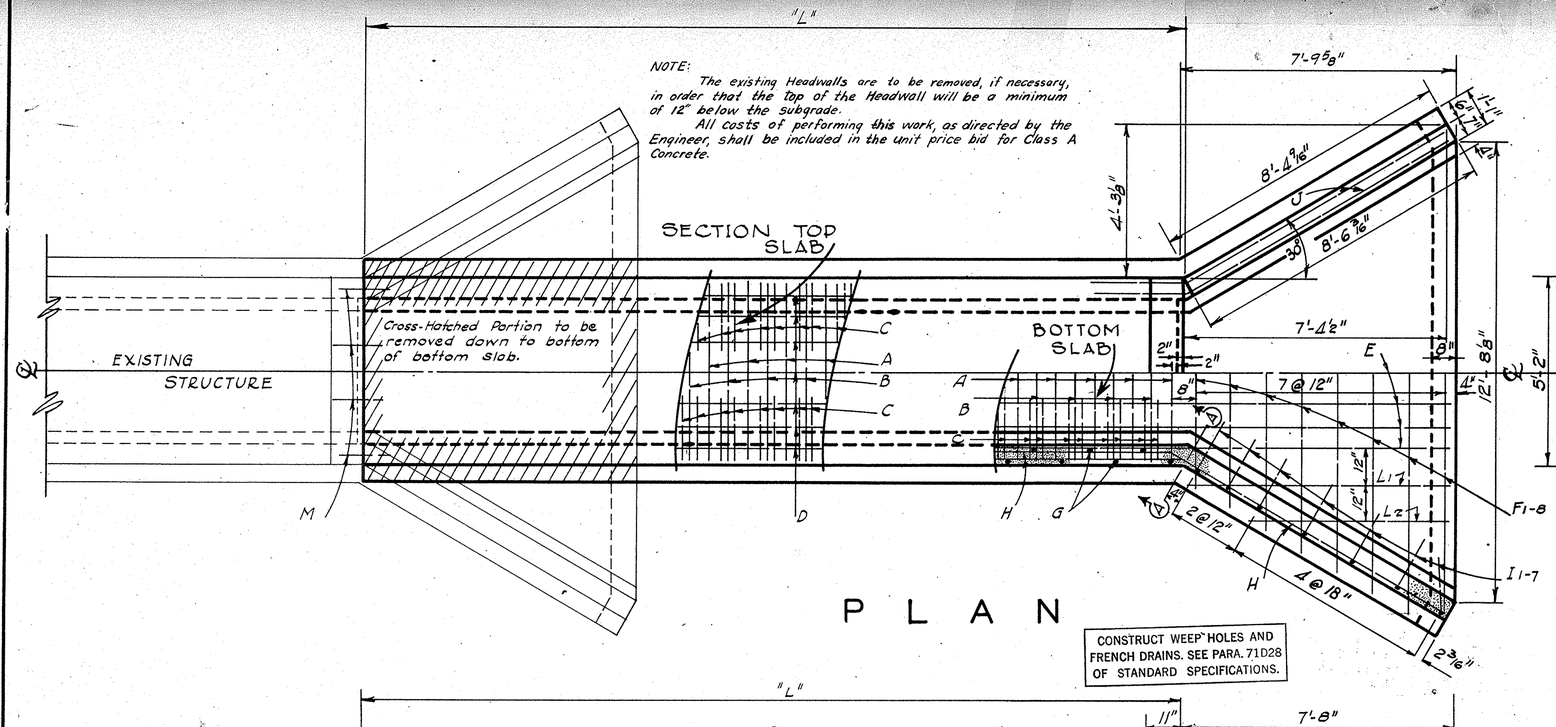
NOTES:-(Cont'd)
Specifications:- "Standard Specifications for Highways Bridges," A.A.S.H.O. 1949, f_s = 20,000 #/in², f_c = 1200 #/in², n = 10, V = 90 #/in², u = 225 #/in². Culvert designed for H20-S16 loading and 25'(max.) earth fill.
All concrete shall be Class "A".
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Center of Main reinforcing steel shall be placed 2" from the surface.
Structural grade reinforcing steel not permitted.

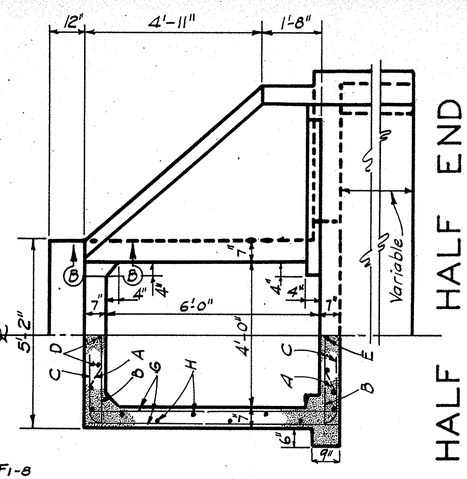
S. C. STATE HIGHWAY DEPARTMENT
COLUMBIA
CONCRETE CULVERT
REINFORCED BOX TYPE
7'X 7' EXT. 96'-0" ON LT.
STA. NO. 8+75 LINE 3
S.C. DOCKET NO. 11-347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY 57
Bl. 77 f 25 Rev.

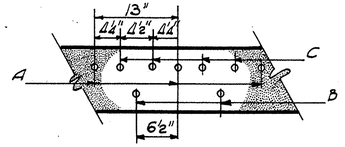
Adapted from Dock. 11.294 & Bl.77f15 By APG, JULY 57
Checked by: W.B.B. 7-57

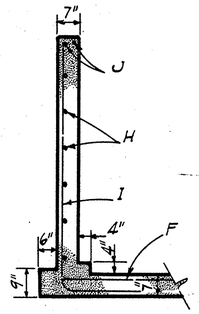
DAS CES - 3-43 Ch. WBB, 3-43 Revised By: W.B.B. 3-46.
Traced By: P.M.C. 5-43 Ch'd WBB 6-43 Checked By: B.M.C. 4-46.

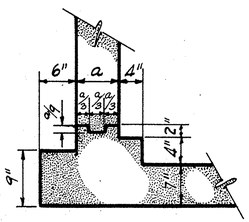
FED ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	213	443











STEEL SCHEDULE ONE END

MARK	# NO in Inches	SIZE	LENGTH	SPACING	LOCATION
A	(5/8) 2	2" ϕ	9'-6"	13" c. to c.	T & B Slabs
B	(5/13) 2	2" ϕ	4'-10"	"	"
C	(5/13) 8	5/8" ϕ	4'-3"	As Shown	Corners
D	7	2" ϕ	L-(0'-4")	"	Top Slab
E	7	1/2" ϕ	L+(7'-4")	"	Bot. Slab
F1	1	1/2" ϕ	13'-2"	12" c. to c.	Apron
F2 To F8	1 ea.	1/2" ϕ	13'-3" to 6'-3" Vary by 1'-2"	"	"
G	(5/9) 2	1/2" ϕ	6'-10"	9" Stag'd.	Side Walls
H1 To H4	2 ea.	1/2" ϕ	L+(7'-6") to L+(6'-9") Vary by 1'-9"	12" Stag'd.	S.W. & Wings
H5	4	1/2" ϕ	L+(8'-3")	"	"
I1 To I5	2 ea.	1/2" ϕ	3'-1" to 6'-9" Vary by 11"	As Shown	Wings & Apron
I6	2	1/2" ϕ	7'-3"	"	"
I7	2	1/2" ϕ	7'-10"	"	"
J	4	5/8" ϕ	12'-0"	"	Wings
L1	2	1/2" ϕ	7'-3"	"	Apron
L2	2	1/2" ϕ	5'-6"	"	"
M	16	3/4" ϕ	1'-6"	"	Dowels.

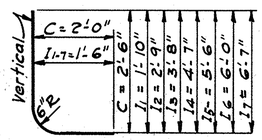
* Disregard Fractions

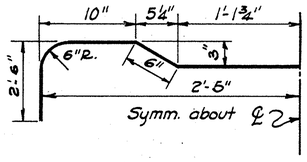
Concrete P.F.L. Barrel ____ 0.5226 C.Y.
Concrete P.F.D. cut-off wall (end) 0.3577 C.Y.
Excavation P.F.L., P.F.D. Barrel ____ 0.3765 C.Y.
Reinforcing Steel P.F.L. Barrel ____ 80.0 LBS.

QUANTITIES

STATION	LENGTH "L"	REINFORCING STEEL	CLASS "A" CONCRETE
1904+75	16'-0" PAT.	1,567 LBS.	12.0 C.Y.
		LBS.	C.Y.
		LBS.	C.Y.
		LBS.	C.Y.
		LBS.	C.Y.
		LBS.	C.Y.
TOTAL		1,567 LBS.	12.0 C.Y.

NOTE:
Method used in figuring Quantities
Rein. Steel = 287.0 + 80.0L
Class "A" Concrete = 3.628 + 0.5226L





NOTES:

Design Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O.-1941 (except fs.) fs = 20,000 #/in², fc=1000 #/in², n=10, v=90 #/in², u=165 #/in², H15 loading, 10' earth fill (Max).

Work to be done consists of removing the designated portions of the existing structure and extending in accordance with these plans.

The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 Mortar.

All costs of removing the designated portions of existing structure, drilling and chipping, are to be included in the unit price bid for Class "A" Concrete.

The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.

Structural grade reinforcing steel not permitted.

Center of main reinforcing steel shall be 2" from the surface of the concrete.

All Concrete shall be Class "A".

Chamfer all exposed edges ¾".

Depth of Cut-Off Wall shall be determined by the Engineer and quantities added to those shown.

This Culvert designed for H15-S12 Live Load and Full Dead Load.

The Stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect.

Rev.	APB	G.K.B.	7-57
QUAN.	G.K.B.	W.B.B.	8-45
TR.	M.R.T.	W.B.B.	9-45
DR.	G.K.B.	W.B.B.	8-45
DES.	G.K.B.	W.D.B.	8-45
	By	CH'KD.	DATE

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

REINFORCED BOX TYPE

SINGLE 4' × 6' EXTENSION

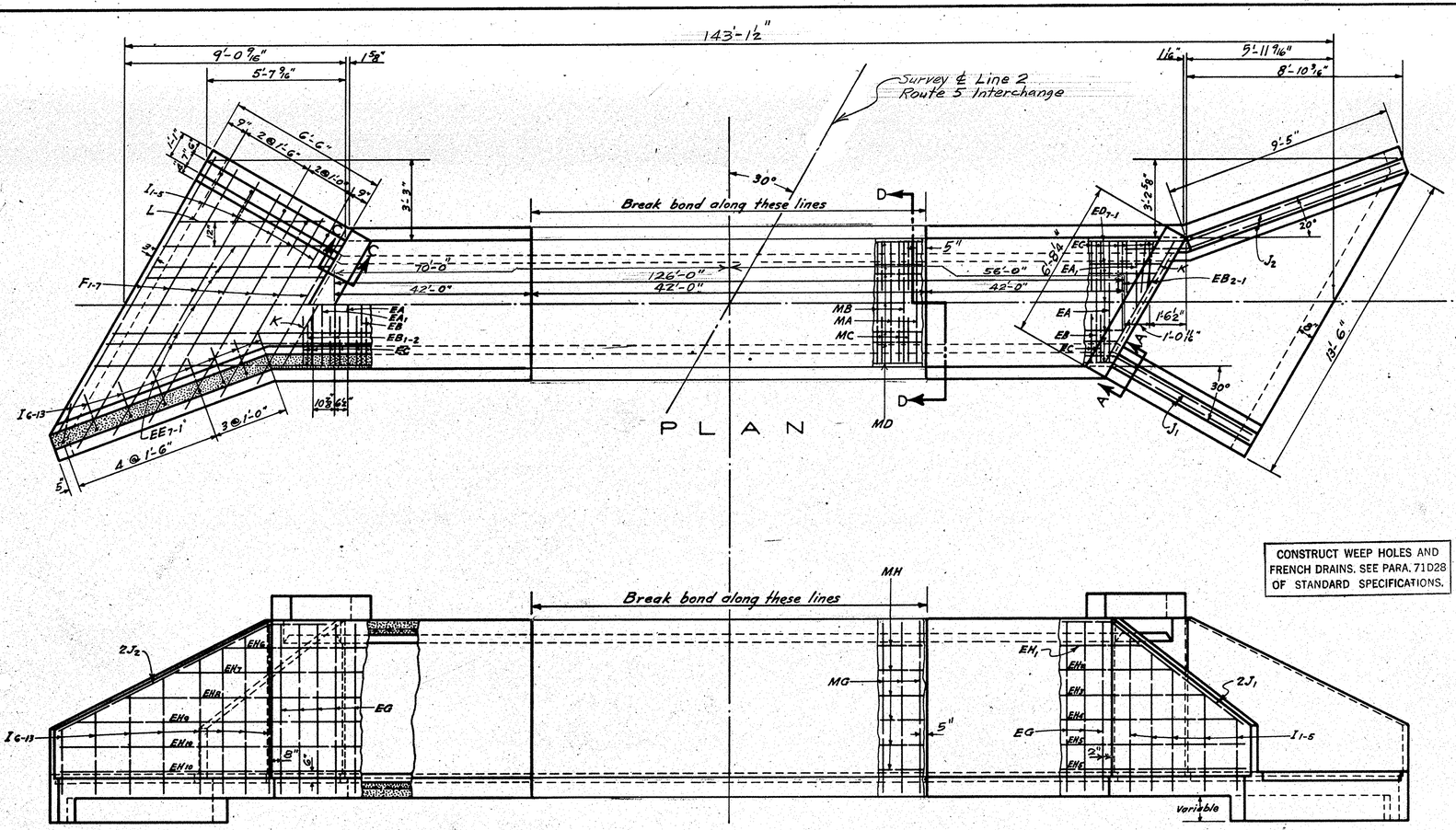
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY

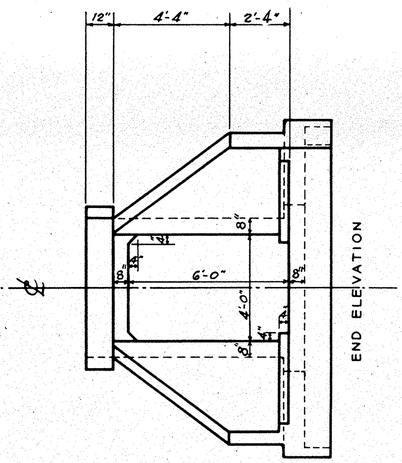
ROUTE NO. 29 DATE JULY, 57

STA 1904+75

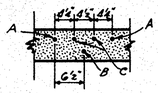
B 1.46 EXT.

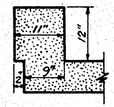
FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
13	S.C.	CHEROKEE	11.347	29	243A	445

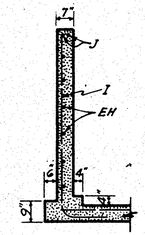


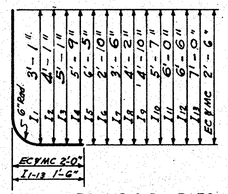


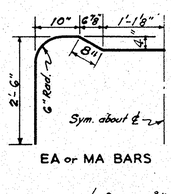
CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

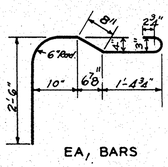












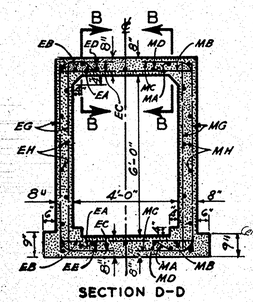
STEEL SCHEDULE					
MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
MID SECTION					
MA	78	½" ϕ	9'-9"	13" c. to c.	T & B Slabs
MB	76	½" ϕ	5'-0"	"	"
MC	304	⅝ ϕ	4'-3"	As Shown	Corners
MD	14	½" ϕ	41'-8"	"	T & B Slabs
MG	112	½" ϕ	7'-0"	9" Stagd.	Side Walls
MH	12	½" ϕ	41'-8"	12" Stagd.	"
ONE END SECTION					
EA	78	½" ϕ	9'-9"	13" c. to c.	T & B Slabs
EA1	2	½" ϕ	5'-8"	"	"
EB	76	½" ϕ	5'-0"	"	"
EB1	2	½" ϕ	3'-9"	"	"
EB2	2	½" ϕ	1'-10"	"	"
EC	312	⅝ ϕ	4'-3"	As Shown	Corners
ED1	1	½" ϕ	41'-1"	"	Top Slab
ED2	1	½" ϕ	41'-2"	"	"
ED3	1	½" ϕ	41'-10"	"	"
ED4	1	½" ϕ	42'-6"	"	"
ED5	1	½" ϕ	43'-2"	"	"
ED6	1	½" ϕ	43'-6"	"	"
ED7	1	½" ϕ	43'-10"	"	"
EE1	1	½" ϕ	48'-9"	"	Bot. Slab
EE2	1	½" ϕ	49'-3"	"	"
EE3	1	½" ϕ	49'-6"	"	"
EE4	1	½" ϕ	50'-2"	"	"
EE5	1	½" ϕ	50'-10"	"	"
EE6	1	½" ϕ	51'-1"	"	"
EE7	1	½" ϕ	51'-6"	"	"
F1	1	½" ϕ	13'-3"	12" c. to c.	Apron
F2	1	½" ϕ	13'-3"	"	"
F3	1	½" ϕ	12'-0"	"	"
F4	1	½" ϕ	10'-10"	"	"
F5	1	½" ϕ	9'-8"	"	"
F6	1	½" ϕ	8'-6"	"	"
F7	1	½" ϕ	7'-3"	"	"
EG	115	½" ϕ	7'-0"	9" Stagd.	Side Walls
EH1	1	½" ϕ	42'-9"	12" Stagd.	"
EH2	1	½" ϕ	44'-3"	"	"
EH3	1	½" ϕ	45'-9"	"	"
EH4	1	½" ϕ	47'-3"	"	"
EH5	2	½" ϕ	47'-9"	"	"
EH6	1	½" ϕ	46'-3"	"	"
EH7	1	½" ϕ	48'-5"	"	"
EH8	1	½" ϕ	50'-7"	"	"
EH9	1	½" ϕ	52'-9"	"	"
EH10	2	½" ϕ	53'-7"	"	"
I1	1	½" ϕ	4'-4"	As Shown	Short Wing
I2	1	½" ϕ	5'-4"	"	"
I3	1	½" ϕ	6'-4"	"	"
I4	1	½" ϕ	7'-0"	"	"
I5	1	½" ϕ	7'-8"	"	"
I6	1	½" ϕ	41'-1"	"	Long Wing
I7	1	½" ϕ	41'-9"	"	"
I8	1	½" ϕ	5'-5"	"	"
I9	1	½" ϕ	5'-1"	"	"
I10	1	½" ϕ	6'-10"	"	"
I11	1	½" ϕ	7'-3"	"	"
I12	1	½" ϕ	7'-9"	"	"
I13	1	½" ϕ	8'-3"	"	"
J1	2	⅝ ϕ	10'-0"	"	Short Wing
J2	2	⅝ ϕ	13'-0"	"	Long Wing
K	2	¾ ϕ	5'-9"	"	T & B Slabs
L	1	½" ϕ	6'-0"	"	Apron

QUANTITIES	MID SEC.	1-END SEC.
CLASS "A" CONCRETE	25.2 C.Y.	29.5 C.Y.
REINFORCING STEEL	3357 LBS.	3692 LBS.

TOTAL QUANTITIES	
CLASS "A" CONCRETE	84.2 CU. YDS.
REINFORCING STEEL	10,741 LBS.

	MID. SEC.	1-END SEC.
CONCRETE P.F.L. BARREL	0.5998	0.5998 CU. YD.
EXCAV. P.F.L., P.F.D. BARREL	0.3827	0.3827 CU. YD.
CONC. P.F.D. CUT-OFF WALL (1-END)		0.3524 CU. YD.

NOTES:
This culvert designed for H15-S12 Live Load and Full Dead Load.
The stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect.



NOTES:-
Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1941 — f_s = 20,000 #/in², f_c = 1,000 #/in², n = 10, v = 90 #/in², u = 150 #/in². Culvert designed for H15 loading and 15' (max.) earth fill. Max. fill height in accordance with 1953 A.A.S.H.O. Spec. equals 21.5'.
All concrete shall be class "A". *(except fs).
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

REINFORCED BOX TYPE

4'x6'x126'-0" SKEWED 30°

STA. NO. 10+80.0 Line 2 Rt. 5 Int.

S.C. DOCKET NO. 11.347 CHEROKEE COUNTY

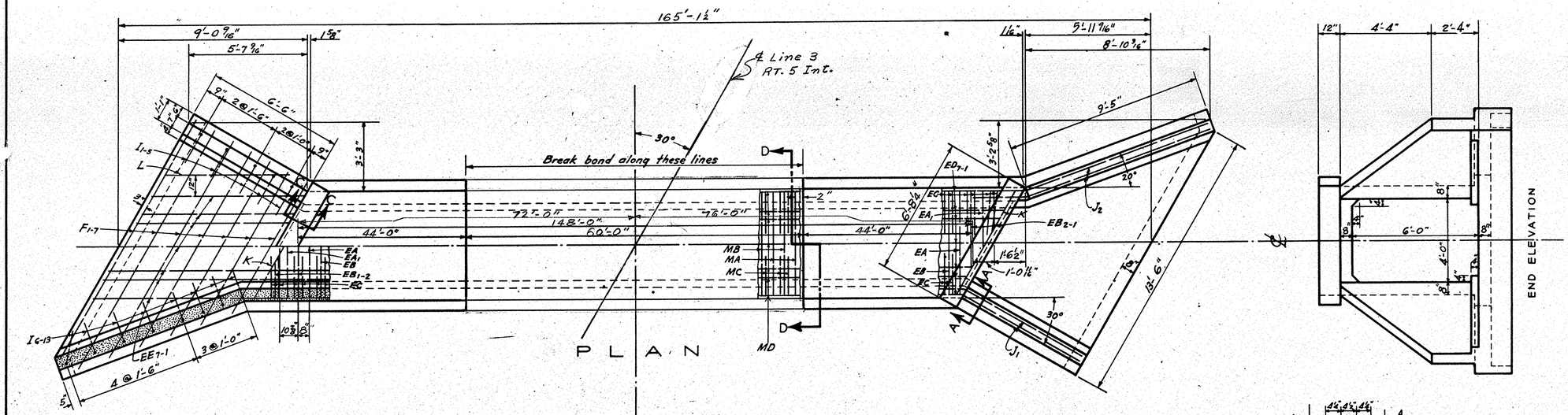
ROUTE NO. 29 DATE JULY, 1957

B 1.46 f 15 s 30 Rev

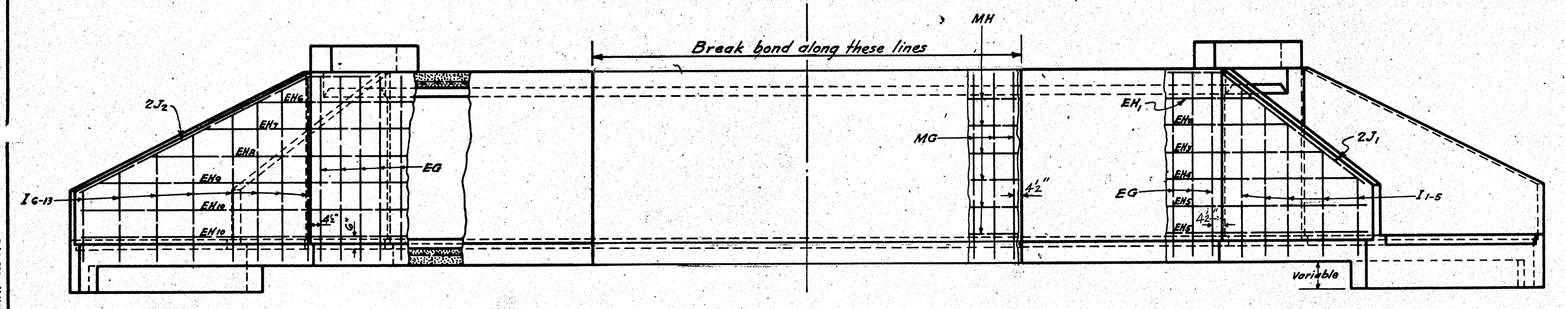
Des. C.E.S. 11-42 Ch. W.B.B. 12-42
Tr. C.H.M. 1-43 Ch. W.B.B. 1-43 Revised and Checked by: W.B.B., G.K.B., + W.R.T. 12-45

Adapted W.B.B. 7-57
Checked G.K.B.

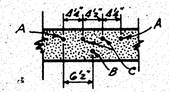
FED. ROAD DIV. NO	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO	TOTAL SHEETS
3	S.C.	CHEROKEE	11,347	29	243-B	445



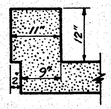
PLAN



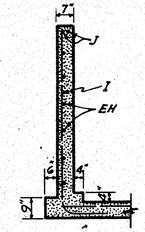
ELEVATION



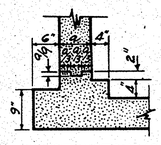
SECTION B-B



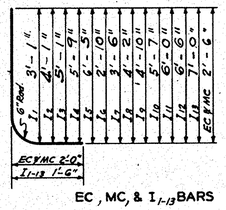
SECTION C-C



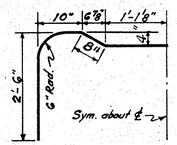
SECTION A-A



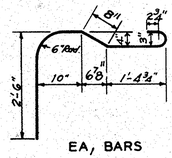
CONSTRUCTON JOINT DETAIL



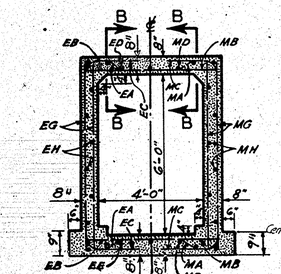
EC, MC, & I_{1-13} BARS



EA or MA BARS



EA, BARS



SECTION D-D

CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

NOTES:
This Culvert Designed for H15-S12 Live Load and Full Dead Load. The Stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect.
Max. fill height in accordance with 1953 A.A.S.H.O. Spec. equals 21.5'

NOTES:-
Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1941" – f_s = 20,000 #/in², f_c = 1,000 #/in², n=10, v=90 #/in², u=150 #/in². Culvert designed for H15 loading and 15'(max.) earth fill
Center of Main reinforcing steel shall be placed 2" from the surface.
All concrete shall be class "A". *(Except fs).
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

STEEL SCHEDULE

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
MID SECTION					
MA	112	½" #	9'-9"	13" c. to c.	T & B Slabs
MB	110	½" #	5'-0"	"	"
MC	440	#8	4'-3"	As Shown	Corners
MD	14	½" #	59'-8"	"	T & B Slabs
MG	160	½" #	7'-0"	9" Stag'd.	Side Walls
MH	12	½" #	59'-8"	12" Stag'd.	"
ONE END SECTION					
EA	80	½" #	9'-9"	13" c. to c.	T & B Slabs
EA1	2	½" #	5'-8"	"	"
EB	80	½" #	5'-0"	"	"
EB1	2	½" #	3'-9"	"	"
EB2	2	½" #	1'-10"	"	"
EC	320	#8	4'-3"	As Shown	Corners
ED1	1	½" #	43'-7"	"	Top Slab
ED2	1	½" #	43'-7"	"	"
ED3	1	½" #	43'-10"	"	"
ED4	1	½" #	44'-6"	"	"
ED5	1	½" #	45'-2"	"	"
ED6	1	½" #	45'-5"	"	"
ED7	1	½" #	45'-10"	"	"
EE1	1	½" #	50'-9"	"	Bot. Slab
EE2	1	½" #	51'-3"	"	"
EE3	1	½" #	51'-6"	"	"
EE4	1	½" #	52'-2"	"	"
EE5	1	½" #	52'-10"	"	"
EE6	1	½" #	53'-1"	"	"
EE7	1	½" #	53'-6"	"	"
F1	1	½" #	13'-3"	12" c. to c.	Apron
F2	1	½" #	13'-3"	"	"
F3	1	½" #	12'-0"	"	"
F4	1	½" #	10'-10"	"	"
F5	1	½" #	9'-8"	"	"
F6	1	½" #	8'-5"	"	"
F7	1	½" #	7'-3"	"	"
EG	120	½" #	7'-0"	9" Stag'd.	Side Walls
EH1	1	½" #	44'-9"	12" Stag'd.	"
EH2	1	½" #	46'-3"	"	"
EH3	1	½" #	47'-9"	"	"
EH4	1	½" #	49'-3"	"	"
EH5	2	½" #	49'-9"	"	"
EH6	1	½" #	48'-3"	"	"
EH7	1	½" #	50'-5"	"	"
EH8	1	½" #	52'-9"	"	"
EH9	1	½" #	54'-9"	"	"
EH10	2	½" #	55'-7"	"	"
I1	1	½" #	4'-4"	As Shown	Short Wing
I2	1	½" #	5'-4"	"	"
I3	1	½" #	6'-4"	"	"
I4	1	½" #	7'-0"	"	"
I5	1	½" #	7'-8"	"	"
I6	1	½" #	4'-1"	"	Long Wing
I7	1	½" #	4'-9"	"	"
I8	1	½" #	5'-5"	"	"
I9	1	½" #	6'-1"	"	"
I10	1	½" #	6'-10"	"	"
I11	1	½" #	7'-3"	"	"
I12	1	½" #	7'-9"	"	"
I13	1	½" #	8'-3"	"	"
J1	2	#6	10'-0"	"	Short Wing
J2	2	#6	13'-0"	"	Long Wing
K	2	#6	5'-9"	"	T & B Slabs
L	1	½" #	6'-0"	"	Apron

QUANTITIES	MID SEC.	1-END SEC.
CLASS "A" CONCRETE	36.0 C.Y.	30.7 C.Y.
REINFORCING STEEL	4,832 LBS.	3,847 LBS.

TOTAL QUANTITIES	
CLASS "A" CONCRETE	97.4 CU.YDS.
REINFORCING STEEL	12,526 LBS.

	MID. SEC.	1-END SEC.
CONCRETE P.F.L. BARREL	0.5998	0.5998 CU.YD.
EXCAV. P.F.L., P.F.D. BARREL	0.3827	0.3827 CU.YD.
CONC. P.F.D. CUT-OFF WALL (1-END)		0.3524 CU.YD.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

REINFORCED BOX TYPE

4'x6'x 148'-0" SKEWED 30°

STA. NO. 17+50 LINE 3 RT. 5 INT.

S.C. DOCKET NO. 11,347 CHEROKEE COUNTY

ROUTE NO. 29 DATE JULY, 57

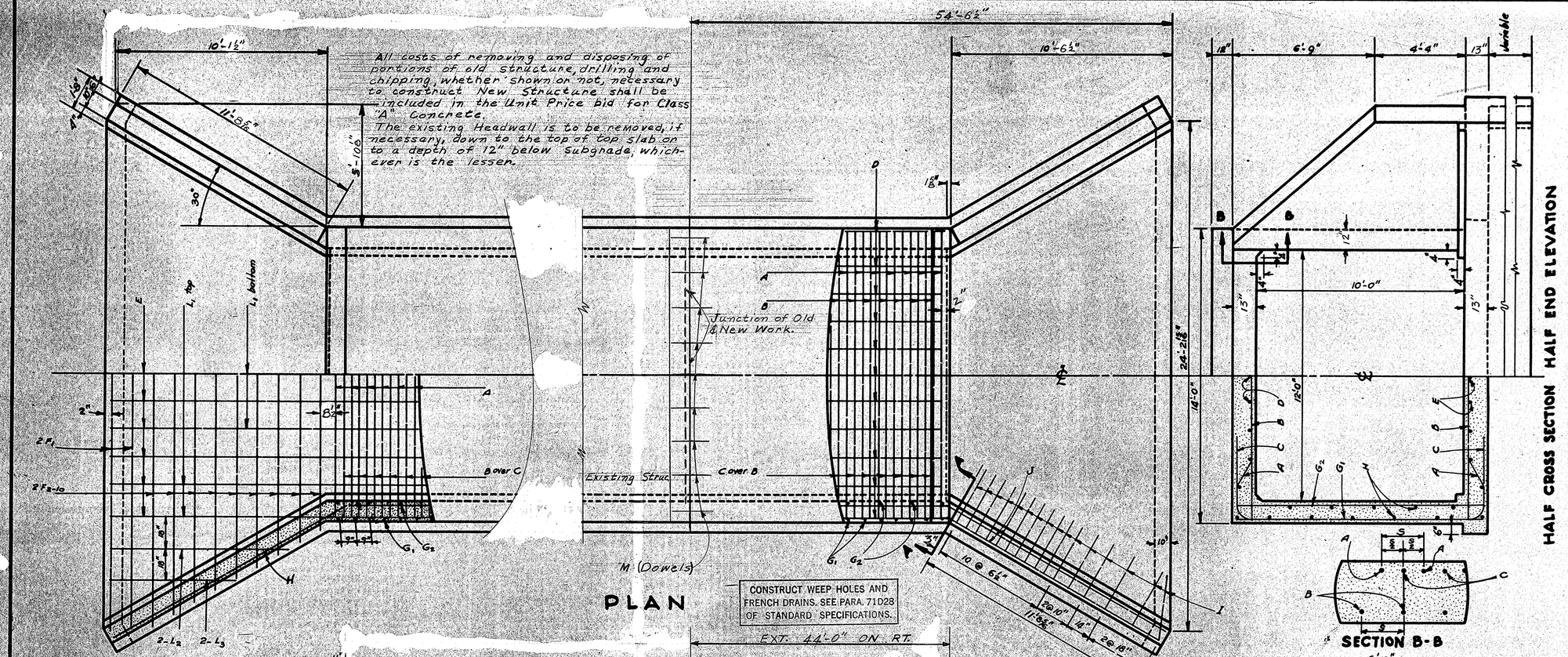
B 1.46 f 15 s 30 Rev.

Des. C.E.S. 11-42 Ch. W.B.B. 12-42
Tr. C.M.M. 1-43 Ch. W.B.B. 1-43 Revised and Checked by: W.B.B., G.K.B., & W.R.T. 12-45

Adapted A-P.G. JULY, 57
Checked W.B.B. 7-57

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	244	445

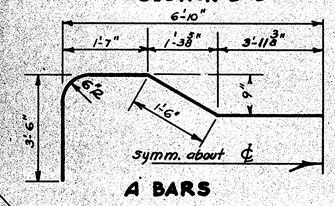
All costs of removing and disposing of portions of old structure, drilling and chipping, whether shown or not, necessary to construct New Structure shall be included in the Unit Price bid for Class "A" Concrete.
The existing Headwall is to be removed, if necessary, down to the top of top slab or to a depth of 12" below subgrade, whichever is the lesser.



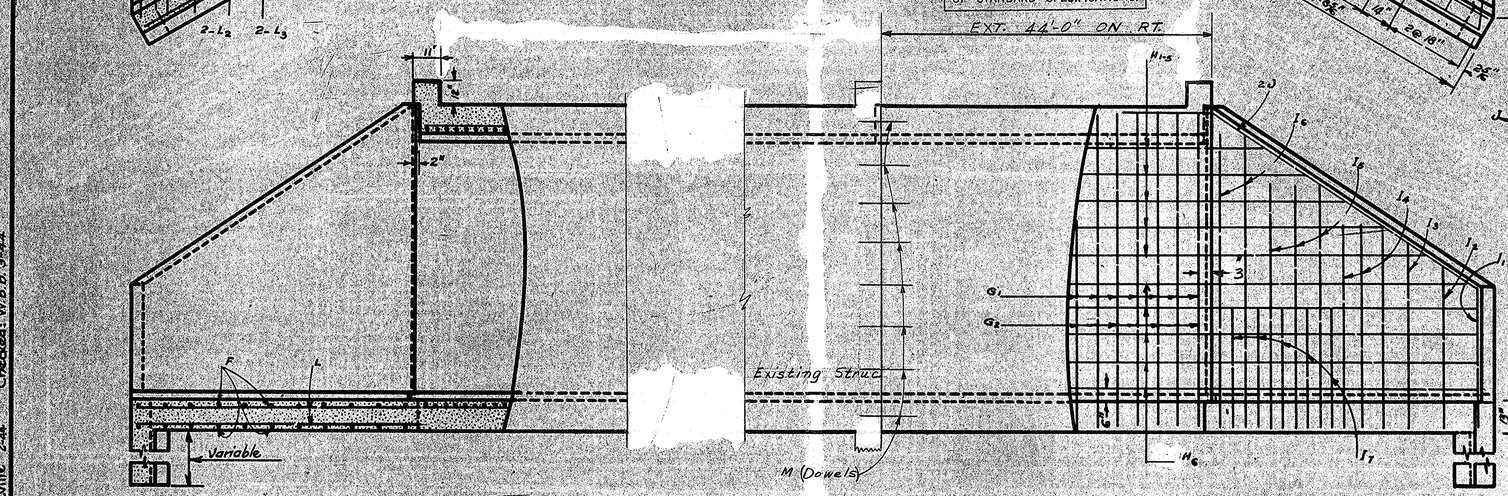
PLAN

CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 71D28 OF STANDARD SPECIFICATIONS.

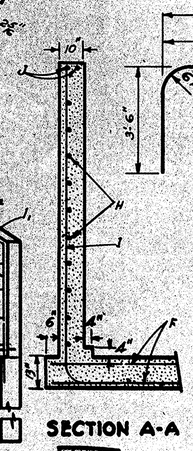
HALF CROSS SECTION HALF END ELEVATION

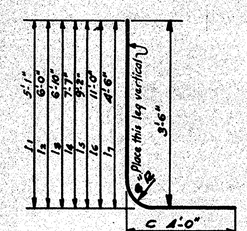


A BARS

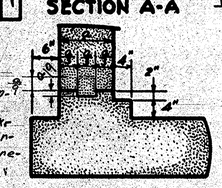


ELEVATION





C & I1-7 BARS



CONSTRUCTION JOINT

STEEL SCHEDULE

MARK	NO	SIZE	LENGTH	SPACING	LOCATION
A	118	⅞"φ	20'-8"	9" c to c	T & B Slabs
B	116	¾"φ	13'-8"	"	"
C	232	½"φ	7'-3"	"	Corners
D	11	½"φ	43'-6"	As Shown	Top Slab
E	11	½"φ	54'-2"	"	Bot. Slab
F1	4	½"φ	24'-0"	12" c to c	Apron
F2	2	½"φ	24'-4"	"	"
F3	2	½"φ	23'-0"	"	"
F4	2	½"φ	22'-0"	"	"
F5	2	½"φ	21'-0"	"	"
F6	2	½"φ	19'-6"	"	"
F7	2	½"φ	18'-8"	"	"
F8	2	½"φ	17'-6"	"	"
F9	2	½"φ	16'-4"	"	"
F10	2	½"φ	15'-0"	"	"
G1	118	¾"φ	11'-10"	9" c to c	Walls
G2	60	½"φ	11'-10"	18" c to c	"
H1	2	½"φ	46'-3"	12" Stag'd	Wings & Walls
H2	2	½"φ	48'-3"	"	"
H3	2	½"φ	49'-10"	"	"
H4	2	½"φ	51'-8"	"	"
H5	2	½"φ	53'-3"	"	"
H6	10	½"φ	55'-5"	"	"
I1	2	½"φ	8'-4"	As Shown	Wings
I2	2	½"φ	9'-3"	"	"
I3	2	½"φ	10'-1"	"	"
I4	6	½"φ	10'-10"	"	"
I5	6	½"φ	12'-5"	"	"
I6	4	½"φ	14'-3"	"	"
I7	10	½"φ	7'-9"	"	"
J	4	⅝"φ	15'-6"	"	"
L1	7	½"φ	10'-6"	"	Apron
L2	4	½"φ	8'-9"	"	"
L3	4	½"φ	6'-2"	"	"
M	30	¾"φ	1'-6"	As Shown	Dowels

TOTAL QUANTITIES

CLASS "A" CONCRETE ..... 99.5 C.Y.
REINFORCING STEEL ..... 13,224 LBS.

CONCRETE P.F.L. BARREL ..... 1.9167 C.Y.
CONCRETE P.F.D. CUTOFF WALL (1 END) ..... 0.8118 C.Y.
EXCAVATION P.F.D. P.F.L. BARREL ..... [illegible] C.Y.

NOTES:-

Specifications: "Standard Specifications for Highway Bridges" A.A.S.H.O. 1941 (Except ⊕) - f_s=20000#/in², f_c=1000#/in², n=10, v=90#/in², u=165#/in², H 15 loading, 10' Earth fill (max).
Center of Main reinforcing steel shall be 2" from the surface.
All concrete shall be class "A"
Chamfer all exposed edges ¾"
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars

NOTES CONT'D:
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged due to his carelessness or negligence.
This culvert designed for H15-S12 Live Load and Full Dead Load.
The stresses are within the allowable unit stresses for H20-S18 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications

Adapted A.P.G. 7-57
Checked W.B.B. 7-57

Designed by: W.B.B. 11-43 Checked: F.M.J. 12-43
Dr. & Traced by: W.B. Neville 2-44 Checked: W.B.B. 3-44

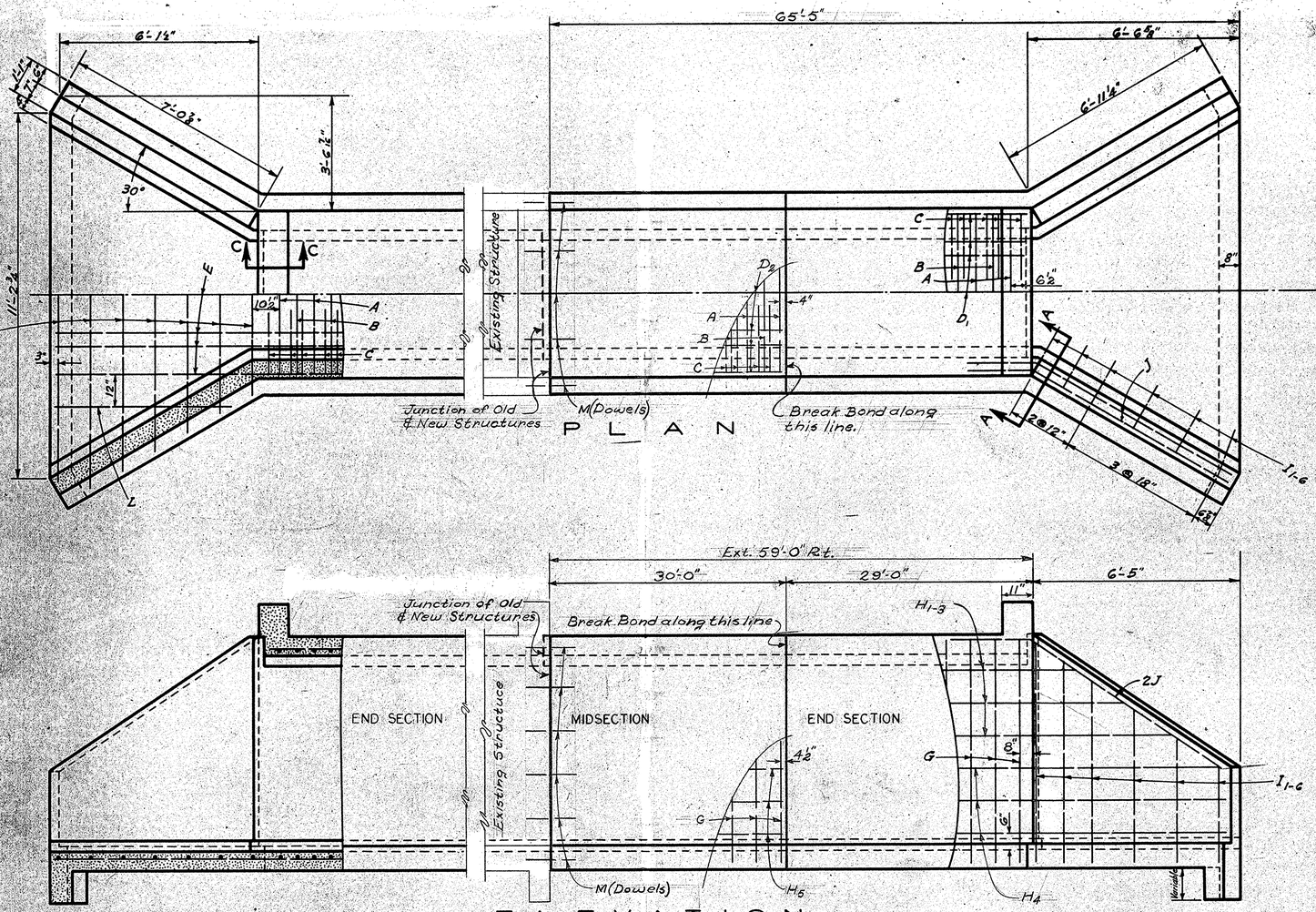
S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

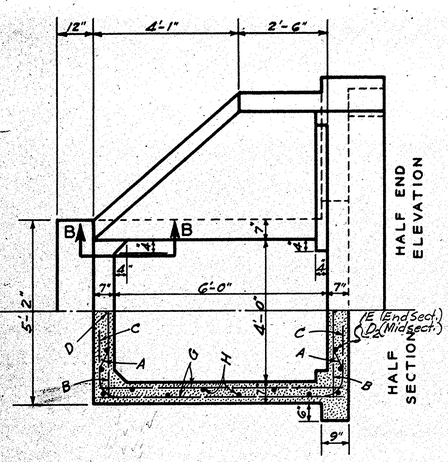
REINFORCED BOX TYPE
12' x 10' EXTENDED 44'-0" RT.
STA. NO. 1940+50
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY 57

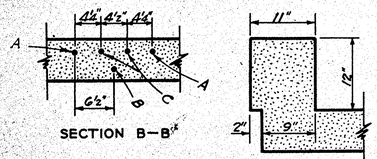
B 1.1210

FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	RT. NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	245	445



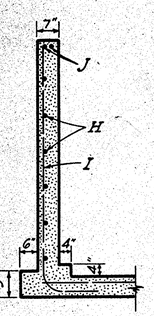
CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.



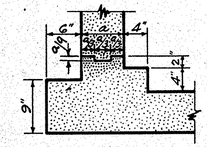


SECTION B—B

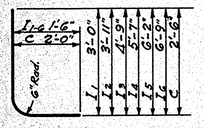
SECTION C—C



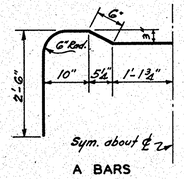
SECTION A—A



CONSTRUCTION JOINT DETAIL



C & I1-6 BARS



A BARS

STEEL SCHEDULE (MID & END SECTION)

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
A	110	½"	9'-6"	13" c. to c.	T. & B. Slabs
B	106	½"	4'-10"	"	"
C	428	⅝"	4'-3"	As Shown	Corners
D_1	7	½"	28'-4"	"	Top Slab (End Sect.)
E	7	½"	35'-1"	"	Bot. Slab "
F_1	1	½"	11'-5"	12" c. to c.	Apron
F_2	1	½"	11'-10"	"	"
F_3	1	½"	10'-9"	"	"
F_4	1	½"	9'-7"	"	"
F_5	1	½"	8'-5"	"	"
F_6	1	½"	7'-3"	"	"
F_7	1	½"	6'-1"	"	"
G	156	½"	6'-10"	9" Staggd.	Side Walls
H_5	12	½"	29'-9"	12" Staggd.	Side Walls Midsection
H_1	2	½"	30'-4"	"	Side Walls End Section
H_2	2	½"	32'-1"	"	"
H_3	2	½"	33'-10"	"	"
H_4	6	½"	35'-6"	"	"
I_1	2	½"	4'-3"	As Shown	Wings
I_2	2	½"	5'-2"	"	"
I_3	2	½"	6'-0"	"	"
I_4	2	½"	6'-10"	"	"
I_5	2	½"	7'-5"	"	"
I_6	2	½"	8'-0"	"	"
J	4	⅝"	10'-0"	"	"
L	2	½"	5'-5"	"	Apron
D_2	14	½"Φ	29'-9"	"	T&B Slab Midsection
M	18	¾"	1'-6"	"	Dowels

TOTAL QUANTITIES

CLASS "A" CONCRETE	33.9	CU. YD.
REINFORCING STEEL	4917	LB.

Concrete P.F.L. Barrel _____ 0.5226 Cu. Yd.
Concrete P.F.D. cut-off Wall (1-End) __ 0.3200 Cu. Yd.
Excavation P.F.D., P.F.L. Barrel _____ 0.3766 Cu. Yd.

NOTES CONT'D:

Work to be done consists of extending the existing structure in accordance with these plans.

The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged due to his carelessness or negligence.

This Culvert Designed for H15-S12 Live Load and Full Dead Load.

The Stresses are within the allowable unit stresses for H20-S16 Live Load when designed in accordance with the 1953 A.A.S.H.O. Specifications and revisions now in effect.

All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.

NOTES:-

Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1941 * f_s = 20,000 #/in², f_c = 1,000 #/in², n = 10, V = 90 #/in², u = 150 #/in²; H15 loading, 10' earth fill (max.).

Center of Main reinforcing steel shall be placed 2" from the surface.

All concrete shall be Class "A".

Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.

Chamfer all exposed edges ¾".

Structural grade reinforcing steel not permitted.

*(except fs)

All dimensions relative to reinforcing steel are to centers of bars.

Des. C.E.S. 10-42 Ck. W.B.B. 11-42
Tr. C.W.M. 11-42 Ck. W.B.B. 12-42

Adapted W.E.B. 7-57
Checked W.B.B. 7-57

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT

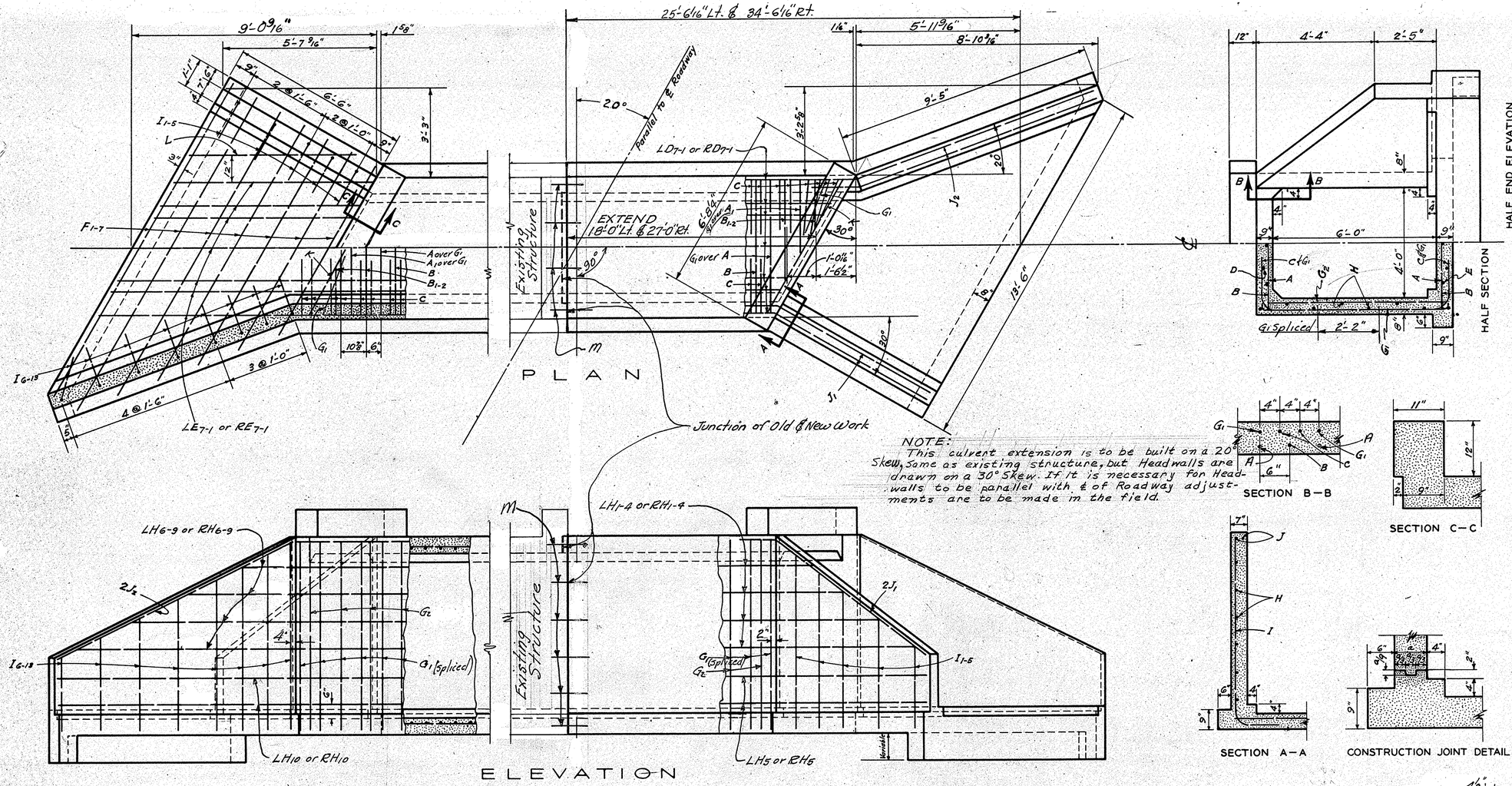
REINFORCED BOX TYPE

4' x 6' EXT. 59'-0" RIGHT

STA. NO. 1964+38
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY 1957

B 1.46 EXT.

FED. ROAD DIST. NO.	STATE	COUNTY	DOCKET NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
13	S.C.	Cherokee	11.347	29	246	445



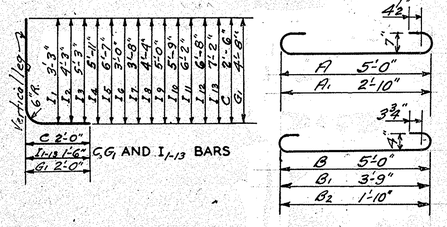
CONSTRUCT WEEP HOLES AND FRENCH DRAINS. SEE PARA. 710.28 OF STANDARD SPECIFICATIONS.

NOTE:
This culvert extension is to be built on a 20° Skew, same as existing structure, but Headwalls are drawn on a 30° Skew. If it is necessary for Headwalls to be parallel with ℄ of Roadway adjustments are to be made in the field.

NOTES:
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense and to the satisfaction of the Engineer, any portion of the existing structure damaged due to his carelessness or negligence.
All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

STEEL SCHEDULE BOTH ENDS

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
A	86	7/8" ϕ	7'-0"	12" c. to c.	T. & B. Slabs
A1	4	7/8" ϕ	4'-10"	"	"
B	82	5/8" ϕ	6'-4"	"	"
B1	4	5/8" ϕ	5'-1"	"	"
B2	4	5/8" ϕ	3'-2"	"	"
C	352	1/2" ϕ	4'-3"	As Shown	Corners
LD4/0 LD7	1 ea.	1/2" ϕ	16'-1" to 18'-10" Vary by 5/8"	"	Top Slab Left End
F1	2	1/2" ϕ	13'-3"	12" c. to c.	Apron
F2	2	1/2" ϕ	13'-3"	"	"
F3	2	1/2" ϕ	12'-0"	"	"
F4	2	1/2" ϕ	10'-10"	"	"
F5	2	1/2" ϕ	9'-8"	"	"
F6	2	1/2" ϕ	8'-5"	"	"
F7	2	1/2" ϕ	7'-3"	"	"
RD1/4 RD7	1 ea.	1/2" ϕ	25'-1" to 27'-10" Vary by 5/8"	As Shown	Top Slab Right End.
LE1/4 LE7	1 ea.	1/2" ϕ	23'-9 1/4" to 26'-6" Vary by 5/8"	"	Bottom Slab Left End
RE1/4 RE7	1 ea	1/2" ϕ	32'-9 1/4" to 35'-6" Vary 5/8"	"	Bottom Slab, Right End
G1	180	5/8" ϕ	6'-5"	12" C. to C.	S. Walls & Slabs
I1	2	1/2" ϕ	4'-6"	As Shown	Short Wing
I2	2	1/2" ϕ	5'-6"	"	"
I3	2	1/2" ϕ	6'-6"	"	"
I4	2	1/2" ϕ	7'-2"	"	"
I5	2	1/2" ϕ	7'-10"	"	"
I6	2	1/2" ϕ	4'-3"	"	Long Wing
I7	2	1/2" ϕ	4'-11"	"	"
I8	2	1/2" ϕ	5'-7"	"	"
I9	2	1/2" ϕ	6'-3"	"	"
I10	2	1/2" ϕ	7'-0"	"	"
I11	2	1/2" ϕ	7'-5"	"	"
I12	2	1/2" ϕ	7'-11"	"	"
I13	2	1/2" ϕ	8'-5"	"	"
J1	4	5/8" ϕ	10'-0"	"	Short Wing
J2	4	5/8" ϕ	13'-0"	"	Long Wing
K	4	3/4" ϕ	5'-7"	"	T. & B. Slabs
L	2	1/2" ϕ	6'-0"	"	Apron
LH1/4 LH4	1 ea.	1/2" ϕ	17'-9" to 22'-3" Vary by 1'-6"	12" Stag'd	Side Wall & Short Wing L.E.
LH6/10 LH9	1 ea.	1/2" ϕ	21'-3" to 27'-9" Vary by 2'-2"	"	Side Wall & Long Wing L.E.
G2	60	5/8" ϕ	7'-2"	18" C. to C.	Side Walls
LH5	2	5/8" ϕ	22'-9"	12" Stag'd.	Sw. Wall Wing L.E.
LH10	2	5/8" ϕ	28'-7"	"	Sw. Wall Wing L.E.
RH1/4 RH8	1 ea.	1/2" ϕ	26'-9" to 31'-3" Vary by 1'-6"	"	Side Wall & Short Wing R.E.
RH6/10 RH9	1 ea.	1/2" ϕ	30'-3" to 36'-9" Vary by 2'-2"	"	Side Wall & Long Wing R.E.
RH5	2	5/8" ϕ	31'-9"	"	Sw. Wall Wing R.E.
RH10	2	5/8" ϕ	37'-7"	"	Sw. Wall Wing R.E.
M	32	3/4"	1'-6"	As Shown	Dowels



NOTES:-
Specifications: "Standard Specifications for Highway Bridges", A.A.S.H.O. 1949 – f_s = 20,000 #/in.², f_c = 1200 #/in.², n = 10. V = 90 #/in.², u = 225 #/in.², H15 loading. Culvert designed for H20-S16 loading and 40' (max) earth fill.
All concrete shall be class "A".
Chamfer all exposed edges ¾".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Structural grade reinforcing steel not permitted.
All dimensions relative to reinforcing steel are to centers of bars.

TOTAL QUANTITIES

CLASS "A" CONCRETE	36.3 CU. YD.
REINFORCING STEEL	5,687 LBS.

CONCRETE P.F.L. BARREL ..... 0.6327 cu. yd.
CONCRETE P.F.D. Cut-off Wall (1-End) 0.3524 cu. yd.
EXCAVATION P.F.D., P.F.L. BARREL ..... 0.3827 cu. yd.

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

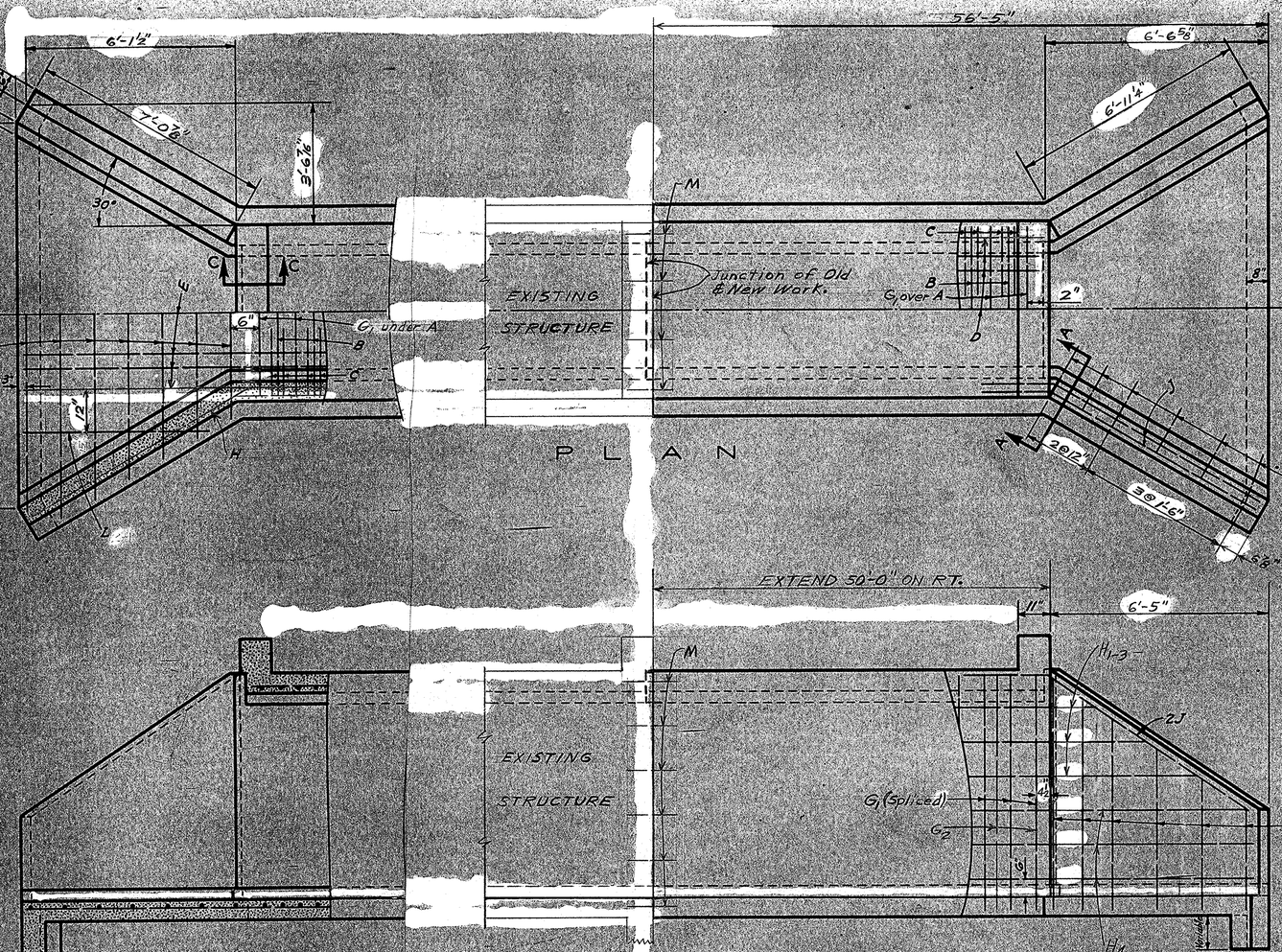
CONCRETE CULVERT
REINFORCED BOX TYPE
4'×6' Sk. 20° Extend 18'-0" Lt. & 27'-0" Rt.

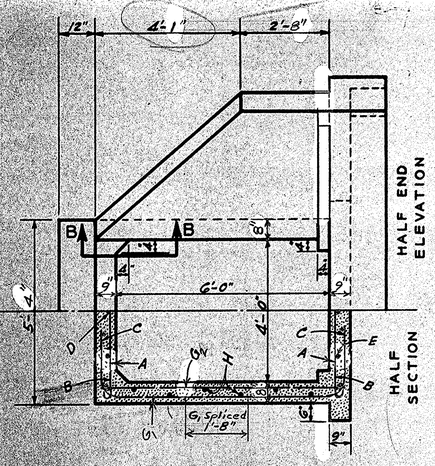
STA. NO. 20591-50
S.C. DOCKET NO. 11.347 Cherokee COUNTY
ROUTE NO. 29 DATE 7-57
B 1.46 (40 S 20)

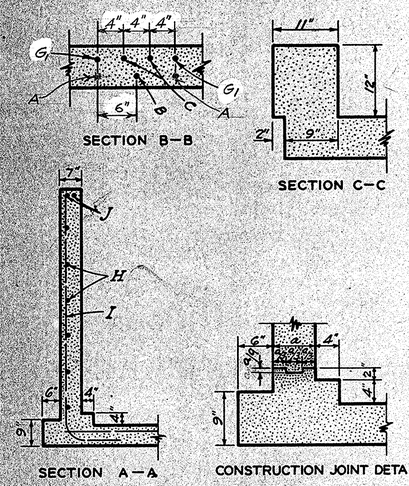
Des. C.E.S. 10-42 Ch. W.B.B., 11-42 C-Bars Revised: W.B.B. 4-46
Tr. C.W.M. 12-42 Ck. W.B.B., 12-42 Checked: W.B.B. 4-46

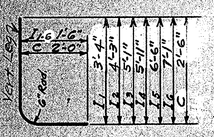
Adopted by: G.K.B. 7-57
Checked by W.B.B. 7-57

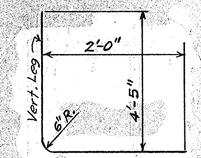
FED. ROAD DIV. NO.	STATE	COUNTY	DOCKET NO.	RT. NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	CHEROKEE	11.347	29	247	445

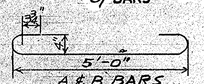












STEEL SCHEDULE

MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
A	100	5/8"	6'-4"	12" c. to c.	T. & B. Slabs
B	100	5/8"	6'-4"	"	"
C	396	1/2"	4'-3"	As Shown	Corners
D	7	1/2"	49'-6"	"	Top Slab
E	7	1/2"	56'-1"	"	Bot. Slab
F1	1	1/2"	11'-7"	12" c. to c.	Apron
F2	1	1/2"	12'-0"	"	"
F3	1	1/2"	10'-11"	"	"
F4	1	1/2"	9'-9"	"	"
F5	1	1/2"	8'-7"	"	"
F6	1	1/2"	7'-5"	"	"
F7	1	1/2"	6'-3"	"	"
G1	200	1/2"	6'-2"	12" c. to c.	Side Walls
G2	68	1/2"	7'-2"	18" c. to c.	"
H1	2	1/2"	51'-10"	12" Stagd	SW. & Wings
H2	2	1/2"	53'-6"	"	"
H3	2	1/2"	55'-4"	"	"
H4	6	1/2"	56'-9"	"	"
I1	2	1/2"	4'-7"	As Shown	Wings
I2	2	1/2"	5'-6"	"	"
I3	2	1/2"	6'-4"	"	"
I4	2	1/2"	7'-2"	"	"
I5	2	1/2"	7'-9"	"	"
I6	2	1/2"	8'-4"	"	"
J	4	5/8"	10'-0"	"	"
L	2	1/2"	5'-5"	"	Apron
M	16	3/4"	1'-6"	"	Dowels

TOTAL QUANTITIES

CLASS "A" CONCRETE	35.2 CU. YD.
REINFORCING STEEL	4713 LB.

Concrete P.F.L. Barrel ---------- 0.6927 Cu. Yd.
Concrete P.F.D. Cut-off Wall (1-End) - 0.3261 Cu. Yd.
Excavation P.F.D., P.F.L. Barrel ---- 0.3827 Cu. Yd.

CONSTRUCT WEEP HOLES AND FRENCH DRAINS, SEE PARA. 710.25 OF STANDARD SPECIFICATIONS.

NOTES:-
Work to be done consists of extending the existing structure in accordance with these plans.
The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.
The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.
All cost of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

NOTES:-(Cont'd)
Specifications: "Standard Specifications for Highway Bridges, A.A.S.H.O. 1949 f_c = 20,000 #/in.² f_c = 1,000 #/in.² n=10 v=90 #/in.² u=225 #/in.² H20-S16 loading, 35' earth fill (max).
Center of Main reinforcing steel shall be placed 2" from the surface.
All concrete shall be class "A".
Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.
Chamfer all exposed edges ¾".
Structural grade reinforcing steel not permitted.

All dimensions relative to reinforcing steel are to centers of

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT
REINFORCED BOX TYPE
4'x 6' EXT. 50'-0" ON RT.

STA. NO. 2071+87
S.C. DOCKET NO. 11.347 CHEROKEE COUNTY
ROUTE NO. 29 DATE JULY, 1957

B 1.46 f 35

Adapted From Dock. 11.294 & B1.46 f 15 Rev. By W.B.B. 7-57
Checked G.K.B.

Des. S.D.S. 10-25 Det. C.W.M. 11-25 Ck. H.B. 11-25 Ck. R.E.C. 11-25

Fed. Road Dtr. No.	State	County	Docket No.	Sh. No.	Sheet No.	Total Sheets
3	S.C.	CHEROKEE	11.347	29	248	445

STEEL SCHEDULE

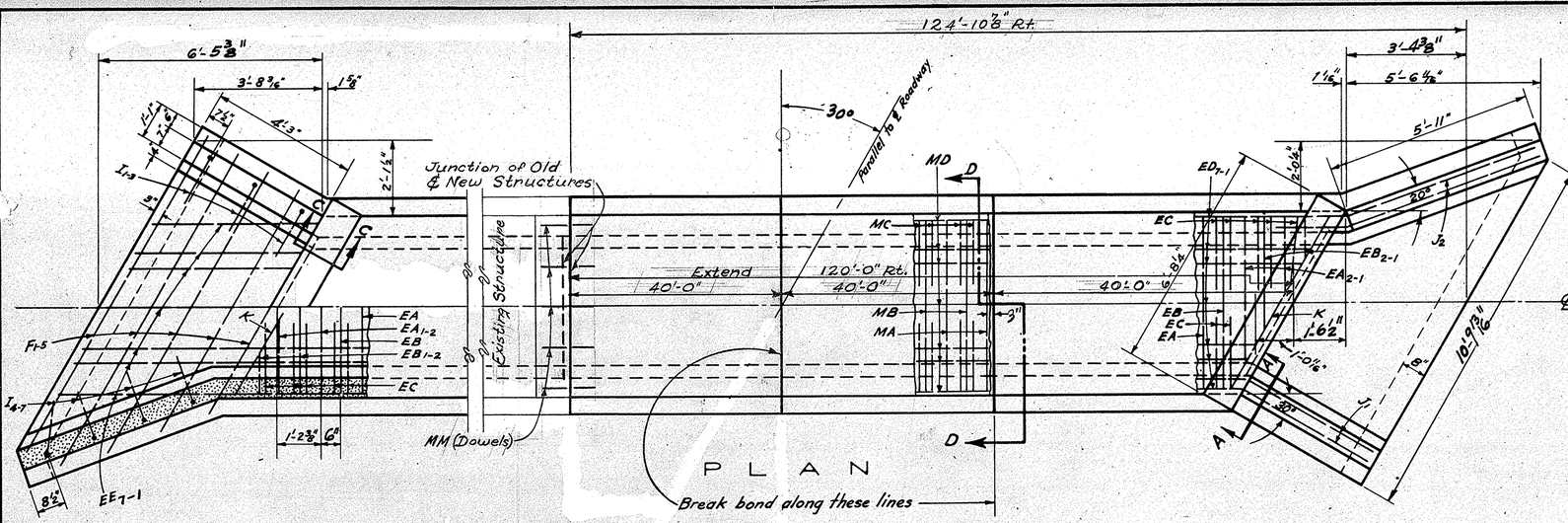
MARK	NO.	SIZE	LENGTH	SPACING	LOCATION
BOTH MID SECTIONS					
MA	160	½"ϕ	8'-9"	12" c. to C.	T. & B. Slabs
MB	160	⅝"ϕ	5'-0"	"	"
MC	640	⅝"ϕ	3'-9"	As Shown	Corners
MD	28	½"ϕ	39'-8"	"	T. & B. Slabs
MG	212	⅝"ϕ	5'-0"	9" Stag'd	Side Walls
MH	16	½"ϕ	39'-8"	12" "	"
MM	16	¾"ϕ	1'-6"	As Shown	Dowels
END SECTION					
EA	76	½"ϕ	8'-9"	12" c. to c.	T. & B. Slabs
EA_1	2	½"ϕ	6'-7"	"	"
EA_2	2	½"ϕ	4'-10"	"	"
EB	78	⅝"ϕ	5'-0"	"	"
EB_1	2	⅝"ϕ	3'-5"	"	"
EB_2	2	⅝"ϕ	1'-8"	"	"
EC	318	⅝"ϕ	3'-9"	As Shown	Corners
ED_1	1	½"ϕ	381'-0"	"	Top Slab
ED_2	1	½"ϕ	38'-6"	"	"
ED_3	1	½"ϕ	38'-9"	"	"
ED_4	1	½"ϕ	39'-5"	"	"
ED_5	1	½"ϕ	40'-1"	"	"
ED_6	1	½"ϕ	40'-4"	"	"
ED_7	1	½"ϕ	40'-9"	"	"
EE_1	1	½"ϕ	43'-1"	"	Bot. Slab
EE_2	1	½"ϕ	43'-7"	"	"
EE_3	1	½"ϕ	43'-10"	"	"
EE_4	1	½"ϕ	44'-6"	"	"
EE_5	1	½"ϕ	45'-2"	"	"
EE_6	1	½"ϕ	45'-5"	"	"
EE_7	1	½"ϕ	45'-10"	"	"
E_1	1	½"ϕ	10'-7"	12" c. to c.	Apron
E_2	1	½"ϕ	10'-6"	"	"
E_3	1	½"ϕ	9'-4"	"	"
E_4	1	½"ϕ	8'-2"	"	"
E_5	1	½"ϕ	7'-0"	"	"
EG	106	⅝"ϕ	51'-0"	9" Stag'd.	Sidewalk
EH_1	1	½"ϕ	39'-8"	12" "	"
EH_2	1	½"ϕ	41'-7"	"	"
EH_3	2	½"ϕ	42'-5"	"	"
EH_4	1	½"ϕ	43'-2"	"	"
EH_5	1	½"ϕ	45'-3"	"	"
EH_6	2	½"ϕ	47'-1"	"	"
I_1	1	½"ϕ	3'-9"	18" c. to c.	Short Wing
I_2	1	½"ϕ	4'-9"	"	"
I_3	1	½"ϕ	5'-9"	"	"
I_4	1	½"ϕ	3'-8"	"	Long Wing
I_5	1	½"ϕ	4'-5"	"	"
I_6	1	½"ϕ	5'-2"	"	"
I_7	1	½"ϕ	5'-10"	"	"
J_1	2	⅝"ϕ	7'-0"	As Shown	Short Wing
J_2	2	⅝"ϕ	8'-6"	"	Long Wing
K	2	¾"ϕ	5'-9"	"	T. & B. Slabs

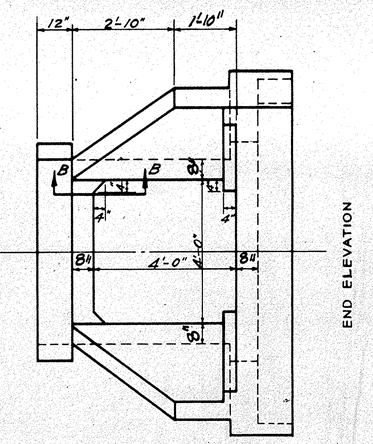
QUANTITIES	2-MID SEC.	END SEC.
Class "A" Concrete	40.1 C.Y.	22.1 C.Y.
Reinforcing Steel	6,580 Lb.	3,401 Lb.

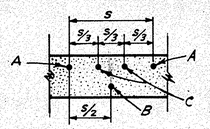
TOTAL QUANTITIES

CLASS "A" CONCRETE	62.2 CU. YD.
REINFORCING STEEL	9,981 LBS.

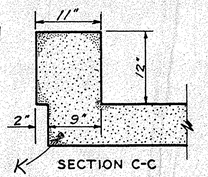
	MID SEC.	END SEC.
CONCRETE P.F.L. BARREL	0.5010	0.5010 CU.YD.
EXCAV. P.F.D. P.F.L. BARREL	0.3827	0.3827 CU.YDS.
CONC. P.F.D. CUT-OFF WALL (1-END)		0.2862 CU.YD.



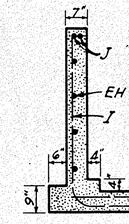




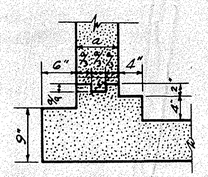
SECTION B-B



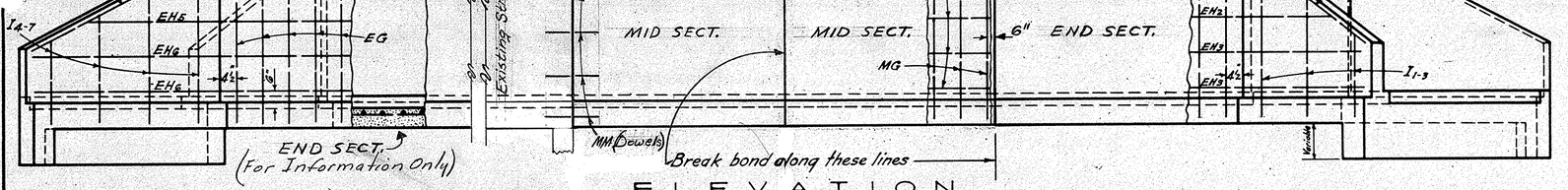
SECTION C-C

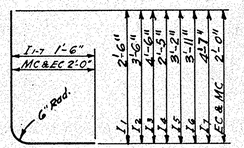


SECTION A-A

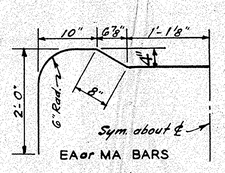


CONSTRUCTION JOINT DETAIL

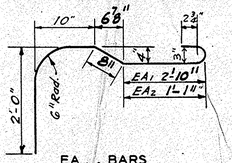




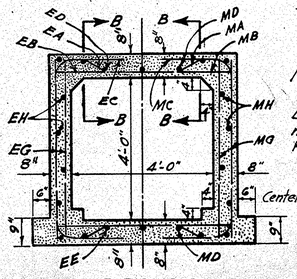
EC, MC & I_{1-7} BARS



EA or MA BARS



EA_{1-2} BARS



SECTION D-D

NOTES:—

Work to be done consists of extending the existing structure in accordance with these plans.

The holes for the dowels to be drilled 9" into old concrete and the dowels firmly set in a 1:3 mortar.

The Contractor shall replace or repair at his own expense, and to the satisfaction of the Engineer, any portion of the existing structure damaged, due to his carelessness or negligence.

All costs of drilling and other work necessary to construct New Structure shall be included in the Unit Price Bid for Class "A" Concrete.

NOTES:—

Specifications: "Standard Specifications for Highway Bridges," A.A.S.H.O. 1949 – $f_s = 20{,}000$ #/in², $f_c = 1{,}200$ #/in², $n = 10$, $v = 90$ #/in², $u = 225$ #/in² Culvert designed for H20-S16 loading and 25' (max) earth fill.

All concrete shall be class "A".

Center of Main reinforcing steel shall be placed 2" from the surface.

Chamfer all exposed edges ¾".

Depth of cut-off walls shall be determined by the Engineer and quantities added to those shown.

Structural grade steel not permitted

...sions relative to reinforc... ...are to cent...

S.C. STATE HIGHWAY DEPARTMENT
COLUMBIA

CONCRETE CULVERT
REINFORCED BOX TYPE

4' x 4' SKEWED 120'-0" ON RT.

STA. NO.

S.C. DOCKET NO. 11.

ROUTE NO. 29

CHEROKEE COUNTY

DATE JULY 19...

Des. C.E.S. 8-42 Ch. W.B.B. 11-42
Tr. C.M.W. 11-42 Ch. W.B.B. 11-42 Revised and Checked By: W.B.B., G.K.B., & W.R.T. 12-45

Adapted from Dock. 11.294 & B1.44 f15 s30 Rev. By: W.B.B. 7-57
Checked G.K.B.