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COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS

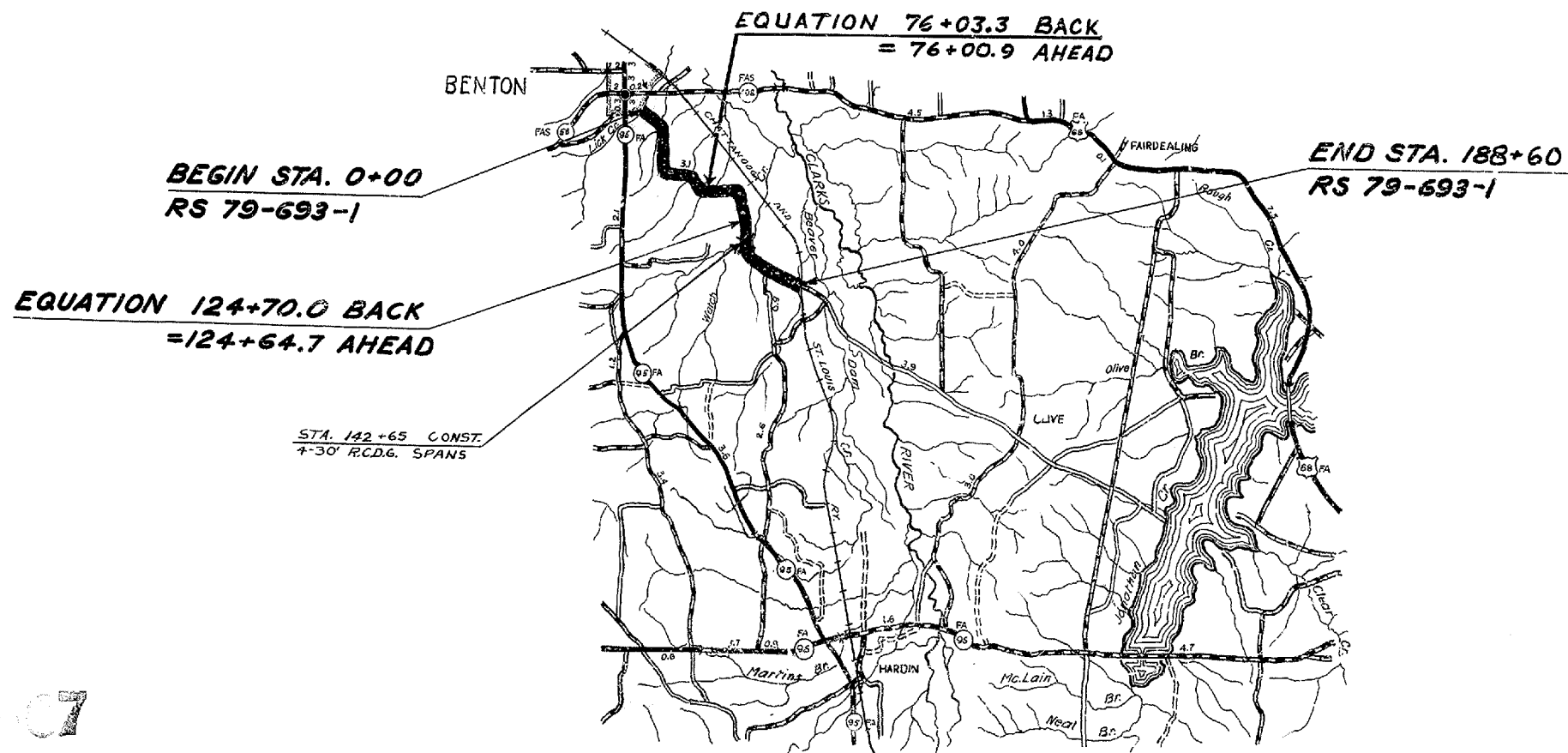
PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

MARSHALL CO.
RS 79-693-1

R.S. 79-693-1			
COUNTY OF	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MARSHALL	1954	1	52

SUBSECTIONS OF CONTRACT FOR MARSHALL CO. RSC 79-693-1

79-2693-ICA Grade, drain, and surface from Sta. 0+00 to Sta. 6+18.5.
 79-693-ICB Grade, drain, and surface from Sta. 6+18.5 to Sta. 188+60.
 79-693-1B1 Bridge (Dbl. 14'x8'x31' R.C. Culvert 0° skew) at Sta. 6+34.
 79-693-1B2 Bridge (4-30' R.C.D.G. Spans-0° skew) at Sta. 142+65.



GRAPHIC SCALE IN MILES

LAYOUT MAP

GROSS LENGTH	ADD'D DEDUCTED	FOR EQUALITIES	NET LENGTH	RAILROAD CROSSINGS	BRIDGES	GROSS LENGTH	ADD'D DEDUCTED	FOR EQUALITIES	NET LENGTH	RAILROAD CROSSINGS	BRIDGES	GROSS LENGTH	ADD'D DEDUCTED	FOR EQUALITIES	NET LENGTH	RAILROAD CROSSINGS	BRIDGES
18867.7			18867.7	1	1	18867.7			18867.7	1	1	18867.7			18867.7	1	1
3.573			3.573			3.573			3.573			3.573			3.573		

CONVENTIONAL SIGNS	
UNIMPROVED ROAD	[Symbol]
GRADE AND DRAINED ROAD	[Symbol]
SOIL SURFACE ROAD	[Symbol]
METAL SURFACED ROAD	[Symbol]
LOW TYPE BITUMINOUS ROAD	[Symbol]
PAVED ROAD	[Symbol]
COUNTY LINE	[Symbol]
CORPORATE LIMITS	[Symbol]
SURVEY LINE	[Symbol]
PROPOSED RIGHT OF WAY	[Symbol]
GRADE LINE	[Symbol]
GROUND LINE	[Symbol]
TRAVELED WAY	[Symbol]
RAILROAD	[Symbol]
FENCES (EXCEPT STONE & HEDGE)	[Symbol]
STONE FENCE	[Symbol]
HEDGE FENCE	[Symbol]
TREES & STUMPS	[Symbol]
PIPE LINE	[Symbol]
TELEPHONE POLES	[Symbol]
PIPE CULVERT	[Symbol]
CONCRETE CULVERT & BRIDGE	[Symbol]
LARGE STREAM	[Symbol]
SMALL STREAM	[Symbol]
BENCH MARKS	[Symbol]
ROAD INTERSECTIONS	[Symbol]
MARSH	[Symbol]
BUILDINGS	[Symbol]

R.S. 79-693-1

KENTUCKY
DEPARTMENT OF HIGHWAYS

COUNTY OF
MARSHALL
UNION HILL

PROJECT
No. RS 79-693-1

DATE
1954

APPROVED 12/9 1954

BY: P.T. Wynnahan
COMMISSIONER OF RURAL HIGHWAYS

BY: [Signature]
COMMISSIONER OF HIGHWAYS

SURVEYED BY BRIGHTON ENGINEERING CO. CHIEF OF PARTY

SURVEY APPROVED 12/9 1954 BY J.J. Paquette CHIEF LOCATING ENGINEER

PLAN CHECKED 12-7-54 BY S.B. Odom CHIEF DRAFTSMAN

SURVEY AND PLAN APPROVED 12-9-54 BY M.F. Johnson CHIEF OF DESIGN

SURVEY AND PLAN APPROVED 12/10 54 BY [Signature]

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

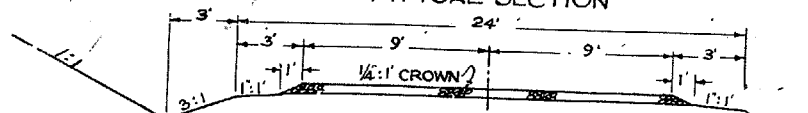
RECOMMENDED FOR APPROVAL:

DISTRICT ENGINEER DATE

APPROVED:

CLASS "C" ROAD

TYPICAL SECTION



TRAFFIC BOUND LIMESTONE

Crushed Limestone (Size No. 610) applied loose equal to 2" Compacted depth.

OR

TRAFFIC BOUND RIVER GRAVEL

River Gravel applied loose equal to 2" Compacted depth.

River Gravel shall conform to Specification 7.4.1.3-2
River Gravel Maintenance Filter Course

OR

TRAFFIC BOUND LOCAL BANK OR CREEK GRAVEL

Local Bank or Creek Gravel applied loose equal to 3 1/2" Compacted depth.

NOTE: The Specifications for Local Bank or Creek Gravel are Modified for this project as follows:
Passing 2 1/2" screen ----- 100%
No change on smaller screens
Per cent of wear not more than ----- 50%
No requirements for disintegration

OR

TRAFFIC BOUND SLAG

Crushed Slag (Size No. 610) applied loose equal to 2" Compacted depth.

TYPICAL SECTION & SUMMARY OF QUANTITIES

GENERAL NOTES

All curves over 5° to be banked and widened one-half the requirements of Standards, or as directed. Superelevation standards of Bulletin No. 2504, when applicable, supersede and void conflicting requirements of Standard Drawing No. 3.11. Superelevation for special cases to be authorized by the District Engineer.

The contractor is not to order material for drainage structures until the quantities have been checked by the engineer.

For typical sections in solid rock cuts see Standard Drawing No. 3.11.

Drawings for Standard Warning Signs will be furnished by the District Engineer.

Entrance Pipe shall be constructed to a minimum length of 18'.

Where the inlet of a culvert pipe is in a cut section and the ditch grade is one per cent or more, a suitable barrier to divert water from ditch into inlet of pipe is to be constructed as directed. No direct payment will be allowed for this work.

End Anchors for Corrugated Metal Pipe Arches and Corrugated Metal Plate Pipe Arches will not be required.

Corrugated Metal Pipe Arches shall be Bituminous Coated.

Corrugated Metal Plate Pipe Arches shall not be Bituminous Coated.

Alternate Types of Entrance Pipe: Standard Strength Reinforced Concrete or Corrugated Metal.

Alternate Types of Culvert Pipe: Standard Strength Reinforced Concrete; Bituminous Coated Corrugated Metal; Triple Strength Vitrified Clay; or Cast Iron.

Special Culvert Pipe shall be Bituminous Coated Corrugated Metal.

Alternate Types of Extra Strength Culvert Pipe: Extra Strength Reinforced Concrete; or Cast Iron.

The Standard Specifications for State and Federal Road and Bridge Construction, edition of 1945, as amended by the amendments published in Pamphlet No. 3 of Approved Provisions, Specifications and Amendments, with the following Provisions, Special Specifications and additional Amendments will apply on this project:

Special Specification No. 1-R: Bituminous Coated Corrugated Metal Pipe.

Special Specification No. 45-R: Surface Finish Exposed Concrete.

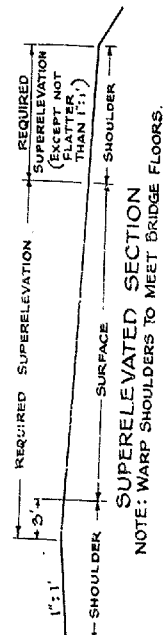
Special Specification No. 48-R-5: Rural Secondary Projects.

Special Specification No. 53: Corrugated Metal Pipe Arch.

Emergency Provision No. 10: Steel Reinforcement.

Emergency Provision No. 13: Deferral or Cancellation.

Amendment No. 42: Grading Requirements for Aggregates.



NOTE: WARP SHOULDERS TO MEET BRIDGE FLOORS.

PROJECT NO. R.S. 79-693
ROAD NAME UNION HILL

COUNTY OF	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MARSHALL	1954	2	52

SURFACING QUANTITIES

ITEM	UNIT	QUANTITY
LIMESTONE		
Crushed Limestone, Size 610	Ton	4320
RIVER GRAVEL		
River Gravel	Ton	9110
LOCAL BANK OR CREEK GRAVEL		
Local Bank or Creek Gravel	Ton	9110
SLAG		
Crushed Slag, Size 610	Ton	9110

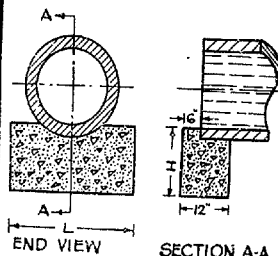
- ① Local Bank or Creek Gravel quantities may be determined by measurement in vehicle beds after the factor of conversion has been determined.
- ② Includes quantities for the following:
Additional aggregate for roadbed failures and for private entrances, to be used during construction operations in an amount equivalent in each instance to 50 tons per mile of compacted limestone as determined by approved Department weight differentials.
- 2045.39 yds. for curve widening, road approaches and intersections.

GENERAL SUMMARY

ITEM	UNIT	QUANTITY
Clearing And Grubbing	Mile	3.57
② Earth Work	Mile	3.57
Ditching And Shouldering	Mile	3.57
④ Class "A" Concrete	Cu.Yd.	769.0
Class "B" Concrete	Cu.Yd.	7.5
Class "D" Concrete	Cu.Yd.	117205
Steel Reinforcement	Lb.	2
Project Monument	Each	2
15" Entrance Pipe	Lin.Ft.	800
18" Entrance Pipe	Lin.Ft.	240
24" Entrance Pipe	Lin.Ft.	48
18" Culvert Pipe	Lin.Ft.	596
24" Culvert Pipe	Lin.Ft.	148
36" Culvert Pipe	Lin.Ft.	56
Furnishing 14" Reinforced Concrete Piling	Lin.Ft.	780
Driving 14" Reinforced Concrete Piling	Lin.Ft.	723
Removing pipe Headwalls	Each	17
Removal of existing structure	Each	2
③ Water	100 Gal.	4790
Slides	Cu.Yd.	1000
Removing Pipe	Lin.Ft.	425
Relaying Pipe	Lin.Ft.	200
Removing Masonry (Stone)	Cu.Yd.	10
Removing Masonry (Concrete)	Cu.Yd.	45

- ③ Water estimated at 10 Gals. per cu. yd. of common excavation used in embankment.
- ④ Includes 3.27 cu. yds. for Pipe Outlet Anchors; 765.9 cu. yds. from Bridge and Culvert Summary.
- ⑤ Total mileage for Earthwork is estimated to contain approximately 4805.1 cu. yds. including approximately

END ANCHORS FOR PIPE OUTLET (CLASS "A" CONCRETE)



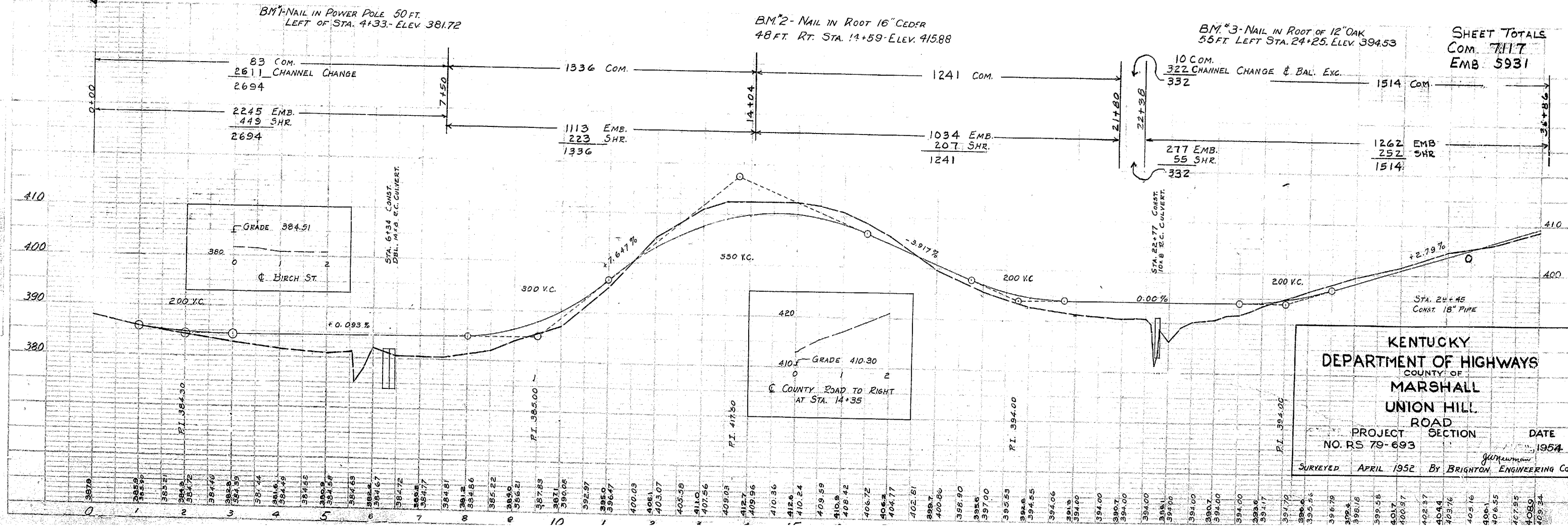
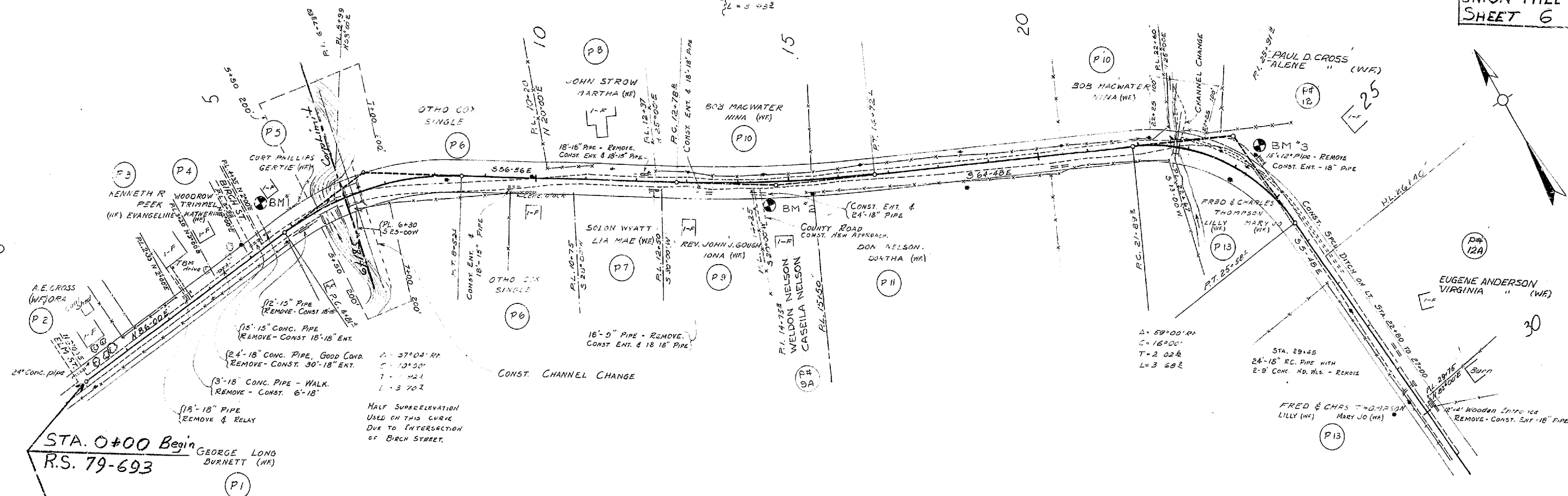
DIMENSION	INCHES
PIPE SIZE	12 15 18 24 30 36 42 48 54
L	28 32 35 42 49 56 63 70 77
H	18 18 18 18 18 18 24 24 24
VOL. CU.YD.	0.13 0.15 0.16 0.19 0.23 0.26 0.39 0.43 0.48

NOTE: The unit price bid for Class "A" Concrete in Pipe Outlet Anchor shall include all forms, tools, labor, excavation, materials, etc. incidental to construction.
Hand mixing and proportioning by volume will be permitted.

BRIDGE AND CULVERT SUMMARY

FINAL ESTIMATE } ALL BID ITEM QUANTITIES
APPROX. ESTIMATE } INCLUDED IN GENERAL SUMMARY

SHEET	STATION	SIZE	SKEW	INLET		OUTLET		GRADE	DRAWING NO.	STANDARD OR SPECIAL	CHANNEL CHANGE	FILL ON CULVERT	CONCRETE			STEEL REIN- FORCEMENT	STRUCTURE EXCAVATION		14" R.C. PILING		Removal of Existing Structure	Existing Structure			
				ELEV.	LENGTH	ELEV.	LENGTH						CLASS "A"	CLASS "B"	CLASS "D"		COMMON	SOLID ROCK	Furn.	Drive					
UNIT TO BID ON													CU.YD.			LB.	CU.YD.		Lin.Ft	Lin.Ft	EACH.				
6	6+34	Dbl. 14x8x31'0"	-	374.13	16'0"	374.07	15'0"	384.70		Spec.	See Road Plans	2.5'	152.6'			21000'									
6	22+77	10x8x33'0"	-	383.03	16'6"	382.37	16'8"	394.00		"		2.0'	90.0'			9500'					1	39'x12' Timber			
8	72+22	Dbl. 8x5x36'0"	-	391.19	17'6"	390.77	18'6"	400.15		"		3.0'	80.0'			9400'									
8	79+55	8x6x32'0"	-	396.16	16'0"	395.83	16'0"	406.04		Std	See Road Plans	3.5'	43.0'			4306'									
9	103+00	5x5x40'0"	45°	390.20	20'0"	389.80	20'0"	397.71		"	See Road Plans	1.7'	36.8'			3302'									
9	118+53	6x5x62'0"	45°	394.85	33'6"	394.25	28'6"	405.52		"	See Road Plans	5.0'	51.8'			4832'									
10	142+65	4-30" R.C. DG. SPANS	-																						
11	153+80	10x6x38'0"	30°	387.25	20'0"	386.75	18'0"	396.93		Spec.			184.0'	7.5	54000'			780	723	1	44" Steel Beam Spans				
12	186+50	10x3'x33'0"	-	379.55	17'6"	379.30	15'6"	385.85		"		3.0'	74.4'			6160'									
										"		3.0'	53.3'			4705'									
TOTAL													765.9'		7.5	117205'			780	723	2				



PAUL D. CROSS
(WF) ALENE

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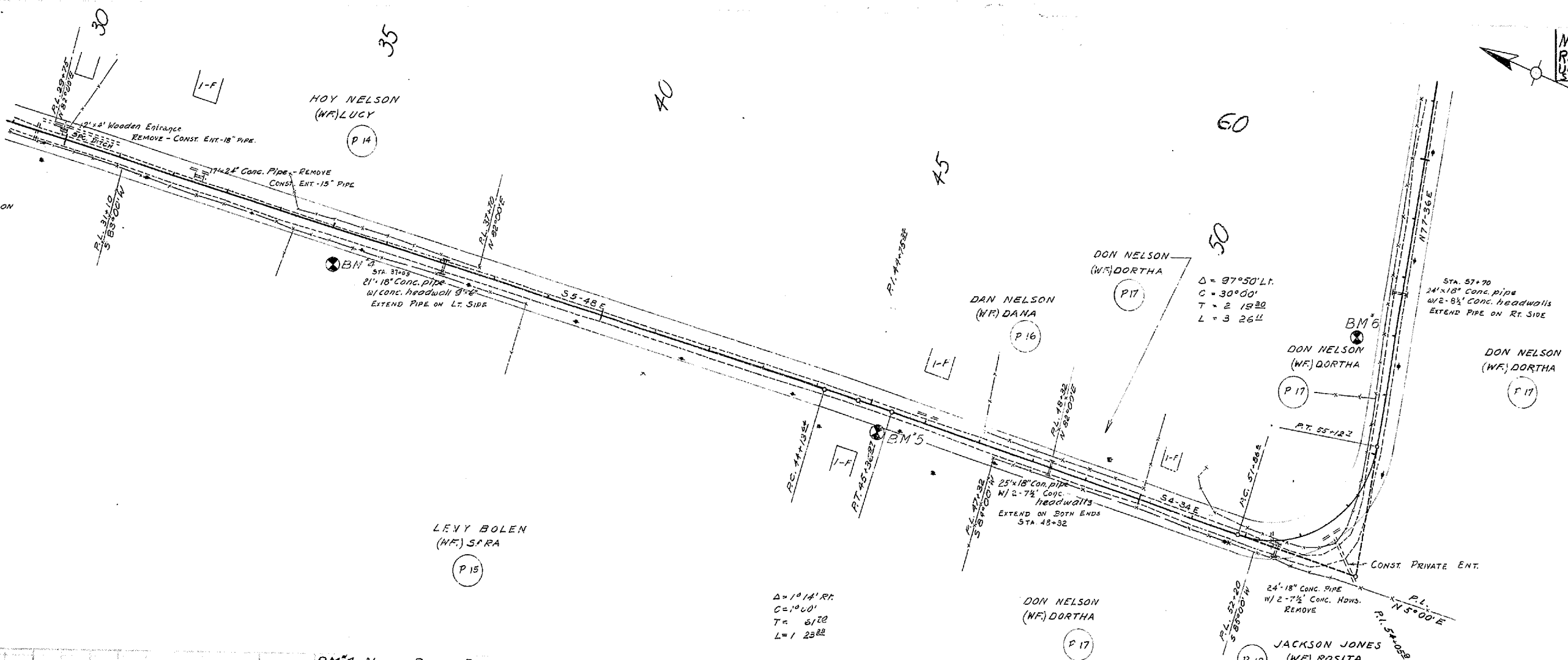
HOY NELSON
(WF) LUCY

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FRED & CHAS. THOMPSON

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MARSHALL CO.
RS. 79-693
UNION HILL ROAD
SHEET 7 OF 52

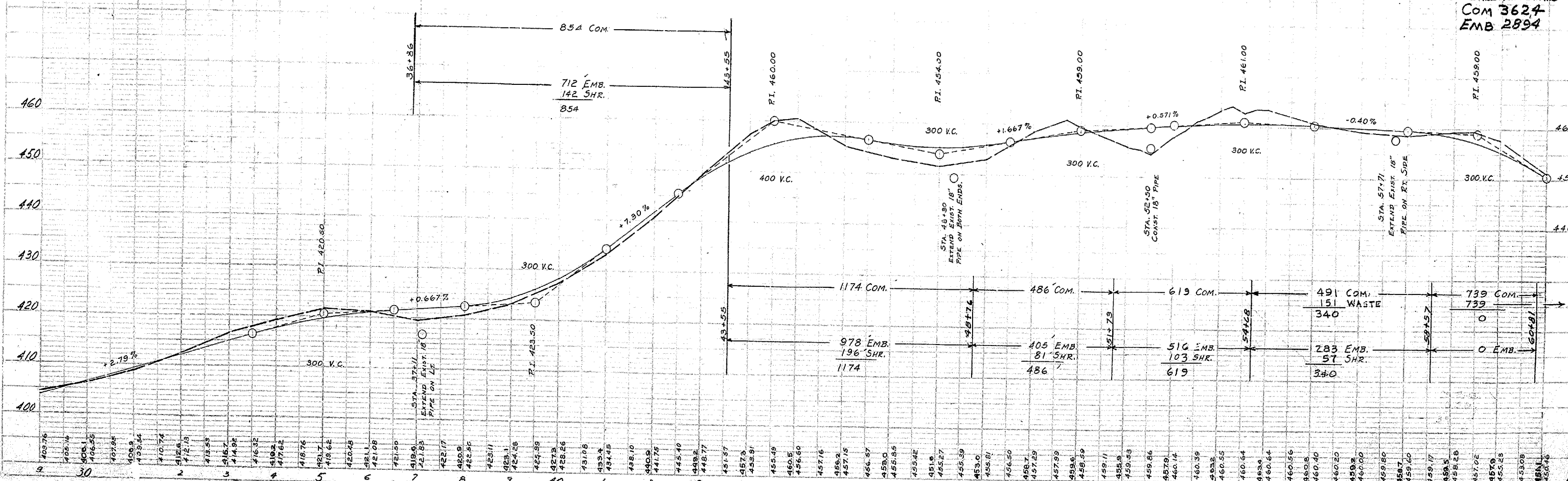


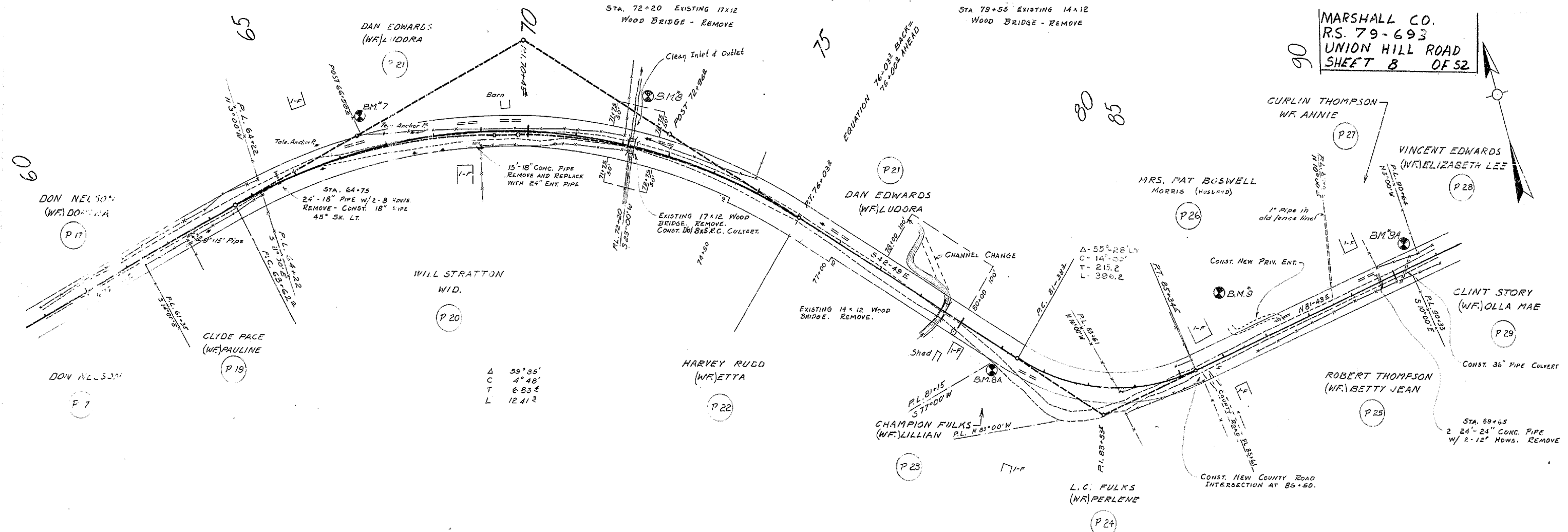
BM*4- NAIL IN POWER POLE
60 FT. RT. STA. 35+25. ELEV. 424.6

BM*5- NAIL IN ROOT 12" OAK
64 FT. RT. STA. 45+37. ELEV. 460.17

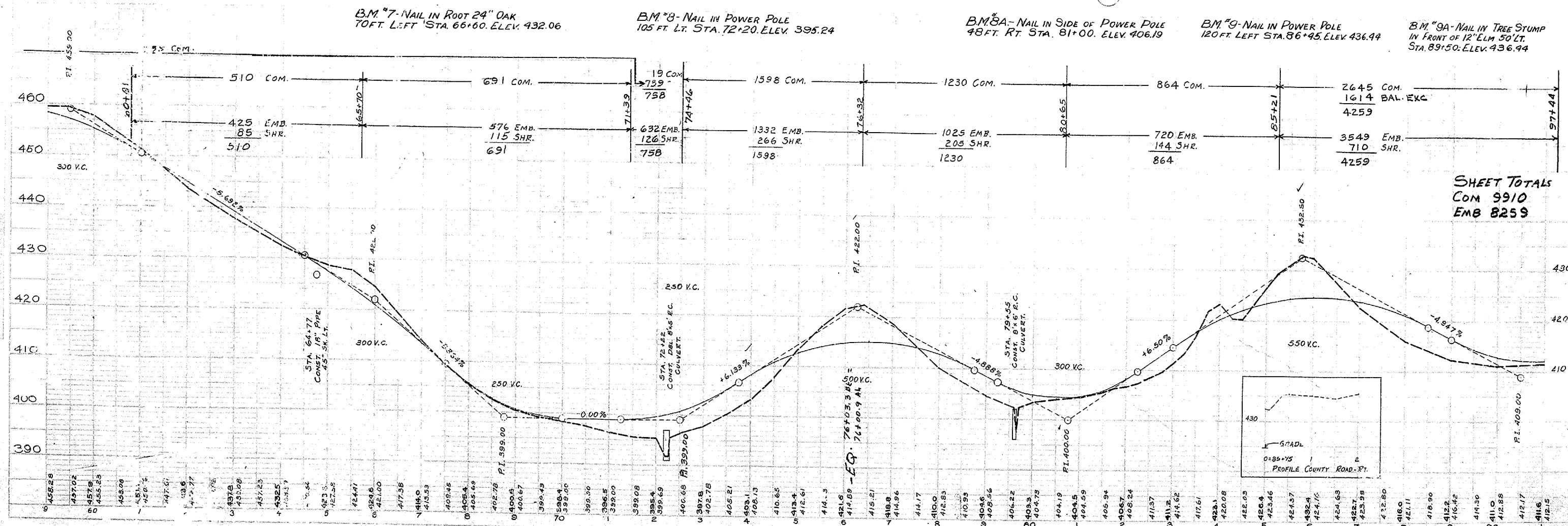
BM*6- NAIL IN ROOT 14" OAK
96 FT. LT. STA. 56+55. ELEV. 457.28

SHEET TOTALS
COM 3624
EMB 2894

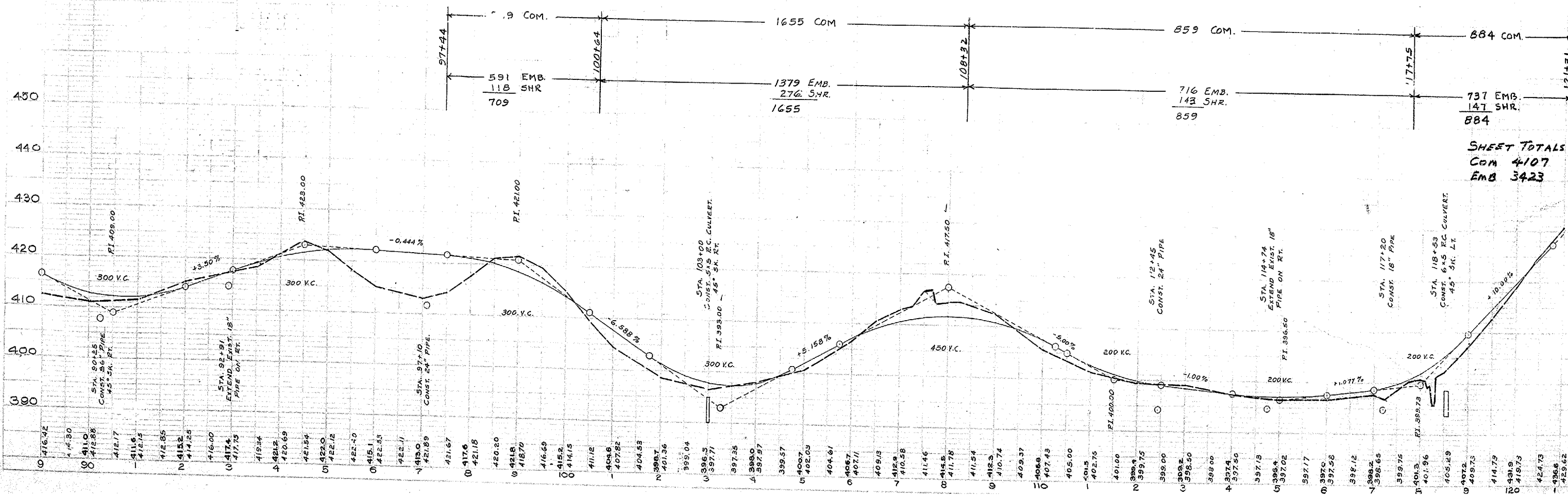
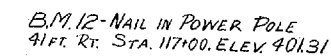
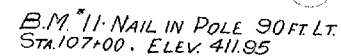
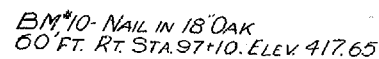




Δ 59°35'
C 4°48'
T 653.4
L 1241.2

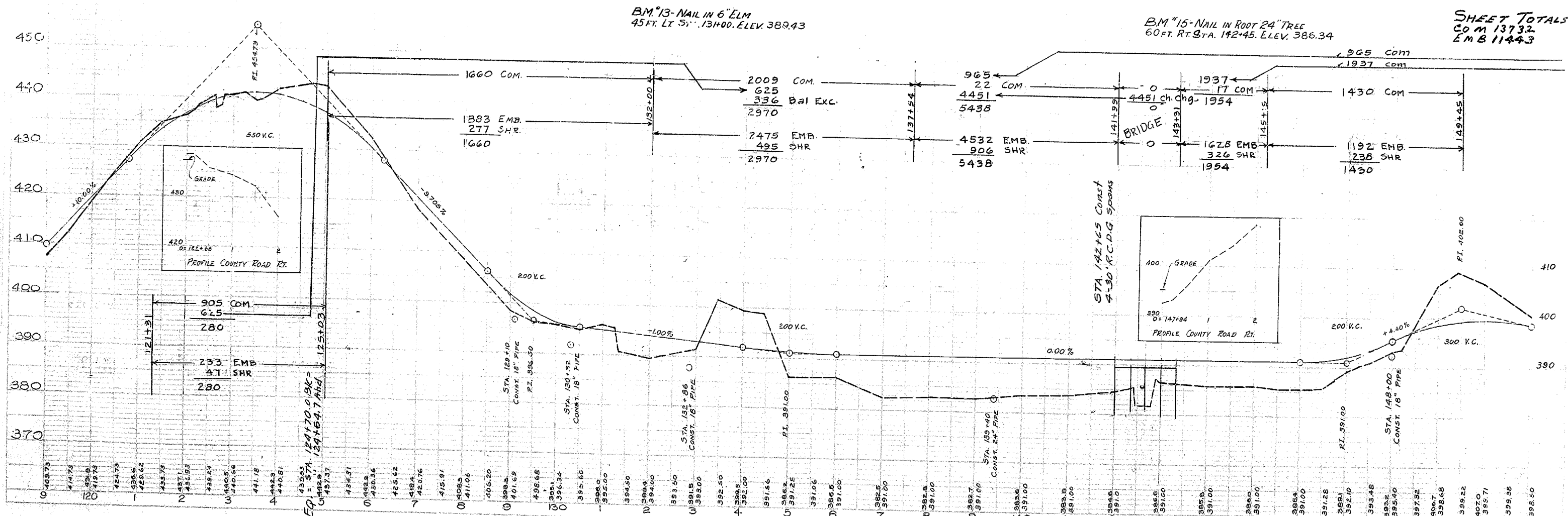
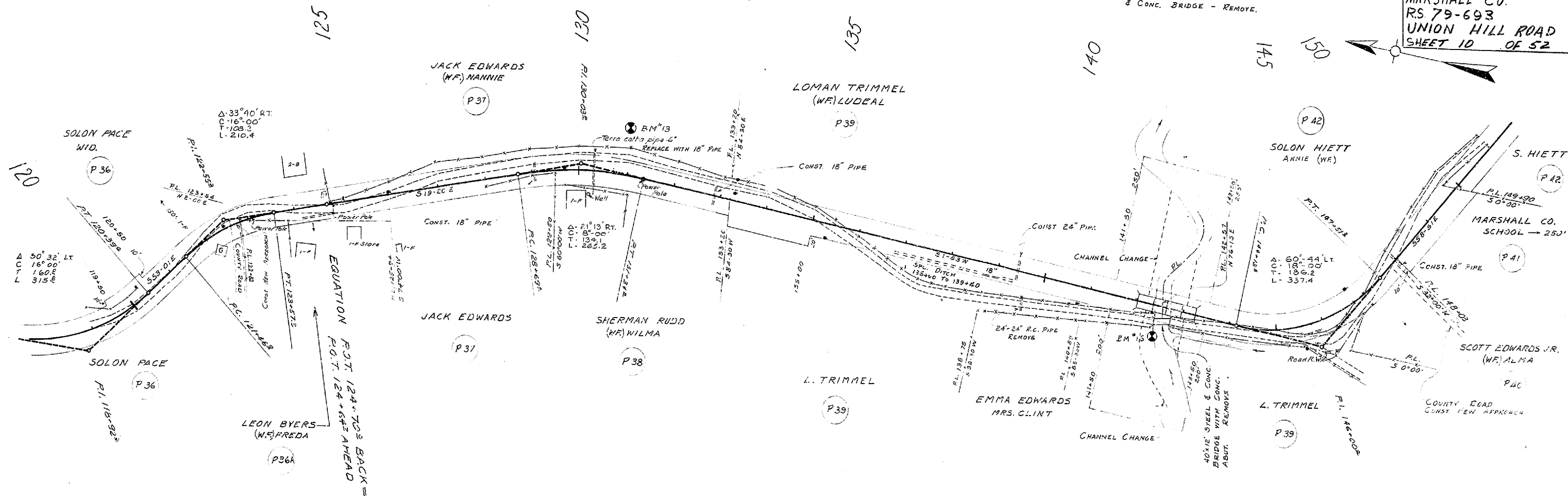


SHEET TOTALS
COM 9910
EMB 8259

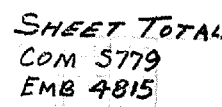


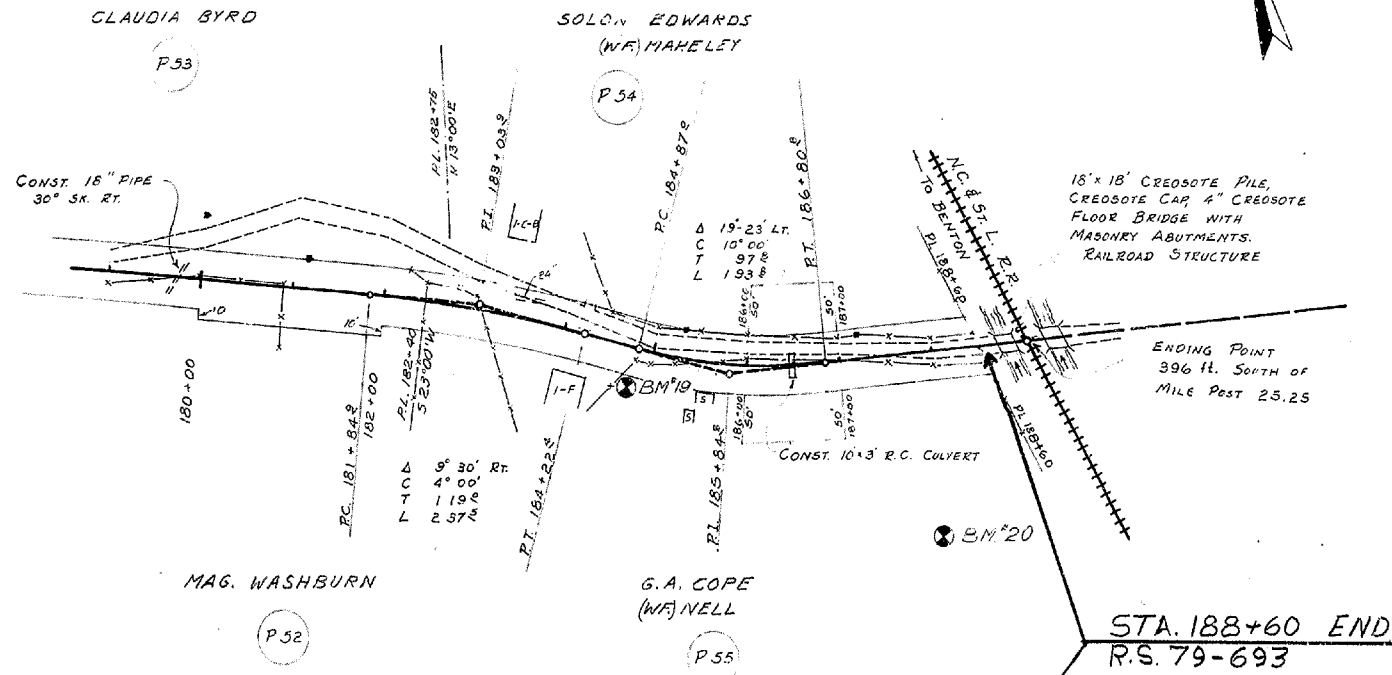
STA. 142+65 EXISTING 44x15 STEEL
& CONC. BRIDGE - REMOVE.

MARSHALL CO.
RS. 79-693
UNION HILL ROAD
SHEET 10 OF 52



SHEET TOTALS
COM 13732
EMB 11443



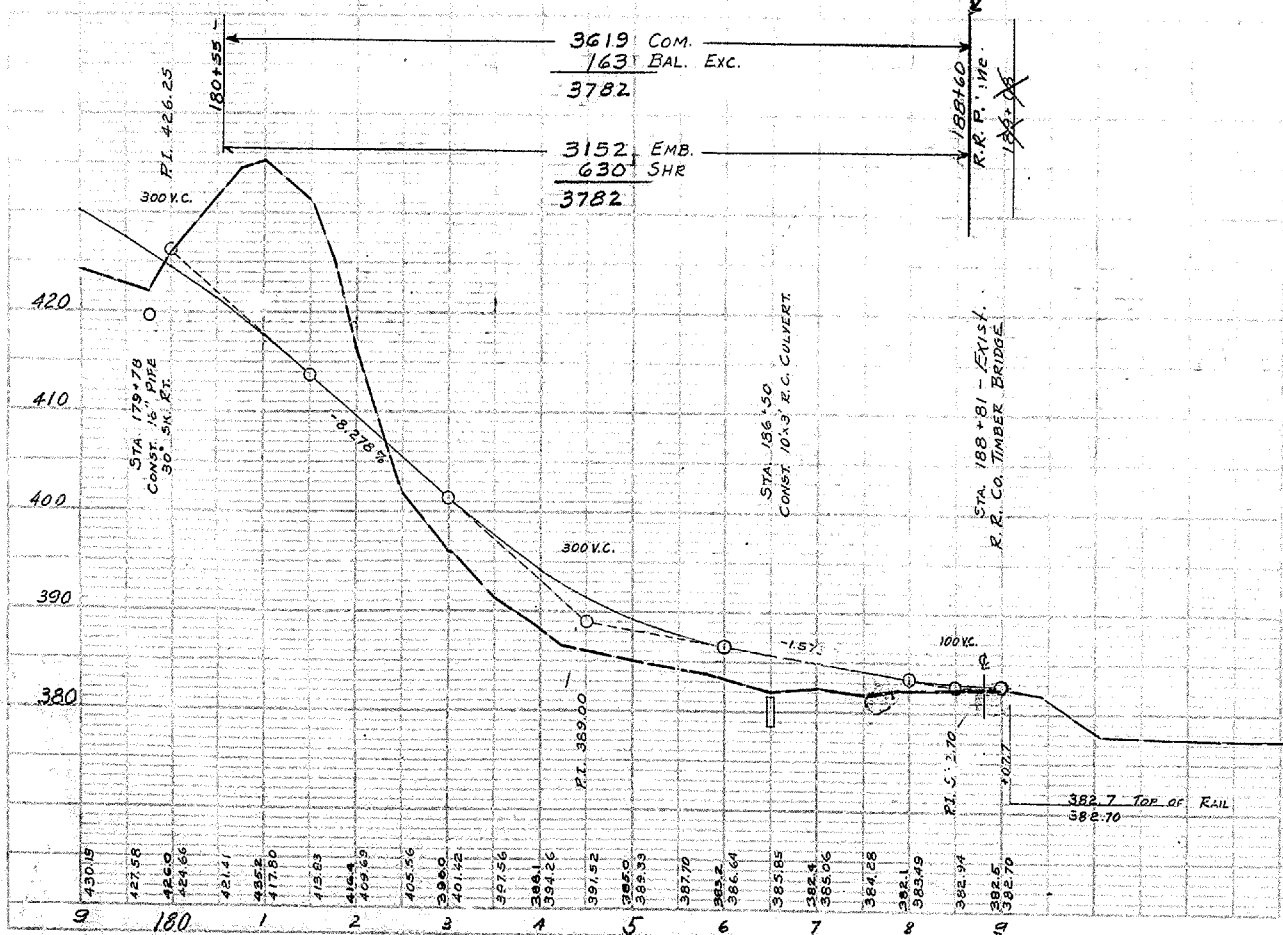


* Construct suitable approach, as directed, ahead.

B.M.*19-NAIL IN SIDE OF SUGAR MAPLE (19)
40 FT. RT. OF STA. 184+70. ELEV. 384.33

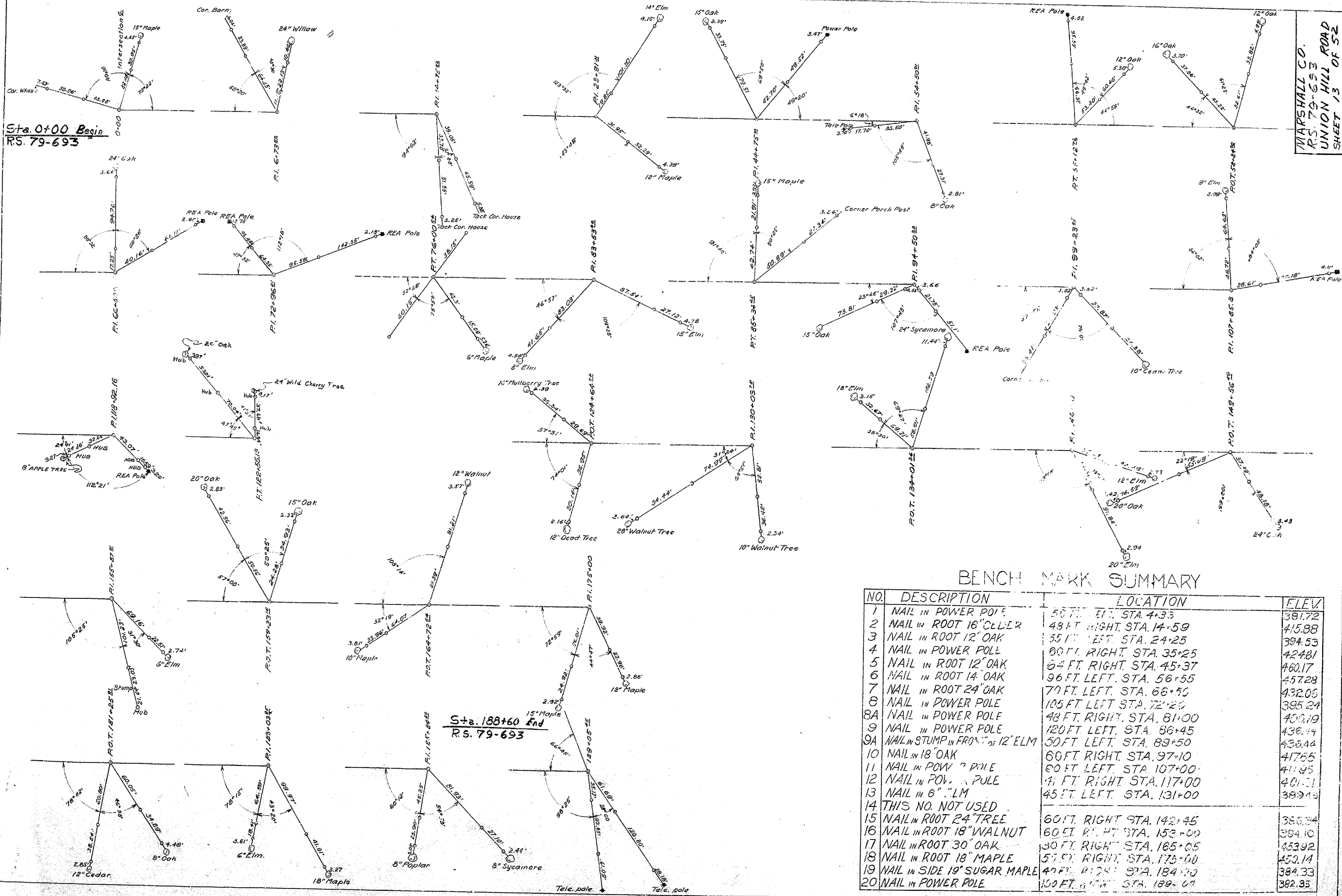
B.M.*20-NAIL IN SIDE OF POWER POLE
190 FT. RT. STA. 189+00. ELEV. 382.35

SHEET TOTALS
COM 3782
EMB 3152



Sta. 0+00 Begin
RS. 79-693

MARSHALL CO.
R.S. 79-693
UNION HILL ROAD
SHEET 13 OF 52



Sta. 188+60 End
RS. 79-693

BENCH MARK SUMMARY

NO.	DESCRIPTION	LOCATION	ELEV.
1	NAIL IN POWER POLE	50 FT. LEFT STA. 4+33	381.72
2	NAIL IN ROOT 16" CEDAR	48 FT. RIGHT STA. 14+59	415.88
3	NAIL IN ROOT 12" OAK	55 FT. LEFT STA. 24+25	394.53
4	NAIL IN POWER POLE	60 FT. RIGHT STA. 35+25	424.81
5	NAIL IN ROOT 12" OAK	64 FT. RIGHT STA. 45+37	460.17
6	NAIL IN ROOT 14" OAK	96 FT. LEFT STA. 56+55	457.28
7	NAIL IN ROOT 24" OAK	70 FT. LEFT STA. 66+50	432.00
8	NAIL IN POWER POLE	105 FT. LEFT STA. 72+20	395.24
8A	NAIL IN POWER POLE	48 FT. RIGHT STA. 81+00	400.19
9	NAIL IN POWER POLE	120 FT. LEFT STA. 86+45	436.14
9A	NAIL IN STUMP IN FRONT OF 12" ELM	50 FT. LEFT STA. 89+50	436.14
10	NAIL IN 18" OAK	60 FT. RIGHT STA. 97+10	417.65
11	NAIL IN POW. POLE	60 FT. LEFT STA. 107+00	411.95
12	NAIL IN POW. POLE	41 FT. RIGHT STA. 117+00	401.21
13	NAIL IN 6" ELM	45 FT. LEFT STA. 131+00	389.45
14	THIS NO. NOT USED		
15	NAIL IN ROOT 24" TREE	60 FT. RIGHT STA. 142+45	380.34
16	NAIL IN ROOT 18" WALNUT	60 FT. RIGHT STA. 153+00	394.10
17	NAIL IN ROOT 30" OAK	30 FT. RIGHT STA. 165+05	453.92
18	NAIL IN ROOT 18" MAPLE	57 FT. RIGHT STA. 175+00	452.14
19	NAIL IN SIDE 19" SUGAR MAPLE	40 FT. RIGHT STA. 184+00	384.33
20	NAIL IN POWER POLE	100 FT. LEFT STA. 189+00	382.35