FORM 129A REV. '54

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT ROAD R/W LINE
LIMITED ACCESS
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
STEAM RAILROAD
ELECTRIC RAILROAD
RAILROAD RIGHT-OF-WAY LINE
CREEK
RAPIDS OR WATERFALL
DRY RUN
DRAINAGE DITCH
HIGH TENSION LINE
POWER POLE LINE
TELEPHONE OR TELEGRAPH LINE
TELEPHONE CONDUIT
GUARD RAIL
WIRE FENCE
RAILROAD SNOW FENCE
BOARD OR HIGHWAY SNOW FENCE
STONE WALL OR FENCE
GAS MAIN
WATER PIPE
SEWER PIPE
DRAIN TILE
GRAVEL PIT
SAND PIT
CLAY PIT
ROCK QUARRY
SPRINGS
MARSH

TIMBER
BRUSH
ORCHARD
ROCK LEDGE
SAND
EDGE OF CUT
TOE OF EMBANKMENT
CATCH BASIN
MANHOLE
DROP INLET
FIRE HYDRANT
ARC LAMP
OTHER LAMPS (State Kind)
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
CATTLE GUARD
OVERHEAD (Highway Over)
UNDERPASS (Highway Under)
ABUTMENT, WALL & PIER
BRIDGE
CULVERT
BUILDING (One Story Frame)
C-CONCRETE S-STONE T-TILE B-BRICK ST.-STUCCO
HEDGE
IRON PIPE
STONE MONUMENT
WOOD STAKE OR HUB
MEANDER CORNER

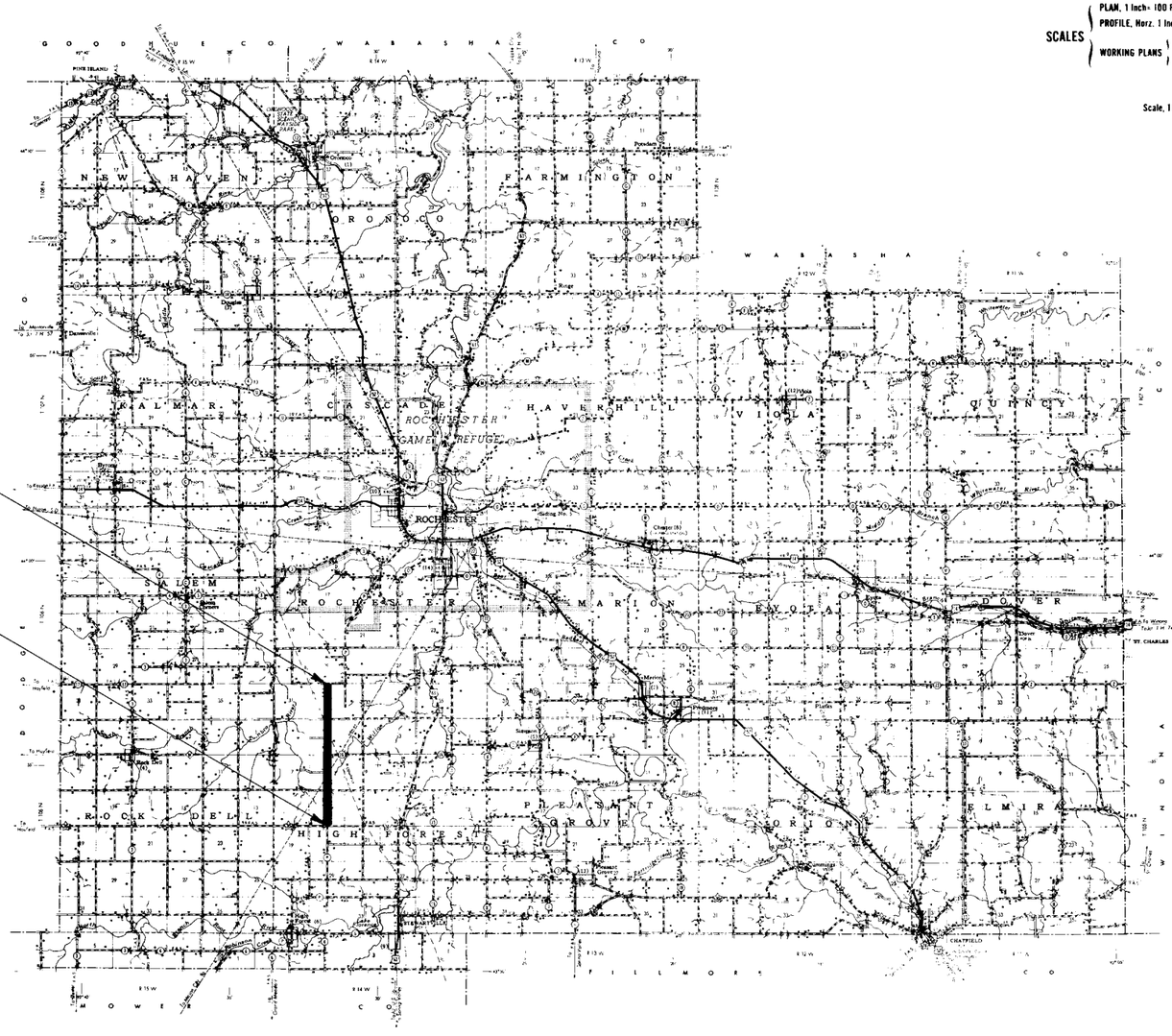
T.110N. R.14W. 35 36 2 1 T.109N. R.14W.

CENTER SECTION 3 5 T.109N. R.14W.

12 1 2 13

NOTE: SECTION NUMBERS READ FROM THE SOUTH

N



End S.A.P. 55-608-01.
Sta. 310 + 87.0

Begin S.A.P. 55-608-01.
Sta. 105 + 98.5

STATE OF MINNESOTA

DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR GRADE AND CRUSHED ROCK SURFACE

County **State Aid Hwy. No. 8**

BETWEEN STATE HIGHWAY # 30 AND STA. 310+87.0

From S 1/4 Cor Sec 17 T105 N-R14 W To 579.7 Ft. South N 1/4 Cor Sec 32 T106N-R14W

Give proper reference to Sections, Township and Range

GROSS LENGTH 20488.5 FEET 3.8804 MILES
BRIDGES LENGTH 0 FEET 0 MILES
EXCEPTIONS LENGTH 0 FEET 0 MILES
NET LENGTH 20488.5 FEET 3.8804 MILES

SCALES
PLAN, 1 Inch = 100 Feet
PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet
WORKING PLANS Horz. 1 Inch = 100 Feet; Vert. 1 Inch = 10 Feet; Cross-Section 1 Inch = 10 Feet

LAYOUT
Scale, 1 Inch = 10560 Feet

INDEX OF SHEETS

Sheet No. 1. Title Sheet & Layout Map
" No. 2. Est. Quantities & Typical Sec.
" No. 3. To 9. Plan & Profile
" No. 10. To 29. Cross Sections

Design Speed 50 M.P.H.

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

G. Erickson
OLMSTED COUNTY HIGHWAY ENGINEER

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

COUNTY ENGINEER DATE

COUNTY REG. NO.

RECOMMENDED FOR APPROVAL DISTRICT ENGINEER 19

RECOMMENDED FOR APPROVAL J. A. McMillan 9/11 1959

APPROVED 19
STATE HIGHWAY ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DISTRICT ENGINEER DATE

—SPECIFICATIONS—

THE SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED **MAY 1, 1959** AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON **MARCH 26, 1959 SHALL GOVERN.**

State Aid Project No. 55-608-01.

Olmsted County, Minnesota County Proj. No. _____ Plan No. _____ Sheet No. 1 of 29 Sheets

H. A. ROGERS CO. Minneapolis

FORM 129 c - # 1 REV. '46

FED ROAD DIST. NO.	STATE	FED AID PROJ. NO.		FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5N	MINN.					

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	Clearing	Tree	210
2101.507	Grubbing	Tree	165
2104.501	Remove Portable Culverts	Linear Foot	1108
2105.501	Class A Excavation	Cubic Yard	78838
2501.511 - 18"	F&I CMP Culverts - 18"	Linear Foot	838
2501.521 - 24"	F&I S.C.P. Culverts - 24" (Class 3)	Linear Foot	506
2501.521 - 30"	F&I S.C.P. Culverts - 30" (Class 3)	Linear Foot	46
2515.531 - 18"	F&I Metal Aprons for CMP - 18"	Apron	52
2515.541 - 24"	F&I Conc. Aprons for S.C.P. - 24"	Apron	16
2515.541 - 30"	F&I Conc. Aprons for S.C.P. - 30"	Apron	2
2413.501	Excavation for Timber Box Culvert	Cubic Yard	90
2413.511	Timber Box Culvert (72" x 72")	Linear Foot	48
2413.512	Timber Culvert End Section (72" x 72")	Section	2
2252.527	Crushed Rock Wearing Course in Place	Cubic Yard (V.M.)	9128

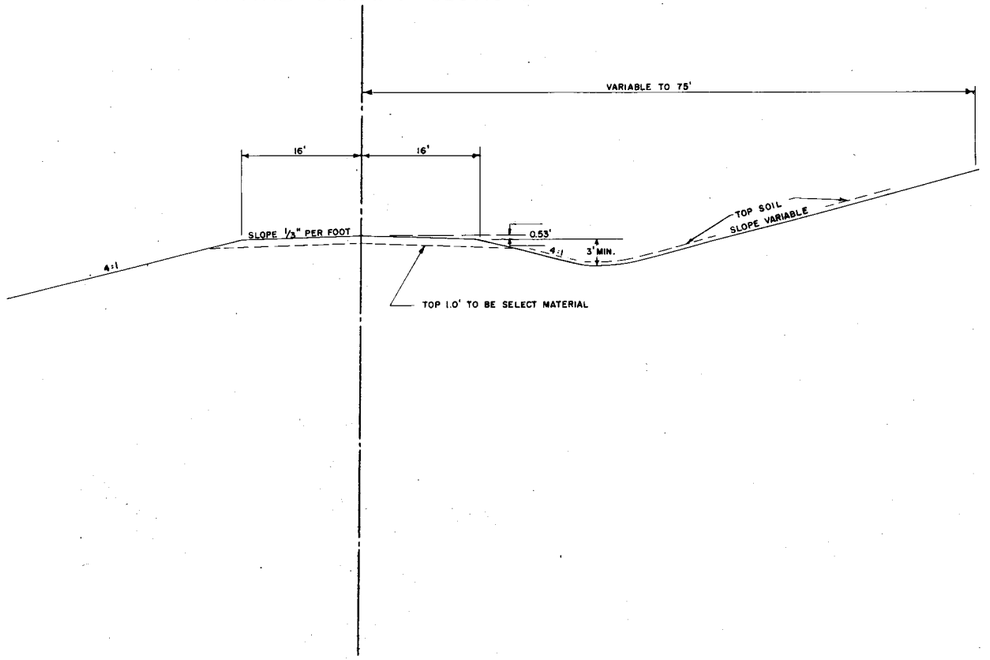
Note: Item 2252.527 Includes 450 Cu. Yds for Approaches and 180 Cu. Yds for T.W.P. Roads.

STANDARD DETAIL PLATES

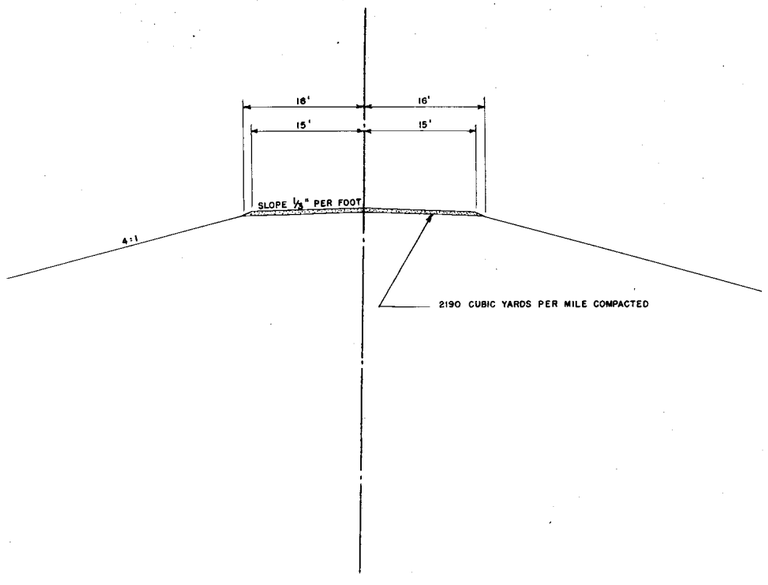
THE FOLLOWING STANDARD DETAIL PLATES, APPROVED BY THE BUREAU OF PUBLIC ROADS, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
3100 B	Concrete Apron for Reinforced Concrete Pipe
3123 A	Metal Apron for C.M. Pipe
3060	Timber Box Culvert

TYPICAL GRADING SECTIONS



TYPICAL BASE & SURFACE SECTIONS



SPECIAL DETAILS

Note: Material from the top 1.0' of the natural topsoil shall not be used in the upper 1.0' of the Roadway. Part of this material shall be spread uniformly on the slope and ditch bottom to a depth of 3". No payment in addition to the contract price for Class A Excavation will be made for spreading the topsoil as provided above, nor will any undercutting made in excavation prior to placing the topsoil be measured for payment.

Note: Corrugated Metal and Sectional Concrete Pipe Culvert excavation shall be considered incidental and will be paid under unit price for Furnish and Install Culvert Pipe.

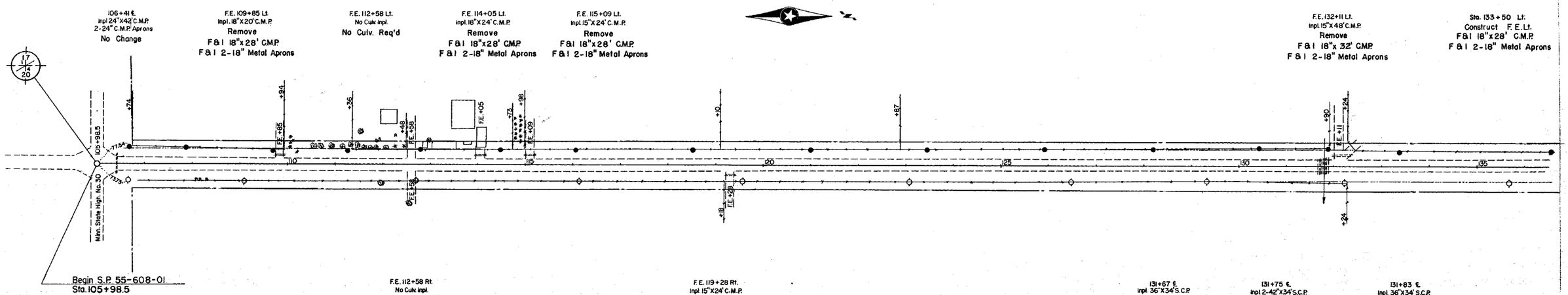
Note: Subgrade Treatment.
Excavation 1.0' below Profile Grade for compaction as shown on Plan and Profile Sheets. Excavation has been computed and is included in Balanced Quantities. Backfill with Select Material from R.O.W. Tapers shall be 50:1 in all cases.

Note: Place Sectional Concrete Pipe on Class C Bedding.

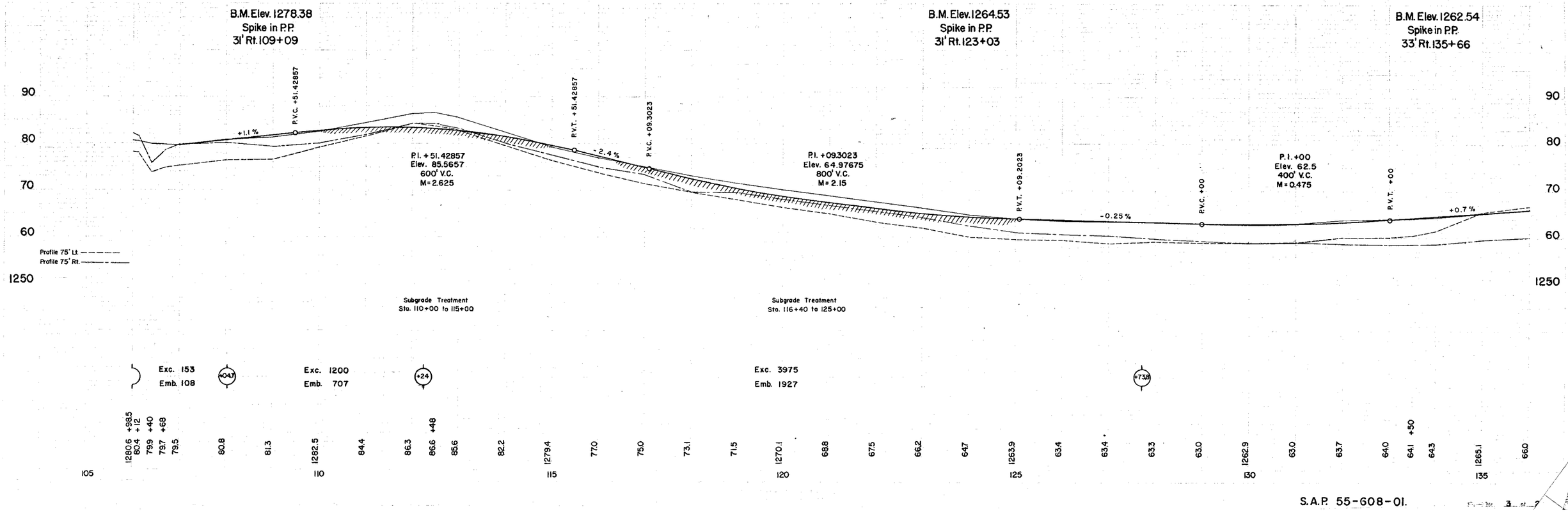
S.A.P. 55-608-01.

Olmsted County, Minn. Proj. No. Plan No. Sheet No. 2 of 29 Sheets.

DAHMS PHOTO PRINT CO.
MPLS. 1, MINN.



Cl II Gr 16



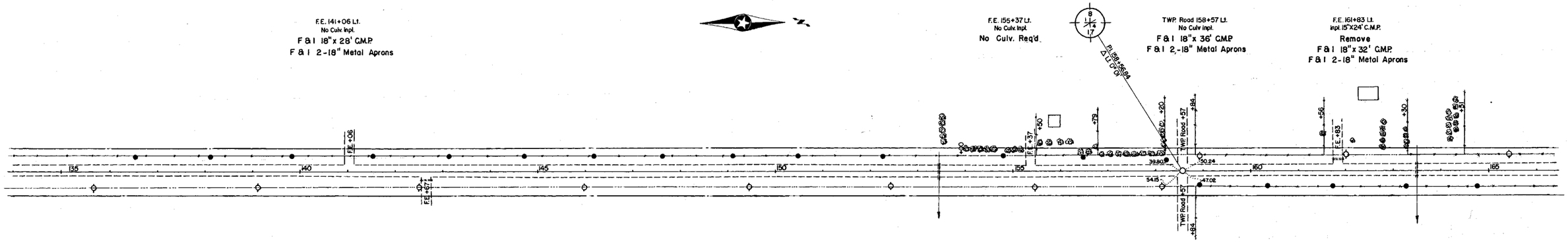
S.A.P. 55-608-01.

F.E. 141+06 Lt.
No Culv. Inpl.
F & I 18"x 28' C.M.P.
F & I 2-18" Metal Aprons

F.E. 155+37 Lt.
No Culv. Inpl.
No Culv. Req'd.

TWP. Road 158+57 Lt.
No Culv. Inpl.
F & I 18"x 36' C.M.P.
F & I 2-18" Metal Aprons

F.E. 161+83 Lt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons



F.E. 142+67 Rt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 28' C.M.P.
F & I 2-18" Metal Aprons

153+46 ℄
Inpl. 15"x 42' S.C.P.
Remove
F & I 24"x 68' S.C.P.
F & I 2-24" Conc. Aprons

TWP. Road 158+57 Rt.
No Culv. Inpl.
No Culv. Req'd.

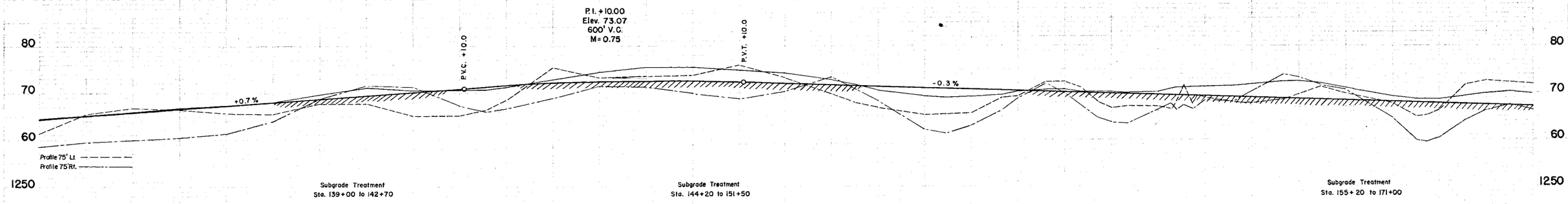
163+51 ℄
Inpl. 18"X 42' S.C.P.
Remove
F & I 24"x 46' S.C.P.
F & I 2-24" Conc. Aprons
Pl. Ditch Block Lt.

Cl 38 Gr 9 — Cl 55 Gr 40 — Cl 12 Gr 7

B.M. Elev. 1262.54
Spike in P.P.
33' Rt. 135+66

B.M. Elev. 1272.61
Spike in P.P.
34' Rt. 145+97

B.M. Elev. 1267.69
Spike in P.P.
33' Rt. 158+14



Subgrade Treatment
Sta. 139+00 to 142+70

Subgrade Treatment
Sta. 144+20 to 151+50

Subgrade Treatment
Sta. 155+20 to 171+00

Exc. 6097
Emb. 3567

+71.1

Exc. 1000
Emb. 568

+39.2

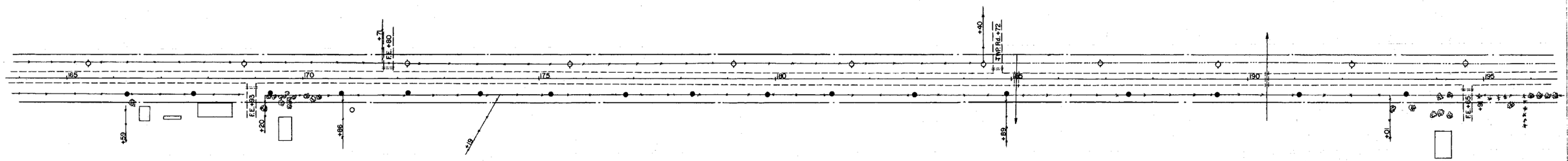
Exc. 3965
Emb. 2265

+64.7

135						140						145						150						155						160						165		
643	1265.1	660	667	674	681	1269.7	711	705	706	708 +60	713	1272.9	745	756	756	750	1274.2	727	717 +50	706	692	681 +45	693	698 +66	1270.3	708 +60	708	703 +33	703 +70	702	701 +34	704	709 +38 +17 +04	710	713	715 +60	1271.9	725 +68	725	721 +50	711	692	688 +52 +17	687	688	694 +60	1269.9	702 +58	698

F.E. 171+80 Lt.
Inpl. 15"X 24' C.M.P.
Remove
F & I 18"x 28' C.M.P.
F & I 2-18" Metal Aprons

TWP. Road 184+72 Lt.
Inpl. 15"X 24' C.M.P.
Remove
F & I 18" 62'x C.M.P.
F & I 2-18" Metal Aprons



F.E. 168+93 Rt.
Inpl. 15"X 24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons

Sta. 173+00 ℄
F & I 24"x 62' S.C.P.
F & I 2-24" Conc. Aprons

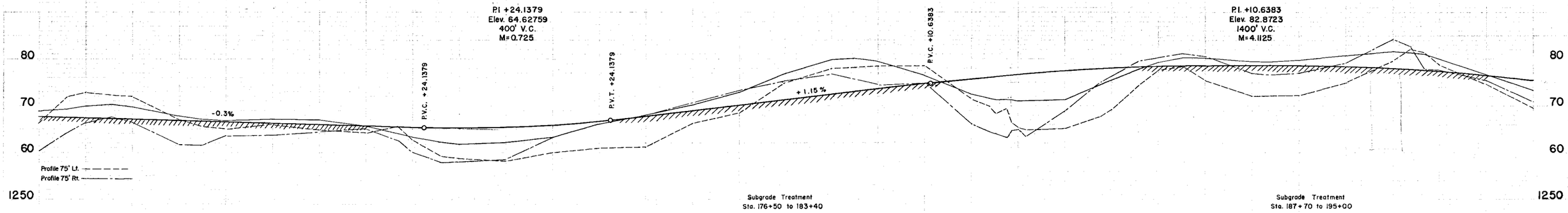
185+12 ℄
Inpl. 24"X 36' C.M.P.
Remove
F & I 24"x 104' S.C.P.
F & I 2-24" Conc. Aprons

190+43 ℄
Inpl. 18"X 36' S.C.P.
Remove
No Culv. Req'd

F.E. 194+65 Rt.
Inpl. 15"X 24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons

B.M. Elev. 1261.10
Spike in P.P.
33' Lt. 172+21

B.M. Elev. 1269.44
Spike in P.P.
33' Lt. 184+39



Subgrade Treatment
Sta. 176+50 to 183+40

Subgrade Treatment
Sta. 187+70 to 195+00

Exc. 5342
Emb. 3015

Exc. 2451
Emb. 1454

Exc. 6363
Emb. 4174

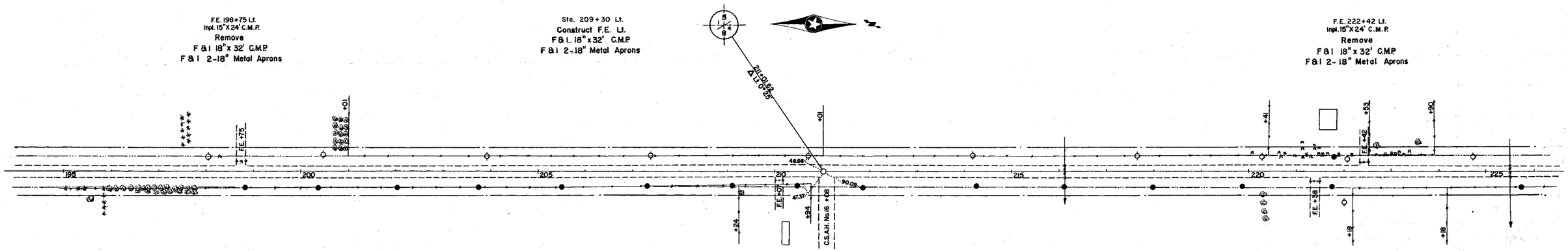
Side Borrow 1740
Exc. 2969
Emb. 2892

| | | |

F.E. 198+75 Lt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons

Sta. 209+30 Lt.
Construct F.E. Lt.
F & I 18"x32' C.M.P.
F & I 2-18" Metal Aprons

F.E. 222+42 Lt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons



F.E. 210+07 Rt.
Inpl. 18"X 24' C.M.P.
Remove
No Culv. Req'd

C.S.A.H. No. 16 211+08 Rt.
No Culv. Inpl.
No Culv. Req'd

216+12 ℄
Inpl. 24"X 36' S.C.P.
Remove
F & I 24"x54' SCP
F & I 2-24" Conc. Aprons

F.E. 221+38' Rt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons

225+48 ℄
Inpl. 24"X38' S.C.P.
Remove
F & I 24"x76' S.C.P.
F & I 2-24" Conc. Aprons

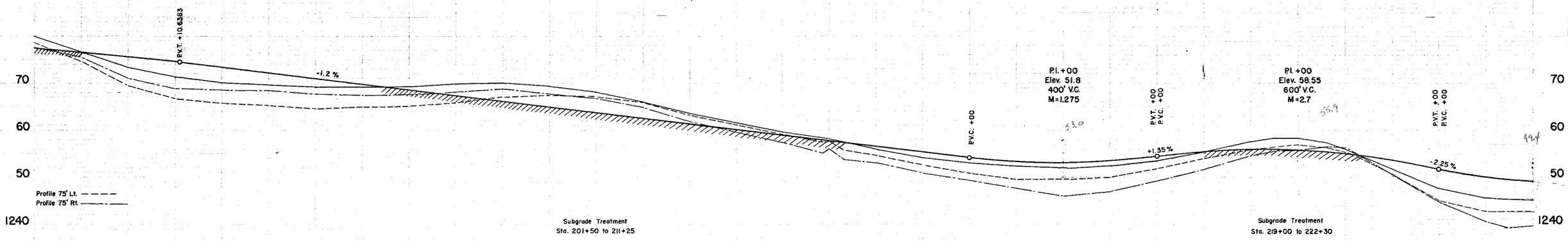
Cl 8 Gr 6 — Cl 1 Gr 1 — Cl 4 Gr 24

B.M. Elev. 1267.59
Spike in P.P.
32' Rt. 198+05

B.M. Elev. 1256.25
Spike in P.P.
32' Lt. 210+69

B.M. Elev. 1258.89
X in SW Cor. 1st Step
100' Rt. 209+80

B.M. Elev. 1257.87
Spike in P.P.
66' Rt. 221+99.



Subgrade Treatment
Sta. 201+50 to 211+25

Subgrade Treatment
Sta. 219+00 to 222+30

Exc. 2767
Emb. 1749

+23.9

Exc. 5440
Emb. 3381

+44.1

Exc. 3456
Emb. 2019

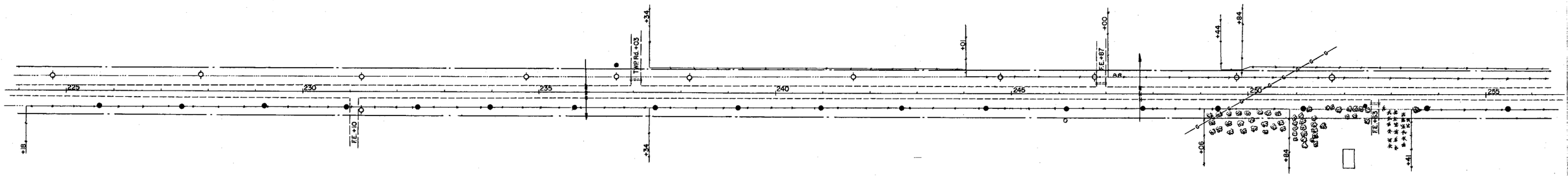
+88.7

| | | |

TWP Road 237+03 Lt.
Inpl. 15"X34' C.M.P.
Remove
F & I 18"x36' C.M.P.
F & I 2-18" Metal Aprons

F.E. 246+87 Lt.
Inpl. 15"X24' C.M.P.
Remove
No Culv. Req'd

250+11 E. Standard Oil Pipe Line



F.E. 231+10 Rt.
No Culv. inpl.
F & I 18"x28' C.M.P.
F & I 2-18" Metal Aprons

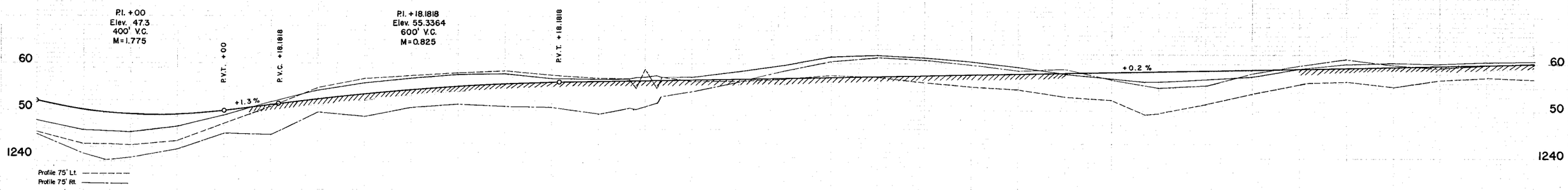
236+00 E.
Inpl. 18"X34' C.M.P.
Remove
No Culv. Req'd

247+69 E.
Inpl. 24"X36' C.M.P.
Remove
F & I 24"x 58' S.C.P.
F & I 2-24" Conc. Aprons

F.E. 252+63 Rt.
Inpl. 15"X24' C.M.P.
Remove
F & I 18"x 32' C.M.P.
F & I 2-18" Metal Aprons

B.M. Elev. 1253.61
Spike in P.P.
33' Rt. 237+46

B.M. Elev. 1257.27
Spike in P.P.
32' Lt. 253+73

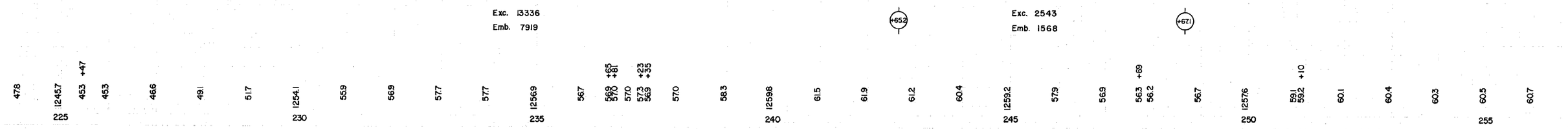


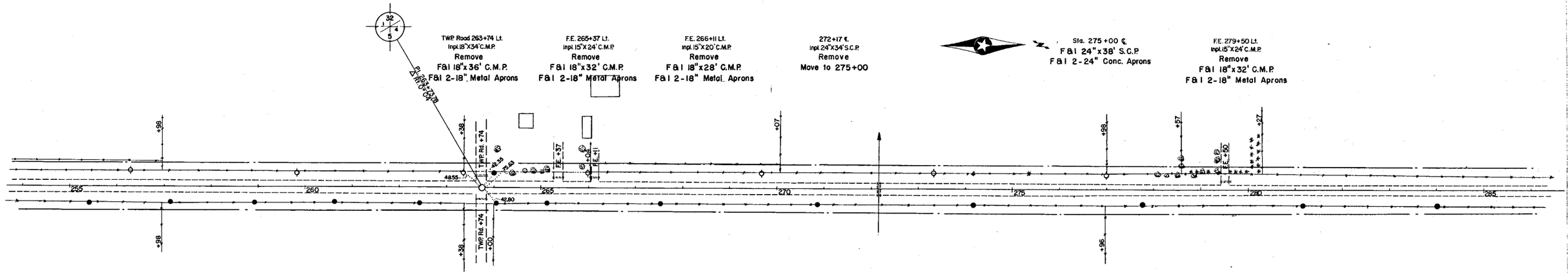
Subgrade Treatment
Sta. 228+60 to 246+00

Subgrade Treatment
Sta. 251+00 to 258+00

Exc. 13336
Emb. 7919

Exc. 2543
Emb. 1568





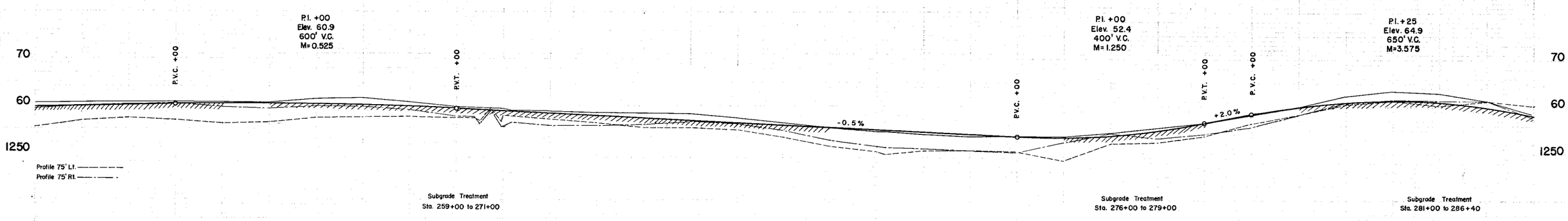
Cl 2 Gr 2

B.M. Elev. 1258.17
Spike in P.P.
32' Lt. 263+38

Cl 2 Gr 2

Cl 18 Gr 18

B.M. Elev. 1253.03
Spike in T.P.
32' Rt. 277+74



Subgrade Treatment
Sta. 259+00 to 271+00

Subgrade Treatment
Sta. 276+00 to 279+00

Subgrade Treatment
Sta. 281+00 to 286+40

Exc. 3675
Emb. 1807

Exc. 3202
Emb. 1551

Exc. 1736
Emb. 975

603 1260.5 607 607 605 606 1261.2 614 608 597 596 595 594 593 590 1258.9 586 584 582 573 1256.3 553 546 545 539 535 1253.6 536 544 553 566 1258.1 600 622 633 629 1261.2 585
255 260 265 270 275 280 285

S.A.P. 55-608-01.

290+29 ℄
Inpl. 30"X36' C.M.P.
Remove
F&I 30"x46' S.C.P
F&I 2-30" Conc. Aprons

F.E. 291+30 Lt.
No Culv. Inpl.
No Culv. Req'd

