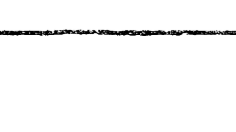
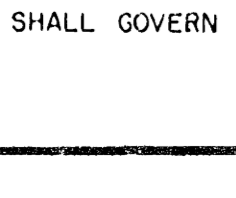
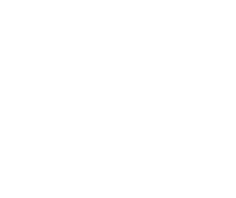
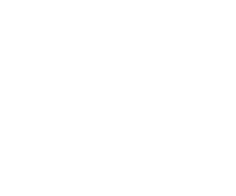
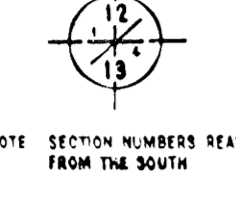


CONVENTIONAL SIGNS

| | | | |
|-----------------------------|-------|-------------------------|-------|
| STATE LINE | ----- | TIMBER | ..... |
| COUNTY LINE | ----- | BRUSH | ..... |
| TOWNSHIP OR RANGE LINE | ----- | ORCHARD | ..... |
| SECTION LINE | ----- | ROCK LEDGE | ..... |
| QUARTER LINE | ----- | SAND | ..... |
| SIXTEENTH LINE | ----- | EDGE OF CUT | ..... |
| RIGHT-OF-WAY LINE | ----- | TOE OF EMBANKMENT | ..... |
| PRESENT ROAD R/W LINE | ----- | CATCH BASIN | ..... |
| LIMITED ACCESS | ----- | MANHOLE | ..... |
| PROPERTY LINE (EXCEPT R/W) | ----- | TROOP NEST | ..... |
| VACATED PLATED PROPERTY | ----- | FIRE HYDRANT | ..... |
| COORDINATE OR CITY LIMITS | ----- | ARC LAMP | ..... |
| TRUNK HIGHWAY CENTER LINE | ----- | OTHER LAMP (HIGH 4-1/2) | ..... |
| RETAINING WALL | ----- | RAILROAD CROSSING SIGN | ..... |
| STEAM RAILROAD | ----- | RAILROAD CROSSING SIGN | ..... |
| ELECTRIC RAILROAD | ----- | RAILROAD CROSSING SIGN | ..... |
| RAILROAD RIGHT-OF-WAY LINE | ----- | RAILROAD CROSSING SIGN | ..... |
| CREEK | ----- | RAILROAD CROSSING SIGN | ..... |
| RAPIDS OR WATERFALL | ----- | RAILROAD CROSSING SIGN | ..... |
| DRY RUN | ----- | RAILROAD CROSSING SIGN | ..... |
| DRAINAGE DITCH | ----- | RAILROAD CROSSING SIGN | ..... |
| HIGH TENSION LINE | ----- | RAILROAD CROSSING SIGN | ..... |
| POWER POLE LINE | ----- | RAILROAD CROSSING SIGN | ..... |
| TELEPHONE OR TELEGRAPH LINE | ----- | RAILROAD CROSSING SIGN | ..... |
| TELEPHONE CONDUIT | ----- | RAILROAD CROSSING SIGN | ..... |
| GUARD RAIL | ----- | RAILROAD CROSSING SIGN | ..... |
| WIRE FENCE | ----- | RAILROAD CROSSING SIGN | ..... |
| RAILROAD SNOW FENCE | ----- | RAILROAD CROSSING SIGN | ..... |
| STONE WALL OR FENCE | ----- | RAILROAD CROSSING SIGN | ..... |
| WATER PIPE | ----- | RAILROAD CROSSING SIGN | ..... |
| SEWER PIPE | ----- | RAILROAD CROSSING SIGN | ..... |
| DRAIN TILE | ----- | RAILROAD CROSSING SIGN | ..... |
| GRAVEL PIT | ----- | RAILROAD CROSSING SIGN | ..... |
| SAND PIT | ----- | RAILROAD CROSSING SIGN | ..... |
| CLAY PIT | ----- | RAILROAD CROSSING SIGN | ..... |
| ROCK QUARRY | ----- | RAILROAD CROSSING SIGN | ..... |
| SPRINGS | ----- | RAILROAD CROSSING SIGN | ..... |
| MARSH | ----- | RAILROAD CROSSING SIGN | ..... |



NOTE SECTION NUMBERS READ FROM THE SOUTH

STATE OF MINNESOTA DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR GRADING

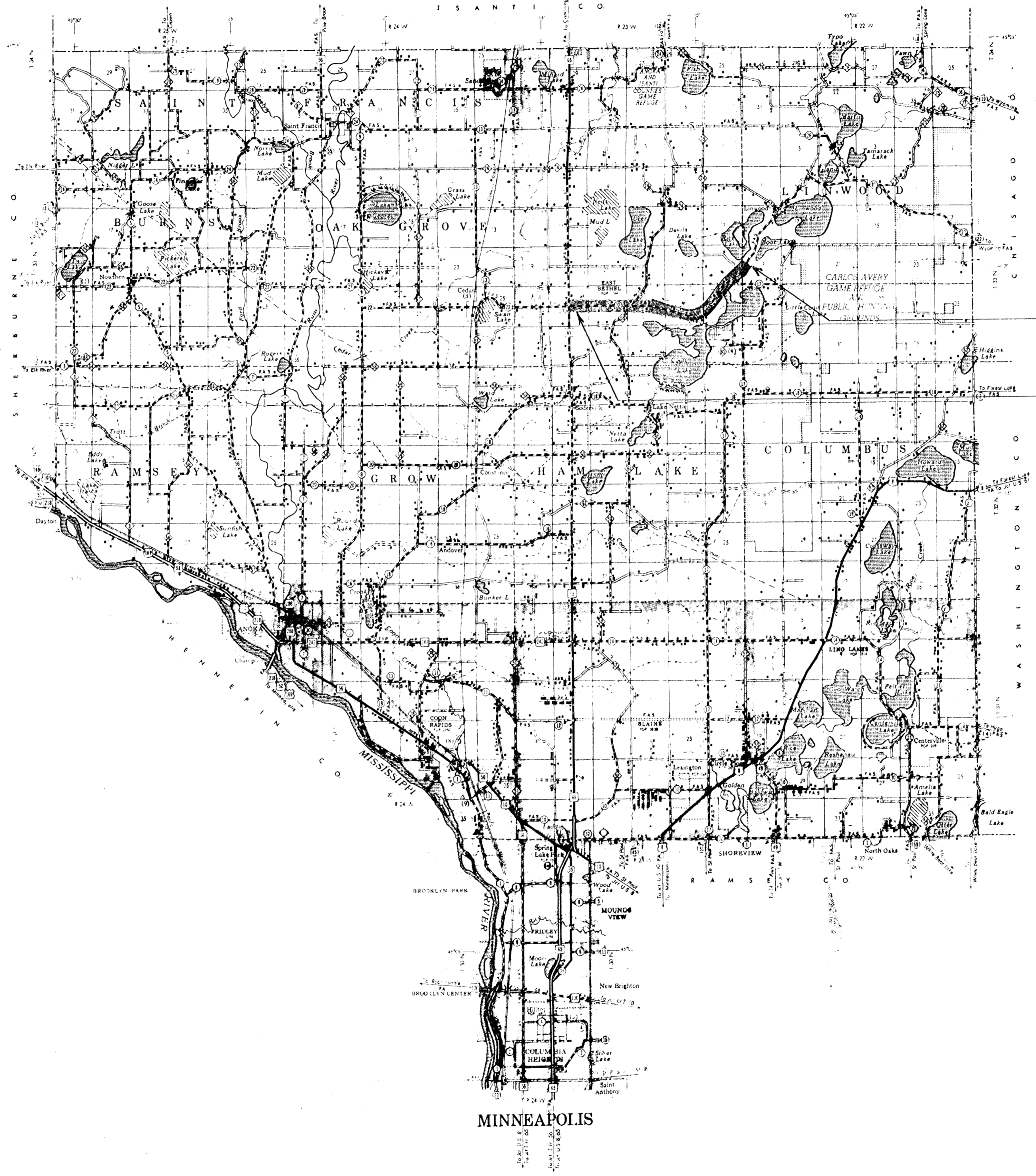
County State Aid Highway No. 22

BETWEEN T.H. NO. 65 23755 EAST OF CENTER OF SECTION 29 AND 1/2 MILE NE OF JCT WITH CSAH 17 730' EAST OF W 1/4 CORNER SECTION 19 From TWP. 33N. RANGE 23W. To TWP. 33N. RANGE 22W.

| | | | | |
|-------------------|-------|------|-------|-------|
| GROSS LENGTH | 28244 | FEET | 5.349 | MILES |
| BRIDGES LENGTH | 0 | FEET | 0 | MILES |
| EXCEPTIONS LENGTH | 0 | FEET | 0 | MILES |
| NET LENGTH | 28244 | FEET | 5.349 | MILES |

SCALES

- Plan 1 inch = 200 Feet
- PROFILE Horiz. 1 inch = 200 Feet, Vert. 1 inch = 20 Feet
- WORKING PLANS Horiz. 1 inch = 100 Feet, Vert. 1 inch = 10 Feet
- Cross Section 1 inch = 10 FEET
- LAYOUT Scale 1 inch = 100 Feet



END SP 02-622-05 S-6372(6) STA. 433+44

BEGIN SP 02-622-05 S-6372(6) STA. 151+00

MINN. PROJ. S-6372(6)

INDEX OF SHEETS

| | |
|-------------|--------------------------------|
| Sheet No. 1 | Title Sheet & Layout Map |
| No. 2 | Est. Quantities & Typical Sec. |
| No. 3 | To 8 Plan & Profile |
| No. 4 | To 37 Cross Sections |

DESIGN SPEED 55 M.P.H. PROJECTED TRAFFIC 813 ADT.

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

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.

Carlton J. Lundheim COUNTY ENGINEER DATE Jun 3, 1964 ANOKA COUNTY REG. NO. 2851

RECOMMENDED FOR APPROVAL [Signature] DISTRICT ENGINEER 1964

RECOMMENDED FOR APPROVAL [Signature] STATE AID ENGINEER 7-23, 1964

APPROVED [Signature] 19-2-64 STATE AID ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DISTRICT ENGINEER _____ DATE _____

S.A.P. Minn. Project No. S-6372(6) State Project No. 02-622-05

ANOKA County, Minnesota. County Proj. No. _____ Plan No. _____ Sheet 1 of 37 Sheets

SPECIFICATIONS

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JAN 1, 1964 SHALL GOVERN

ESTIMATED QUANTITIES

| SPECIFICATION NO. | ITEM | UNIT | MUNICIPAL | RURAL | TOTAL ESTIMATED QUANTITIES |
|-------------------|----------------------------------|-----------------|-----------|-------|----------------------------|
| 2101.501 | CLEARING | ACRE | 1.0 | 0.0 | 1.0 |
| 2101.502 | CLEARING | TREE | 6 | 0 | 6 |
| 2101.506 | GRUBBING | ACRE | 635 | 0.95 | 730 |
| 2101.507 | GRUBBING | TREE | 57 | 0 | 57 |
| 2104.501 | REMOVE PORTABLE CULV. | LIN. FT. | 453 | 0 | 453 |
| 2104.510 | REMOVE FENCE | LIN. FT. | 7284 | 1786 | 9070 |
| 557.621 | RESET FENCE | LIN. FT. | 6804 | 1786 | 8590 |
| 2106.501 | SPECIAL SWAMP EXC. | CU. YDS. | 3988 | 0 | 3988 |
| * 2105.501 | CLASS "A" EXC. | CU. YDS. | 103,157 | 7,134 | 110,291 |
| 2105.514 | SALVAGED BIT. MIX. ON ROAD | CU. YDS. (V.M.) | 10,689 | 530 | 11,219 |
| 2801.503 | STRUCTURE EXC. (CLASS U) | CU. YDS. | 616 | 0 | 616 |
| 2130.501 | WATER | M-GALLON | 294 | 14 | 308 |
| 2501.511-15 | F&I 15" C.M.P. CULV. | LIN. FT. | 153.8 | 136 | 167.4 |
| 2501.511-18 | F&I 18" C.M.P. CULV. | LIN. FT. | 76 | 0 | 76 |
| 2451.511 | SAND GRAVEL SUB-FOUNDATION | CU. YDS. (V.M.) | 384 | 0 | 384 |
| 2501.521-24 | F&I 24" R.C.P. CULV. CL. II | LIN. FT. | 130 | 0 | 130 |
| 2501.521-24 | F&I 24" R.C.P. CULV. CL. III | LIN. FT. | 202 | 0 | 202 |
| 2501.521-60 | F&I 60" R.C.P. CULV. CL. II | LIN. FT. | 62 | 0 | 62 |
| 2515.541-24 | F&I APRONS 24" S.C.P. CULV. | APRON | 12 | 0 | 12 |
| 2515.541-60 | F&I APRONS 60" S.C.P. CULV. | APRON | 2 | 0 | 2 |
| 2501.521-36 | F&I 36" R.C.P. CULV. CL. II | LIN. FT. | 44 | 0 | 44 |
| 2501.521-48 | F&I 48" R.C.P. CULV. CL. II | LIN. FT. | 76 | 0 | 76 |
| 2515.541-36 | F&I APRONS 36" S.C.P. CULV. | APRON | 2 | 0 | 2 |
| 2515.541-48 | F&I APRONS 48" S.C.P. CULV. | APRON | 2 | 0 | 2 |
| A 2574.501 | ROADSIDE SEEDING | ACRE | 46.14 | 2.03 | 48.17 |
| B 2575.501 | SURFACE MULCHING TYPE I (7) | TON | 298 | 16 | 314 |
| B 2575.506 | SURFACE MULCHING TYPE 6 (7) | GALLON | 2981 | 160 | 3141 |
| 2575.521 | WATER | M GALLON | 189 | 11 | 200 |
| C 2576.501 | SODDING | SQ. YD. | 2627 | 67 | 3300 |
| D 2123.503 | MOTOR GRADER | HOUR | 9 | 1 | 10 |
| D 2123.509 | DOZER | HOUR | 18 | 2 | 20 |
| E 2415.503 | STRUCTURE EXCAVATION (CLASS U) | CU. YD. | 49 | 0 | 49 |
| E 2415.512 | F&I 98" SPAN-10 GAGE SPR-A-CULV. | LIN. FT. | 14 | 0 | 14 |
| E 2451.511 | SAND GRAVEL SUB-FOUNDATION | CU. YD. | 60 | 0 | 60 |

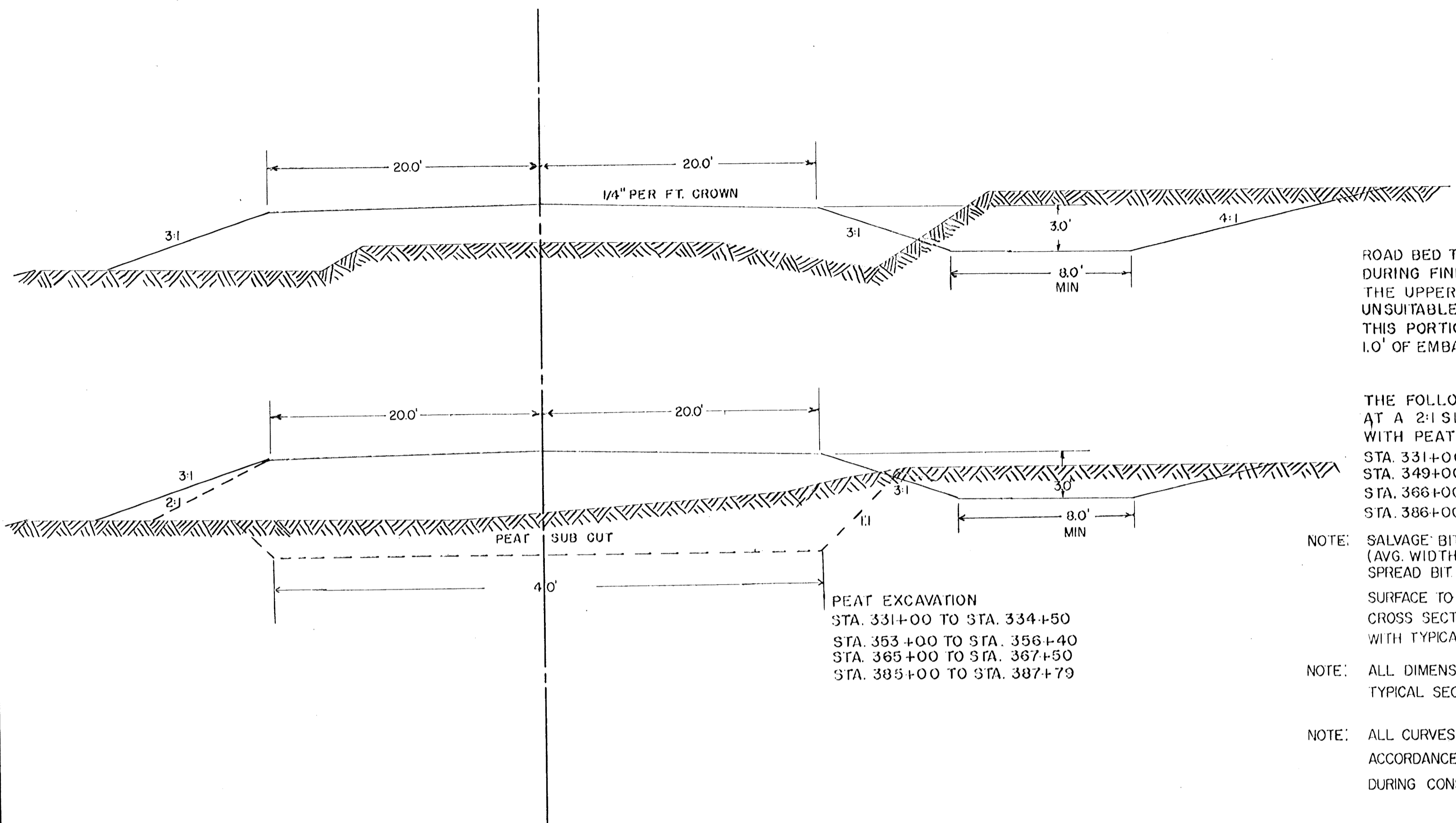
- A COUNTY WILL FURNISH SEED ON PROJECT (36 LBS. PER ACRE) CL.17
- B 2575.501 & 2575.506 TO BE USED FOR TYPE 7 MULCHING ON INSLOPES NOT COVERED BY PEAT.
- C ALL AREAS TO BE SODDED SHALL BE COVERED WITH MINIMUM OF 3 INCHES OF TOPSOIL OR CLAY FOUND WITHIN LIMITS OF THIS PROJECT. THIS WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXC.
- D EQUIPMENT HOURS TO BE USE FOR ROAD OBLITERATION
- E (3:1 BEVEL ENDS)
- * ITEM REDUCED BY QUANTITY OF SALVAGE BIT IN CUT AREAS ONLY

STANDARD DETAIL PLATES

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

| PLATE NO. | DESCRIPTION |
|---------------|-----------------------------|
| 3000 B | S.C.P. CLASS II & III |
| 3100-C 3102-B | CONCRETE APRONS |
| 8000A, 8001 | STANDARD SIGNS & BARRICADES |
| 8003 8008 A | |
| 9000 | APPROACHES & ENTRANCES |
| 3050 | STRUCTURAL PLATE STRUCTURES |
| | |
| | |
| | |
| | |
| | |

TYPICAL GRADING SECTIONS



SPECIAL DETAILS

ROAD BED TO BE BLADED TO 1/4" PER FT. PITCH DURING FINISHING OPERATIONS. THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN THE UPPER 1.0' OF ROADBED THIS PORTION SHALL BE PLACED BELOW THE UPPER 1.0' OF EMBANKMENT DURING CONSTRUCTION.

THE FOLLOWING AREAS BUILD ROAD INSLOPES AT A 2:1 SLOPE COMPLETE TO A 4:1 INSLOPES WITH PEAT EXCAVATION.
 STA. 331+00 TO 334+00 LT. & RT.
 STA. 349+00 TO 356+00 RT. ONLY.
 STA. 366+00 TO 367+00 LT. & RT.
 STA. 386+00 TO 387+54 LT. & RT.

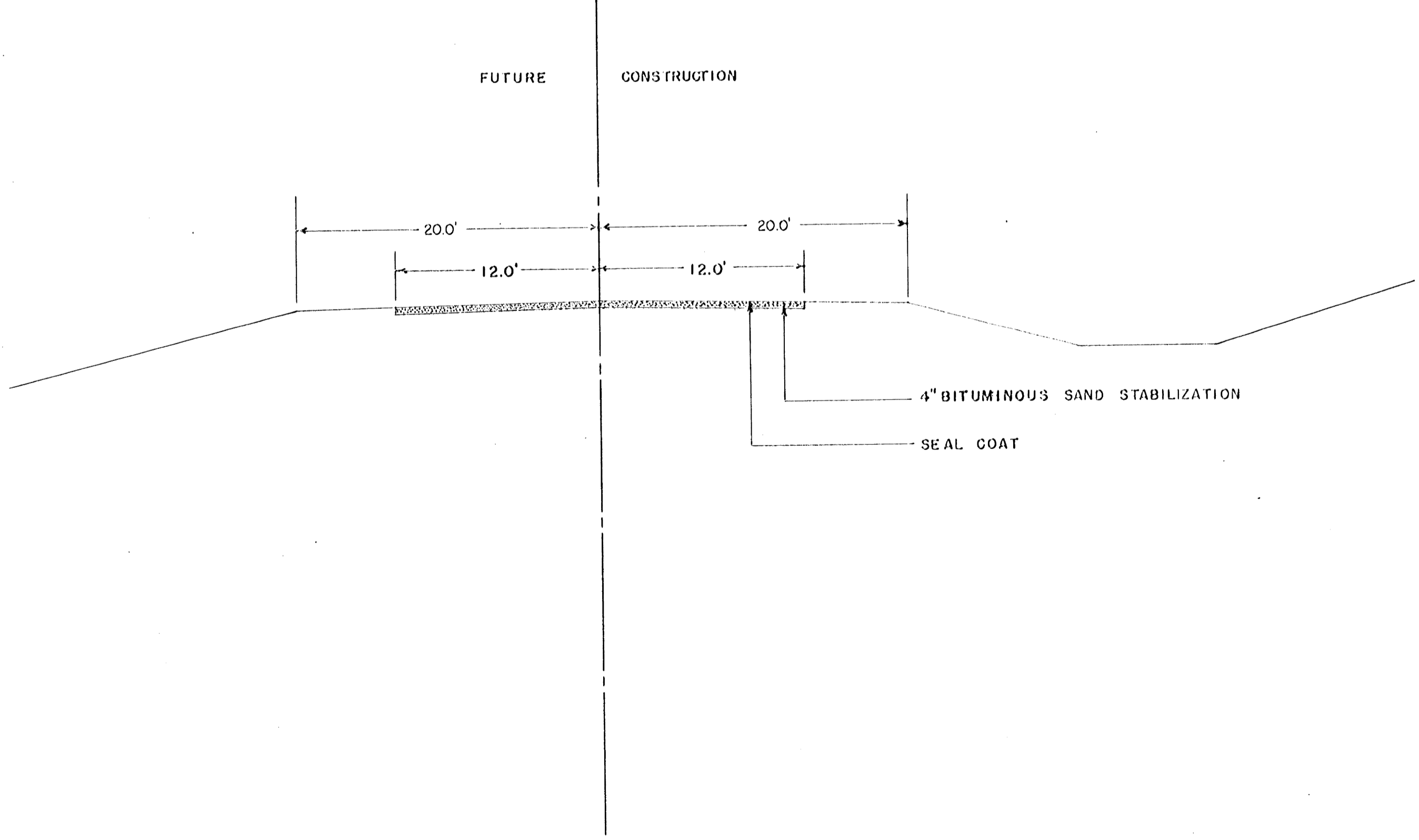
NOTE: SALVAGE BIT AVERAGE 23.95 CU. YDS. PER STA. (AVG. WIDTH 19.4' AVG. DEPTH 4')
 SPREAD BIT SALVAGE OVER ENTIRE ROAD SURFACE TO DEPTH OF AVAILABLE QUANTITIES
 CROSS SECTIONS ARE TO BE CONSTRUCTED IN CONFORMANCE WITH TYPICAL SECTION THIS PAGE.

NOTE: ALL DIMENSIONS & SLOPES SHOWN ON TYPICAL SECTION ARE APPROXIMATE ONLY

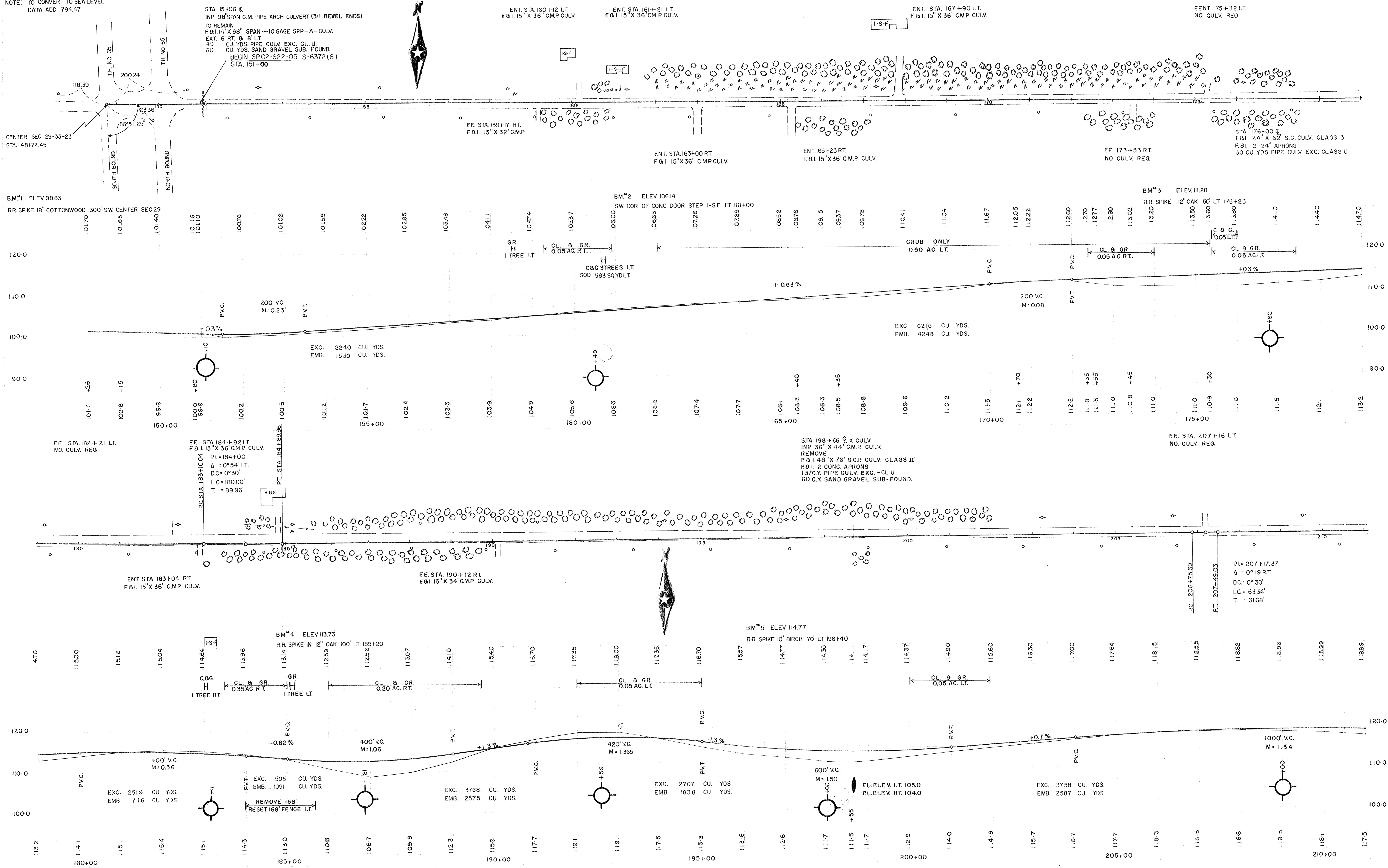
NOTE: ALL CURVES WILL BE SUPERELEVATED IN ACCORDANCE WITH THE DESIGN STANDARDS DURING CONSTRUCTION

NOTE: WORKING AROUND MISC. UTILITY POLES WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXC.

TYPICAL BASE & SURFACE SECTIONS



NOTE: TO CONVERT TO SEA LEVEL
DATA ADD 794.47



FE. STA. 215+40 LT.
F&I 15" X 34" C.M.P. CULV.

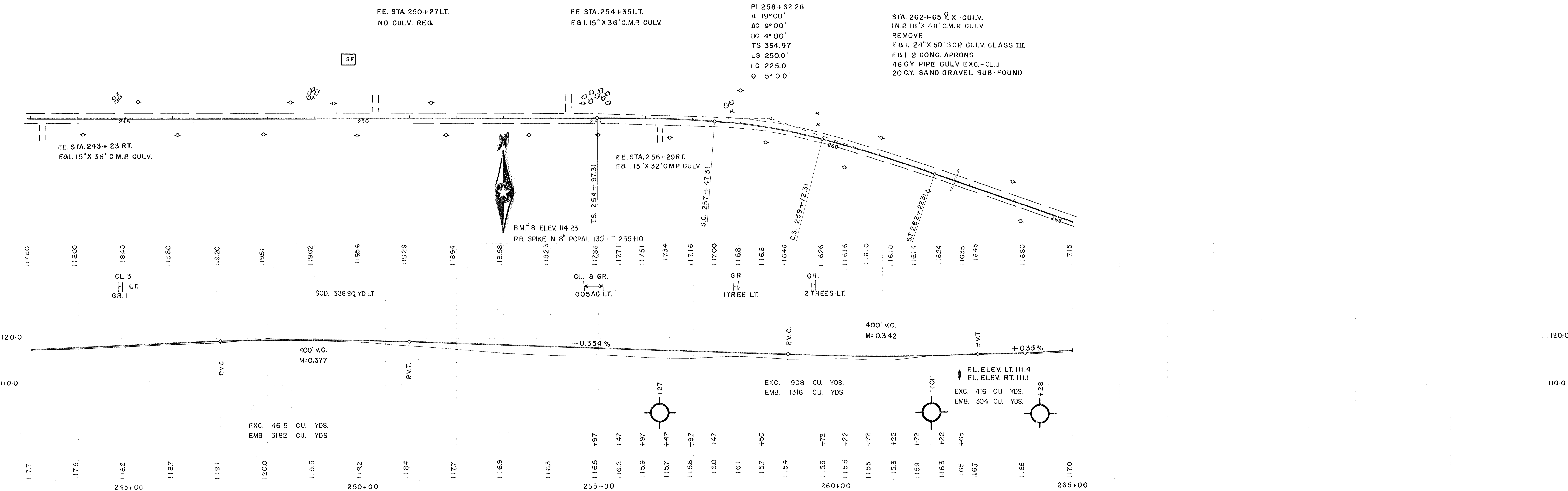
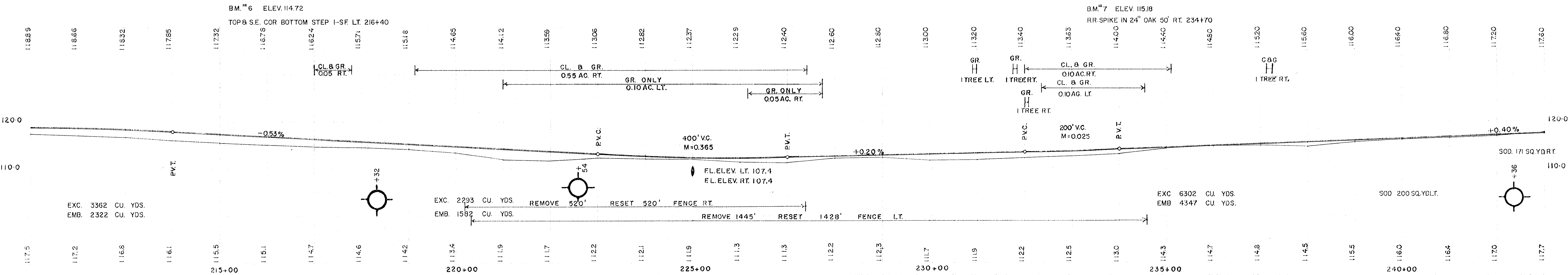
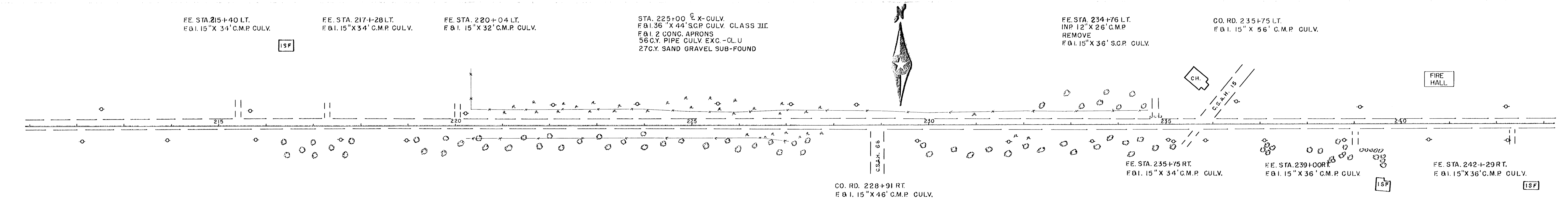
FE. STA. 217+28 LT.
F&I 15" X 34" C.M.P. CULV.

FE. STA. 220+04 LT.
F&I 15" X 32" C.M.P. CULV.

STA. 225+00 C.C. X-CULV.
F&I 36" X 44" S.C.P. CULV. CLASS III
F&I 2 CONC. APRONS
56 CY. PIPE CULV. EXC.-CLU
27 CY. SAND GRAVEL SUB-FOUND

FE. STA. 234+76 LT.
INP 12" X 26" C.M.P.
REMOVE
F&I 15" X 36" S.C.P. CULV.

CO. RD. 235+75 LT.
F&I 15" X 56" C.M.P. CULV.



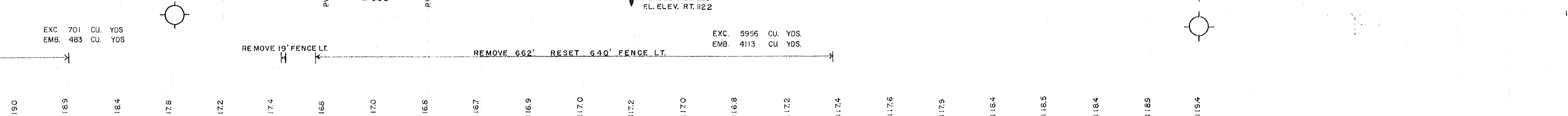
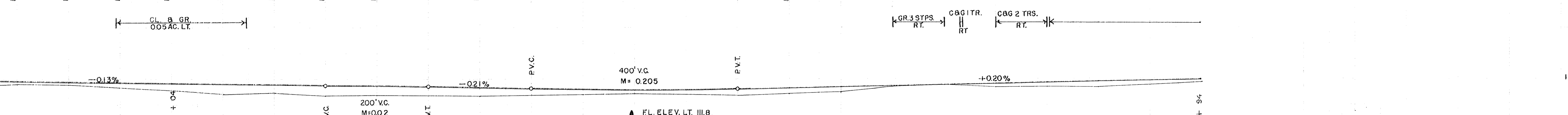
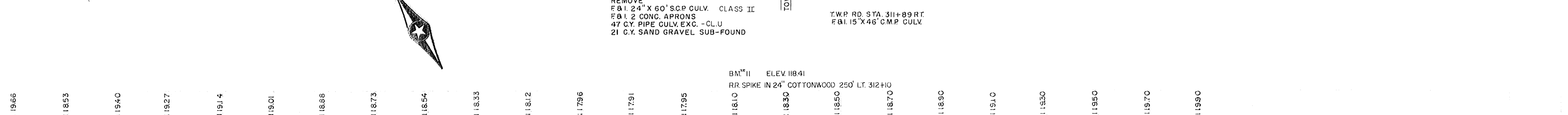
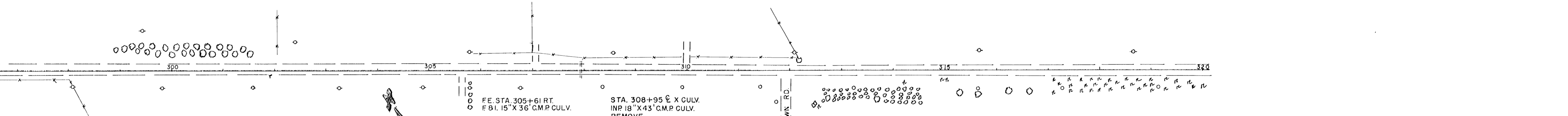
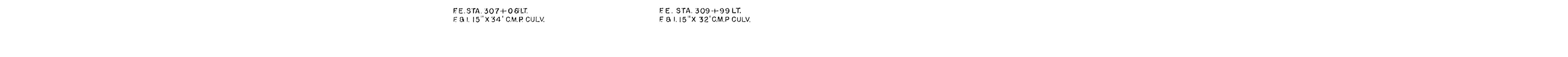
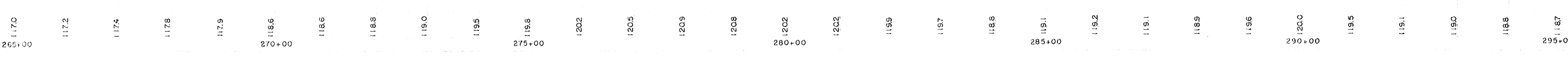
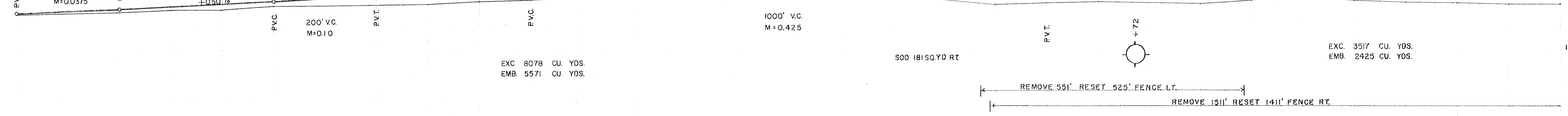
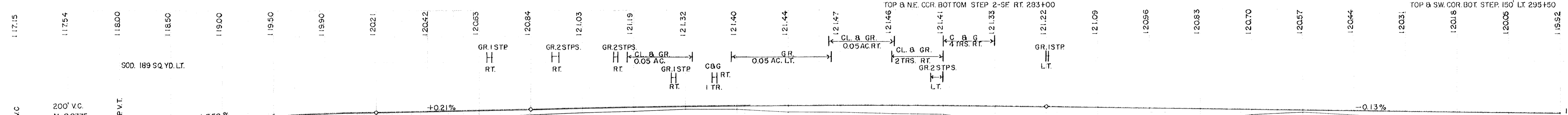
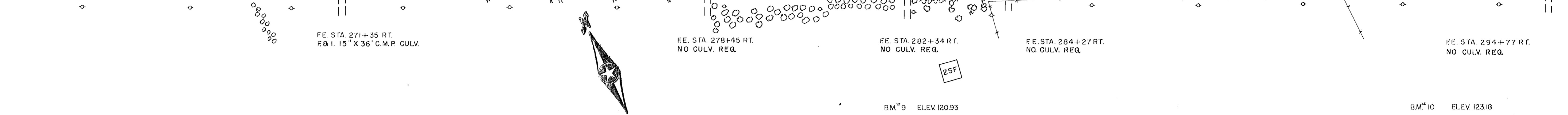
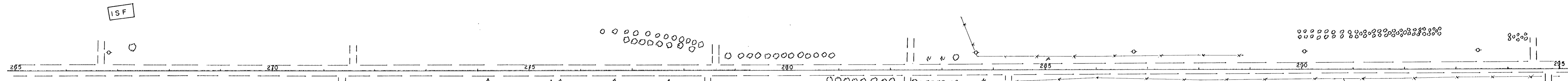
FE. STA. 266+66 LT.
F&I 15" X 36" C.M.P. CULV.

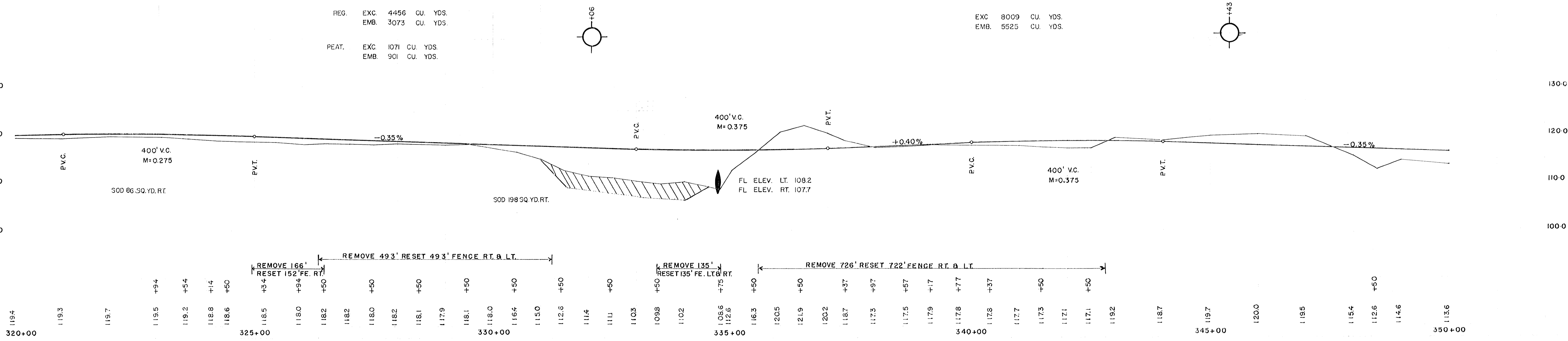
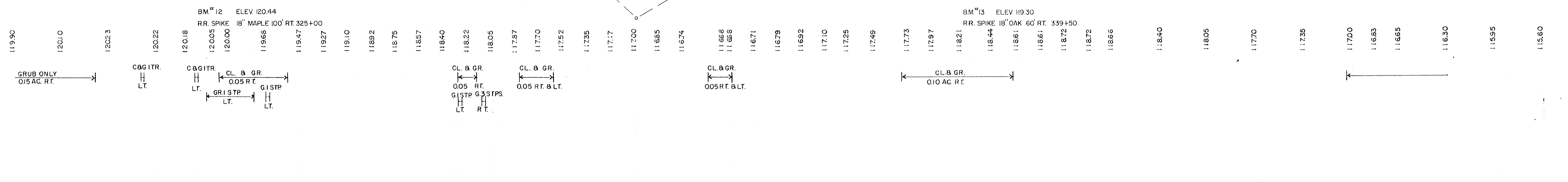
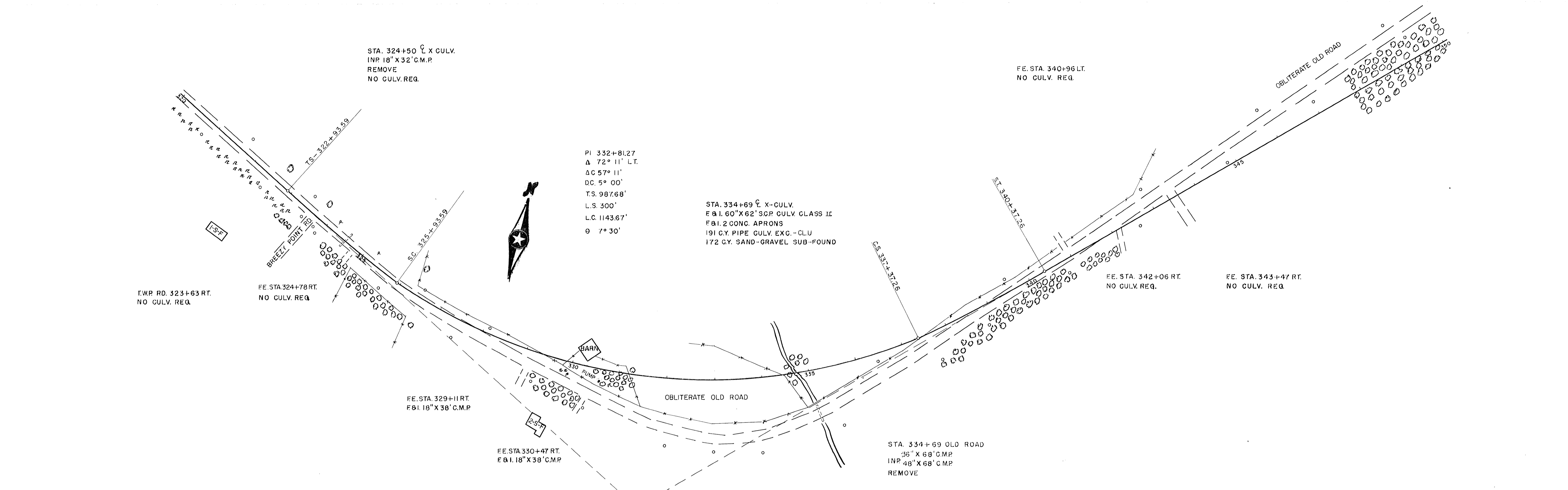
FE. STA. 271+57 LT.
F&I 15" X 36" C.M.P. CULV.

FE. STA. 278+62 LT.
NO CULV. REQ.

FE. STA. 282+37 LT.
NO CULV. REQ.

FE. STA. 294+49 LT.
NO CULV. REQ.

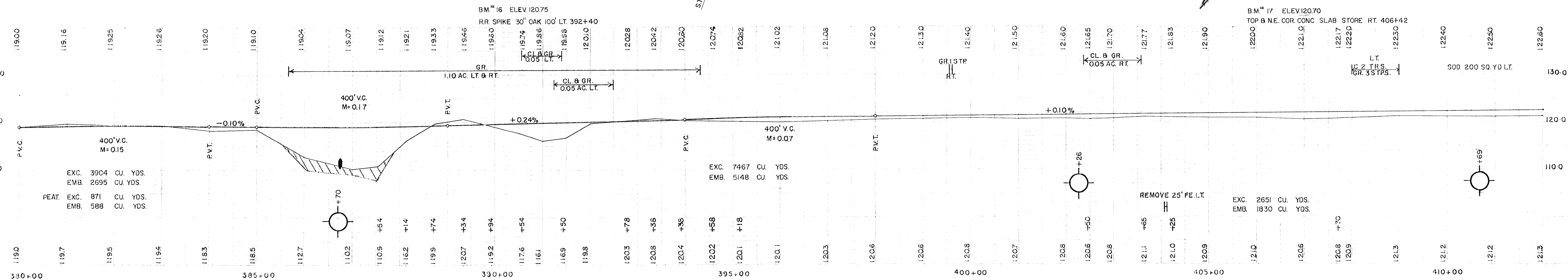
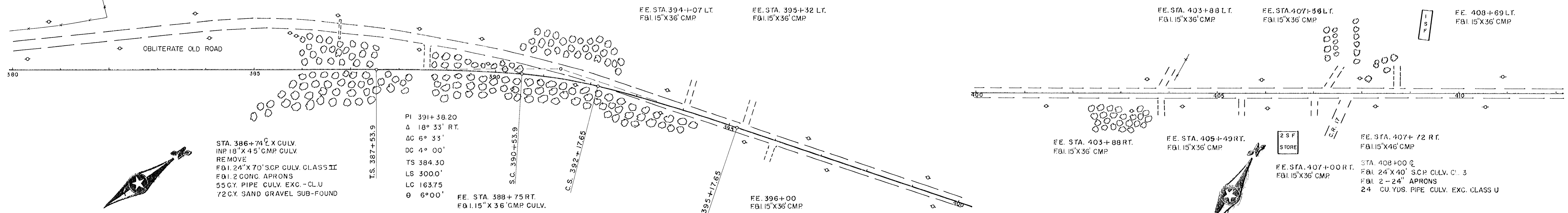
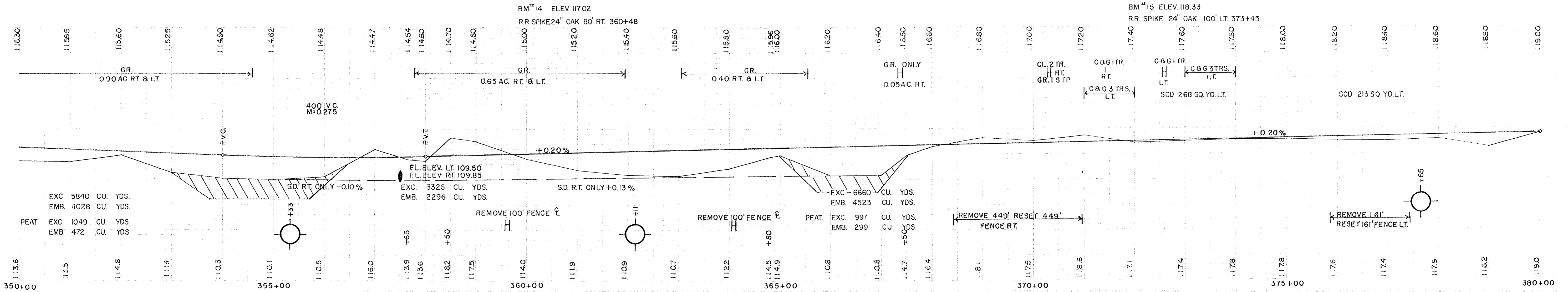
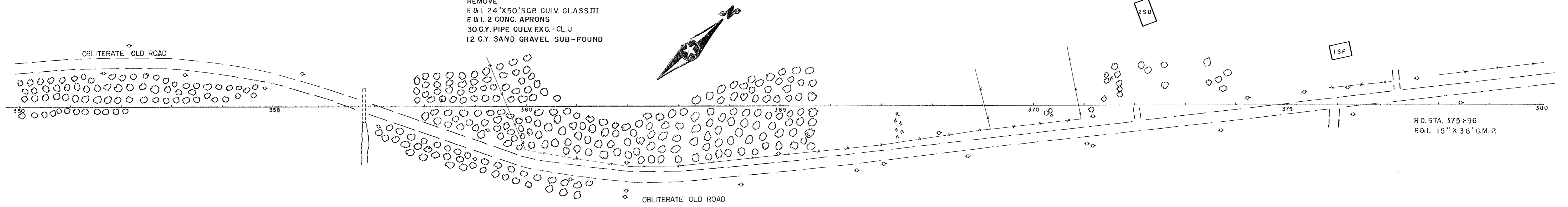




STA. 357+50 CULV.
 INP. 24" X 79' C.M.P.
 REMOVE
 F&I 24" X 50' S.C.P. CULV. CLASS III
 F&I 2 CONC. APRONS
 30 C.Y. PIPE CULV. EXC. - CL.U
 12 C.Y. SAND GRAVEL SUB-FOUND

FE. STA. 372+01 LT.
 F&I 15" X 36' C.M.P.

FE. STA. 377+19 LT.
 F&I 15" X 36' C.M.P.

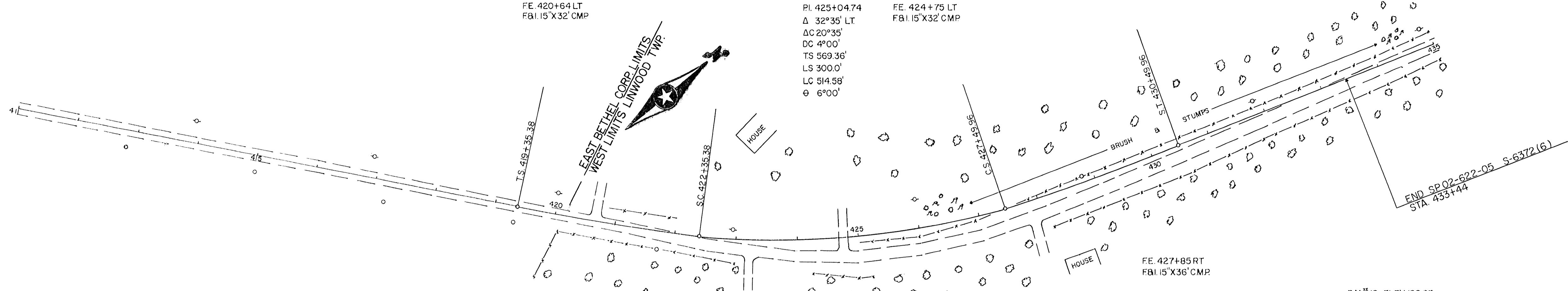
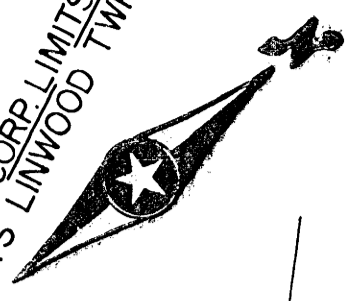


FE. 420+64 LT
F&I 15'X32' CMP

PL 425+04.74
Δ 32°35' LT
ΔC 20°35'
DC 4°00'
TS 569.36'
LS 300.0'
LC 514.58'
θ 6°00'

FE. 424+75 LT
F&I 15'X32' CMP

EAST BETHEL CORRLIMITS
WEST LIMITS LINWOOD TWP.



END SP.02-622-05 S-6372(6)
STA. 433+44

BM[#] 18 ELEV. 122.53
R.R. SPIKE 18" OAK 100' RT. 422+00

BM[#] 19 ELEV. 122.93
R.R. SPIKE 18" OAK 75' LT. 436+50

