

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR GRADING

County State Aid Highway No. 22

BETWEEN 1/2 MILE NE. OF JCT. C.S.A.H. No. 17 AND 1/4 MILE EAST OF JCT. C.S.A.H. No. 26
From APPROX 1/4 MILE EAST OF W. 1/4 CORNER SECTION 19, TWP. 33 N. RANGE 22 W. To APPROX 620' NORTH & 690' WEST OF THE E. 1/4 COR. SEC. 9, TWP. 33 N. RANGE 22 W.
Give proper reference to Sections, Township and Range

GROSS LENGTH 21,207 FEET 4.02 MILES
BRIDGES LENGTH 0 FEET 0 MILES
EXCEPTIONS LENGTH 0 FEET 0 MILES
NET LENGTH 21,207 FEET 4.02 MILES

Plan 1 Inch = 200 Feet
PROFILE Horiz. 1 Inch = 200 Feet, Vert. 1 Inch = 20 Feet
SCALES WORKING PLANS Horiz. 1 Inch = 100 Feet, Vert. 1 Inch = 10 Feet
LAYOUT Scale 1 Inch = 100 Feet

END S.P. 02-622-06 S-6372(7)
STA. 643+87
643+17.70
642+60.70
555+99.70
555+26.85
485+05.93
485+20.80
449+55.50
449+05.50
BEGIN S.P. 02-622-06 S-6372(7)
STA. 433+44

MINN. PROJ. S-6372(7)

INDEX OF SHEETS
Sheet No. 1. Title Sheet & Layout Map
" No. 2. Est. Quantities & Typical Sec.
" No. 3. To 7 Plan & Profile

DESIGN SPEED 55 M.P.H.

DESIGN DATA

ADT (CURRENT YEAR) 1963 346
ADT (PROJECTED 1958) 807
T (HEAVY COMMERCIAL) 10 %
DESIGN SPEED 55 M.P.H.
SOIL FACTOR 50 %
STRUCTURAL DESIGN 7 ULT. 9

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.

Edgar C. Pearson COUNTY ENGINEER DATE July 9, 1965
ANOKA COUNTY REG. NO. 2551
RECOMMENDED FOR APPROVAL *Edgar C. Pearson* DISTRICT ENGINEER 7-9 1965
RECOMMENDED FOR APPROVAL *J. T. ...* 7-23 1965
APPROVED 7-23 1965 *J. M. ...* STATE AID ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DISTRICT ENGINEER _____ DATE _____
S.A.P. _____
State Project No. 02-622-06

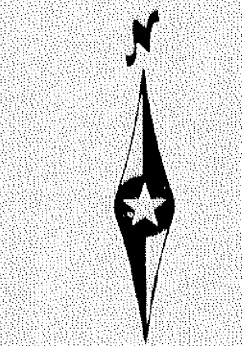
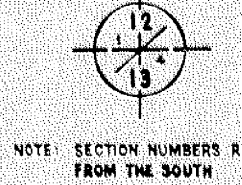
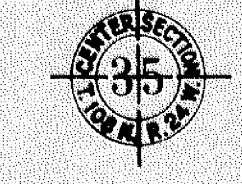
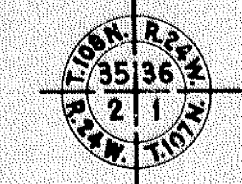
MICRO-FILMED

Minn. Project No. S-6372(7)

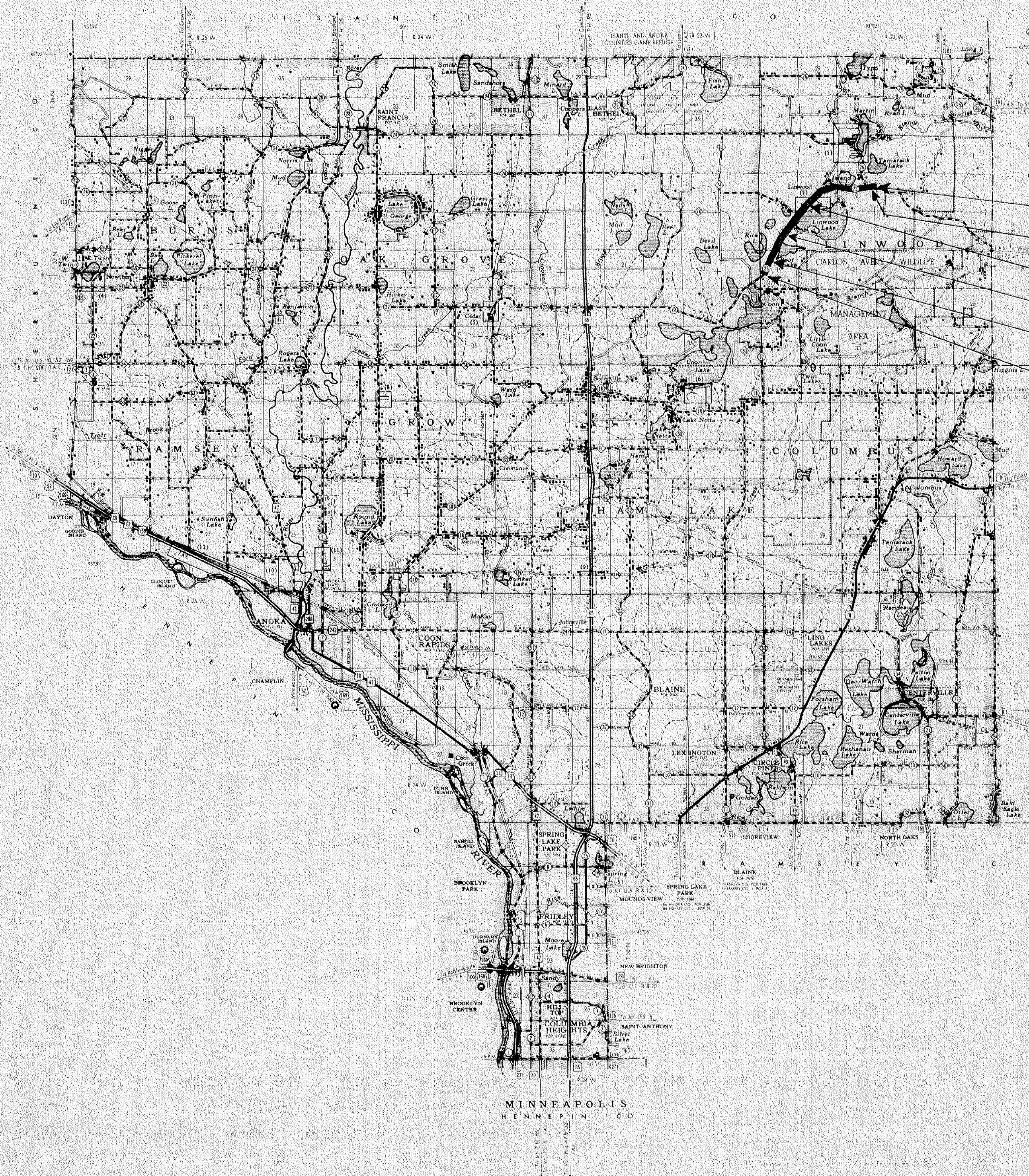
ANOKA County, Minnesota. County Proj. No. _____ Plan No. _____ Sheet 1 of 7 Sheets

CONVENTIONAL SIGNS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- RIGHT-OF-WAY LINE
- PRESENT ROAD "A" LINE
- LIMITED ACCESS
- PROPERTY LINE (Large Lot Line)
- UNDEVELOPED PROPERTY
- CORNER OF CITY LIMITS
- TRUNK HIGHWAY CENTER LINE
- RETAINING WALL
- STEAM RAILROAD
- ELECTRIC RAILROAD
- RAILROAD RIGHT-OF-WAY LINE
- CREEK
- RAPIDS OR WATERFALL
- DRY RUN
- GRANITE DITCH
- HIGH TENSION LINE
- POWER POLE LINE
- TELEPHONE OR TELEGRAPH LINE
- TELEPHONE CONDUIT
- GUARD RAIL
- WIRE FENCE
- BARBED SNOW FENCE
- BOARD OR HIGHWAY SNOW FENCE
- STONE WALL OR FENCE
- RAIL MAIN
- WATER PIPE
- SEWER PIPE
- SEAM TILE
- GRAVEL PIT
- SAND PIT
- CLAY PIT
- ROCK QUARRY
- SPRINGS
- MARSH
- TIMBER
- BUSH
- ORCHARD
- ROCK LEDGE
- SAND
- EDGE OF CUT
- TOE OF EMBANKMENT
- CATCH BASIN
- MANHOLE
- DROP INLET
- FIRE HYDRANT
- ARC LAMP
- OTHER LAMPS (HIGH BAY)
- RAILROAD CROSSING SIGN
- RAILROAD CROSSING BALL
- ELECTRIC WARNING SIGN
- CROSSING GATE
- CATTLE GUARD
- OVERHEAD (Highway Over)
- UNDERPASS (Highway Under)
- ABUTMENT, WALL & PIER
- BRIDGE
- CULVERT
- BUILDING (One Story Frame)
- CONCRETE S-STONE T-TILE B BRICK ST-STUCCO
- HEDGE
- IRON PIPE
- STONE MONUMENT
- WOOD STAKE OR NUB
- MEANDER CORNER



NOTE: SECTION NUMBERS READ FROM THE SOUTH



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

STATEMENT OF ESTIMATED QUANTITIES

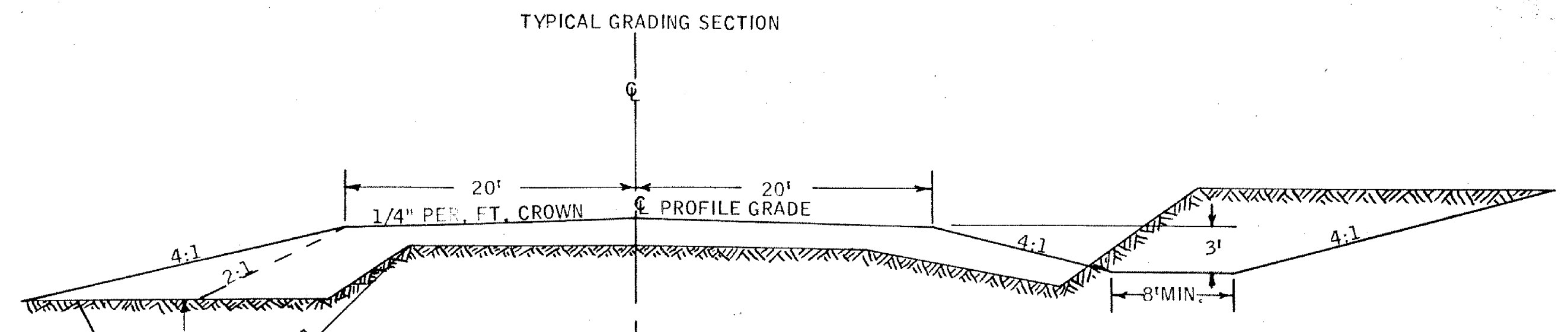
ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
ITEMS WITHOUT ALTERNATES			
GRADING	ACRE	17.55	
ROOTING	TREE	18	
ROOTING	ACRE	26.50	
ROOTING	TREE	18	
REMOVE PORTABLE CULV.	LIN. FT.	420	
REMOVE FENCE	LIN. FT.	12,315	
SET FENCE	LIN. FT.	10,665	
CLASS "A" EXC.	CU. YDS.	130,088	
BORROW EXC. (CLASS "A")	CU. YDS.	22,190	
ROAD PIT STRIPPING	CU. YDS.	3,083	
SPREAD BIT, MIX ON ROAD	CU. YDS.	8,770	
FOR GRADER	HOUR	12	
APPLY GELINE (ONE CU. YD.)	HOUR	200	
GRADING	HOUR	6	
APPLY WEARING COURSE IN PLACE	CU. YDS.	3300	
INSTALL P.C. CONC. CATTLE PASS 5' HIGH	LIN. FT.	56	
INSTALL P.C. CONC. CATTLE PASS END SECTION 5' HIGH	SECTION	2	
CONCRETE	M-GAL.	250	
STRUCTURE EXC. (Class - U)	CU. YDS.	26	
STRUCTURE EXC. (Class U)	CU. YDS.	836	
INSTALL 36" BIT. COATED C.M.P. CULV.	LIN. FT.	80	
INSTALL 48" C.M. CULV.	LIN. FT.	37	
INSTALL 24" R.C.P. CULV. CL. 2	LIN. FT.	202	
INSTALL 48" R.C.P. CULV. CL. 2	LIN. FT.	110	
INSTALL 54" R.C.P. CULV. CL. 2	LIN. FT.	60	
INSTALL 72" R.C.P. CULV. CL. 4	LIN. FT.	206	
INSTALL BIT. COATED METAL APRON FOR 36" C.M.P.	APRON	2	
INSTALL CONC. APRONS FOR 24" S.C.P.	APRON	6	
INSTALL CONC. APRONS FOR 48" S.C.P.	APRON	2	
INSTALL CONC. APRONS FOR 54" S.C.P.	APRON	2	
INSTALL CONC. APRONS FOR 72" S.C.P.	APRON	2	
ROADSIDE SEEDING	ACRE	44.04	
SPREAD FACE MULCH TYPE 1 (7)	TON	39.34	
SPREAD FACE MULCH TYPE 6 (7)	GAL.	3934	
ROADSIDE DRAINAGE	SQ. YDS.	2662	
ALTERNATE NO. 1 - 1			
INSTALL 15" C.M.P. CULV.	LIN. FT.	1318	
INSTALL 18" C.M.P. CULV.	LIN. FT.	152	
ALTERNATE NO. 1 - 2			
INSTALL 15" R.C.P. CULV. CL. 2	LIN. FT.	1318	
INSTALL 18" R.C.P. CULV. CL. 2	LIN. FT.	152	
ALTERNATE NO. 1 - 3			
INSTALL 15" C.A.P. CULV.	LIN. FT.	1318	
INSTALL 18" C.A.P. CULV.	LIN. FT.	152	

TO BE USED FOR ROAD OBLITERATION AND TRENCHING AS PER TYPICAL SECTION. SEED ON PROJECT, SEE SPECIAL PROVISIONS. EXPOSED SHALL BE COVERED WITH A MINIMUM OF 3 INCHES OF TOPSOIL OR CLAY MIXTURES OF THIS PROJECT. THIS WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXC. TO BE REPLACED UNIFORMLY ON BOTTOMS AND SLOPES OF BORROW PITS

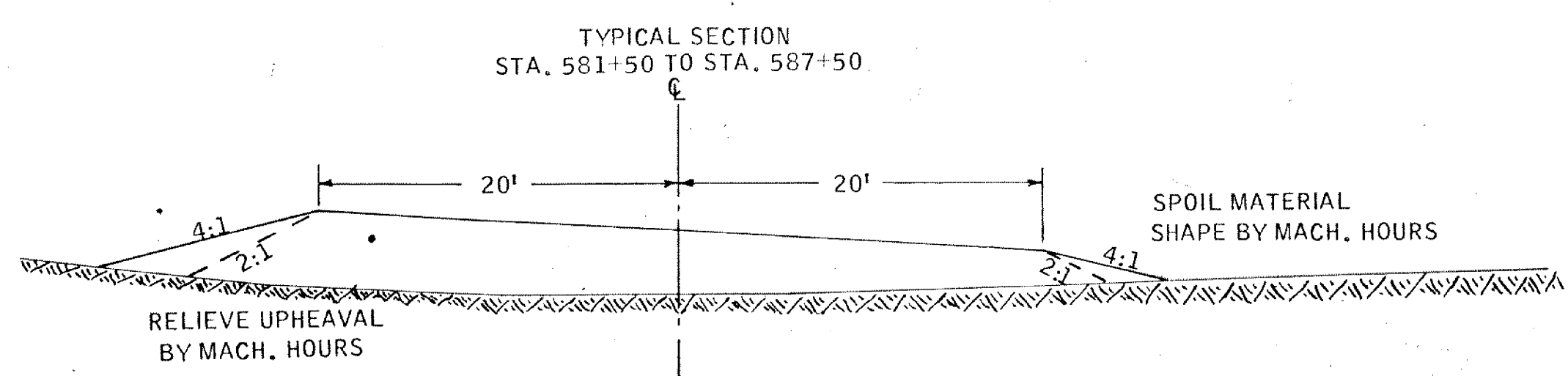
Standard Detail plates, approved by the Bureau of Public Works, are to be used on this project.

DESCRIPTION
STANDARD SIGNS & BARRICADES
STANDARD SIGNS & BARRICADES
ROADWAYS AND ENTRANCES
REINFORCED CONCRETE PIPE
CAST CONCRETE CATTLE PASS
CONCRETE APRON FOR REINFORCED CONCRETE PIPE
METAL APRON FOR C.M. PIPES
WORKING AT PIPE CULVERT ENDS

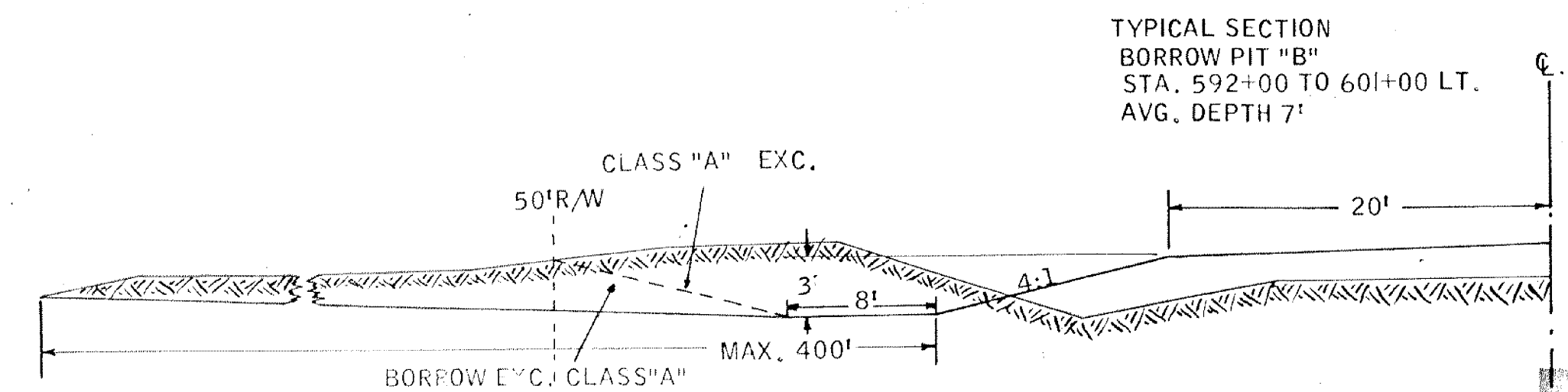
- NOTE: SALVAGE BIT, AVERAGE 25.54 CU. YDS. PER STA. (AVG. WIDTH 20.3', AVG. DEPTH 4") SPREAD BIT. SALVAGE OVER ENTIRE ROAD SURFACE TO DEPTH OF AVAILABLE QUANTITIES.
- NOTE: CROSS SECTIONS ARE TO BE CONSTRUCTED IN CONFORMANCE WITH TYPICAL SECTION THIS PAGE.
- NOTE: ROAD BED TO BE BLADED TO 1/4" PER FT. PITCH DURING FINISHING OPERATIONS. THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN UPPER 1.0' OF ROAD BED. THIS PORTION SHALL BE PLACED BELOW THE UPPER 1.0' OF EMBANKMENT DURING CONSTRUCTION.
- NOTE: ALL DIMENSIONS AND SLOPES SHOWN ON TYPICAL SECTION ARE APPROXIMATELY 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.



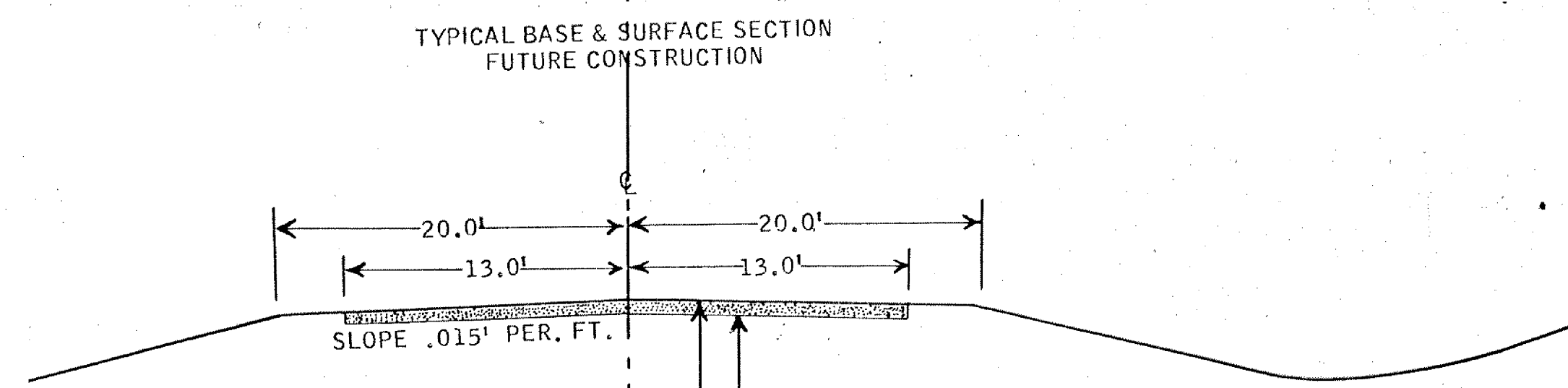
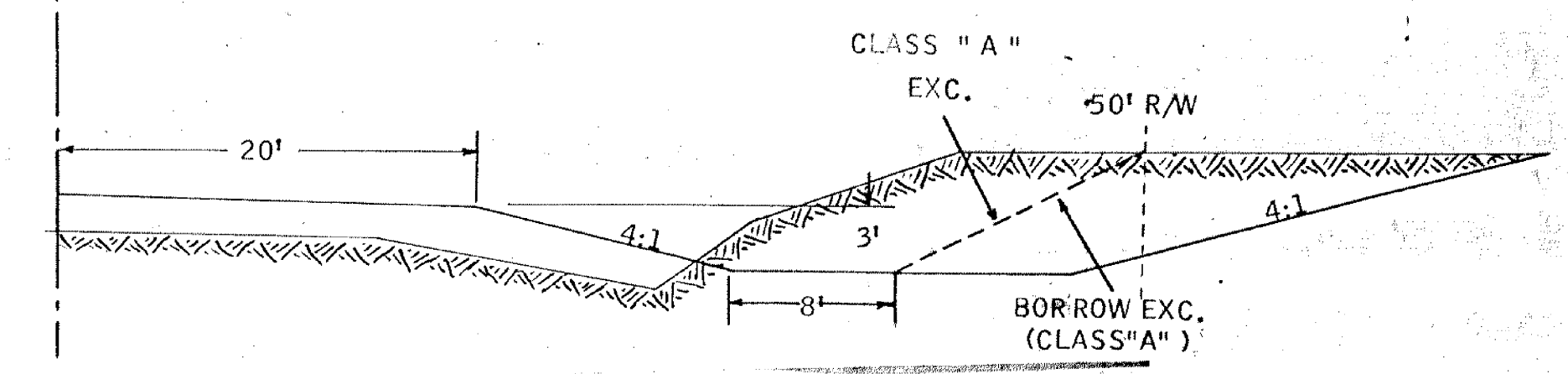
STA. 553+00 TO STA. 560+00 LT. & RT. EXCAVATE UNSUITABLE MATERIAL BY MACHINE HOURS, BACKFILL WITH MATERIAL FROM BORROW PIT RT. STA. 570+00. CONSTRUCT INSLOPES AT A 2:1 INSLOPE, COMPLETE TO A 4:1 INSLOPE WITH SAID EXCAVATION.



RELIEVE UPHEAVAL BY MACH. HOURS. MAINTAIN OVERLOAD TO FORCE SUBSIDENCE SECURE OVERLOAD FROM BORROW PIT "B".



TYPICAL SECTION BORROW PIT "A" STA. 562+00 TO 572+00 RT.

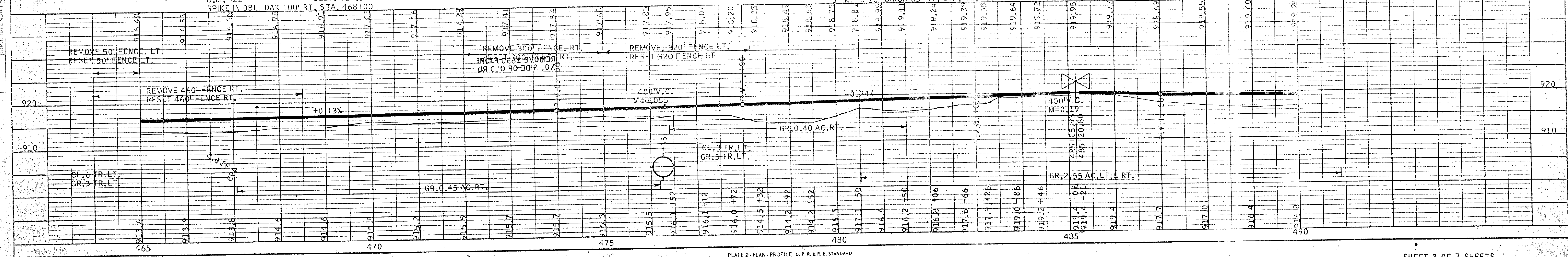
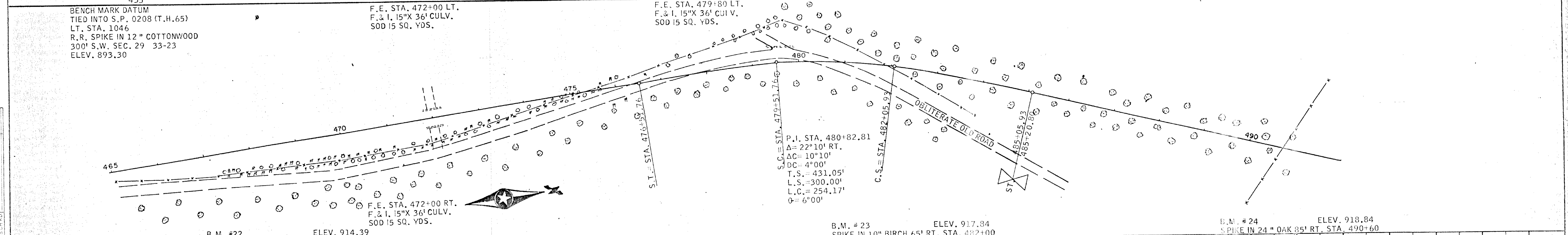
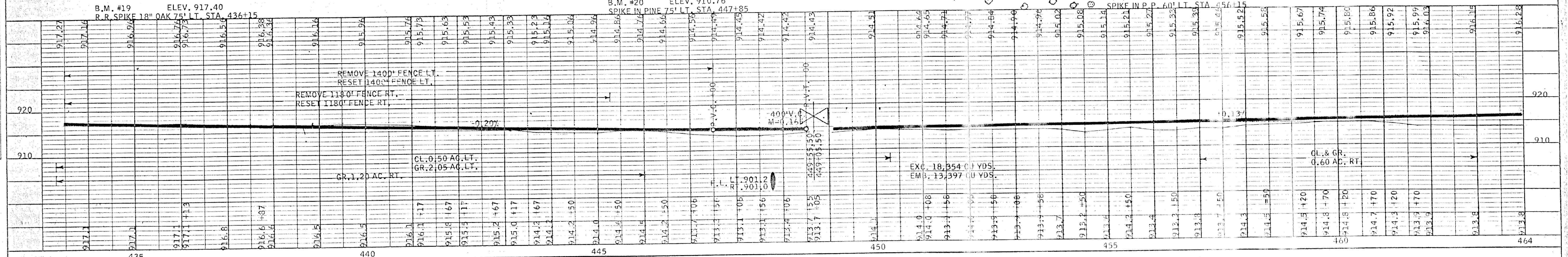
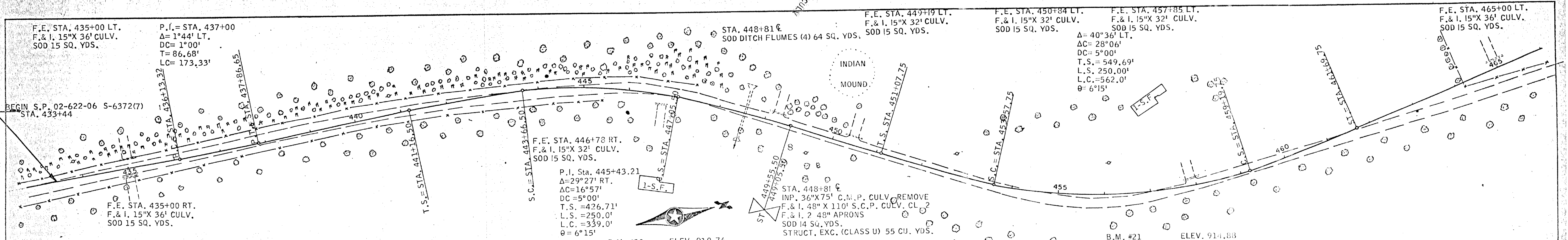


NOTE: ALL DIMENSIONS & SLOPES SHOWN ON THE TYPICAL SECTIONS ARE NOMINAL.

6" (COMPACTED THICKNESS) BITUMINOUS STABILIZED SUBGRADE BITUMINOUS SEAL COAT

DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____

DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____



F.E. STA. 492+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 510+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 516+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

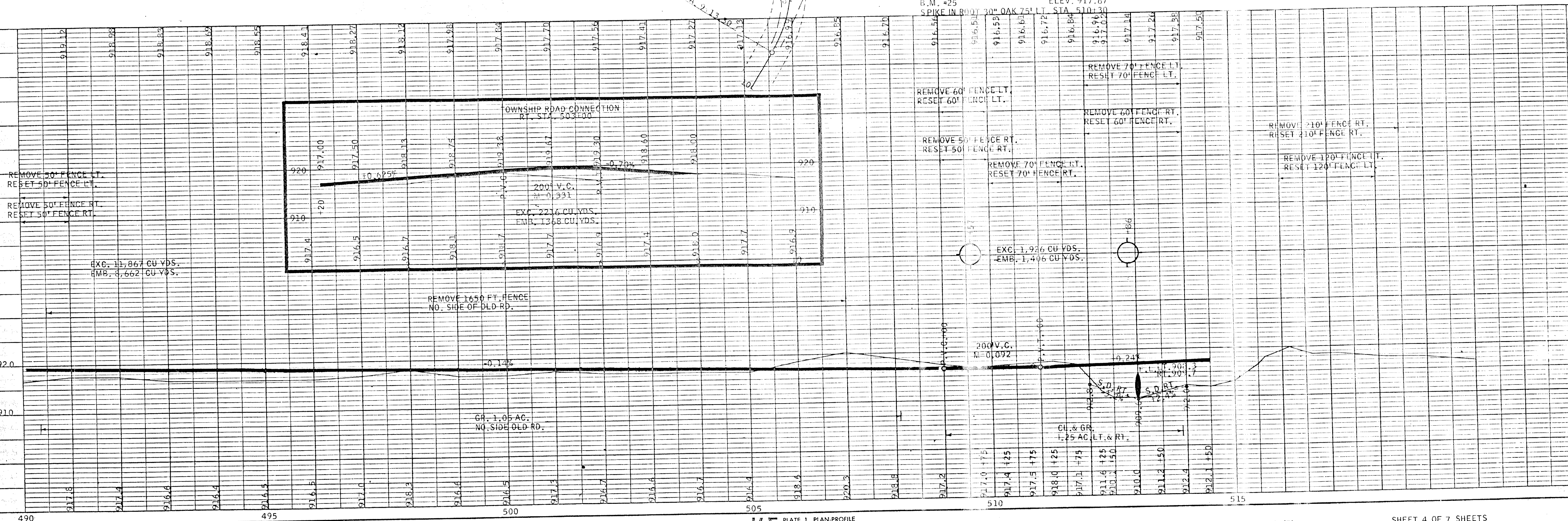
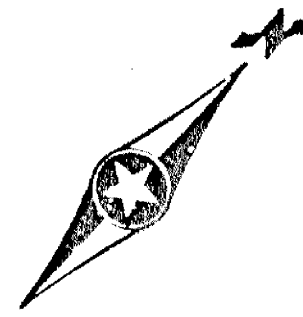
F.E. STA. 492+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 511+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 518+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

STA. 513+00 E
F. & I. 4'X5'X56' P.C. CATTLE PASS
F. & I. 2'4'X5' P.C. END SECTS.
SOD 32 SQ. YDS.
L.C. 26 C.Y. (CLASS U)



490

495

500

505

510

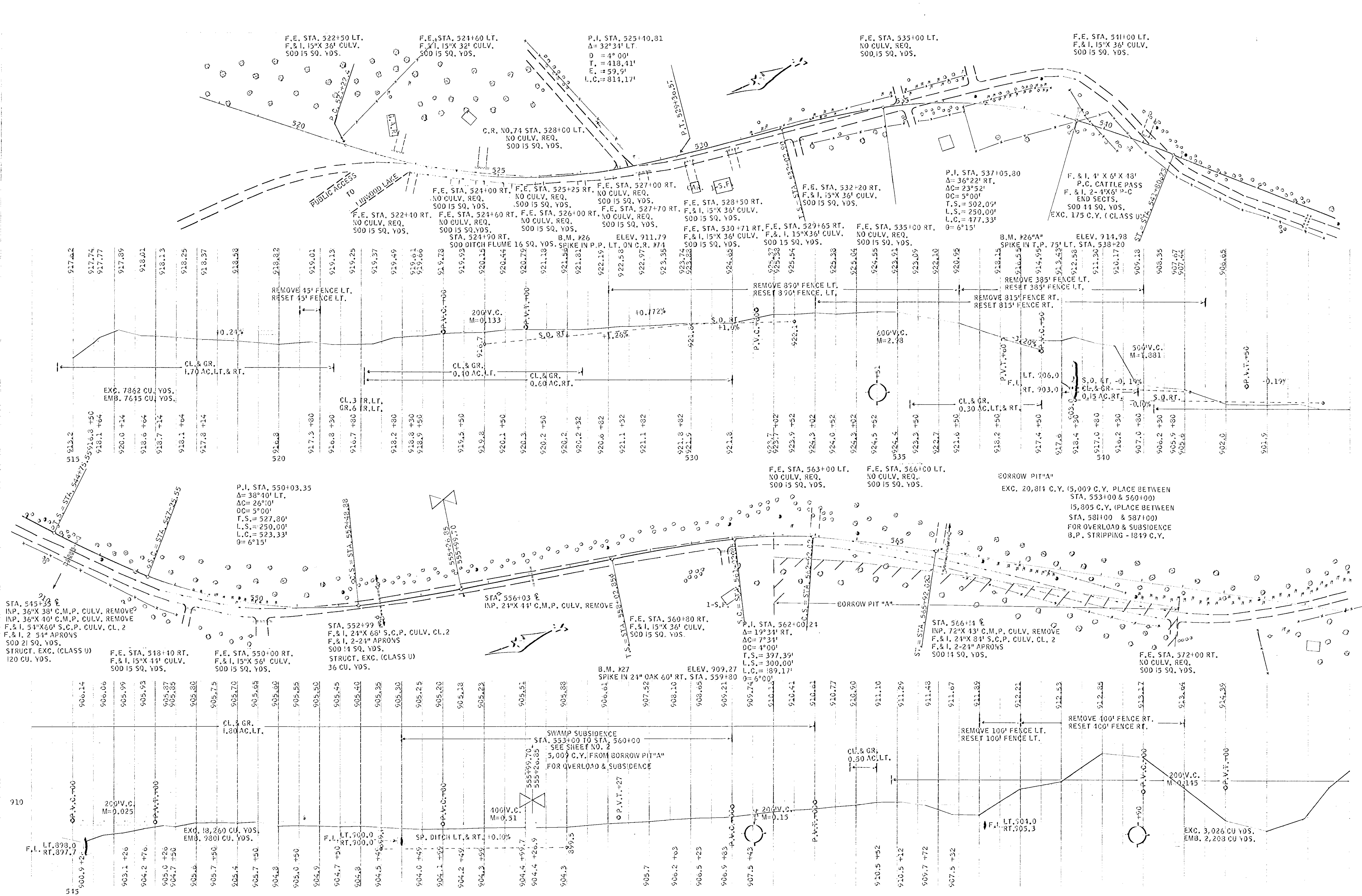
515

PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

S.P. 02-622-06 S-6372 (7)

SHEET 4 OF 7 SHEETS

48 7012 IMPERIAL™ TRACING CLOTH 2112



F.E. STA. 522+50 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 524+60 LT.
F. & I. 15"X 32' CULV.
SOD 15 SQ. YDS.

P.I. STA. 525+40.81
Δ = 32° 34' RT.
D = 4° 00'
T.S. = 418.41'
L.S. = 59.9'
L.C. = 814.17'

F.E. STA. 535+00 LT.
NO CULV. REQ.
SOD 15 SQ. YDS.

F.E. STA. 541+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

P.I. STA. 537+05.80
Δ = 36° 22' RT.
AC = 23° 52'
DC = 5° 00'
T.S. = 502.09'
L.S. = 250.00'
L.C. = 477.33'
θ = 6° 15'

F. & I. 4' X 6' X 48'
P.C. CATTLE PASS
F. & I. 2-4' X 6' P-C
END SECTS.
SOD 44 SQ. YDS.
EXC. 175 C.Y. (CLASS U)

REMOVE 45' FENCE LT.
RESET 45' FENCE LT.

REMOVE 890' FENCE LT.
RESET 890' FENCE LT.

REMOVE 385' FENCE LT.
RESET 385' FENCE LT.

REMOVE 815' FENCE RT.
RESET 815' FENCE RT.

REMOVE 100' FENCE RT.
RESET 100' FENCE RT.

REMOVE 100' FENCE LT.
RESET 100' FENCE LT.

P.I. STA. 550+03.35
Δ = 38° 40' LT.
AC = 26° 10'
DC = 5° 00'
T.S. = 527.80'
L.S. = 250.00'
L.C. = 523.33'
θ = 6° 15'

F.E. STA. 563+00 LT.
NO CULV. REQ.
SOD 15 SQ. YDS.

F.E. STA. 566+00 LT.
NO CULV. REQ.
SOD 15 SQ. YDS.

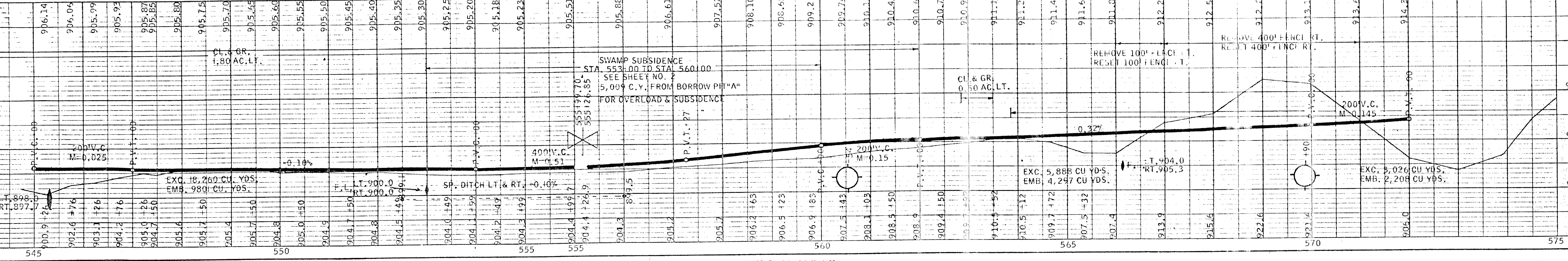
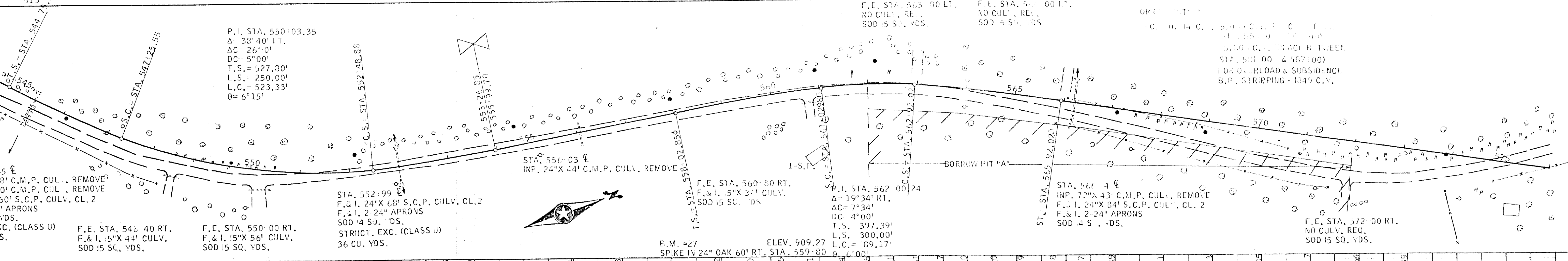
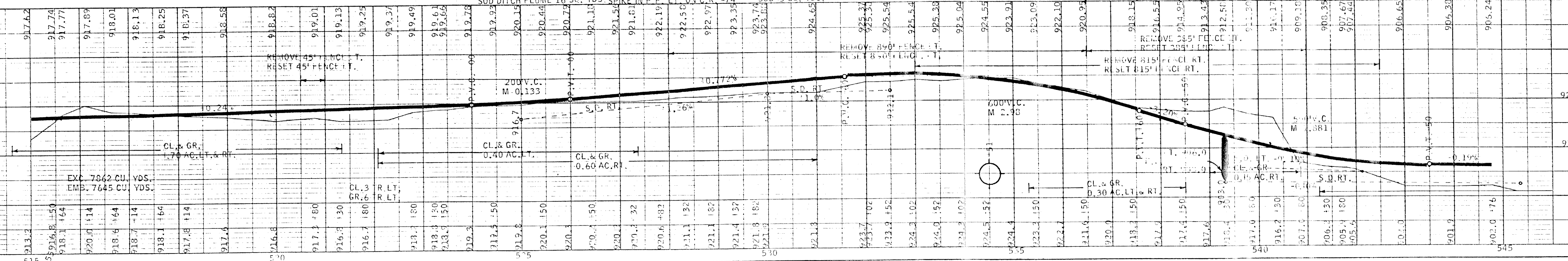
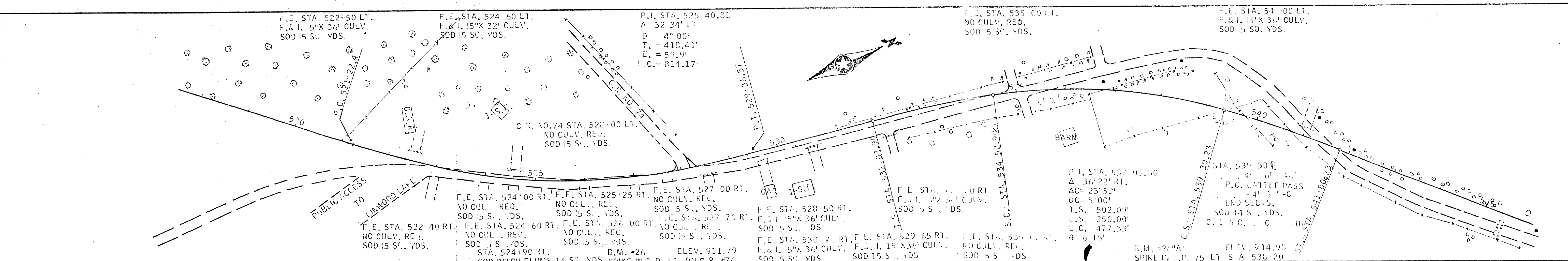
BORROW PIT "A"
EXC. 20,814 C.Y. (5,009 C.Y. PLACE BETWEEN
STA. 553+00 & 560+00)
15,805 C.Y. (PLACE BETWEEN
STA. 581+00 & 587+00)
FOR OVERLOAD & SUBSIDENCE
B.P. STRIPPING - 1849 C.Y.

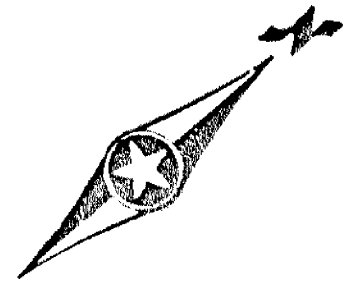
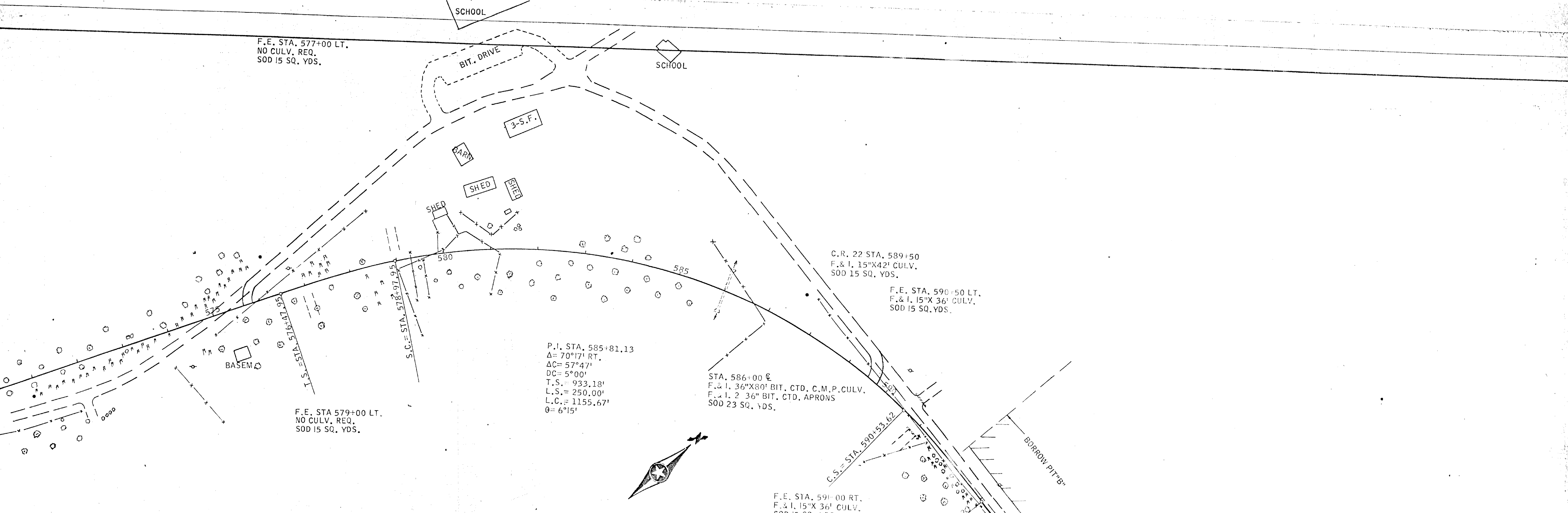
SWAMP SUBSIDENCE
STA. 553+00 TO STA. 560+00
SEE SHEET NO. 2
5,000 C.Y. FROM BORROW PIT "A"
FOR OVERLOAD & SUBSIDENCE

STA. 566+14 E
INP. 72"X 43' C.M.P. CULV. REMOVE
F. & I. 24"X 84' S.C.P. CULV. CL. 2
F. & I. 2-24" APRONS
SOD 14 SQ. YDS.

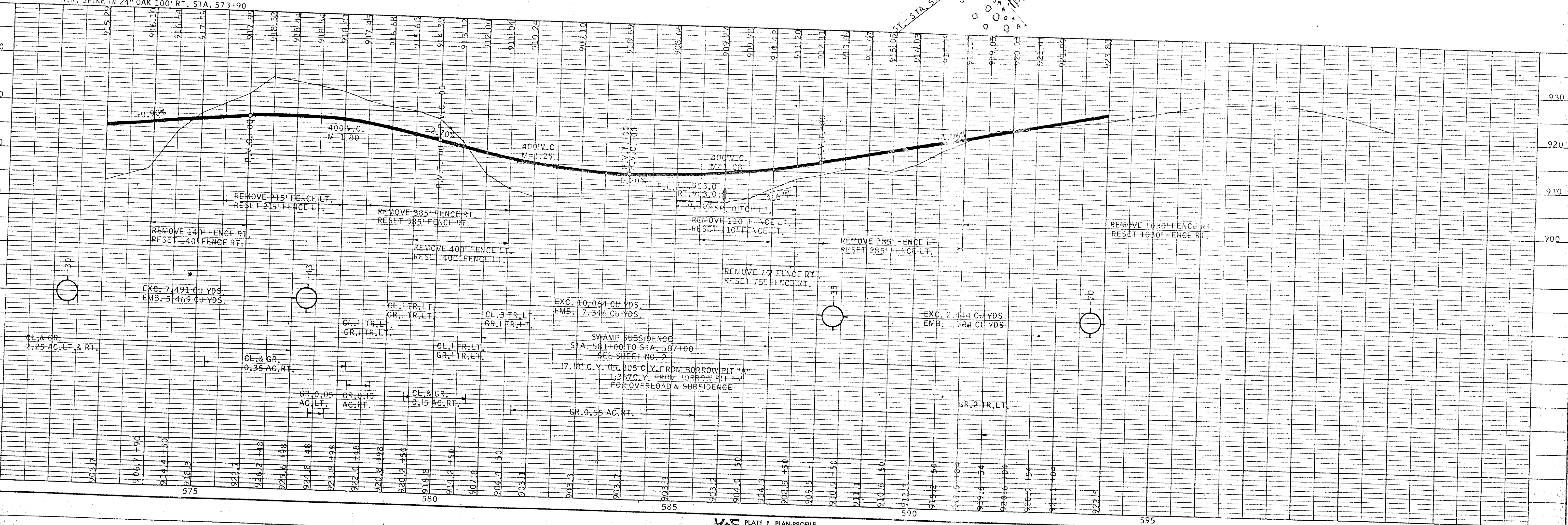
F.E. STA. 572+00 RT.
NO CULV. REQ.
SOD 15 SQ. YDS.

F.L. LT. 901.2
RT. 901.0

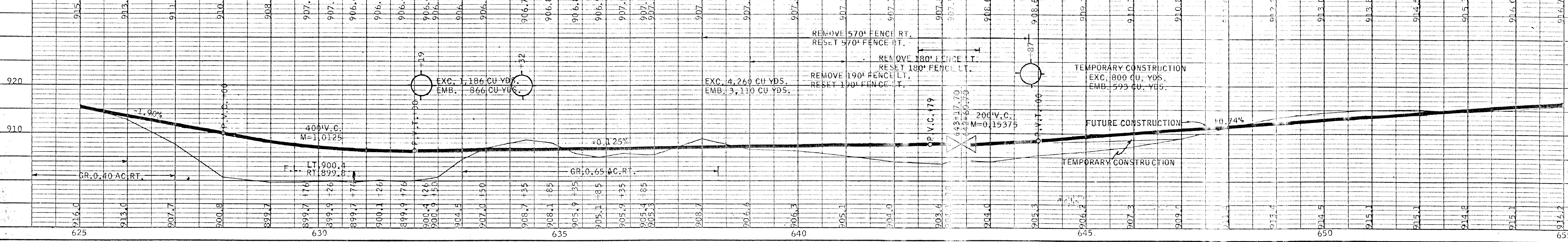
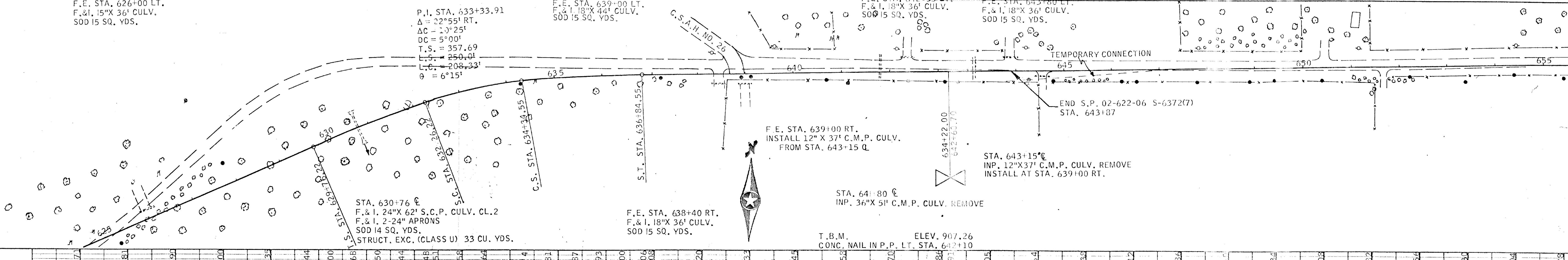
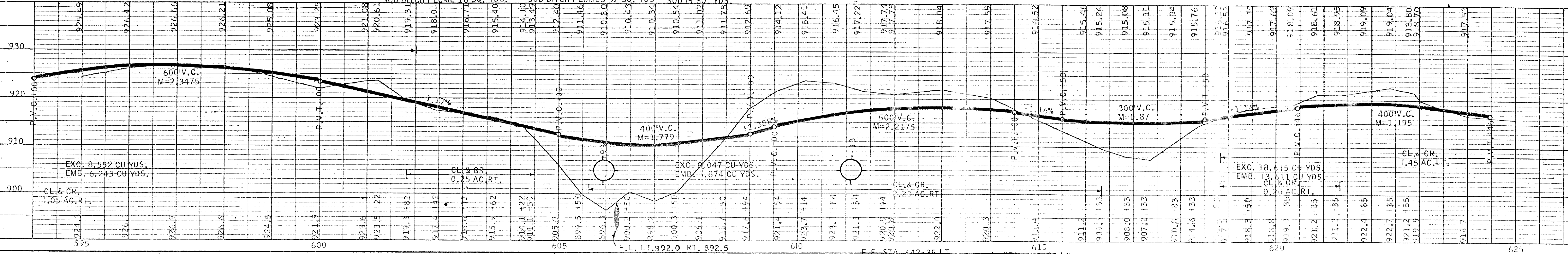
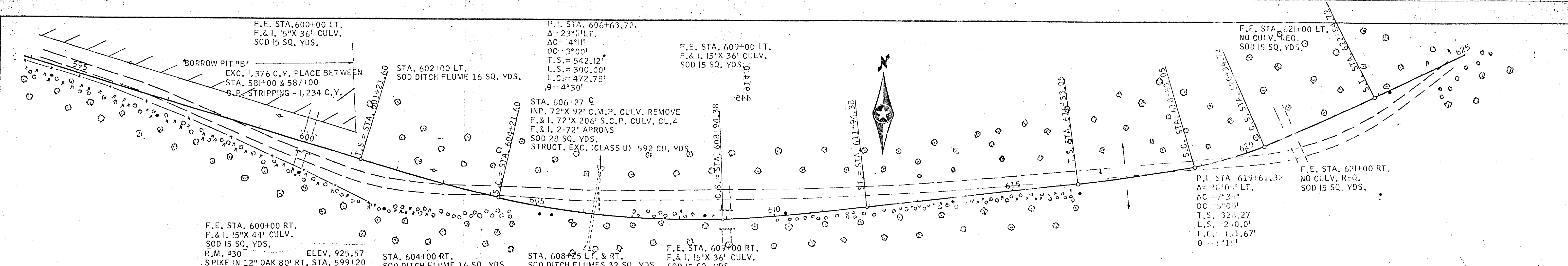




B.M. # 28
 R.R. SPIKE IN 24" OAK 100' RT. STA. 573+90
 ELEV. 917.53



K&E PLATE 1, PLAN-PROFILE
 KEUFFEL & ESSER CO.
 48 7012 IMPERIAL TRACING CLOTH 21602



F.E. STA. 577+00 LT.
NO CULV. REQ.
SOD 15 SQ. YDS.

SCHOOL

BAR

SHED

SHED

SHED

BASEM

C.R. 22 STA. 589+50
F. & I. 15"X42' CULV.
SOD 15 SQ. YDS.

F.E. STA. 590+50 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

P.I. STA. 585+81.13
 $\Delta = 70^{\circ}17' RT.$
 $AC = 57^{\circ}47'$
 $DC = 5^{\circ}00'$
 $T.S. = 933.18'$
 $L.S. = 250.00'$
 $L.C. = 1155.67'$
 $\theta = 6^{\circ}15'$

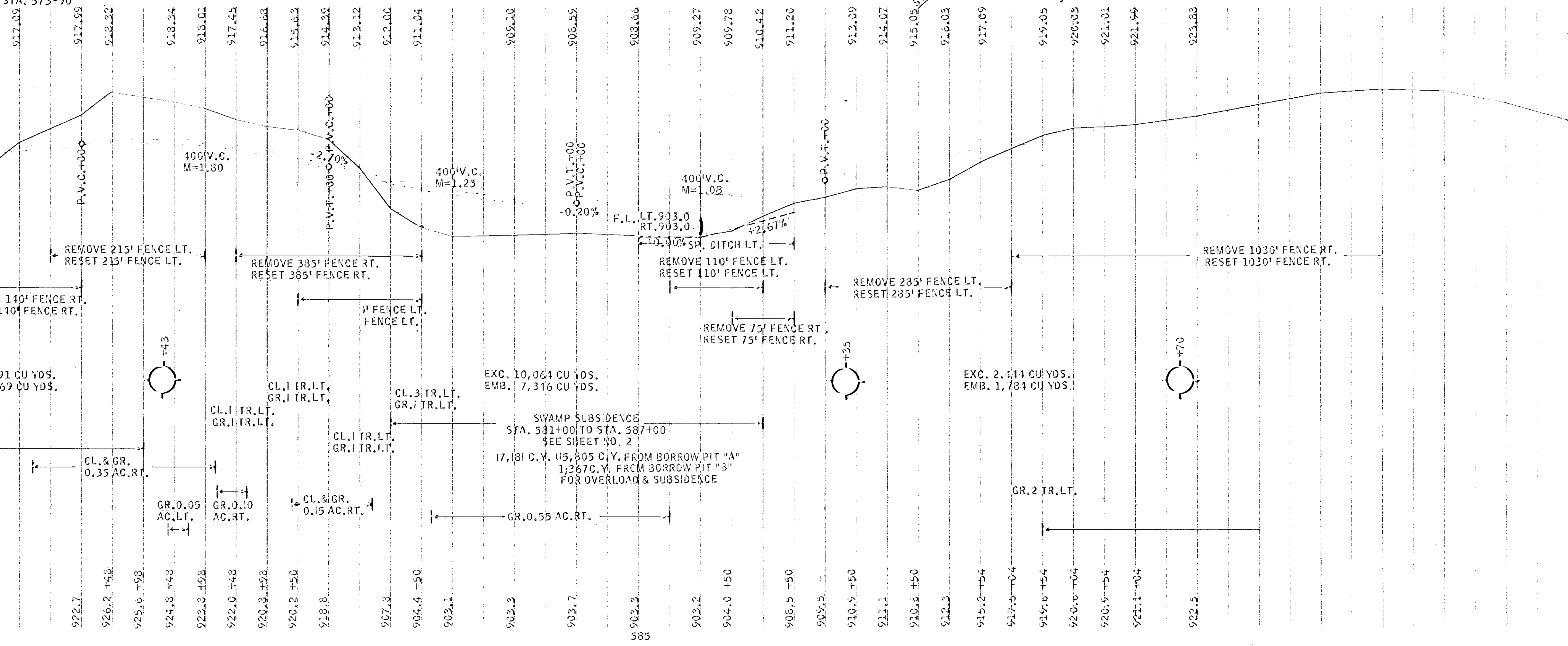
STA. 586+00 E
F. & I. 36"X80' BIT. CTD. C.M.P. CULV.
F. & I. 2 36" BIT. CTD. APRONS
SOD 23 SQ. YDS.

NO CULV. REQ.
SOD 15 SQ. YDS.

F.E. STA. 591+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

BORROW PIT "B"

LEV. 917.33
STA. 573+90

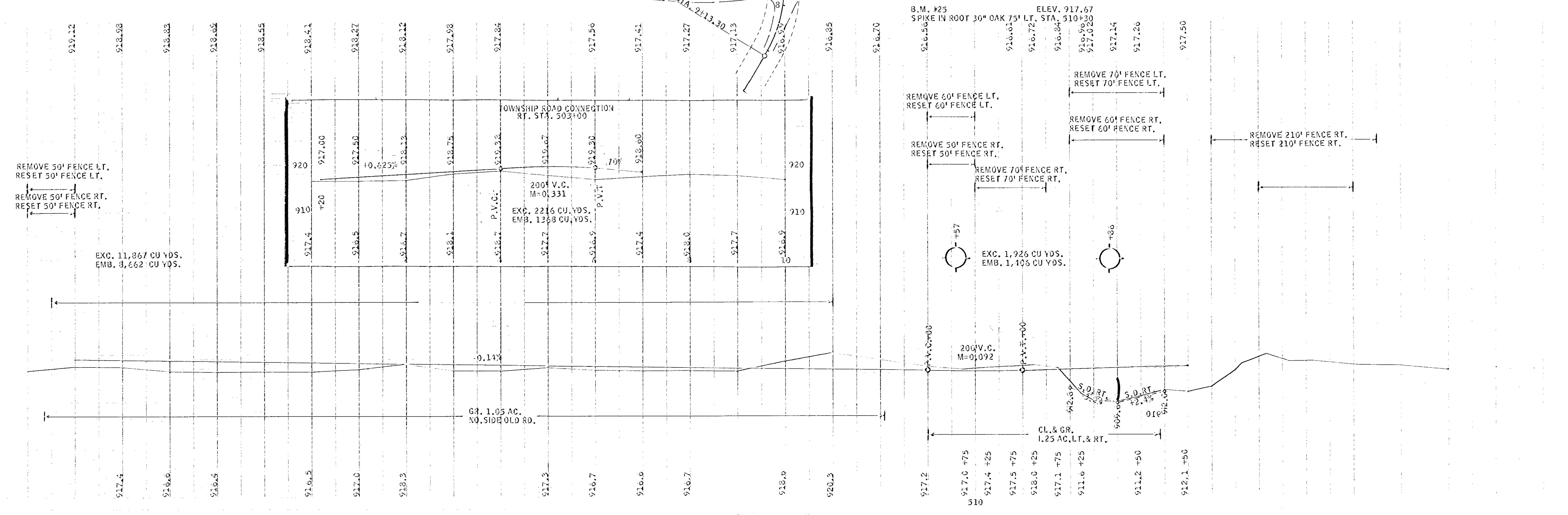
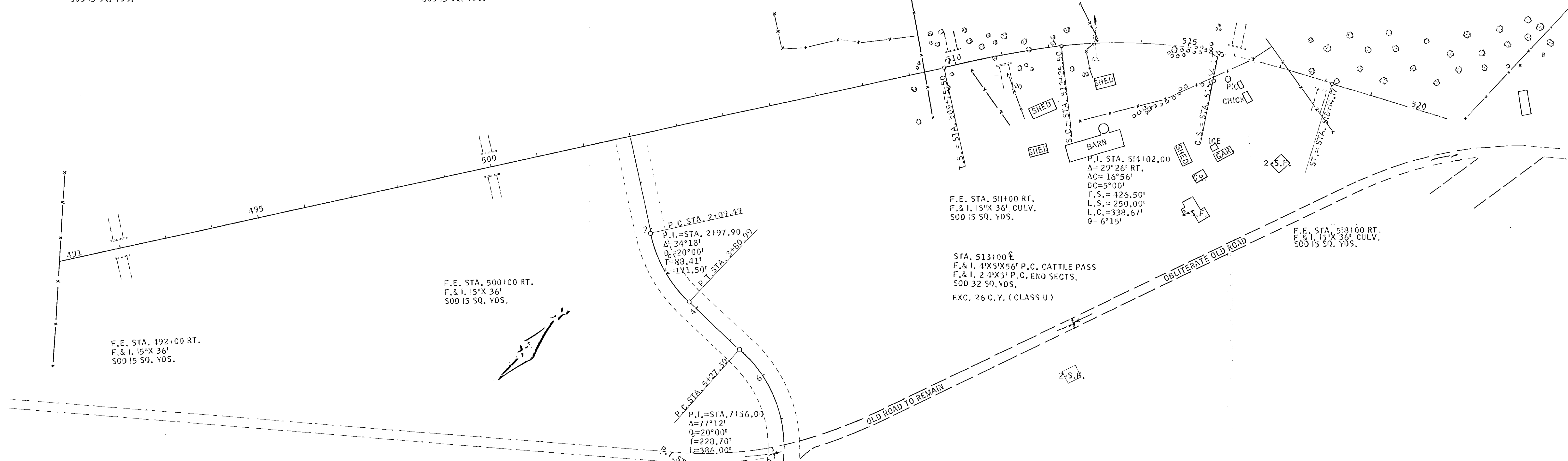


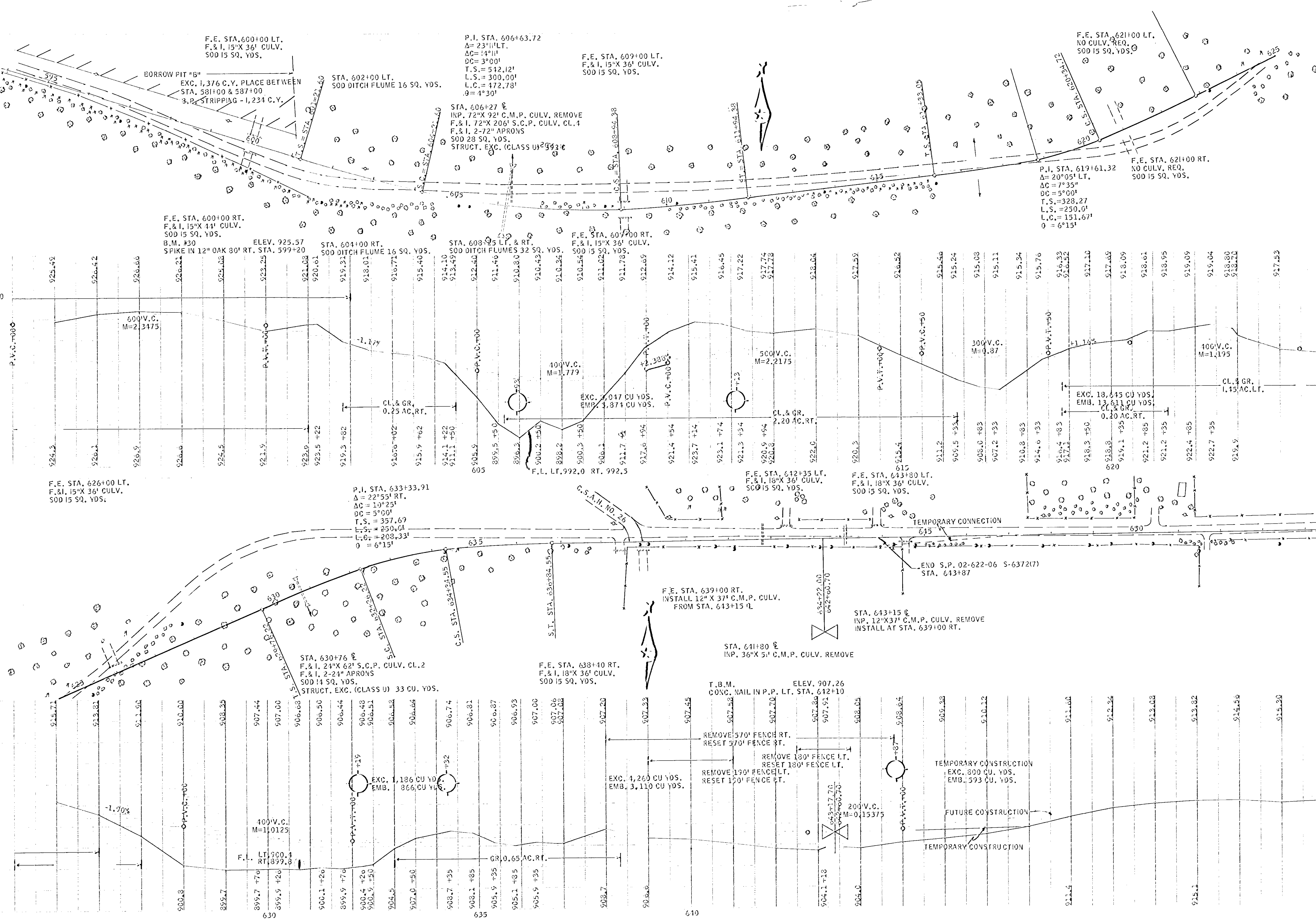
F.E. STA. 492+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 510+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 516+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.





STATEMENT OF ESTIMATED QUANTITIES

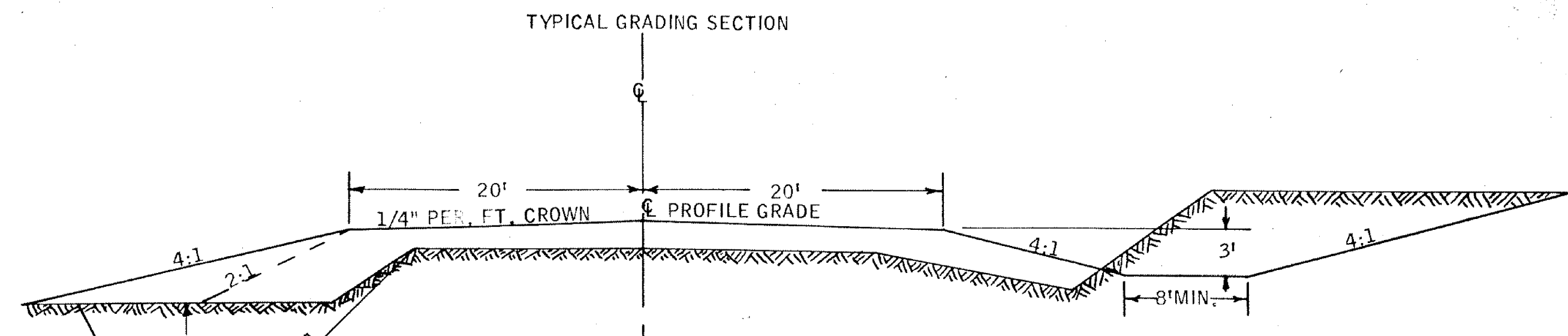
ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
ITEMS WITHOUT ALTERNATES			
ARING	ACRE	17.55	
ARING	TREE	18	
BBING	ACRE	26.50	
BBING	TREE	18	
OVE PORTABLE CULV.	LIN. FT.	420	
OVE FENCE	LIN. FT.	12,315	
ET FENCE	LIN. FT.	10,665	
SS "A" EXC.	CU. YDS.	130,088	
ROW EXC. (CLASS "A")	CU. YDS.	22,190	
ROW PIT STRIPPING	CU. YDS.	3,083	
VAGE BIT, MIX ON ROAD	CU. YDS.	8,770	
OR GRADER	HOUR	12	
GLINE (ONE CU. YD.)	HOUR	200	
ER	HOUR	6	
VEL WEARING COURSE IN PLACE	CU. YDS.	3300	
P.C. CONC. CATTLE PASS 5' HIGH	LIN. FT.	56	
P.C. CONC. CATTLE PASS END SECTION 5' HIGH	SECTION	2	
TER	M-GAL.	250	
RUCTURE EXC. (Class - U)	CU. YDS.	26	
RUCTURE EXC. (Class U)	CU. YDS.	836	
I, 36" BIT. COATED C.M.P. CULV.	LIN. FT.	80	
FALL C.M. CULV.	LIN. FT.	37	
I, 24" R.C.P. CULV. CL. 2	LIN. FT.	202	
I, 48" R.C.P. CULV. CL. 2	LIN. FT.	110	
I, 54" R.C.P. CULV. CL. 2	LIN. FT.	60	
I, 72" R.C.P. CULV. CL. 4	LIN. FT.	206	
I, BIT. COATED METAL APRON FOR 36" C.M.P.	APRON	2	
I, CONC. APRONS FOR 24" S.C.P.	APRON	6	
I, CONC. APRONS FOR 48" S.C.P.	APRON	2	
I, CONC. APRONS FOR 54" S.C.P.	APRON	2	
I, CONC. APRONS FOR 72" S.C.P.	APRON	2	
DSIDE SEEDING	ACRE	44.04	
FACE MULCH TYPE 1 (7)	TON	39.34	
FACE MULCH TYPE 6 (7)	GAL.	3934	
DING	SQ. YDS.	2662	
ALTERNATE NO. 1 - 1			
I, 15" C.M.P. CULV.	LIN. FT.	1318	
I, 18" C.M.P. CULV.	LIN. FT.	152	
ALTERNATE NO. 1 - 2			
I, 15" R.C.P. CULV. CL. 2	LIN. FT.	1318	
I, 18" R.C.P. CULV. CL. 2	LIN. FT.	152	
ALTERNATE NO. 1 - 3			
I, 15" C.A.P. CULV.	LIN. FT.	1318	
I, 18" C.A.P. CULV.	LIN. FT.	152	

TO BE USED FOR ROAD OBLITERATION AND TRENCHING AS PER TYPICAL SECTION. SEED ON PROJECT, SEE SPECIAL PROVISIONS. EXPOSED SHALL BE COVERED WITH A MINIMUM OF 3 INCHES OF TOPSOIL OR CLAY MIXTURES OF THIS PROJECT. THIS WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXC. TO BE REPLACED UNIFORMLY ON BOTTOMS AND SLOPES OF BORROW PITS

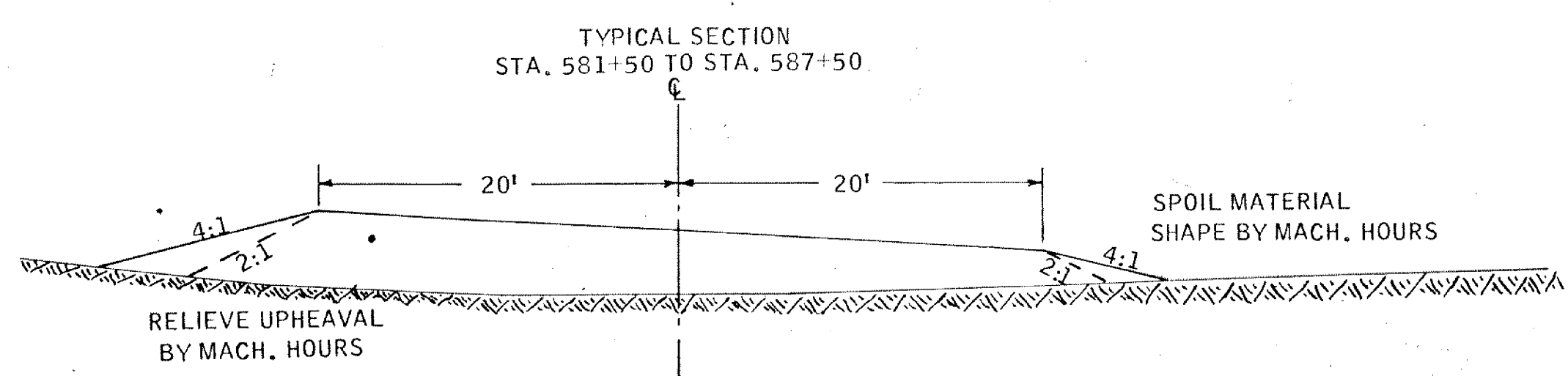
Standard Detail plates, approved by the Bureau of Public Works, are to be used on this project.

DESCRIPTION
STANDARD SIGNS & BARRICADES
STANDARD SIGNS & BARRICADES
ROADWAYS AND ENTRANCES
REINFORCED CONCRETE PIPE
CAST CONCRETE CATTLE PASS
CONCRETE APRON FOR REINFORCED CONCRETE PIPE
METAL APRON FOR C.M. PIPES
WORKING AT PIPE CULVERT ENDS

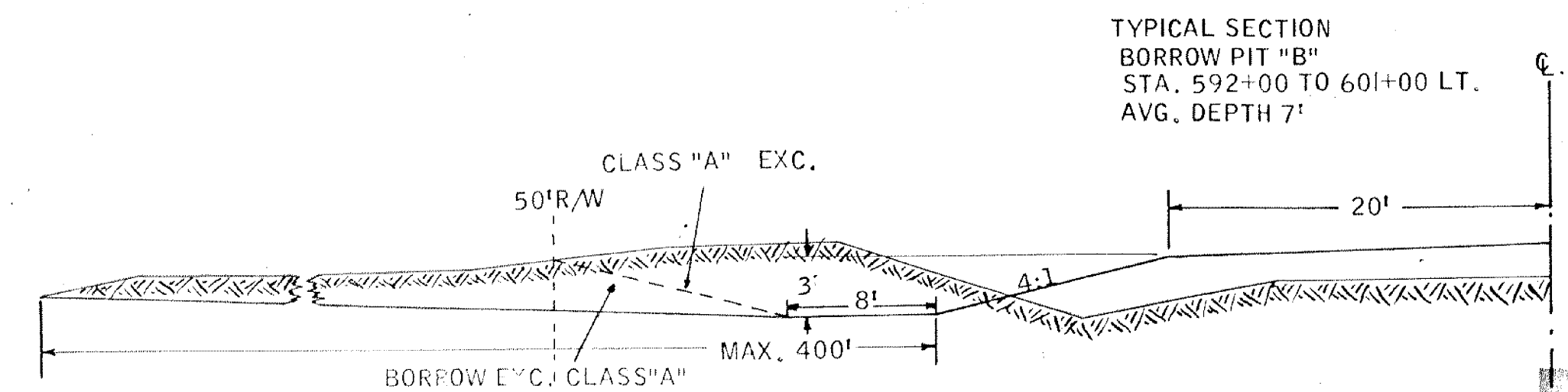
- NOTE: SALVAGE BIT, AVERAGE 25.54 CU. YDS. PER STA. (AVG. WIDTH 20.3', AVG. DEPTH 4") SPREAD BIT. SALVAGE OVER ENTIRE ROAD SURFACE TO DEPTH OF AVAILABLE QUANTITIES.
- NOTE: CROSS SECTIONS ARE TO BE CONSTRUCTED IN CONFORMANCE WITH TYPICAL SECTION THIS PAGE. ROAD BED TO BE BLADED TO 1/4" PER FT. PITCH DURING FINISHING OPERATIONS. THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN UPPER 1.0' OF ROAD BED. THIS PORTION SHALL BE PLACED BELOW THE UPPER 1.0' OF EMBANKMENT DURING CONSTRUCTION.
- NOTE: ALL DIMENSIONS AND SLOPES SHOWN ON TYPICAL SECTION ARE APPROXIMATELY 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.



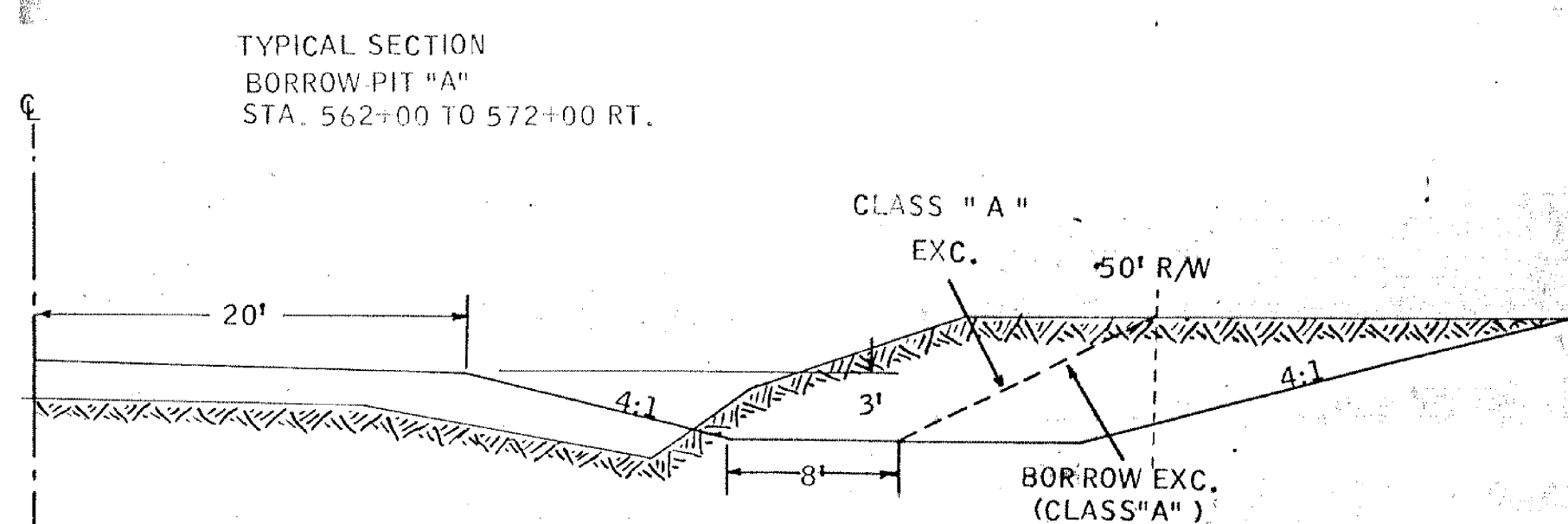
STA. 553+00 TO STA. 560+00 LT. & RT. EXCAVATE UNSUITABLE MATERIAL BY MACHINE HOURS, BACKFILL WITH MATERIAL FROM BORROW PIT RT. STA. 570+00. CONSTRUCT INSLOPES AT A 2:1 INSLOPE, COMPLETE TO A 4:1 INSLOPE WITH SAID EXCAVATION.



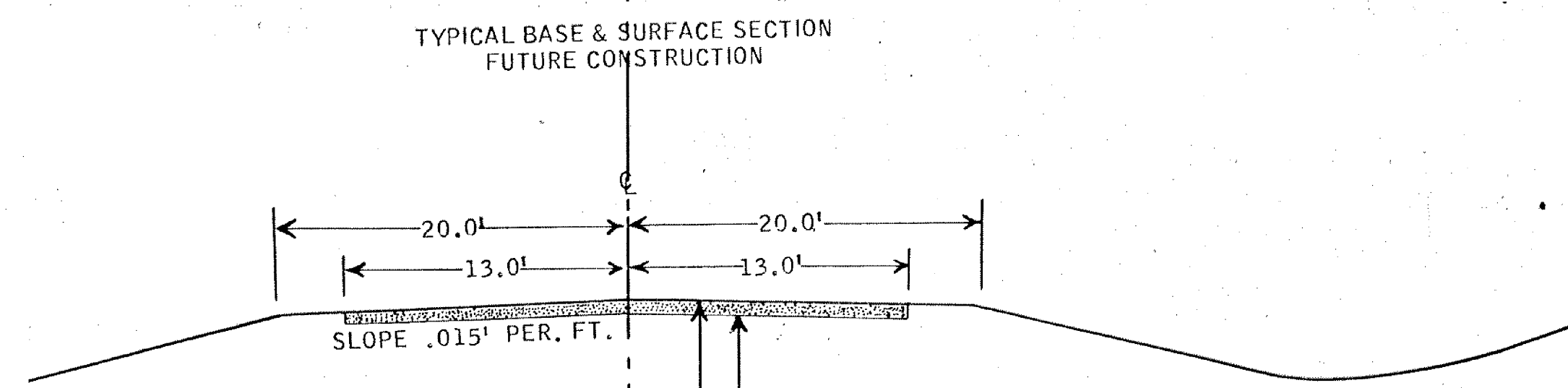
MAINTAIN OVERLOAD TO FORCE SUBSIDENCE SECURE OVERLOAD FROM BORROW PIT "B"



TYPICAL SECTION BORROW PIT "B" STA. 592+00 TO 601+00 LT. AVG. DEPTH 7'

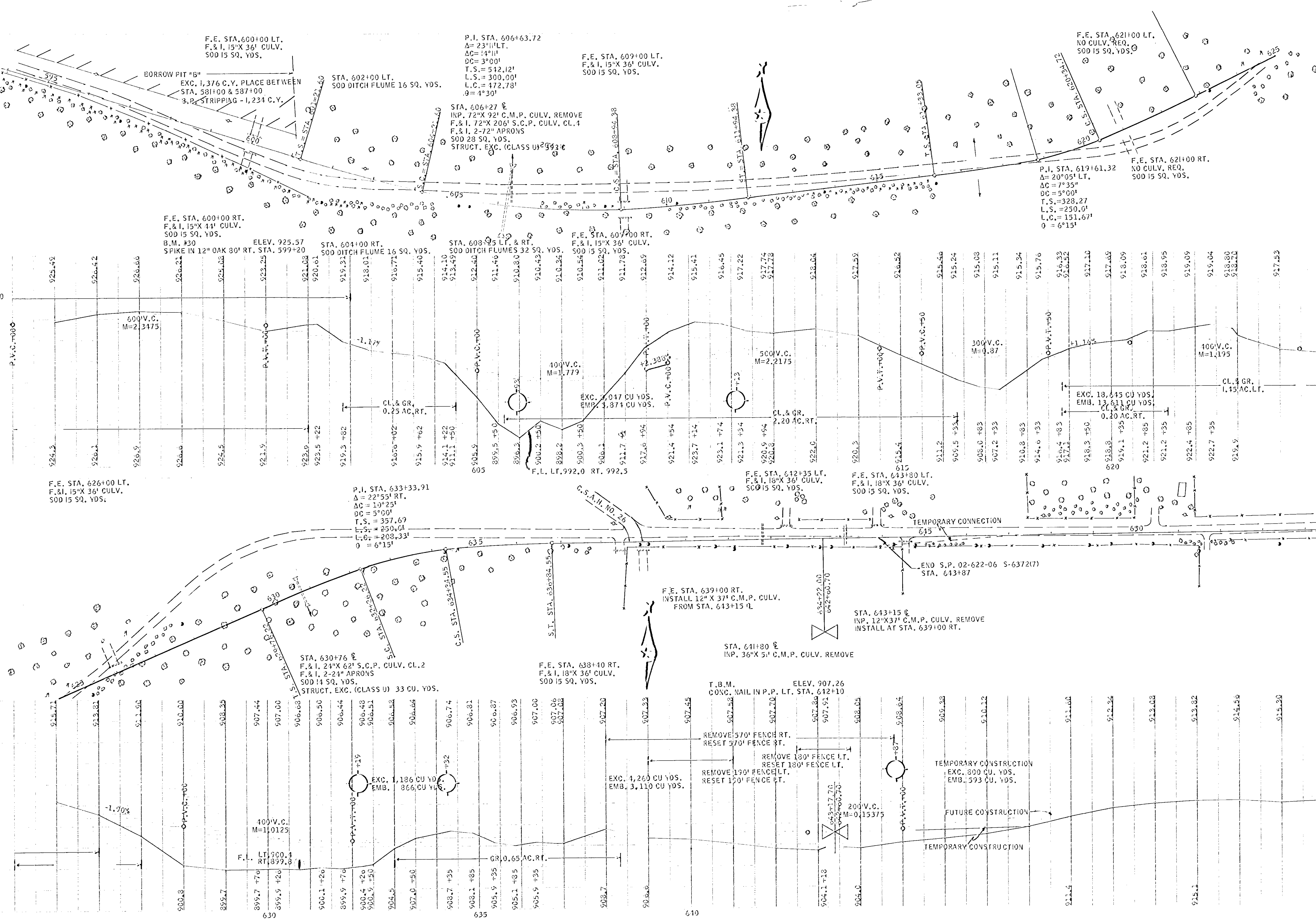


TYPICAL SECTION BORROW PIT "A" STA. 562+00 TO 572+00 RT.



NOTE: ALL DIMENSIONS & SLOPES SHOWN ON THE TYPICAL SECTIONS ARE NOMINAL.

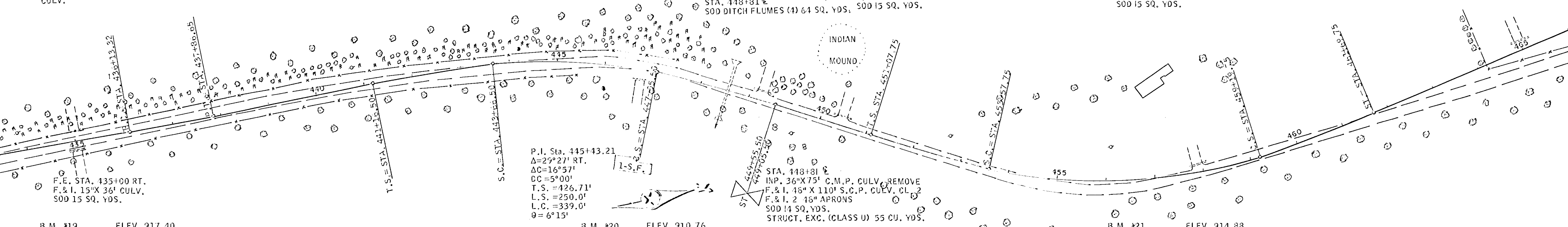
6" (COMPACTED THICKNESS) BITUMINOUS STABILIZED SUBGRADE BITUMINOUS SEAL COAT



CULV.

F.E. STA. 449+19 LT.
F. & I. 15" X 32" CULV.
SOD 15 SQ. YDS.

F.E. STA. 457+85 LT.
F. & I. 15" X 32" CULV.
SOD 15 SQ. YDS.

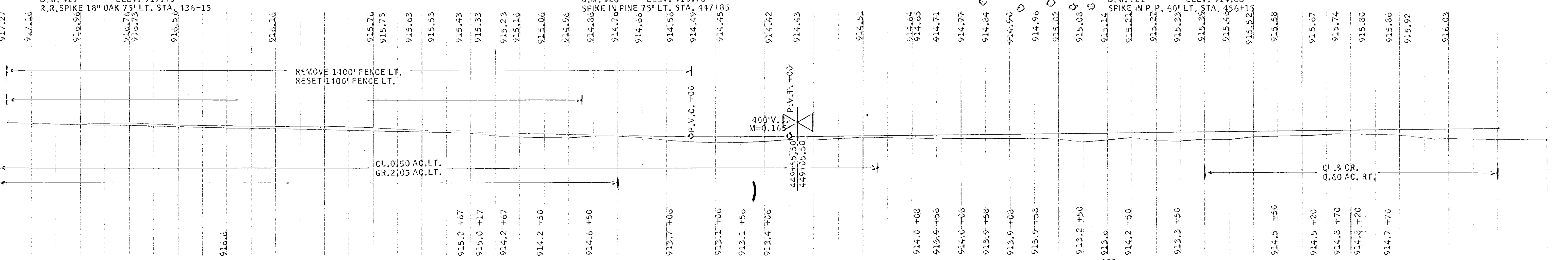


B.M. #19 ELEV. 917.40
R.R. SPIKE 18" OAK 75' LT. STA. 436+15

P.I. Sta. 445+43.21
 $\Delta = 29^\circ 27' RT.$
 $\Delta C = 16^\circ 57'$
 $CC = 5^\circ 00'$
T.S. = 426.71'
L.S. = 250.0'
L.C. = 339.0'
 $\theta = 6^\circ 15'$

STA. 448+81
SOD DITCH FLUMES (4) 64 SQ. YDS.
INDIAN MOUND
STA. 448+81
INP. 36" X 75' C.M.P. CULV. REMOVE
F. & I. 48" X 110' S.C.P. CULV. CL. 2
F. & I. 2 48" APRONS
SOD 14 SQ. YDS.
STRUCT. EXC. (CLASS U) 55 CU. YDS.

B.M. #21 ELEV. 914.88
SPIKE IN P. 60' LT. STA. 456+15



410
F.E. STA. 474
F. & I. 15" X 36"
SOD 15 SQ. YDS.

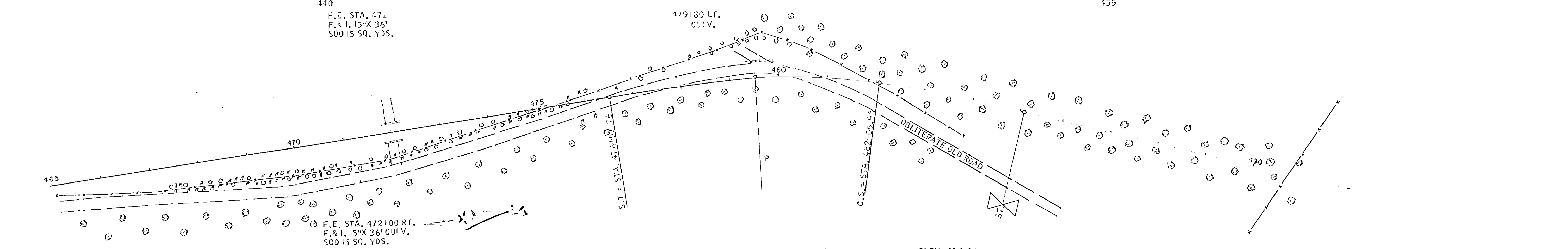
479+80 LT.
CULV.

400' V.C.
M=0.15

449' V.C.
M=0.15

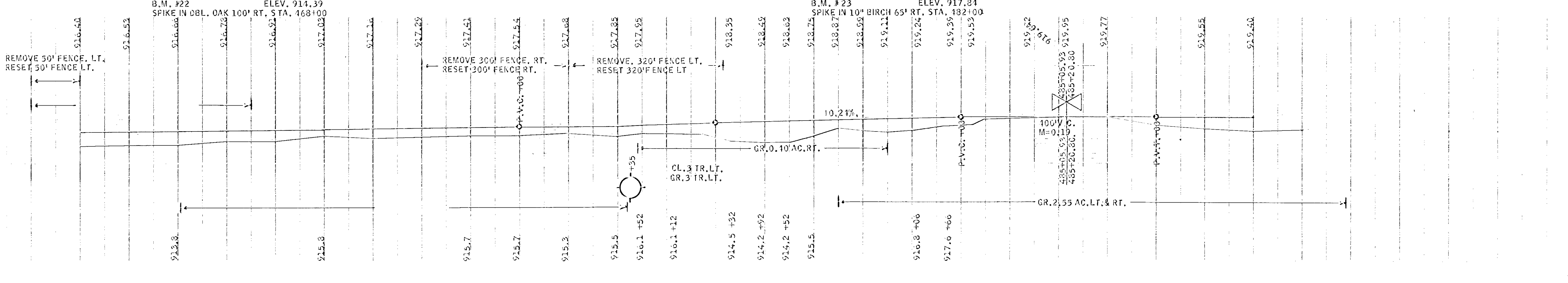
400' V.C.
M=0.15

CL. & GR.
0.60 AC. RT.



B.M. #22 ELEV. 914.39
SPIKE IN DBL. OAK 100' RT. STA. 468+00

B.M. #23 ELEV. 917.84
SPIKE IN 10" BIRCH 65' RT. STA. 482+00



REMOVE 50' FENCE LT.
RESET 50' FENCE LT.

REMOVE 300' FENCE RT.
RESET 300' FENCE RT.

REMOVE 320' FENCE LT.
RESET 320' FENCE LT.

CL. 3 TR. LT.
GR. 3 TR. LT.

GR. 0.10 AC. RT.

GR. 2.55 AC. LT. & RT.

F.E. STA. 492+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 510+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 516+00 LT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

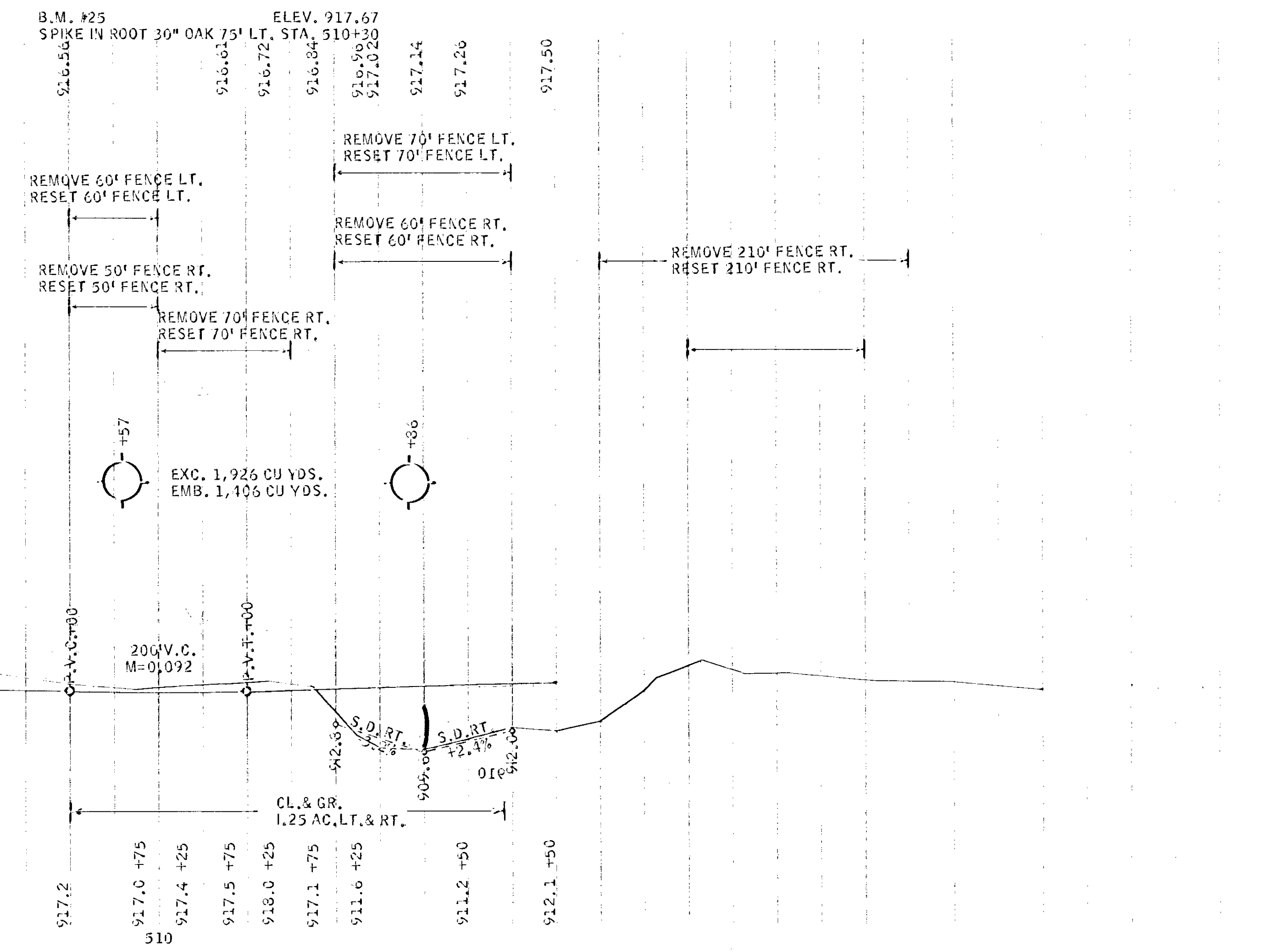
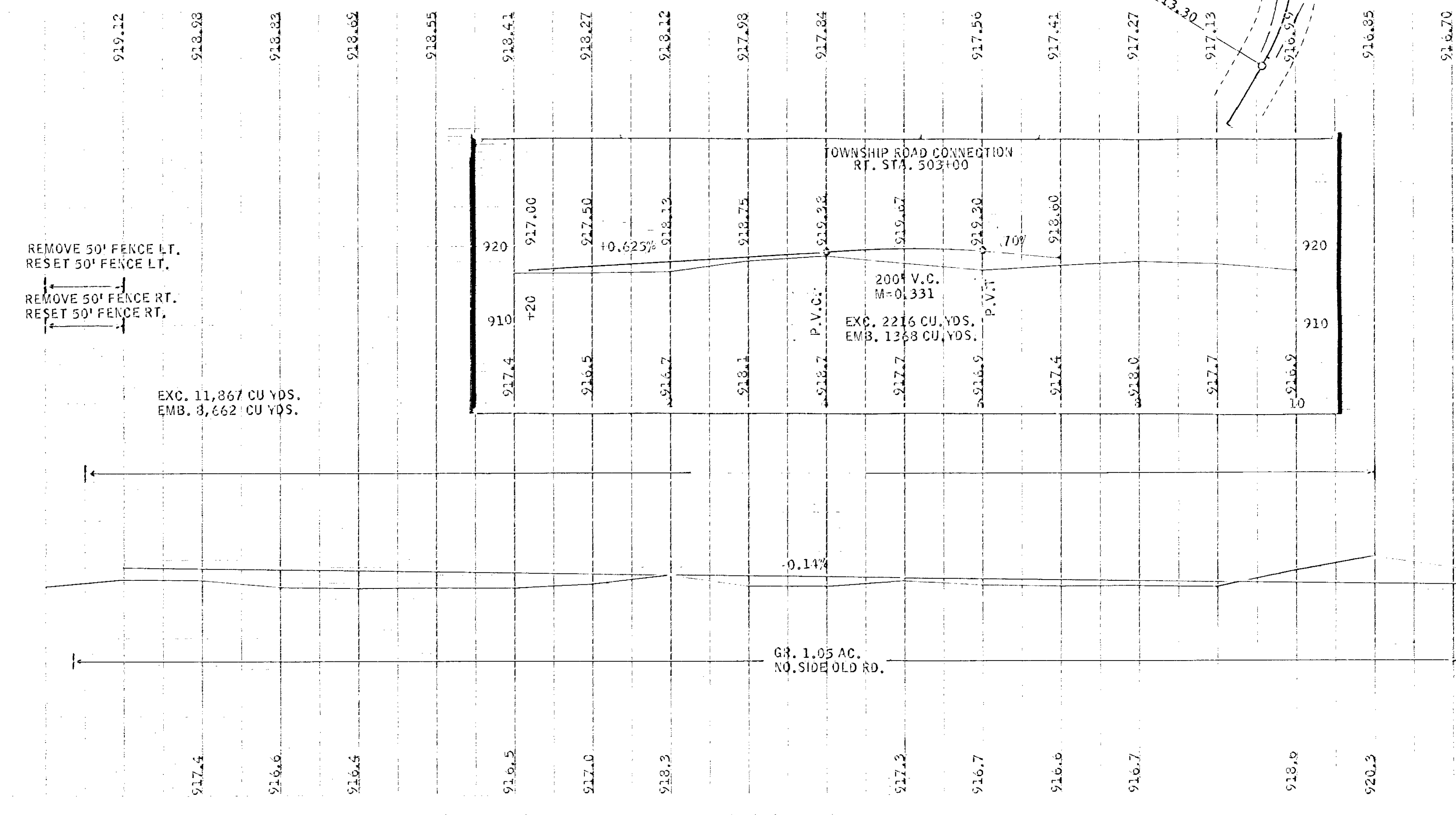
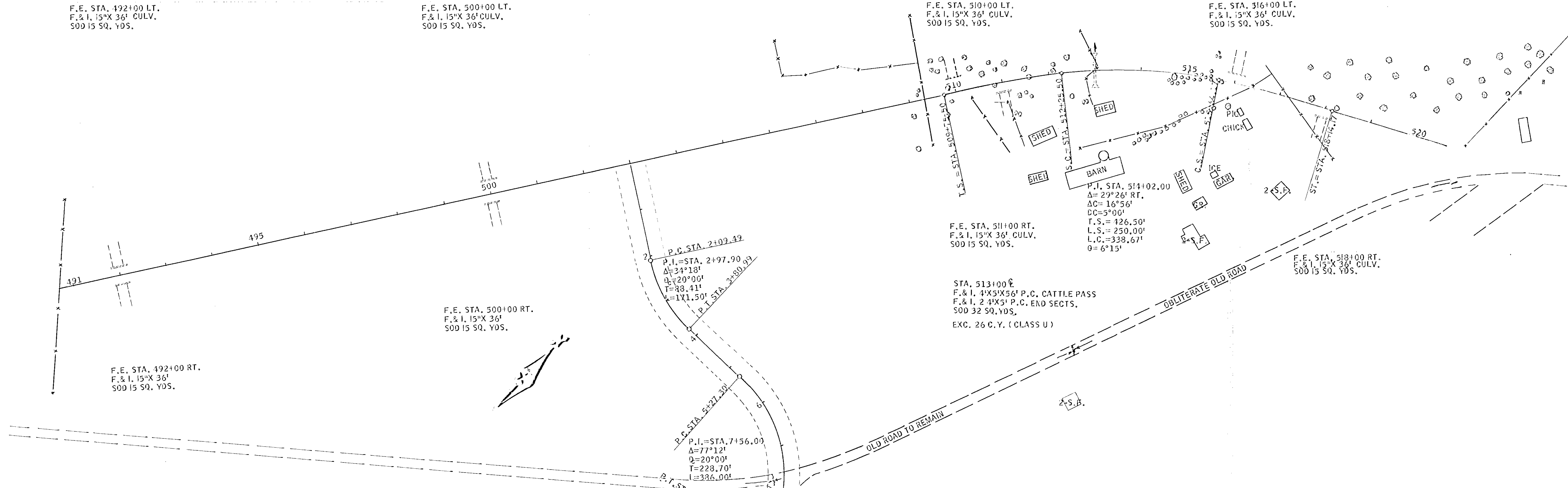
F.E. STA. 500+00 RT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

F.E. STA. 511+00 RT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

P.I. STA. 514+02.00
Δ = 29° 26' RT.
ΔC = 16° 56'
DC = 5° 00'
T.S. = 426.50'
L.S. = 250.00'
L.C. = 338.67'
θ = 6° 15'

F.E. STA. 518+00 RT.
F. & I. 15" X 36" CULV.
SOD 15 SQ. YDS.

STA. 513+00 E
F. & I. 4' X 5' X 56' P.C. CATTLE PASS
F. & I. 2' X 5' P.C. END SECTS.
SOD 32 SQ. YDS.
EXC. 26 C.Y. (CLASS U)



F.E. STA. 577+00 LT.
NO CULV. REQ.
SOD 15 SQ. YDS.

SCHOOL

BAR

SHED

SHED

SHED

BASEM

C.R. 22 STA. 589+50
F. & I. 15"X42' CULV.
SOD 15 SQ. YDS.

F.E. STA. 590+50 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

P.I. STA. 585+81.13
 $\Delta = 70^\circ 17' RT.$
 $AC = 57^\circ 47'$
 $DC = 5^\circ 00'$
 $T.S. = 933.18'$
 $L.S. = 250.00'$
 $L.C. = 1155.67'$
 $\theta = 6^\circ 15'$

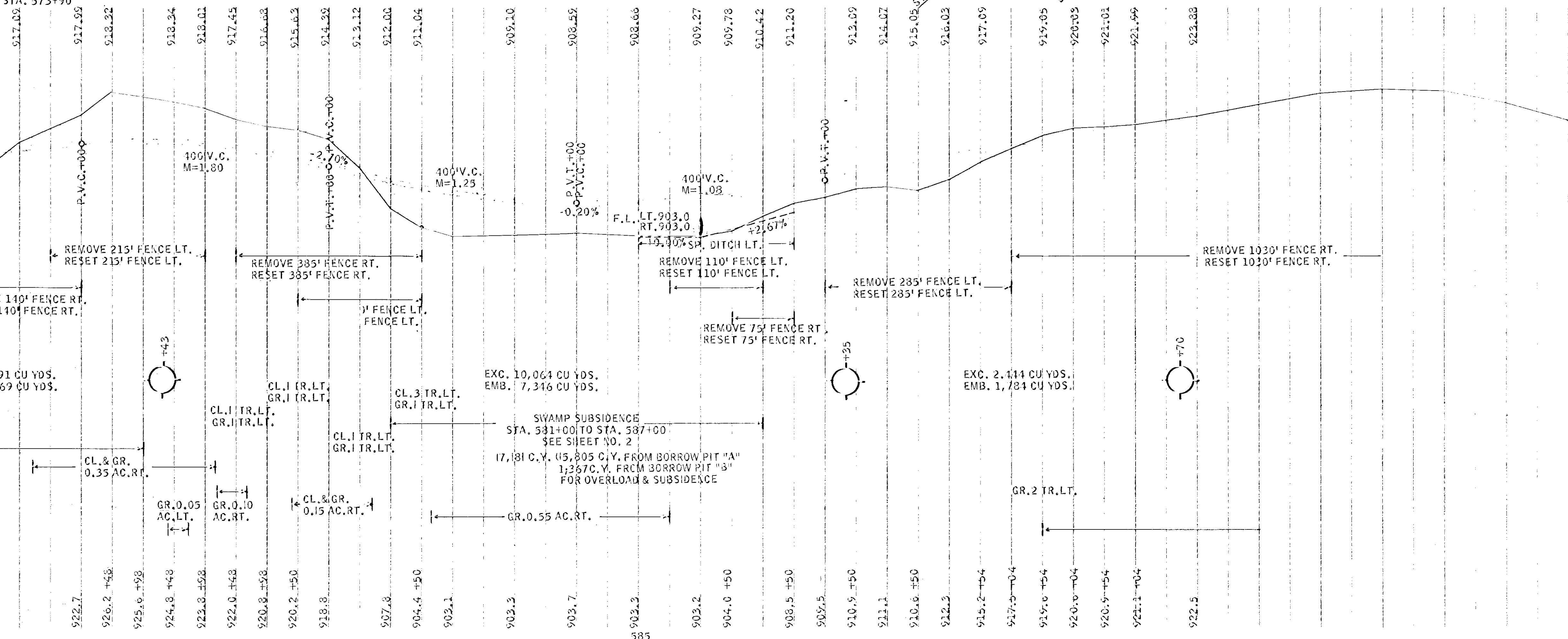
STA. 586+00 E
F. & I. 36"X80' BIT. CTD. C.M.P. CULV.
F. & I. 2 36" BIT. CTD. APRONS
SOD 23 SQ. YDS.

NO CULV. REQ.
SOD 15 SQ. YDS.

F.E. STA. 591+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

BORROW PIT "B"

LEV. 917.33
STA. 573+90



140' FENCE RT.
140' FENCE RT.

91 CU YDS.
69 CU YDS.

CL. & GR.
0.35 AC. RT.

GR. 0.05
AC. LT.

GR. 0.10
AC. RT.

CL. & GR.
0.15 AC. RT.

GR. 0.55 AC. RT.

EXC. 10,064 CU YDS.
EMB. 7,346 CU YDS.

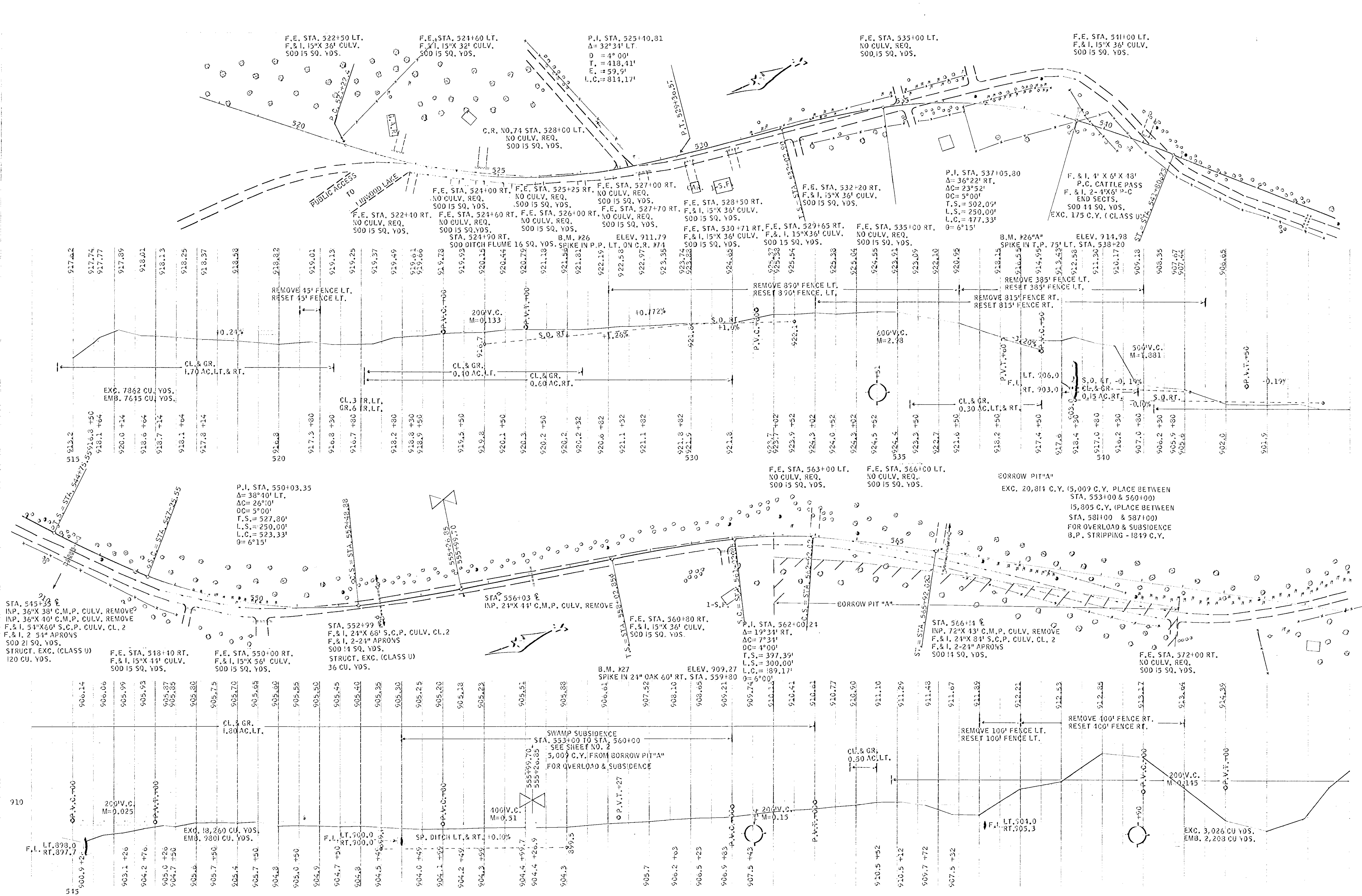
SWAMP SUBSIDENCE
STA. 581+00 TO STA. 587+00
SEE SHEET NO. 2
17,181 C.Y. (15,805 C.Y. FROM BORROW PIT "A"
1,376 C.Y. FROM BORROW PIT "B")
FOR OVERLOAD & SUBSIDENCE

EXC. 2,444 CU YDS.
EMB. 1,784 CU YDS.

GR. 2 TR. LT.

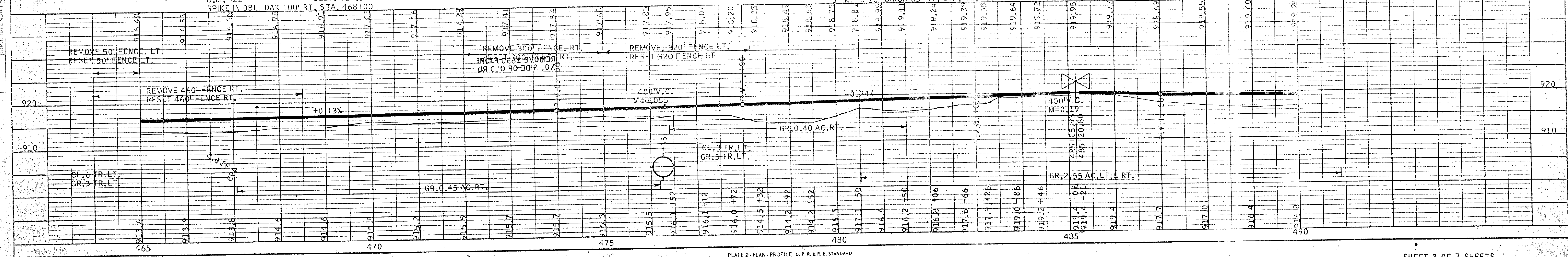
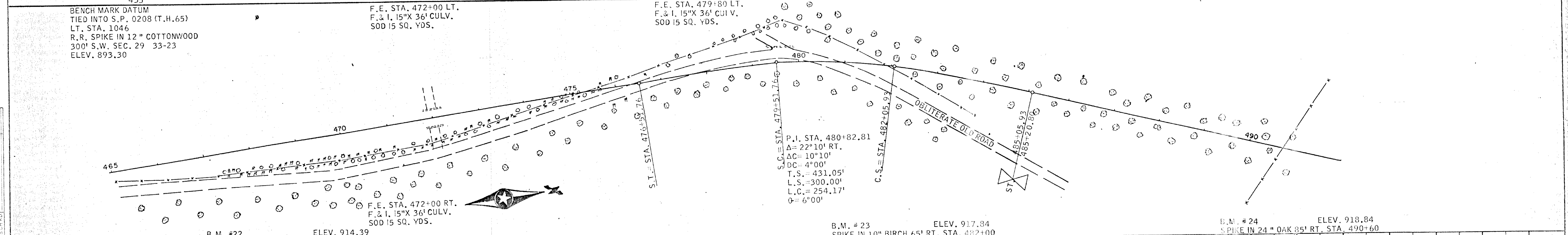
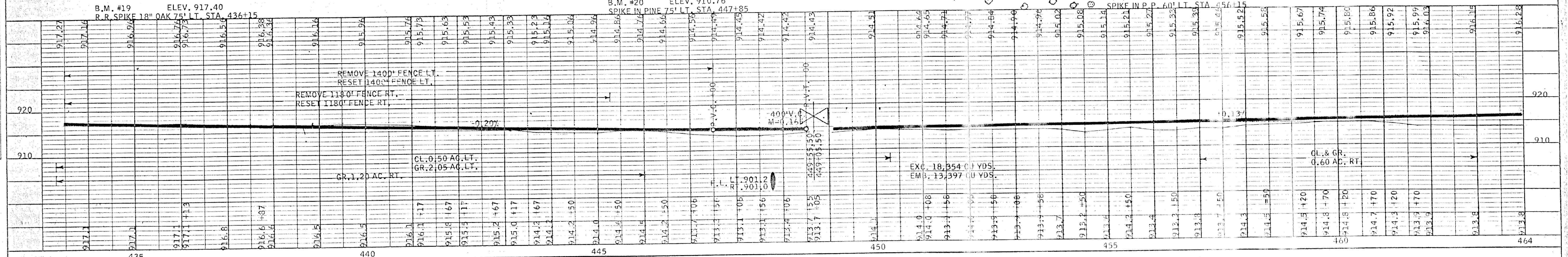
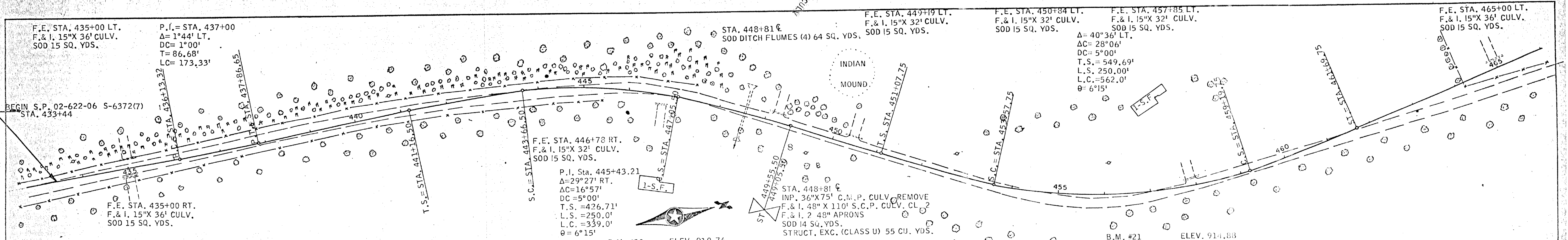
585

CONSTRUCTION



DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____

DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____



F.E. STA. 492+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 510+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 516+00 LT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

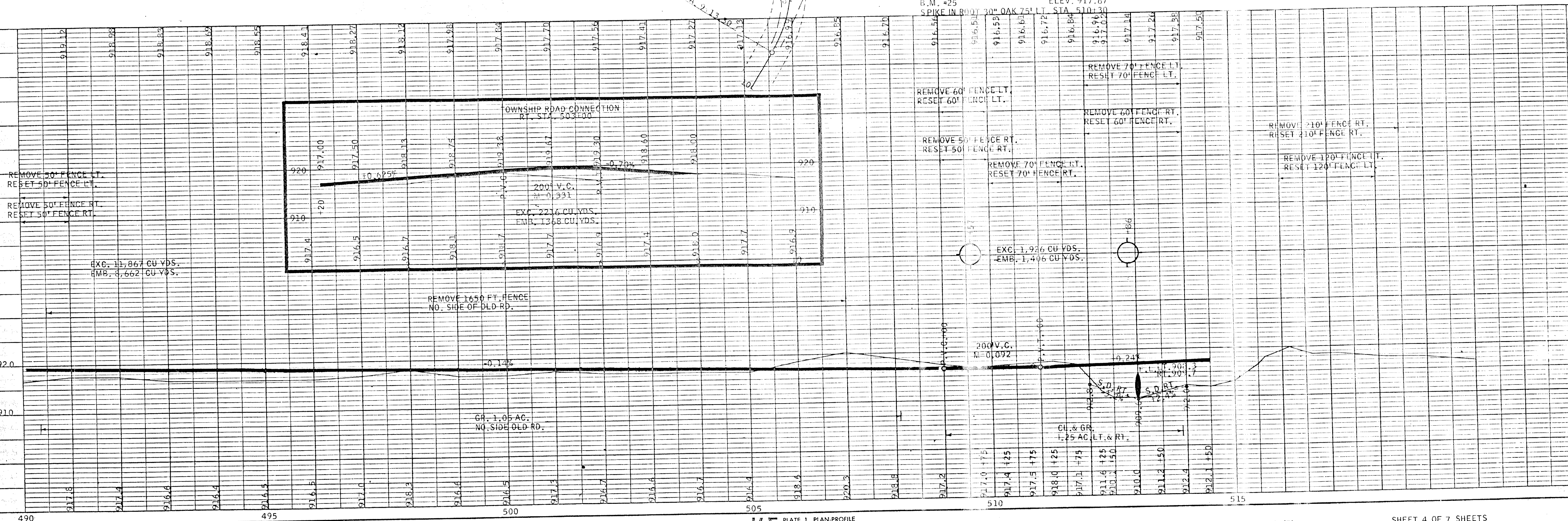
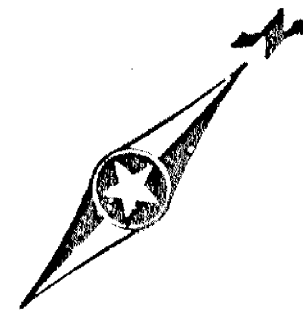
F.E. STA. 492+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 500+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 511+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

F.E. STA. 518+00 RT.
F. & I. 15"X 36' CULV.
SOD 15 SQ. YDS.

STA. 513+00 E
F. & I. 4'X5'X56' P.C. CATTLE PASS
F. & I. 2'4'X5' P.C. END SECTS.
SOD 32 SQ. YDS.
L.C. 26 C.Y. (CLASS U)



490

495

500

505

510

515

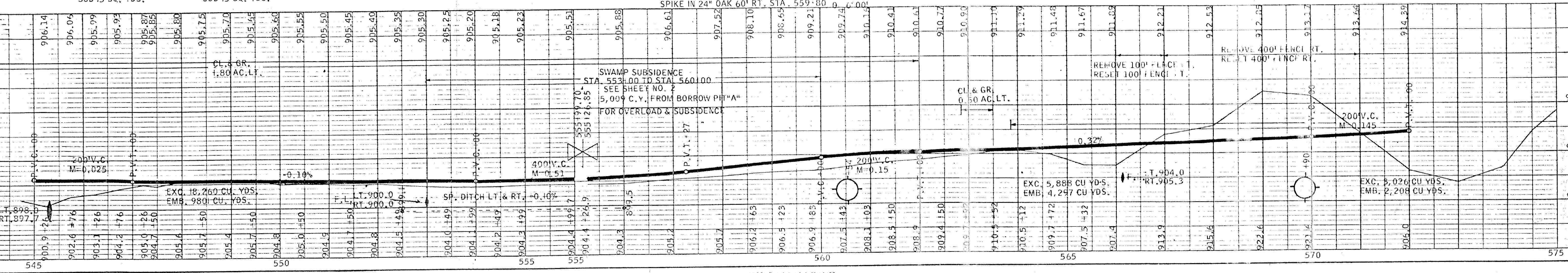
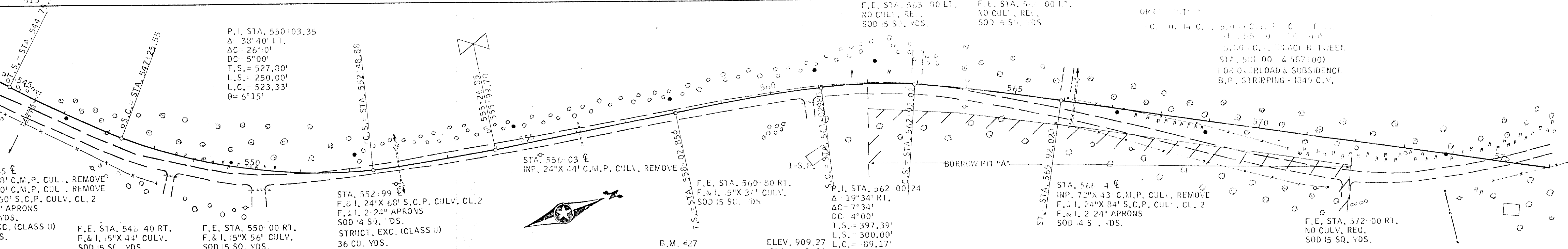
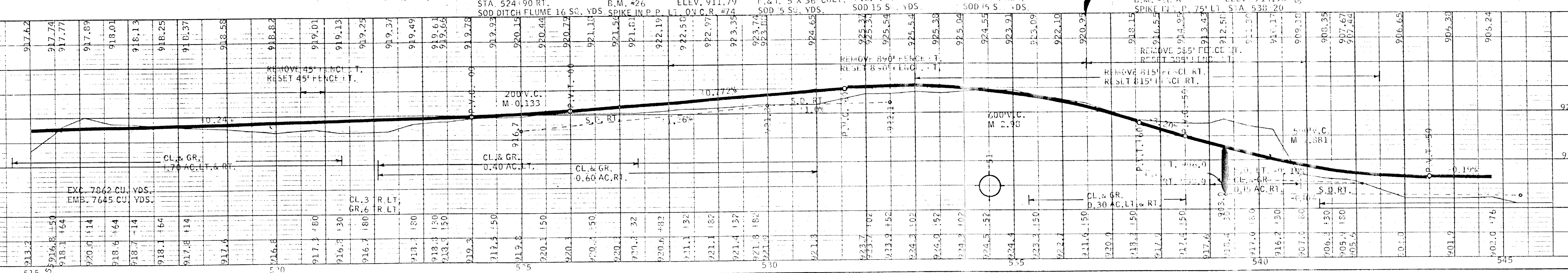
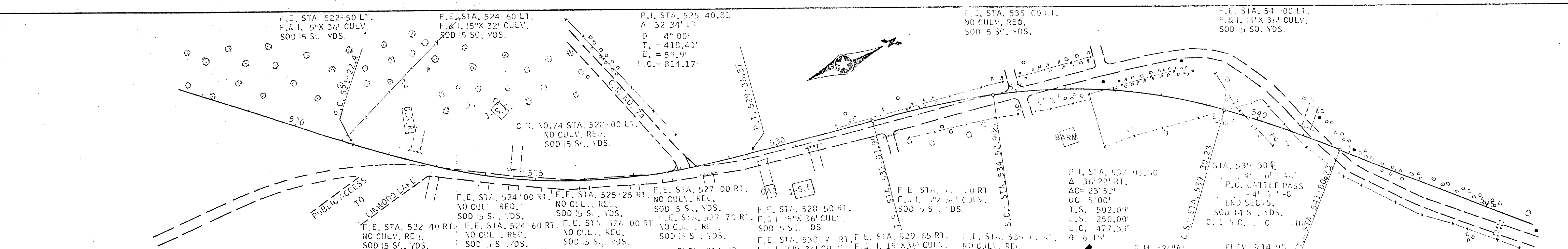
PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

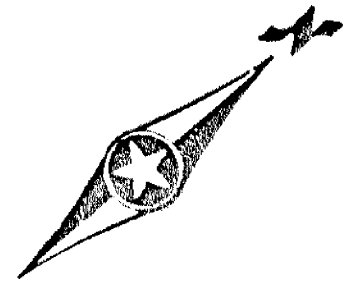
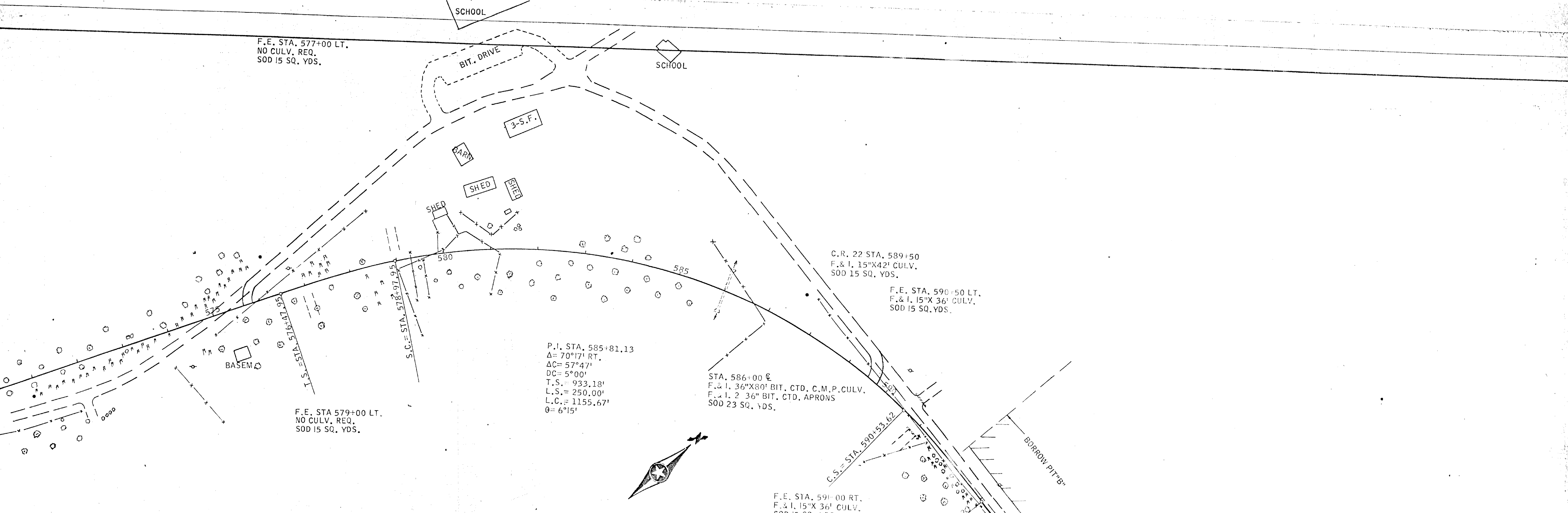
S.P. 02-622-06 S-6372 (7)

SHEET 4 OF 7 SHEETS

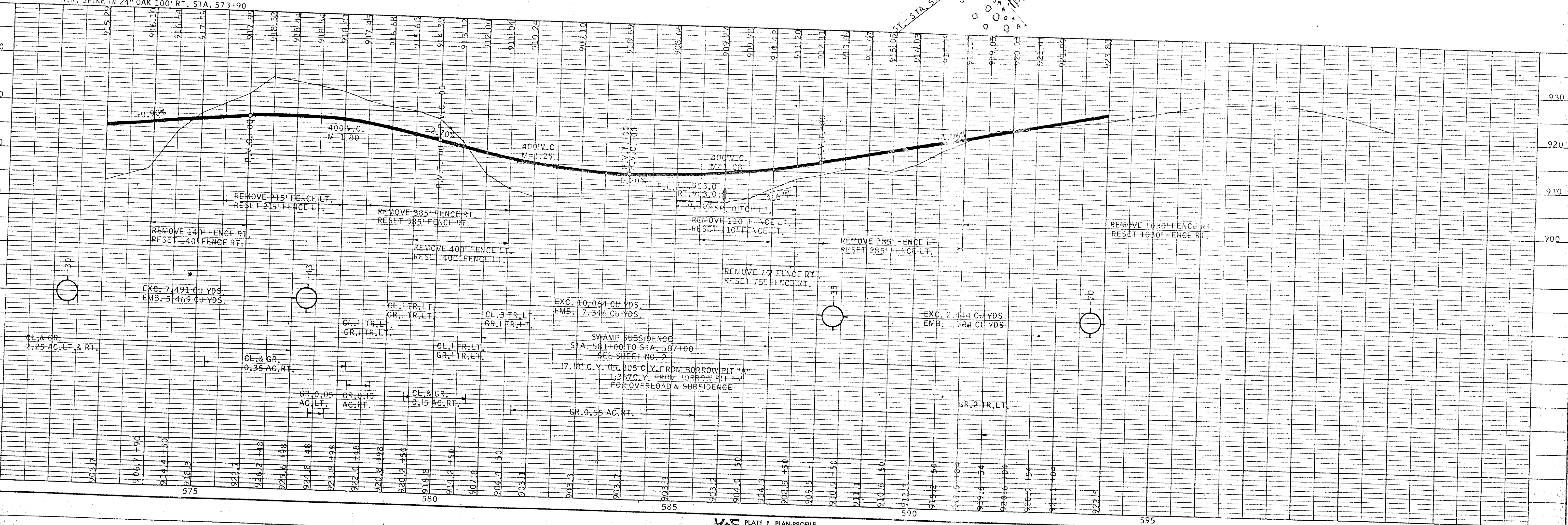
48 7012 IMPERIAL™ TRACING CLOTH 2112

F.L. RT. 901.2
 F.L. RT. 901.0





B.M. # 28
 R.R. SPIKE IN 24" OAK 100' RT. STA. 573+90
 ELEV. 917.53



K&E PLATE 1, PLAN-PROFILE
 KEUFFEL & ESSER CO.
 40 7012 IMPERIAL™ TRACING CLOTH 21602

