



HIGHWAY FACTORS ATTACHMENT

Grading and paving plans for the westbound Silver Lake rest stop completed in 1973

Highland, IL

HWY23MH015

(8 pages)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

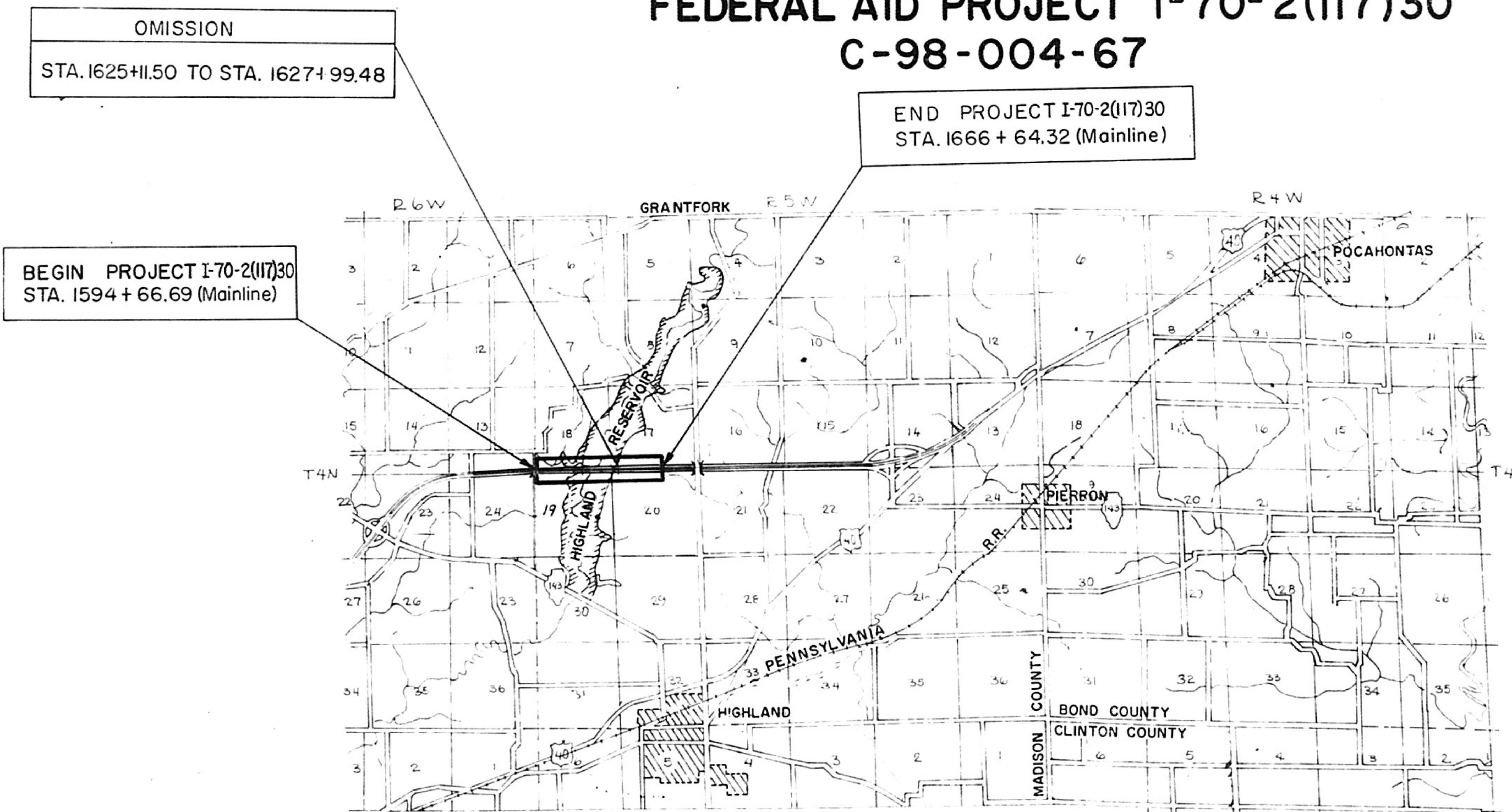
FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70-131	60-131	MADISON	57	1
FED. ROAD NO. 7	ILLINOIS PROJECT		1-11-2(117)30	

P-98-080-64

INDEX OF SHEETS
ON SHEET NO.5

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

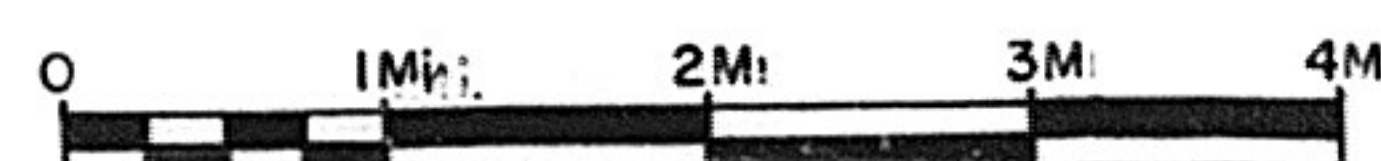
GRADING AND PAVING-REST AREAS
F.A.I. ROUTE 70 SECTION 60-131
MADISON COUNTY
FEDERAL AID PROJECT I-70-2(117)30
C-98-004-67



LAYOUT



GROSS LENGTH 7197.63 FT. = 1.363 MILES
LENGTH OF PROJECT 6909.65 FT. = 1.309 MILES
ROAD CLASSIFICATION: 2250(87)·15·1·0·90 (PCC-20)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNIVERSITY AND STATE TRANSPORTATION
7/15/73 7/15/73

RECEIVED

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

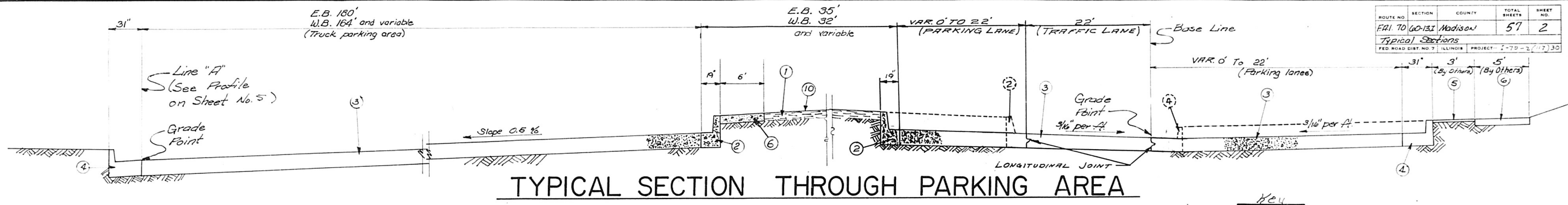
APPROVED _____ DATE _____
DIVISION ENGINEER

REVISED SET
10-15-73 , 3-12-75

CONTRACT NO. 25350

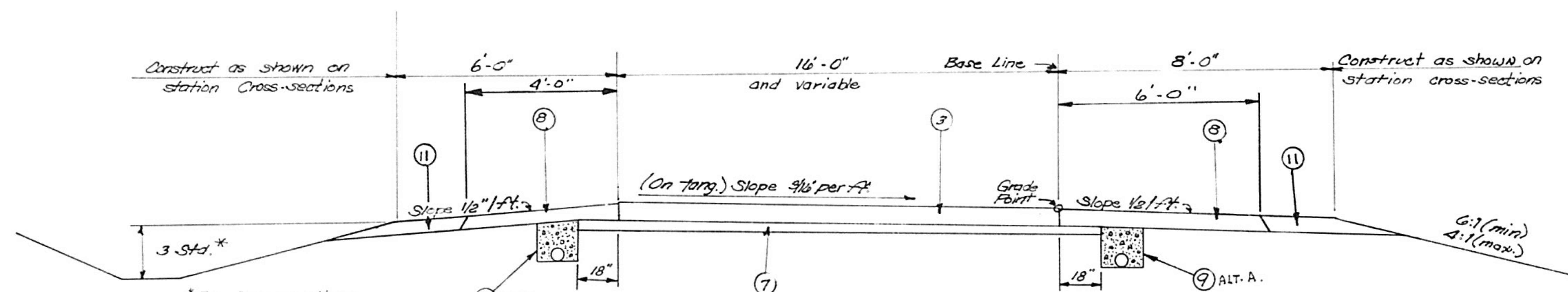
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	60-131	Madison	57	2

Typical Sections
 FED. ROAD DIST. NO. 7 ILLINOIS PROJECT: 1-70-2(17)30



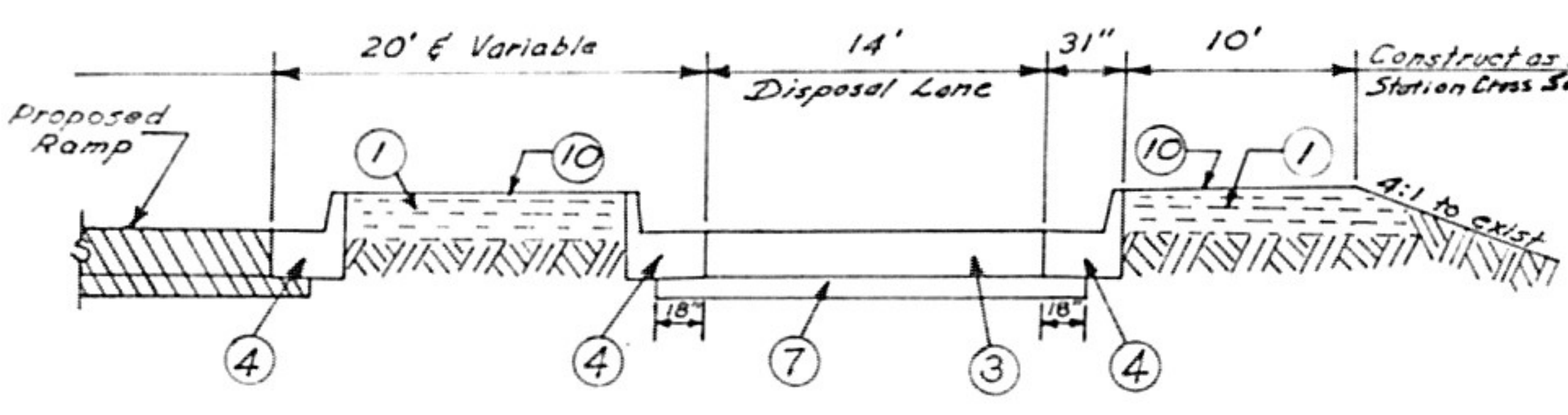
TYPICAL SECTION THROUGH PARKING AREA

- Key
- ① Earth Fill
 - ② Combination Concrete Curb & Gutter, Type B-9.12
 - ③ P.C. Concrete Pavement, 8 inch.
 - ④ Combination Concrete Curb & Gutter, Type B-6.24
 - ⑤ Incidental Bituminous Surfacing (By others)
 - ⑥ P.C. Concrete Sidewall, 4 inch.
 - ⑦ Stabilized Sub-base, 4 inch.
 - ⑧ Stabilized Shoulders - B.A.M.
 - ⑨ Pipe Underdrains & Pipe Drains 6" (ALTERNATE A)
 - ⑩ Sodding
 - ⑪ Aggregate Shoulder, Type A

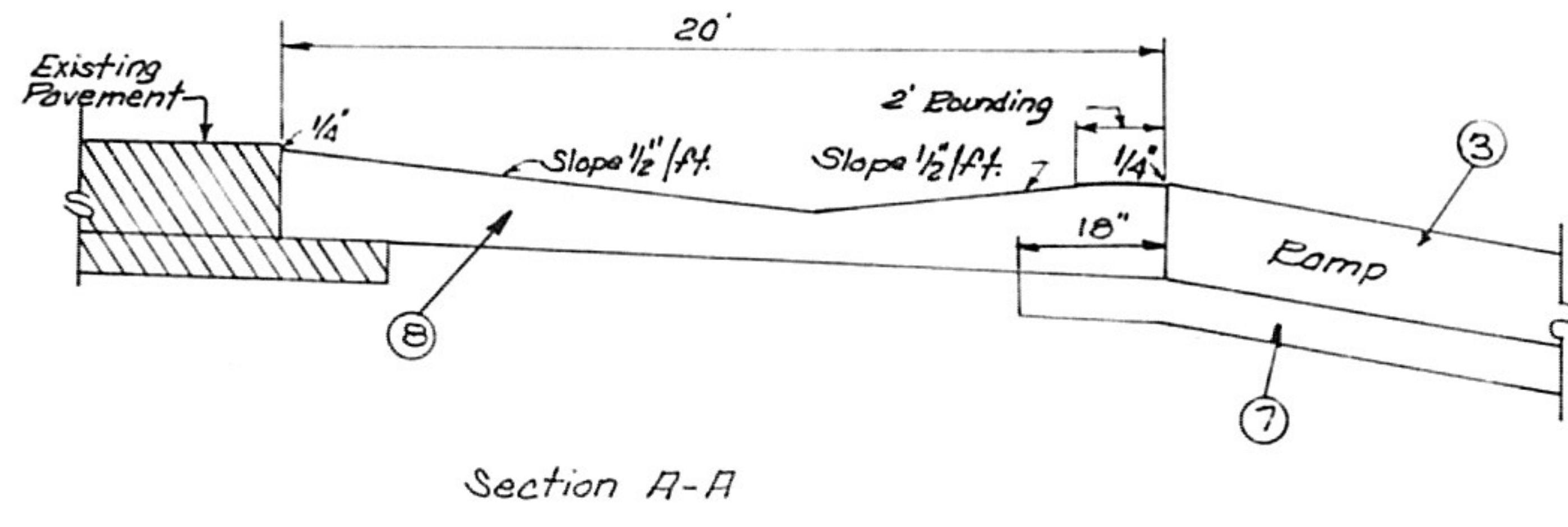


TYPICAL SECTION ~ RAMP

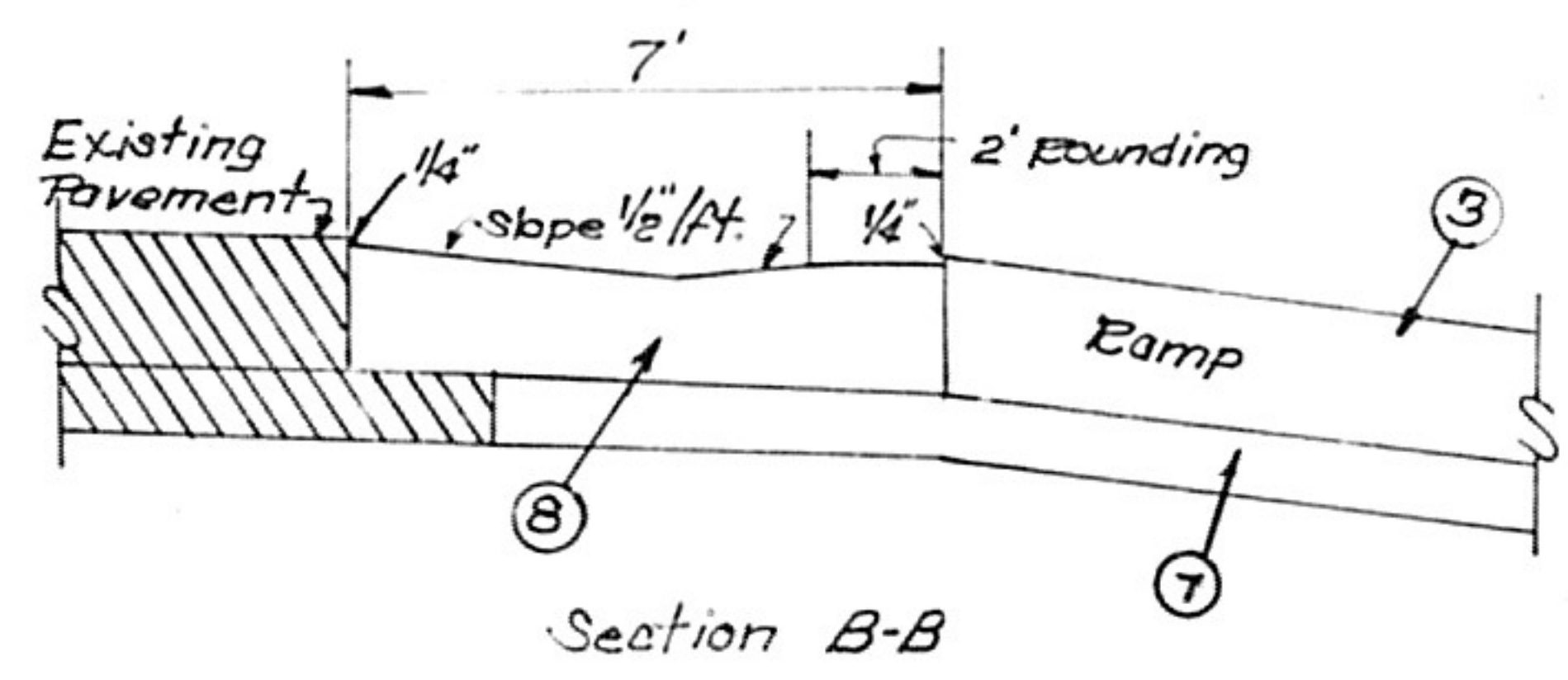
Sta 6+62.40 To Sta 10+29.59 Eastbound
 Sta 19+45.10 To Sta 22+00.00
 Sta 11+00.00 To Sta 20+57.25 Westbound
 Sta 30+09.33 To Sta 34+34.98
 Note: On superelevated sections rotate about "grade point". See plan sheets.



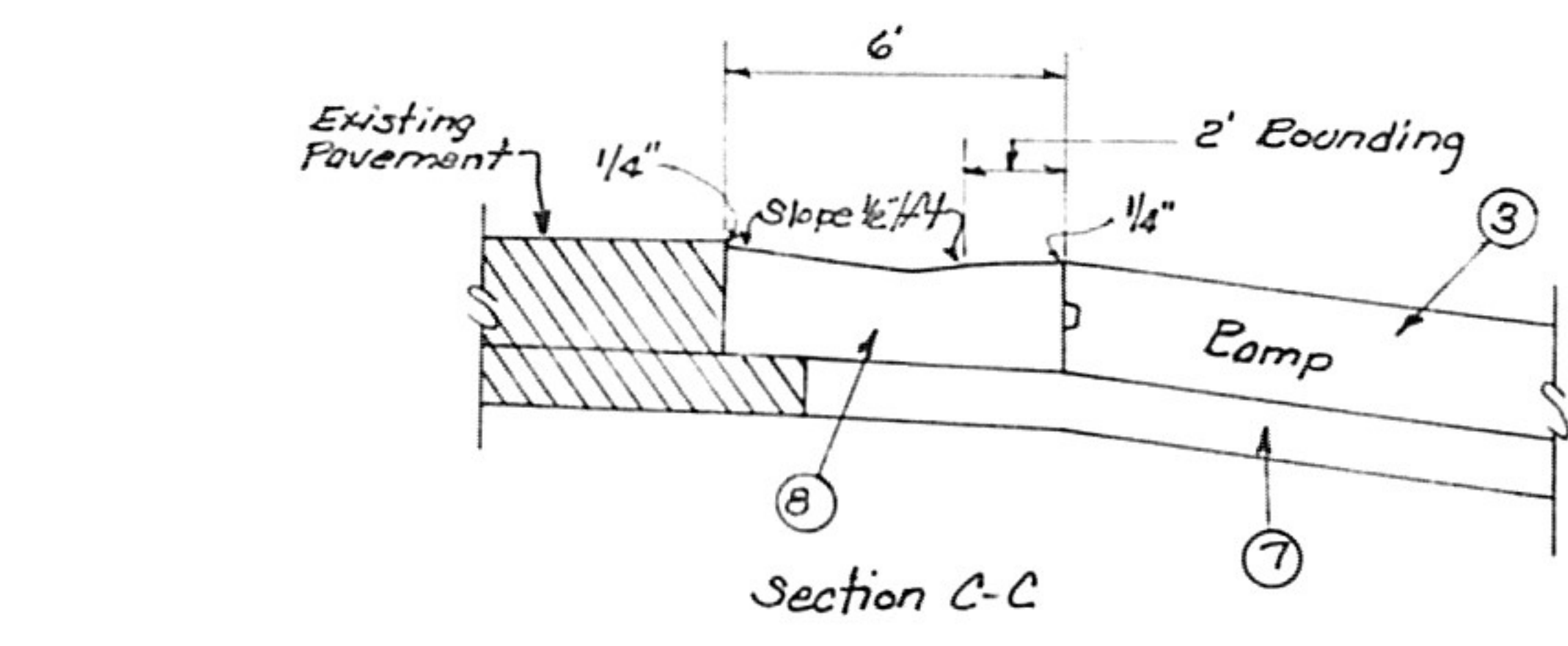
TYPICAL SECTION THROUGH SURPLUS DISPOSAL AREA



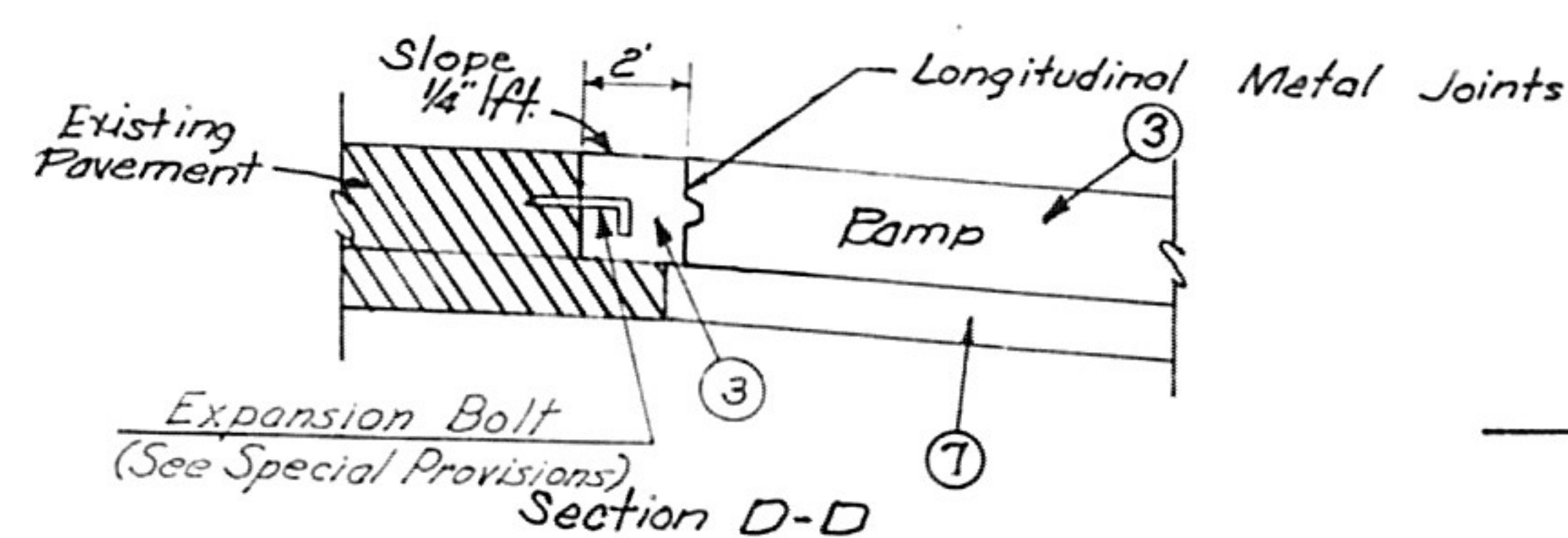
Section A-A



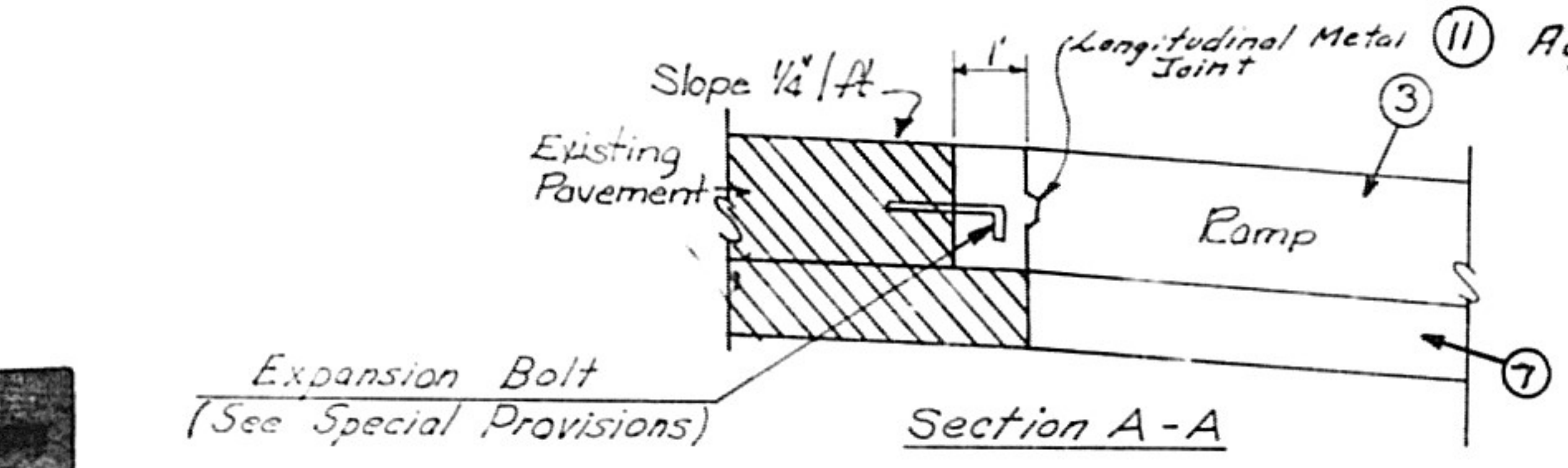
Section B-B



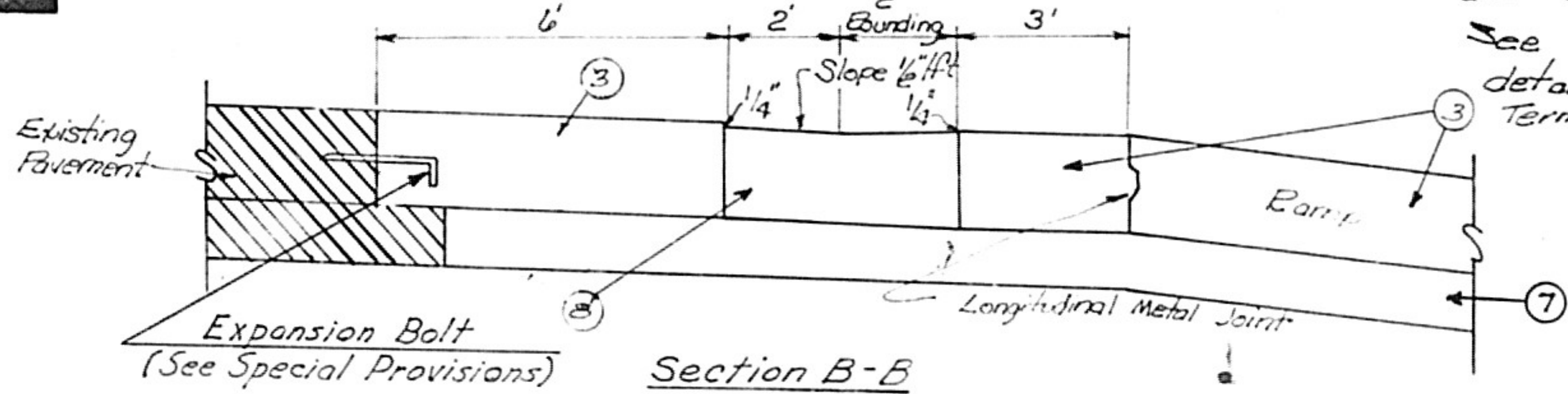
Section C-C



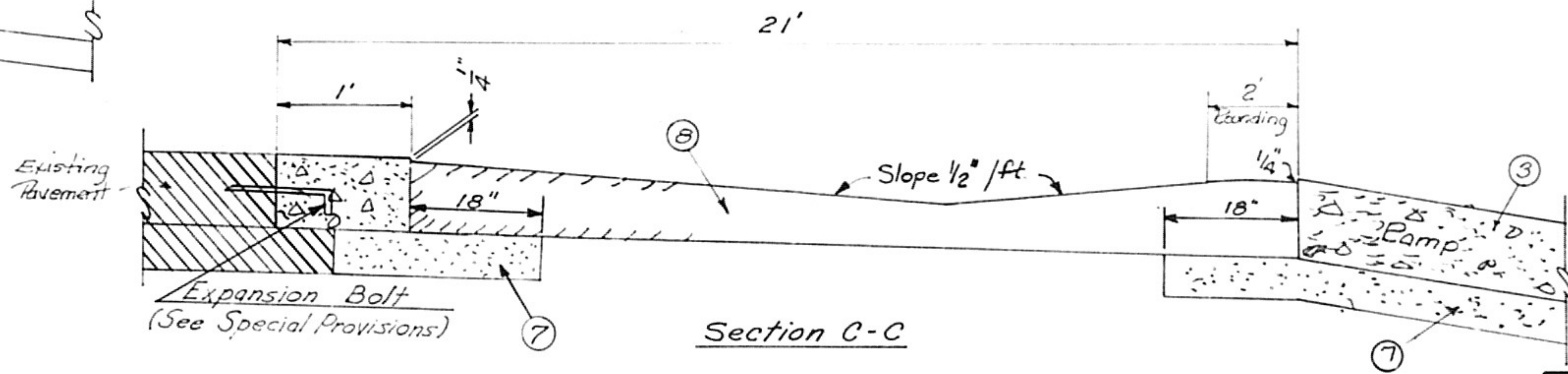
Section D-D



Section A-A



Section B-B



Section C-C

TYPICAL SECTIONS EXIT TERMINAL

NOTE: THE CROSS SECTIONS AND THE BALANCE QUANTITIES HAVE NOT BEEN ADJUSTED TO AGREE WITH REVISIONS SHOWN ON TYPICAL SECTIONS. THE SHOULDERS HAVE BEEN CHANGED FROM 10' & 8' TO 8' & 6' RESPECTIVELY.

TYPICAL SECTIONS ~ ENTRANCE TERMINAL

**TYPICAL SECTIONS
 F.A.I. ROUTE 70
 SECTION 60-131
 MADISON COUNTY
 SCALE: NONE**

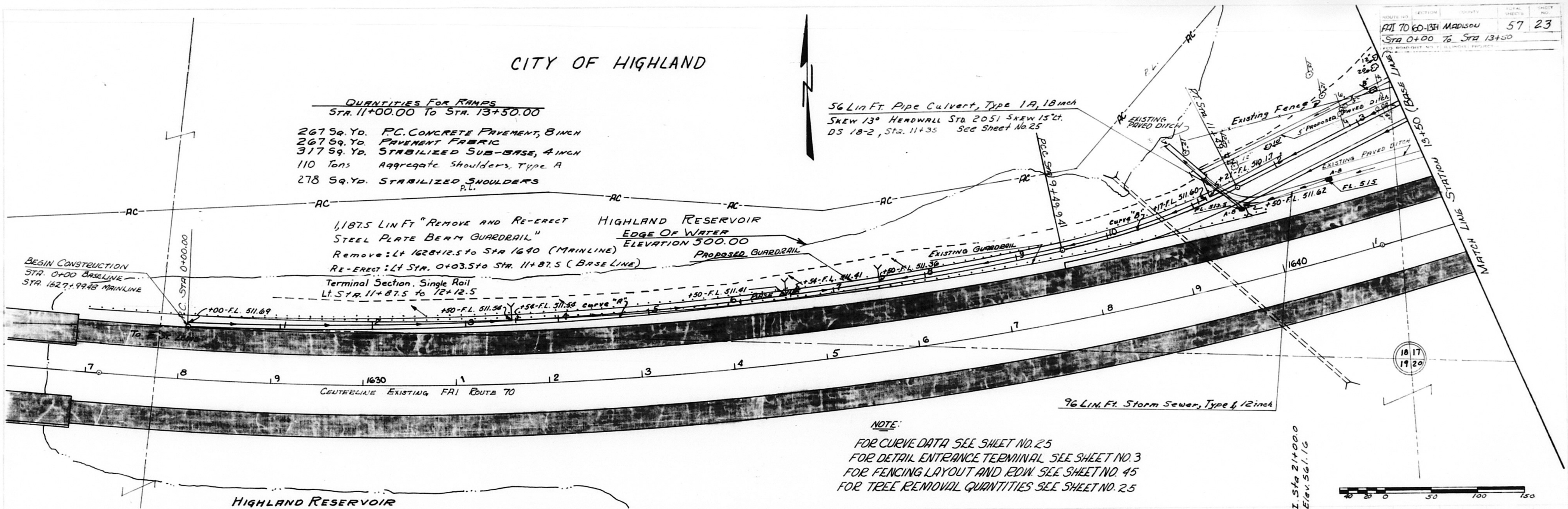
CITY OF HIGHLAND

QUANTITIES FOR RAMPS
 STA. 11+00.00 TO STA. 13+50.00
 267 Sq. Yd. P.C. CONCRETE PAVEMENT, 8 INCH
 267 Sq. Yd. PAVEMENT FABRIC
 317 Sq. Yd. STABILIZED SUB-BASE, 4 INCH
 110 Tons Aggregate Shoulders, Type A
 278 Sq. Yd. STABILIZED SHOULDERS

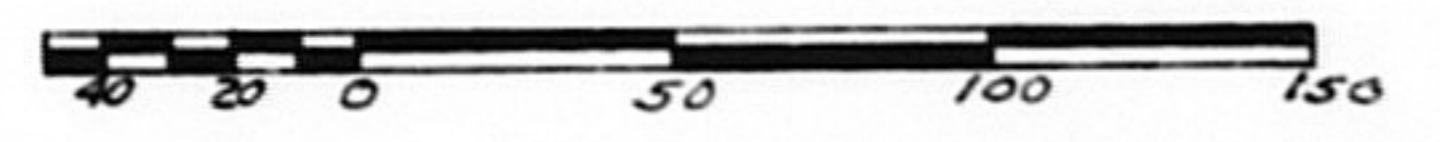
56 Lin Ft. Pipe Culvert, Type 1A, 18 inch
 SKEW 13° HEADWALL STD 20.51 SKEW 15°
 DS 18-2, Sta. 11+35 See Sheet No 25

1,187.5 LIN FT "REMOVE AND RE-ERECT
 STEEL PLATE BEAM GUARDRAIL"
 REMOVE: Lt STA. 1628+12.5 TO STA 1640 (MAINLINE)
 RE-ERECT: Lt STA. 0+03.5 TO STA. 11+87.5 (BASE LINE)
 Terminal Section, Single Rail
 Lt STA. 11+87.5 TO 12+12.5

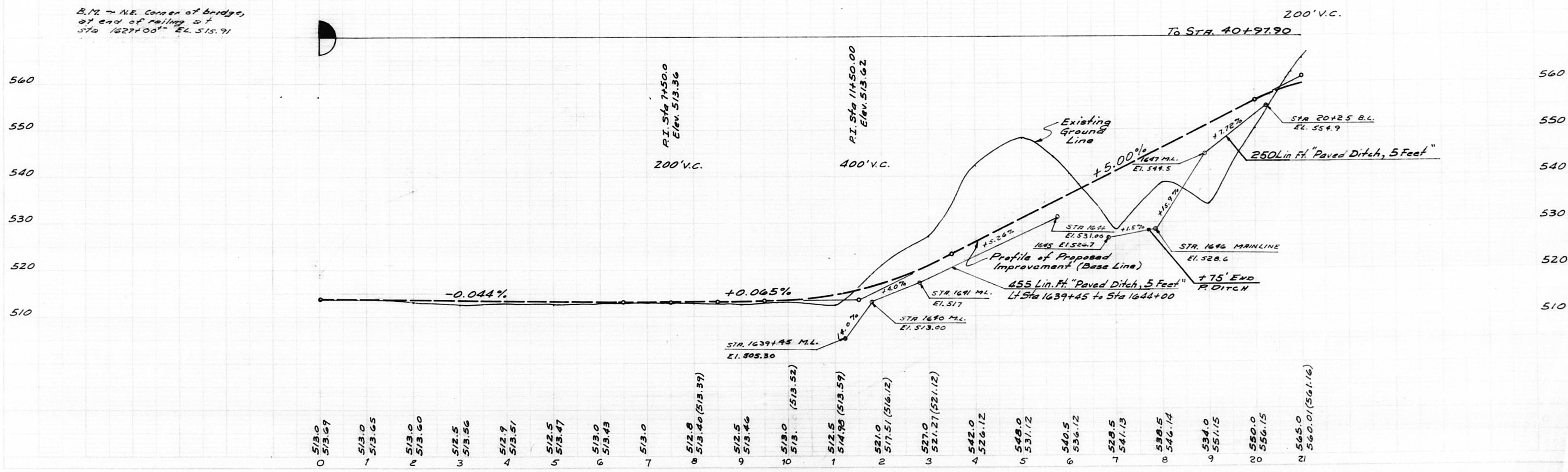
BEGIN CONSTRUCTION
 STA. 0+00 BASELINE
 STA. 1627+99.48 MAINLINE



NOTE:
 FOR CURVE DATA SEE SHEET NO. 25
 FOR DETAIL ENTRANCE TERMINAL SEE SHEET NO. 3
 FOR FENCING LAYOUT AND EDW. SEE SHEET NO. 45
 FOR TREE REMOVAL QUANTITIES SEE SHEET NO. 25



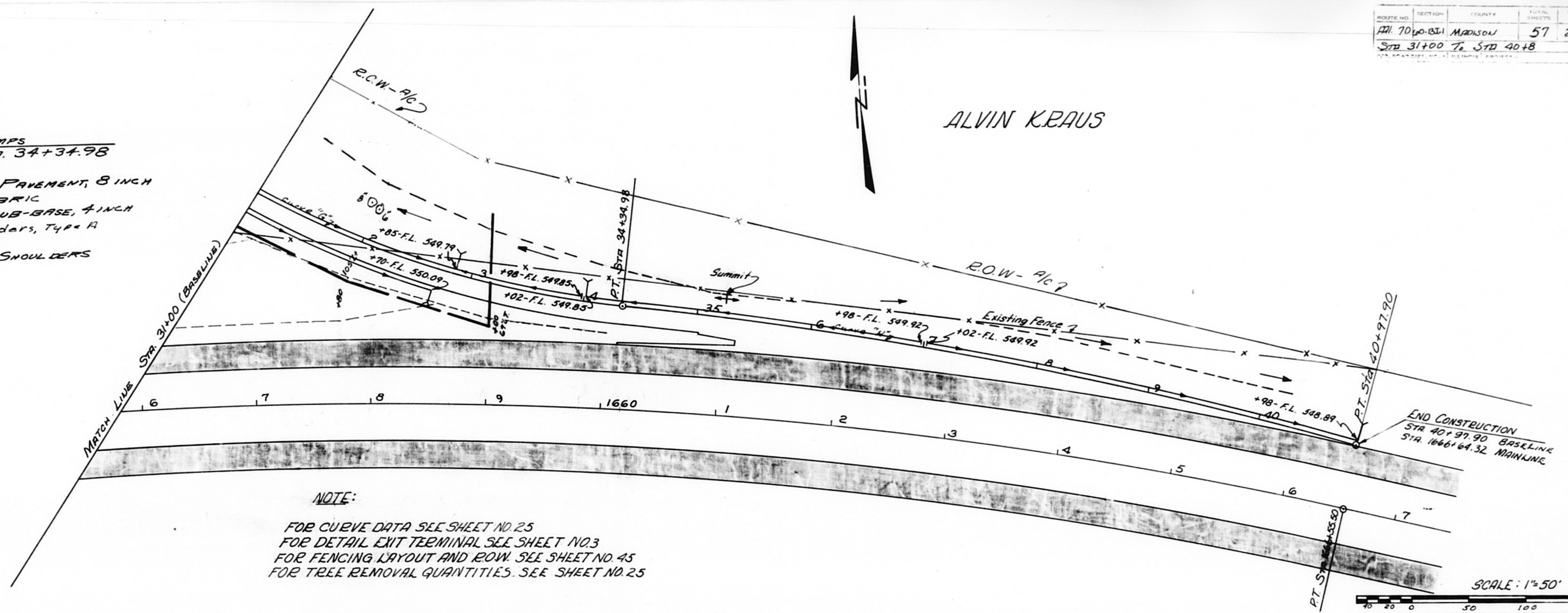
B.M. - N.E. Corner of bridge,
 at end of railing at
 Sta 1627+00" EL. 515.91



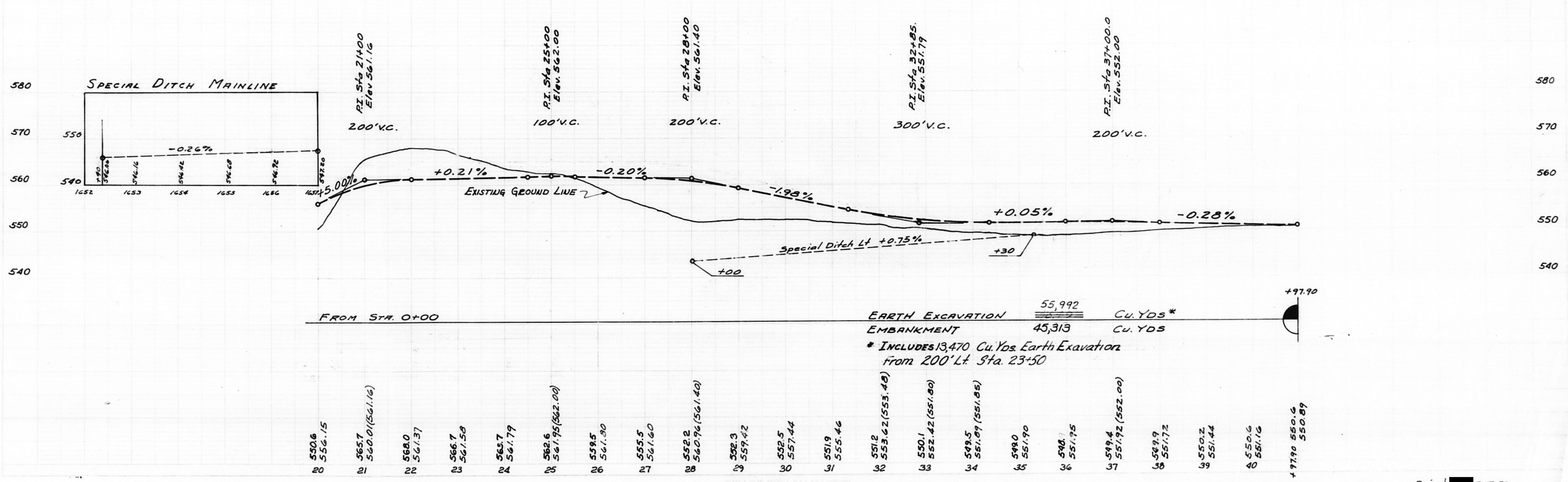
ALVIN KRAUS

QUANTITIES FOR RAMPS
 STA. 31+00.00 TO STA. 34+34.98

- 596 Sq. Yd. P.C. CONCRETE PAVEMENT, 8 INCH
- 596 Sq. Yd. PAVEMENT FABRIC
- 707 Sq. Yd. STABILIZED SUB-BASE, 4 INCH
- 146 Tons Aggregate Shoulders, Type A
- 372 Sq. Yd. STABILIZED SHOULDERS



NOTE:
 FOR CURVE DATA SEE SHEET NO. 25
 FOR DETAIL EXIT TERMINAL SEE SHEET NO. 3
 FOR FENCING LAYOUT AND R.O.W. SEE SHEET NO. 45
 FOR TREE REMOVAL QUANTITIES SEE SHEET NO. 25



HIGHLAND RESERVOIR
EDGE OF WATER
ELEVATION 500.00
CURVE DATA

CURVE A
P.I. Sta 4+77.51
Δ = 14°27'50"
D = 1°31'21.39"
R = 3763.00
L = 949.94
T = 477.51
E = 30.10
S = Construct according to baseline profile

CURVE B
P.I. Sta 10+50.51
Δ = 15°00'00"
D = 7°30'
R = 763.94
L = 200.00
T = 100.57
E = 6.59'
S = .08
Superelevation Attain: Construct to Baseline Profile
Superelevation Remove: Sta. 10+79.94 to Sta. 12+89.94

CURVE C
P.I. Sta 14+69.05
Δ = 11°49'30"
D = 7°30'
R = 763.94
L = 157.67
T = 79.11
E = 4.08'
S = .08
Superelevation Attain: Sta. 12+93.44 to Sta. 14+37.94
Superelevation Remove: Sta. 14+99.61 to Sta. 16+43.61

CURVE D
P.I. Sta 20+42.37
Δ = 23°36'00"
D = 13°20'
R = 429.72
L = 177.00
T = 89.77
E = 10.07'
S = NONE

CURVE E
P.I. Sta 24+82.85
Δ = 35°30'00"
D = 69°52'23"
R = 82.00
L = 50.81
T = 26.25
E = 4.10'
S = NONE

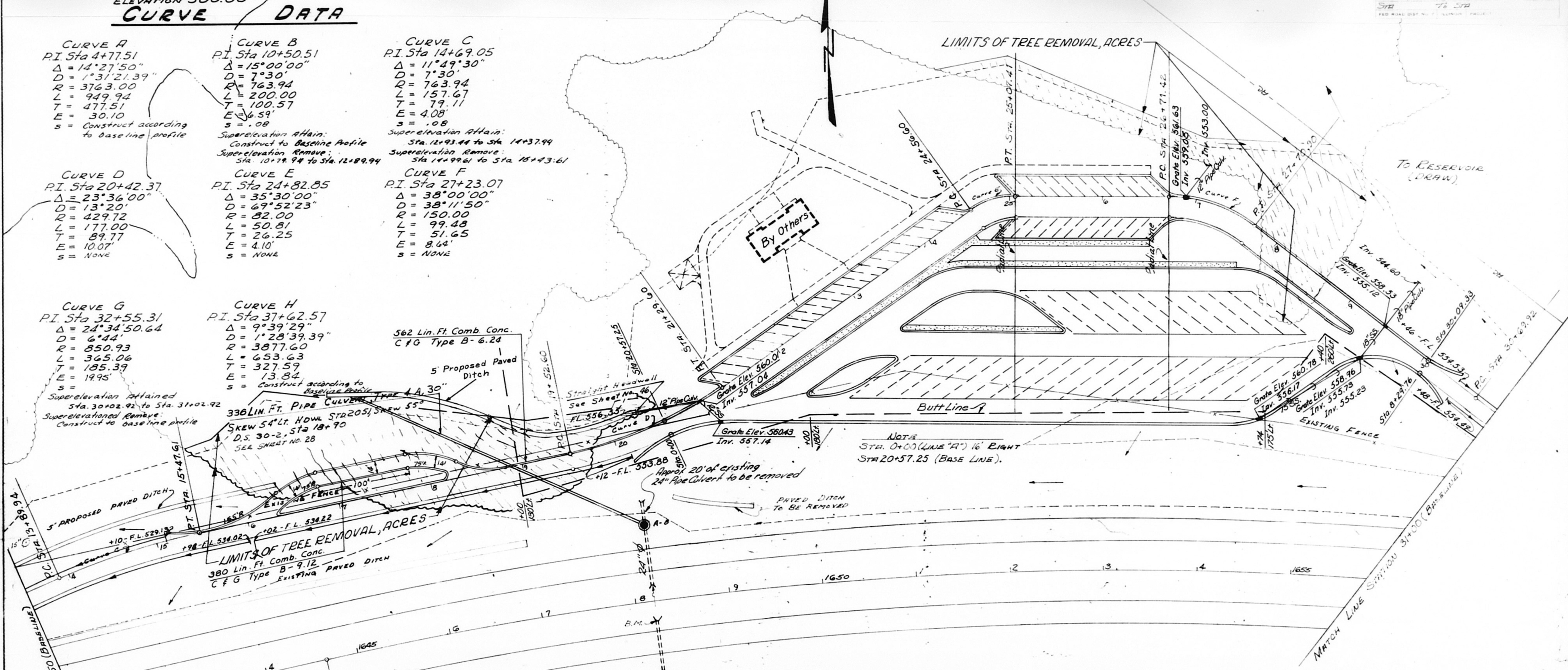
CURVE F
P.I. Sta 27+23.07
Δ = 38°00'00"
D = 38°11'50"
R = 150.00
L = 99.48
T = 51.65
E = 8.64'
S = NONE

CURVE G
P.I. Sta 32+55.31
Δ = 24°34'50.64"
D = 6°44'
R = 850.93
L = 365.06
T = 185.39
E = 19.95'
S =
Superelevation Attained: Sta. 30+02.92 to Sta. 31+02.92
Superelevation Remove: Construct to baseline profile

CURVE H
P.I. Sta 37+62.57
Δ = 9°39'29"
D = 1°28'39.39"
R = 3877.60
L = 653.63
T = 327.59
E = 13.84'
S = Construct according to baseline profile

562 Lin. Ft. Comb. Conc.
C & G Type B-6.24

336 LIN. FT. PIPE CULVERT TYPE A-A, 30"
SKEW 54° LT. HDWL STA 2051, SKEW 55°
D.S. 30-2, STA 18+90
SEE SHEET NO. 28



NOTE
STA. 0+00 (LINE "A") 16' RIGHT
STA 20+57.25 (BASE LINE).

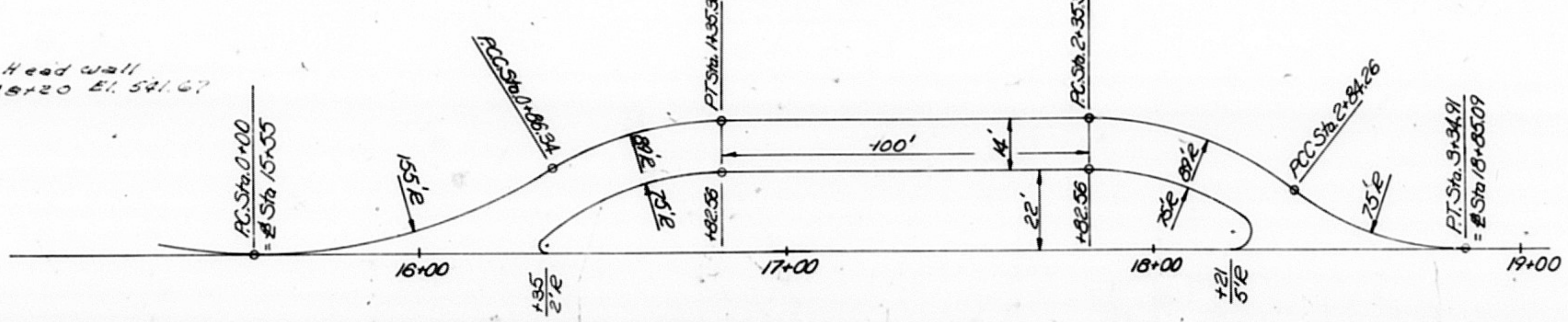
TREE REMOVAL
A. 15 acres "Tree Removal - Acres" as follows,
between Sta. 15+48 and Sta. 20+55
between Sta. 24+80 and Sta. 27+80
B. 122 in. Dia "Tree Removal (6 to 15 inch Diameter)"
C. 20 in. Dia "Tree Removal (over 15 inch Diameter)"
B.M. - Top of Head wall
10' RT STA 12+82.20 EL. 541.67

NOTES
1) FOR DETAILS OF PAVEMENT AND DRAINAGE
IN PARKING AREA, STA. 20+57.25 TO STA.
30+09.33, SEE SHEET NO. 26
2) FOR PROFILE OF "LINE A", STA 0+00 TO
STA. 8+29.76, SEE SHEET NO. 26

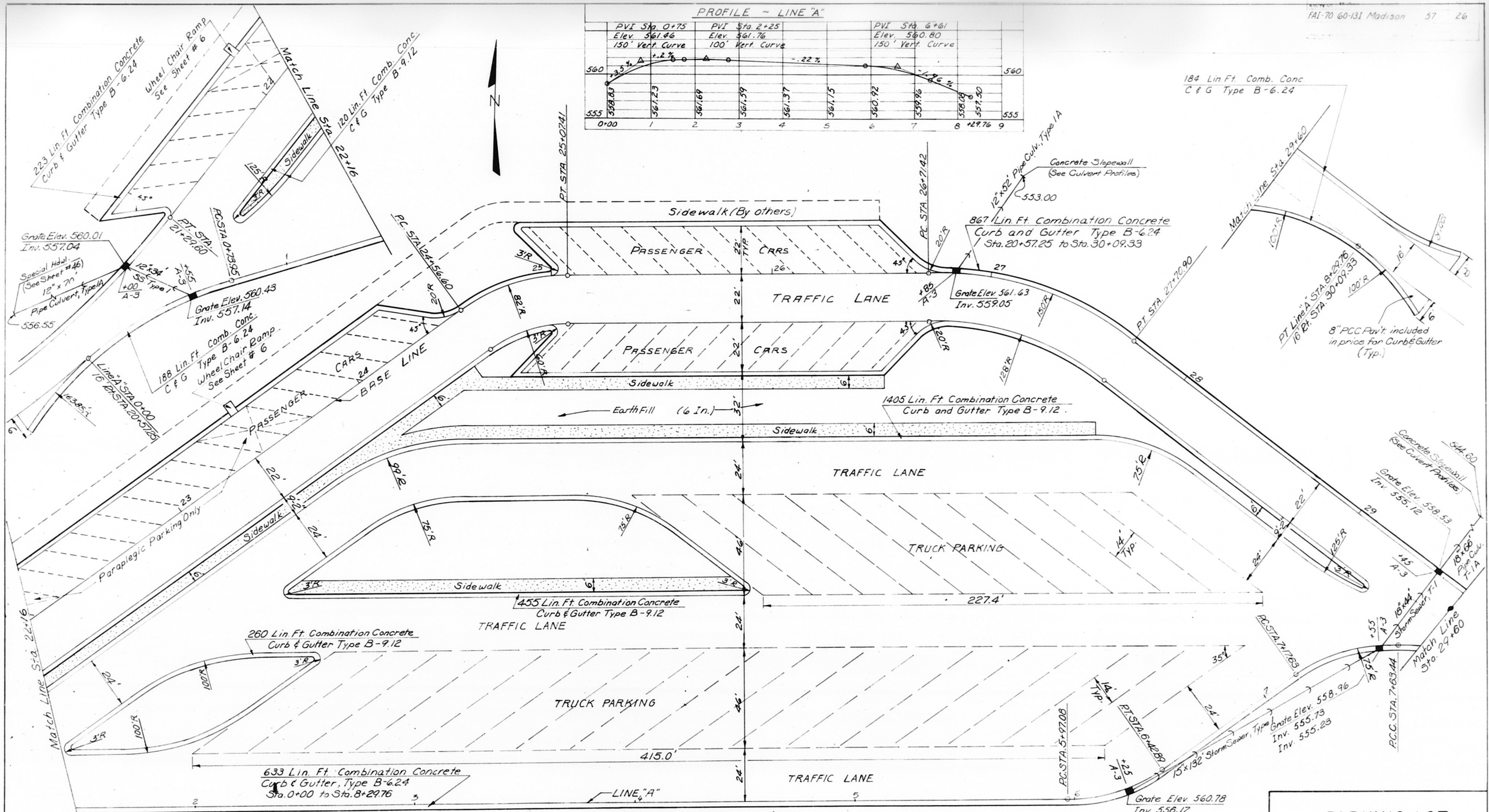
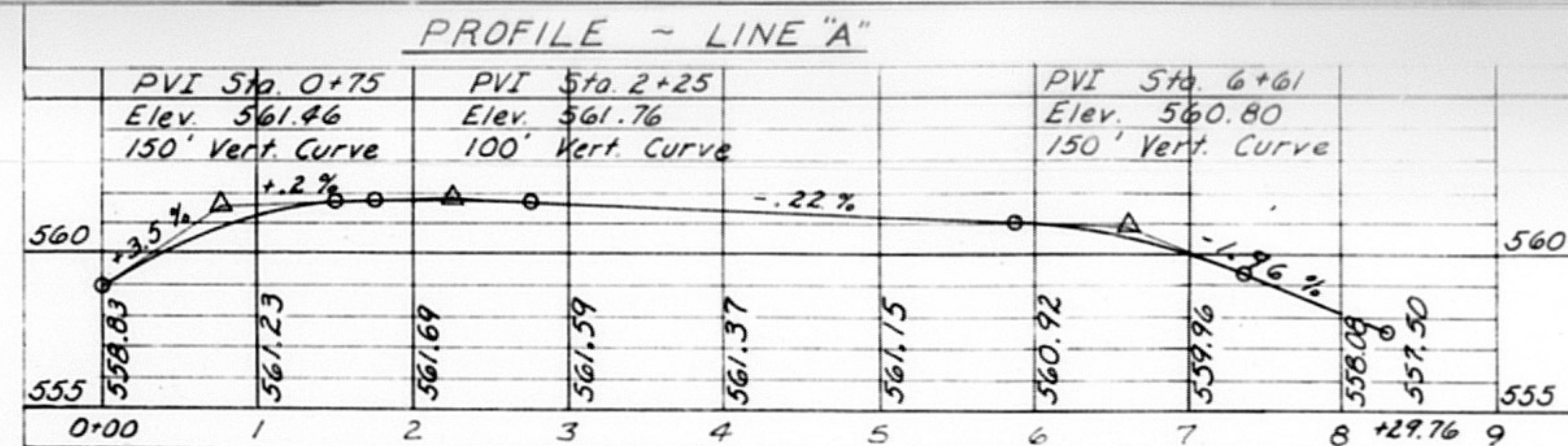
QUANTITIES FOR RAMPS & SURPLUS DISPOSAL AREA
STA 13+50.00 TO STA 20+57.25
STA 30+09.33 TO STA 31+00.00

1,859 Sq. Yd.	PC Concrete Pavement, 8 inch.
1,859 Sq. Yd.	Pavement Fabric
2,208 Sq. Yd.	Stabilized Sub-base, 4 inch.
455 Sq. Yd.	Stabilized Shoulders
948 Sq. Yd.	Sodding
158 Cu. Yd.	Earth Fill (Included in Earth Excavation)
143 Ton	Aggregate Shoulders

GEOMETRIC LAYOUT FOR SURPLUS DISPOSAL AREA



GENERAL PLAN WESTBOUND REST AREA
Scale: 1" = 40'
Revised 8-8-73
1600-5-72



QUANTITIES FOR PARKING AREA
STA. 20+57.25 TO STA. 30+09.33

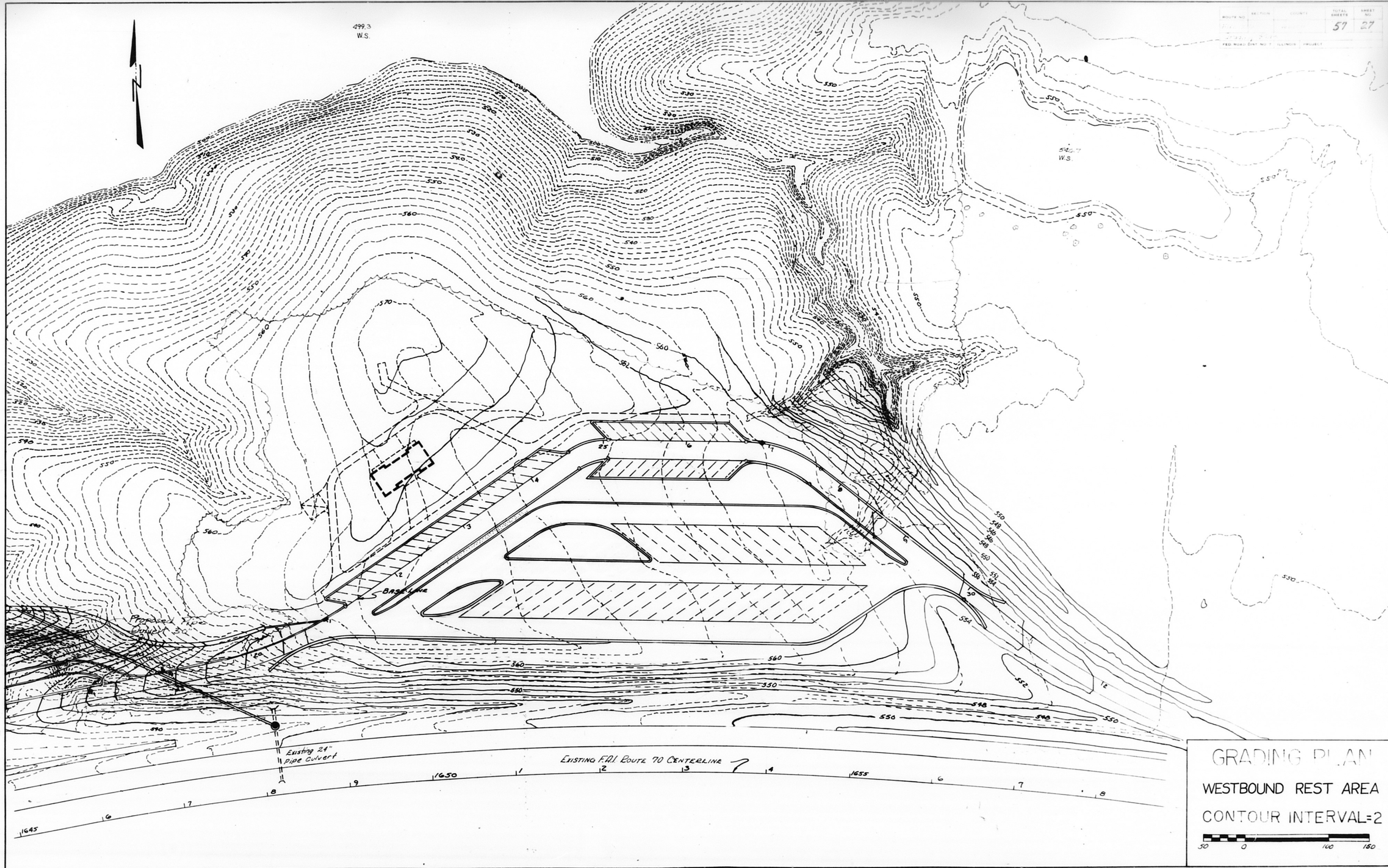
13,109	Sq. Yd.	PCC Pavement 8"
13,109	Sq. Yd.	Pavement Fabric
6,056	Sq. Ft.	PCC Sidewalk 4"
3,465	Sq. Yd.	Sodding
578	Cu. Yd.	Earth Fill (Included in Earth Excavation)
6	Each	Inlets, T-A, T-3, F & G
17	Cu. Yd.	Trench Backfill

NOTE
 --- Denotes lines for parking lanes (By others).
 Earthfill and sodding shall be placed in the central island of the parking lot and a distance of 10 feet from behind the Combination Concrete Curb & Gutter, Type B-6.24

PARKING LOT
PAVEMENT DETAIL
 WESTBOUND REST AREA
 SCALE: 1" = 20 FT.

499.3
W.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			57	27
FED. ROAD DIST. NO. 7, ILLINOIS, PROJECT				



GRADING PLAN
 WESTBOUND REST AREA
 CONTOUR INTERVAL=2



Revised 7-17-73