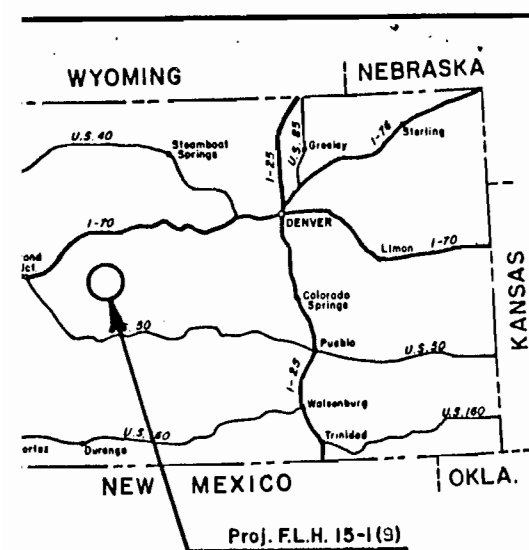




U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

AS-CONSTRUCTED

COLORADO FEDERAL LANDS HIGHWAY PROJECT 15-1(S)

MC CLURE PASS

CLASS 2

GUNNISON COUNTY

LENGTH ~~4.463~~ MILES
4.475

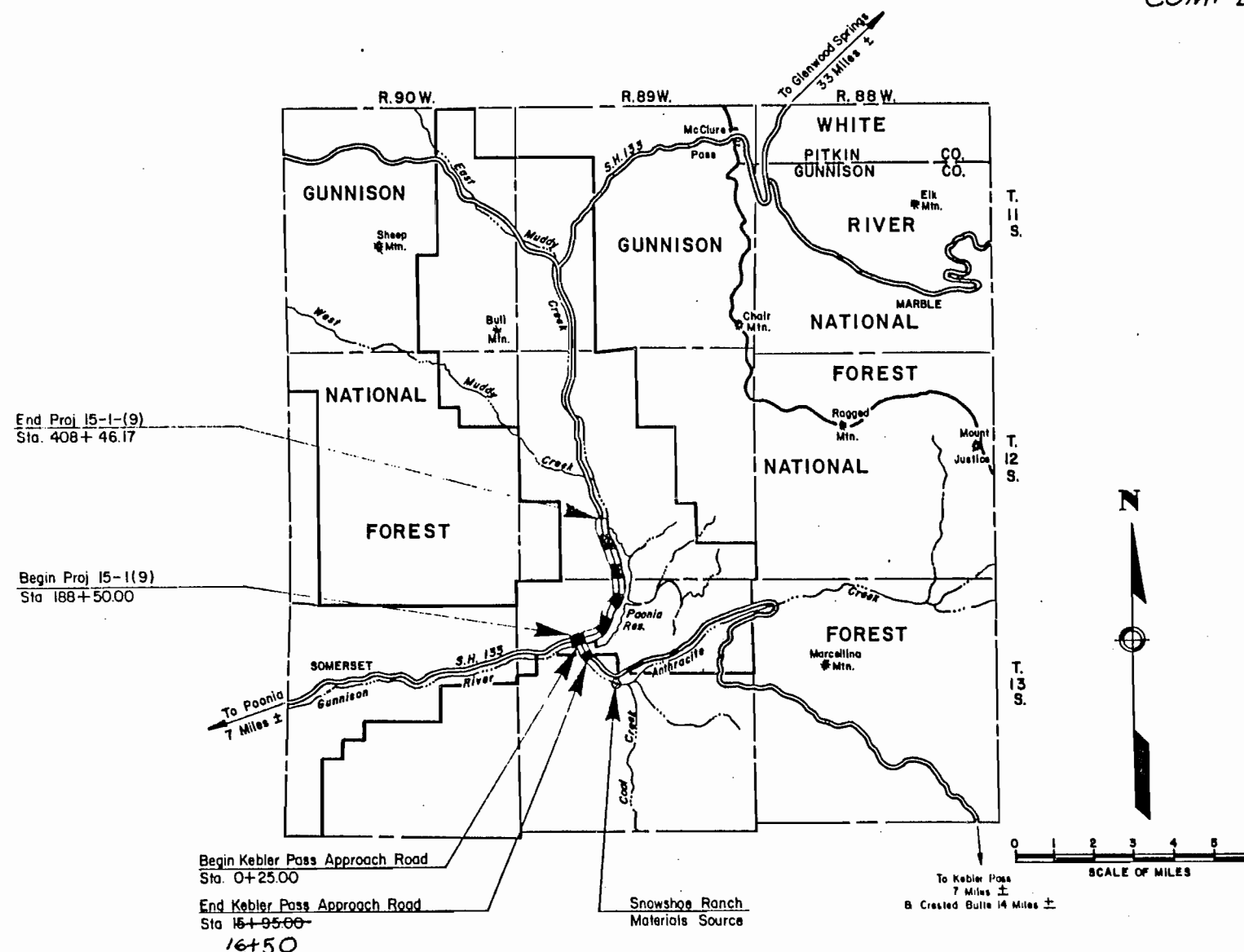
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
COLO.	F.L.H. 15-1(S)	1	34

INDEX TO SHEETS	
SHEET	DESCRIPTION
1	Title Sheet
2	Typical Sections
3-4	Summary of Quantities
5	Drainage Summary
6	Site Map
7-12	Plan and Profile, Sta 188+50 to 275+00
13	Plan and Profile, Kebler Pass Approach Road
14	Special 1 - Waste Area, Sta. 210+00 Right
15	Special 2 - Snowshoe Ranch Materials Source
16	Special 3 - Hillfiker Walls Typical Section
17	Special 4 - Hillfiker Walls Construction Details
18	Special 5 - Reinforced Earth Walls
19-22	Special 6 - Sign Details
23	Special 7 - Striping Details
24	Special 8 - Burlap Bag Curb Spillway
25-34	Standard Drawings

CONVENTIONAL SYMBOLS

PROJECTED CENTERLINE	
STAKED CENTERLINE	
REVISED CENTERLINE	
PRESENT ROAD	
STATE BOUNDARY	
COUNTY LINE	
FOREST BOUNDARY	
PARK BOUNDARY	
TOWNSHIP OR RANGE LINE	
SECTION LINE	
1/4 SECTION LINE	
1/16 SECTION LINE	
OWNERSHIP BOUNDARY	
PARCEL NUMBER	
SECTION CORNERS	
1/4 CORNERS	
1/16 CORNERS	
PROPOSED R/W LINE & CALCULATIONS	
FENCE	
GATE	
CATTLE GUARD	
SLOPE LIMITS	
CONSTRUCTION PERMIT	
EXISTING POLES	
UNDER GROUND LINES	
EXISTING CULVERTS	
NEW CULVERTS	
PIPE LINE (WATER, GAS, ETC.)	
DROP INLETS & MANHOLE	
TRAIL	
RAILROAD	
IRRIGATION OR FURROW DITCH	
INTERMITTENT STREAM	
RIVER WITH BRIDGE	
CHANNEL CHANGE	
DIKE	
ROCK OUTCROP	
MARSH OR SWAMP	
TREES	
GUARD RAIL	
CONTROL POINTS	

COMPLETED 1-14-85



TYPE OF CONSTRUCTION:
Grading, drainage, base, and Bituminous Surfacing

TYPE CODE: 1000

DESIGN DESIGNATION:
ADT (1983) - 582
ADT (2003) - 2187
DHV - 656
D - 50%
T - 6%
V - 30MPH

PLANS PREPARED BY
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
DENVER, COLORADO

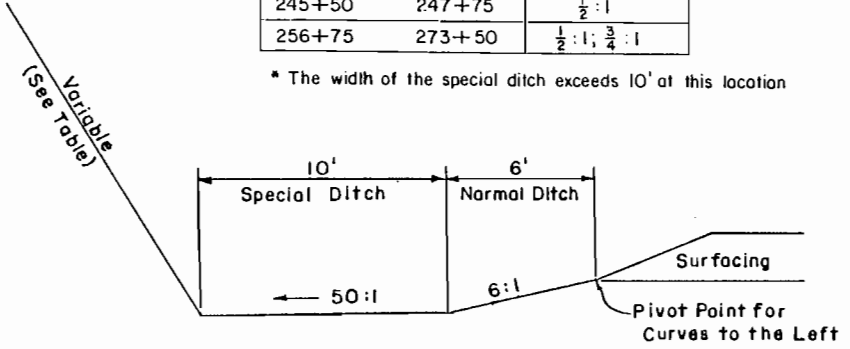
APPROVED
J. C. Brown DATE 7-28-1982
Division Engineer, Central District Federal Division

LEGEND

UNIMPROVED	GRADED	REINFORCED SUBGRADE	BASE COURSE	SURFACE TREATMENT	ROAD PLANT MIX BITUM.	CONCRETE
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SPECIAL DITCH LOCATION		
STATION TO	STATION	BACK SLOPE
219+00	223+25	$\frac{1}{2}:1, \frac{1}{4}:1$
235+25	235+75	$\frac{1}{2}:1$
241+00	244+25	$1:1, \frac{1}{2}:1$
245+50	247+75	$\frac{1}{2}:1$
256+75	273+50	$\frac{1}{2}:1, \frac{3}{4}:1$

* The width of the special ditch exceeds 10' at this location



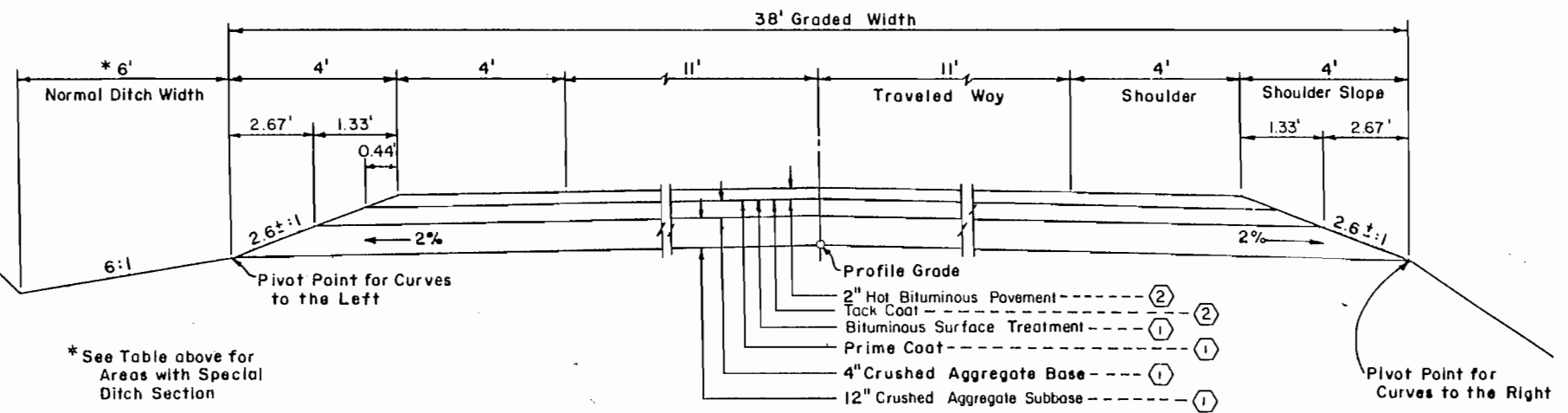
SPECIAL DITCH SECTION
(IN STEEP, HIGH CUT AREAS)

SUMMARY OF SURFACING QUANTITIES, TON						
Item No.	Cr. Aggr. Base	Cr. Aggr. Subbase	Hot Bit. Pavement	Asphalt Cement	Prime Coat	Tack Coat
304(3)	304(10A)	403(1)	403(2)	410(2)	410(4)	
MAINLINE						
188+50 - 275+00	6,539	21,480	3,147	192.0	35.3	
275+00 - 333+00			2,105	128.4		5.8
333+00 - 408+46	659	850	2,739	167.1	4.2	7.5
RAILROAD WIDENING						
188+50 - 275+00	291	861	146	8.9	1.6	
275+00 - 333+00			124	7.6		0.3
333+00 - 408+46			106	6.5		0.3
KEBLER PASS APPR. RD.						
0+25 - 15+95	233		850	51.9	6.4	
APPROACH ROAD						
220+00 Rt.	54		43	26	2.8	
TURN OUT			22	1.4		0.1
354+00 Rt.						
TOTAL	7,776	23,191	9,692	591.4	50.3	14.0

Values used for estimating quantities
Subbase : 140.3 lbs./ft.³, including 6 1% moisture.
Crushed Aggregate Base : 142.6 lbs./ft.³ including 7.2% moisture.
Hot Bituminous Pavement : 142.8 lbs./ft.³ with 6.1% Asphalt by weight of mix.
Prime Coat : 0.30 gals./sq. yd.
Tack Coat : 0.07 gals./sq. yd.

- GENERAL NOTES
- The gradient and width of roadway ditches, and the excavation and embankment slope ratios may be adjusted by the Engineer to assure adequate drainage and stability, and to provide an economical balance of quantities.
 - Traveled way widening shall be as shown in the table below. One half of the widening shall be added to the left lane and one half to the right lane. Transitions to and from widened sections shall be made throughout the spiral lengths, and may be continued throughout when the short tangents exist in curvilinear alignment.

LENGTH OF PROJECT		
STATION TO	STATION	
188+50	to 275+00 (Mainline)	8,650 Feet
275+00	to 408+46 (Mainline)	13,346 Feet
0+25	to 15+95 (Kebler Pass)	1,570 Feet
Total		23,566 Feet
Total		4.463 Miles



* See Table above for Areas with Special Ditch Section

CUT SECTION

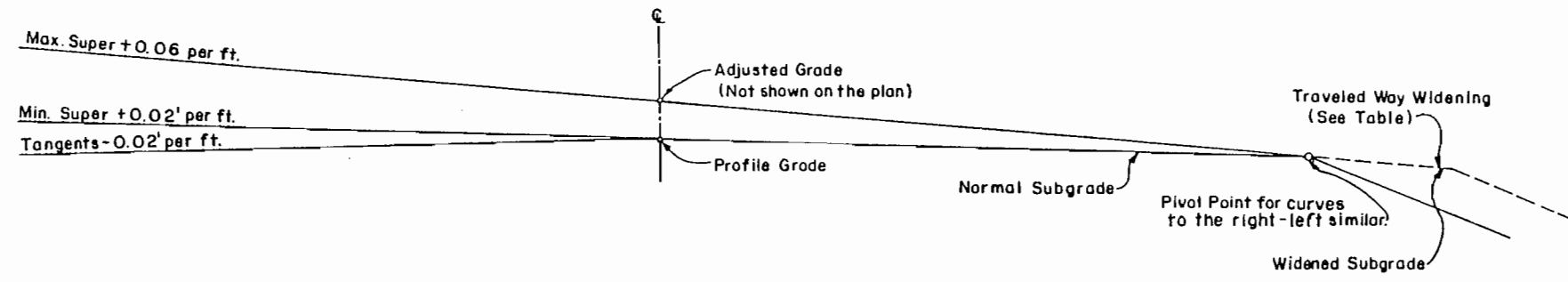
EMBANKMENT SECTION

TYPICAL SECTION

- In place from Sta. 275 to 408+46. Constructed under projects 1(6) & 1(7).
- Construct from Sta. 188+50 to 408+46. Tack coat from Sta. 275 to 408+46 as required.

SLOPE RATIOS

HEIGHT	EMBANKMENT SLOPE	HEIGHT	EXCAVATION SLOPE
0' to 3'	6:1	0' to 1'	-50:1
3' to 6'	4:1	0' to 3'	6:1
6' to 10'	3:1	3' to 6'	4:1
10' to 15'	2:1	6' to 10'	3:1
Over 15'	1 1/2:1	10' to 15'	2:1
		15' to 20'	1 1/2:1
		Over 20'	1:1
		Special	1/4:1, 1/2:1, 3/4:1



METHOD OF SUPERELEVATING ON CURVES

DEGREE OF CURVES	WIDENING IN FEET
8-11	2.0
12-14.5	2.6
15-18	3.0
19-21	3.6

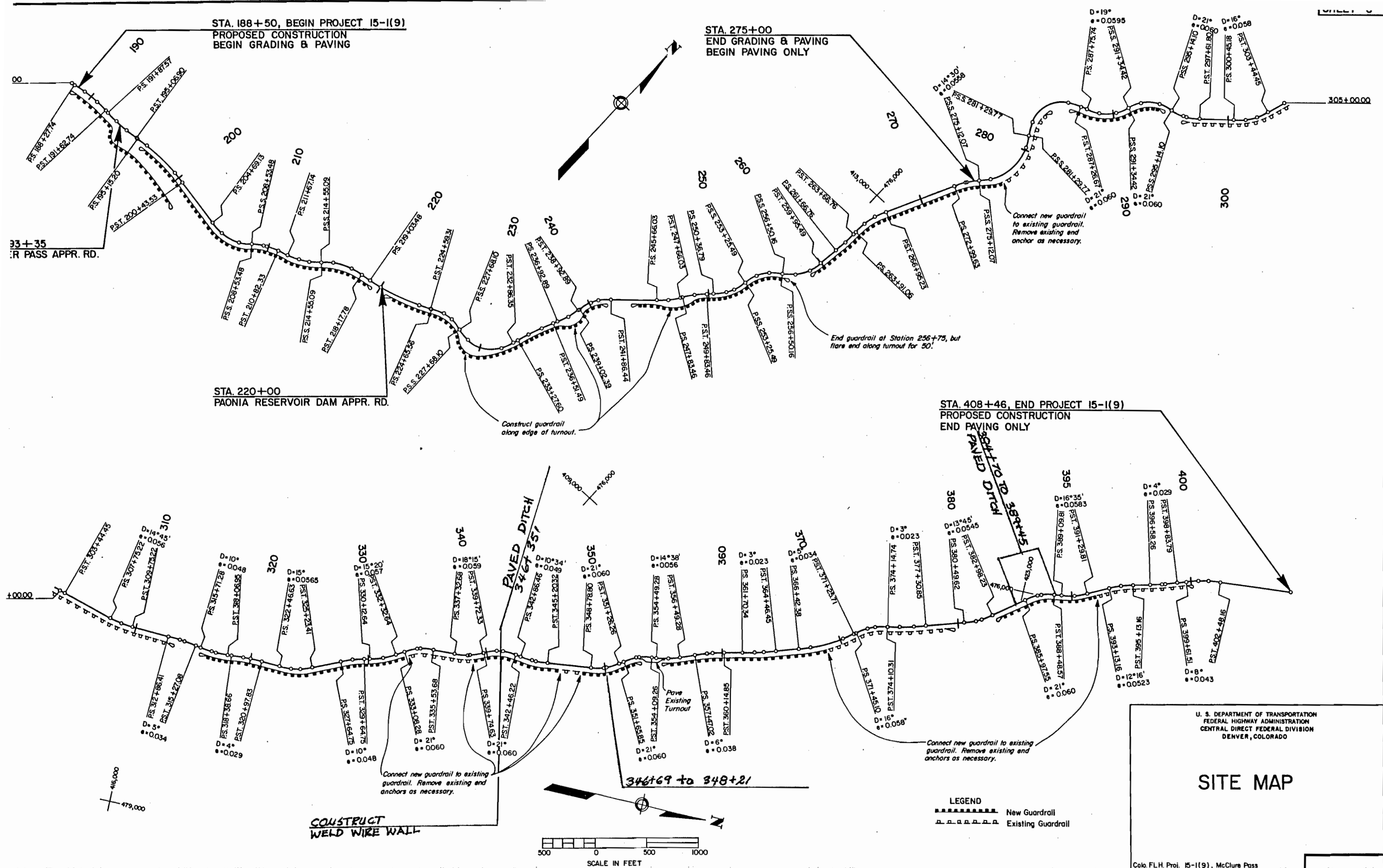
TRAVELED WAY WIDENING ON CURVES

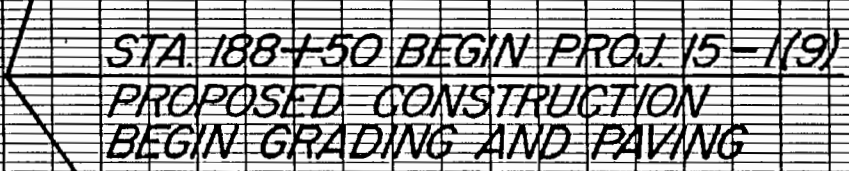
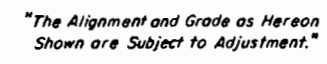
(AS-CONSTRUCTED)

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION-8 DENVER, COLORADO

TYPICAL CROSS SECTION
STA. 188+50 to 408+46

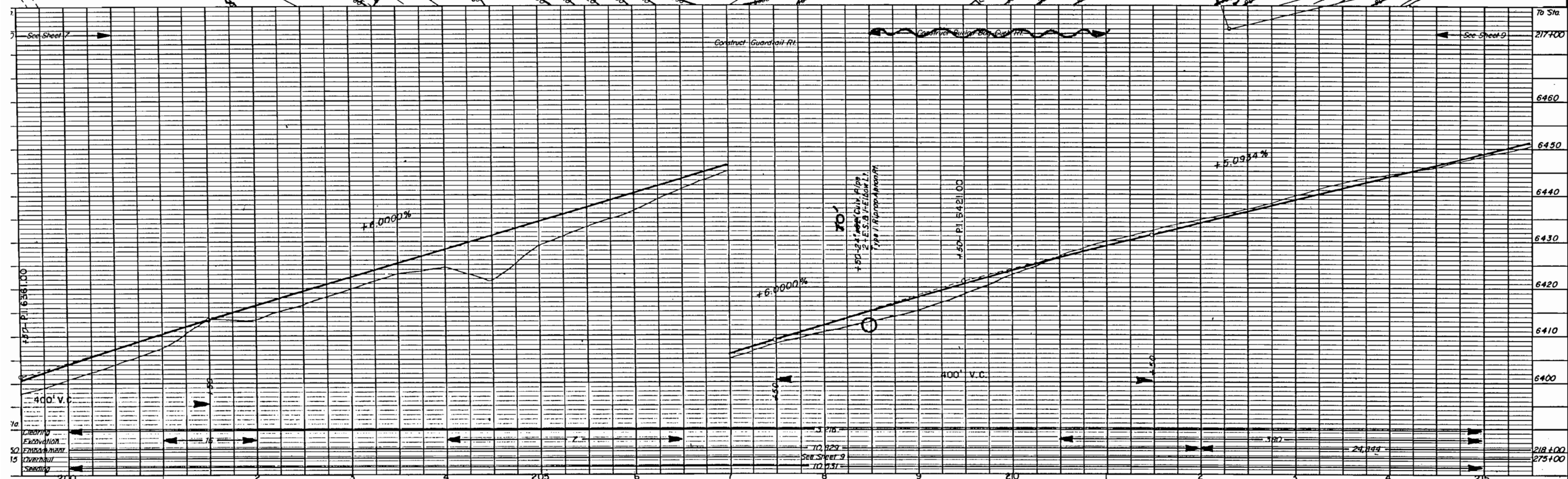
Colo. FLH Proj. 15-1(8) McClure Pass



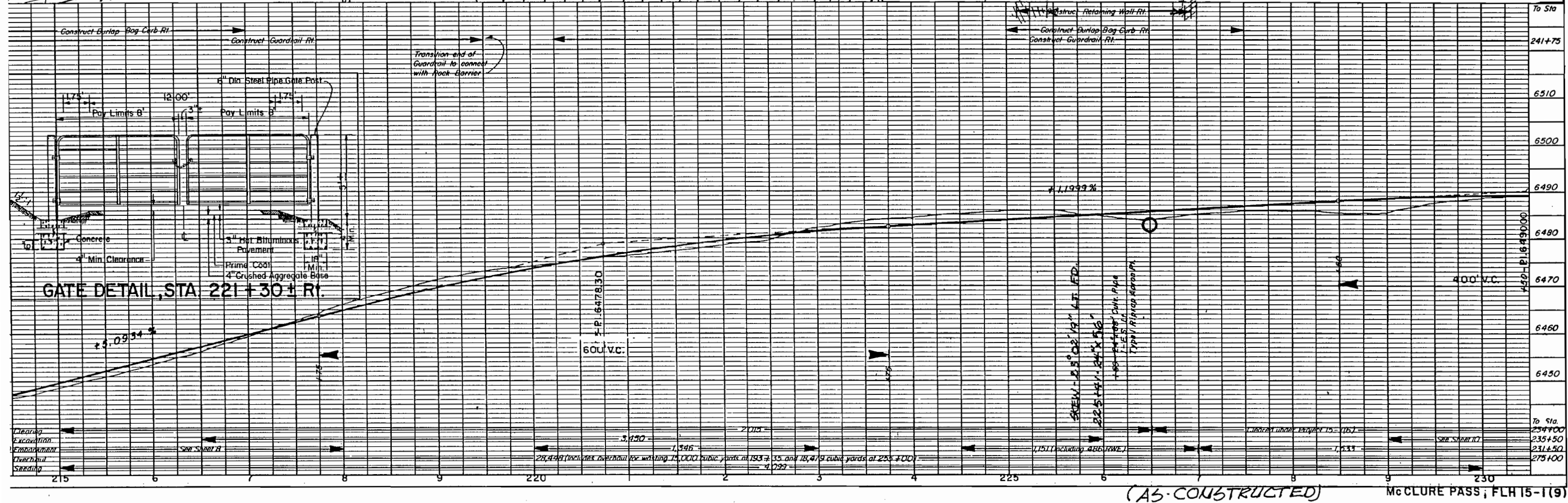
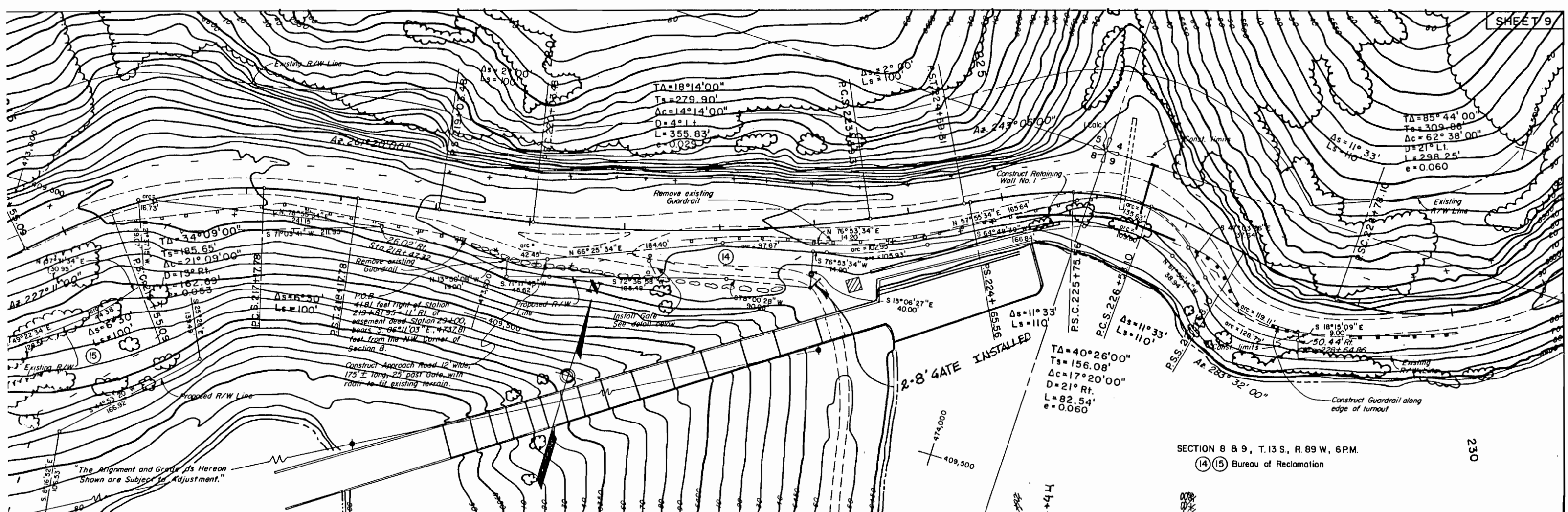


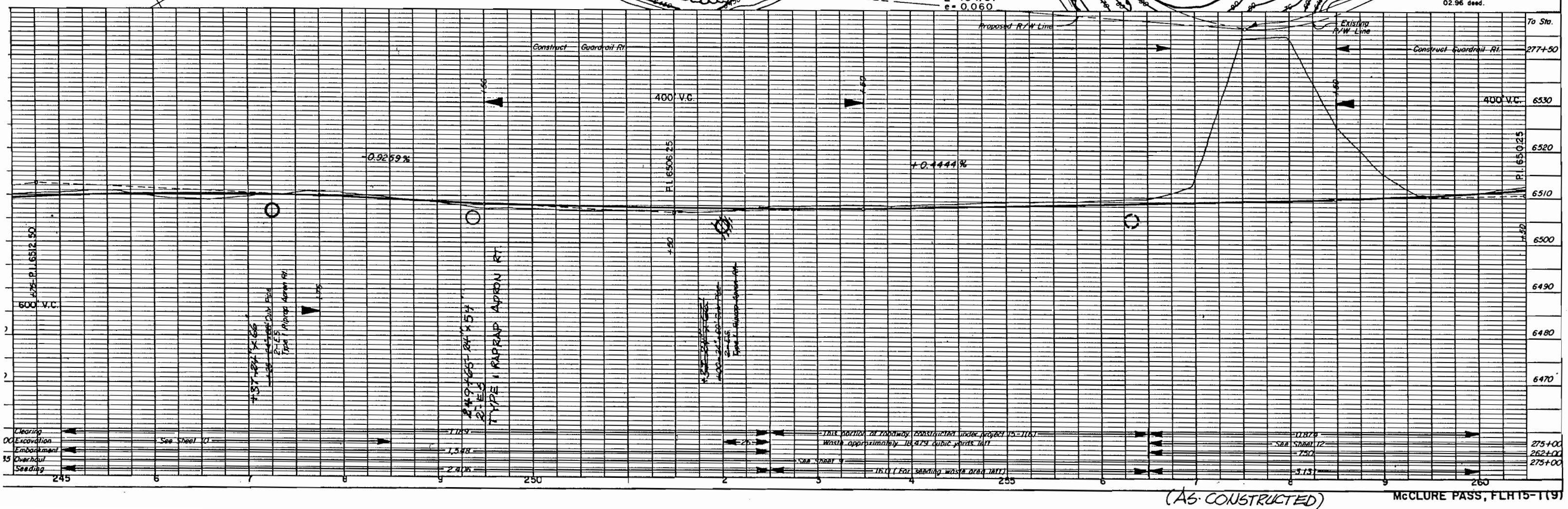
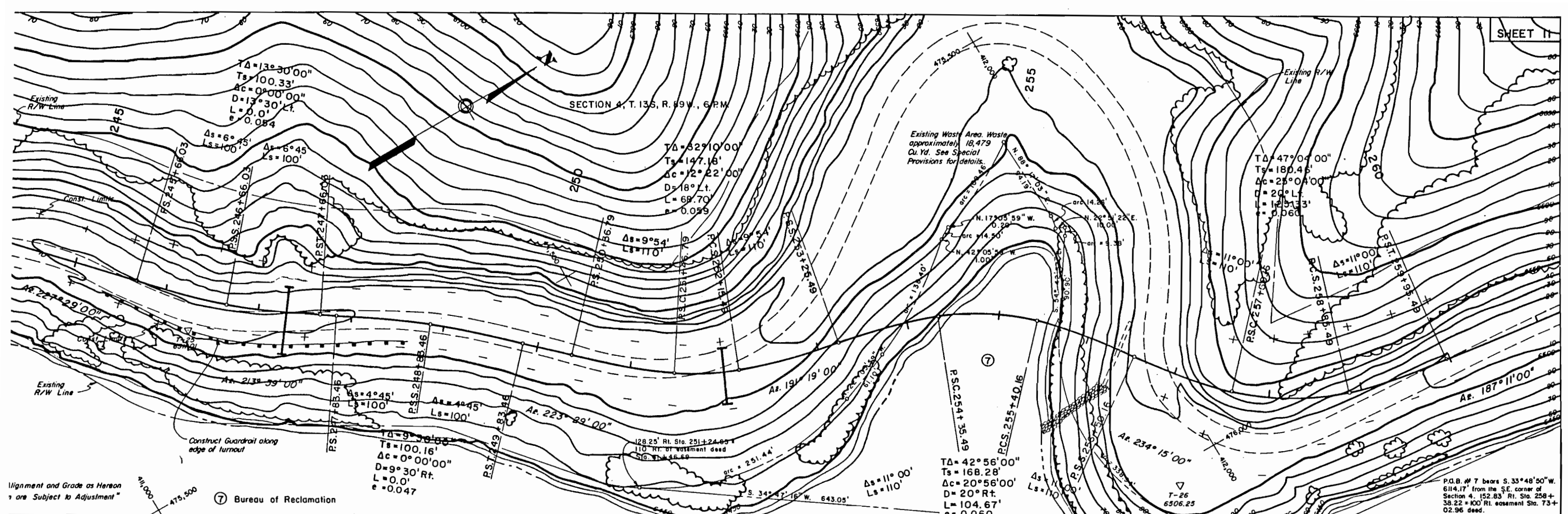
RIPRAP WATERWAY, RT. 195+00

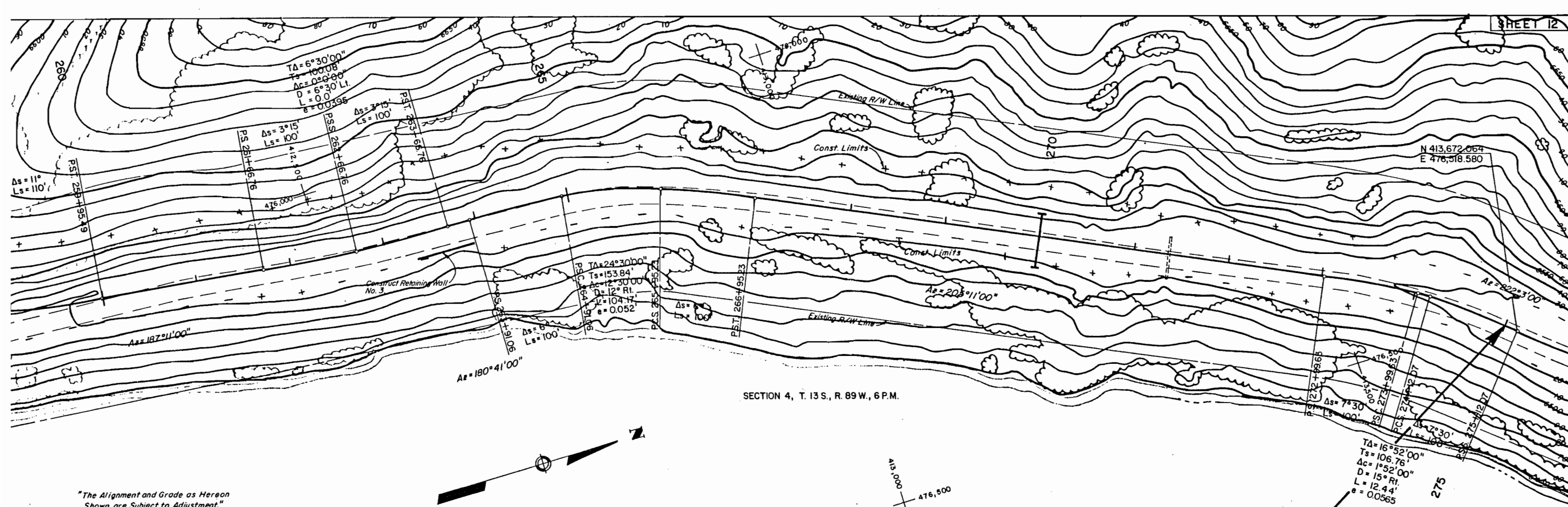
(A3-CONSTRUCTED) McCLOURE PASS, FLHT5-1(9)



(A3-CONSTRUCTED) McCLURE PASS, FLH 15-1(9)

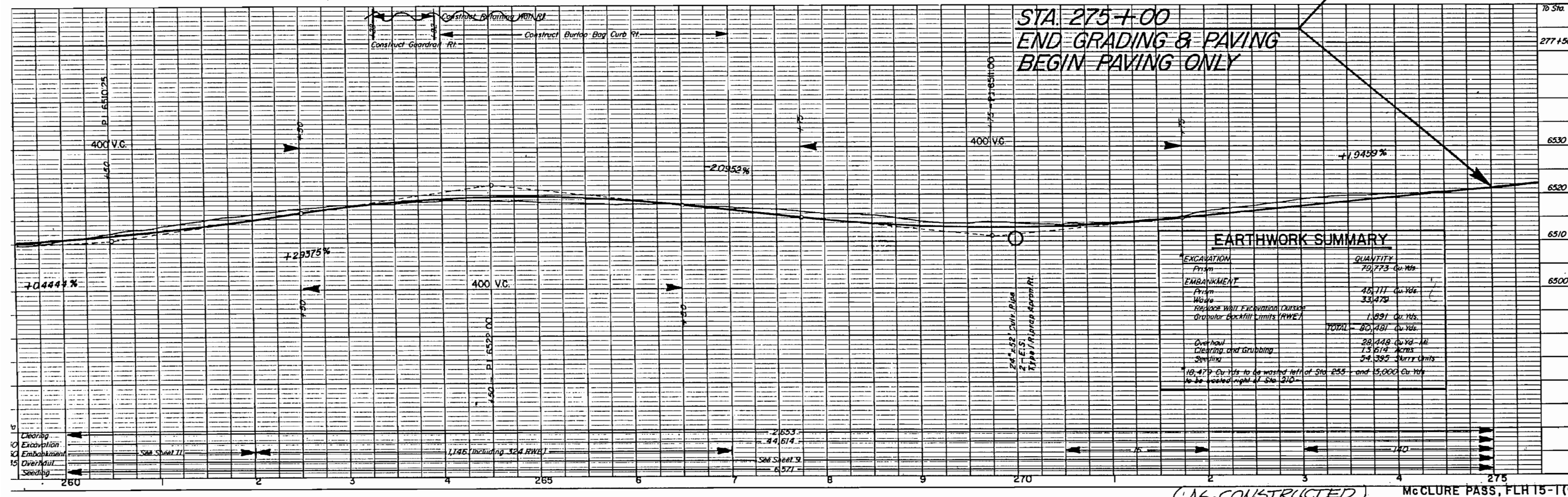






SECTION 4, T. 13 S., R. 89 W., 6 P.M.

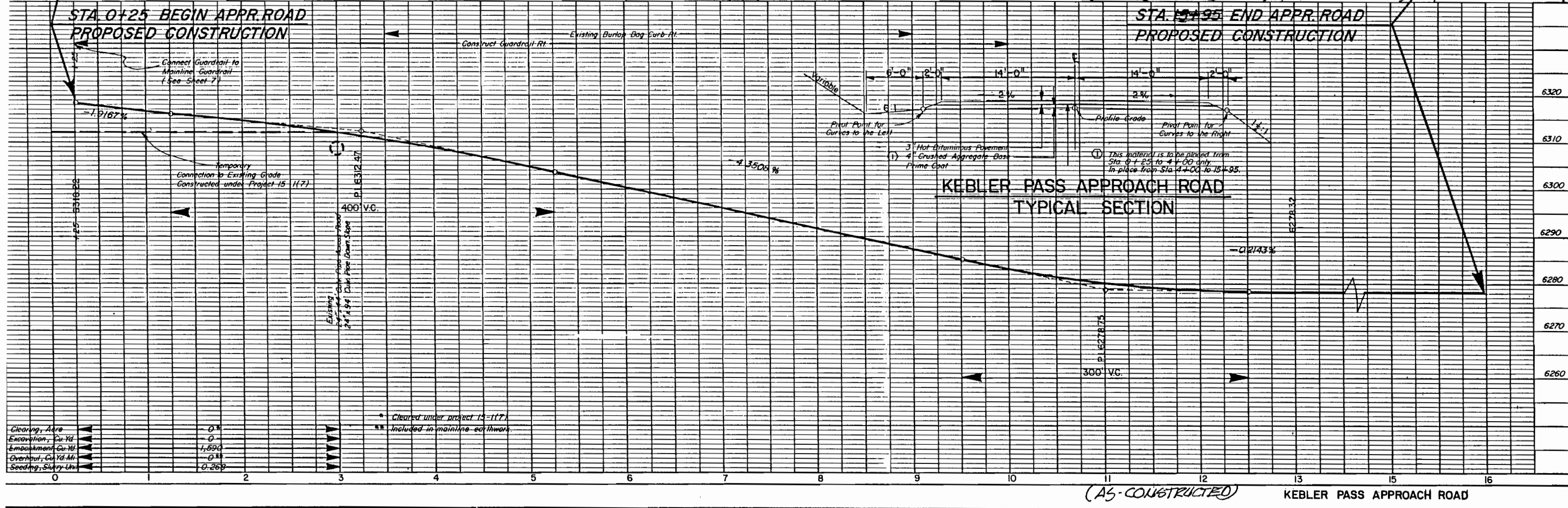
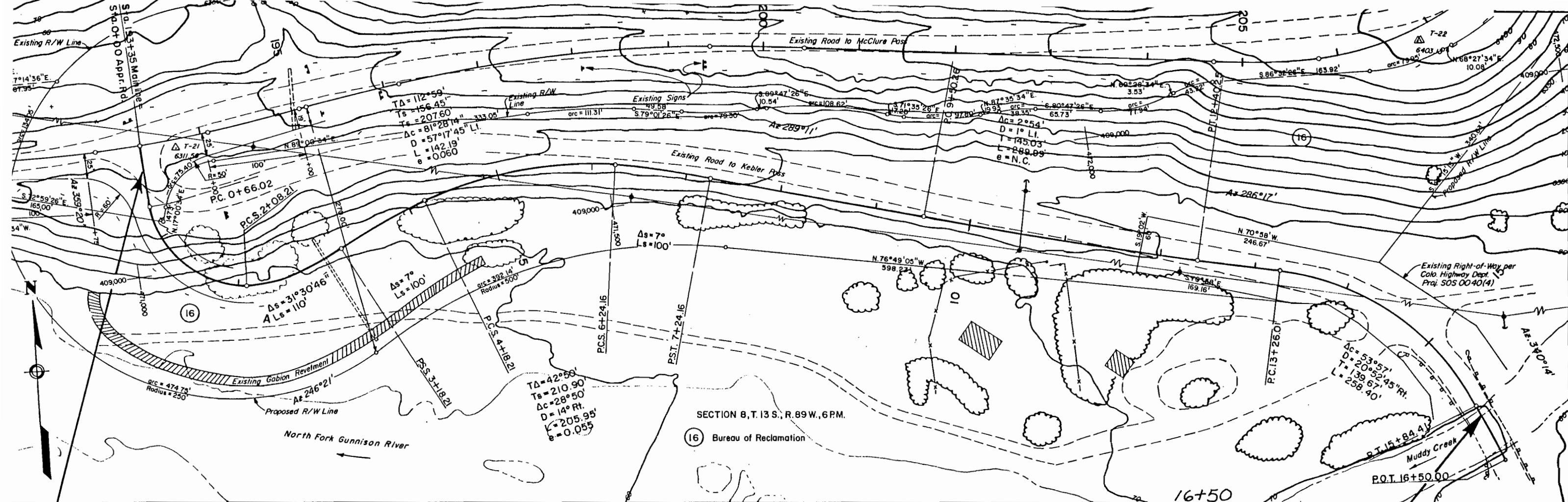
The Alignment and Grade as Hereon Shown are Subject to Adjustment.



STA. 275+00
END GRADING & PAVING
BEGIN PAVING ONLY

EARTHWORK SUMMARY

EXCAVATION	QUANTITY
Prism	79,773 Cu Yds
EMBANKMENT	
Prism	45,111 Cu Yds
Walls	33,479
Replace Wall Excavation (Outside)	
Gravel Backfill Limits (RWE)	1,891 Cu Yds
TOTAL	80,481 Cu Yds
Overhaul	28,448 Cu Yd-Mi
Clearing and Grubbing	15,614 Acres
Seeding	54,395 Shrub Units
18,479 Cu Yds to be washed left of Sta. 255 and 15,000 Cu Yds to be washed right of Sta. 210	



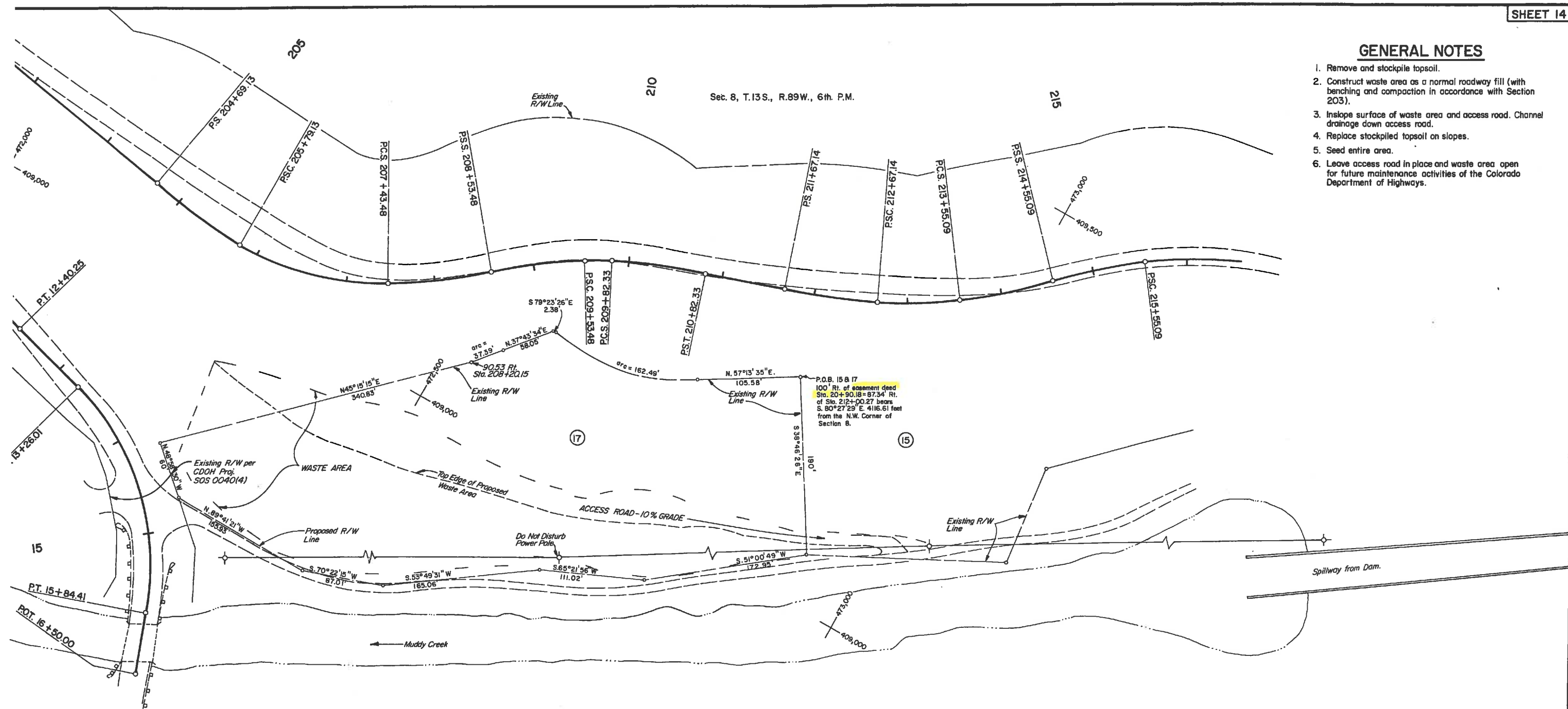
Clearing, Area	0.0
Excavation, Cu Yd	0.0
Embankment, Cu Yd	1,690
Overhaul, Cu Yd Mi	0.0
Seeding, Slurry Lin	0.269

* Cleared under project 13-117A
 ** Included in mainline earthwork

(AS-CONSTRUCTED) KEBLER PASS APPROACH ROAD

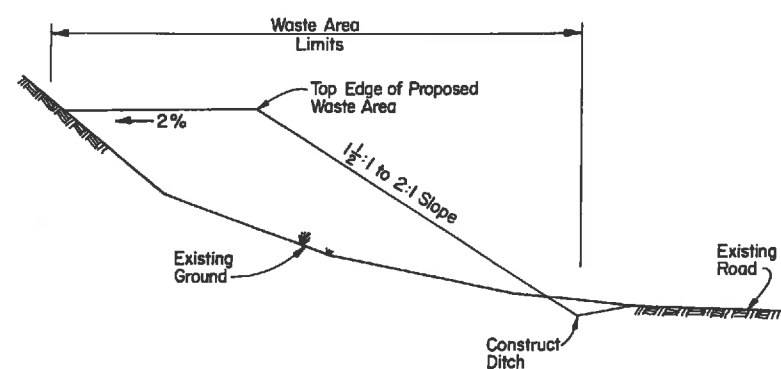
GENERAL NOTES

1. Remove and stockpile topsoil.
2. Construct waste area as a normal roadway fill (with benching and compaction in accordance with Section 203).
3. Inslope surface of waste area and access road. Channel drainage down access road.
4. Replace stockpiled topsoil on slopes.
5. Seed entire area.
6. Leave access road in place and waste area open for future maintenance activities of the Colorado Department of Highways.



ESTIMATED QUANTITIES

Clearing	- 1.877 acres
Unclassified Exc.	- 600 cu. yds. (for stripping topsoil)
Benching	- As Required - No direct payment
Embankment	- 15,000 cu. yds. (waste from mainline construction)
Overhaul	- 8,239 cu. yd.-miles (from mainline sta. 193 + 35)
Placing Topsoil	- 600 cu. yds.
Seeding	- 9.0 slurry units



TYPICAL SECTION

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL DIRECT FEDERAL DIVISION
DENVER, COLORADO

WASTE AREA
Station 210+00, Right

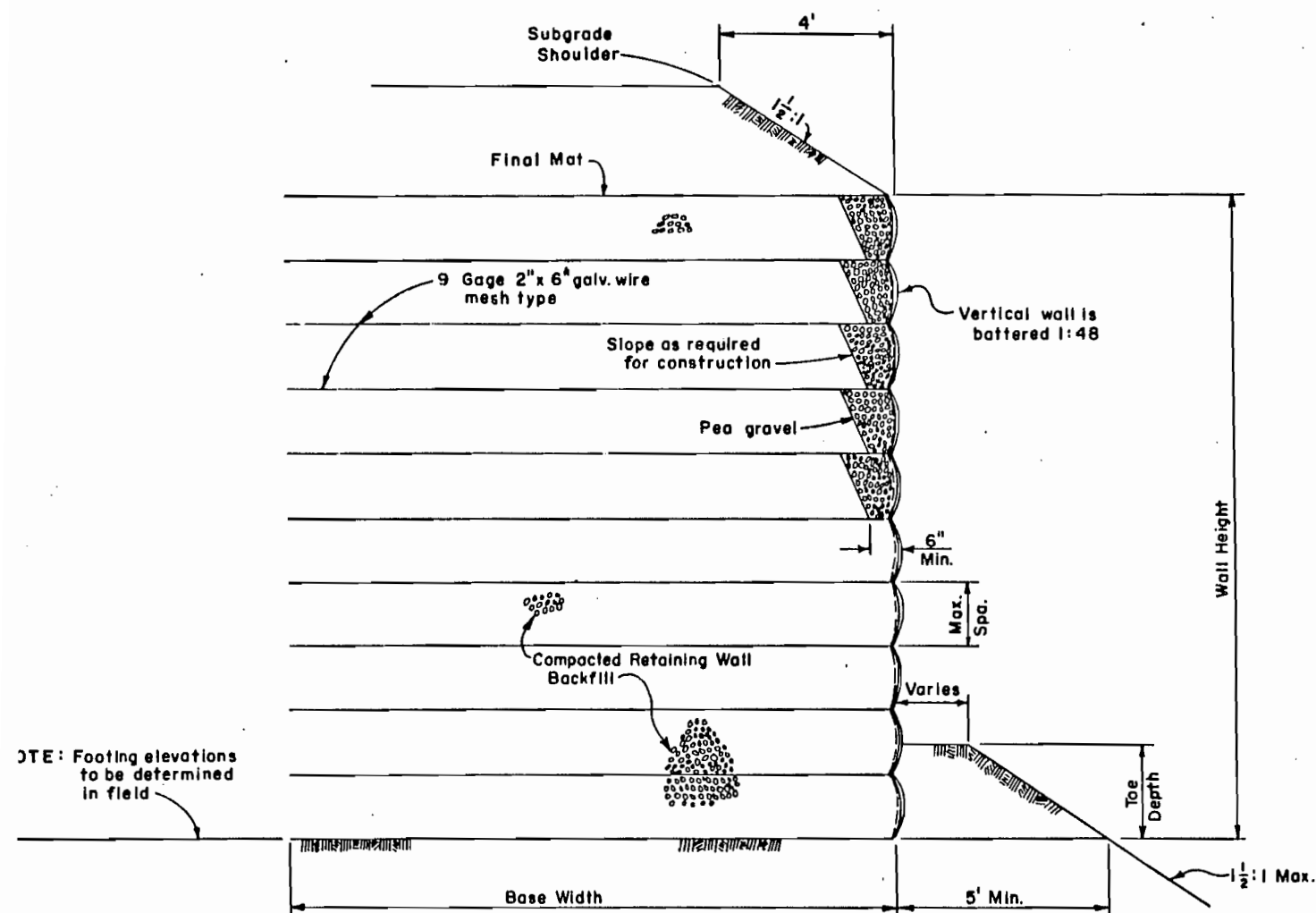
STANDARD SELECTION CHART

VERTICAL 9 GAGE WIRE WALL

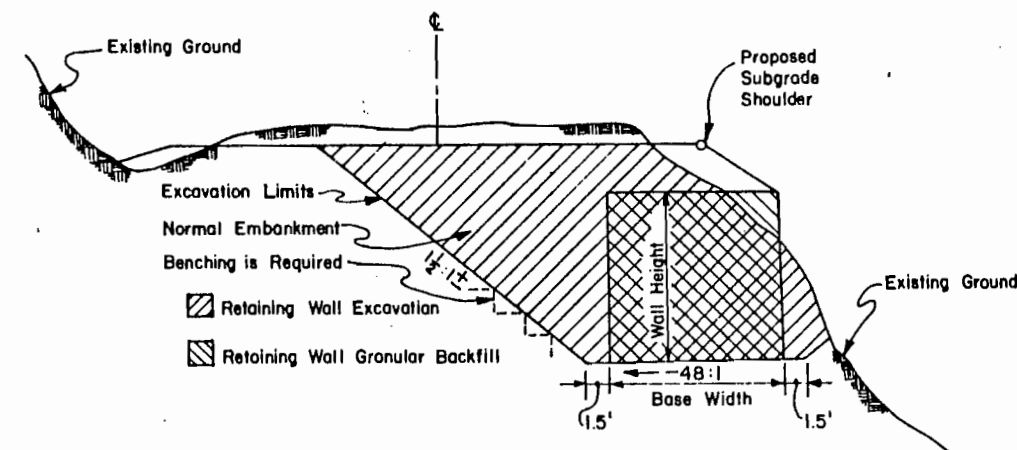
MAX. WALL HEIGHT FT.	BASE WIDTH FT.	MAX. SPA. IN.	TOE DEPTH MIN. FT.
5	8	18	1'-6"
10	10	18	1'-6"
15	13	18	3'-0"
20	16	18	3'-0"

GENERAL NOTES

- Hilfiker Welded Wire Wall is covered under U.S. Patent No. 4117686.
- Retaining walls may be constructed using the Hilfiker Welded Wire Fabric design as detailed on this sheet, or they may be constructed of any other suitable material and design meeting the design requirements stated in the Special Provisions.
- Construct retaining walls parallel to the roadway shoulder grade.
- The exact retaining wall lengths, footing step dimensions, footing elevations, and all other necessary final design details shall be based on current cross sections taken in the field and shall be a part of the final shop plans submitted to the Federal Highway Administration for the wall alternate selected.



TYPICAL SECTION



TYPICAL EXCAVATION & BACKFILL SECTION

WALL AREAS

FROM	TO	QUANTITIES		
		EXCAVATION	SURFACE AREA	BACKFILL
225+44	226+88	1,043 cu. yds.	1,380 sq. ft.	554 cu. yds.
231+90	233+82	1,284 cu. yds.	1,524 sq. ft.	555 cu. yds.
234+22	235+02	680 cu. yds.	780 sq. ft.	329 cu. yds.
263+28	263+92	616 cu. yds.	672 sq. ft.	324 cu. yds.
TOTALS		3,623 cu. yds.	4,356 sq. ft.	1,762 cu. yds.

EXCAVATION
508²
740²
343²
NOT REQUIRED

EXTENSION:

346+05.5 346+69.5
347+25 348+21

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION-8 DENVER, COLORADO

HILFIKER RETAINING
WALLS
TYPICAL CROSS SECTION

Colo. F.H. Proj. 15-1(8) McClure Pass

SPECIAL-3

(AS CONSTRUCTED)