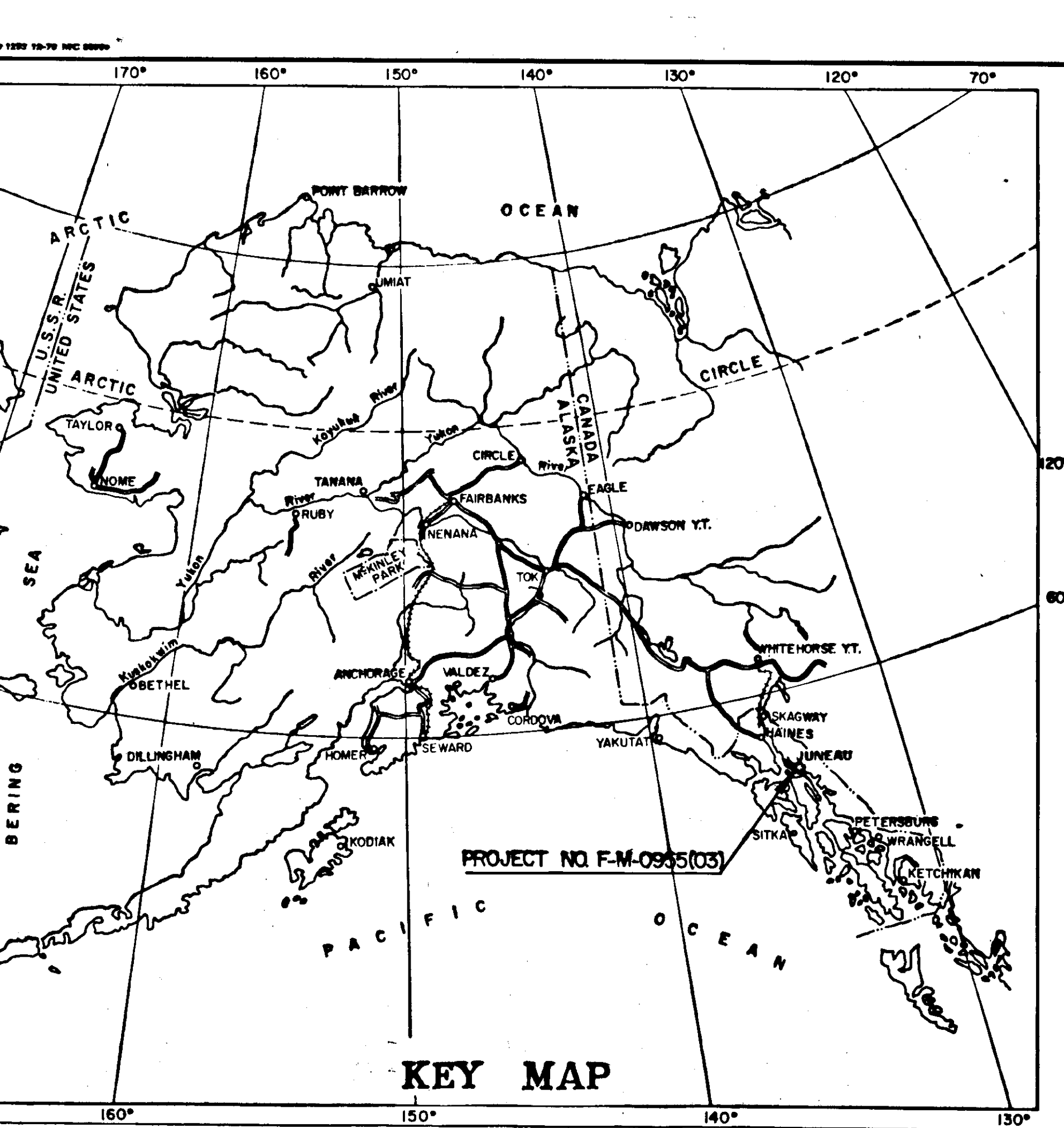




STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

PLAN AND PROFILE PROPOSED HIGHWAY PROJECT F-M-0955(03)— 68799 68818 GLACIER HIGHWAY SWITZER TO FRED MEYER GRADING, PAVING & DRAINAGE

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955(03)	1	18

SHEET NO.	INDEX OF SHEETS
1	TITLE SHEET
2	TYPICAL SECTION
3	ESTIMATE OF QUANTITIES MISC. SUMMARY TABLES
4	MISC. SUMMARY TABLES
5-11	PLAN & PROFILE SHEETS
12-17	DRAINAGE DETAILS
18	STRIPING & ILLUMINATION

The following Standard Drawings apply to this project:
 A-1, C-01.02, C-02.00, C-03.01, D-04.10,
 D-05.10, D-06.01, D-23.00, D-24.00, D-26.01,
 E-00.00, G-04.02S, G-04.02W, G-14.03S, G-14.03W,
 G-18.01, I-20.01, I-40.00, L-03.00, L-10.00,
 L-20.01, L-23.00, L-30.00, M-16.00, M-20.01,
 M-23.00, S-00.00, S-05.00, S-20.00, S-30.01,
 T-20.00, T-21.01, T-22.01, T-31.00.

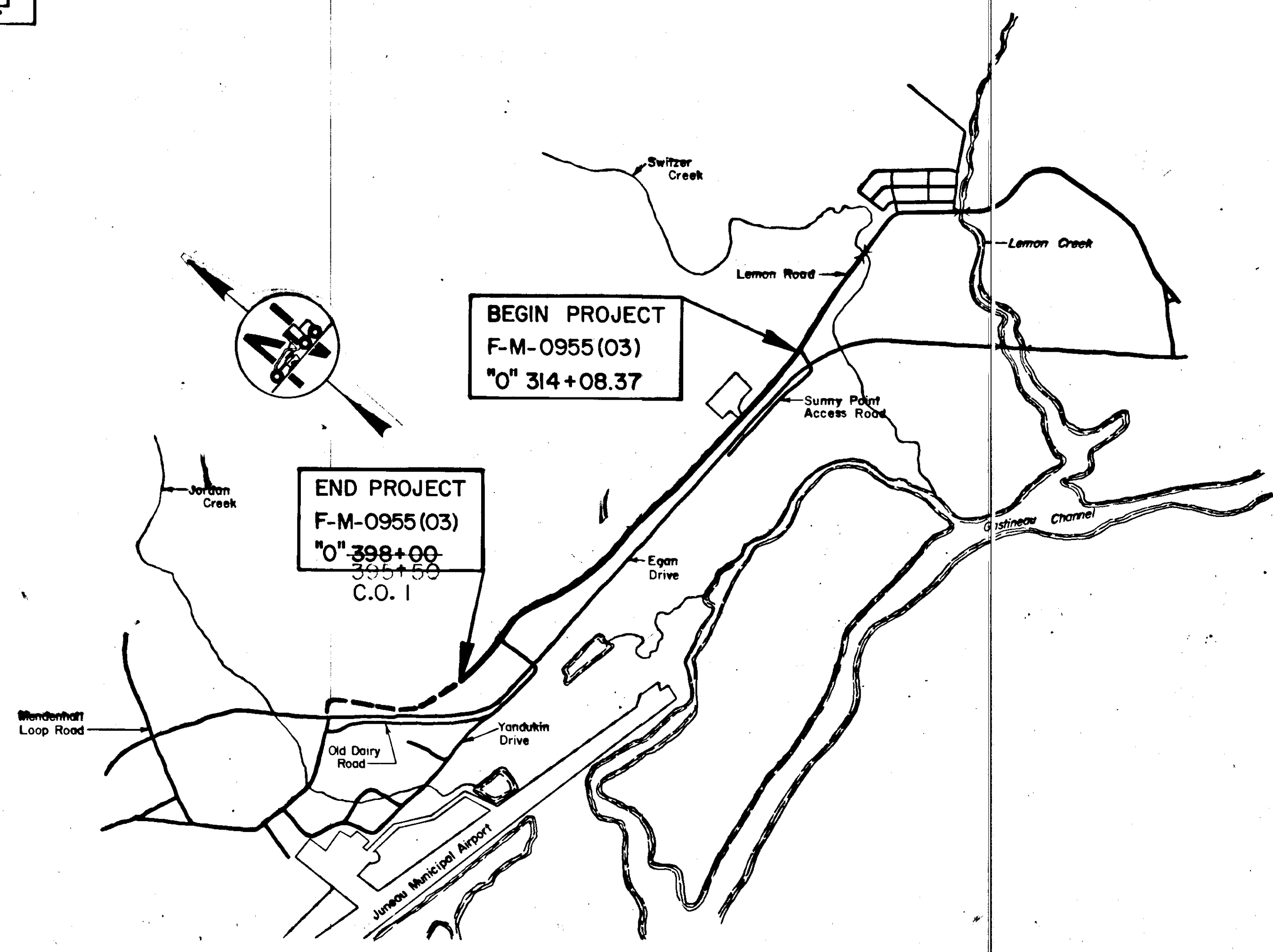
"As-Built" Plans
 RED SAMM CONSTRUCTION
 P.E.: SOC KREUZENSTEIN
 1-20-87 to 6-13-88

DESIGN DESIGNATION

V	=	40 MPH
ADT 1985	=	2002
ADT 2005	=	3281
DHV 12%	=	394
%T	=	7.7 %
TI	=	7.6

PROJECT SUMMARY

WIDTH OF PAVING	=	40'
LENGTH OF PROJECT	=	8,141.63 = 1,5420 MI
LENGTH OF PAVING	=	8,491.63 = 1,6085 MI



Plans Developed By **FRANK MURPHY**

Under The Supervision Of

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Walter Kuller DATE 2-10-86
 S.E. Region, Design Chief

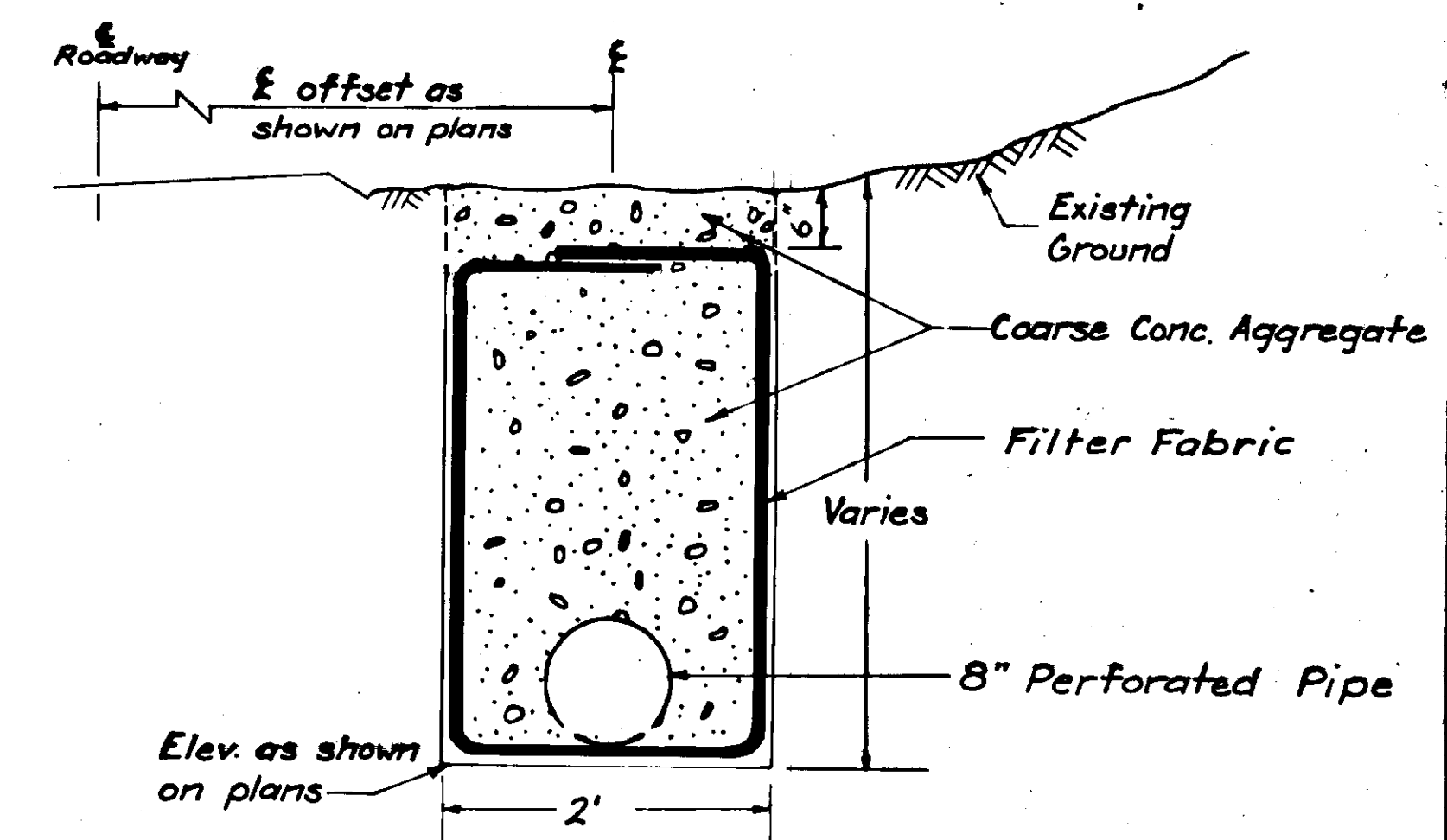
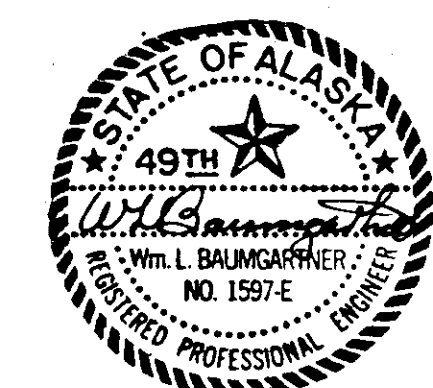
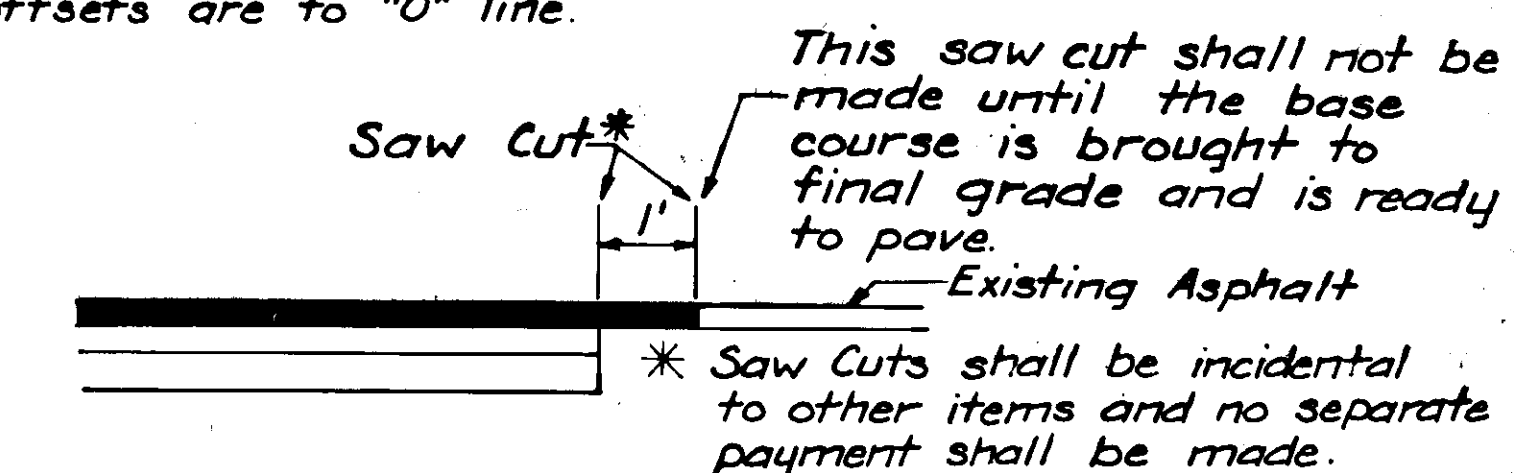
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
W. Dickman Date 2-10-86
 S.E. Region, Director, Design & Construction

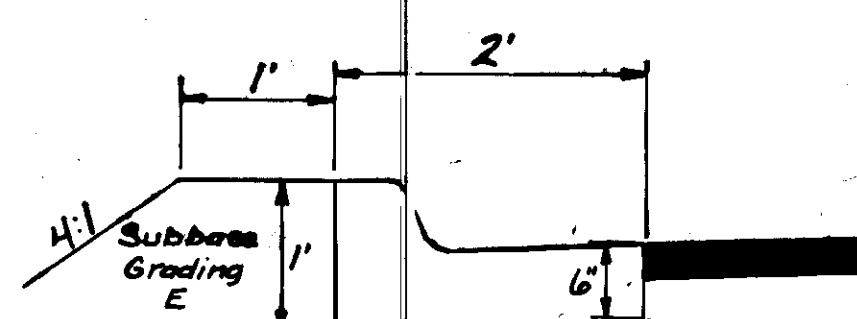
GENERAL NOTES

- Grades and alignment as shown on the plans are subject to minor revision.
- Culvert and inlet locations are subject to minor revision.
- All waste material shall be placed outside the project limits at a location approved by the Engineer.
- Clearing and Grubbing will not be measured for payment but will be considered incidental to other items of work. Approximately 0.8 acre of clearing is involved.
- Culvert and storm drain bedding will not be measured for payment but will be considered incidental to other items of work.
- Superelevation is rotated about the inside edge of pavement.
- Material excavated from the backslope on the right side of the roadway shall be wasted unless otherwise directed by the Engineer.
- One lane of traffic shall be maintained at all times. Detours around the work area shall be in accordance with Standard Drawing C-03.01. Two lane roadway - single lane closure, Typical lane closure - short duration.
- Pavement removed under this contract shall be stockpiled at the site located at the intersection of Mendenhall Loop Road and Egan Expressway.
- Clearing Limits shall be 5 feet from slope limits. Or to ROW whichever is less.
- All $\pm$ offsets are to "0" line.

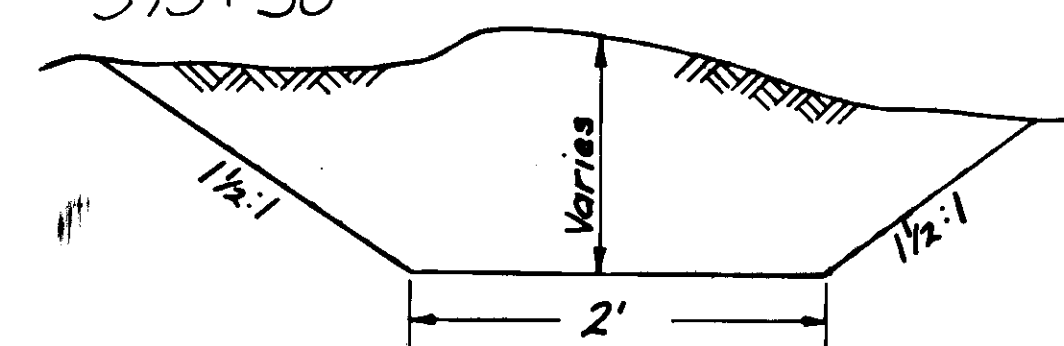
PAVEMENT JOINT DETAIL



MODIFIED UNDERDRAIN DETAIL

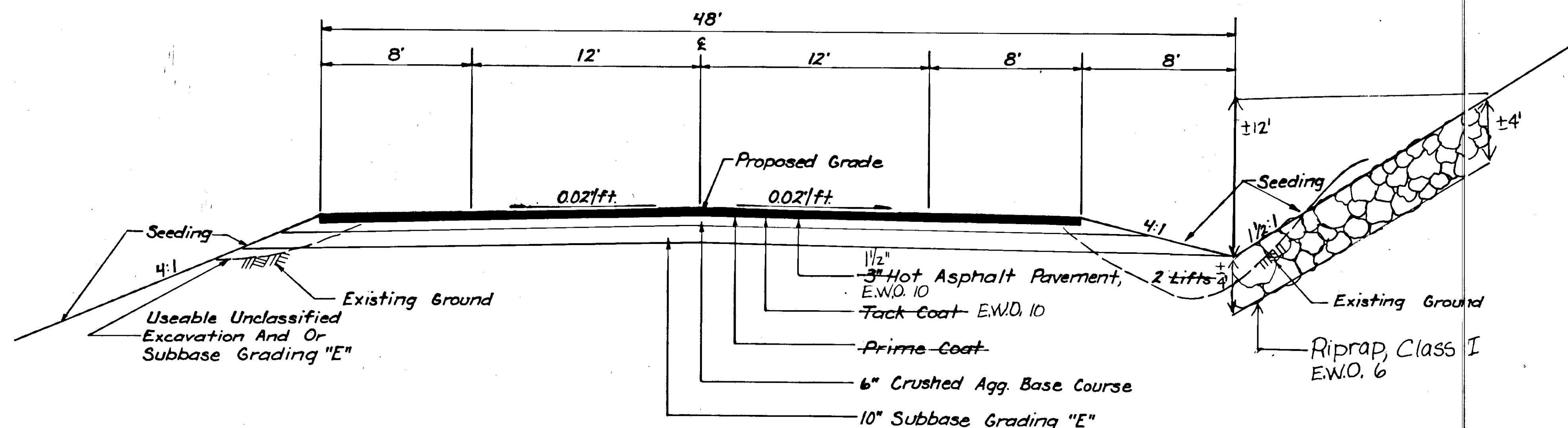


CURB & GUTTER DETAIL STA. "K" 3+97.89 to "0" 389+555

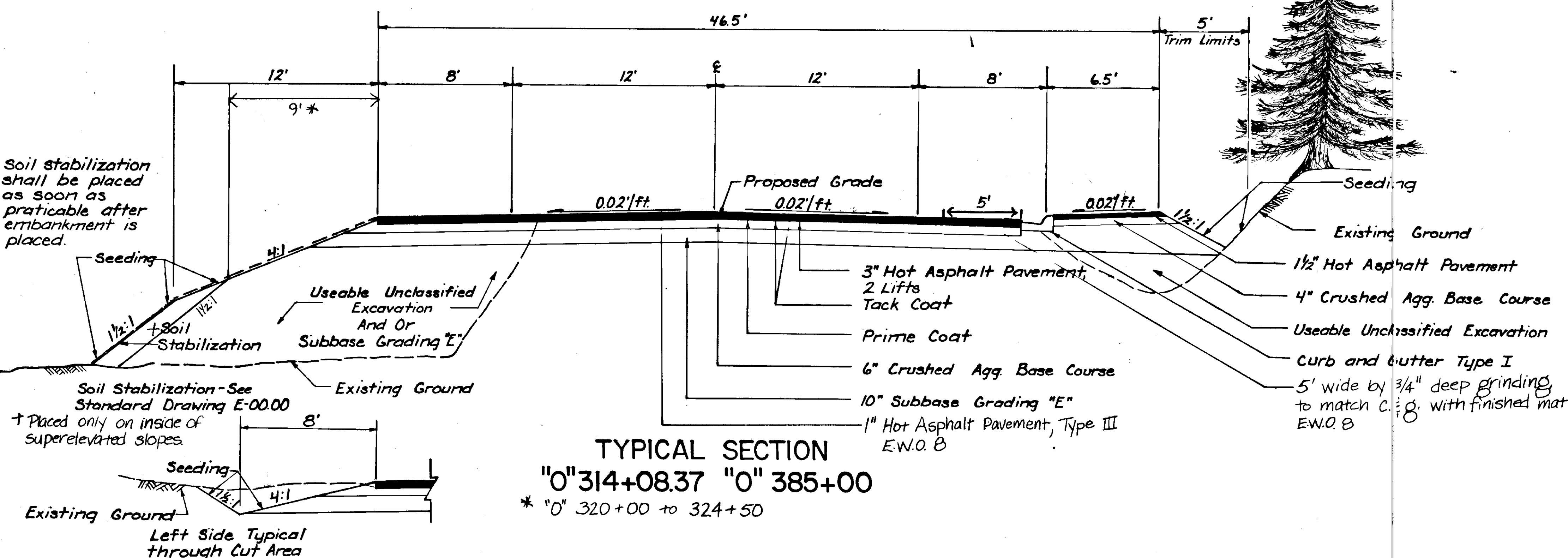


SPECIAL DITCH DETAIL

TYPICAL SECTION "0" 385+10 - "0" 398+00 395+50



TYPICAL SECTION "0" 314+08.37 "0" 385+00 * "0" 320+00 to 324+50



BASIS OF ESTIMATE

301(1)	Crushed Aggregate Base Course	1.92 Ton/Cubic Yard
304(1)	Subbase Grading "E"	1.92 Ton/Cubic Yard
401(1)	Asphalt Concrete Type II	1140 lbs/Sy.Yd./In Depth
401(2)	AC-5 Asphalt Cement	6.5% of Item 401(1)
402(1)	CSS-1 Asphalt For Tack Coat	0.1 Gall/Sy.Yd. 253 Gall/Ton
403(2)	Mc-30 Liquid Asphalt for Prime Coat	0.25 Gall/SY, 256 Gall/Ton

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
109 (2)	DBE and WBE Adjustments	C.S.	All Req'd.
110 (2)	Mobilization & Demobilization	L.S.	"
111 (1)	Temporary Erosion and Pollution Control	C.S.	"
113 (1)	Flagging	M.H.	1500-1561.5
114 (1)	Construction Surveying By The Contractor	L.S.	All Req'd.
115 (1)	Traffic Maintenance	L.S.	"
116 (1)	Furnishing & Maintaining Field Office	L.S.	"
116 (2)	Furnishing & Maintaining Field Laboratory	L.S.	"
202 (1)	Removal of Structures & Obstructions	L.S.	"
202 (2)	Removal of Pavement	S.Y.	24,703.23,195
202 (4)	Removal of Culvert Pipe	L.F.	2088-2011
203 (8)	Sub-Excavation	C.Y.	10,098
202 (9)	Single Mail Box Installation	E.A.	11 8
202 (10)	Multiple Mail Box Installation	L.F.	20 11
203 (3)	Unclassified Excavation	C.Y.	20,507.9441
301 (1)	Crushed Aggregate Base Course	Ton	44,058.46,350.5
304 (1)	Subbase Grading "E"	Ton	31,687.63,248
203 (9)	Slope Rehabilitation	L.S.	All Req'd.
401 (1)	Asphalt Concrete, Type II	Ton	7019.640.1
401 (2)	Ac-5 Asphalt Cement	Ton	456.375.77
402 (1)	CSS-1 Asphalt for Tack Coat	Ton	16.692
403 (2)	Mc-30 Liquid Asphalt for Prime Coat	Ton	40.9.85
603 (6)	24x42 Inch Bituminous Coated Corrugated Steel Pipe Arch	L.F.	444-146
603 (8)	End Section For Bituminous Coated Corrugated Steel Pipe Arch	E.A.	2
603 (22-12)	12-Inch Pipe	L.F.	68-104
603 (22-18)	18-Inch Pipe	L.F.	748-820.7
603 (22-24)	24-Inch Pipe	L.F.	7998-2178.5
603 (22-30)	30-Inch Pipe	L.F.	152-127.2
604 (3)	Reconstruct Existing Manhole	E.A.	15
628 (9A)	Temporary Water Services	L.S.	All Req'd.
604 (4)	Adjust Existing Manhole	E.A.	12-11
604 (5A)	Inlet Type A	E.A.	20-21
604 (5C)	Inlet Type Field	E.A.	3
605 (6)	Modified Underdrain	L.F.	895-897.5
606 (1)	Beam Type Guard Rail Type I Post	L.F.	150
606 (6)	End Anchorages	E.A.	2
606 (5)	Removal and Disposal of Guard Rail	L.F.	30
608 (2)	Asphalt Sidewalk	Ton	400-4650
609 (2A)	Curb & Gutter, Type I	L.F.	7354-7554.7
614 (1)	Survey Monuments	E.A.	12-11
614 (2)	Monument Cases	E.A.	12-11
615 (1)	Standard Sign	S.F.	1615-253.1
618 (1)	Seeding	M.S.F.	144-163.6
618 (4)	Water for Maintenance	M.Gal.	120-122.3
619 (2)	Soil Stabilization	S.Y.	3216-2678
619 (3)	Silt Fence	L.F.	3434-3285
627 (1)	Watering	M.Gal.	120-122.3
628 (2A)	20" D.I. Water Conduit- Class 50	L.S.	All Req'd.
628 (7)	Fire Hydrant Relocation	E.A.	5-7
628 (11)	Adjustment of Valve Box	E.A.	22-27
639 (1)	Approaches	E.A.	11
660 (3)	Highway Lighting System Complete	L.S.	All Req'd.
670 (1)	Painted Traffic Markings	L.S.	"
660 (9)	Miscellaneous Electrical Work	L.S.	"
613 (1A)	Reference Right of Way Monuments	E.A.	2
203 (9A)	Drain Extension & Slope Protection	L.S.	All Req'd.
628 (12)	Fire Hydrant Removal & Installation	L.S.	All Req'd.

MAIL BOX SUMMARY

STATION	LEFT	RIGHT	NO. OF BOXES	REMARKS
"0" 339+84.7		X	1	
" 342+25.7		X	1	
" 344+69.6+60		X	2-1	
" 344+80		X	1	
"0" 348+61.1+50		X	1	
"0" 350+72.4		X	1	
"0" 360+85.2+20		X	2-1	
" 369+03.5		X	1	
" 370+35.5		X	1	
" 370+38.4		X	2	
" 370+44.0		X	5-6	
" 373+15.7+40		X	1	
" 377+29.8+20		X	1	
" 379+12.6		X	1	
" 380+87.2+70		X	1	
" 381+72.1		X	1	

VALVE ADJUSTMENT SUMMARY

STATION	OFFSET		REMARKS
	LEFT	RIGHT	
323+05			
"0" 324+01	14' 21.8"		"0" 330+24 Rt.
" 324+15		9'	" 341+15 Rt.
" 324+50		35.2'	" 345+30 Rt.
" 324+55		10.6'	" 360+90 Rt.
" 325+31		4.9'	" 361+92 Lt.
" 345+37		18.6'	
" 355+98		23.2'	
" 365+18		26.2'	
" 365+23		22.7'	
" 367+76		18.2'	
" 370+46		24.7'	
" 377+77		19.6'	
" 378+06	31.8'		
" 381+46		22.4'	
" 382+76		22.2'	
" 387+76		12.8'	
" 391+39		16.8'	
" 391+77		12.1'	
" 393+88		11.2'	
" 394+83		11.5'	
" 395+78		13.1'	
" 397+55		12.1'	Deleted by CO. 1
" 350+09		24'	
Total		22-27	

MONUMENT SUMMARY

STATION	LOCATION	REMARKS	MON.	CASE
"0" 315+00.00	0.18 Rt.	P.I.	1	1
" 327+50.04	0.57 Lt.	P.I.	1	1
" 337+79.10	E	P.C.	1	1
"0" 342+15.16	E	P.T.	1	1
"0" 349+56.27	E	P.C.	1	1
"0" 352+56.27	E	P.T. Bk =	1	1
"0" 352+56.31	E	POT Ahd.		
" 357+71.09	E	P.C.	1	1
" 367+92.98	E	P.T.	1	1
" 375+57.75	E	P.C.	1	1
" 380+02.33	E	P.T.	1	1
" 389+17.38	E	P.C.	1	1
" 396+99.72	E	P.T.	1	1
Total			12-11	12-11

SIGNING SCHEDULE

NO.	STATION	DIST. FROM LT. RT.	CODE NO.	LEGEND	SIGN PANEL THICKNESS		NO. OF POSTS	LENGTH	EMBEDMENT	FACING TRAFFIC	REMARKS
					SIZE	UNFRAMED FRAMED AREA S.F.					
1	314+90	40	211-1	Bike Route	24x18	✓	3.0	1	10'	3'	NB
2	316+90	40	22-1	Speed Limit 40	24x30	✓	5.0	1	12'	3'	NB
3	317+00	30	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	12'	3'	NB
4	320+00	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	16'	3'	NB
5	320+00	35	28-1	No Parking	24x30	✓	5.0	1	16'	3'	SB
6	326+50	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	14'	3'	NB
7	326+50	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	12'	3'	SB
8	328+50	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	12'	3'	NB
9	328+50	35	28-1	No Parking	24x30	✓	5.0	1	14'	3'	SB
10	336+75	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	14'	3'	NB
11	336+75	35	28-1	No Parking	24x30	✓	5.0	1	16'	3'	SB
12	340+50	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	16'	3'	NB
13	340+50	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	16'	3'	SB
14	344+00	30	27-9	No Parking Bike Lane	12x18	✓	1.5	1	14'	3'	NB
15	344+00	35	28-1	No Parking	24x30	✓	5.0	1	14'	3'	SB
16	348+90	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	10'	3'	NB
17	348+90	35	28-1	No Parking	24x30	✓	5.0	1	16'	3'	SB
18	353+00	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	14'	3'	NB
19	353+00	35	28-1	No Parking	24x30	✓	5.0	1	16'	3'	SB
20	361+00	35	27-9	No Parking Bike Lane	12x18	✓	1.5	1	12'	3'	NB
21	361+00	30	28-1	No Parking	24x30	✓	5.0	1	14'	3'	SB
22	366+75	30	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	12'	3'	NB
23	366+75	25	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	12'	3'	SB
24	368+50	30	27-12	No Parking Bike Lane	12x18	✓	1.5	1	12'	3'	NB
25	368+50	35	28-1	No Parking	24x30	✓	5.0	1	10'	3'	SB
26	372+50	30	27-12	No Parking Bike Lane	12x18	✓	1.5	1	12'	3'	NB
27	372+50	30	28-1	No Parking	24x30	✓	5.0	1	12'	3'	SB
28	377+50	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	12'	3'	NB
29	378+60	30	31-1	School Advance	36x36	✓	9.0	1	14'	3'	NB
30	379+00	25	28-1	No Parking	24x30	✓	5.0	1	12'	3'	SB
31	379+80	35	23-17	Right Lane Bikes Only	24x30	✓	5.0	1	10'	3'	SB
32	380+40	35	35-1	School Speed Limit 20 When Flashing	24x48	✓	8.0	1	12'	3'	NB
33	380+80	25	22-1	Speed Limit 40	24x30	✓	5.0	1	12'	3'	SB
34	383+10	30	211-1	Bike Route	24x18	✓	3.0	1	10'	3'	SB
35	385+20	30	211-1	Bike Route	24x18	✓	3.0	1	12'	3'	NB
36	387+90	30	35-1	School Flashing	24x48	✓	8.0	1	12'	3'	SB
37	388+50	30	32-1	School Advance	36x36	✓	9.0	1	12'	3'	SB
	385+00	35	314-2	No Outlet	30x30	✓	6.25	1	12'	3'	NB
Total =							161.5				
							253.1				

GENERAL SIGNING NOTES

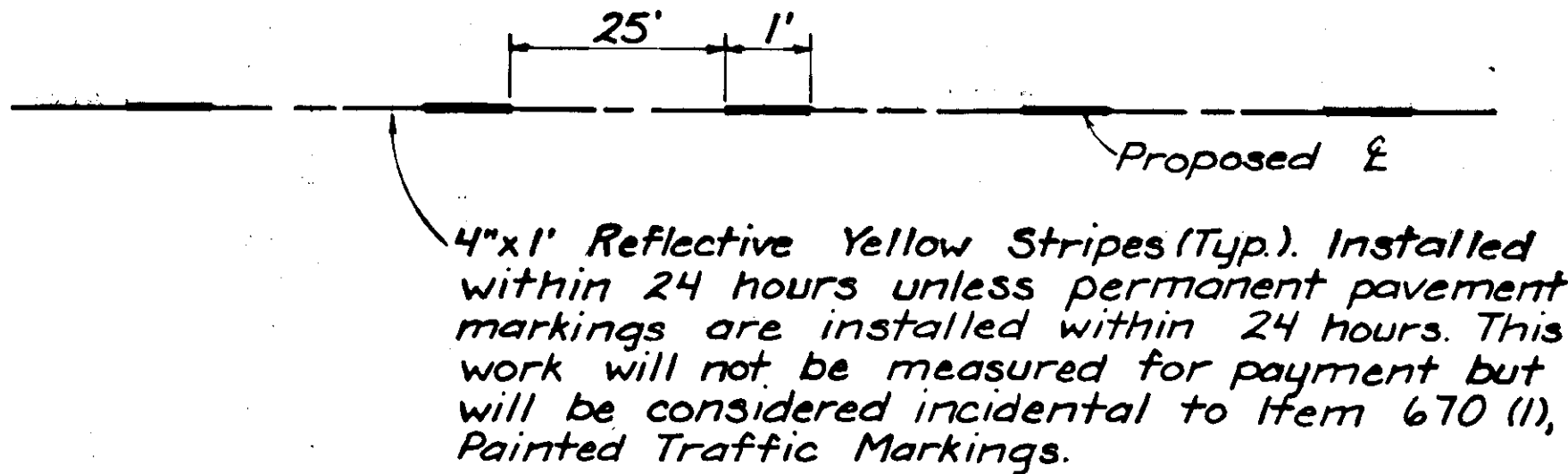
1. Sign locations and post lengths are approximate only and are subject to minor revisions.
2. All sign posts shall be telescoping perforated galvanized square steel posts. The 2" size shall be used above ground and the 2 1/4" size shall be used below ground for sleeve.
3. All signs shall be .080" thick.
4. All new signs shall be unframed unless otherwise noted.
5. All sign posts shall be installed with the sleeve type embedment, in accordance with Standard Drawing S-30.01 except that the 2 1/4" shall be used for the entire embankment depth.
6. Sign post lengths are from the cutoff in the sleeve to the top of the post. See Standard Drawings S-05.00 and S-30.01.
7. All signs to be replaced shall be dismantled by the contractor and stockpiled at the State of Alaska, D.O.T. & P.F. Maintenance Station as directed by the engineer. This work shall be considered incidental to Pay Item 615(1) Standard Signs, no separate payment shall be made therefore.

SIGNING SCHEDULE CO. 3

STATION	SIZE	AREA	LEGEND	CODE
381+80 Rt.	36"x36"	9.0	90° Turn	W1-1L
381+80 Rt.	24"x24"	4.0	10 MPH	W13-1
384+50 Rt.	24"x48"	3.0	→	W1-6
385+20 Lt.	30"x30"	6.25	STOP	R1-1
1/4' 8+00	36"x36"	9.0	Lane Narrow	W4-2L
1/4' 7+50	36"x36"	9.0	Left Lane Must Turn Left	R3-7
1/4' 5+50	36"x36"	9.0	90° Turn	W1-1R
1/4' 5+50	24"x24"	4.0	10 MPH	W13-1
390+50 Rt.	30"x36"	7.5	35 MPH	R2-1
394+50 Lt.	30"x36"	7.5	35 MPH	R2-1



TEMPORARY STRIPING DETAIL



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955(03)	1986	4	18

CURB CUT SUMMARY

STATION	OFFSET		WIDTH	REMARKS
	RT.	LT.		
"0" 339+52	X		14'	
" 342+36	X		14'-16'	
" 344+58	X		14'	
" 344+98	X		22'-20'	
" 346+46	X		20'	
" 348+40	X		14'-16'	
" 349+29	X		14'	
" 351+01	X		18'-20'	
" 360+60	X		18'	
" 341+70	X		14'	New driveway permit
" 365+40	X		14'	
" 368+81	X		16'	
" 370+27	X		14'	Driveway removed
" 370+57	X		22'-20'	
" 371+24	X		14'	
" 371+73	X		14'	
" 373+31	X		14'-16'	
" 374+06	X		14'	
" 375+00	X		18'	
" 376+87	X		25'-20'	
" 378+92	X		20'	
" 380+56+00	X		14'	
" 381+39+60	X		16'-14'	
" 382+40	X		32'	
" 381+30	X		16'	Existing driveway permit
Grade behind Curb Cuts with Crushed Agg. as directed by the Engineer.				

APPROACH SUMMARY

STATION	OFFSET		WIDTH	REMARKS
	RT.	LT.		
"0" 315+91	X		25'	Switzer, Creek
" 324+76	X		34'	DOT/PF
" 369+00		X	25'	Barn
" 369+95		X	25'	Vet. Clinic
" 368+40		X	14'	
" 371+42+55		X	25'	Humane Soc.
" 381+43		X	30'	School Ent.
" 382+49		X	25'	School Ent.
" 387+00		X	30'	Fred Meyer Ent.
" 370+75		X	25'	Humane Soc. New driveway permit
" 395+10		X	30'	Fred Meyer Ent.
" 396+48		X	20'	

SILT FENCE SUMMARY

STATION TO STATION		OFFSET		LENGTH
		RT.	LT.	
318+69-319+00	324+05-323+80	X		536 LF 480'
342+30-341+70	344+60		X	230 LF 290'
345+15	347+95-347+80		X	280 LF 265'
348+40	348+60		X	20 LF
349+80-349+75	359+70		X	990 LF 995'
361+25-361+50	365+60		X	435 LF 410'
372+35-372+00	376+78-371+50		X	443 LF 550'
Miscellaneous Area near Culvert Crossings				500 LF 215'

FIRE HYDRANT RELOCATION & ADJUSTMENT SUMMARY

STATION	EXISTING		PROPOSED	
	OFFSET	ELEVATION	OFFSET	ELEVATION
"0" 330+24	21.7 Rt.	38.4	27.7 Rt.	39.4
"0" 341+15	26.5 Rt.	40.0	28.0 Rt.	41.5-42.0
*0" 350+09	28.2 Rt.	32.1	28.2 Rt.	34.1-33.1
"0" 378+08	31.8 Lt.	25.7	37.8 Lt.	27.7-29.7
" 391+18	22.3 Rt.	30.1	32.3 Rt.	31.1
" 345+20	27.0 Rt.	31.5	27.0 Rt.	33.5
" 360+52	27.0 Rt.	32.5	27.0 Rt.	33.5

* Vertical Adjustment Only

MANHOLE SUMMARY

STATION	OFFSET		REMARKS
	LT.	RT.	
"0" 316+20.37		27.9	Adjust
" 336+35.47	15.1		Adjust
" 336+98.44		17.7	Adjust
" 339+15.32	12.6		Adjust
" 343+14.56	12.0		Reconstruct
" 344+13.31	11.1		Reconstruct
" 346+15.75	12.7		Reconstruct
" 348+91.77	12.5		Adjust
" 352+08.04	12.4		Reconstruct
" 356+09.61	14.9		Adjust
" 360+16.07	18.9		Reconstruct
" 362+05.43	7.9		Reconstruct
" 365+57.88	18.3		Reconstruct
" 369+50.56	8.0		Adjust
* " 370+08.50		20.8	Reconstruct
" 373+32.23	11.0		Adjust
" 377+08.33	9.9		Reconstruct
" 379+07.26	11.0		Reconstruct
" 381+38.32	9.3		Reconstruct
" 384+64.69	10.2		Adjust
" 388+50.52	16.2		Adjust
" 388+52.54		28.7	Reconstruct
" 388+77.98	20.7		Adjust
" 391+51.94	33.3		No Change
" 391+64.44	17.3		Reconstruct
" 391+65.47		3.2	Reconstruct
" 392+96.74	28.9		No Change
" 394+00.20	17.0		Reconstruct
" 395+33.19	26.9		No Change
" 396+35.10	20.0		Adjust

CO1

* See note on sheet 9

GUARD RAIL SUMMARY

STATION TO STATION		OFFSET		LENGTH	REMARKS
		LT.	RT.		
"0" 358+03.27	359+51.69	X		150'	Install w/Two End Anchorages

MODIFIED UNDERDRAIN SUMMARY

STATION TO STATION		LENGTH	
"0" 346+75	" 348+25	151'	450 LF
" 349+35	" 351+40	206'	5205 "
" 351+10	" 359+70	260'	"
" 368+50	" 370+00	150'	"
" 380+50	" 381+80	130'	"

* Connect 8" Perf. Pipe to S-22 Field Inlet. (See sheet 14)

REMOVAL OF STRUCTURES AND OBSTRUCTIONS SUMMARY

STATION	REMARKS
"0" 346+75	Concrete Headwalls
"0" 349+93	Timber Headwall
"0" 362+60	"
" 364+70	Concrete Headwall
" 365+73	"
" 379+16	"
" 381+82	"
" 390+27	Timber Wall
" 397+30	Concrete Headwall

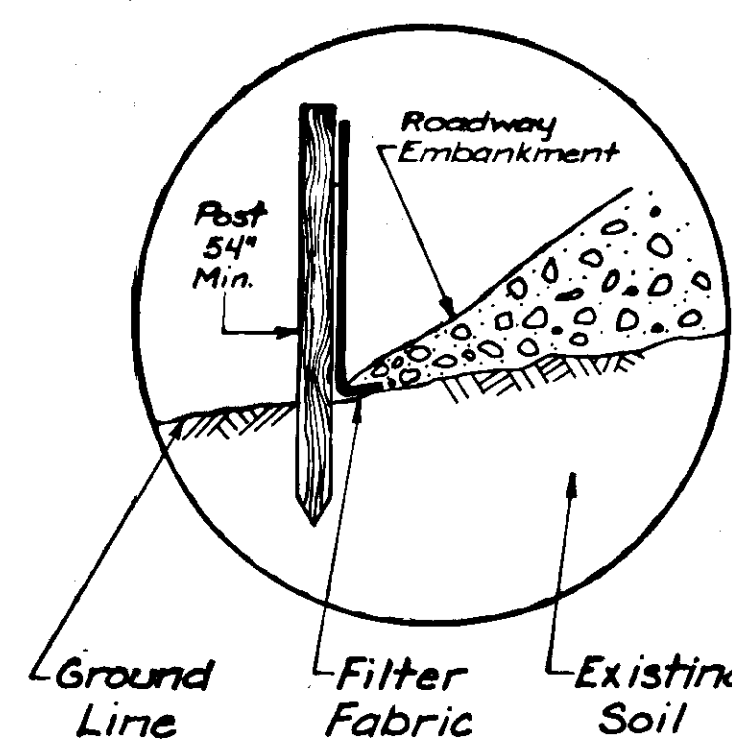
CO1

PIPE SUMMARY

STATION	REMOVE	INSTALL	REMARKS	STATION	REMOVE	INSTALL	REMARKS
315+95		18" x 36" CMP	Extend Ex. Galv. CMP	363+35		24" x 64" CMP	Curb Drain
* 316+63	48" x 38" CMP	66" x 51" x 64" Arch.	NOT IN CONTRACT	364+70	20" x 48" Conc.	24" x 76" CMP	X-Drain
317+27		18" x 14" CMP	Curb Drain	365+75	24" x 62" CMP	29" x 42" x 78" Arch	Incl. (1) End Section
319+38		18" x 16" CMP	Curb Drain	366+85-366+50	24" x 14" CMP	24" x 14" CMP	Curb Drain Hydrant
321+50		18" x 22" CMP	Curb Drain	367+50		18" x 20" CMP	Curb Drain
321+72 (1)	24" x 64" Conc.	24" x 84" CMP	X-Drain	368+85	18" x 40" CMP		Appr. 24' Rt.
326+10	24" x 48" Conc.	24" x 102" x 24" x 54" CMP	X/Curb Drain	370+27	18" x 24" CMP	Removed prior to project	Appr. 26' Rt.
328+50		24" x 56" CMP	Curb Drain	370+39 (3)		18" x 26" CMP	Parallel Drain 28 Rt.
329+11	18" x 58" CMP	24" x 72" CMP	X-Drain	370+60	18" x 24" CMP		Appr. 26' Rt.
330+50		18" x 14" CMP	Curb Drain	371+25	24" x 22" CMP	18" x 26" CMP	Appr. 31' Rt.
333+35		24" x 54" x 24" x 12" CMP	X/Curb Drain	371+50		18" x 6" CMP	Curb Drain
335+67		24" x 80" CMP	X-Drain	371+78	18" x 20" CMP	18" x 26" CMP	Appr. 31' Rt.
335+72	18" x 64" CMP			373+10 (6)	18" x 68" CMP	30" x 16" x 30" x 68" CMP	X/Curb Drain
336+00		18" x 12" CMP	Curb Drain	373+33	18" x 30" CMP	18" x 34" CMP	Appr. 40' Rt.
365+85		18" x 17" CMP	Curb Drain	374+05	18" x 26" CMP	18" x 26" CMP	Appr. 33' Rt.
340+45		18" x 14" CMP	Curb Drain	374+60		18" x 12" CMP	Curb Drain
340+55	24" x 64" Conc.	24" x 80" CMP	X-Drain	374+64		24" x 72" CMP	X-Drain
342+37	12" x 24" CMP	12" x 24" CMP	Appr. 32' Rt.	374+70	18" x 56" CMP		
343+57		18" x 12" x 24" x 64" CMP	X/Curb Drain	375+00	18" x 30" CMP	18" x 34" CMP	Appr. 35' Rt.
344+60	18" x 26" CMP	18" x 26" CMP	Appr. 38' Rt.	378+00		24" x 76" CMP	X-Drain
344+75 (6)	24" x 52" CMP	29" x 42" x 74" Arch	Incl. (1) End Section	378+93	18" x 46" CMP	18" x 46" CMP	Appr. 33' Rt.
345+00	18" x 32" CMP	18" x 34" CMP	Appr. 36' Rt.	379+15	24" x 44" Conc.		
346+50 (2)	18" x 48" CMP	12" x 44" CMP	Appr. 36' Rt.	381+84	24" x 46" Conc.		
346+75 (2)	24" x 52" Conc.	18" x 102" x 24" x 54" CMP	X/Curb Drain	381+95		24" x 76" CMP	X-Drain
348+45	18" x 66" CMP	24" x 84" CMP	X-Drain	382+50	18" x 48" CMP	18" x 40" CMP	Appr. 42' Lt.
349+27	12" x 20" CMP		Appr. 24' Rt.	382+97		24" x 12" x 24" x 64" CMP	X/Curb Drain
349+94	18" x 48" CMP			383+63	18" x 52" CMP		
351+75		30" x 76" CMP	X-Drain	383+75		24" x 76" CMP	X-Drain
352+41+40	20" x 64" Conc.	24" x 80" CMP	X-Drain	384+95 (3)	24" x 58" CMP	24" x 64" CMP	X-Drain
354+88	18" x 60" CMP	24" x 72" CMP	X-Drain	388+80 (4)	21" x 34" Conc.	24" x 48" CMP	X-Drain
355+80	18" x 60" CMP	24" x 12" x 24" x 80" CMP	X/Curb Drain	391+50 (4)	21" x 48" Conc.	24" x 62" CMP	X-Drain
357+05		24" x 72" CMP	X-Drain	392+95 (4)	21" x 48" Conc.	24" x 56" CMP	X-Drain
357+20	18" x 60" CMP			395+33 (4)	21" x 46" Conc.	24" x 54" CMP	X-Drain
358+62		24" x 60" CMP	Curb Drain	397+31	21" x 52" Conc.	24" x 68" CMP	X-Drain CO1
359+68	18" x 72" CMP	24" x 74" CMP	X-Drain		(3) Field Drain Required		
362+60	18" x 58" CMP	24" x 76" CMP	X-Drain		(4) Connects to Field Meyer Drain System		

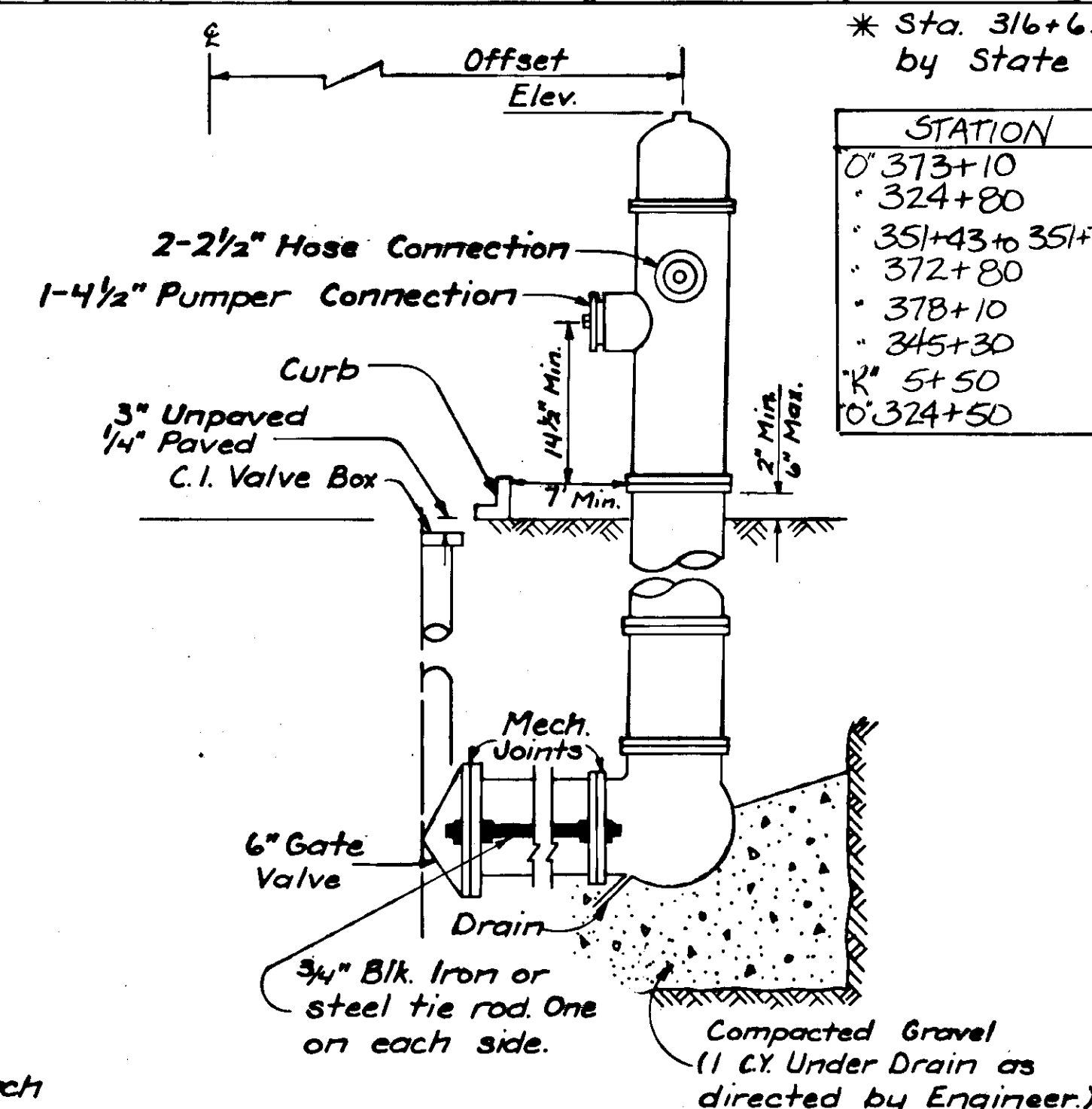
(1) Aluminum CMP Required
(2) See S-12/22 Drain Details

* Sta. 316+63 Pipe Arch to be installed by State Maintenance Forces.



SILT FENCE

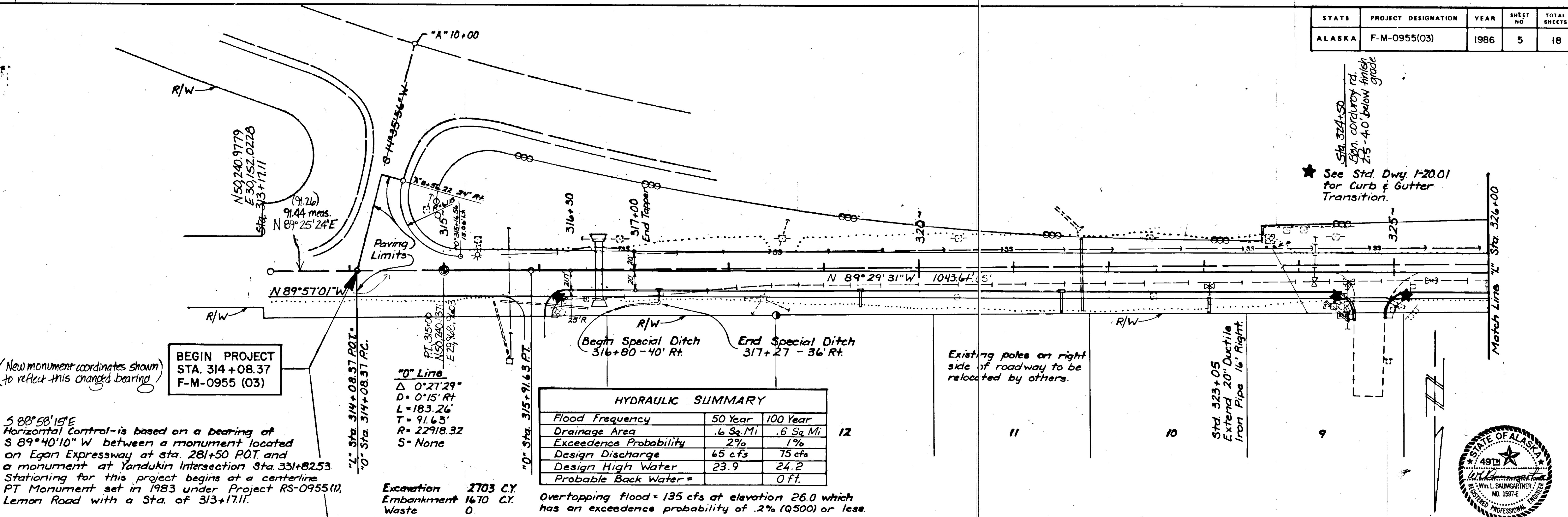
Note: Silt fence shall be installed in such a manner that a tight seal with the ground surface is achieved.



FIRE HYDRANT DETAIL



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955(03)	1986	5	18

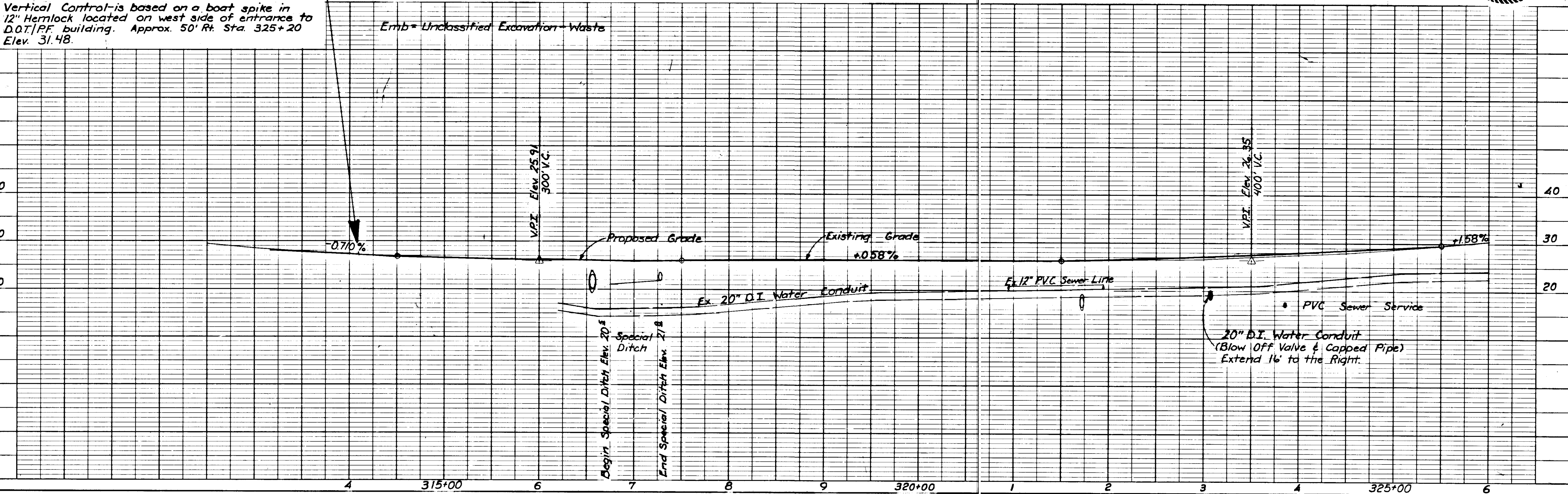


(New monument coordinates shown to reflect this changed bearing)

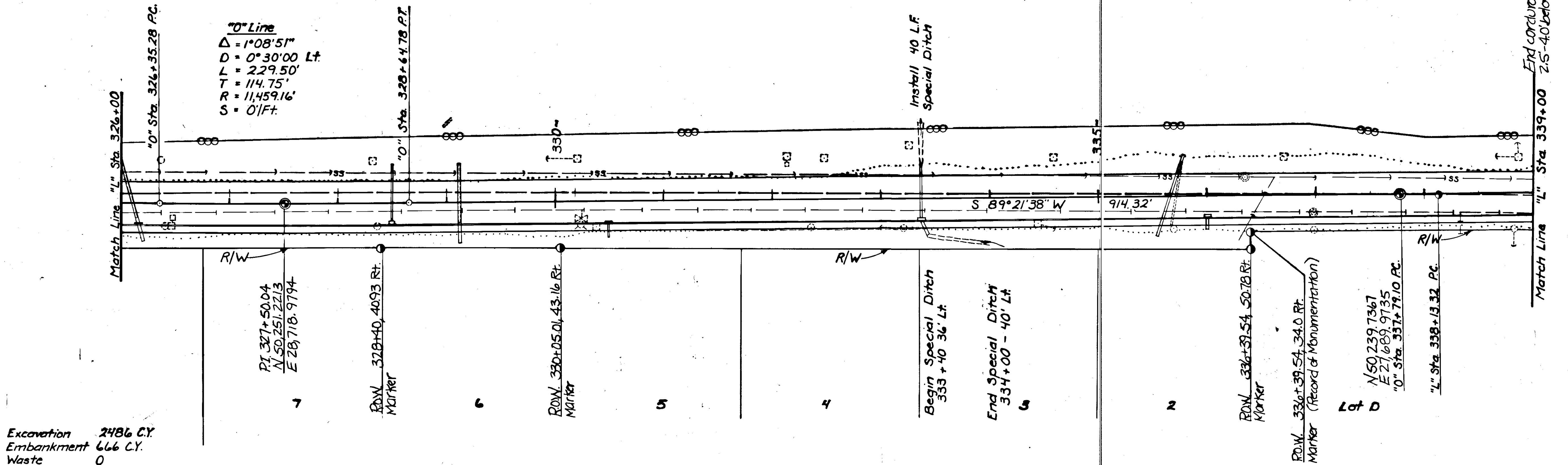
Horizontal Control is based on a bearing of $S 89^{\circ} 40' 10'' W$ between a monument located on Egan Expressway at sta. 281+50 P.O.T. and a monument at Yandukin Intersection Sta. 331+82.53. Stationing for this project begins at a centerline PT Monument set in 1983 under Project RS-0955(11), Lemon Road with a Sta. of 313+17.11.

Vertical Control is based on a boat spike in 12" Hemlock located on west side of entrance to D.O.T./P.F. building. Approx. 50' Rt. Sta. 325+20 Elev. 31.48.

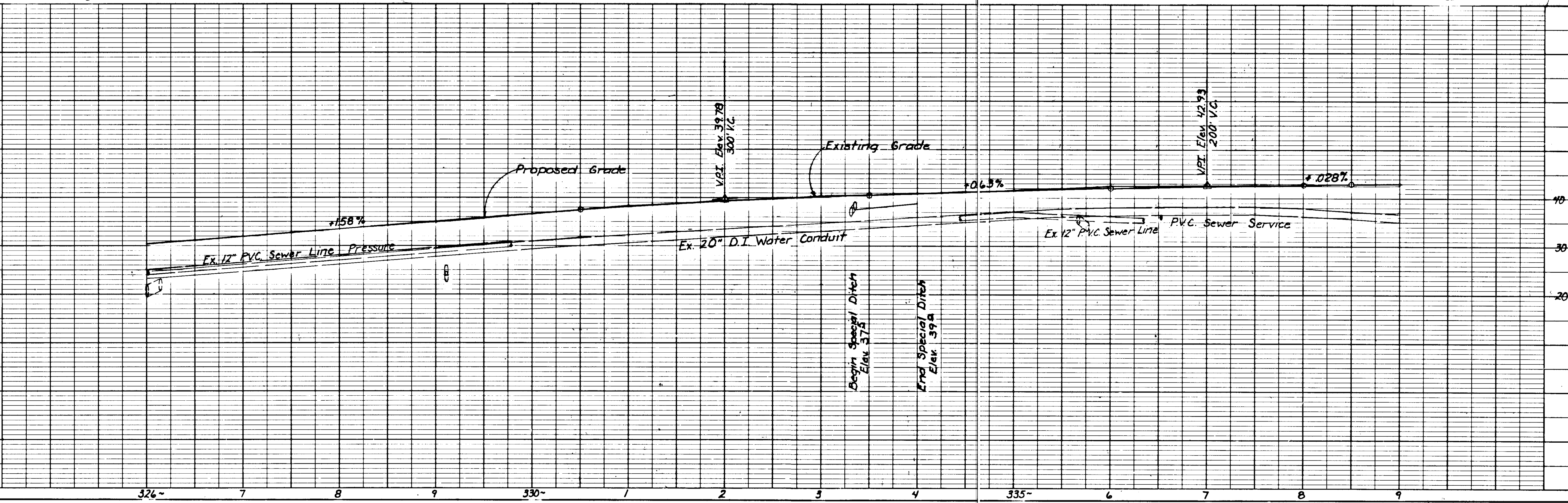
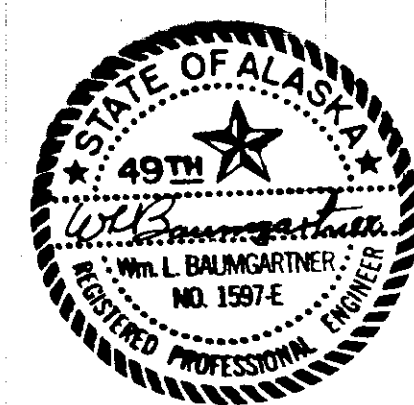
Emb = Unclassified Excavation + Waste

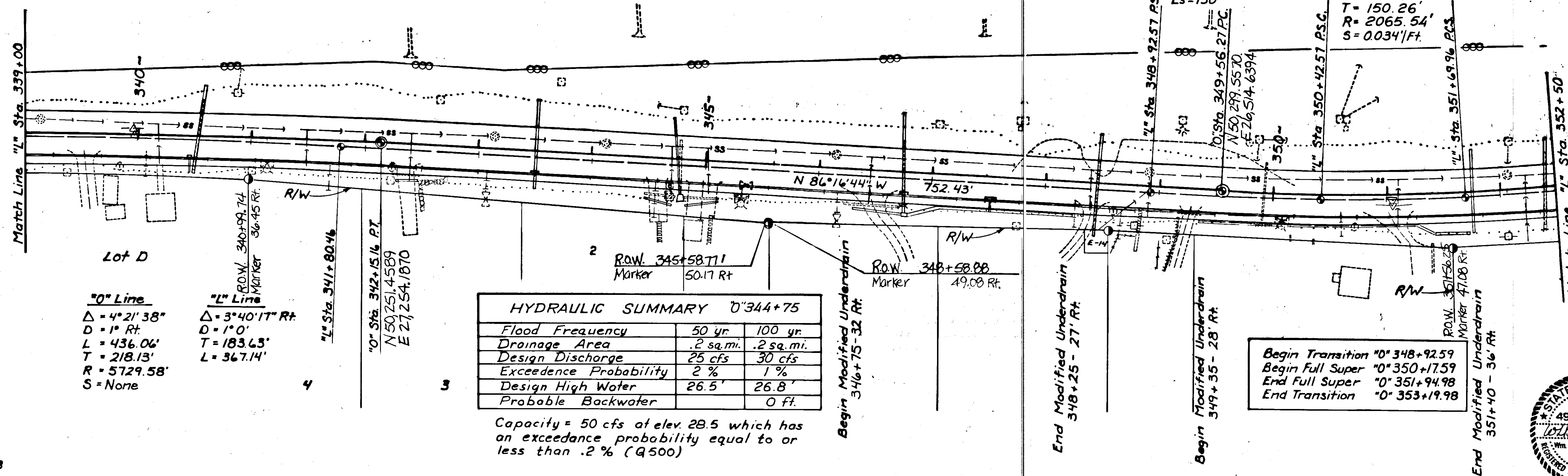


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955 (03)	1986	6	18

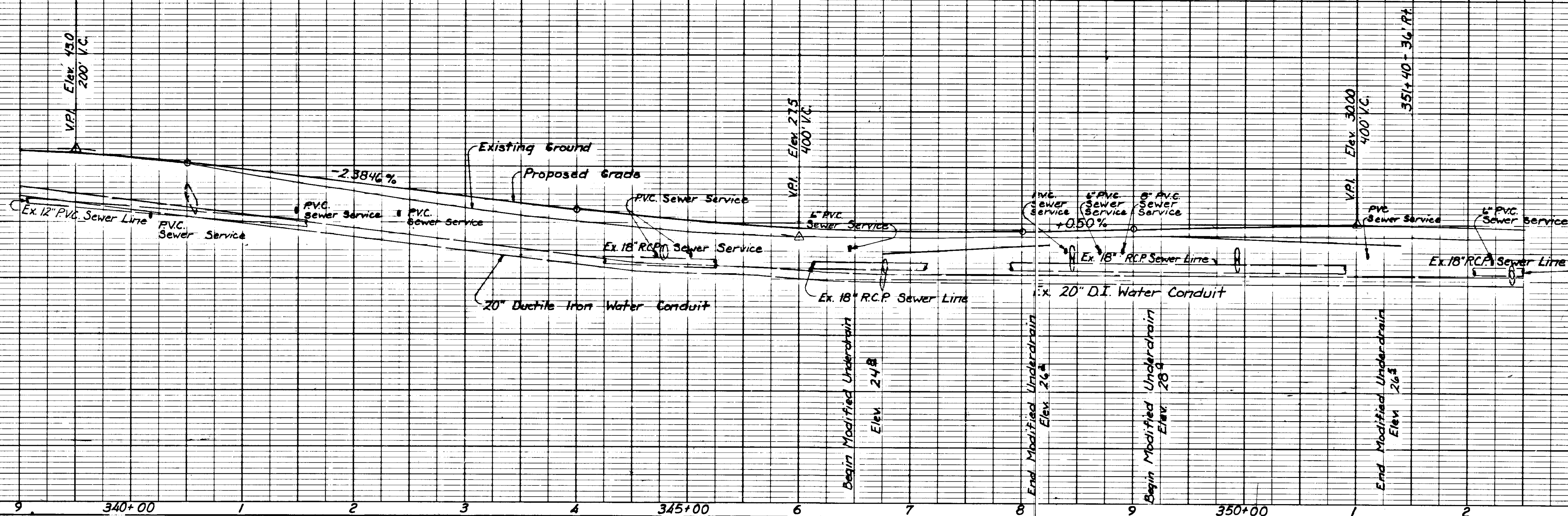


Excavation 2486 C.Y.
 Embankment 666 C.Y.
 Waste 0





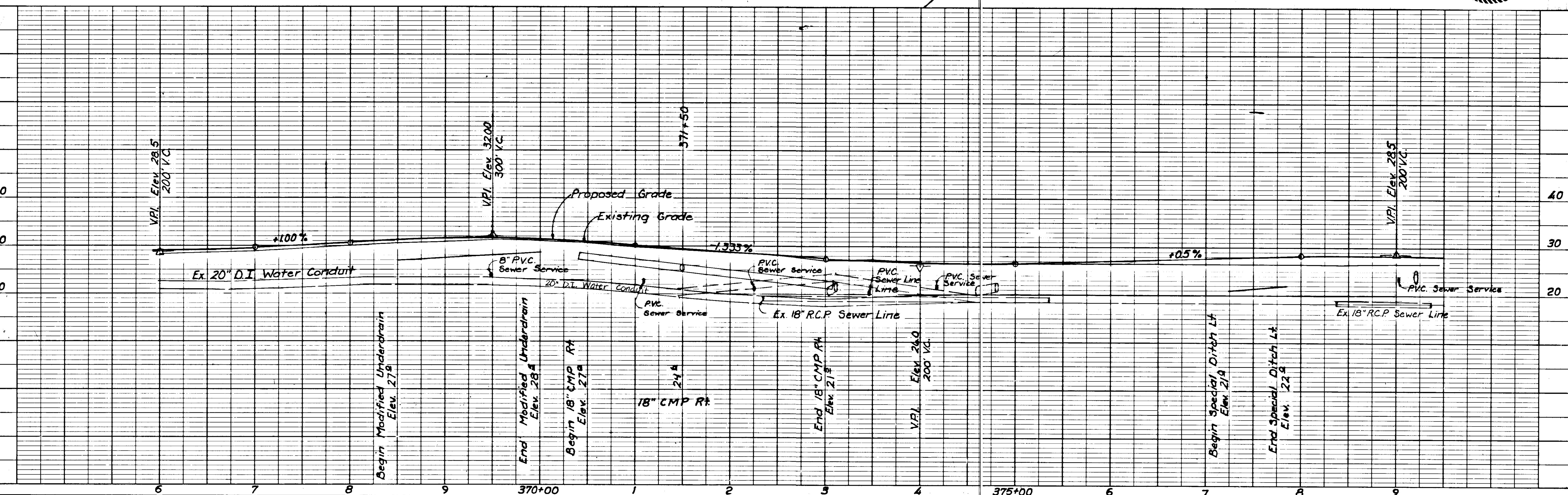
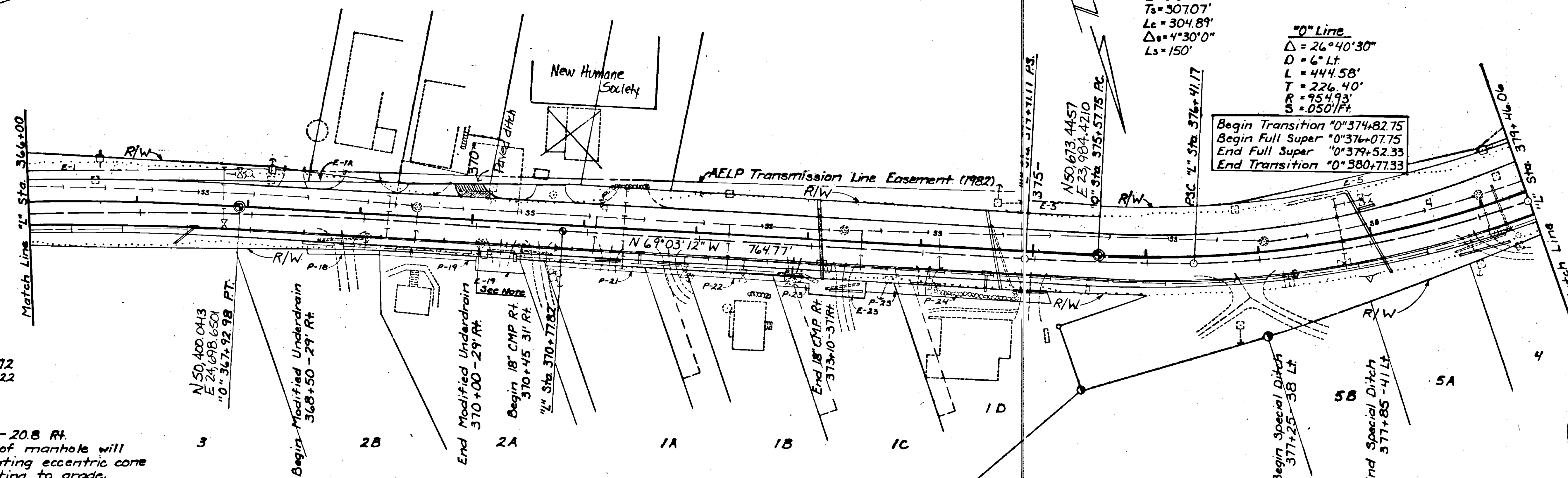
Excavation 746
 Embankment 4498
 Waste 0



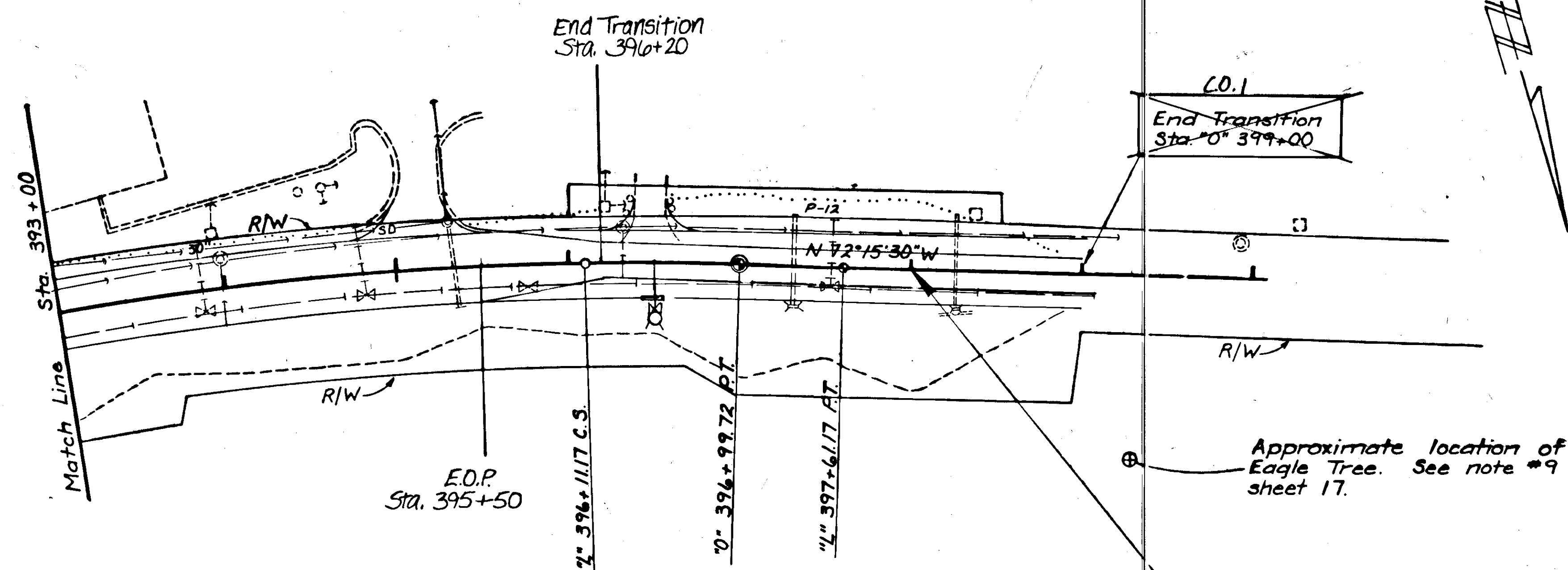
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955 (03)	1986	9	18

Excavation 1772
Embankment 2622
Waste 0

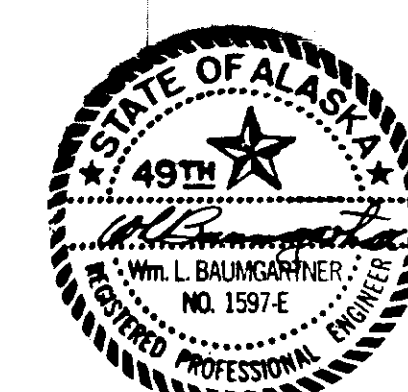
Note:
Sta. 370+08.5-20.8 Rt.
Reconstruction of manhole will
consist of rotating eccentric cone
180°, and adjusting to grade.



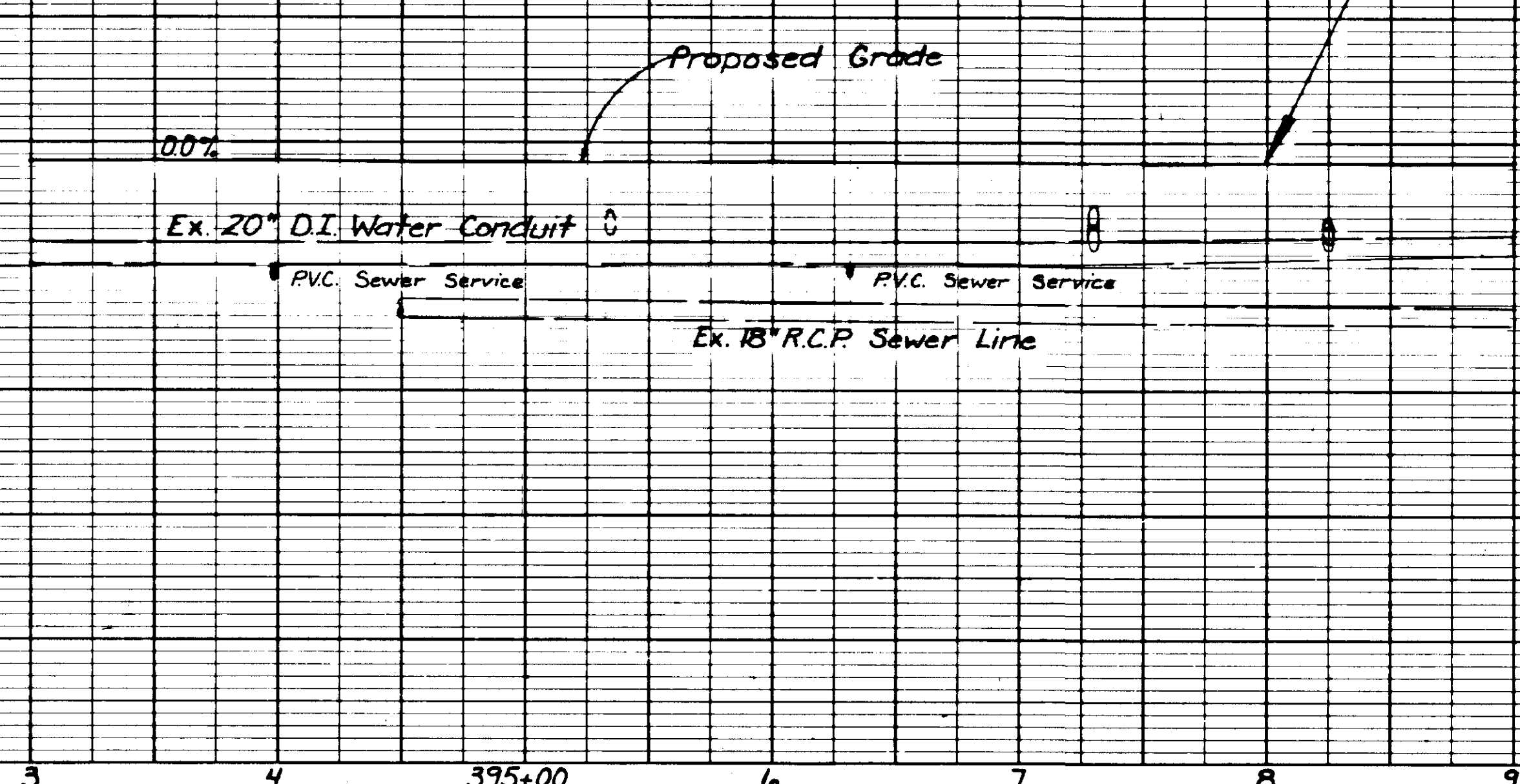
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955 (03)	1986	11	18

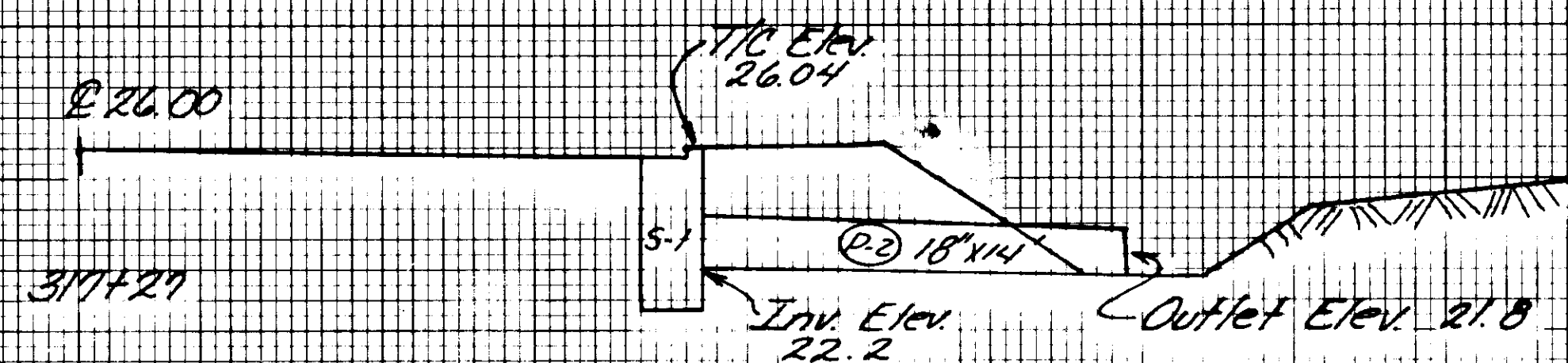


C.O. 1
END PROJECT
STA. "0" 398+00
F-M-0955 (03)

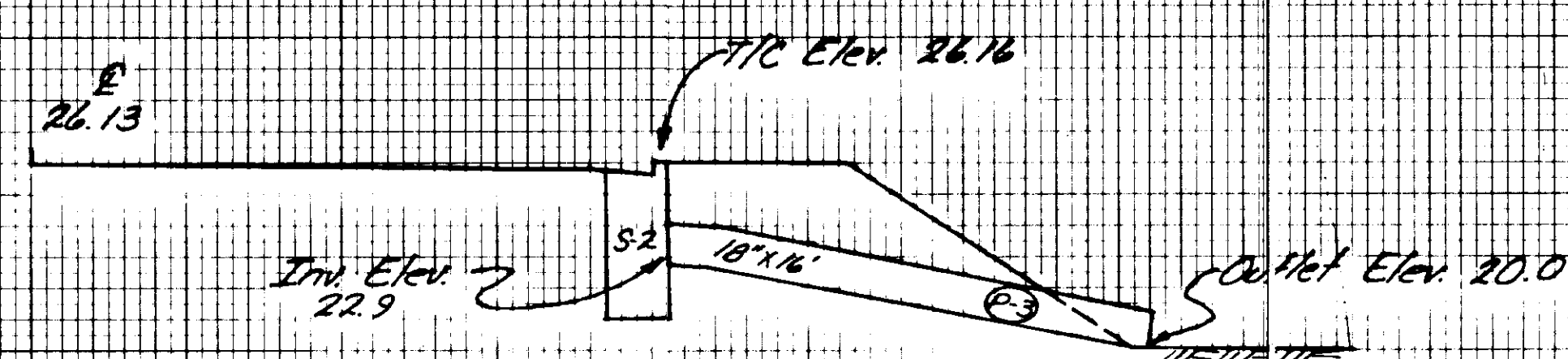


Excavation 3289 CY
Embankment 279 CY
Waste 3029 CY

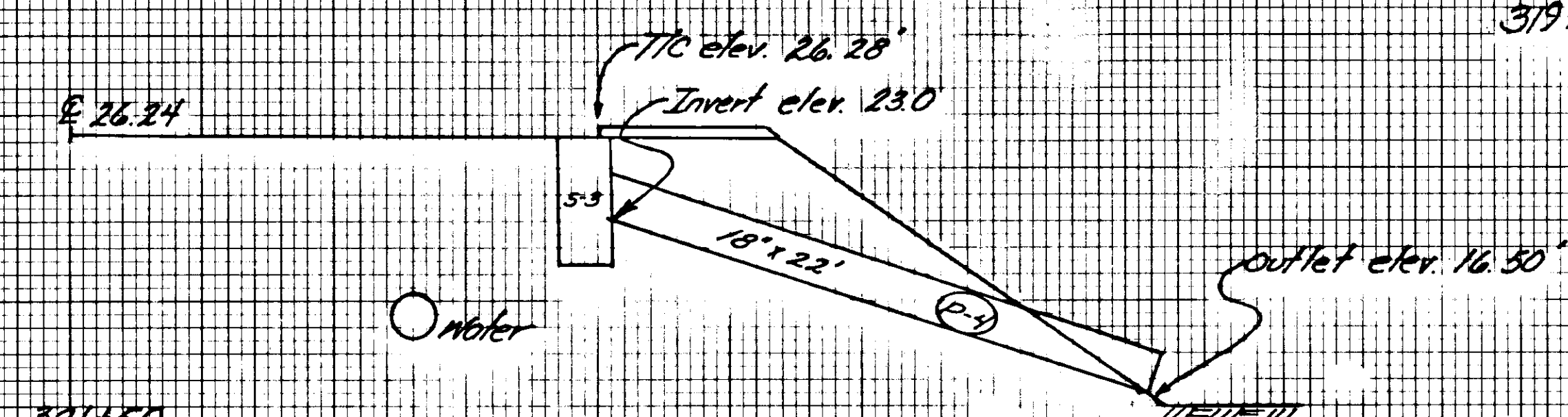




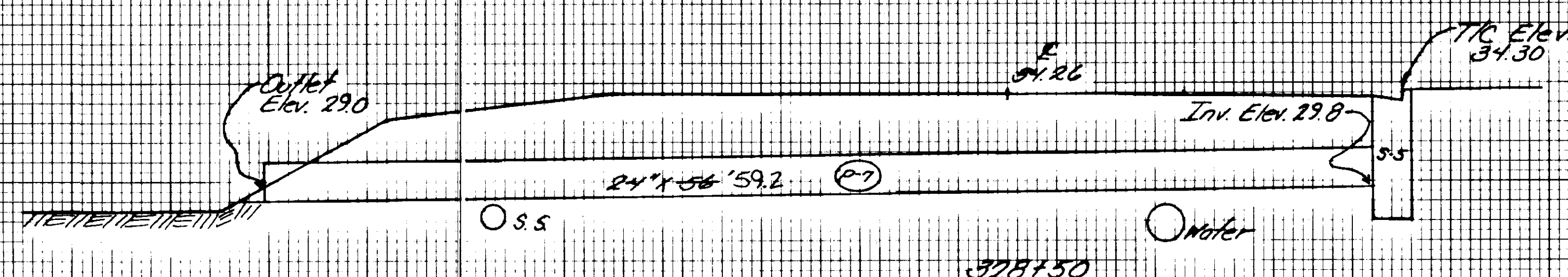
Water



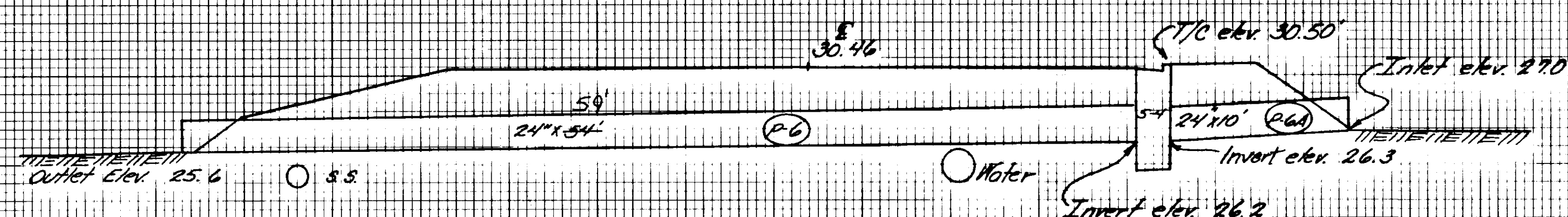
Water



Water



Water

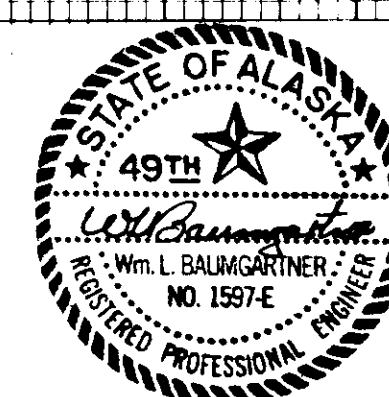


Water

STRUCTURE	INLET TYPE	STATION	TOP CURB ELEV.	PIPE NO.	SIZE
S-1	A	317+27	26.04	P-2	18" X 14"
S-2	A	319+38	26.16	P-3	18" X 16"
S-3	A	321+50	26.28	P-4	18" X 22"
S-4	A	326+10	30.50	P-6A	24" X 54" 59'
S-5	A	328+50	34.30	P-7	24" X 56" 59.2'
S-6	A	330+50	37.46	P-8	18" X 14"

Drainage Notes

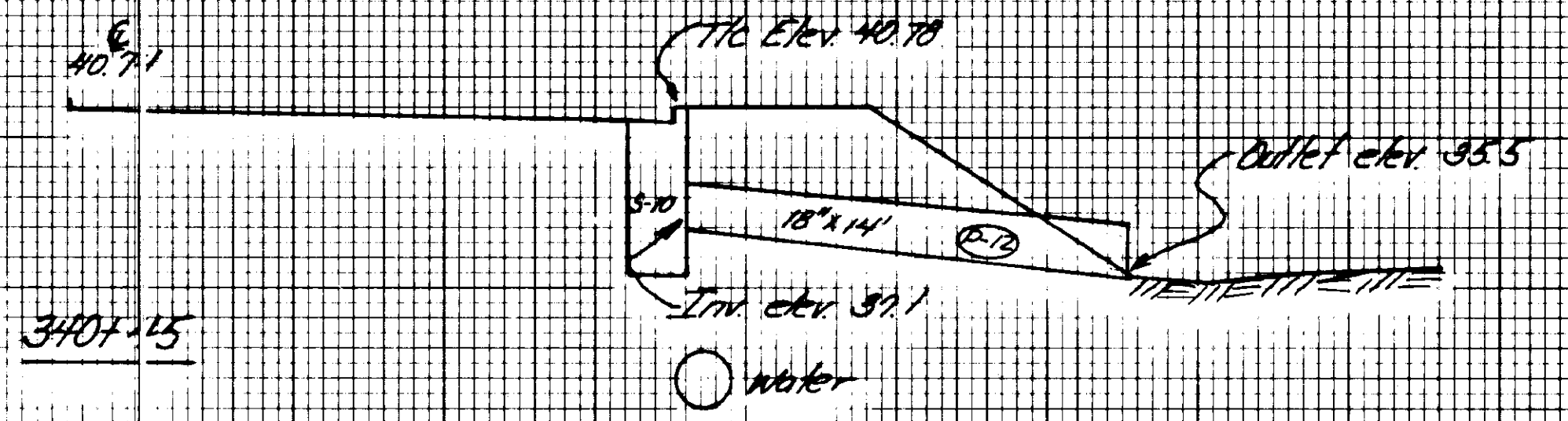
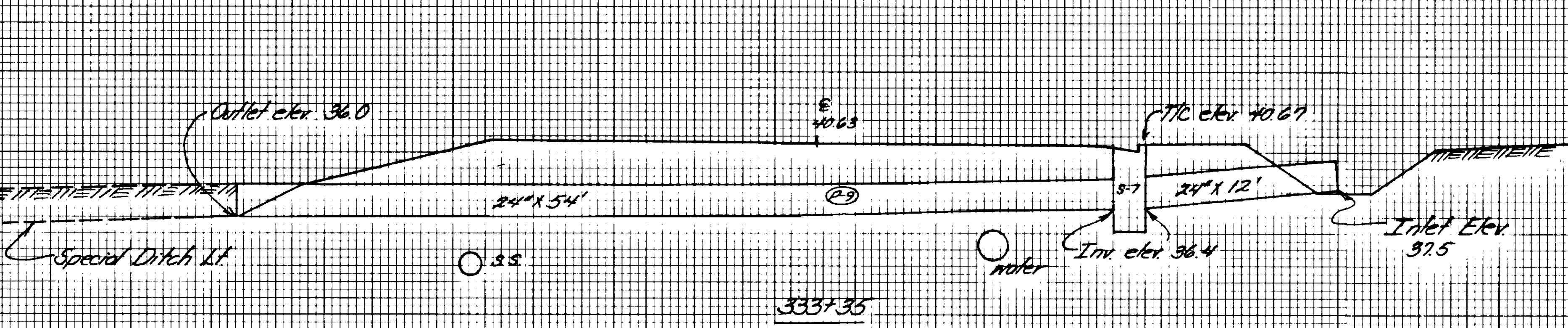
1. The contractor is advised that the water main location as shown on these plans is approximate and its location shall be verified prior to Storm Drain installation.
2. Bedding and backfill are incidental to other items and no separate payment shall be made.
3. Insulation board 2" thick by 4 feet long by trench width shall be placed over water line at each culvert crossing. Materials and labor shall be considered incidental and no separate payment shall be made.



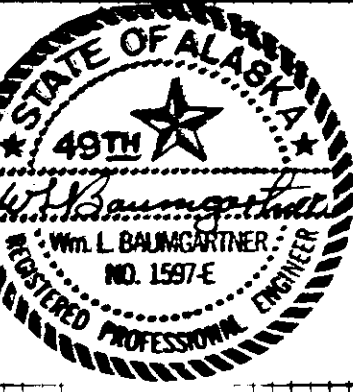
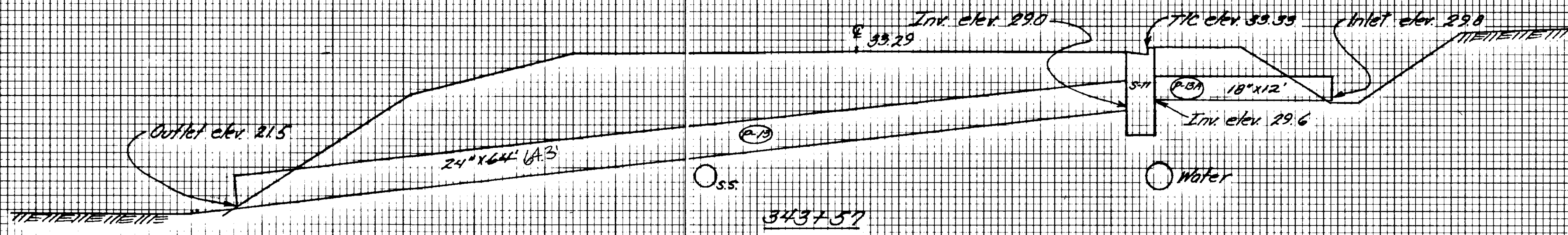
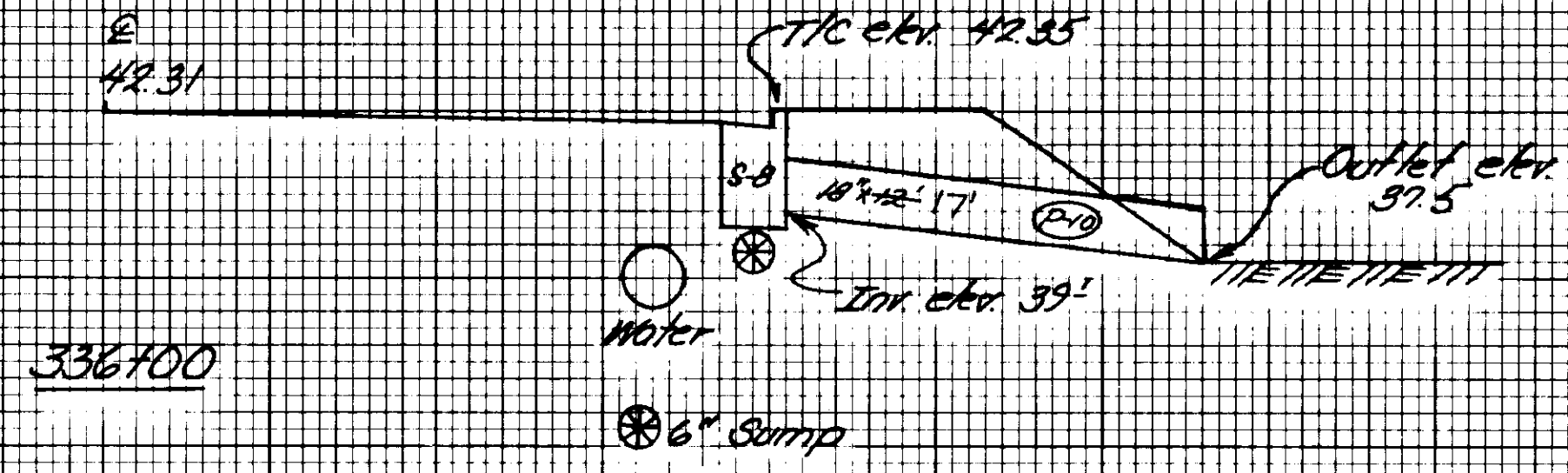
Kauffel & Esser Company

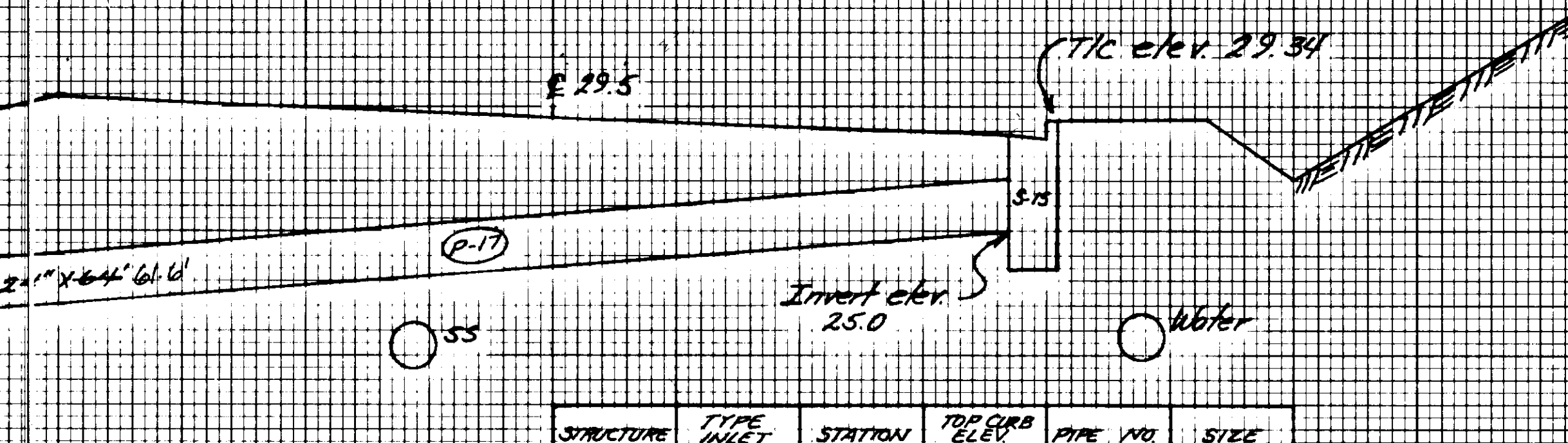
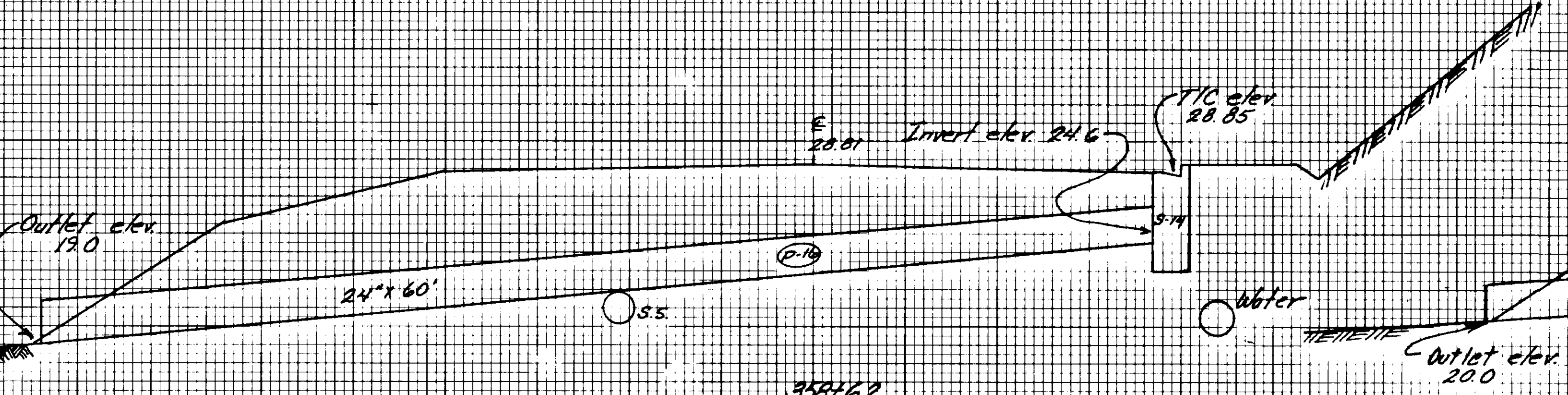
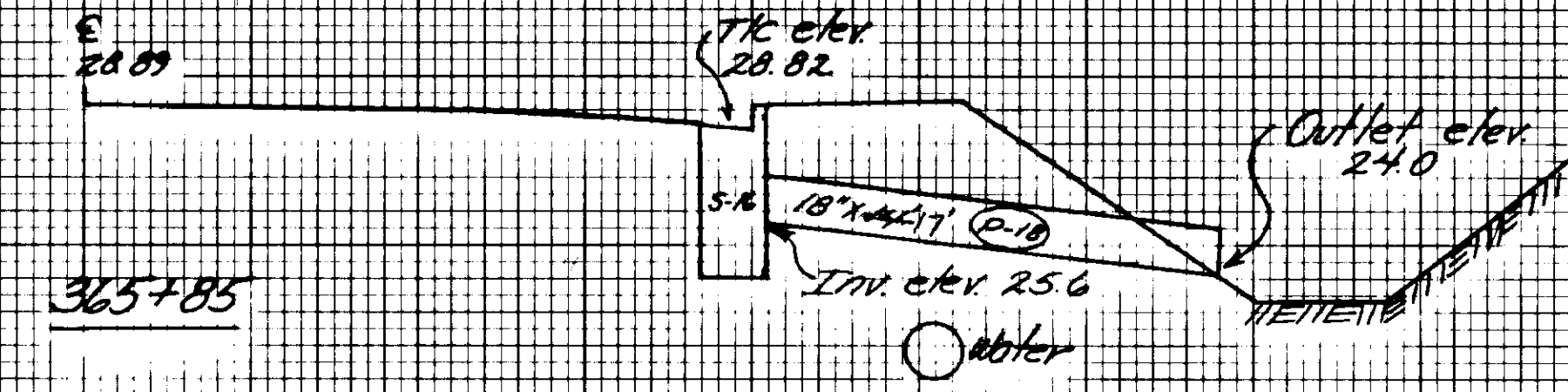
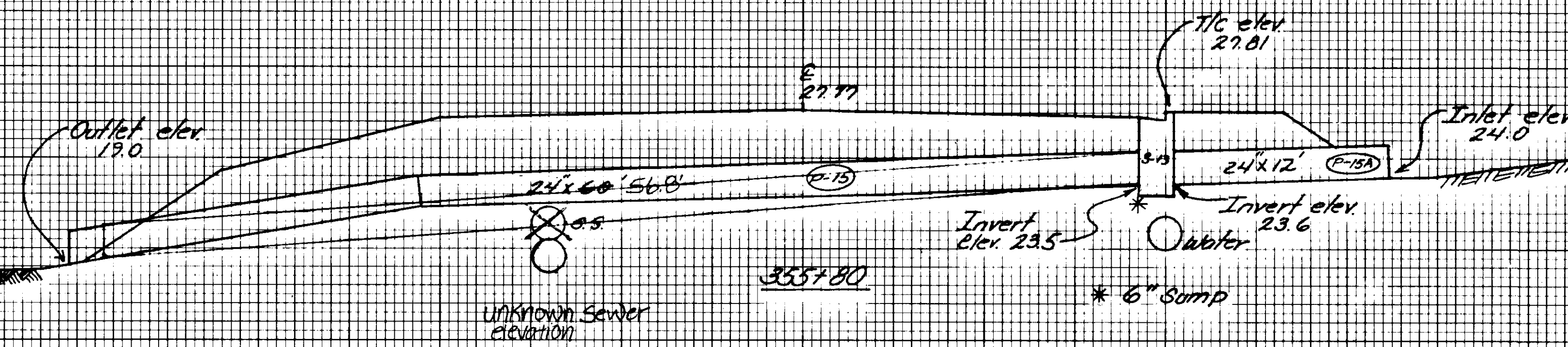
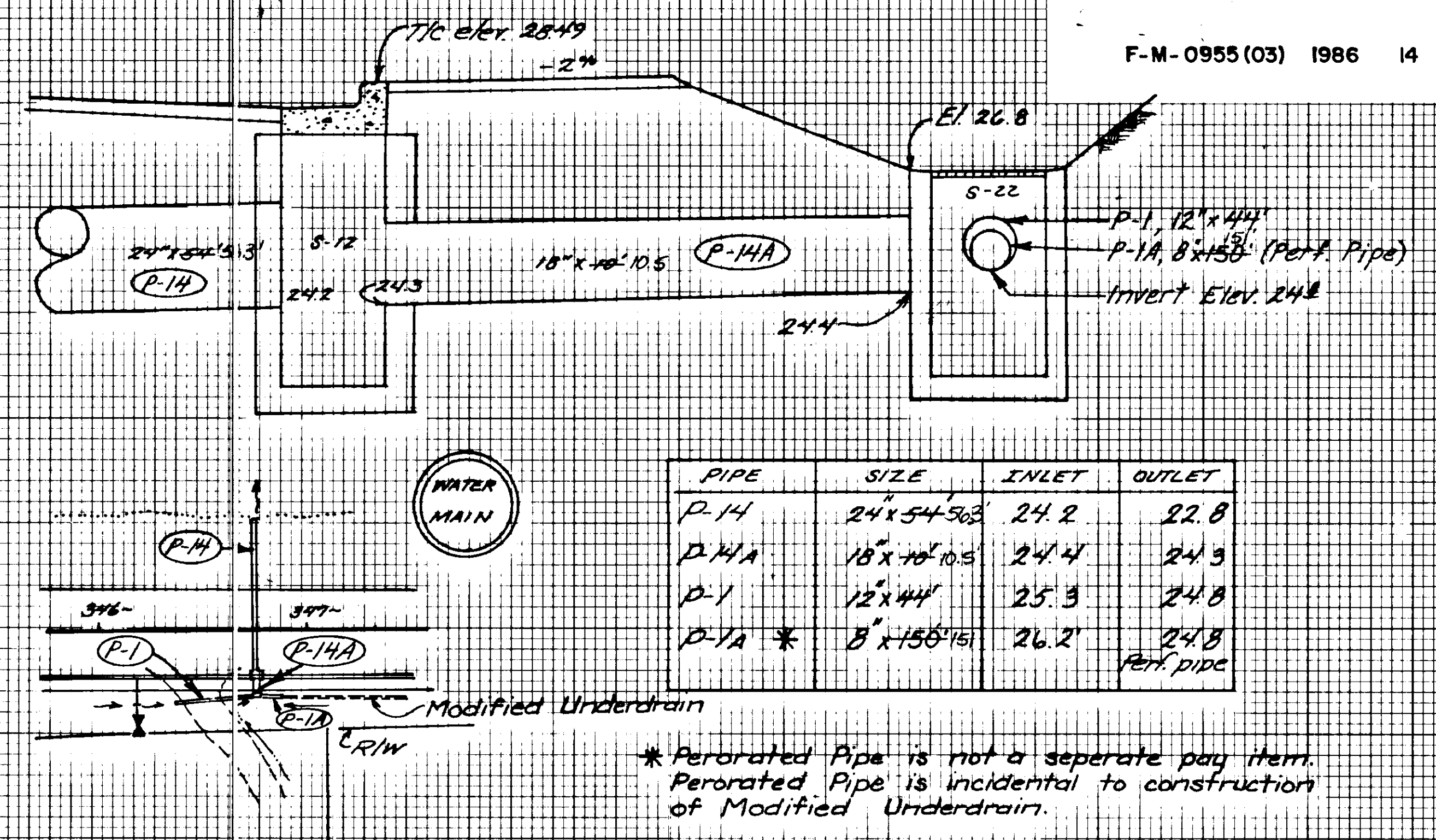
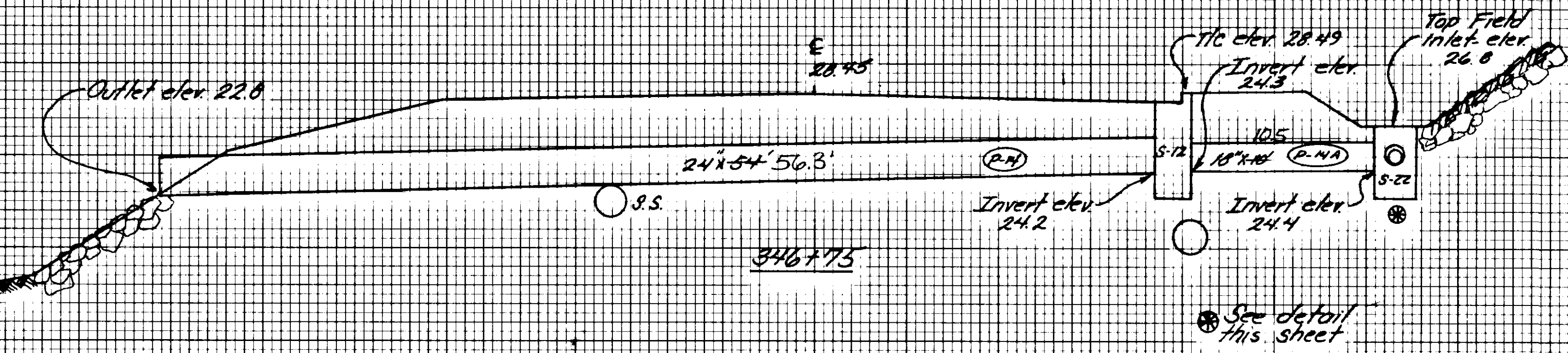
Made in U.S.A.

PLATE 3, CROSS SECTION 487072



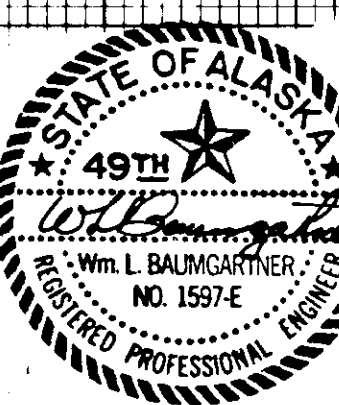
STRUCTURE	TYPE	STATION	TOP CURB ELEV	DESCRIPTION	PIPE SIZE
S-7	A	333+35	40.67	P.9	24" x 54'
S-8	A	336+00	42.35	P.10	18" x 12'
S-10	A	340+15	40.70	P.12	18" x 14'
S-11	A	343+57	39.33	P.13 P.13A	24" x 64' (A.3) 18" x 12'

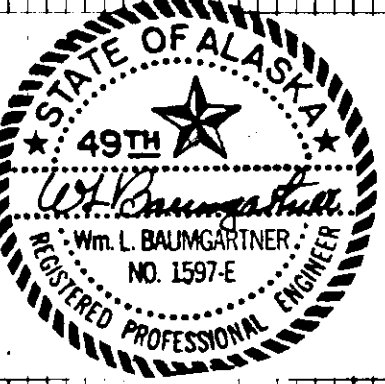
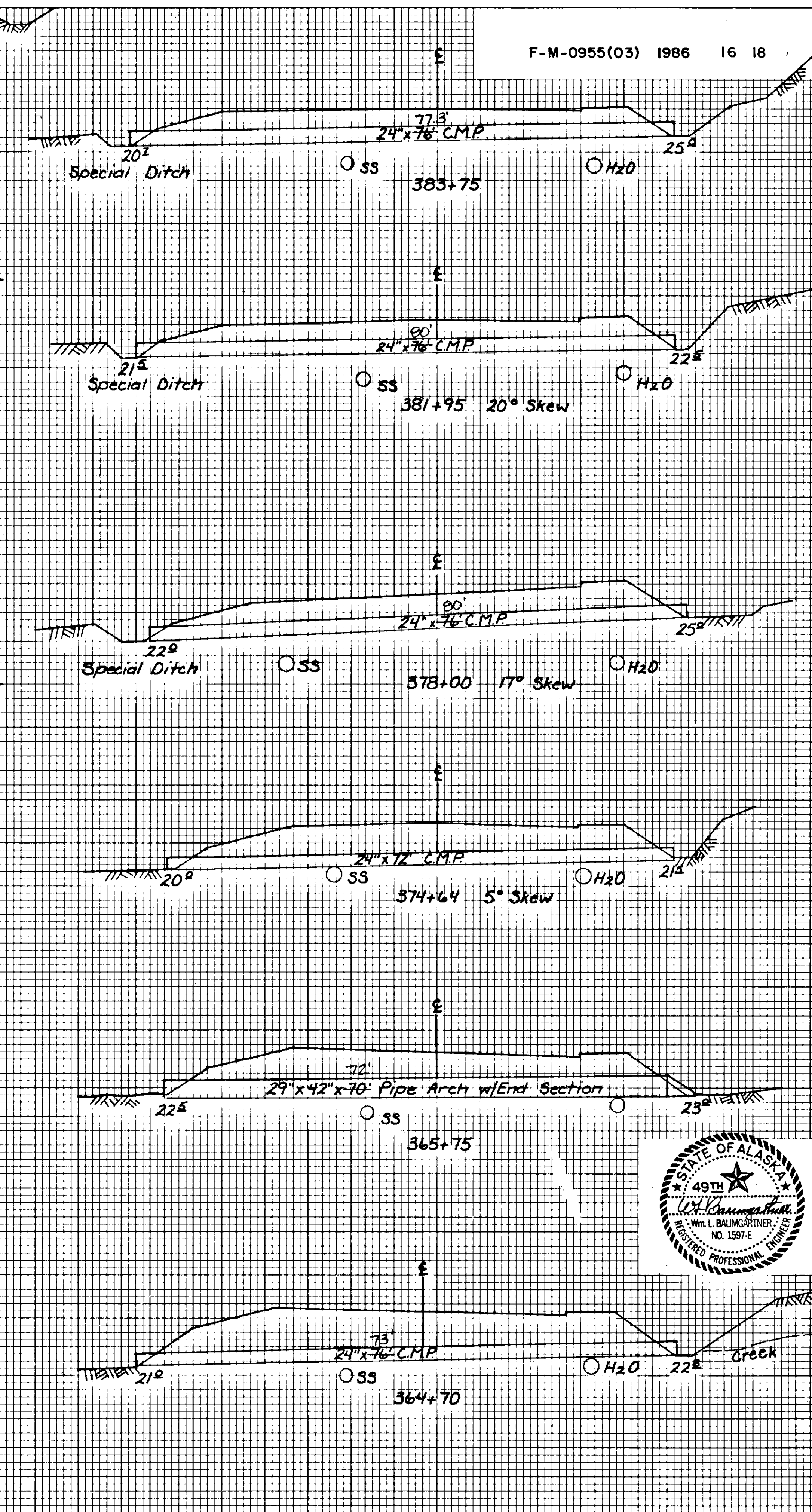
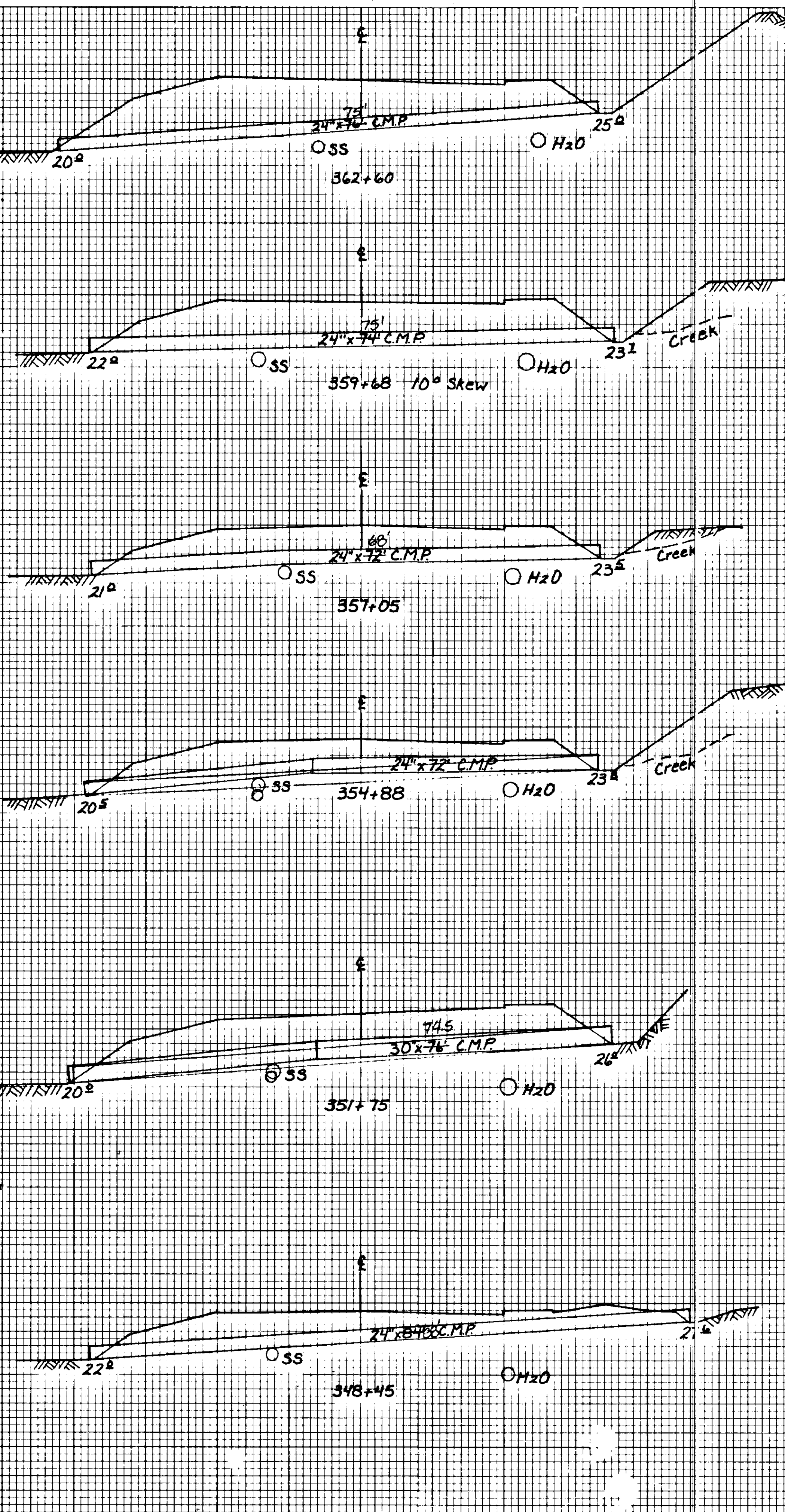
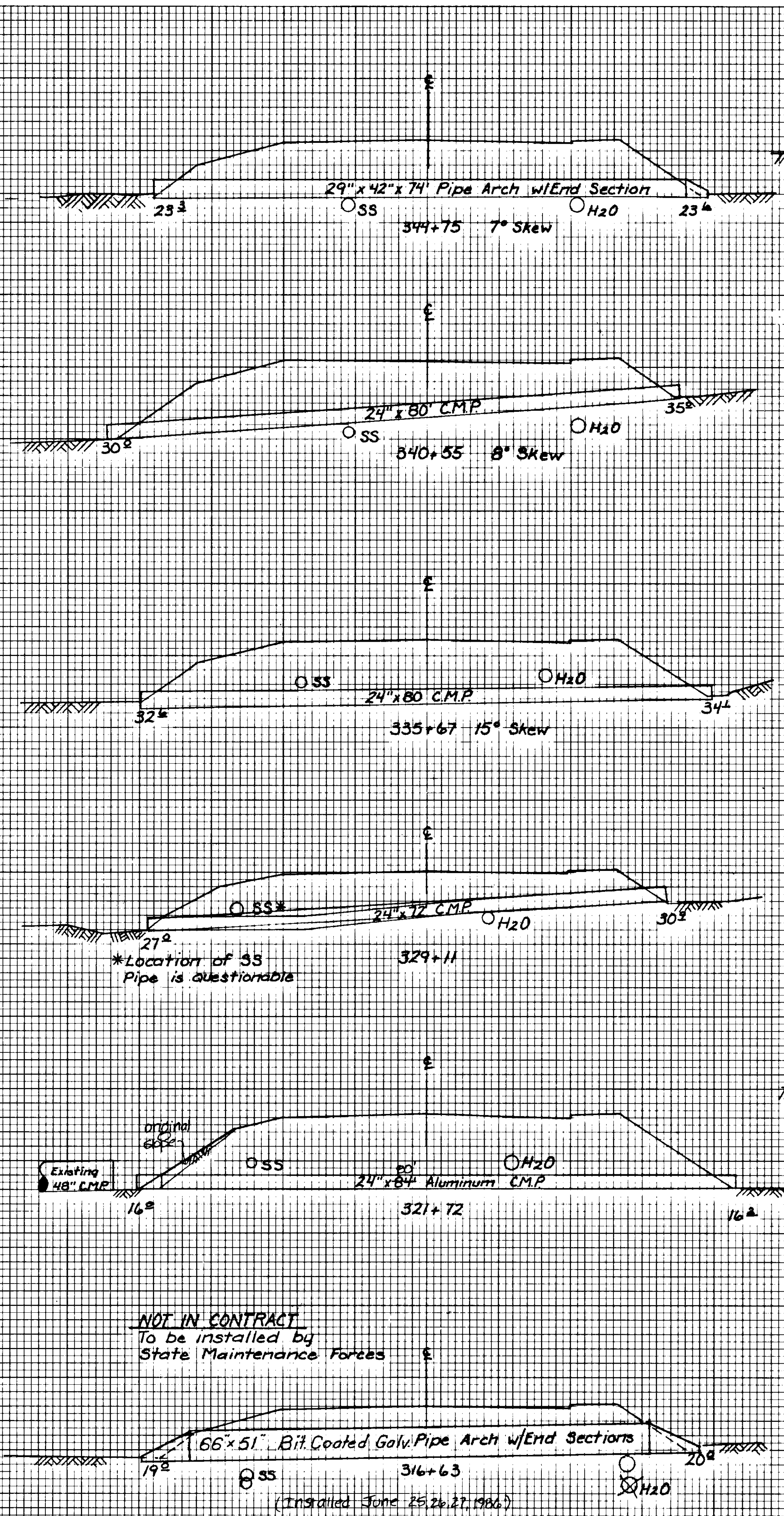




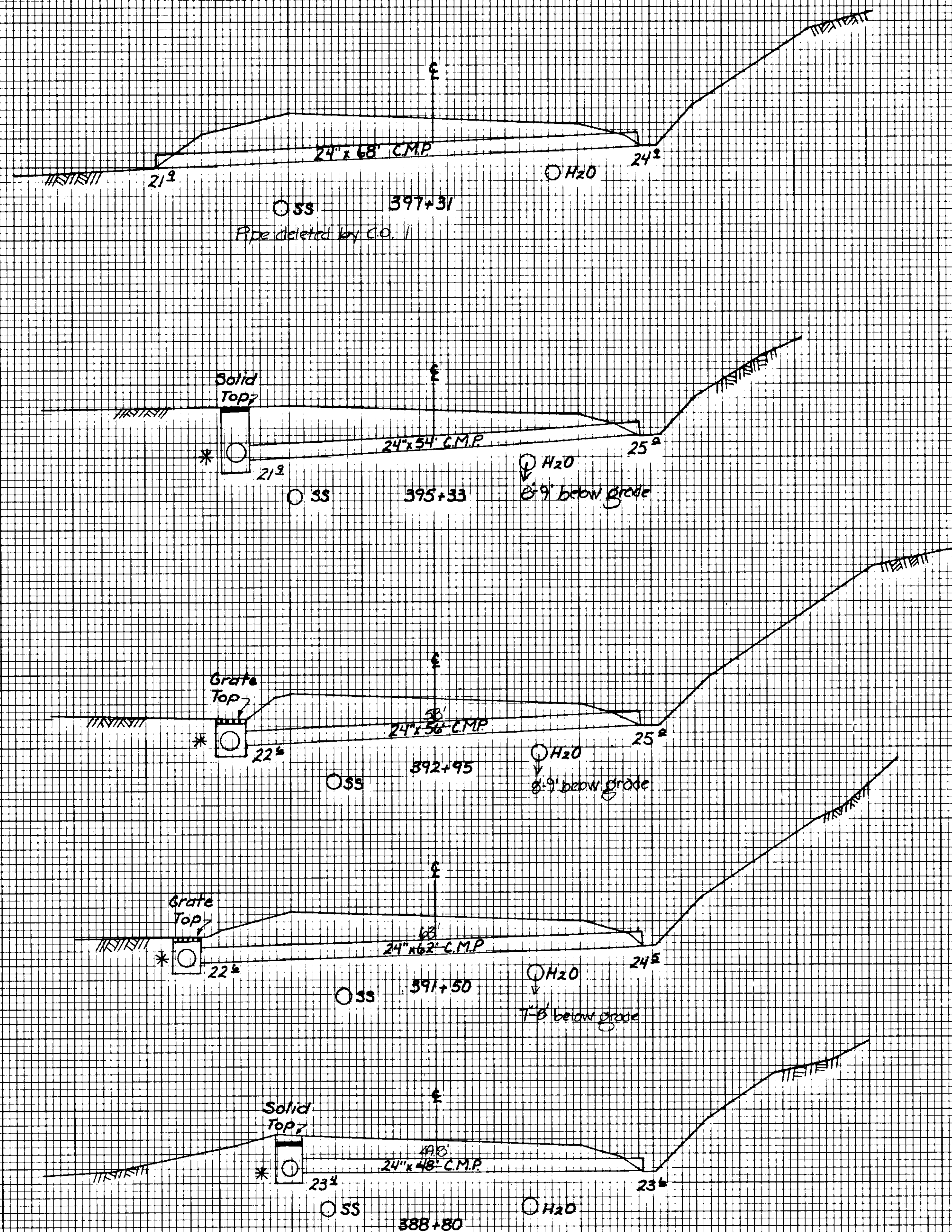
STRUCTURE	TYPE	INLET	STATION	TOP CURB ELEV.	PIPE NO.	SIZE
S-12	A		346+75	28.49	P-14	24x54x56.3
S-13	A		347+46	27.81	P-14A	18x10x10.5
S-14	A		355+80	28.85	P-15	24x60x56.8
S-15	A		358+62	28.85	P-16	24x60x61.6
S-16	A		363+35	29.34	P-17	24x64x61.6
S-17	A		365+85	28.82	P-18	18x10x10.5
S-22	A		346+75		P-1A	8x156x151

* Field Inlet See Detail





STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-M-0955(03)	1986	17	18



IN ACCORDANCE WITH ADF&G TITLE 16 THE FOLLOWING CONSTRUCTION GUIDELINE SHALL APPLY TO THIS PROJECT:

THE FOLLOWING CULVERT REPLACEMENT, ON STREAMS THAT SUPPORT REARING SALMONIDS, SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTION 840 IN ORDER TO PRESERVE FISH PASSAGE. STATION 344+75 WILL HAVE A 29" X 42" ARCH PIPE; STATION 365+75 A 29" X 42" ARCH PIPE; AND STATION 373+10 A 30" PIPE. THESE CULVERTS WILL ALL BE BEDDED 6 INCHES INTO THE STREAMBEDS.

CULVERT REPLACEMENT OPERATIONS WILL INCORPORATE THE FOLLOWING FEATURES TO PROTECT EXISTING FISH POPULATIONS AND PRESERVE HABITAT VALUES:

1. THE CONTRACTOR'S EROSION CONTROL PLAN WILL BE SUBMITTED TO ADF&G FOR REVIEW AND APPROVAL.
2. A MEETING WILL BE ARRANGED BETWEEN DOT&PF PROJECT PERSONNEL, ADF&G AND THE CONTRACTOR PRIOR TO CONSTRUCTION ACTIVITIES.
3. DOT&PF PERSONNEL WILL TRAP AND RELOCATE RESIDENT FISH IN THE STREAM WORK AREAS PRIOR TO CONSTRUCTION ACTIVITIES.
4. CULVERT INSTALLATIONS WILL BE IN COMPLIANCE WITH U.S. ARMY CORPS OF ENGINEERS RECOMMENDED MANAGEMENT PRACTICES.
5. EXCAVATED MATERIALS WILL BE COVERED BY JUTE MESH, PLASTIC FILM, OR OTHER APPROVED MATERIAL TO PREVENT SILTATION OF STREAMS IN INCLEMENT WEATHER.
6. NO EROSION CONTROL MATERIALS WHICH COULD FUNCTION AS A GILLNET WILL BE INSTALLED ALONG THE STREAMBANKS.
7. STANDARD STREAM DIVERSION TECHNIQUES WILL BE USED AT EACH SITE OR A PUMPING OPTION WILL BE SUBMITTED TO ADF&G FOR APPROVAL.

ADDITIONAL STEPS WILL BE TAKEN TO PRESERVE WATER QUALITY AND PROTECT FISH HABITAT IN ADJACENT WETLANDS:

1. AFTER PROJECT SLOPE STAKING, DOT&PF WILL DETERMINE WETLAND AREAS TO BE SILT-FENCED PRIOR TO EXCAVATION OR EMBANKMENT ACTIVITIES.
2. SILT FENCE WILL BE IN PLACE PRIOR TO EARTHMOVING OR GROUND DISTURBING ACTIVITIES.
3. ROADSIDE DITCHES DRAINING INTO THE ABOVE DESCRIBED SALMONID SPawning OR REARING STREAMS WILL HAVE SILT CONTROL STRUCTURES INSTALLED TO PROTECT THE STREAMS.
4. MAINTENANCE OF SILT CONTROL STRUCTURES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
5. CLEARING LIMITS WILL BE TOE-OF-SLOPE UNLESS SPECIAL CONDITIONS WARRANT OTHERWISE.
6. ANY PUMPING WILL BE DONE IN CONFORMANCE WITH APPLICABLE REGULATIONS.
7. SEEDING WILL BE ACCOMPLISHED BY AUGUST 15 OR THE CONTRACTOR WILL BE RESPONSIBLE FOR EMBANKMENT EROSION PROTECTION UNTIL THE NEXT GROWING SEASON.
8. FUELING OPERATIONS FOR CONSTRUCTION EQUIPMENT WILL BE CONDUCTED IN A MANNER TO PREVENT POLLUTION OF STREAMS AND WETLANDS IN THE PROJECT AREA.
9. AN EAGLE NEST IS LOCATED 150 FEET FROM THE END OF PROJECT. TO REDUCE THE RISKS OF DISTURBANCES TO THE NEST DURING BREEDING OR REARING, THERE WILL BE NO CONSTRUCTION ACTIVITY WITHIN 330 FEET OF THE NEST BETWEEN MARCH 1 AND MAY 15. IF THE NEST IS INACTIVE (NO INCUBATING ADULTS) AFTER MAY 15, ALL CONSTRUCTION ACTIVITIES CAN BE RESUMED. HOWEVER, IF EAGLES ARE PRESENT ON THE NEST BY MAY 15, NO CONSTRUCTION ACTIVITIES WILL TAKE PLACE WITHIN 330 FEET OF THE NEST UNTIL THE YOUNG EAGLES FLEDGE OR AUGUST 15, WHICHEVER OCCURS FIRST.

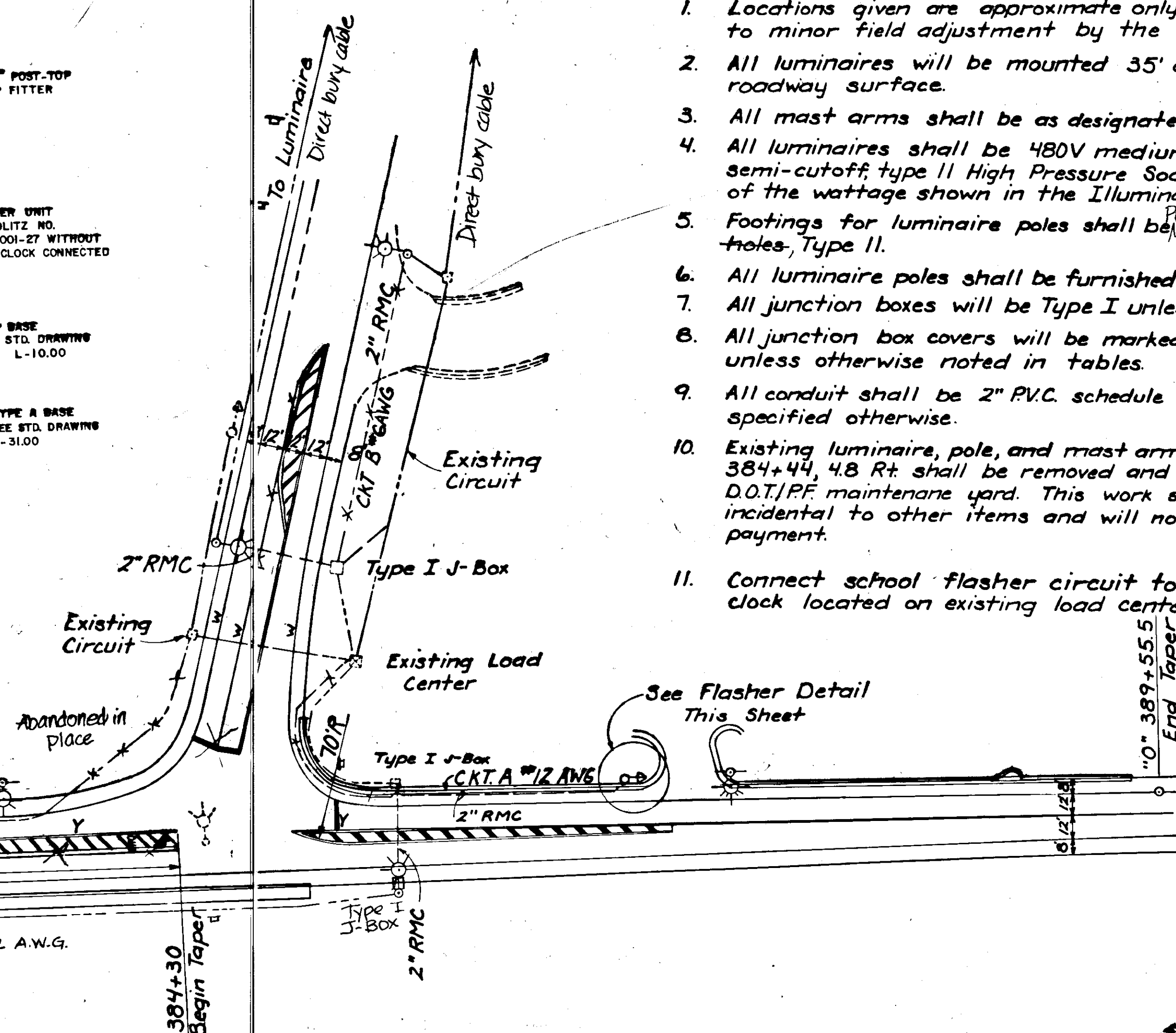
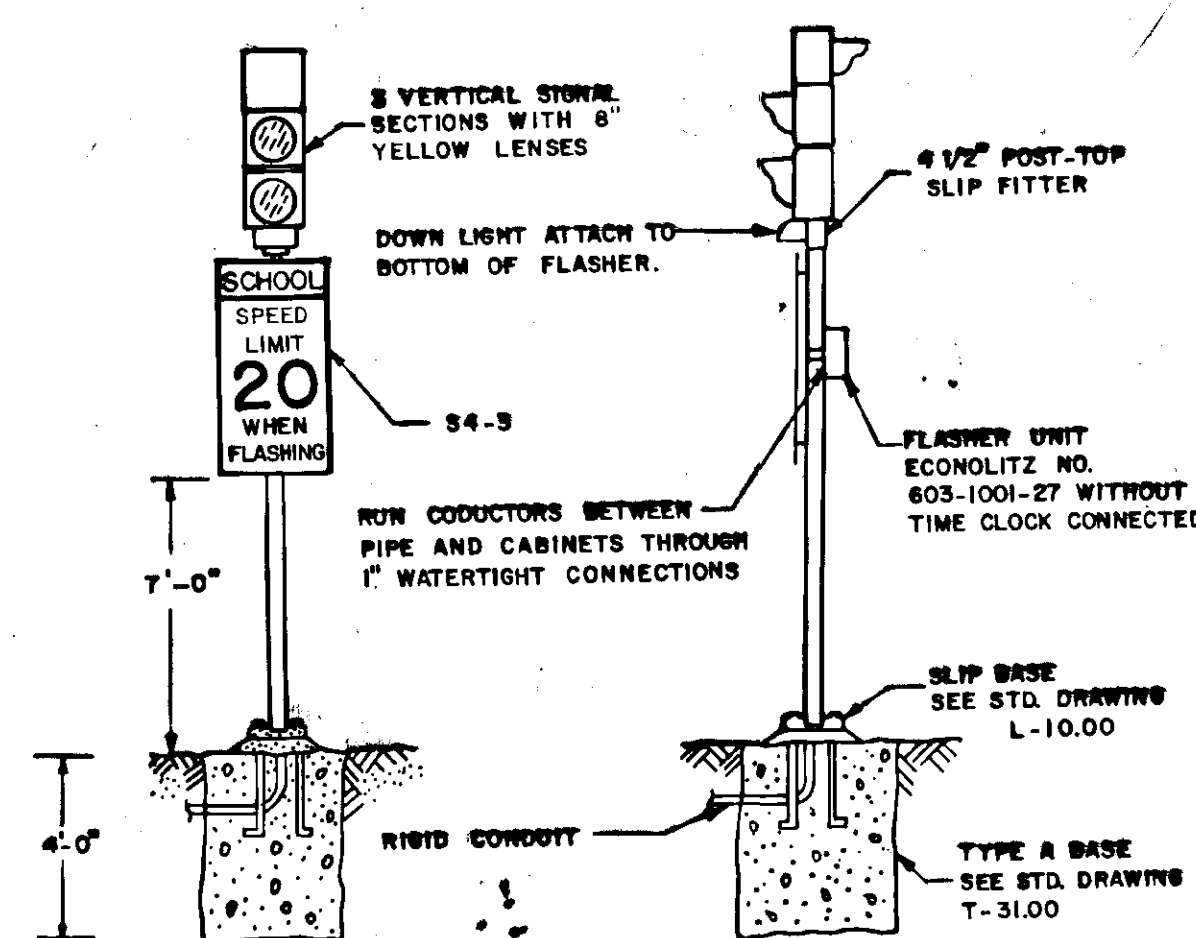


GENERAL ILLUMINATION NOTES

- Locations given are approximate only and are subject to minor field adjustment by the engineer.
- All luminaires will be mounted 35' above the roadway surface.
- All mast arms shall be as designated in the table.
- All luminaires shall be 480V medium distribution, semi-cutoff, type II High Pressure Sodium and will be of the wattage shown in the Illumination Tables.
- Footings for luminaire poles shall be cast-in-drilled holes, Type II.
- All luminaire poles shall be furnished with slip bases.
- All junction boxes will be Type I unless otherwise noted.
- All junction box covers will be marked "Lighting" unless otherwise noted in tables.
- All conduit shall be 2" P.V.C. schedule 40, except where specified otherwise.
- Existing luminaire, pole, and mast arm located at "0" 384+44, 4.8 Rt. shall be removed and stockpiled at the D.O.T./PF maintenance yard. This work shall be considered incidental to other items and will not be measured for payment.
- Connect school flasher circuit to existing time clock located on existing load center.

ESTIMATE OF STRIPING QUANTITIES

4" Yellow	=	11,917 LF
4" White	=	17,072 LF
18" Yellow	=	370 LF
24" White	=	26 LF



STATION	OFFSET		POLE	MAST ARM LENGTH	LUMINAIRE WATTS	REMARKS
	LT.	RT.				
0" 379+42		27'	✓	8'	250	
" 381+22	10±			8'	400	Mount on Exist Power Pole *
" 383+36	10±			8'	400	" " " " " *
" 384+44		48'				Remove Exist Luminaire
" 385+47		27'	✓	12'	400	
" 386+68	30'					School Flasher
" 387+26	30'			8'	250	Mount on Exist Power Pole *
"K" 4+81	37'		✓	12'	250	
"K" 6+52+62		30'	✓	12'	250	
"K" 7+90			✓	12'	250	

* By Others

STATION	OFFSET	
	LT.	RT.
0" 381+16 (Exist.)	18'	
" 381+16 (Relocated)	32'	
" 382+43		28'
" 385+47		32'
"K" 4+30 (Exist.)		38'
" 4+81		25'
" 6+41 (Exist.)		55'

