

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		

SUPPLEMENTAL WORK 'A'

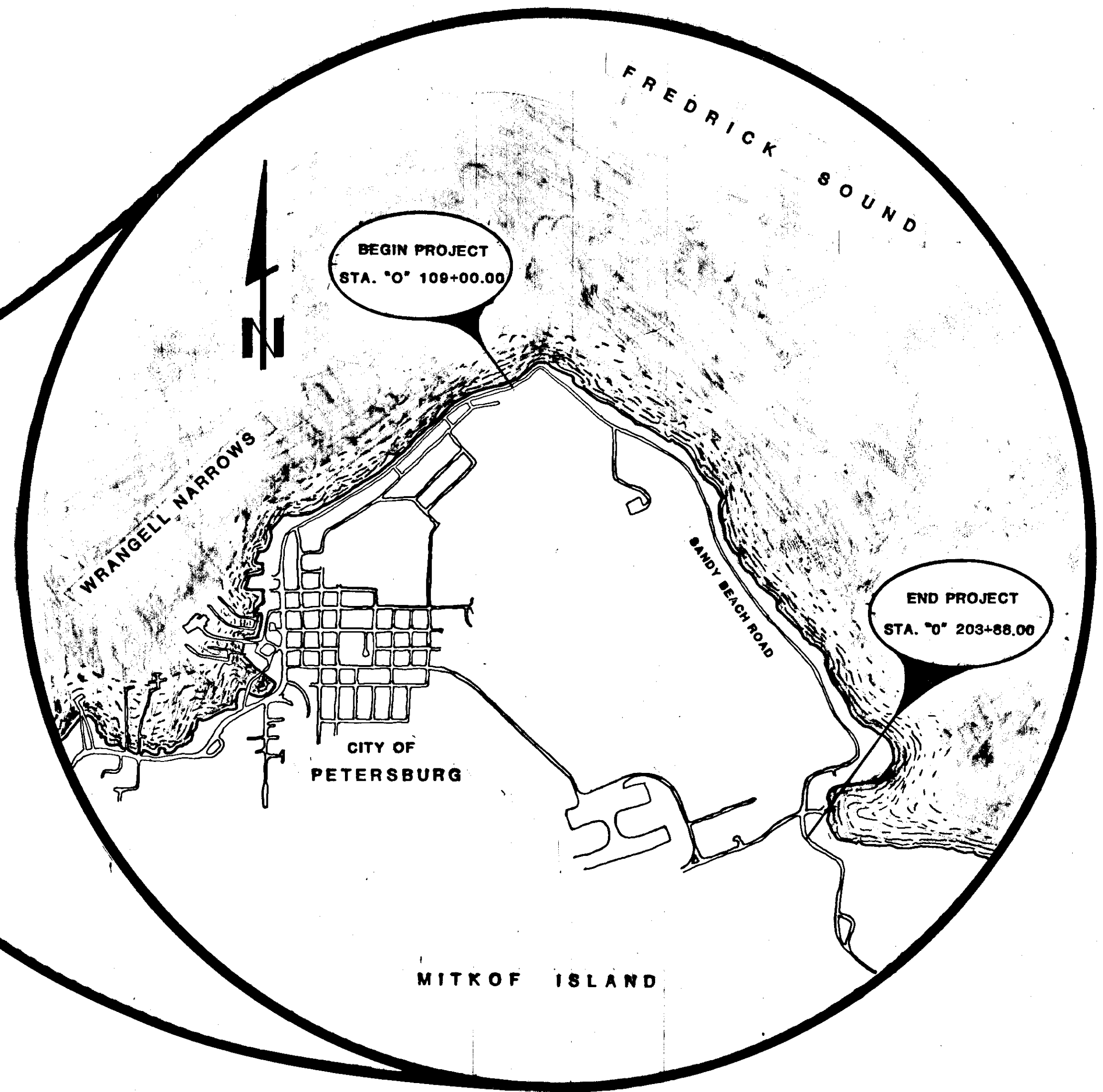
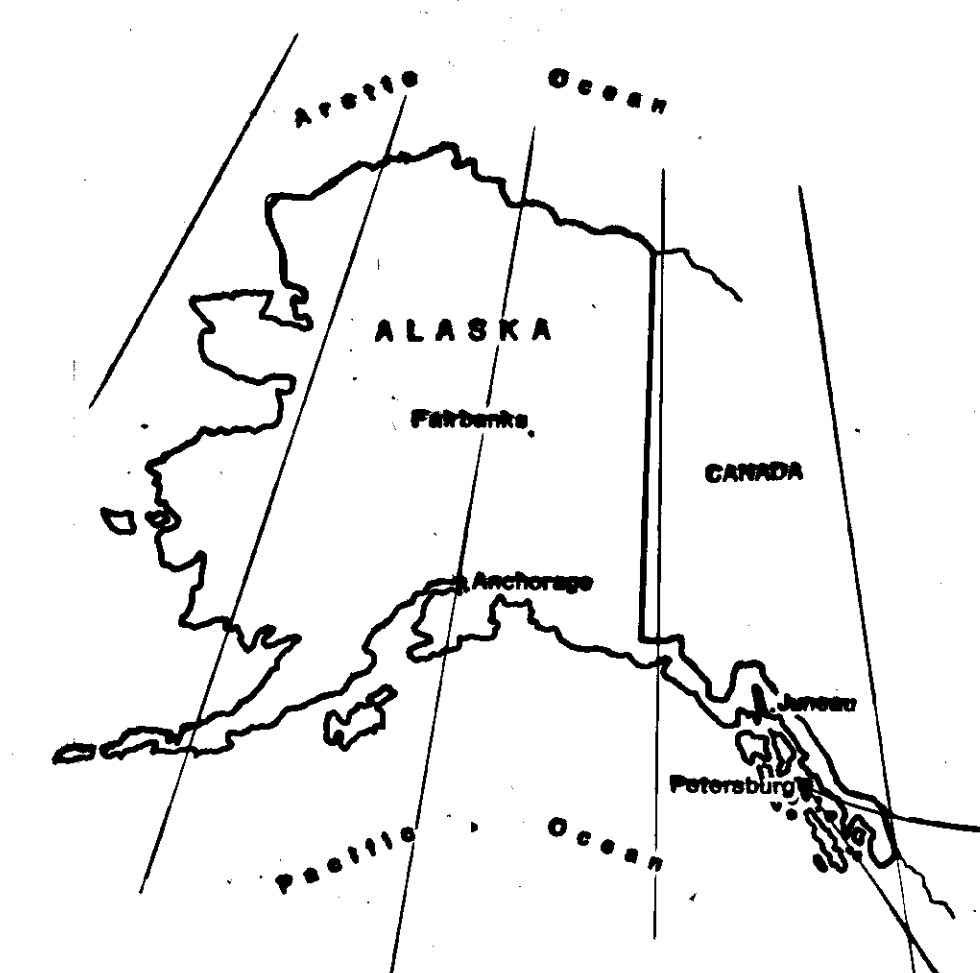
SANDY BEACH ROAD

SEWER LINE EXTENSION

R-30669

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S-12	STA 142+42 - STA 147+40	BEGIN SEWER EXTENSION
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S-25	HAUGEN DRIVE EXTENSION	END PROJECT



ESTIMATE OF QUANTITIES FOR SUPPLEMENTAL WORK (SUMMARY)																								
ITEM NO.	ITEM	UNIT	SHEET 8-5	SHEET 8-6	SHEET 8-7	SHEET 8-8	SHEET 8-9	SHEET 8-10	SHEET 8-11	SHEET 8-12	SHEET 8-13	SHEET 8-14	SHEET 8-15	SHEET 8-16	SHEET 8-17	SHEET 8-18	SHEET 8-19	SHEET 8-20	SHEET 8-21	SHEET 8-22	SHEET 8-23	SHEET 8-24	TOTAL	
604(2)	SANITARY SEWER M' HOLE	EACH								1	1	3	1	2	1	2	1	1	3	1	2	2	2	23
626(1-6)	6" DI SEWER CONDUIT	LF											150	21				290	398	222			1081	
626(1-8)	8" DI SEWER CONDUIT	LF										176						211	398	239		554	1478	
626(1-10)	10" DI SEWER CONDUIT	LF																140		247	321		708	
626(1-12)	12" DI SEWER CONDUIT	LF							317	516	482	363	495	500	573	459	403	58					4156	
626(2-6A)	INSTALL 6" SEWER SERVICE	EACH							2	8	6	10	8	6	9	6	5	6	6	7	3	0	82	
626(3)	LIFT STATION UNIT	EACH												1						1			2	
110(1A)	MOBILIZATION	LS																					ALL REQ'D	
113(1A)	FLAGGING	M' HRS																					500	
114(1A)	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LS																					ALL REQ'D	
115(1A)	TRAFFIC MAINTENANCE	LS																					ALL REQ'D	

D.I. SEWER MAIN SUMMARY				
STATION	OFFSET	L.F.	SIZE	REMARKS
			1663	
144+20	141+33	09	1678	12" D.I. SEWER MAIN
161+13	162+63	L	150	6" D.I. FORCE MAIN
162+63	187+30	L	2486	12" D.I. MAIN
187+30	188+70	L	148	10" D.I. MAIN
188+70	198+05	L	910	6" D.I. FORCE MAIN
189+00	198+05	L	806	8" D.I. MAIN
198+05	203+88	L	568	10" D.I. MAIN
201+70		R	555	8" HAUGEN DR. EXTENSION
155+15		R	75	8" D.I. STUB (CAP)
188+70		L	46	8" D.I. STUB (CAP)
HAUGEN DR		L	32	8" D.I. STUB (CAP)

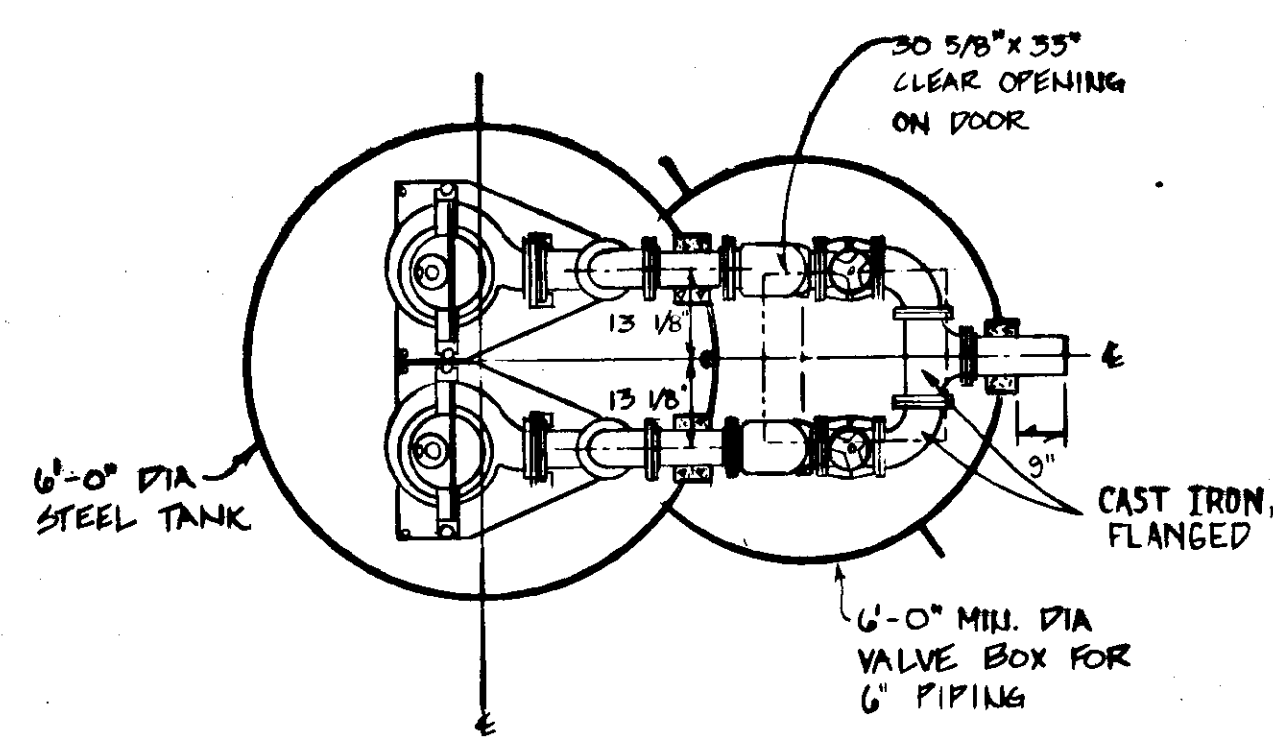
D.I. SEWER SERVICES																				
STATION	LENGTH	SIZE	OFFSET	REMARKS	STATION	LENGTH	SIZE	OFFSET	REMARKS	STATION	LENGTH	SIZE	OFFSET	REMARKS	STATION	LENGTH	SIZE	OFFSET	REMARKS	
140+00					158+27	69 LF	6"	R	CAP	173+80	43 LF	6"	L	CAP	188+23	82 LF	6"	R	CAP	
140+09.7	50.1		L		158+50	52 LF	6"	L	CAP	174+80	58 LF	6"	R	CAP						
140+87	32.8		L							174+85	43 LF	6"	L	CAP	196+25	54 LF	6"	L	CAP	
142+19	32.8		L		159+50	36 LF	6"	L	CAP	175+80	42 LF	6"	L	CAP	190+64	50 LF	6"	R	CAP	
142+52.3	27.2		R		159+78	47 LF	6"	R	CAP					190+85	52 LF	6"	L	CAP		
144+33	43.6		R		160+37	36 LF	6"	L	CAP	176+50	58 LF	6"	L	CAP						
145+28	70.5		L							176+87	45 LF	6"	R	CAP	191+75	52 LF	6"	L	CAP	
147+94	50		R		161+68	36 LF	6"	L	CAP	177+70	40 LF	6"	L	CAP	192+28	50 LF	6"	R	CAP	
146+130.2	45 LF	6"	L	CAP	161+85	67 LF	6"	R	CAP					192+90	30 LF	6"	L	CAP		
146+37.1	63 LF	6"	R	CAP	161+97	33 LF	6"	L	CAP	178+30	44 LF	6"	L	CAP						
147+52.1	37 LF	6"	L	CAP	162+76	46		R		178+66	41		R		193+80	54 LF	6"	L	CAP	
149+04	47.5				163+55	32 LF	6"	L	CAP	179+40	58 LF	6"	R	CAP	194+80	85 LF	6"	R	CAP	
148+148	37 LF	6"	L	CAP	163+80	70 LF	6"	R	CAP	180+00	43 LF	6"	L	CAP	194+85	35 LF	6"	L	CAP	
148+50	46.5 LF	6"	R	CAP	164+40	40 LF	6"	L	CAP	180+70	60 LF	6"	L	CAP	195+80	64 LF	6"	R	CAP	
149+85	53.7 LF	6"	R	CAP	164+90	30 LF	6"	L	CAP	181+50	66 LF	6"	R	CAP	196+00	36 LF	6"	L	CAP	
150+16	46.5 LF	6"	R	CAP	165+20	48 LF	6"	R	CAP	179+85	40		R							
151+04	43.2 LF	6"	L	CAP	166+08	34 LF	6"	L	CAP	182+15	35 LF	6"	L	CAP						
155+70	45		R		166+69	45 LF	6"	R	CAP											
152+15	50 LF	6"	L	CAP	167+18	32 LF	6"	L	CAP					198+58	43 LF	6"	L	CAP		
152+30	59 LF	6"	R	CAP	168+35	43 LF	6"	R	CAP	182+98	55 LF	6"	L	CAP	198+70	59 LF	6"	R	CAP	
153+69	78 LF	6"	R	CAP	168+50	35 LF	6"	L	CAP	183+70	68 LF	6"	R	CAP	199+80	40 LF	6"	L	CAP	
153+95	33 LF	6"	L	CAP	169+38	40 LF	6"	L	CAP	183+80	32 LF	6"	L	CAP	199+80	38 LF	6"	L	CAP	
154+74	78 LF	6"	R	CAP	170+20	42 LF	6"	R	CAP	184+92	30 LF	6"	L	CAP	200+25	37 LF	6"	L	CAP	
154+98	29 LF	6"	L	CAP	170+55	38 LF	6"	L	CAP					200+60	69 LF	6"	R	CAP		
155+85	73 LF	6"	R	CAP	171+75	34 LF	6"	L	CAP	186+00	60 LF	6"	R	CAP	200+80	28 LF	6"	L	CAP	
155+98	30 LF	6"	L	CAP	162+80			L		187+15	34 LF	6"	L	CAP	201+28	25 LF	6"	L	CAP	
157+37	49 LF	6"	R	CAP	172+52	45 LF	6"	R	CAP	187+80	40 LF	6"	L	CAP	202+14	18.2 LF	8"	R	M.H.	
157+68	36 LF	6"	L	CAP	173+45	39 LF	6"	L	CAP											

MANHOLE SUMMARY			
STATION	OFFSET	REMARKS	
146+43	20' L	INSTALL	
150+41	20' L	INSTALL	
153+01	16' 20' L	INSTALL	
157+00	20' L	INSTALL	
161+13.09	20' L	INSTALL	
162+70.69	20' L	INSTALL	
165+20.23	20' L	INSTALL	
169+15.14	20' L	INSTALL	
173+22.20	20' L	INSTALL	
176+45.43	20' L	INSTALL	
180+36.34	20' L	INSTALL	
183+93.95	20' L	INSTALL	
187+30.29	20' L	INSTALL	
188+70	22' L	INSTALL	
189+80	20' L	INSTALL	
192+07	28' L	INSTALL	
196+15.13	20' L	INSTALL	
198+05.03	20' L	INSTALL	
202+08.08	20' L	INSTALL	
203+70.62	9' 20' L	INSTALL	
* 155+15	20' 28' L	INSTALL	
HAUGEN DR. - TENT CITY			
2+01	6' R	INSTALL	
5+36	40' L	INSTALL	

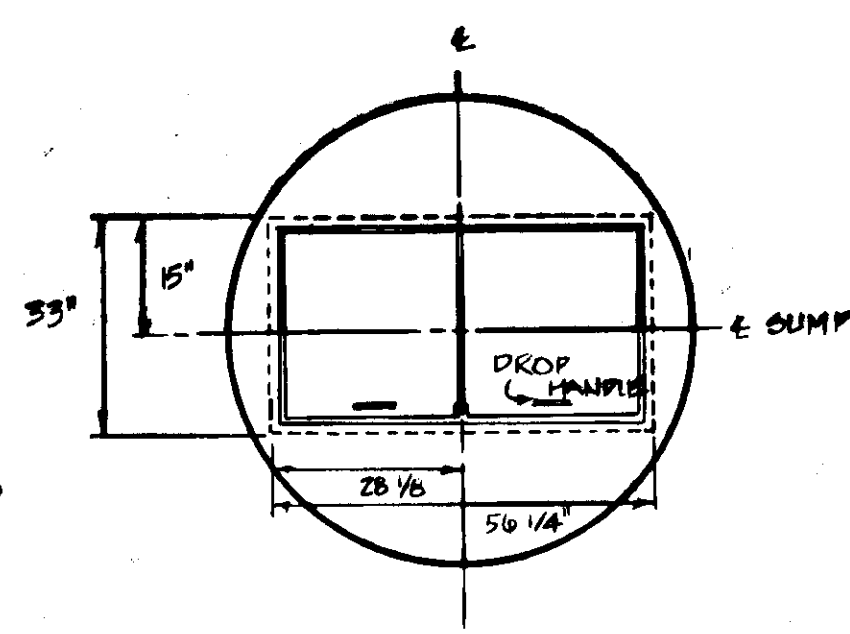
ABBREVIATIONS	
AC	ASBESTOS CEMENT
CL	CAST IRON
DI	DUCTILE IRON
FH	FIRE HYDRANT
GV	GATE VALVE
MH	MANHOLE
PVC	POLYVINYL CHLORIDE
VB	VALVE BOX
WC	WATER CONDUIT
WM	WATER METER
WS	WATER SERVICE

* Station out of order

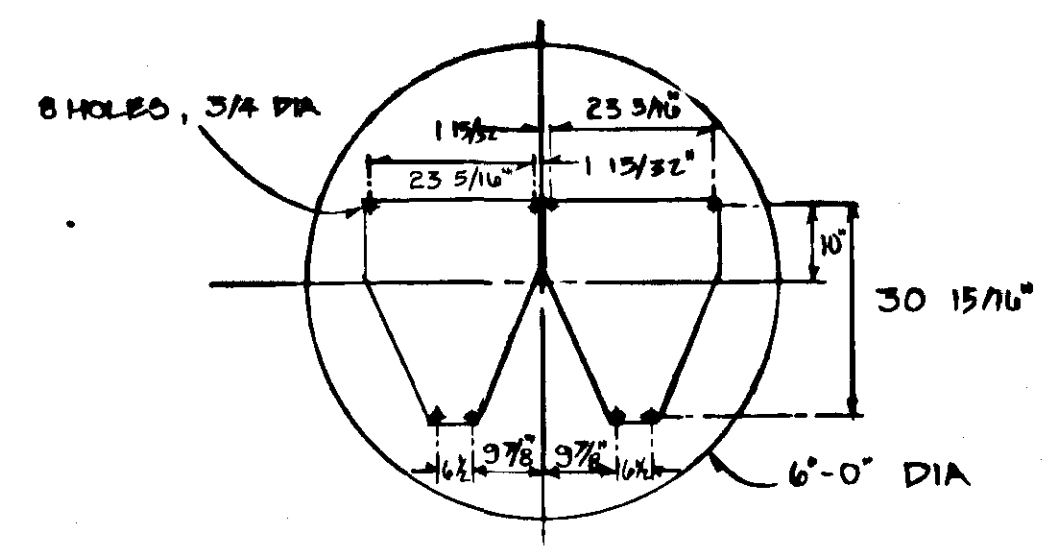




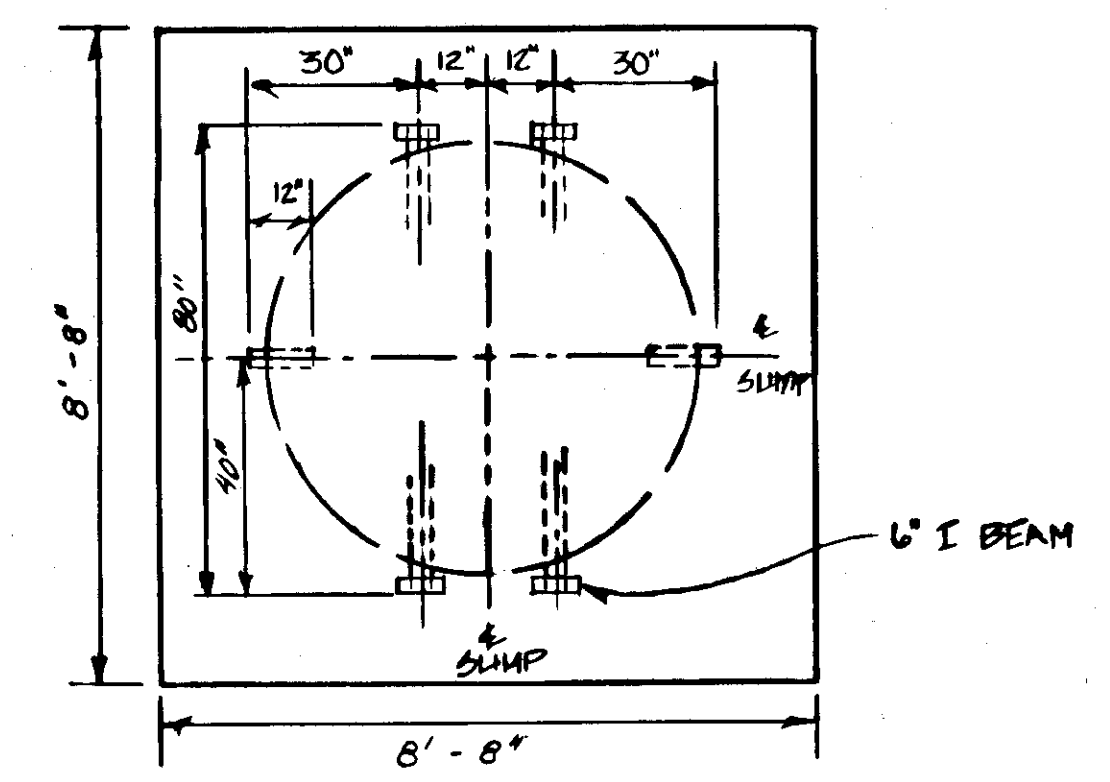
LIFT STATION PLAN VIEW
N.T.S.



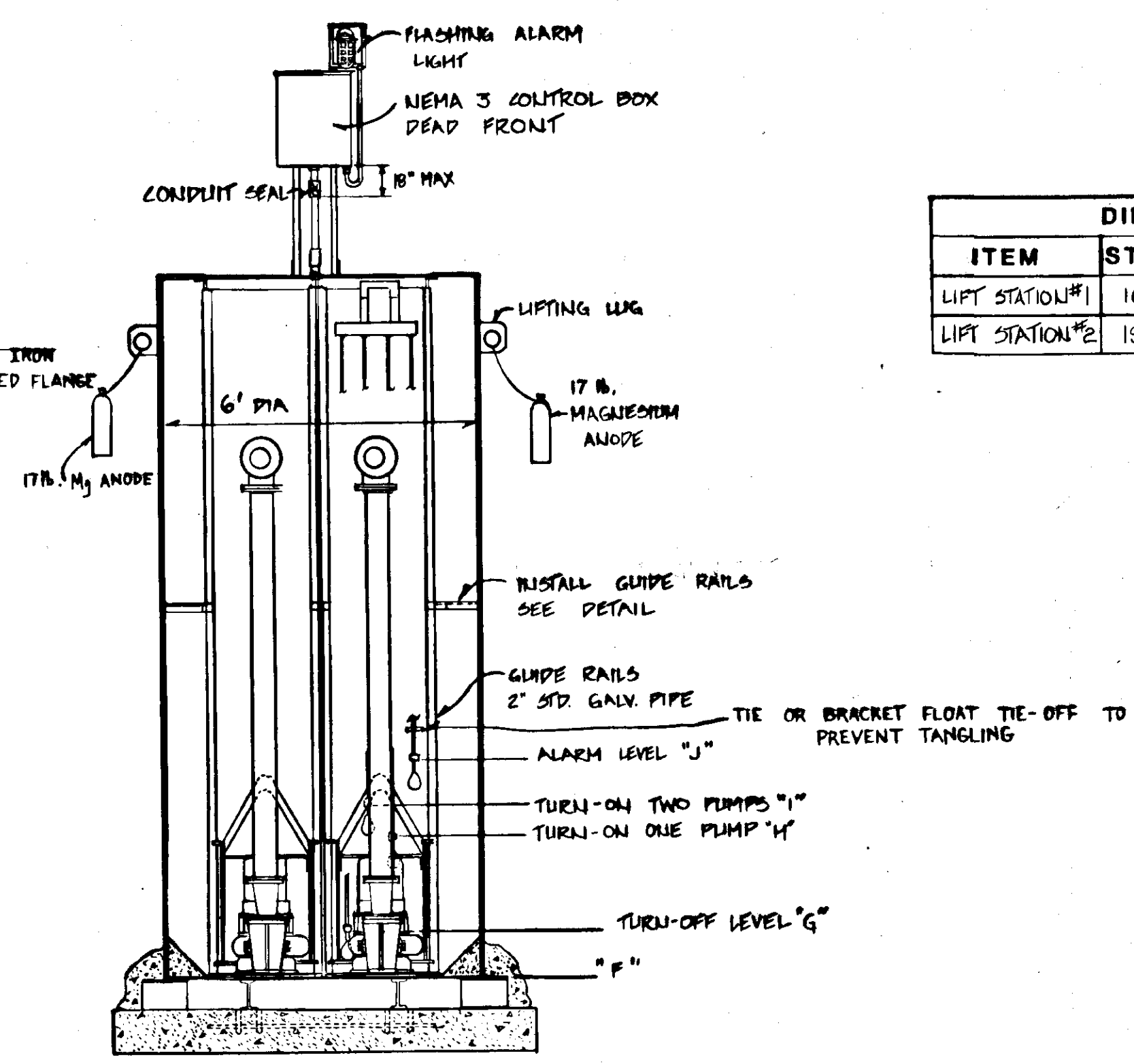
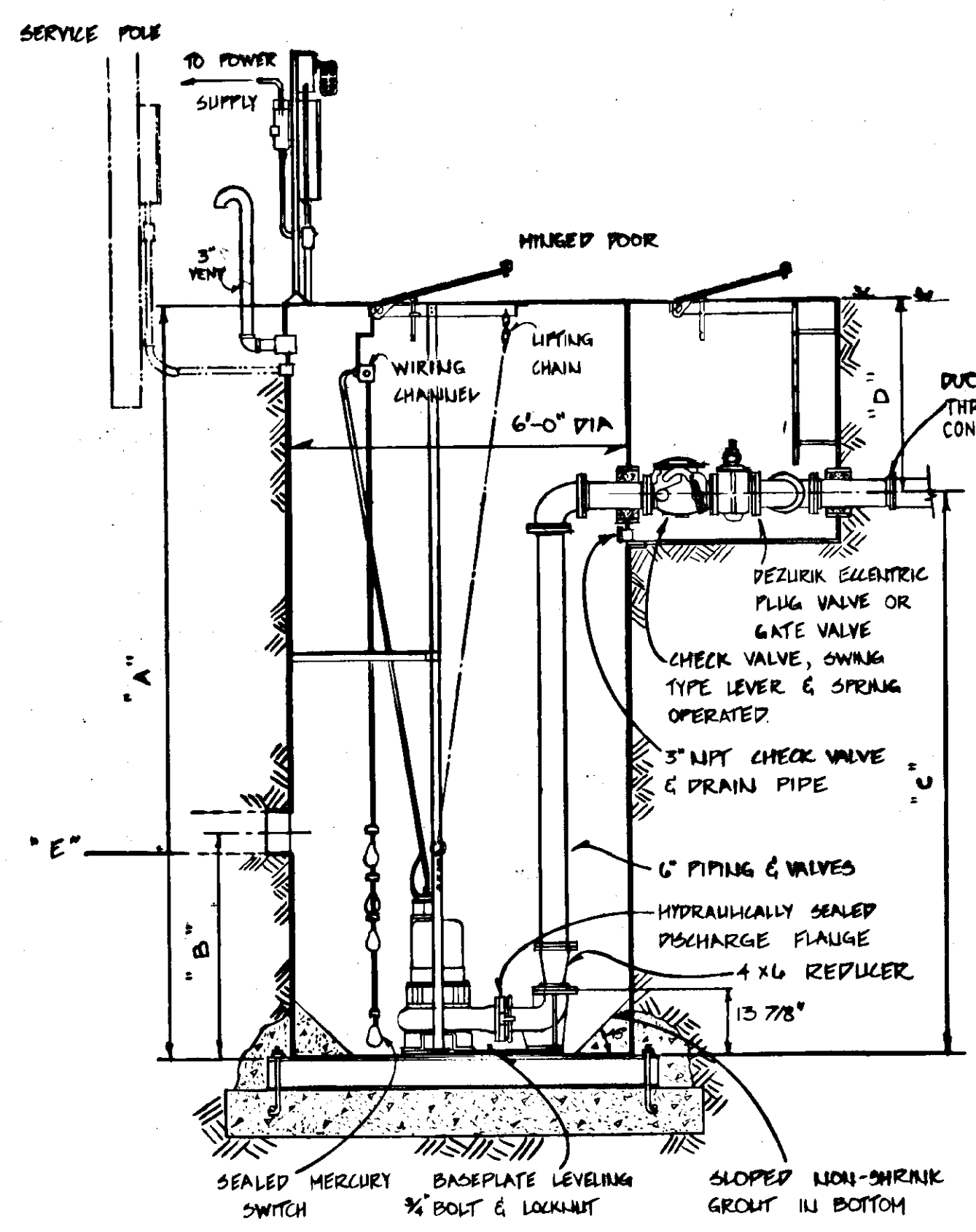
SUMP COVER DETAIL
N.T.S.



HOLE LOCATIONS FOR PUMP MOUNTING PLATES
N.T.S.

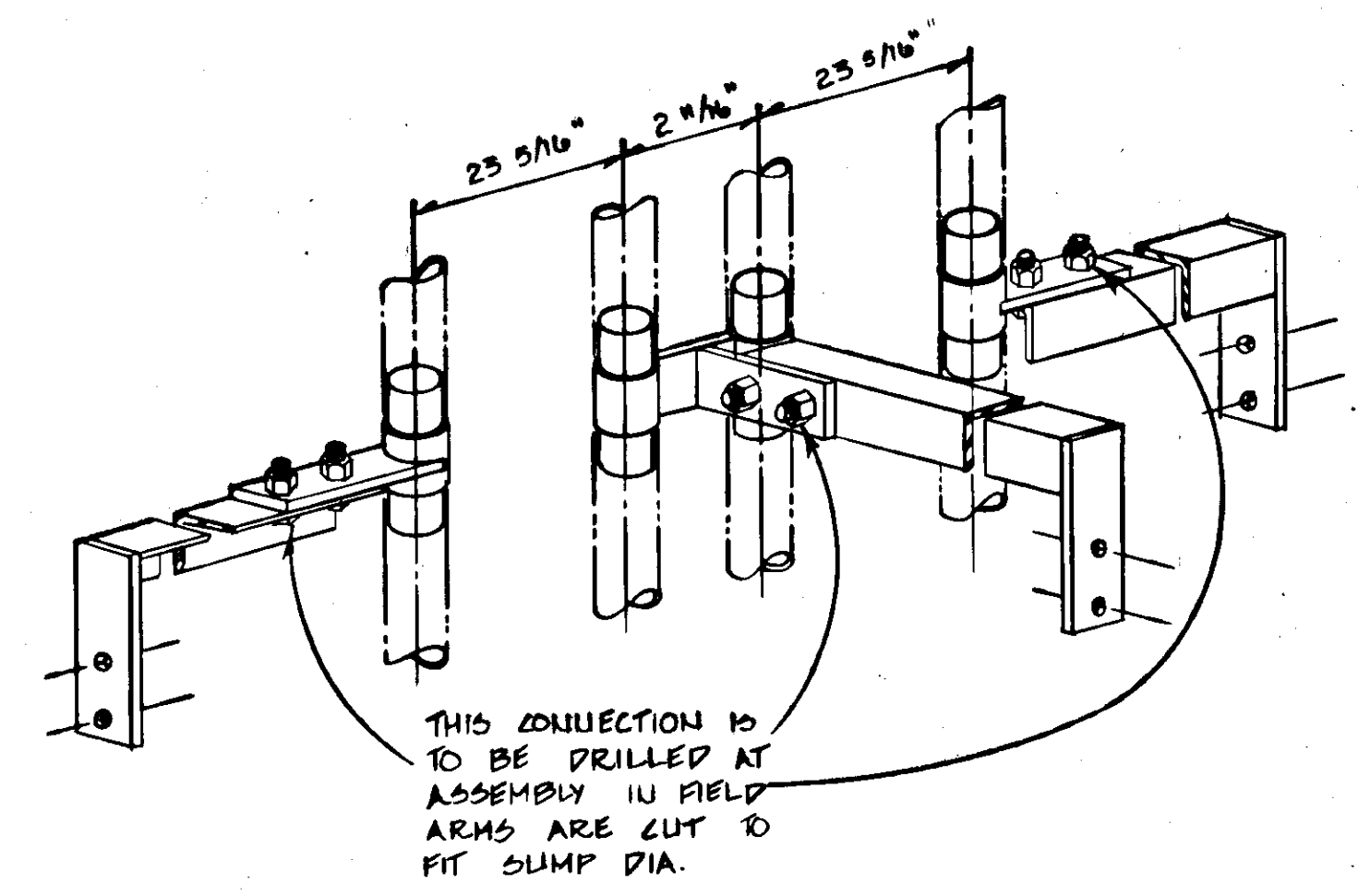


CONCRETE FOUNDATION & FLOOR SUPPORT BEAMS
N.T.S.

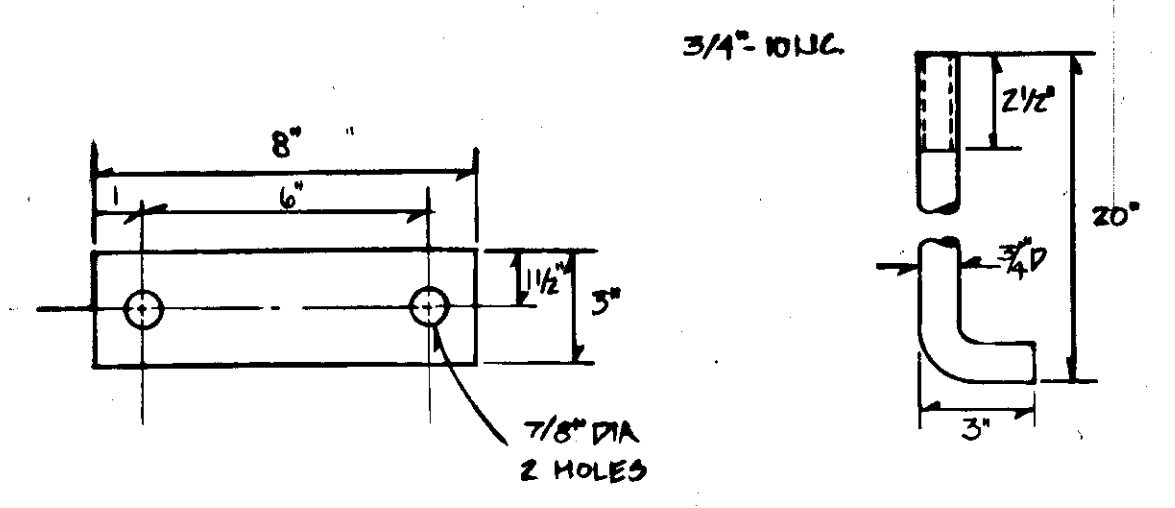


LIFT STATION INSTALLATION DETAIL
N.T.S.

ITEM	STATION	DIMENSIONS					ELEVATION				
		A	B	C	D	E	F	G	H	I	J
LIFT STATION #1	162+52	18.5'	5.5'	9.0'	9.5'	15.0'	10.0'	10.5'	13.0'	14.0'	15.0'
LIFT STATION #2	138+05	16.0'	5.5'	6.5'	9.5'	15.56'	10.56'	11.06'	13.56'	14.56'	15.56'

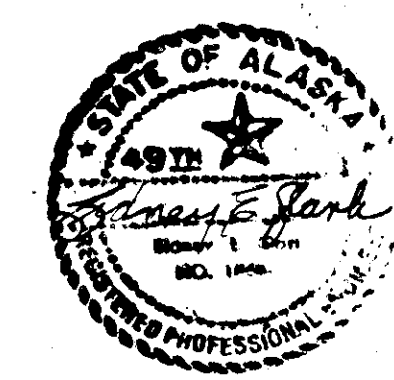


RAIL EXTENSION ASSEMBLY
N.T.S.

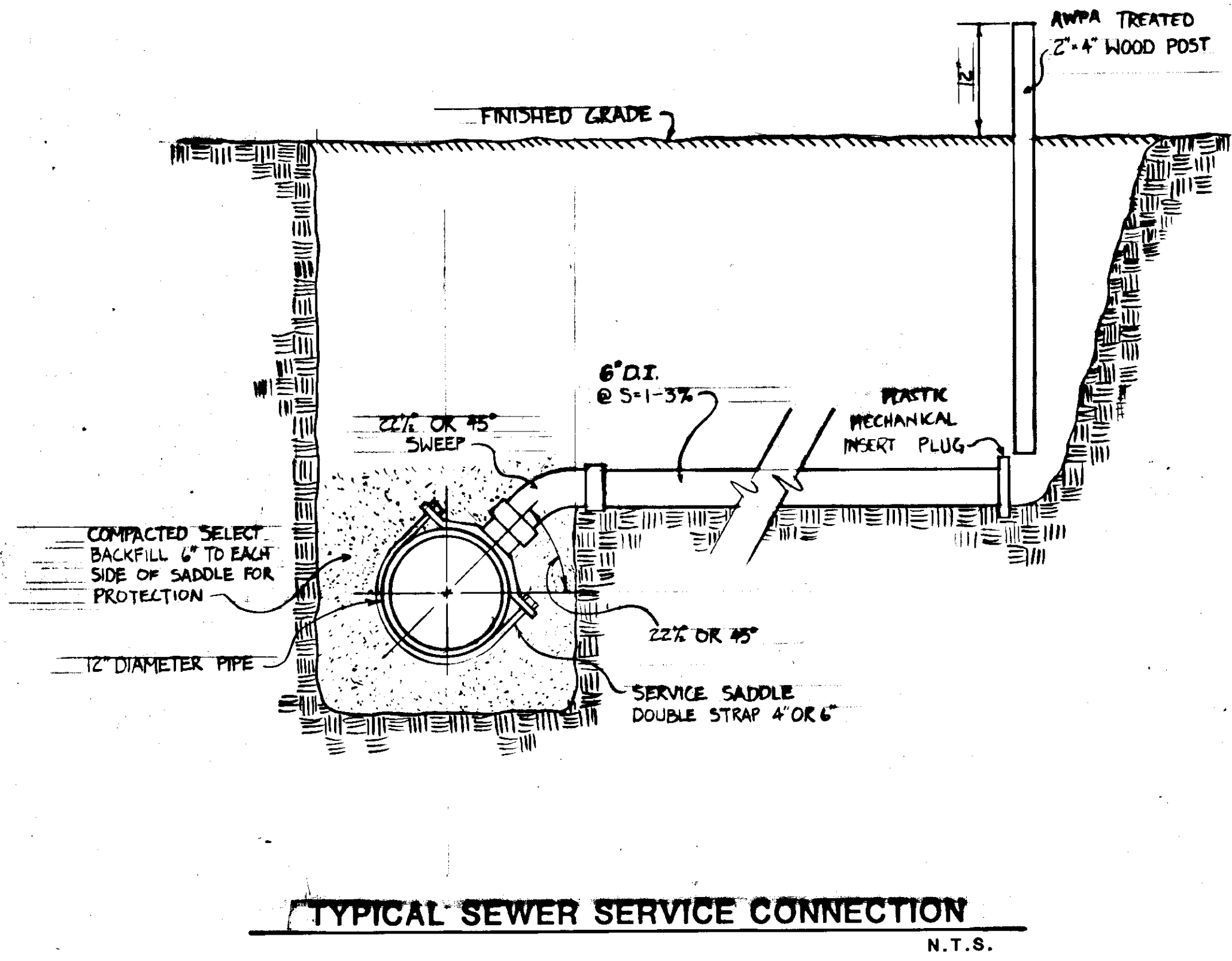


TIE DOWN PLATE
3/4\"/>

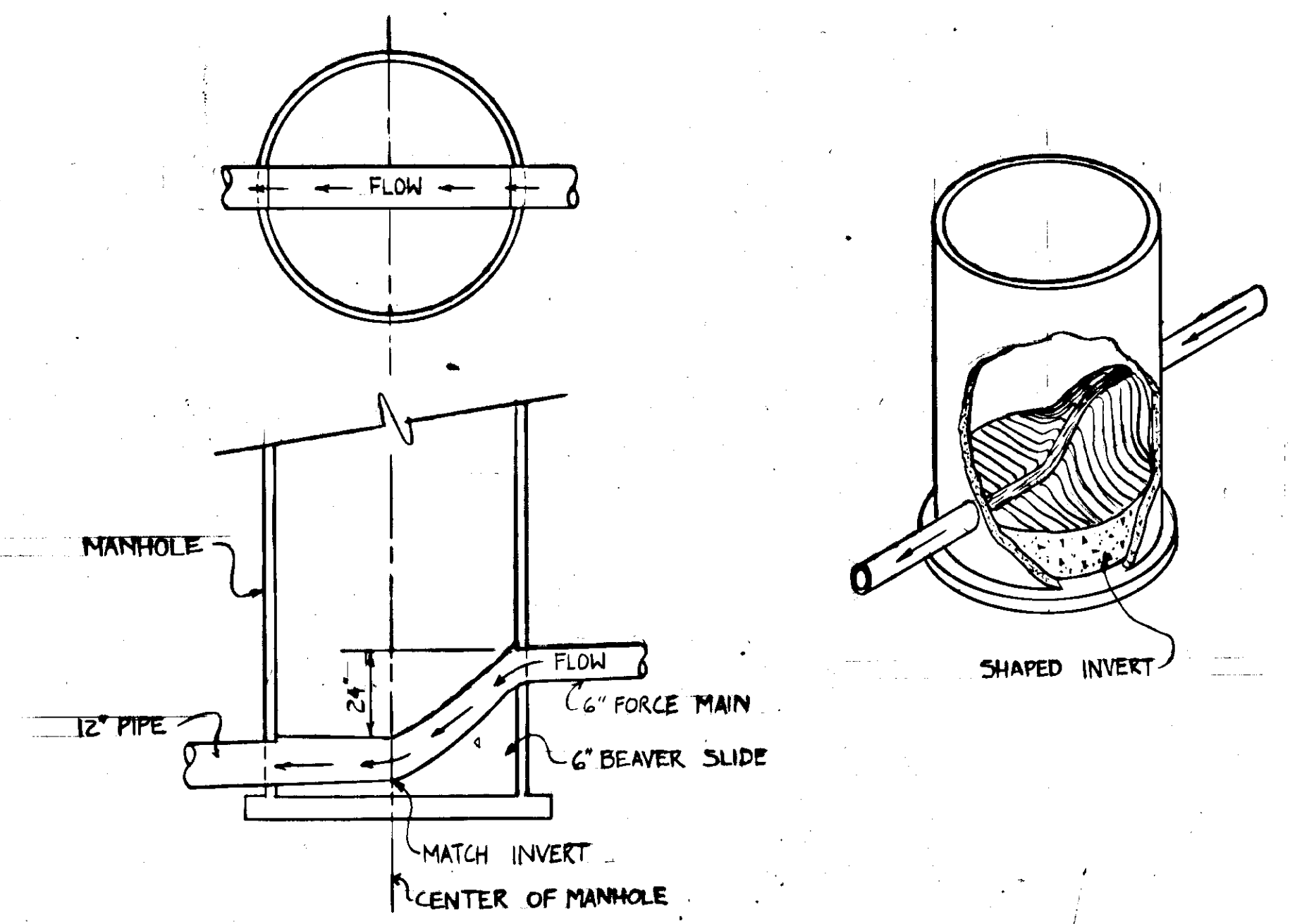
ANCHOR BOLT
N.T.S.



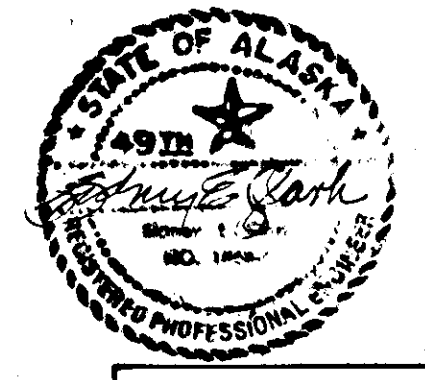
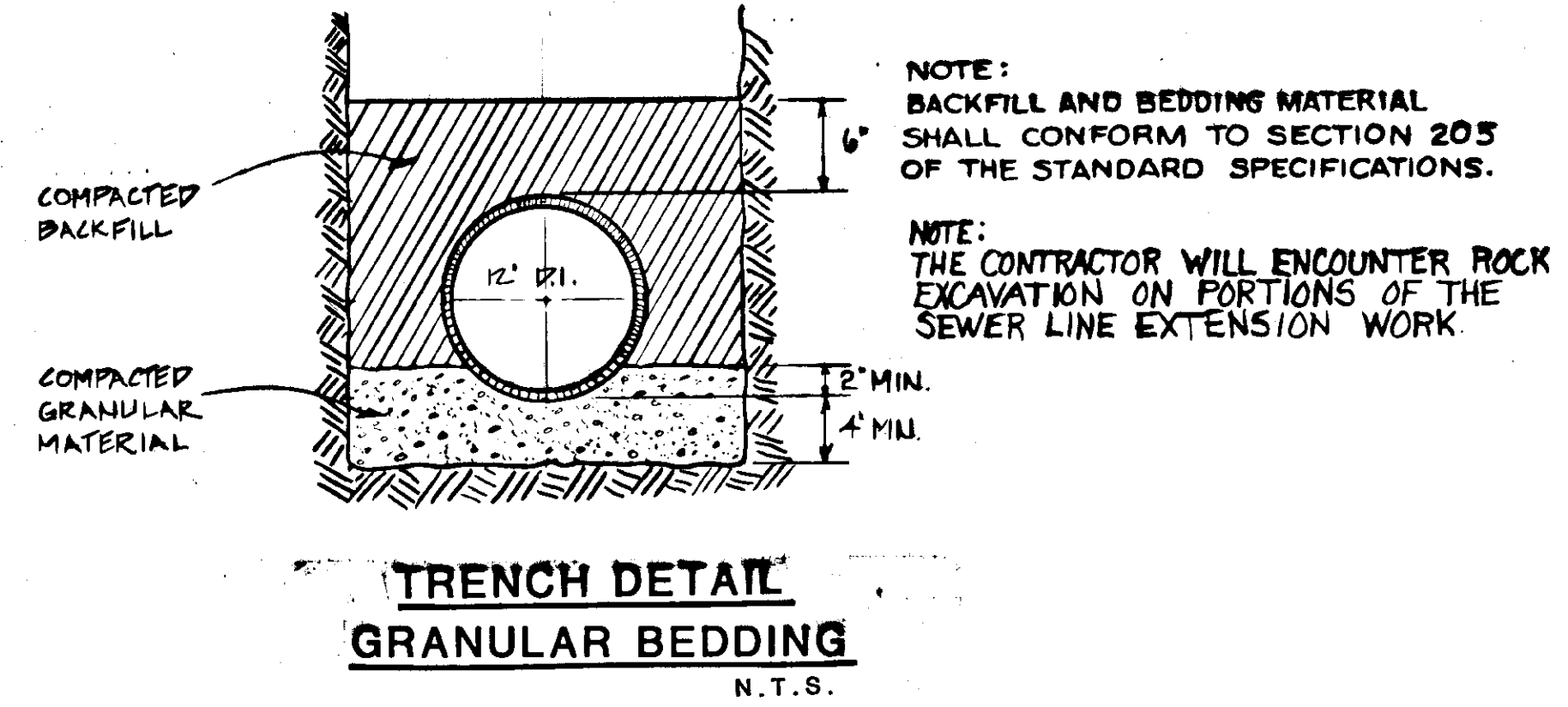
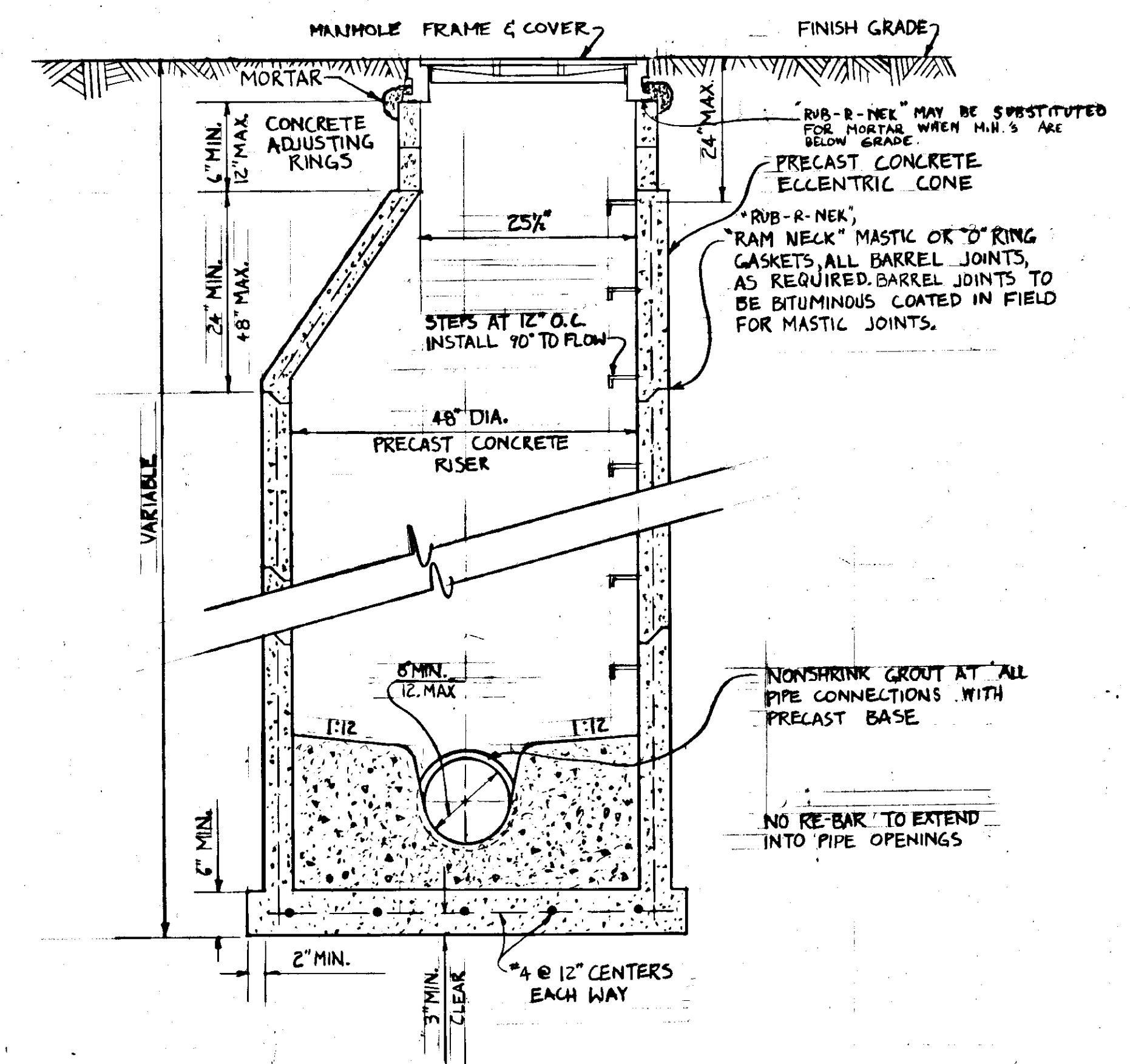
SUPPLEMENTAL WORK	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	R-30669	1982		



NOTE: SEWER SERVICE CONNECTIONS INCLUDE PIPING FROM THE CONNECT TO THE RIGHT-OF-WAY LINE UNLESS OTHERWISE INDICATED.

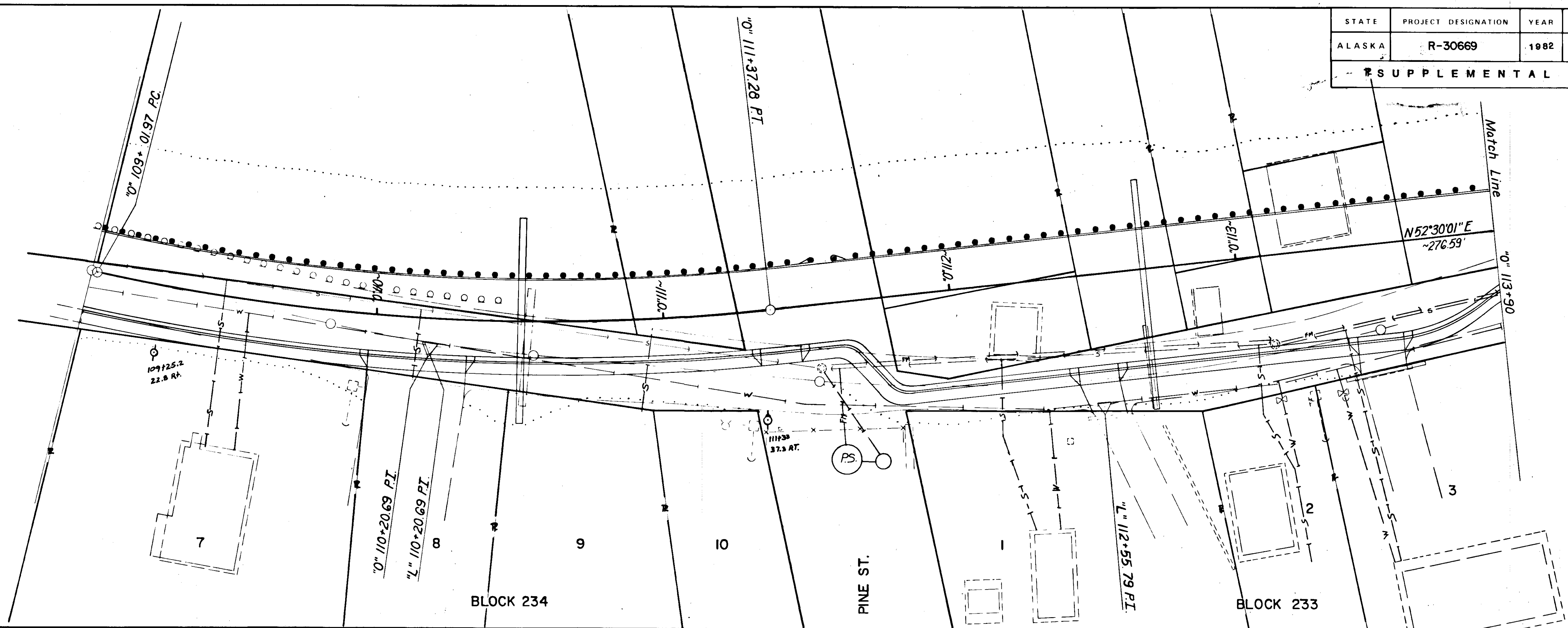


MANHOLE SB 15 - STA 161-13
N.T.S.



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ALASKA	R-30669	1982		

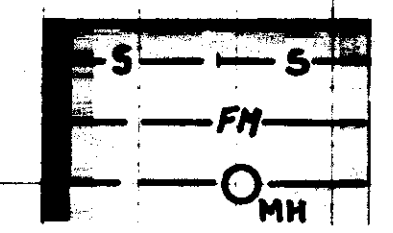
--- SUPPLEMENTAL WORK ---



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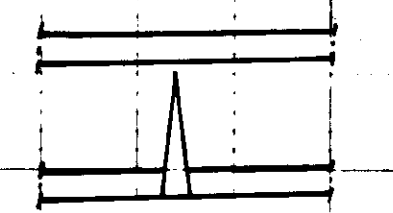
LEGEND

PLAN VIEW

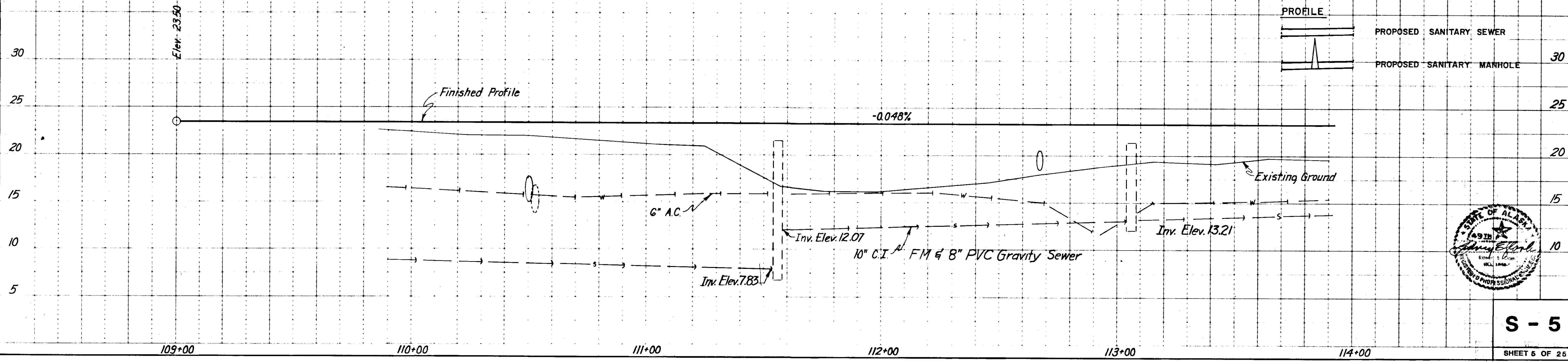


PROPOSED SANITARY SEWER
 PROPOSED FORCE MAIN
 PROPOSED SANITARY MANHOLE

PROFILE



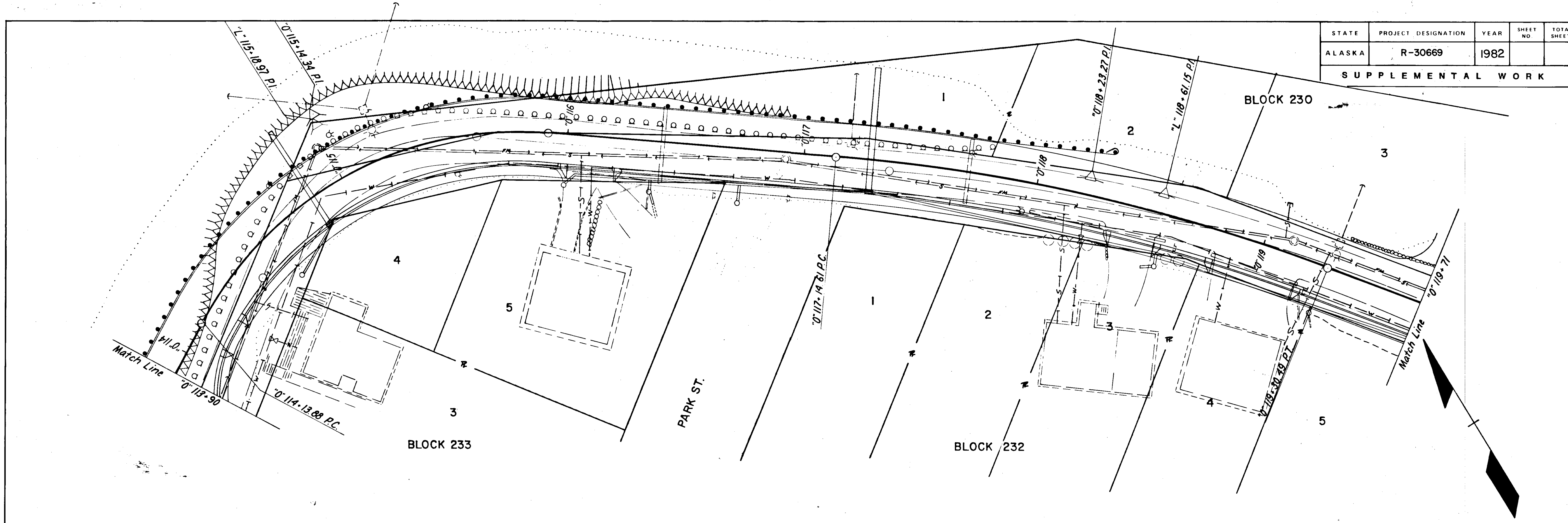
PROPOSED SANITARY SEWER
 PROPOSED SANITARY MANHOLE



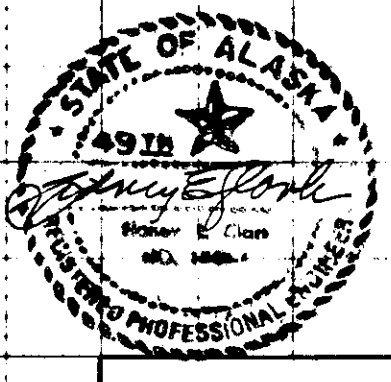
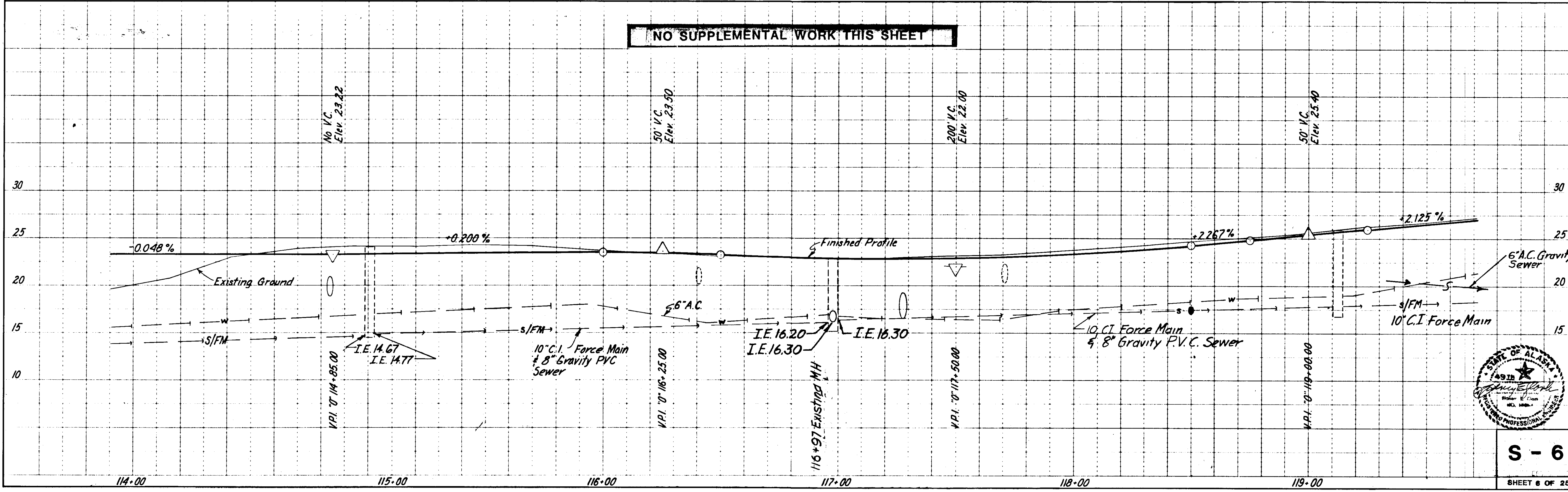
S - 5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		

SUPPLEMENTAL WORK

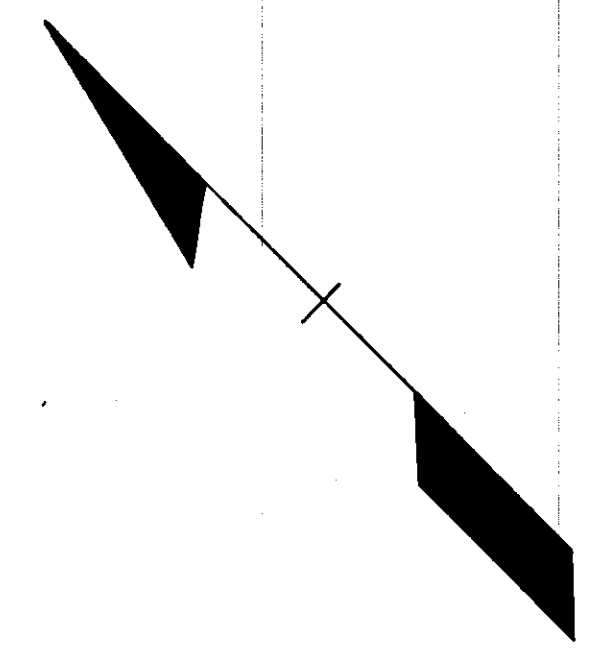
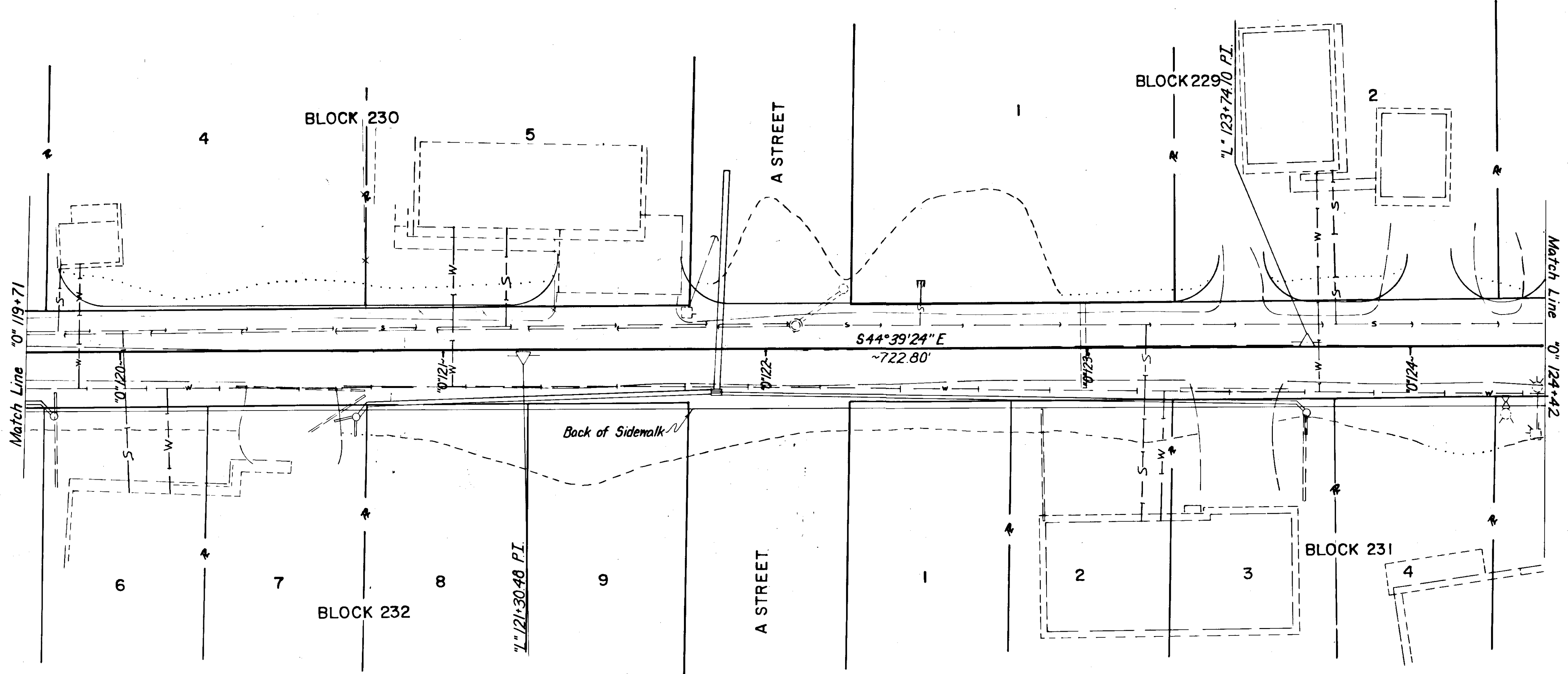


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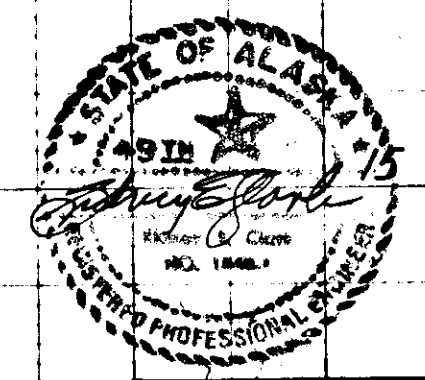
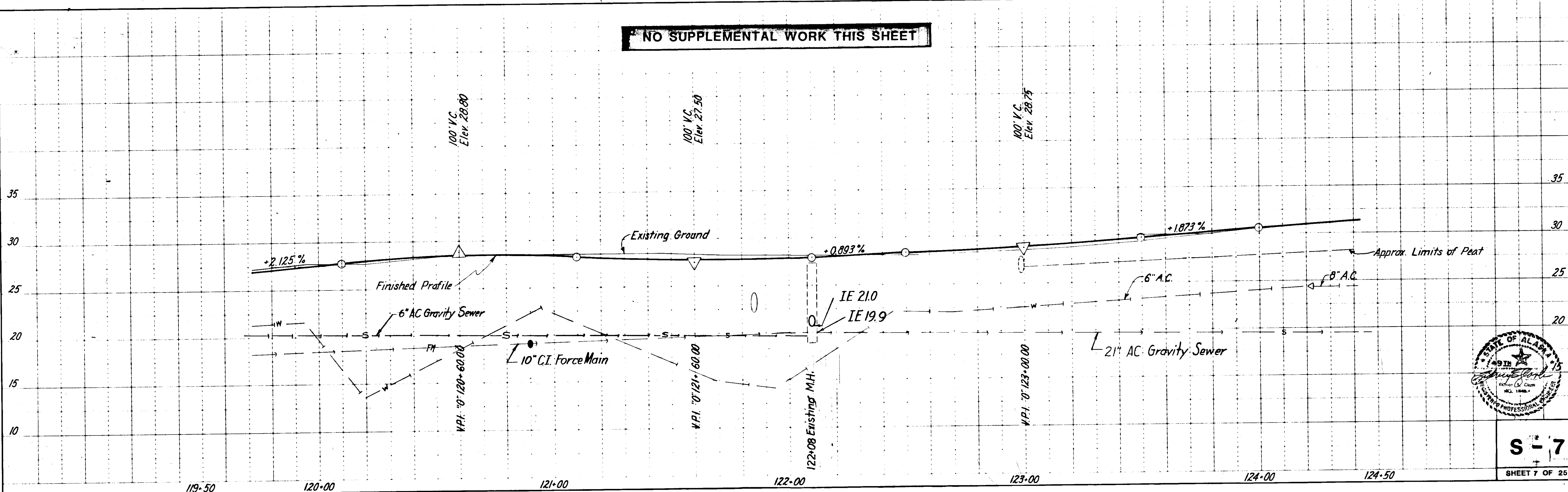


S - 6

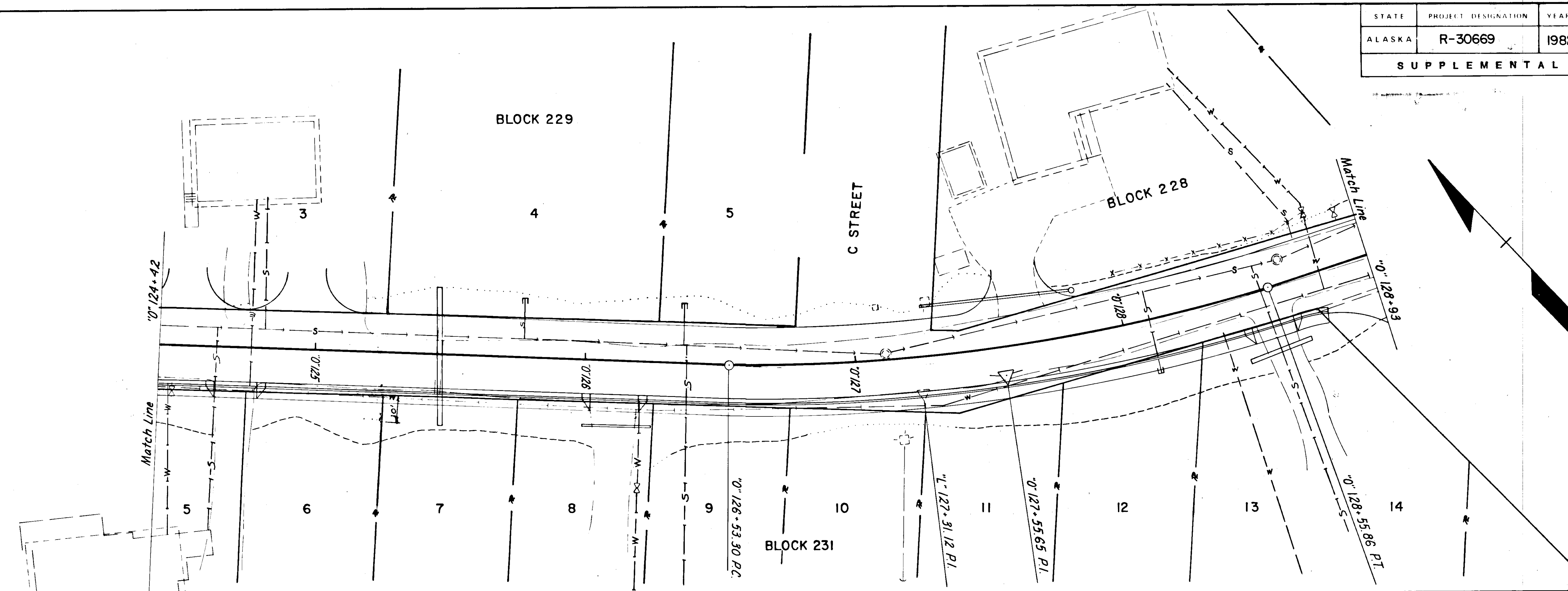
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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SUPPLEMENTAL WORK				



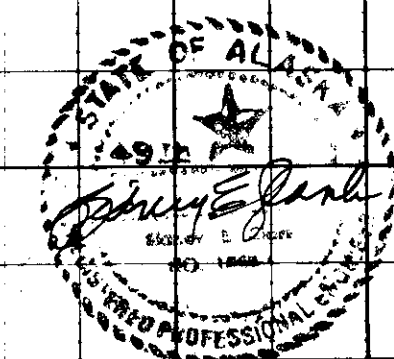
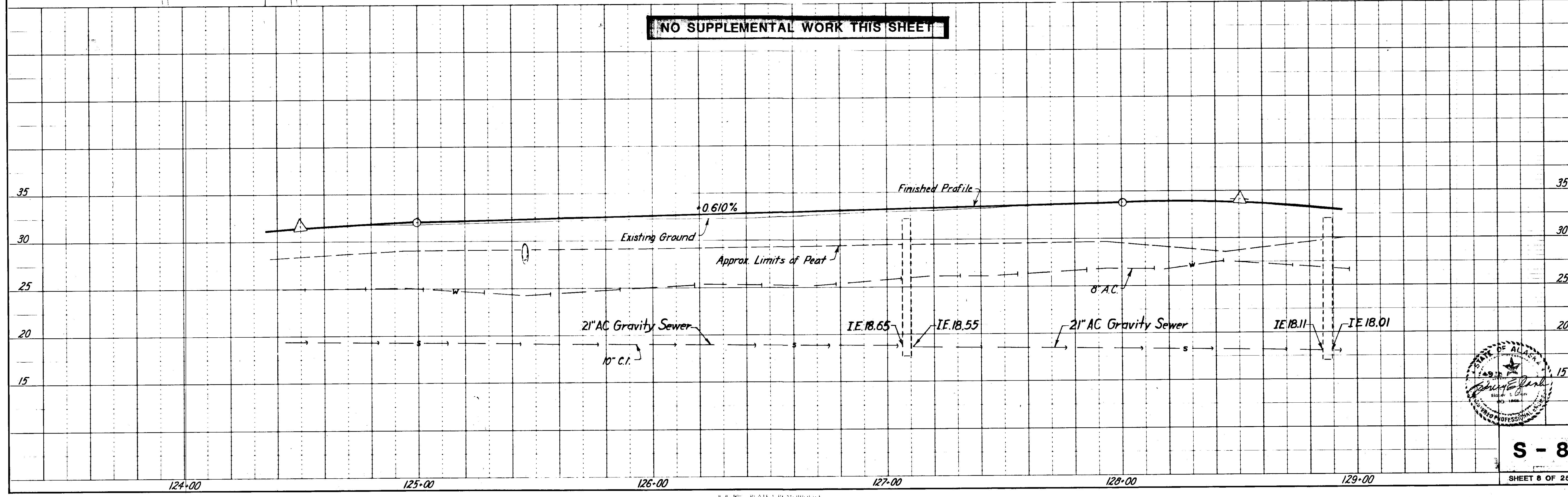
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SUPPLEMENTAL WORK				



NO SUPPLEMENTAL WORK THIS SHEET



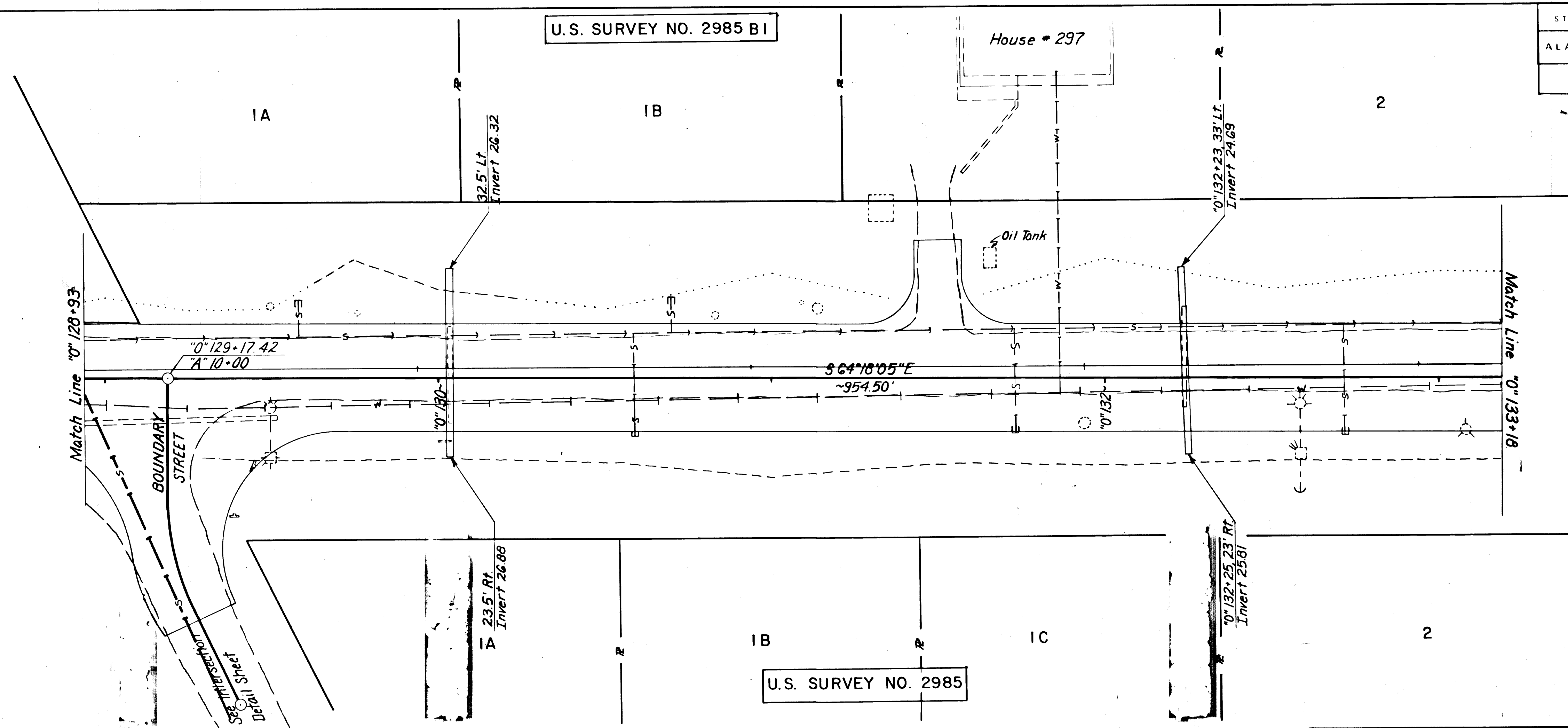
S - 8

SHEET 8 OF 26

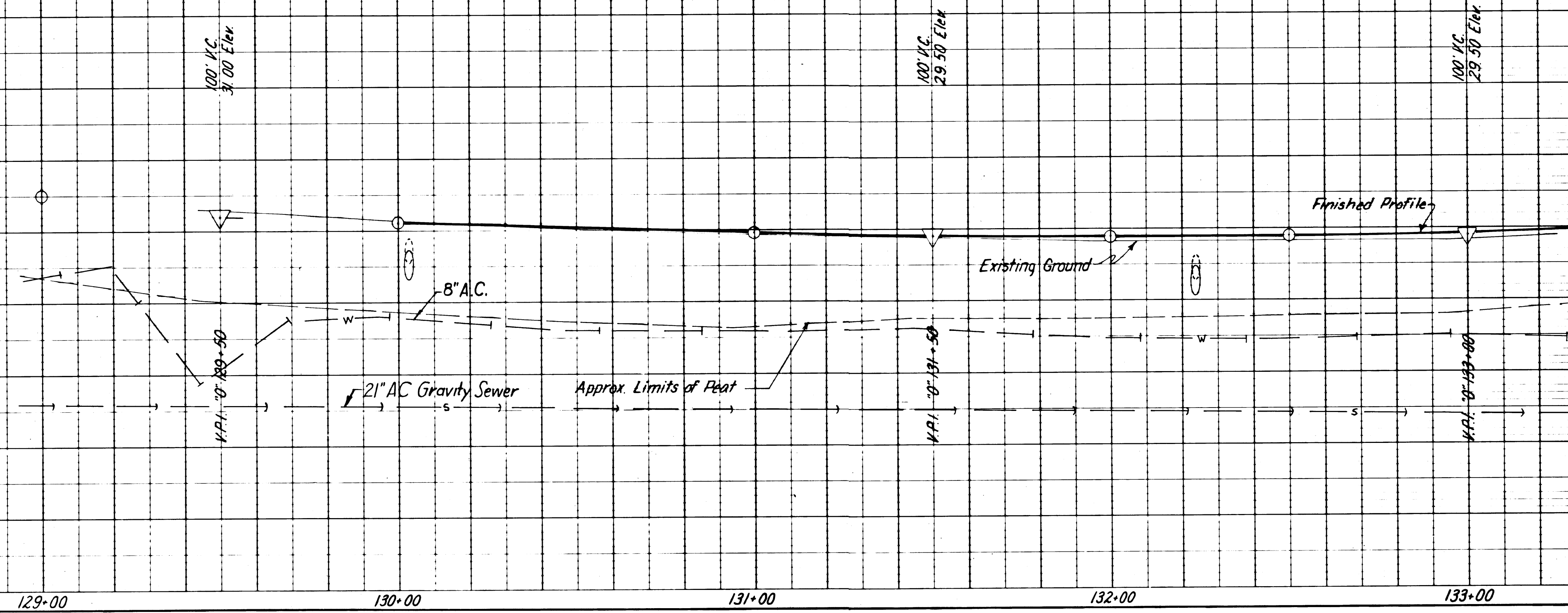
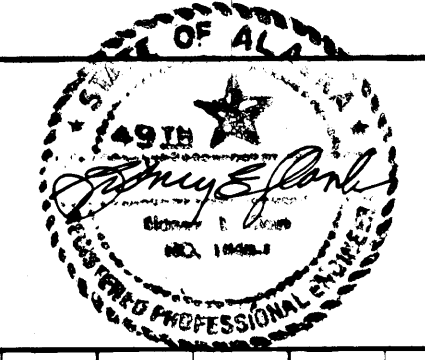
STATE	PROJECT DESIGNATION	YEAR		
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

U.S. SURVEY NO. 2985 B1

House # 297



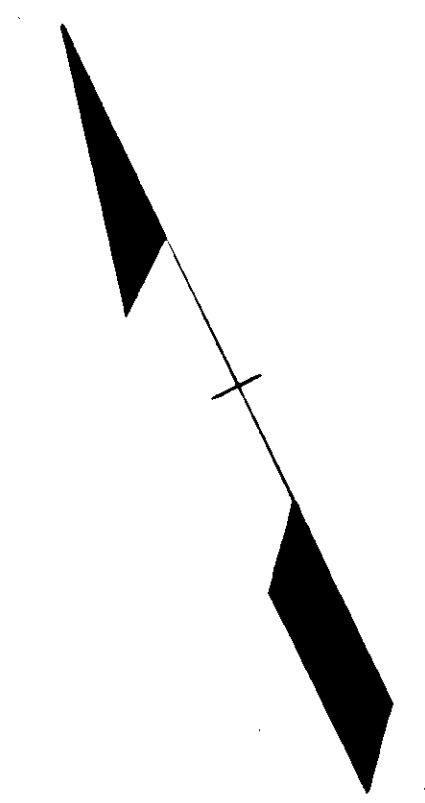
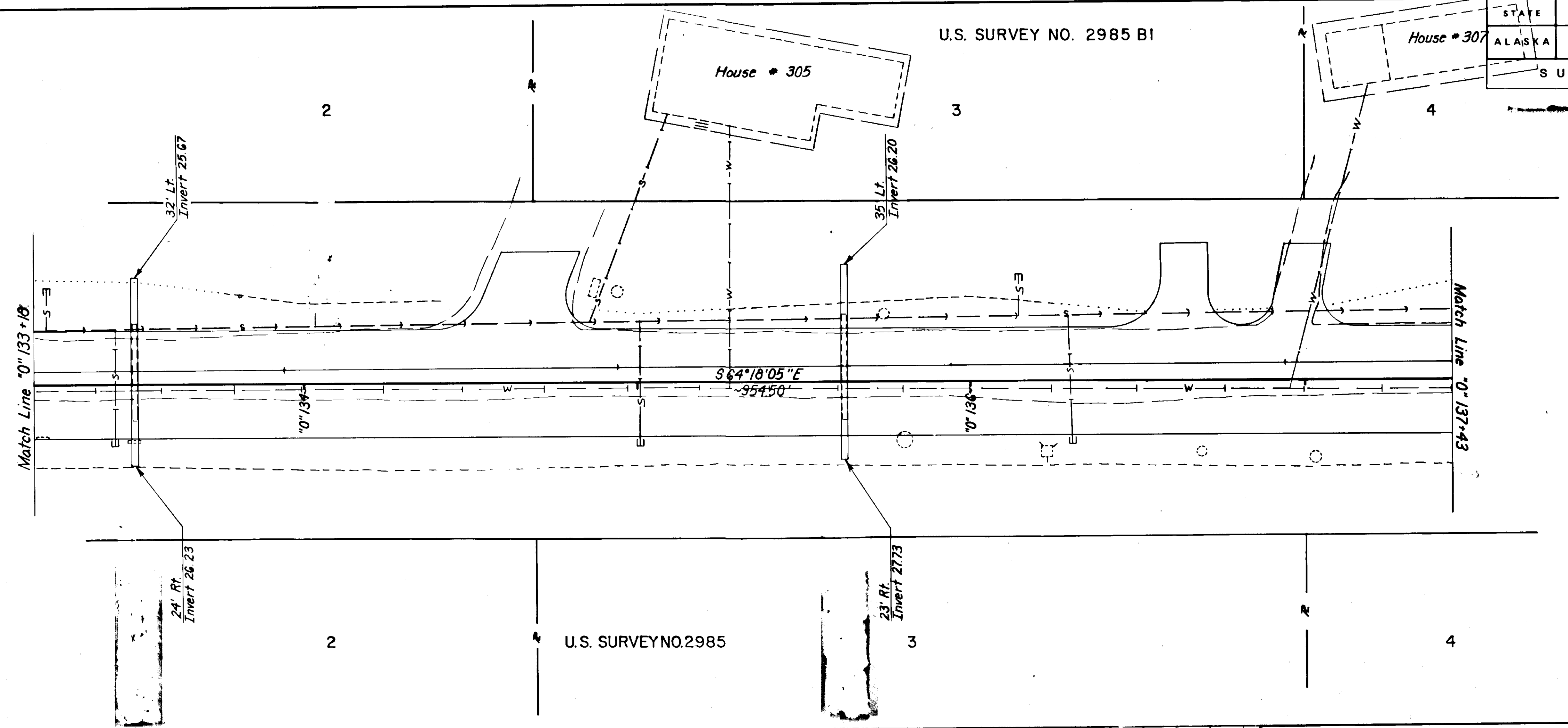
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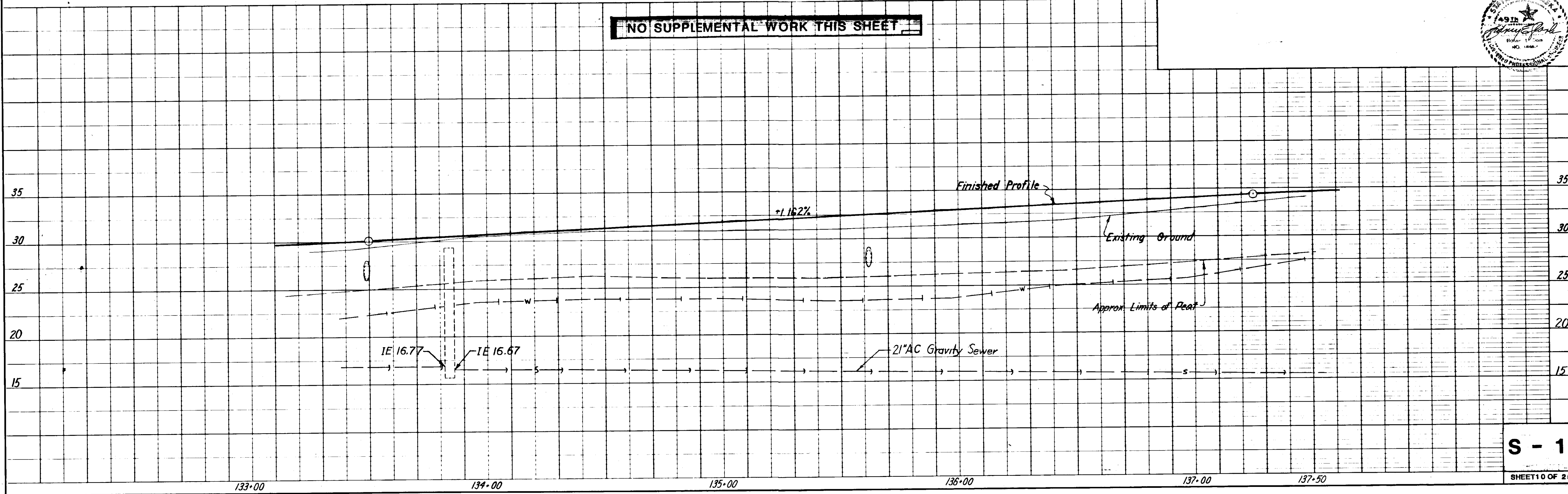
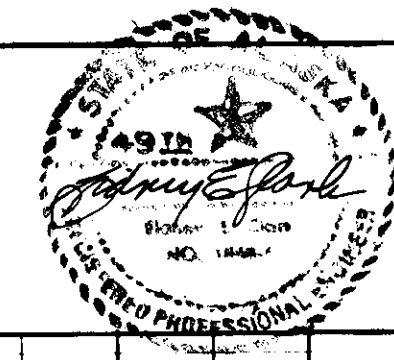
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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SUPPLEMENTAL WORK

U.S. SURVEY NO. 2985 BI



NO SUPPLEMENTAL WORK THIS SHEET



S - 10

SHEET 10 OF 25

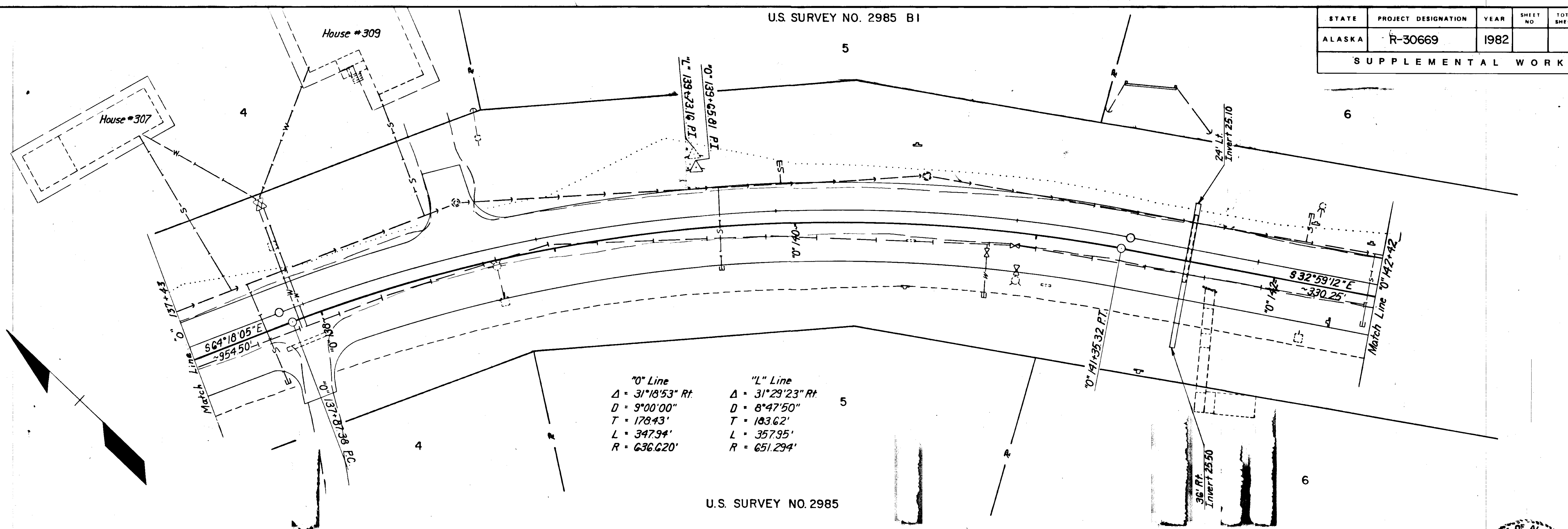
NOTE BOOK: ALIGNMENT CHECKED
ET. OF WAY CHECKED
No.

NOTED: GRAVITY CHECKED
PERMANENT SOLUTIONS CHECKED
No.

133+00 134+00 135+00 136+00 137+00 137+50

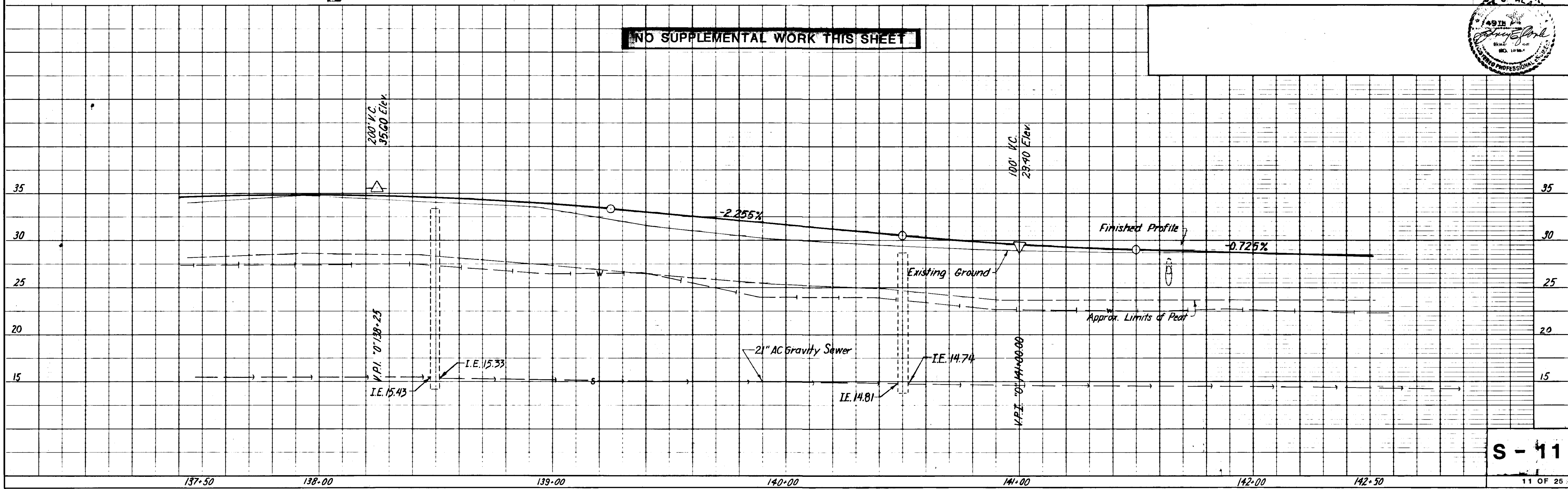
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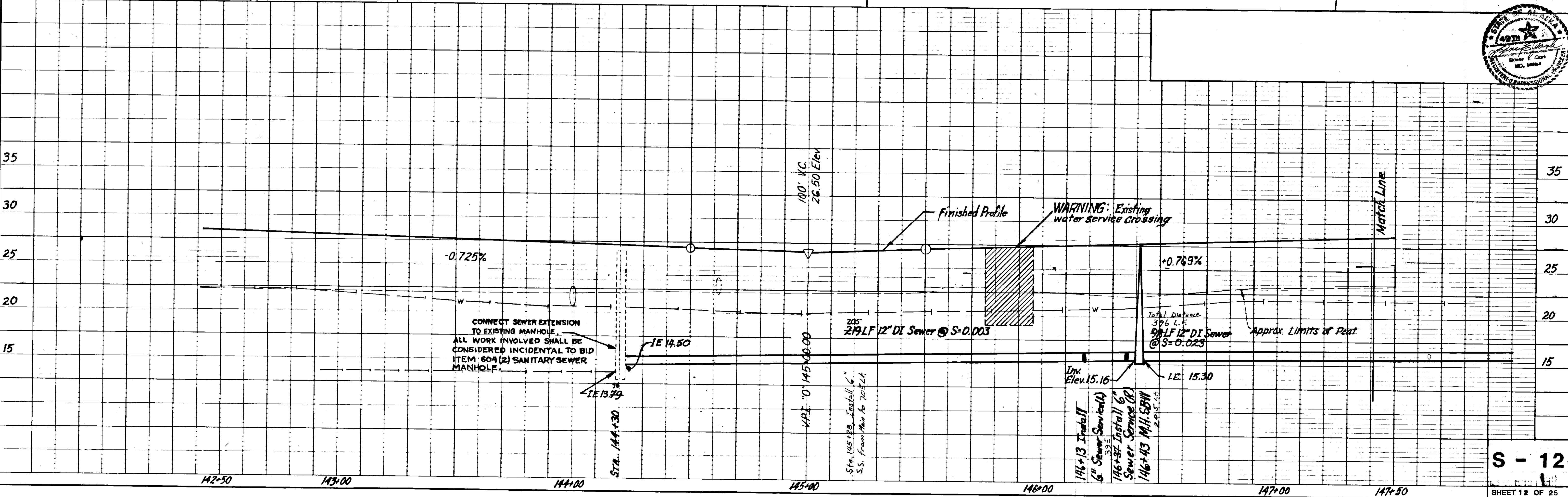
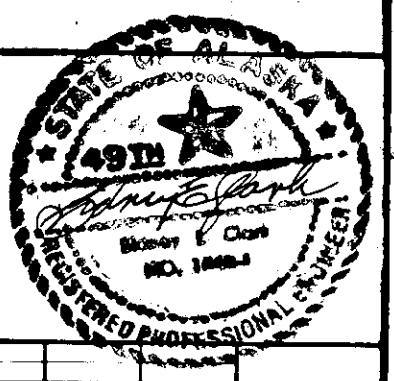
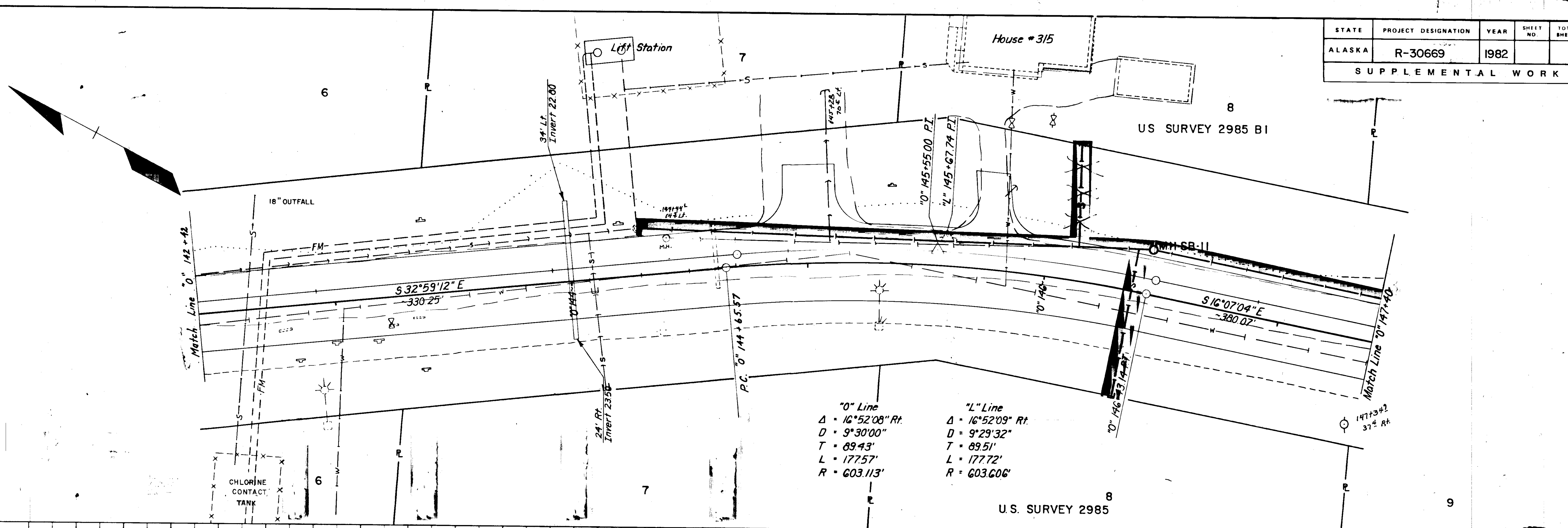


"0" Line	"L" Line
$\Delta = 31^{\circ}18'53" \text{ Rt.}$	$\Delta = 31^{\circ}29'23" \text{ Rt.}$
$D = 9^{\circ}00'00"$	$D = 8^{\circ}47'50"$
$T = 178.43'$	$T = 183.62'$
$L = 347.94'$	$L = 357.95'$
$R = 636.620'$	$R = 651.294'$

NO SUPPLEMENTAL WORK THIS SHEET



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SUPPLEMENTAL WORK				



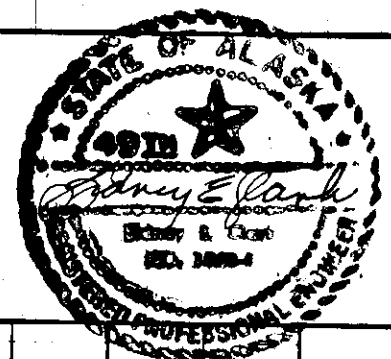
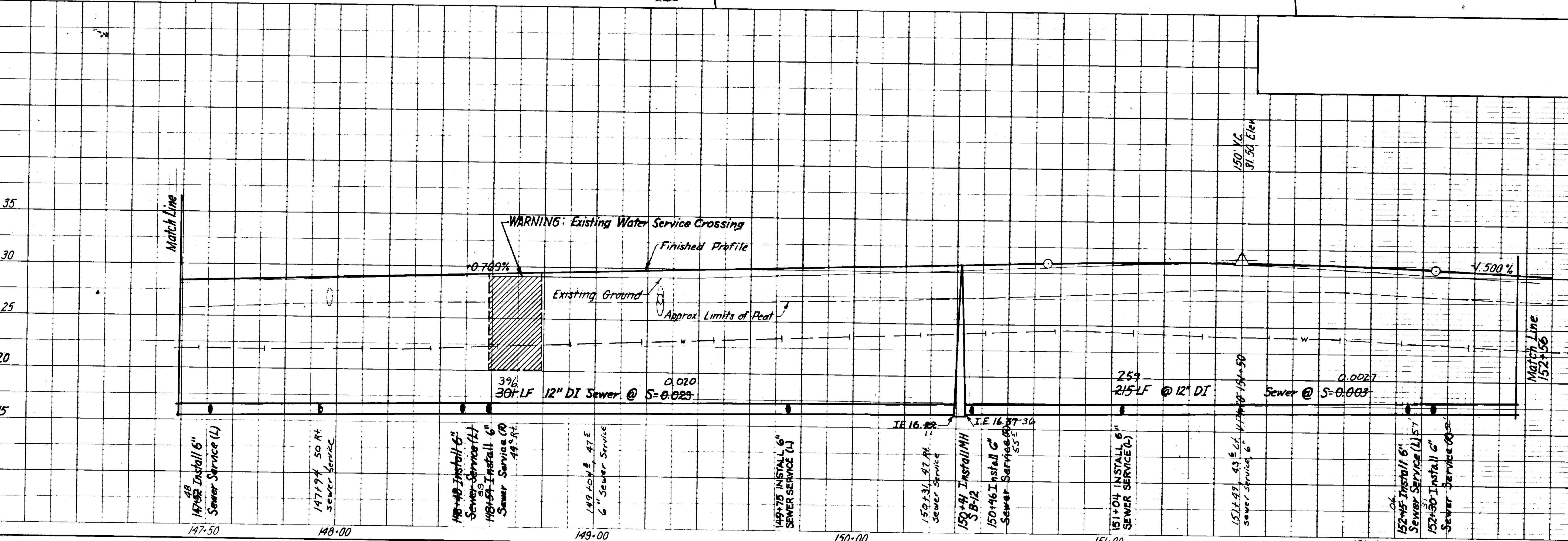
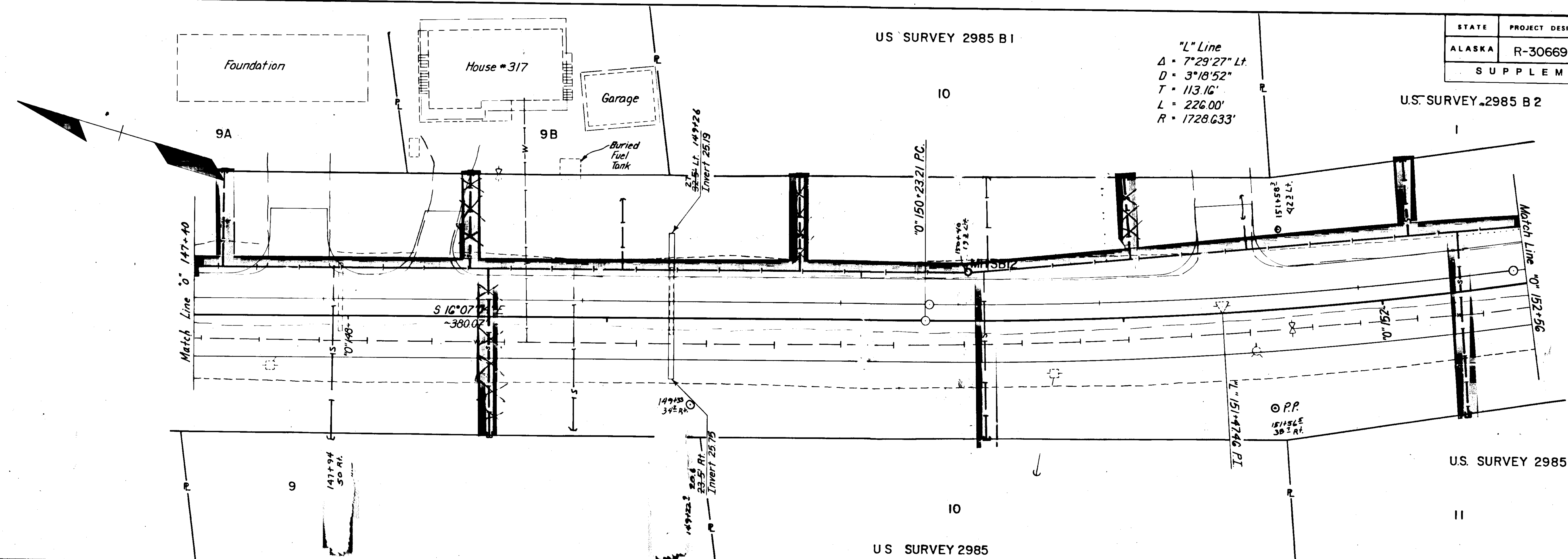
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		

SUPPLEMENTAL WORK

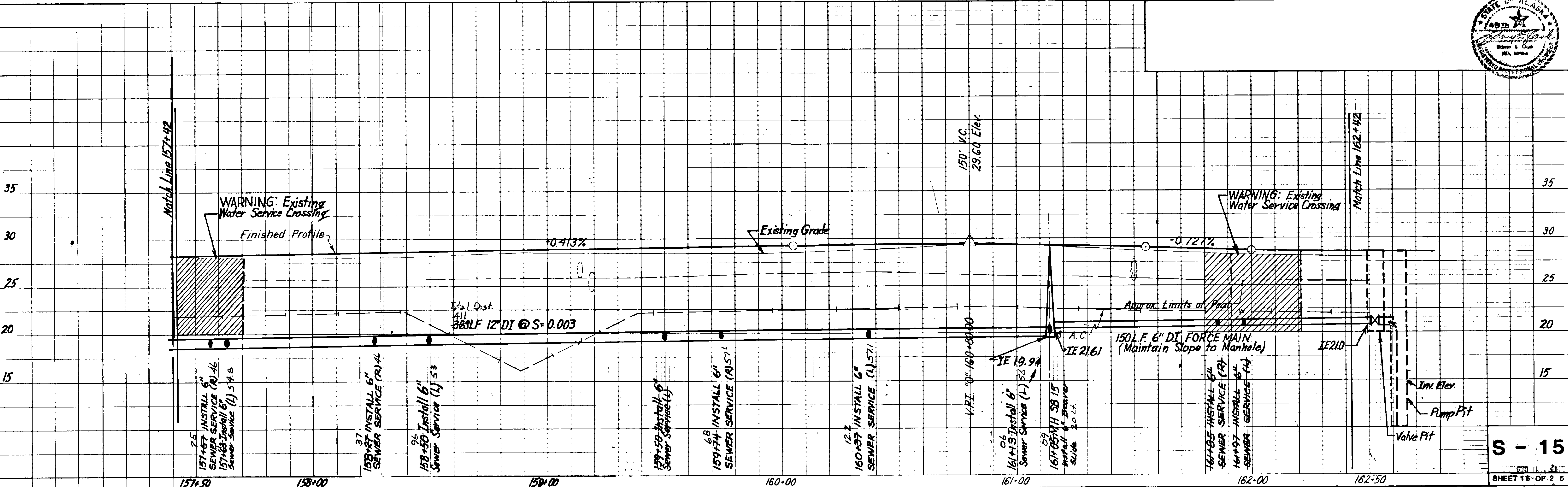
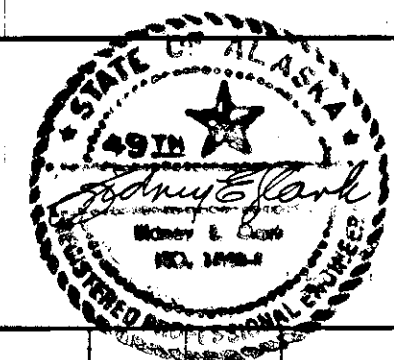
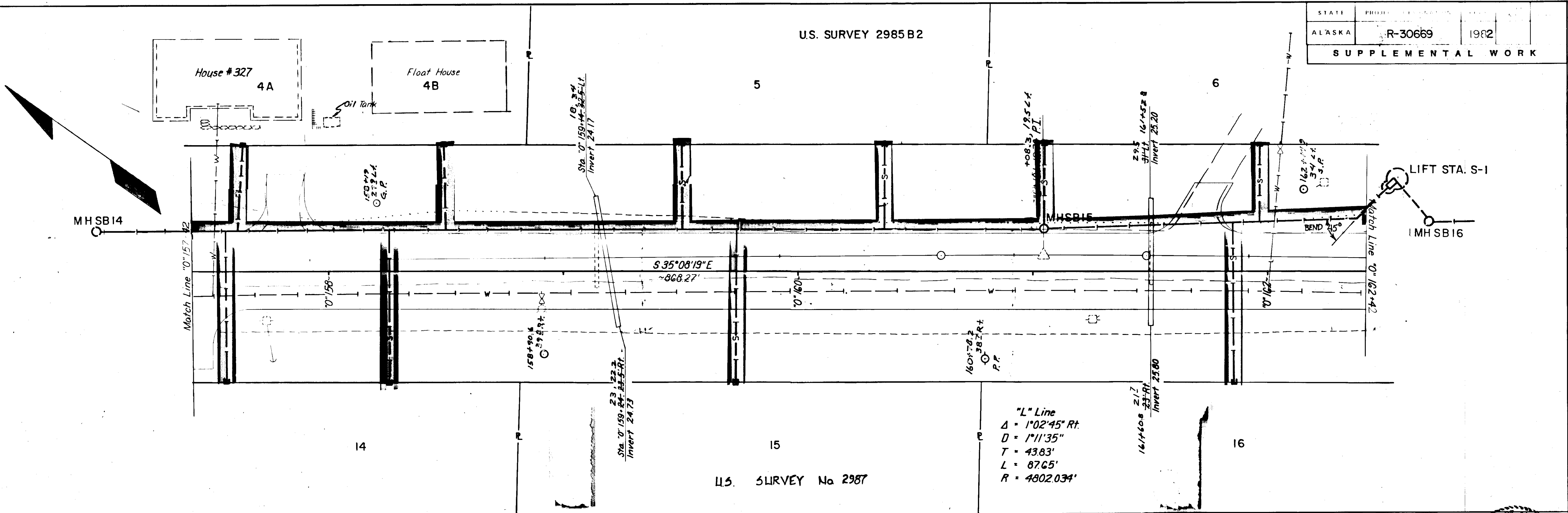
US SURVEY 2985 B1

US SURVEY 2985 B2

"L" Line
 $\Delta = 7^{\circ}29'27''$ Lt.
 $D = 3^{\circ}18'52''$
 $T = 113.16'$
 $L = 226.00'$
 $R = 1728.633'$



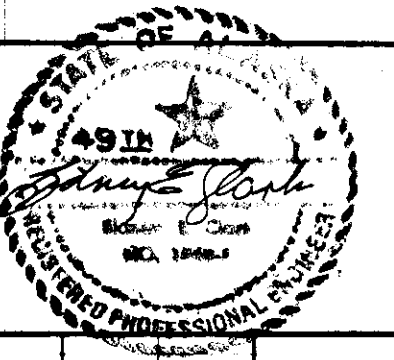
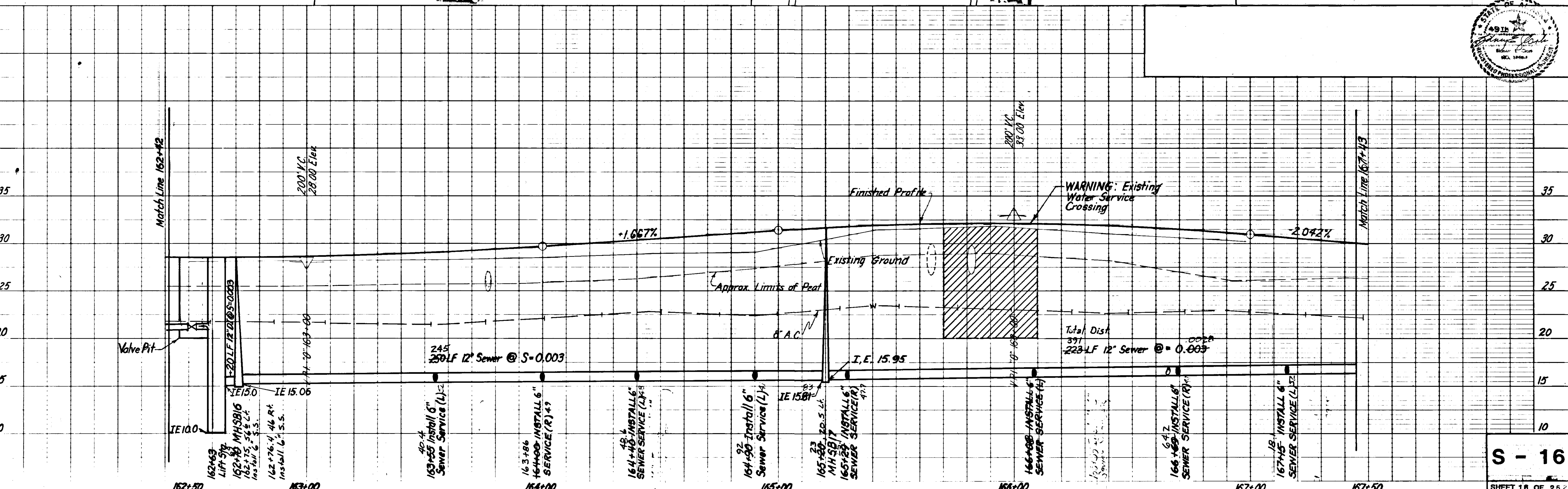
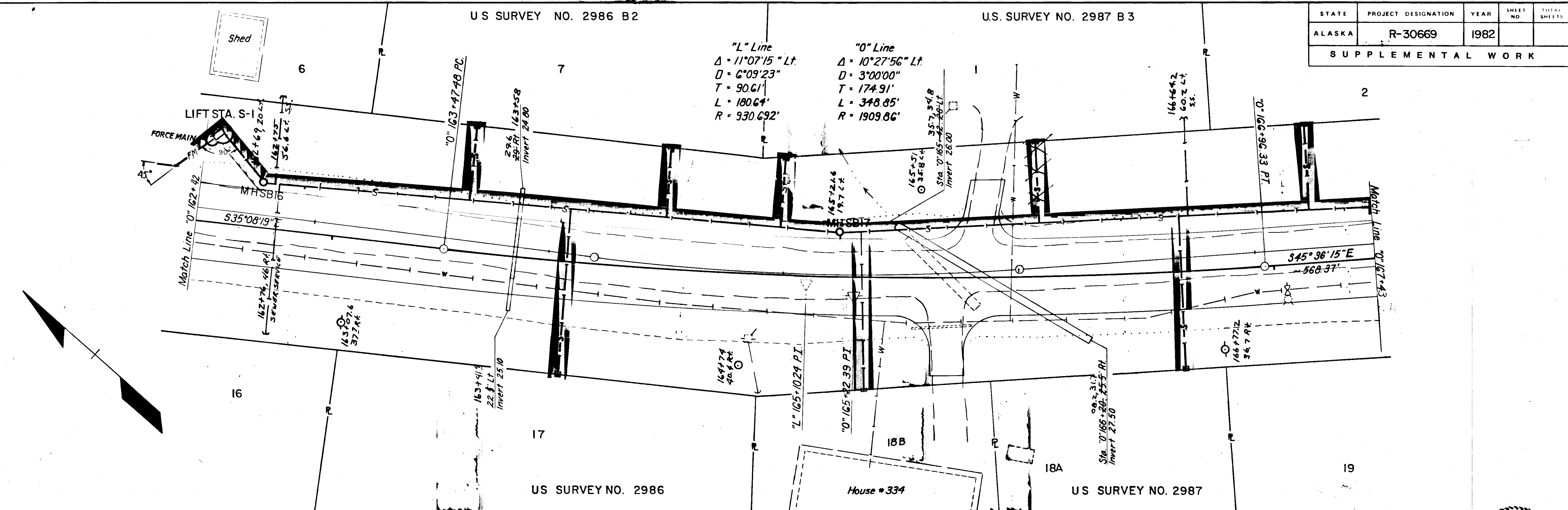
U.S. SURVEY 2985B2



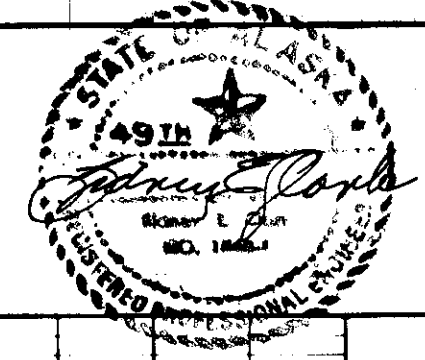
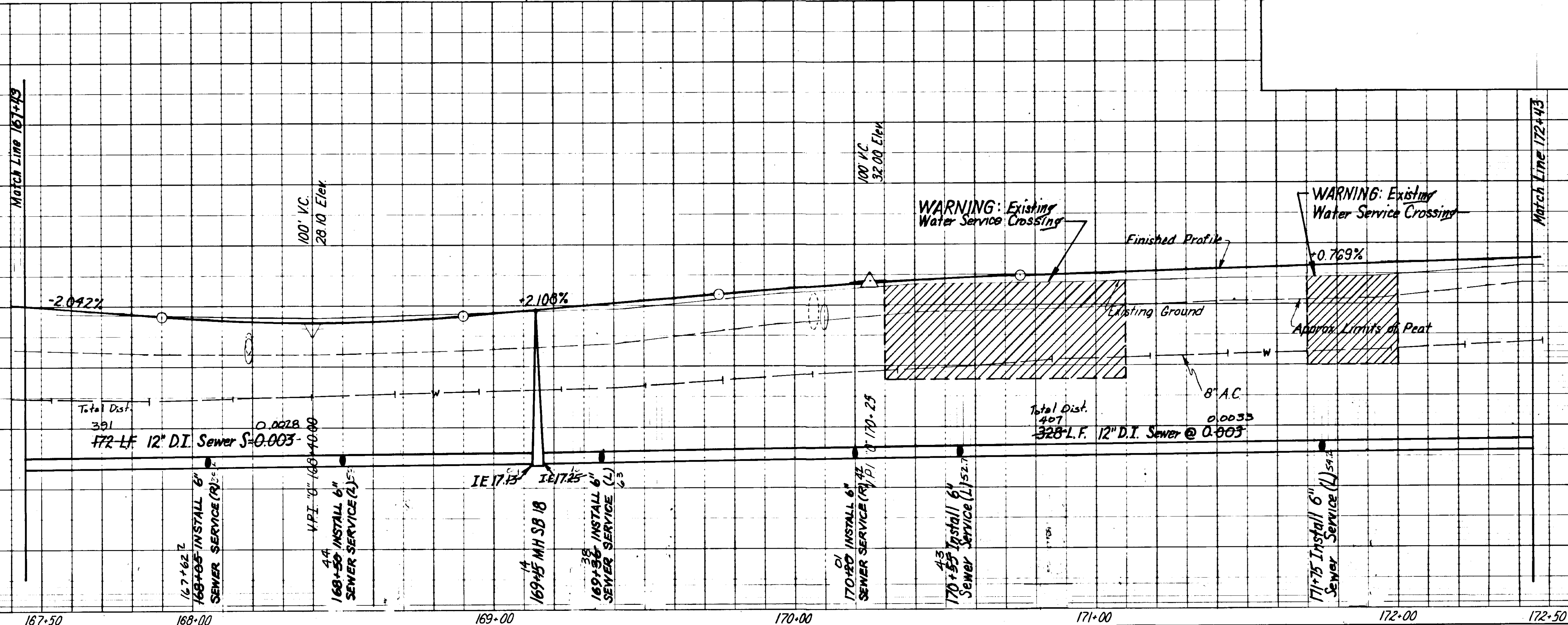
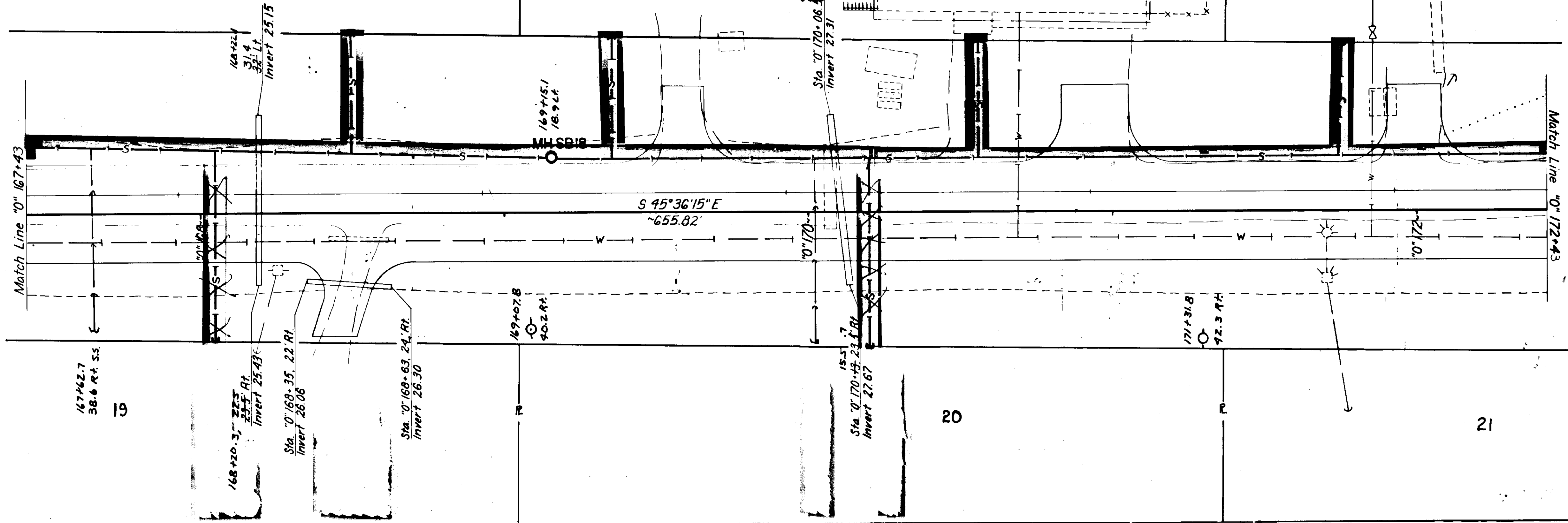
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

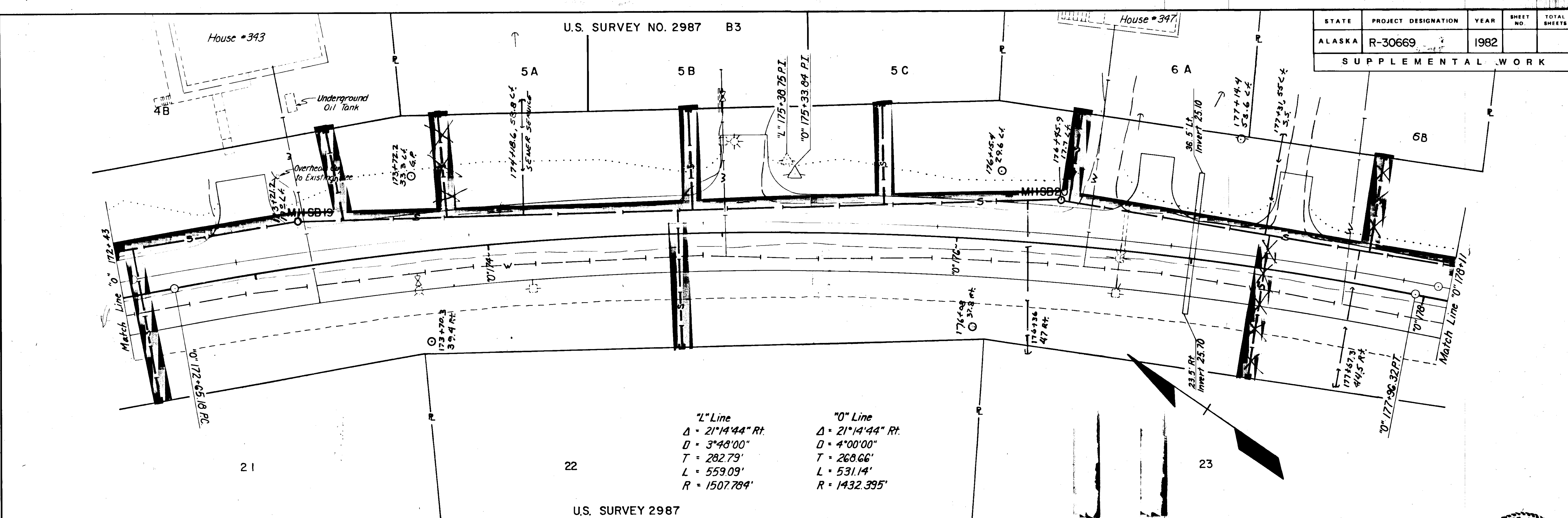
"L" Line
 $\Delta = 11^{\circ}07'15''$ Lt.
 $D = 6^{\circ}09'23''$
 $T = 90.61'$
 $L = 180.64'$
 $R = 930.692'$

"O" Line
 $\Delta = 10^{\circ}27'56''$ Lt.
 $D = 3^{\circ}00'00''$
 $T = 174.91'$
 $L = 348.85'$
 $R = 1909.86'$



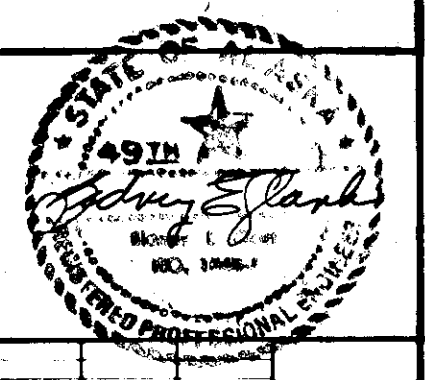
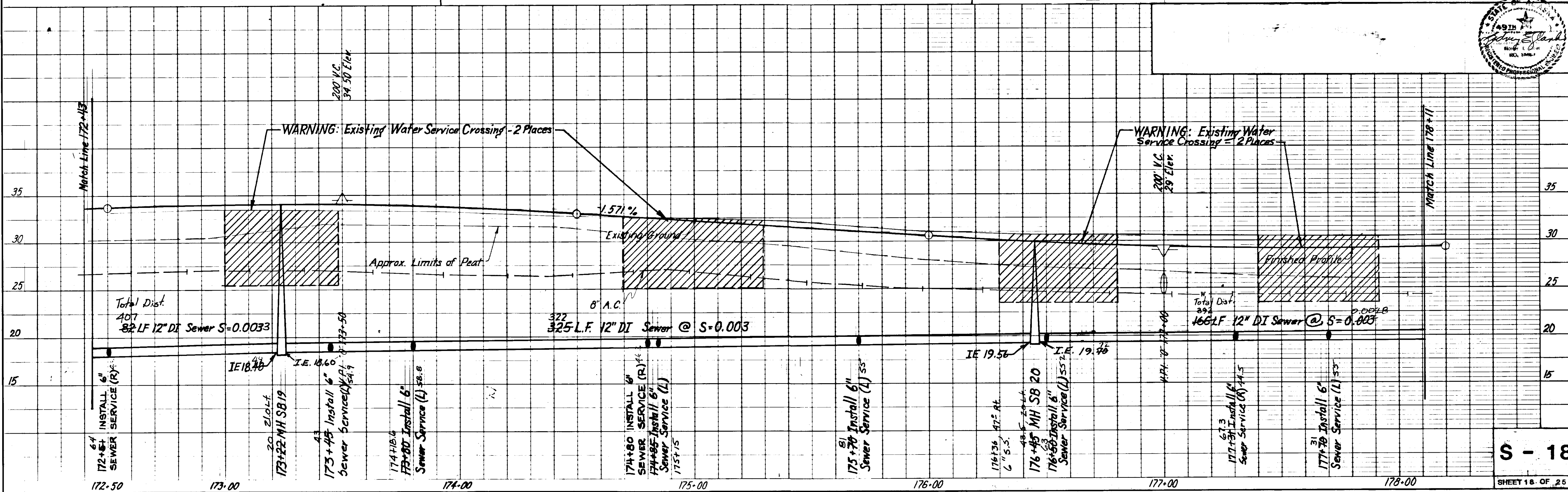
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				





STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		

SUPPLEMENTAL WORK

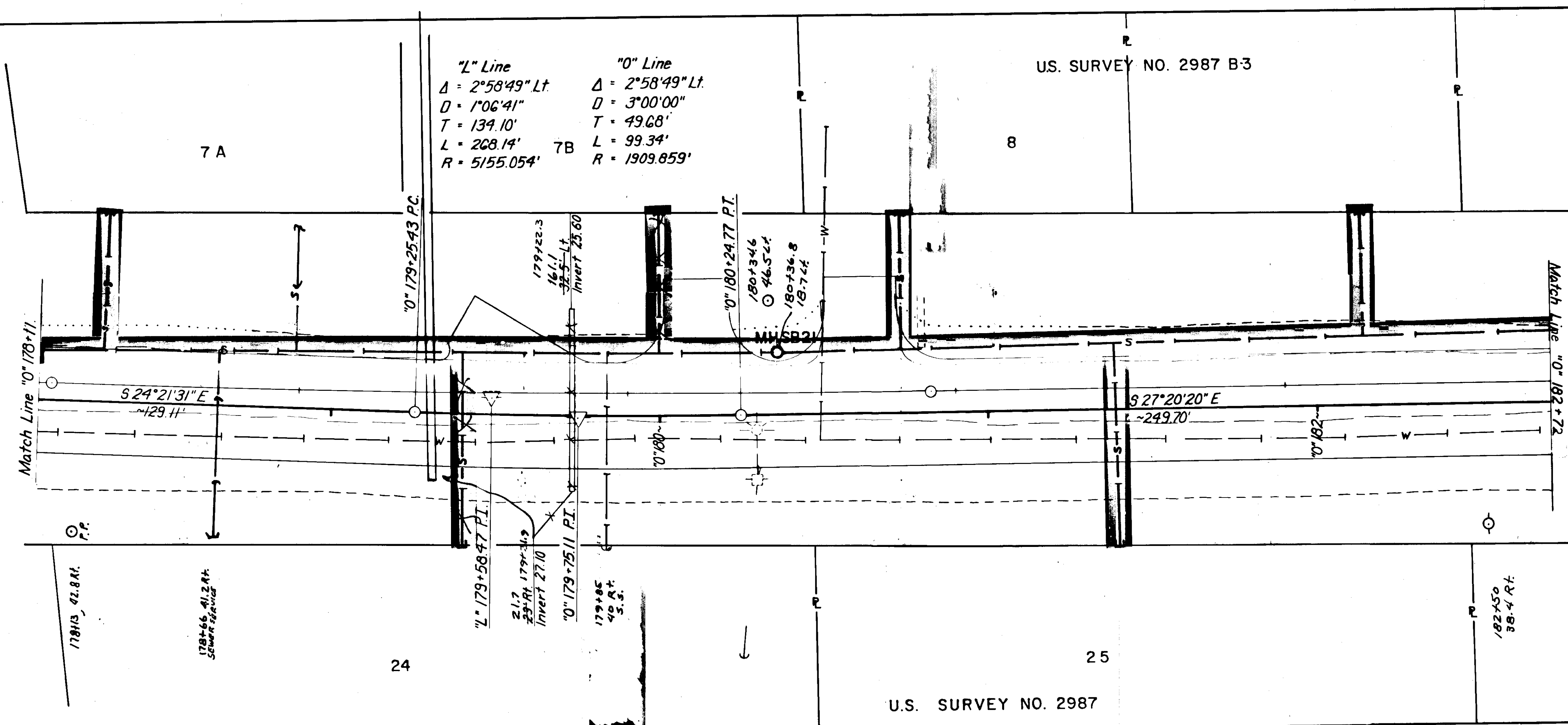


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

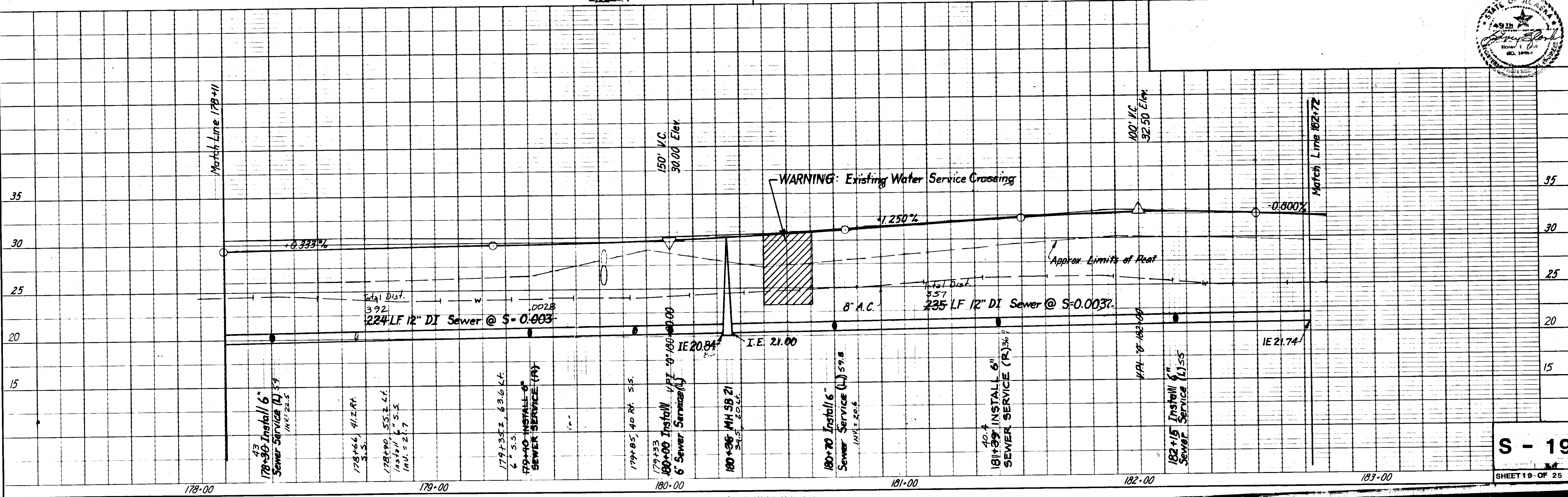
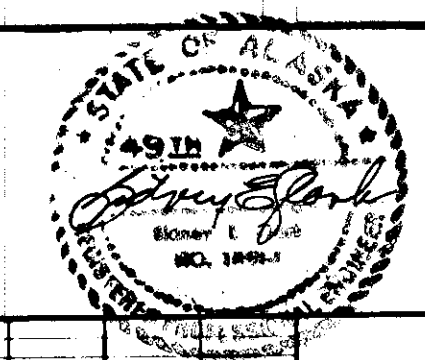
U.S. SURVEY NO. 2987 B-3

"L" Line
 $\Delta = 2^{\circ}58'49''$ Lt
 $D = 1^{\circ}06'41''$
 $T = 139.10'$
 $L = 208.14'$
 $R = 5155.054'$

"O" Line
 $\Delta = 2^{\circ}58'49''$ Lt
 $D = 3^{\circ}00'00''$
 $T = 49.68'$
 $L = 99.34'$
 $R = 1909.859'$



U.S. SURVEY NO. 2987



S - 19

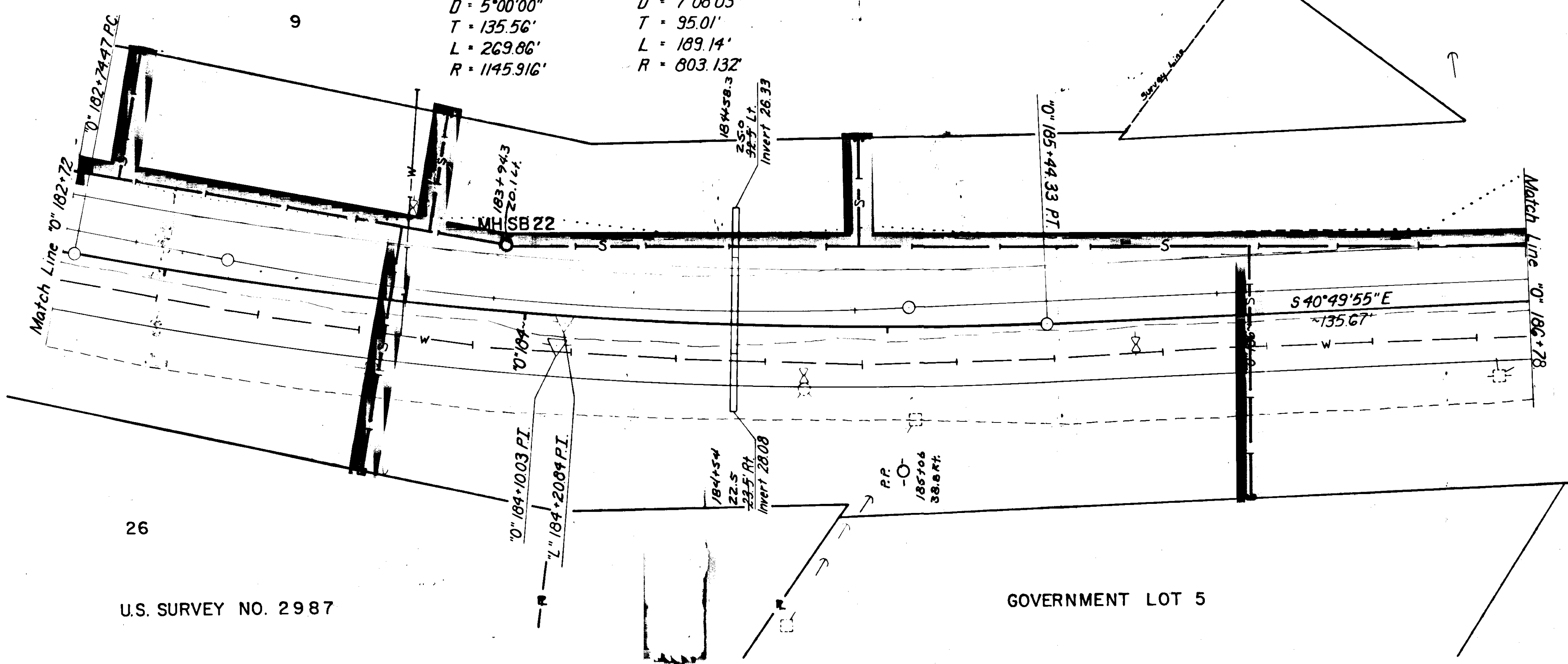
SHEET 19 OF 25

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

U S SURVEY 2987B-3

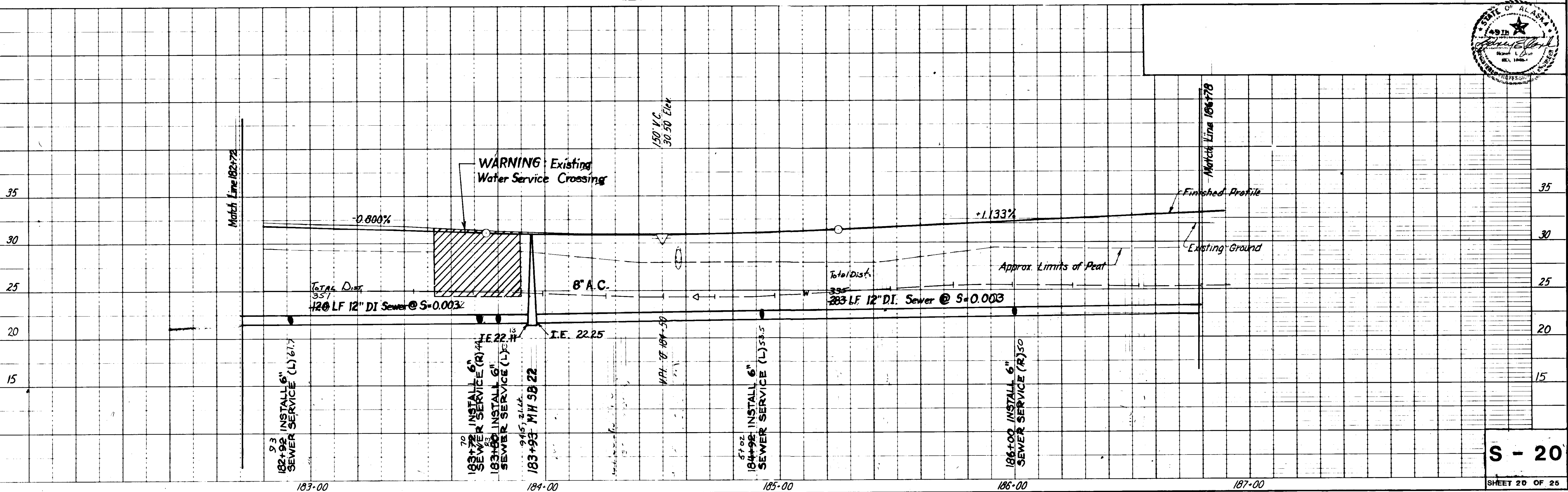
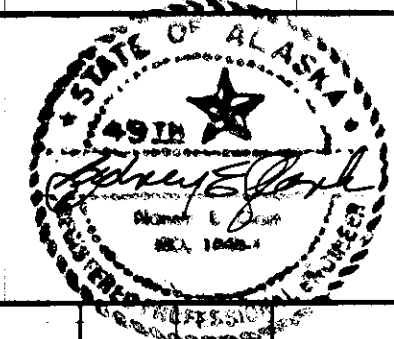
"O" Line
 $\Delta = 13^{\circ}29'35'' Lt$
 $D = 5'00'00''$
 $T = 135.56'$
 $L = 269.86'$
 $R = 1145.916'$

"L" Line
 $\Delta = 13^{\circ}29'35'' Lt$
 $D = 7'08'03''$
 $T = 95.01'$
 $L = 189.14'$
 $R = 803.132'$



U.S. SURVEY NO. 2987

GOVERNMENT LOT 5

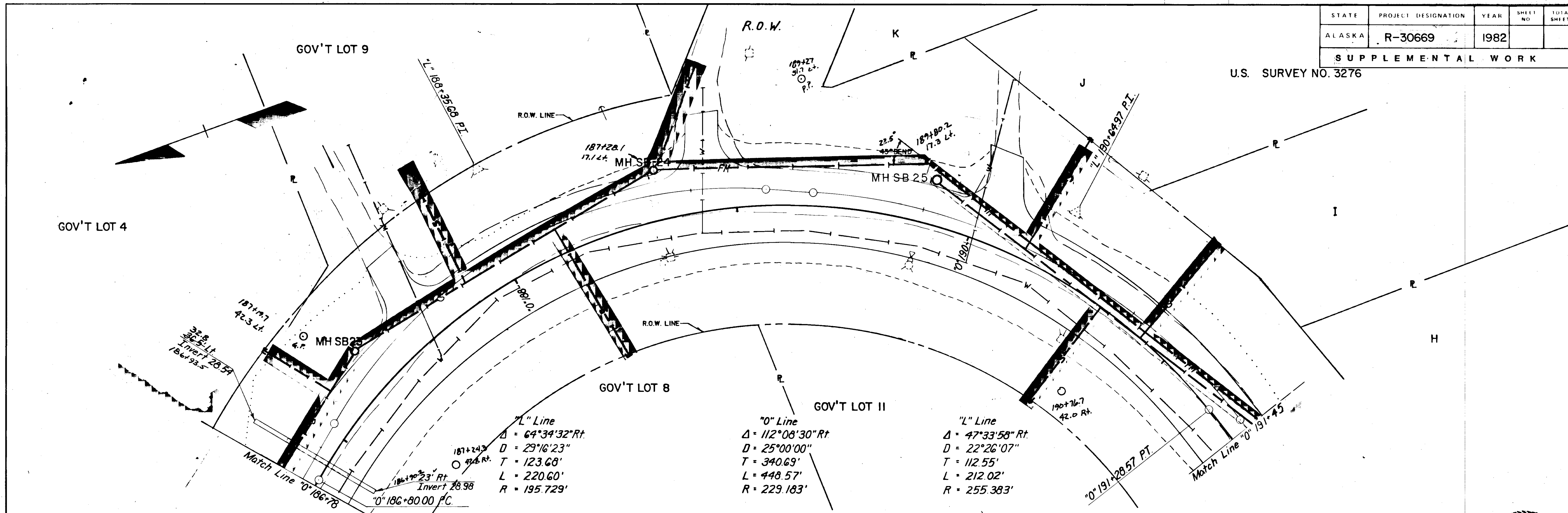


S - 20

SHEET 20 OF 25

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

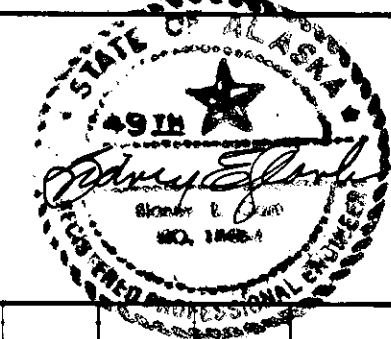
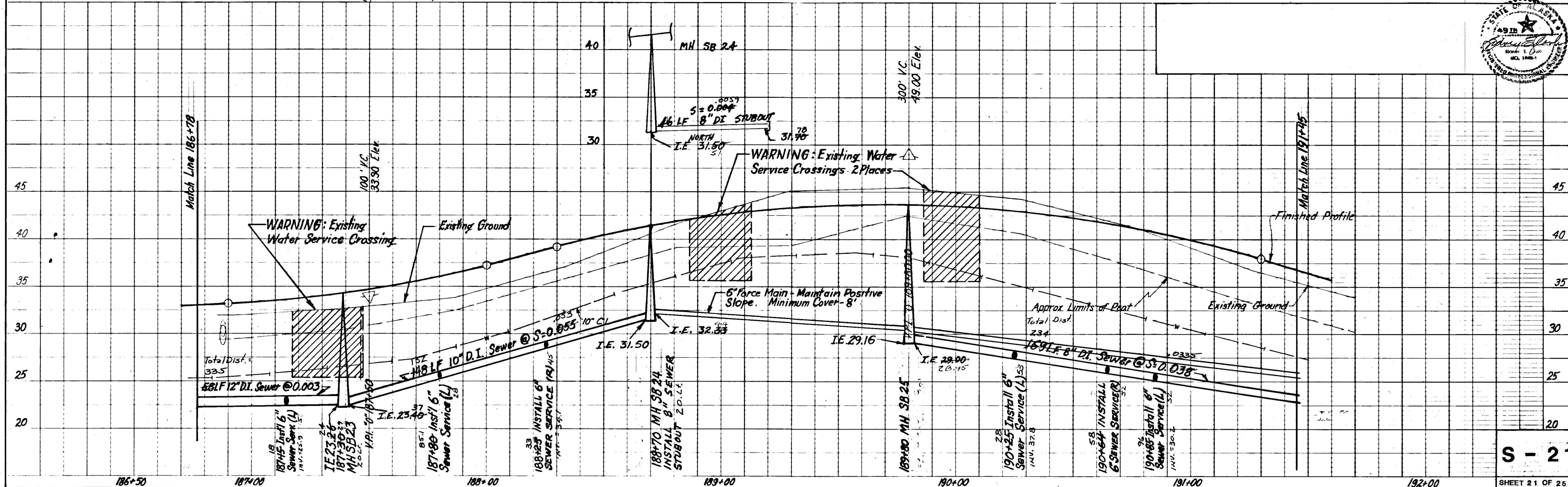
U.S. SURVEY NO. 3276



"L" Line
 $\Delta = 64^{\circ}34'32'' \text{ Rt.}$
 $D = 29'16''23''$
 $T = 123.68'$
 $L = 220.60'$
 $R = 195.729'$

"0" Line
 $\Delta = 112^{\circ}08'30'' \text{ Rt.}$
 $D = 25'00''00''$
 $T = 340.69'$
 $L = 448.57'$
 $R = 229.183'$

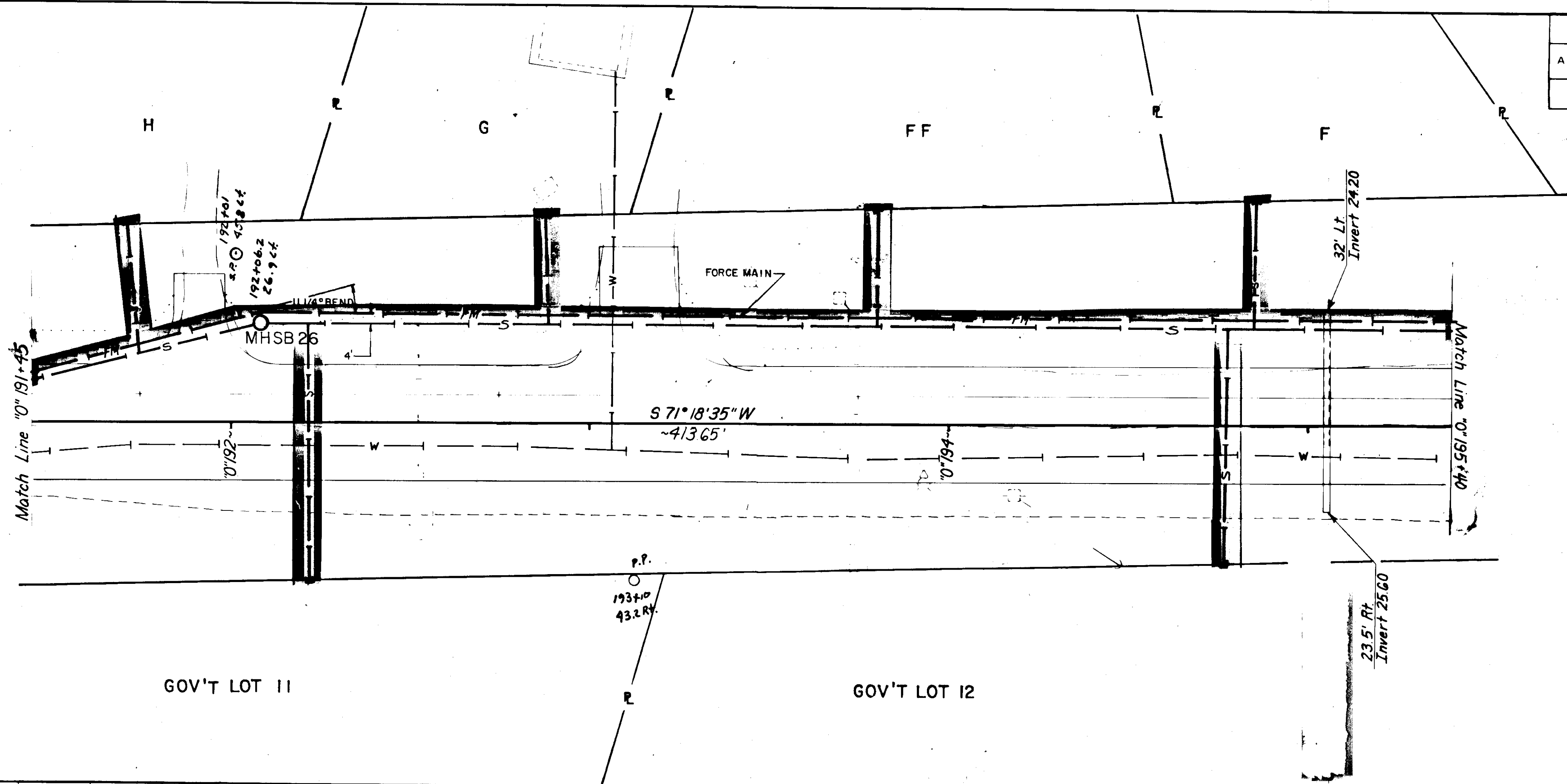
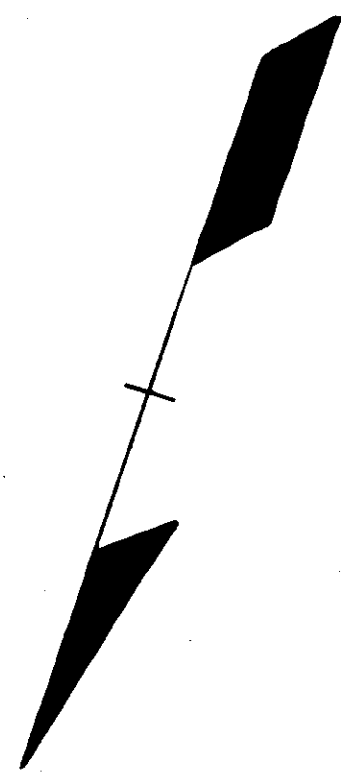
"L" Line
 $\Delta = 47^{\circ}33'58'' \text{ Rt.}$
 $D = 22'26''07''$
 $T = 112.55'$
 $L = 212.02'$
 $R = 255.383'$



S - 21

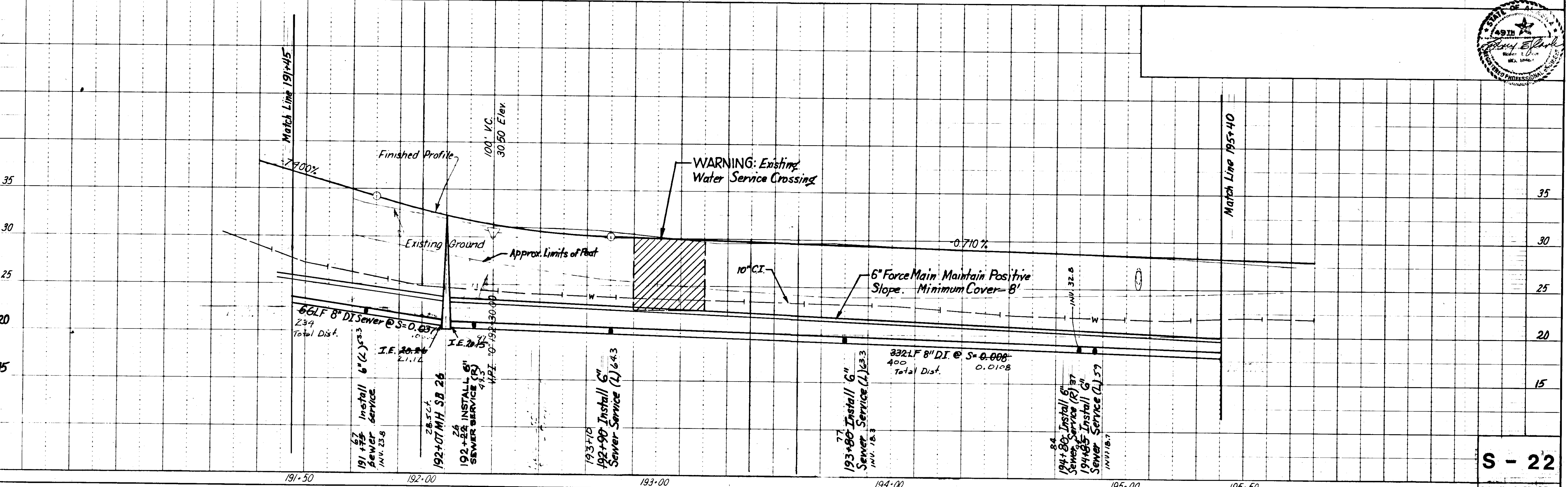
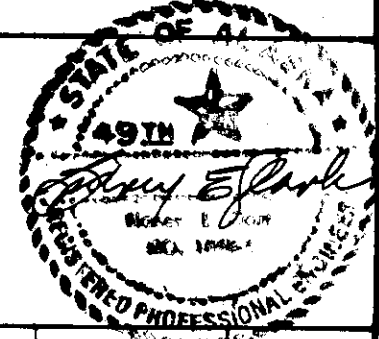
SHEET 21 OF 25

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				

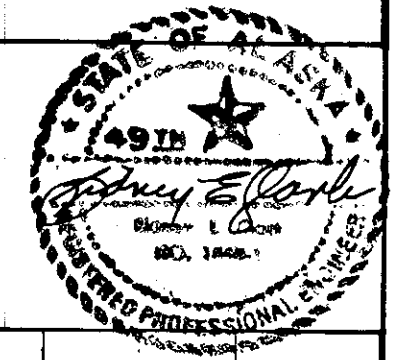
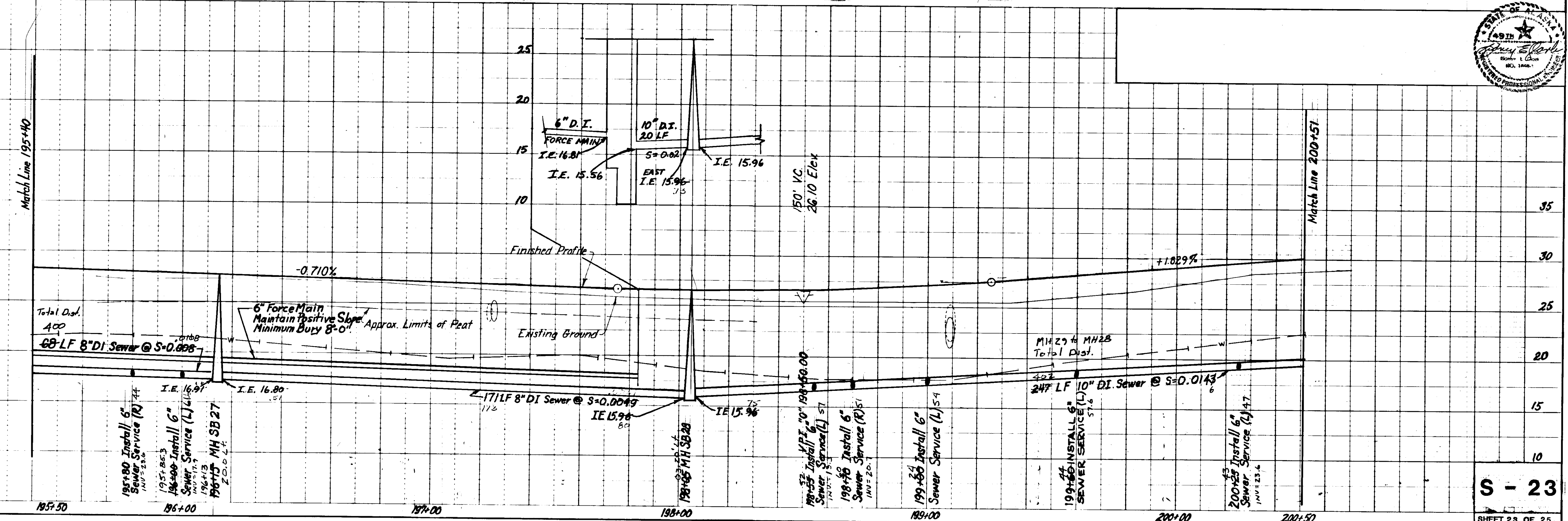
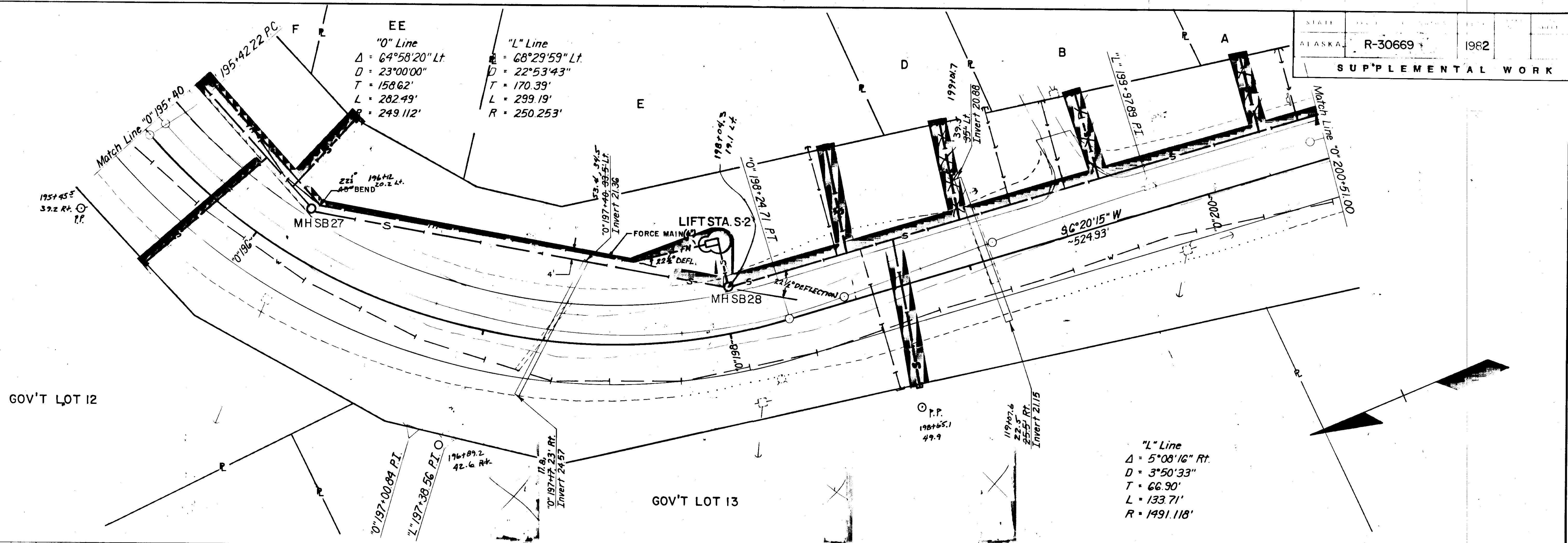


GOV'T LOT 11

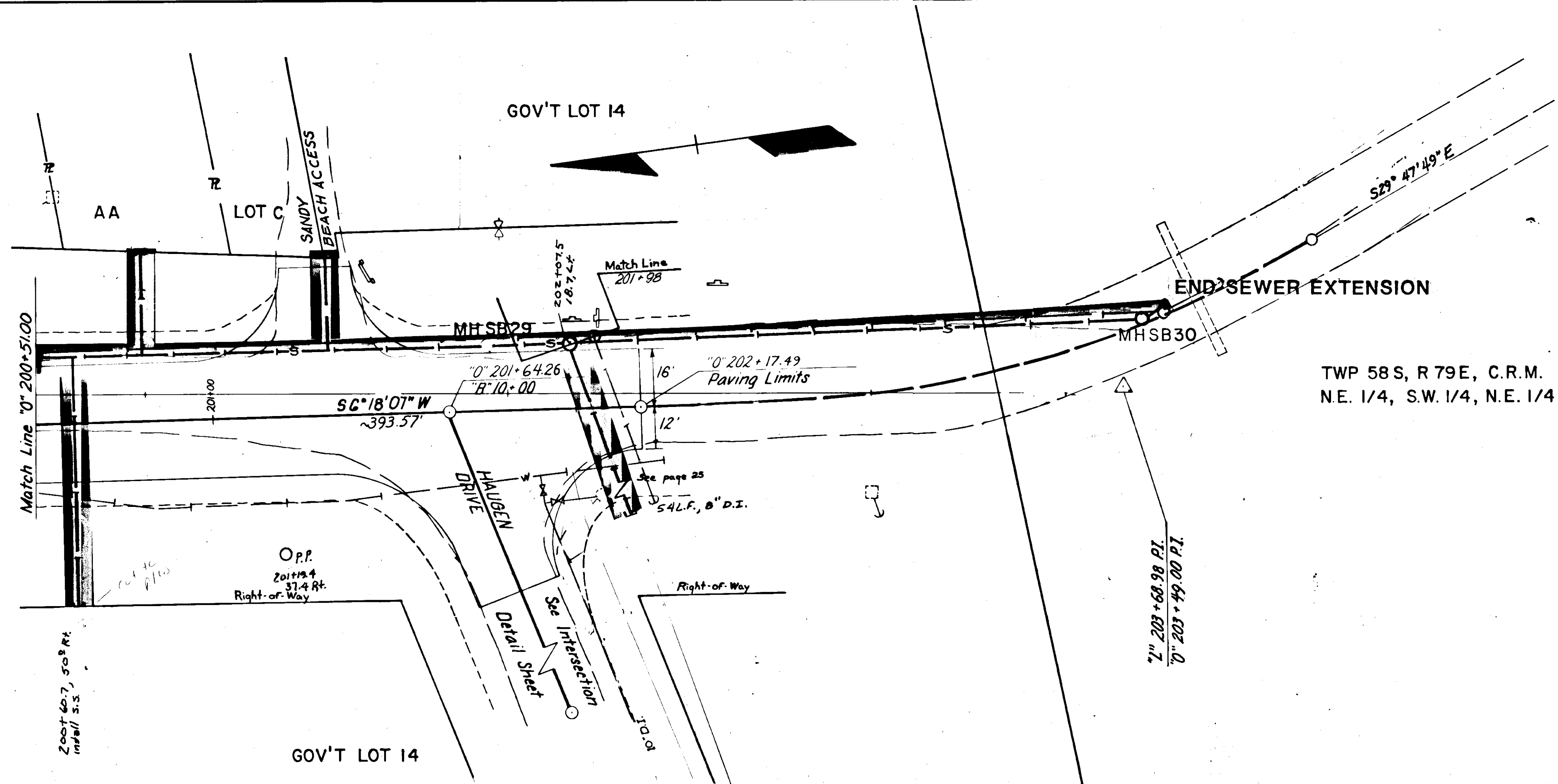
GOV'T LOT 12



S - 22



STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	R-30669	1982		
SUPPLEMENTAL WORK				



TWP 58 S, R 79 E, C.R.M.
N.E. 1/4, S.W. 1/4, N.E. 1/4

