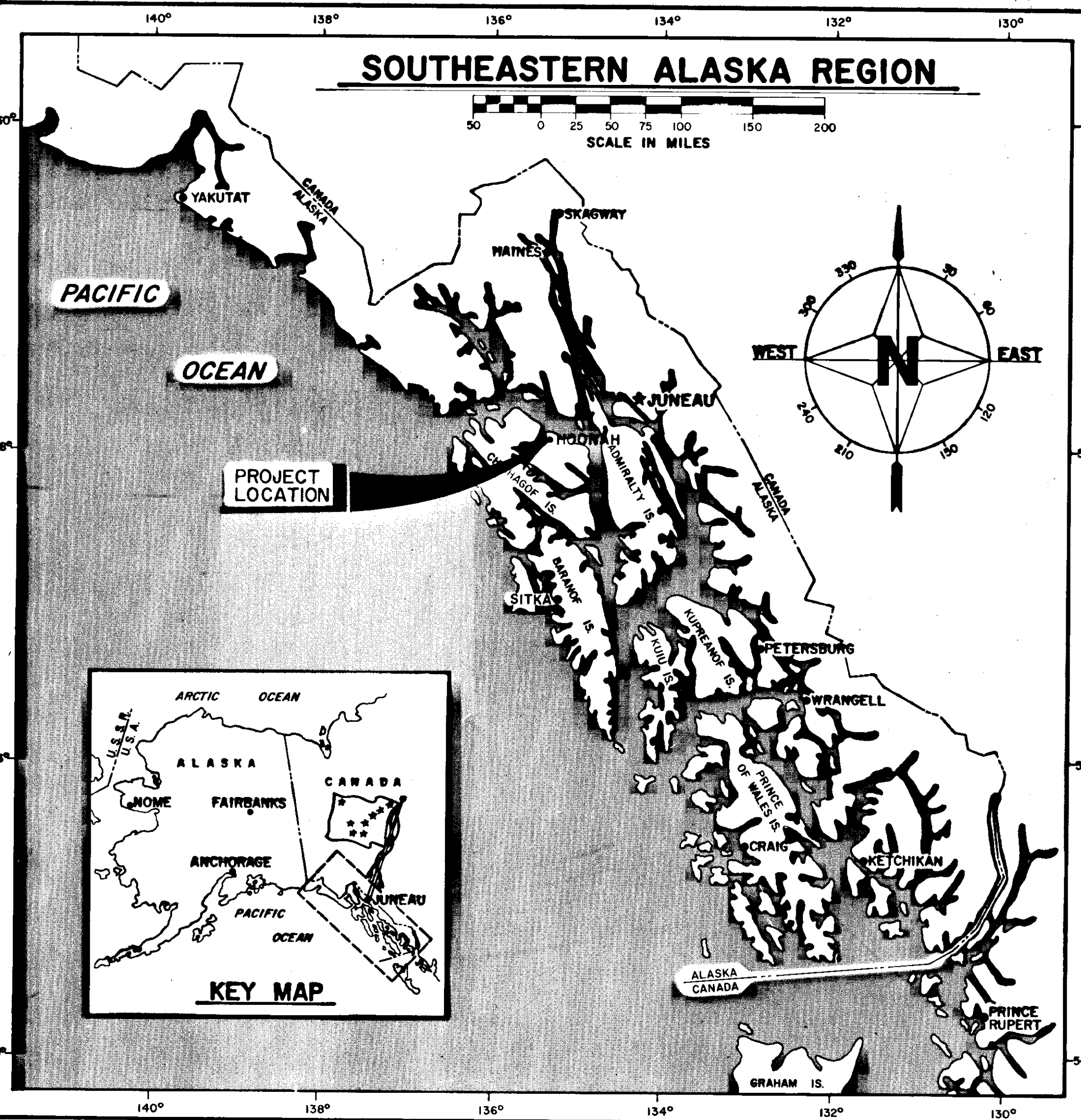




THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:

A-1, C-01.03, C-02.01,	D-01.01, D-04.10
D-05.10, D-20.01, D-23.00, D-24.00, D-26.01, D-27.01,	F-01.01,
G-04.03S, G-04.04W, G-14.04S,	G-15.00, G-18.00S,
I-20.10, I-40.00, I-81.00, M-05.00, M-13.01, M-16.01, S-00.00, S-05.00	
S-20.00, S-30.01, T-20.00, T-21.01 & U-03.00.	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEASTERN REGION
DESIGN AND CONSTRUCTION DIVISION



HOONAH ARTERIAL
STAGE II

RS-0918(4) 69305

FERRY TERMINAL TO HOONAH SEAFOODS
AND WHITE ALICE ROAD TO AIRPORT
GRADING, PAVING, DRAINAGE IMPROVEMENTS
AND

HOONAH FERRY
TERMINAL

RS-0918(5) 74905

GRADING, PAVING, LIGHTING, DRAINAGE IMPROVEMENTS

"AS-BUILT" PLANS

CONTRACTOR: Red Samm Construction
PROJECT ENGINEER: Larry Geise
BEGIN CONSTRUCTION: 4-20-91
END CONSTRUCTION: 6-30-92

SHEET NO.	INDEX OF SHEETS
1	MAIN TITLE
2	COMBINED ESTIMATE OF QUANTITIES
RS-0918(4) 69305	
3	TITLE
4-5	TYPICAL SECTIONS & SLOPE SCHEDULES
6	ESTIMATE OF QUANTITIES
7-22	PLAN & PROFILE
23-25	SUMMARY TABLES & NOTES
26	STRIPING PLAN, NOTES & TYP. APPROACH
27-30	CULVERT SECTIONS & SUMMARIES
31-46	UNDERGROUND UTILITIES PLAN & PROFILE
47-48	AIRPORT RD. PLAN & PROFILE
49-50	SPECIAL DRIVEWAYS, PLAN & PROFILE
51-57	TRANSMISSION LINE PLANS
58-61	TRANSMISSION LINE DETAILS
62	RESIDENCE RELOCATION
63-65	TRAFFIC CONTROL PLAN
RS-0918(5) 74905	
1	TITLE
2	GENERAL LAYOUT
3	TYPICAL SECTIONS
4	SUMMARY OF QUANTITIES
5	MISCELLANEOUS DETAILS
6-10	LIGHTING DETAILS

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
109(1)	Petroleum Adjustment	C.S.	All Req'd
120 (1)	DBE Adjustments	C.S.	All Req'd
120 (1A)	DBE Adjustment	C.S.	All Req'd
201 (1B)	Clearing Estimated 4 acres + 1 acre of heavy deadfall Estimated .1 acres hand clearing	L.S.	All Req'd
202 (1)	Removal of Structures and Obstructions	L.S.	All Req'd
202 (1A)	Removal of Structures and Obstructions	L.S.	All Req'd
202 (4)	Removal of Culvert Pipe	L.F.	655
202 (12)	Removal of Corduroy	S.Y.	0
203 (1)	Common Excavation	C.Y.	83,025
203 (1A)	Common Excavation	C.Y.	544
203 (2)	Rock Excavation	C.Y.	17,446.9
203 (6)	Borrow "B"	Ton	69,030
203 (6A)	Borrow "B"	Ton	12,974
203 (6B)	Borrow "D"	Ton	0
203 (9)	Obliterate Roadway	L.S.	All Req'd
203 (10)	Controlled Blasting	L.F.	1,588
301 (1)	Crushed Aggregate Base Course	Ton	17,228
301 (1A)	Crushed Aggregate Base Course	Ton	1,148.1
304 (1)	Subbase, Grading "E"	Ton	20,145.8
304 (1A)	Subbase, Grading "E"	Ton	1,256.1
306 (1)	Asphalt Treated Base Course	Ton	5,098.3
306 (2)	Asphalt Material, Type AC-5	Ton	206.19
401 (1)	Asphalt Concrete, Type 1 SE	Ton	2,992
401 (1A)	Asphalt Concrete, Type 1 SE	Ton	321.7
401 (2)	AC-5 Asphalt Cement	Ton	17,593
401 (2A)	AC-5 Asphalt Cement	Ton	19.08
402 (1)	CSS-1 Asphalt for Tack Coat	Ton	34.59
403 (1A)	MC-30 Liquid Asphalt for Prime Coat	Ton	0
506 (5)	Stairway Adjustment	L.S.	All Req'd
506 (6)	Residence Relocation C.O.#6	L.S.	All Req'd
602 (1)	Structural Plate Pipe Dia. 9'-6"x6'-5" G.A. 12	L.F.	90
603 (9-18)	18" Corrugated Aluminum Pipe	L.F.	566,402
603 (9A-18)	18" Corrugated Aluminum Pipe	L.F.	288,262
603 (9-24)	24" Corrugated Aluminum Pipe	L.F.	1,022,960
603 (9-36)	36" Corrugated Aluminum Pipe	L.F.	80,644
603 (9-60)	60" Corrugated Aluminum Pipe	L.F.	230.1
604 (2)	Sanitary Sewer Manhole	Each	3
604 (3)	Reconstruct Existing Manhole	Each	5

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
604 (4)	Adjust Existing Manhole	Each	5 4
604 (5A)	Inlet, Type "A"	Each	5
604 (5C)	Inlet, Type "A"	Each	3
604 (5D)	Inlet, Field	Each	2
606 (1)	W Beam Guardrail	L.F.	375
606 (4)	Removal and Reconstruction of Guardrail	L.F.	579
606 (5)	Removal and Disposal of Guardrail	L.F.	61
607 (3)	Chain Link Fence C.O.#16	L.F.	0 415
608 (1)	Concrete Sidewalk	S.Y.	375,344
608 (3)	Asphalt Sidewalk C.O.#8	S.Y.	0 1,200
608 (3A)	Asphalt Sidewalk/Driveway C.O.#8	S.Y.	0 79
609 (2)	Curb and Gutter, Type I	L.F.	322,914
609 (2A)	Curb and Gutter, Type I	L.F.	486,491
611 (1A)	Riprap, Class II A	C.Y.	3,382.7
611 (1B)	Riprap, Class I	C.Y.	24,300
611 (1C)	Riprap, Class II B	C.Y.	22,713
613 (1)	Right of Way Monuments	Each	23 24
614 (1)	Survey Monuments	Each	11 42
614 (2)	Monument Cases	Each	11 42
615 (1)	Standard Sign	S.F.	214
615 (1A)	Standard Sign	S.F.	16
615 (7)	Salvage Signs	Each	8 7
618 (3)	Water for Seeding	M.Gal.	0 40
618 (5A)	Seeding	M.S.F.	6,254
618 (5)	Seeding	M.S.F.	278.8
625 (1)	Pipe Handrail	L.F.	56
626 (1)	Sanitary Sewer Conduit	L.F.	451,396
627 (1-4)	4 Inch Ductile Iron Water Conduit	L.F.	153,414
627 (1-6)	6 Inch Ductile Iron Water Conduit	L.F.	1,045
627 (1-8)	8 Inch Ductile Iron Water Conduit	L.F.	297,371
627 (1-10)	10 Inch Ductile Iron Water Conduit	L.F.	177,763
627 (3A)	Install Valve Box	Each	0 4
627 (4)	Fire Hydrant Adjustment	Each	0 4
627 (5)	Fire Hydrant Installation	Each	1
627 (6)	Fire Hydrant Relocation	Each	2 4
627 (8)	Water Service Connection	Each	22 49
627 (8A)	Water Service Connection	Each	1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
627 (9-4)	Install 4 Inch Gate Valve	Each	1
627 (9-6)	Install 6 Inch Gate Valve	Each	1
627 (9-8)	Install 8 Inch Gate Valve	Each	2
627 (10)	Adjustment of Valve Box	Each	8 31
627 (11)	Air Release Valve	Each	1
630 (1)	Geotextile Separation	S.Y.	10,493
631 (2)	Geotextile Riprap Liner	S.Y.	6,099
631 (2A)	Geotextile Riprap Liner	S.Y.	2,247
635 (1)	Insulation Board	MBM	3.18
639 (1)	Residence Driveways	Each	23 29
640 (1)	Mobilization and Demobilization	L.S.	All Req'd
640 (1A)	Mobilization and Demobilization	L.S.	All Req'd
641 (1)	Temporary Erosion and Pollution Control	C.S.	All Req'd
641 (1A)	Temporary Erosion and Pollution Control	C.S.	All Req'd
642 (1)	Construction Surveying	L.S.	All Req'd
642 (1A)	Construction Surveying	L.S.	All Req'd
642 (2)	Three Person Survey Party	L.S.	All Req'd
643 (2)	Traffic Maintenance	L.S.	All Req'd
643 (2A)	Traffic Maintenance	L.S.	All Req'd
643 (3)	Permanent Construction Signing	Ea. Pr. Day	2,181
643 (4)	Construction Sign	Ea. Pr. Day	1,112
643 (4A)	Construction Sign	Ea. Pr. Day	0 400
643 (5)	Type II Barricade	Ea. Pr. Day	2,082
643 (5A)	Type II Barricade	Ea. Pr. Day	212,400
643 (6)	Type III Barricade	Ea. Pr. Day	616
643 (6A)	Type III Barricade	Ea. Pr. Day	0 200
643 (7)	Traffic Cone	Ea. Pr. Day	9,031
643 (7A)	Traffic Cone	Ea. Pr. Day	553
643 (15)	Flagging	Hr.	4,032.5
643 (15A)	Flagging	Hr.	110 400
643 (18)	Watering	M. Gal.	344.5
645 (1)	Training Program	M. Hr.	500
662 (1)	Electrical Power and Lighting System	L.S.	All Req'd
670 (1A)	Painted Traffic Markers	L.S.	All Req'd
670 (6)	Preformed Traffic Markings C.O.#7	L.S.	All Req'd
670 (8)	Recessed Pavement Markers	Each	92 83
681 (1)	Electrical Power Relocation C.O.#5	L.S.	All Req'd
681 (2)	CATV Relocation	L.S.	All Req'd

DATE: DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

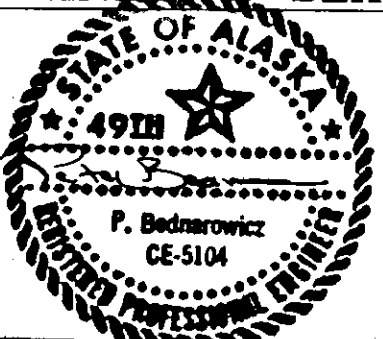
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

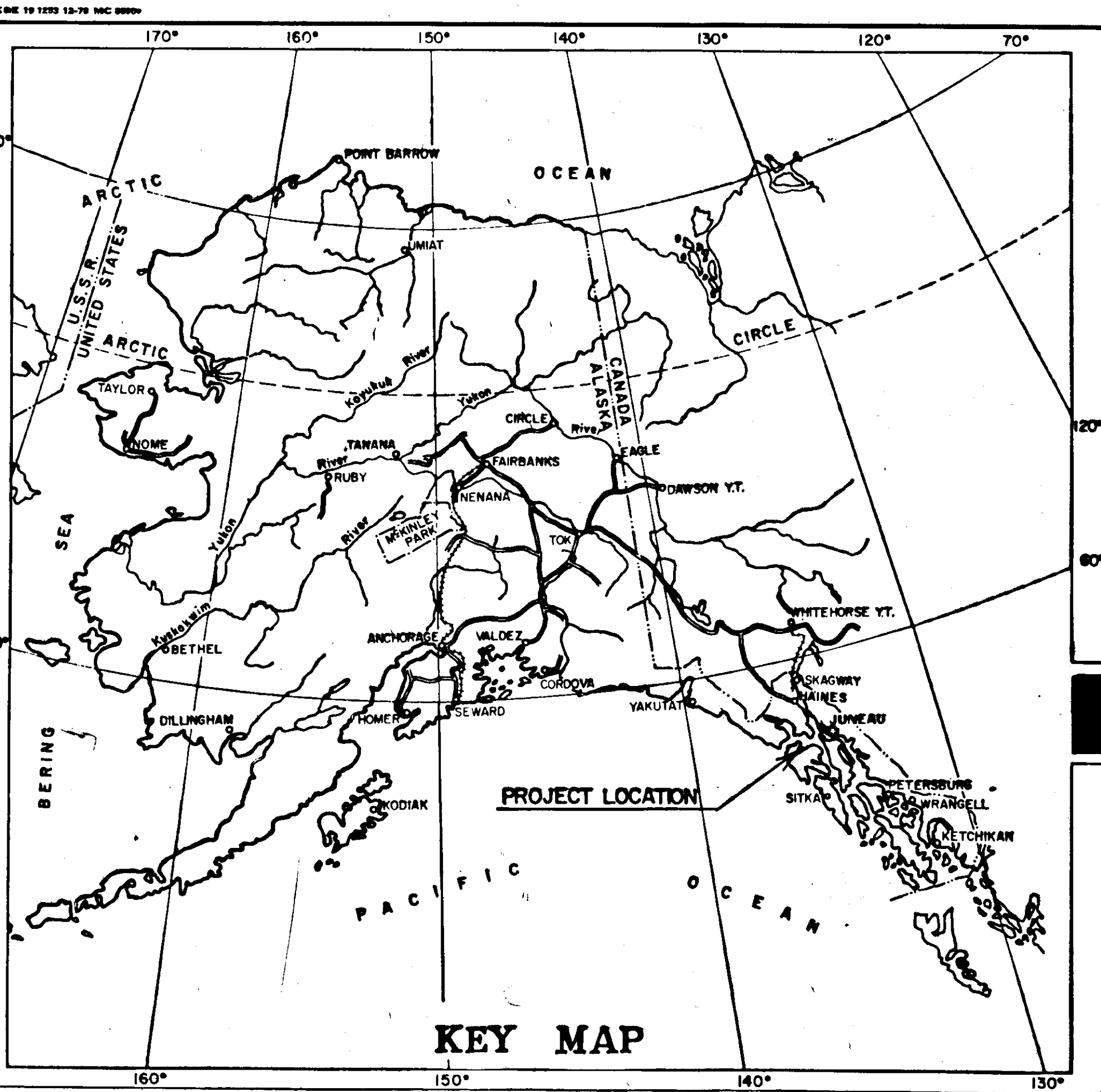
HOONAH ARTERIAL-STAGE II & HOONAH FERRY TERMINAL
COMBINED ESTIMATE OF QUANTITIES
PROJECT NO. RS-0918(4) 69305 & RS-0918(5) 74905

DESIGNED BY: M.B.
DRAWN BY: Autocadd/R.S.
CHECKED BY: P.B.

SCALE: NONE
DATE:
SHEET 2 OF 65

ENGINEER'S SEAL





STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT

HOONAH ARTERIAL
STAGE I I

RS-0918(4) 69305

FERRY TERMINAL TO HOONAH SEAFOODS
AND WHITE ALICE ROAD TO AIRPORT
GRADING, PAVING, DRAINAGE IMPROVEMENTS

SHT. NO.	INDEX OF SHEETS
3	TITLE
4-5	TYPICAL SECTIONS
6	ESTIMATE OF QUANTITIES
7-22	PLAN & PROFILE SHEETS
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27-30	CULVERT SECTIONS & SUMMARIES
31-46	UNDERGROUND UTILITIES PLAN & PROFILE
47-48	AIRPORT RD. PLAN & PROFILE
49-50	SPECIAL DRIVEWAYS, PLAN & PROFILE
51-57	TRANSMISSION LINE PLANS
58-61	TRANSMISSION LINE DETAILS
62	DALTON RESIDENCE RELOCATION
63-65	TRAFFIC CONTROL PLAN

THE FOLLOWING STANDARD DRAWINGS ARE INCLUDED IN THIS PROJECT: A-1, C-01.03, C-02.01, D-05.01, D-27.01, D-01.01, D-04.10, D-20.01, D-23.00, D-24.00, D-26.01, F-01.01, G-04.03, G-14.04S, G-18.00S, I-20.10, I-40.00, I-81.00, M-13.01, M-16.01, S-00.00, S-05.00, S-20.00, S-30.01, T-21.02, U-03.00, G-15.00, M-05.00, T-20.00

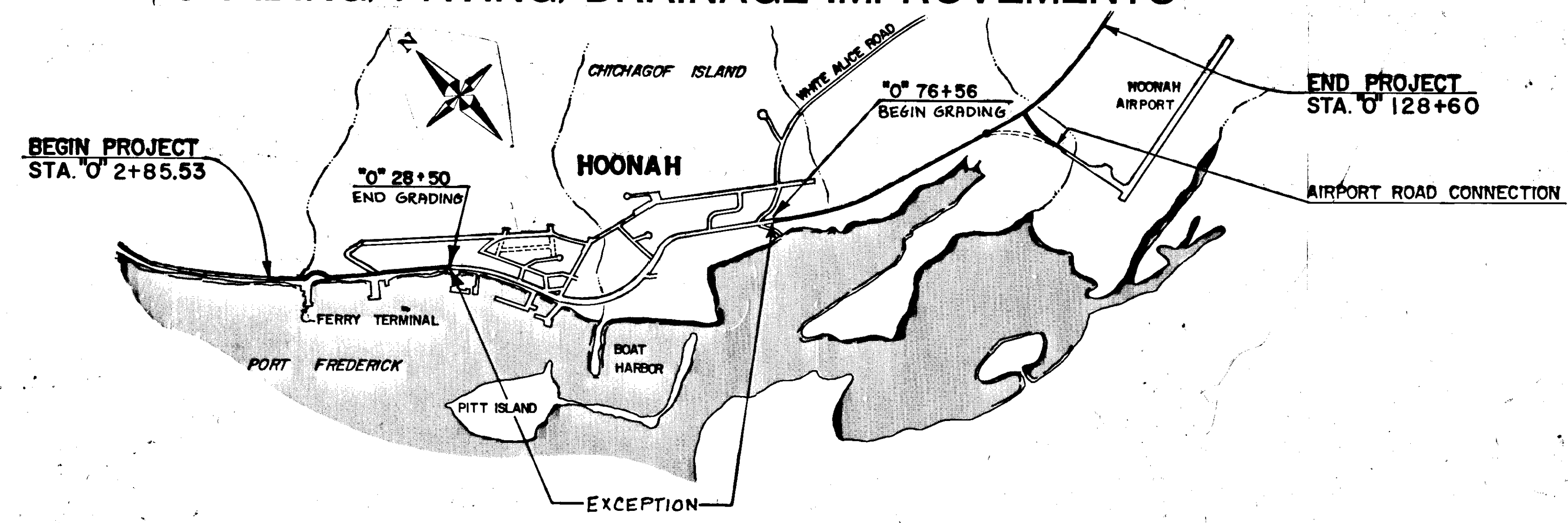
DESIGN DESIGNATION

B.O.P. TO 28+50		76+56 TO E.O.P.	
A.D.T.(1990)	= 126	A.D.T.(1990)	= 325
A.D.T.(2010)	= 139	A.D.T.(2010)	= 397
D.H.V.(16%)	= 22	D.H.V.(16%)	= 64
D	= 60-40	D	= 60-40
% T.	= 5%	% T.	= 5%
E.A.L.	= 7.410	E.A.L.	= 20.320
V.	= 30 MPH	V.	= 40 M.P.H.
T.I.	= 50	T.I.	= 55

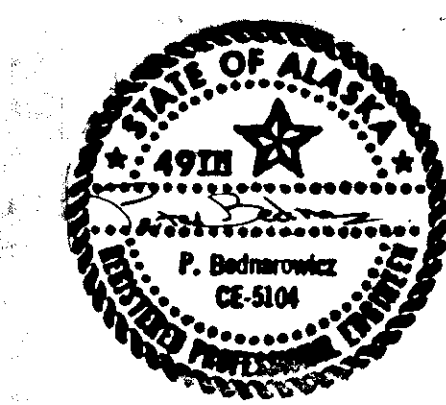
PROJECT SUMMARY

B.O.P. TO 28+50	
WIDTH OF PAVEMENT	= 26'
WIDTH OF ROADWAY	= 34'
LENGTH OF PROJECT	= 2,565' = 0.4858 MILES
LENGTH OF PAVING	= 2,565' = 0.4072 MILES
LENGTH OF GRADING	= 2,565' = 0.4858 MILES

76+56 TO E.O.P.	
WIDTH OF PAVEMENT	= 28'
WIDTH OF ROADWAY	= 30'
LENGTH OF PROJECT	= 5,204' = 0.9856 MILES
LENGTH OF PAVING	= 5,204' = 0.9534 MILES
LENGTH OF GRADING	= 5,204' = 0.9856 MILES

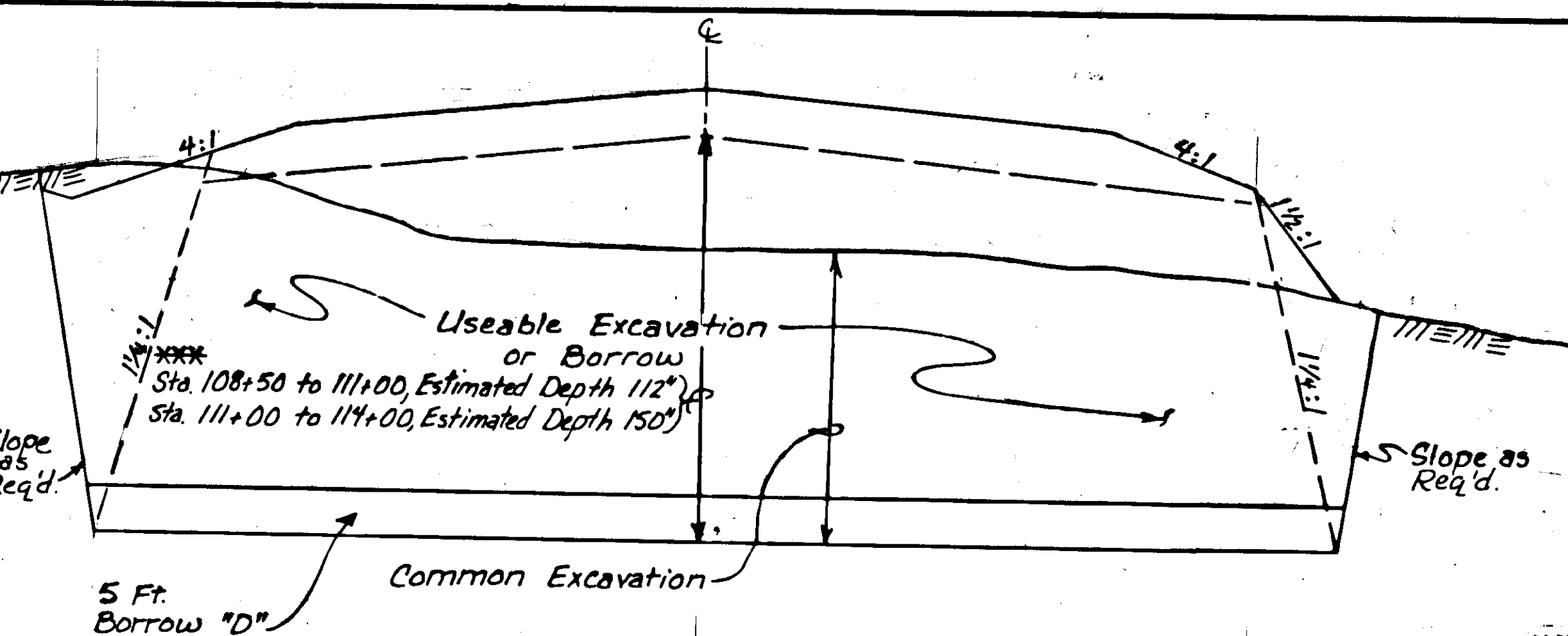


VICINITY MAP



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
APPROVED BY: *Merrill* DATE: *9/27/90*
Southeast Region
Design Chief

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
APPROVED BY: *E. V. Samel* DATE: *9-27-90*
DIRECTOR
Southeast Region
Design and Construction



DEPTH OF BORROW "B"			
STATION TO STATION		EXISTING ROADBED	
		WITHIN	OUTSIDE
2+85 TO 28+50		6"	10"
76+56 TO 94+00		24"	24"
94+00 TO 98+30		6"	6"
98+30 TO 108+50		24" 2'	9' 24"
108+50 TO 111+00 **		8'	13' 4"
111+00 TO 114+00 **		11'	15' 4"
114+00 TO 120+00		11'	1' 24"
120+00 TO 128+60		6" 1'	5' 10"

** NOTE: SEE SUBEXCAVATION DETAIL

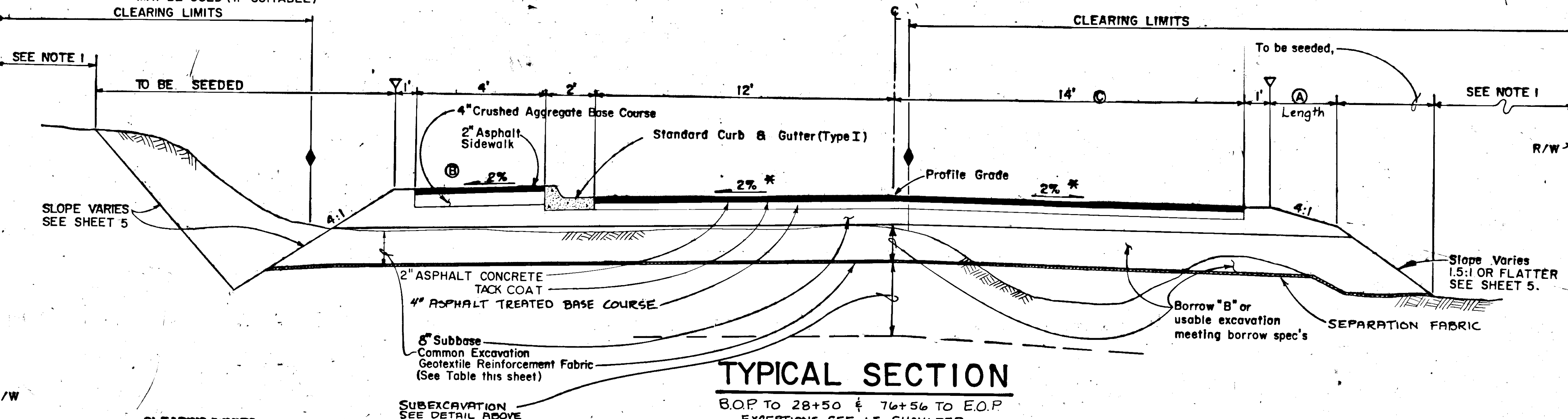
BASIS OF ESTIMATE		
ITEM	ITEM NO	FACTOR
CRUSHED AGG	301 (1)	1.98 TONS / CU. YD.
SUBBASE	304 (1)	1.9 TONS / CU. YD.
ASPH. CONCRETE	401 (1)	116 LBS. / SQ. YD. / IN. DEPTH
ASPH. CEMENT	401 (2)	6% OF 401 (1)
PRIME COAT	403 (1)	0.25 GAL. / SQ. YD. 241 GAL. / TON
ASPHALT CEMENT	304 (2)	2.5% OF 304 (1)
BORROW	203 (6)	1.8 TONS / CU. YD.
TACK COAT	402 (1)	0.26 GAL. / SY-253 GAL. / TON

GENERAL NOTES

- CLEARING AND/OR GRUBBING LIMITS SHALL EXTEND 10' BEYOND CUT SLOPE LIMITS AND 5' BEYOND FILL SLOPE LIMITS, OR TO THE RIGHT-OF-WAY LINE WHICHEVER IS LESS. ADDITIONAL AREAS FOR THE POWER LINE RELOCATION SHALL BE CLEARED, BUT NOT GRUBBED. POWERLINE CLEARING SHALL BE 10' LT. AND 10' RT., OR TO THE RIGHT-OF-WAY, WHICHEVER IS LESS.
- ALL PAVING OF DRIVEWAYS AND INTERSECTING STREETS OR ROADS SHALL BE CONSTRUCTED WITH THE SAME STRUCTURAL SECTION AS SHOWN ON THE TYP. SECTION, EXCEPT CRUSHED AGGREGATE BASE SHALL BE SUBSTITUTED FOR ASPHALT TREATED BASE.
- ALL SPECIAL DITCHES SHALL UTILIZE THE SAME BACKSLOPE AND FORESLOPE OF DITCHES LEADING INTO AND OUT OF THE SPECIAL DITCH.
- ON HUNA TOTEM LAND, ALL TIMBER OVER 6" IN DIAMETER SHALL BE CUT INTO 20' LOG LENGTHS TO BE STACKED AT A SITE TO BE DESIGNATED BY HUNA TOTEM.

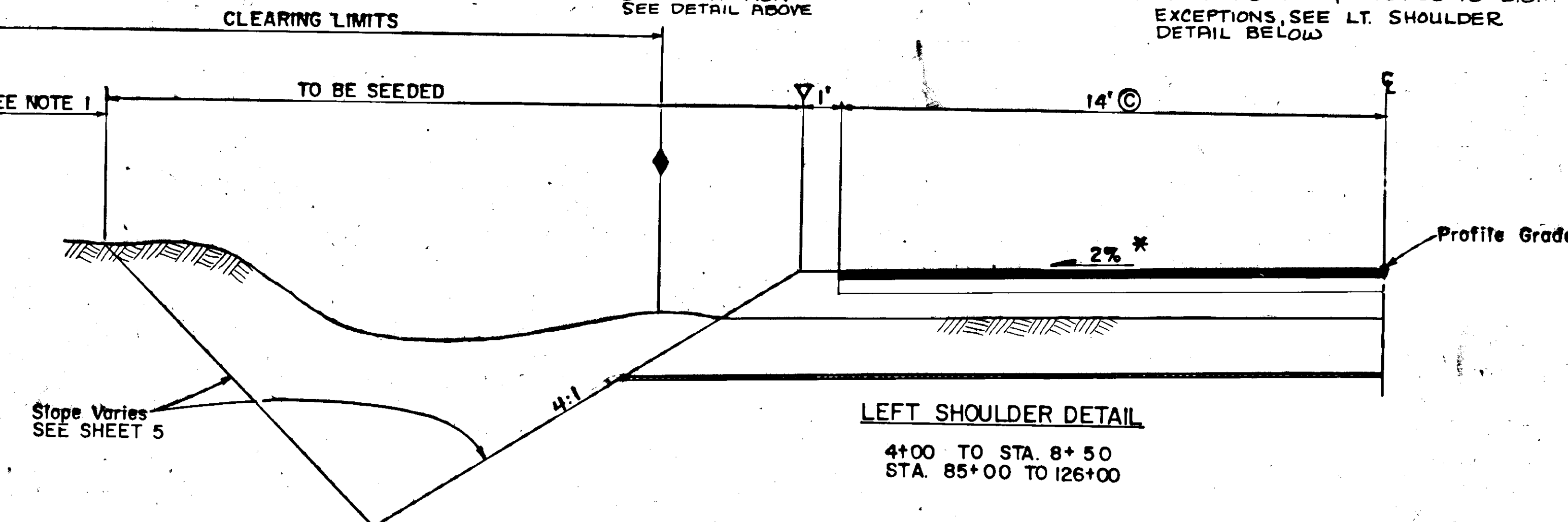
⑤ SUBEXCAVATION DETAIL

STA. 108+50 TO STA. 114+00
 *** EXCEPT STA. 108+50 TO 110+00. EXISTING ROADBED MAY BE USED (IF SUITABLE)
 CLEARING LIMITS



TYPICAL SECTION

B.O.P. TO 28+50 & 76+56 TO E.O.P.
 EXCEPTIONS, SEE LT. SHOULDER DETAIL BELOW



LEFT SHOULDER DETAIL

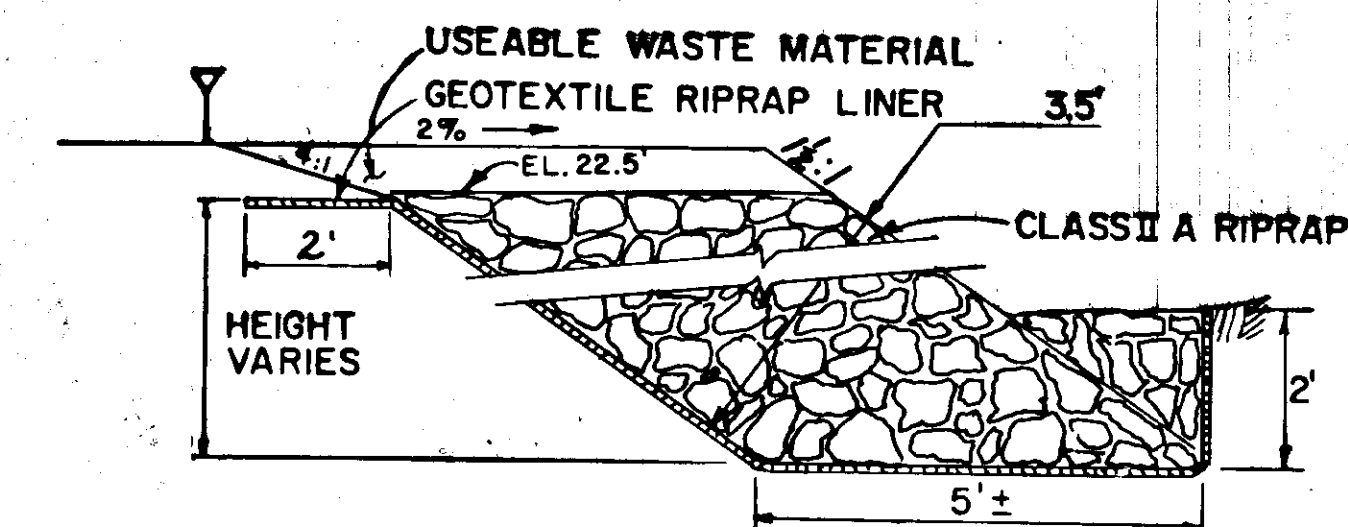
4+00 TO STA. 8+50
 STA. 85+00 TO 126+00

- ① A LENGTH OF 247' SHALL BE USED FOR FILL SECTIONS EXCEPT IN THE FOLLOWING LOCATIONS.

STATION TO STATION	LT OR RT	LENGTH
77+25 TO 82+00	RT	6.67'
109+25 TO 110+88	LT. & RT.	6.67'
119+00 TO 119+60	LT. & RT.	6.67'
89+00 TO 128+60	LT. & RT.	12'

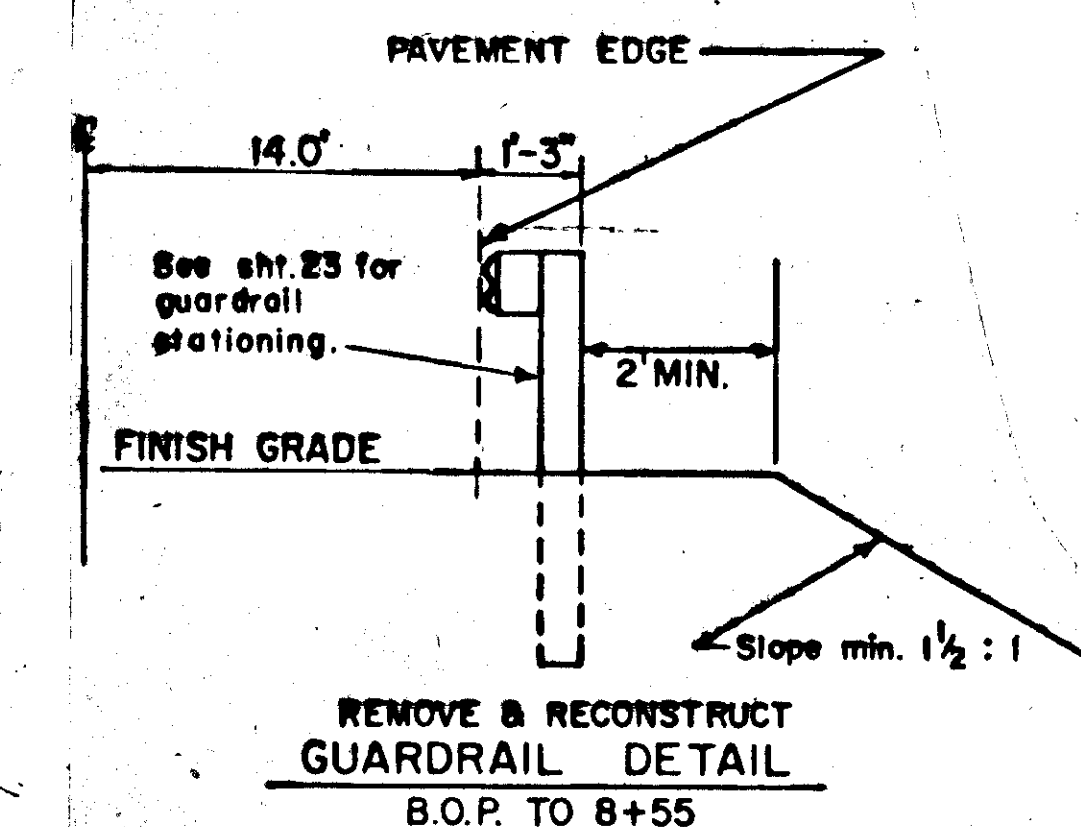
- ② SLOPE TOWARD THE ROAD AT 2% BETWEEN STA. 24+00 TO 28+50.

- ③ TRANSITION FROM 24' SECTION AT B.O.P. TO 28' SECTION AT 4+00 AND TRANSITION FROM 28' SECTION AT 126+90 TO 24' SECTION AT E.O.P.



RIPRAP DETAIL OUTSIDE ROAD SHOULDER

CLASS II A - RT. SIDE 4+80 TO 8+60
 RT. SIDE 10+50 TO 12+75
 RT. SIDE 13+50 TO 15+80
 RT. SIDE 20+05 TO 22+75
 RT. SIDE 22+75 TO 28+25

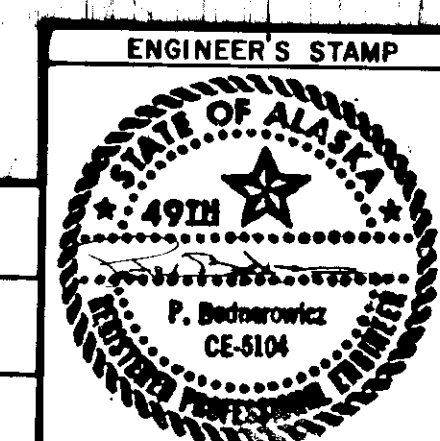


- * SHEET 24 FOR CROSS SLOPES FOR ROADWAY.
 ▽ HINGE POINT.
 ◆ HINGE POINT OF OLD ROADWAY.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
 TYPICAL SECTIONS
 PROJECT NO. RS-0918 (4) 69305

APPROVED BY:	DESIGNED BY:	SCALE:
RECOMMENDED BY:	M.B.	
PREPARED BY:	DRAWN BY:	DATE:
PROJECT MANAGER	B.A.	
LEAD DESIGNER	CHECKED BY:	SHEET 4 OF 65
	P.B.	



SLOPE TABLE						
LEFT			STATION TO STATION	RIGHT		
CUT		FILL		FILL	CUT	
BACKSLOPE	FORESLOPE				FORESLOPE	BACKSLOPE
MATCH EXISTING			2+85	MATCH EXISTING		
		4:1	2+85 to 4+80	4:1		
④			4+80 to 8+50	4:1 RIPRAP		
		4:1	8+50 to 10+07	MATCH FERRY PLANS		
2:1	4:1 DITCH TO DRAIN		10+07 to 10+50	MATCH FERRY PLANS		
2:1	4:1 DITCH TO DRAIN		10+50 to 11+47	4:1 RIPRAP		
		4:1	11+47 to 12+75	4:1 RIPRAP		
		4:1	12+75 to 13+25	4:1		
TRANSITION			13+25 to 13+75	4:1 RIPRAP		
1/4:1	1.5:1		13+75 to 15+80	4:1 RIPRAP		
1/4:1	1.5:1		15+80 to 16+60	4:1		
		2:1	16+60 to 17+60	4:1		
		2:1	17+60 to 18+00		4:1	2:1
		2:1	18+00 to 19+05	MATCH CITY DOCK		
1/4:1	1.5:1		19+05 to 20+05	4:1 RIPRAP		
①			20+05 to 21+50	4:1 RIPRAP		
TRANSITION			21+50 to 22+00	4:1 RIPRAP		
2:1	3' DEEP		22+00 to 24+00	4:1 RIPRAP		
③			24+00 to 27+50	4:1 RIPRAP		
1/4:1	2' DEEP		27+00 to 28+50	4:1 RIPRAP		
MATCH EXISTING			28+50	MATCH EXISTING		
MATCH EXISTING			76+56	MATCH EXISTING		
2:1	2:1 3' DEEP		76+56 to 79+45	2:1 *		
2:1	2:1 DITCH TO DRAIN		79+45 to 79+85	2:1 *		
2:1	2:1 3' DEEP		79+85 to 82+20	2:1 *		
2:1	2:1 DITCH TO DRAIN		82+20 to 82+60		DITCH TO DRAIN	
2:1	2:1 3' DEEP		82+60 to 83+20		3' DEEP	2:1
2:1	2:1 3' DEEP		83+20 to 85+00	4:1		
2:1	4:1 3' DEEP		85+00 to 85+25	4:1		
2:1		1.5:1*	85+25 to 87+00	1.5:1*		
1.5:1	4:1 3' DEEP		87+00 to 87+75	4:1		
1.5:1	4:1 3' DEEP		87+75 to 89+00		3' DEEP	1.5:1

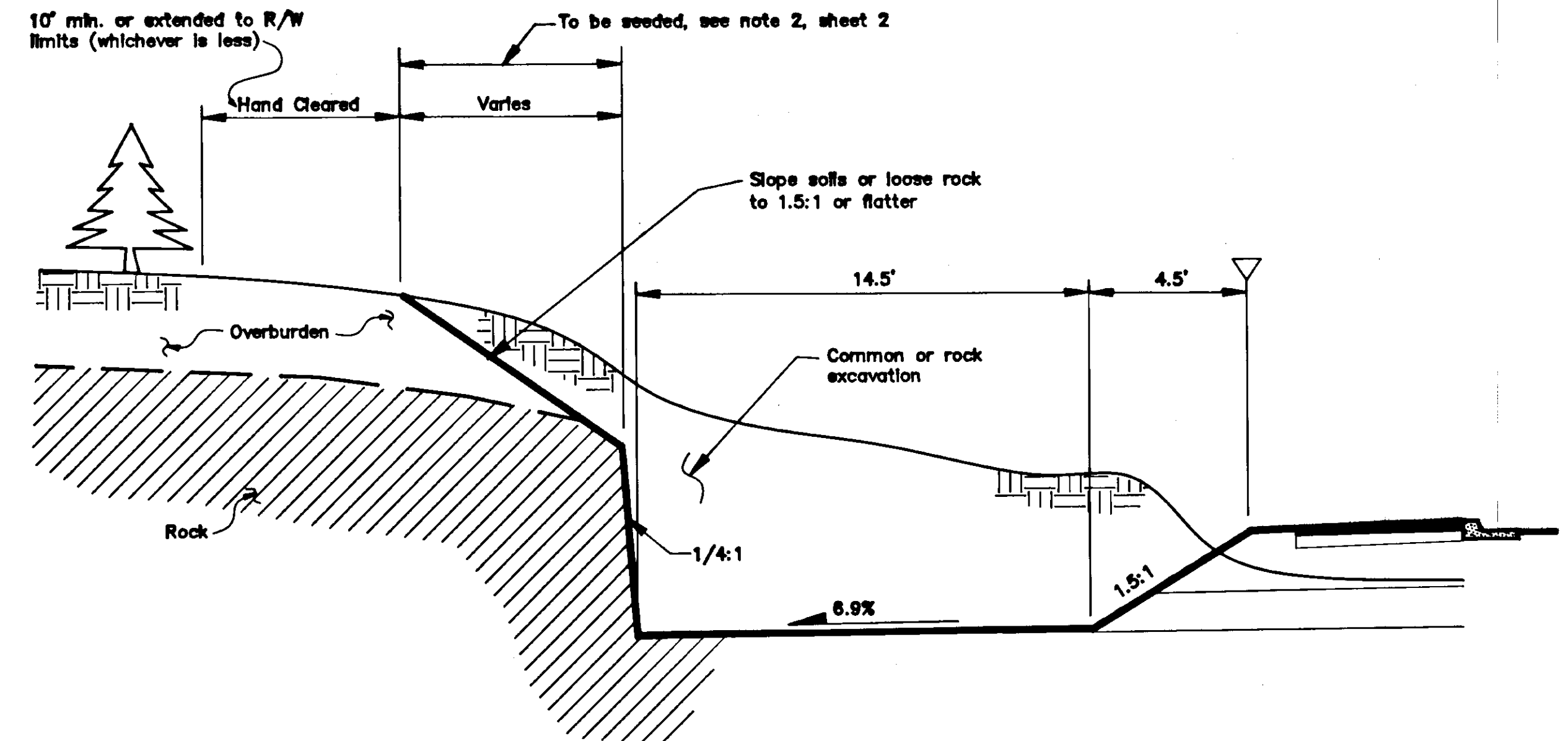
* See (A) on Sheet 2

SLOPE TABLE						
LEFT			STATION TO STATION	RIGHT		
CUT		FILL		FILL	CUT	
BACKSLOPE	FORESLOPE				FORESLOPE	BACKSLOPE
1.5:1	4:1 3' DEEP		89+00 to 92+19	2:1*		
2:1	DITCH TO DRAIN		92+19 to 93+29	2:1*		
TRANSITION			93+29 to 93+79	TRANSITION		
②			93+79 to 97+25	See Detail, Sht. 48		
②			97+25 to 98+20		②	
TRANSITION			98+20 to 98+70	TRANSITION		
1.5:1	4:1 3' DEEP		98+70 to 99+70	DITCH TO DRAIN		2:1
1.5:1	4:1 3' DEEP		99+70 to 100+85	DITCH TO DRAIN		2:1
2:1	DITCH TO DRAIN		100+85 to 101+25	2:1*		
1.5:1	4:1 3' DEEP		101+25 to 102+60	3' DEEP		1.5:1
2:1	DITCH TO DRAIN		102+60 to 103+00	DITCH TO DRAIN		2:1
1.5:1	4:1 3' DEEP		103+00 to 106+85		3' DEEP	1.5:1
2:1	DITCH TO DRAIN		106+85 to 107+09	2:1*		
1.5:1	4:1 3' DEEP		107+09 to 108+50	2:1*		
1.5:1⑤	4:1 3' DEEP		108+50 to 109+25	⑤ 2:1*		
		⑤ 1.5:1*	109+25 to 112+88	⑤ 1.5:1*		
2:1 ⑤	DITCH TO DRAIN		112+88 to 113+13	⑤ 2:1*		
		⑤ 2:1*	113+13 to 114+00	⑤ 2:1*		
			114+00 to 115+50	2:1*		
2:1	4:1 DITCH TO DRAIN		115+50 to 116+50	2:1*		
		2:1*	116+50 to 118+75	2:1*		
		1.5:1*	118+75 to 119+50	1.5:1*		
2:1	4:1 3' DEEP		119+50 to 123+26	2:1*		
2:1	DITCH TO DRAIN		123+26 to 123+66	2:1*		
2:1	4:1 3' DEEP		123+66 to 125+93	2:1*		
2:1	4:1 DITCH TO DRAIN		125+93 to 126+53	1.5:1*		
2:1	4:1 3' DEEP		126+53 to 127+00	2:1*		
		2:1*	127+00 to 128+60	2:1*		
MATCH EXISTING			128+60	MATCH EXISTING		

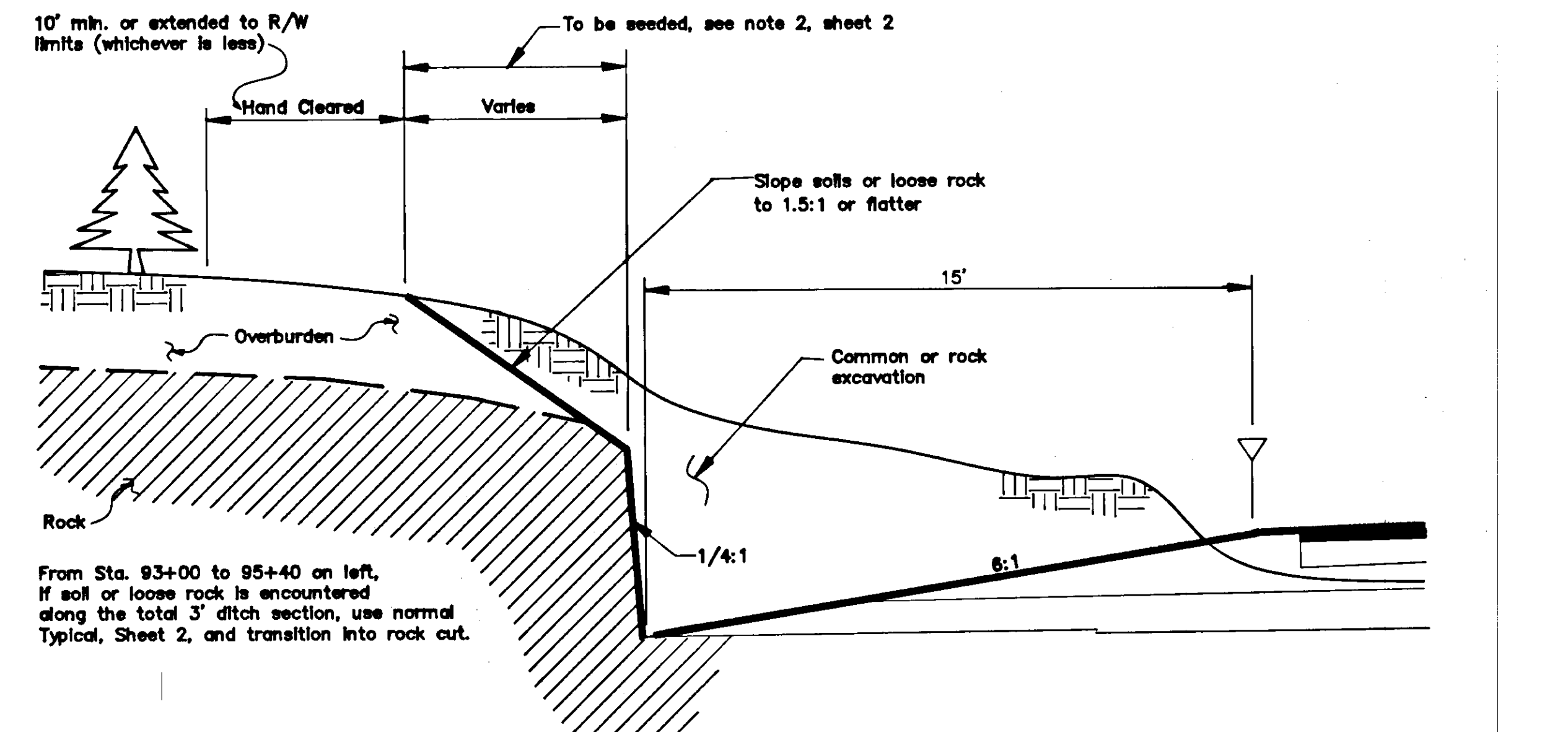
5 SEE SHEET 4, SUBEXCAVATION DETAIL.

NOTES:

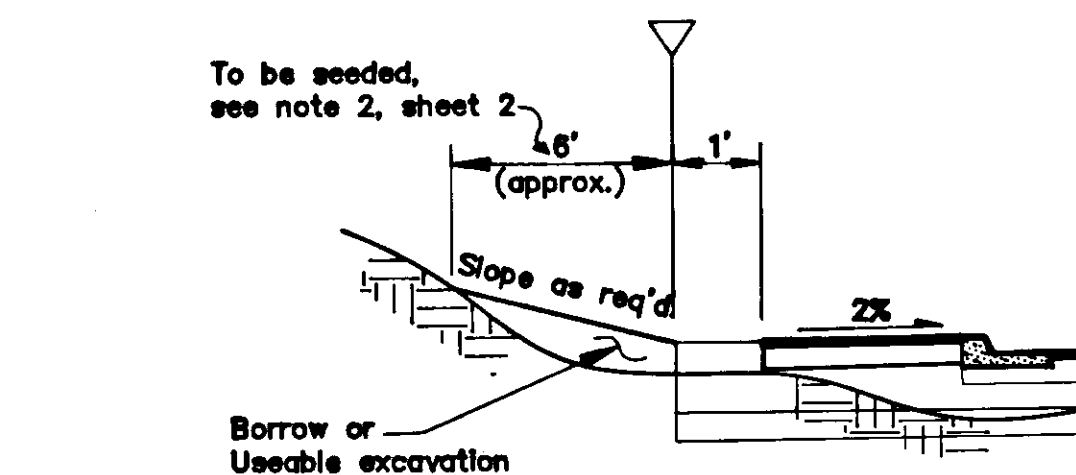
- Minimum transition length is 50' from one detail to the next prior to each start station.
- All driveway slopes are not shown on schedule. See sheet 24 for typical approach profile.



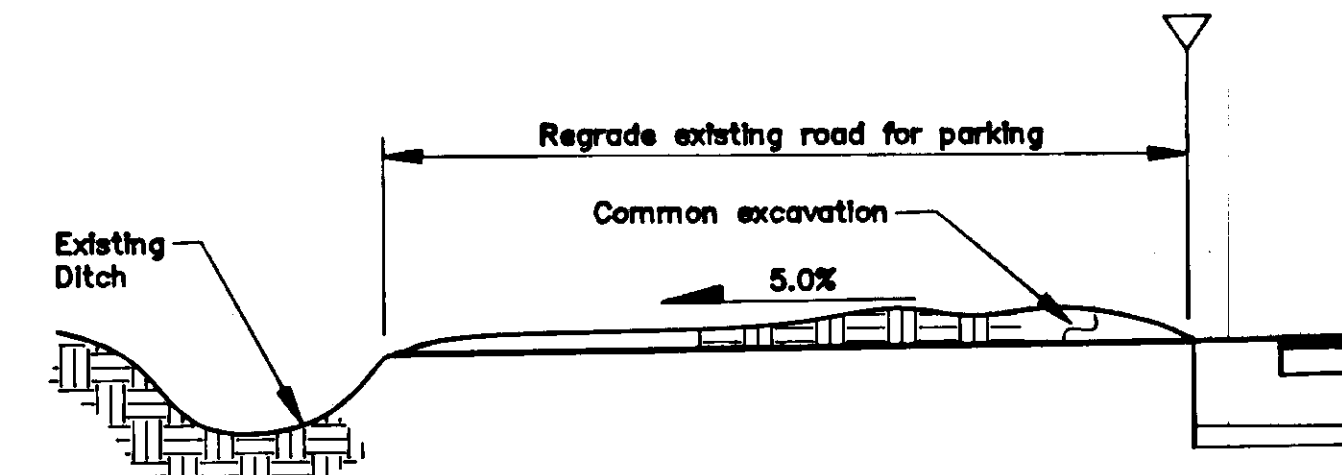
1 ROCK EXCAVATION DETAIL



2 ROCK EXCAVATION DETAIL



3 Hinge Point DETAIL



4 DETAIL

DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH

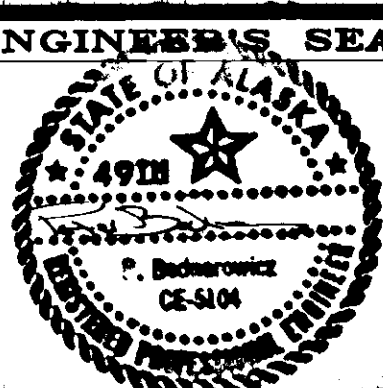
HOONAH ARTERIAL STAGE II

SLOPE SCHEDULE
PROJECT NO. RS-0918(4) 69305

ALASKA

DESIGNED BY: M.B.
DRAWN BY: AUTOCAD/R.K.S.
CHECKED BY: P.B.

SCALE NONE
DATE: 1/90
SHEET 5 OF 65



ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
109(1)	Petroleum Adjustment	C.S.	All Req'd
120 (1)	DBE Adjustments	C.S.	All Req'd
201 (1B)	Clearing Estimated 4 acres + 1 acre of heavy deadfall Estimated .1 acres hand clearing	L.S.	All Req'd
202 (1)	Removal of Structures and Obstructions	L.S.	All Req'd
202 (4)	Removal of Culvert Pipe	L.F.	1,140
202 (12)	Removal of Corduroy	S.Y.	45,000
203 (1)	Common Excavation	C.Y.	51,200
203 (2)	Rock Excavation	C.Y.	24,000
203 (6)	Borrow "B"	Ton	15,900
203 (6B)	Borrow "D"	Ton	9,900
203 (9)	Obliterate Roadway	L.S.	All Req'd
203 (10)	Controlled Blasting	L.F.	4,000
301 (1)	Crushed Aggregate Base Course	Ton	1,300
304 (1)	Subbase, Grading "E"	Ton	17,400
306 (1)	Asphalt Treated Base Course	Ton	5,700
306 (2)	Asphalt Material, Type AC-5	Ton	143
401 (1)	Asphalt Concrete, Type 1 SE	Ton	3,550
401 (2)	AC-5 Asphalt Cement	Ton	213
402 (1)	CSS-1 Asphalt for Tack Coat	Ton	22
506 (5)	Stairway Adjustment	L.S.	All Req'd
506 (6)	Residence Relocation	L.S.	All Req'd
602 (1)	Structural Plate Pipe Dia. 9'-6"x6'-5" G.A. 12	L.F.	90
603 (9-18)	18" Corrugated Aluminum Pipe	L.F.	402
603 (9-24)	24" Corrugated Aluminum Pipe	L.F.	960
603 (9-36)	36" Corrugated Aluminum Pipe	L.F.	64
603 (9-60)	60" Corrugated Aluminum Pipe	L.F.	230
604 (2)	Sanitary Sewer Manhole	Each	3
604 (3)	Reconstruct Existing Manhole	Each	5
604 (4)	Adjust Existing Manhole	Each	4
604 (5A)	Inlet, Type "A"	Each	5

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
606 (4)	Removal and Reconstruction of Guardrail	L.F.	579
606 (5)	Removal and Disposal of Guardrail	L.F.	61
607 (3)	Chain Link Fence	L.F.	115
608 (3)	Asphalt Sidewalk	S.Y.	1,200
608 (3A)	Asphalt Sidewalk/Driveway	S.Y.	79
609 (2)	Curb and Gutter, Type I	L.F.	2,914
611 (1A)	Riprap, Class II A	C.Y.	5,550
611 (1B)	Riprap, Class I	C.Y.	290
613 (1)	Right of Way Monuments	Each	24
614 (1)	Survey Monuments	Each	12
614 (2)	Monument Cases	Each	12
615 (1)	Standard Sign	S.F.	214
615 (7)	Salvage Signs	Each	7
618 (3)	Water for Seeding	M. Gal.	10
618 (5)	Seeding	M.S.F.	212
626 (1)	Sanitary Sewer Conduit	L.F.	396
627 (1-4)	4 Inch Ductile Iron Water Conduit	L.F.	1,414
627 (1-8)	8 Inch Ductile Iron Water Conduit	L.F.	371
627 (1-10)	10 Inch Ductile Iron Water Conduit	L.F.	1,763
627 (4)	Fire Hydrant Adjustment	Each	4
627 (6)	Fire Hydrant Relocation	Each	1
627 (8)	Water Service Connection	Each	19
627 (9-4)	Install 4" Gate Valve	Each	1
627 (9-6)	Install 6" Gate Valve	Each	1
627 (9-8)	Install 8" Gate Valve	Each	2
627 (10)	Adjustment of Valve Box	Each	31
627 (11)	Air Release Valve	Each	1
630 (1)	Geotextile Separation	S.Y.	26,400
631 (2)	Geotextile Riprap Liner	S.Y.	7,890

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
635 (1)	Insulation Board	MBM	.82
639 (1)	Residence Driveways	Each	29
640 (1)	Mobilization and Demobilization	L.S.	All Req'd
641 (1)	Temporary Erosion and Pollution Control	C.S.	All Req'd
642 (1)	Construction Surveying	L.S.	All Req'd
642 (2)	Three Person Survey Party	Hr.	10
643 (2)	Traffic Maintenance	L.S.	All Req'd
643(3)	Permanent Construction Signing	Ea. Pr. Day	3,000
643 (4)	Construction Sign	Ea. Pr. Day	2,000
643 (5)	Type II Barricade	Ea. Pr. Day	2,500
643 (6)	Type III Barricade	Ea. Pr. Day	1,000
643 (7)	Traffic Cone	Ea. Pr. Day	8,000
643 (15)	Flagging		3,000
643 (18)	Watering	M. Gal.	70
645 (1)	Training Program	M. Hr.	1,000
670 (6)	Preformed Traffic Markings	L.S.	All Req'd
670 (8)	Recessed Pavement Markers	Each	83
681 (1)	Electrical Power Relocation	L.S.	All Req'd
681 (2)	CATV Relocation	L.S.	All Req'd

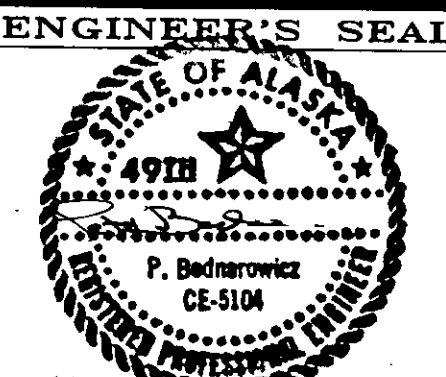
DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
ESTIMATE OF QUANTITIES
PROJECT NO. RS-0918(4) 69305

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: M.B.	SCALE NONE
DRAWN BY: Autocadd/R.S.	DATE:
CHECKED BY: P.B.	SHEET 6 OF 65



BASIS OF BEARINGS:

BASIS OF HORIZONTAL CONTROL:
 BASIS OF BEARINGS: PROJECT BEARINGS ARE BASED UPON A LINE FROM U.S.N.O.S. MONUMENT "FERRY", A 1981 BRASS CAP LOCATED NEAR THE SOUTHEAST END OF THE FERRY TERMINAL ABUTMENT WALL, AND U.S.N.O.S. MONUMENT "RED", A 1981 BRASS CAP LOCATED NEAR THE EASTERN TIP OF PITT ISLAND. THE PROJECT BEARING FROM "FERRY" TO "RED" IS S.23°58'21"E. COORDINATES FOR "FERRY" ARE 50,000.00 N. AND 80,000.00 E. COORDINATES FOR "RED" ARE 46,988.33 N. AND 61,339.145 E.
 BASIS OF VERTICAL CONTROL:
 DATUM: THE LOCAL PROJECT BENCH MARK IS THE U.S.N.O.S. MONUMENT "FERRY" WITH A TOP ELEVATION OF 26.58 FEET ABOVE M.L.L.W.

SEE SHEET 24 FOR COORDINATES OF P.I.'S

CITY OF HOONAH

KEY

E # E # Easement
 # P # P # Permit
 --- Right of Way
 --- Shoulder of Road (Existing)
 --- Edge of Pavement

"0" STA. 5+97 APPROXIMATE END OF CEMETERY LIMITS

CEMETERY

S 31°24'16"E 335.20'

"0" STA. 4+00
END TRANSITION

"0" STA. 2+85.53
BEGIN TRANSITION AND
BEGIN PART I
PROJECT NO. RS-0918 (4) 69305

"0" LINE
 Δ = 22°19'37" RT.
 D = 14°00'00"
 T = 80.76'
 L = 159.48'
 R = 409.26'
 S = .06
 BT = MATCH EXISTING TRANSITION AT 2+85
 BFS = 3+69
 EFS = 4+55
 ET = 5+65

Note: See sheets 31 to 46 for Underground Utilities.

CITY OF HOONAH

STATE OF ALASKA

COMMON EXCAVATION = 740 C.YD.
 EMBANKMENT "B" = 1320 C.YD.

"0" STA. 2+85 BEGIN
PROJECT AND MATCH
EXISTING GRADE
EL. 25.99'

STA. 3+00 VPC
EL. 25.78'

STA. 4+00 VPI
EL. 24.37' 200' VC

STA. 5+00 VPT
EL. 23.87'

STA. 7+00 VPC
EL. 22.90'

MATCH LINE STA. 8+00

PROFILE GRADE

- .50 %

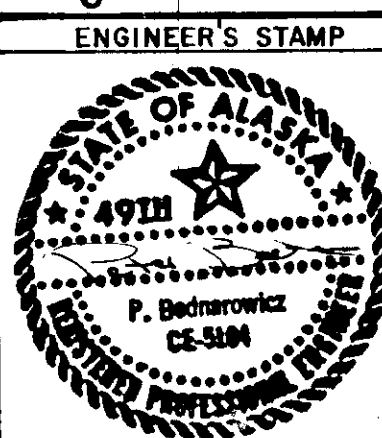
+1.39%

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
 PLAN & PROFILE
 PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____
 DESIGN GROUP CHIEF _____ DATE _____
 RECOMMENDED BY: _____
 DESIGN ENGINEER, GROUP "B" _____ DATE _____
 PREPARED BY: _____
 PROJECT MANAGER _____ LEAD DESIGNER _____

DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 P.B. _____
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 2'
 DATE: _____
 SHEET 7 OF 65



BY: _____ DATE: _____ DESCRIPTION OF CHANGE: _____
 RECORD OF REVISIONS

NOTE: CONTRACTOR SHALL USE CAUTION WHILE WORKING AROUND THE CEMETERY. THE CEMETERY SHALL NOT BE DISTURBED.

CITY OF HOONAH

WARDS COVE PACKING CO.

APPROX. STA. 10+43
WOOD CRIBWALL APPROXIMATE
END BOUNDARY FOR CEMETERY.

CEMETERY

G.L.O.B.C.
C2 54929

0+ STA. 10+42.96 PT

0+ STA. 12+00.04 PC

0+ STA. 13+00.49 PI

0+ STA. 8+27.14 PC

*SEE STANDARD DRAWING I-20.01

0+ 8+90 LT. BEGIN CURB.
GUTTER & SIDEWALK
SLOPE FIRST 6 FEET
FOR HANDICAP ACCESS.
START WITH DEPRESS CURB*
SLOPE UNIFORMLY TO FULL
CURB & SIDEWALK HEIGHT.
MIN. DEPTH 12" FOR SIDEWALK.

HANDICAP ACCESS

W11-2

I-8

I-8

10'x4' Asphalt
Spill Way

11 S. 52° 59' 13" E. -157.08'

EDGE OF EXISTING SHOULDER

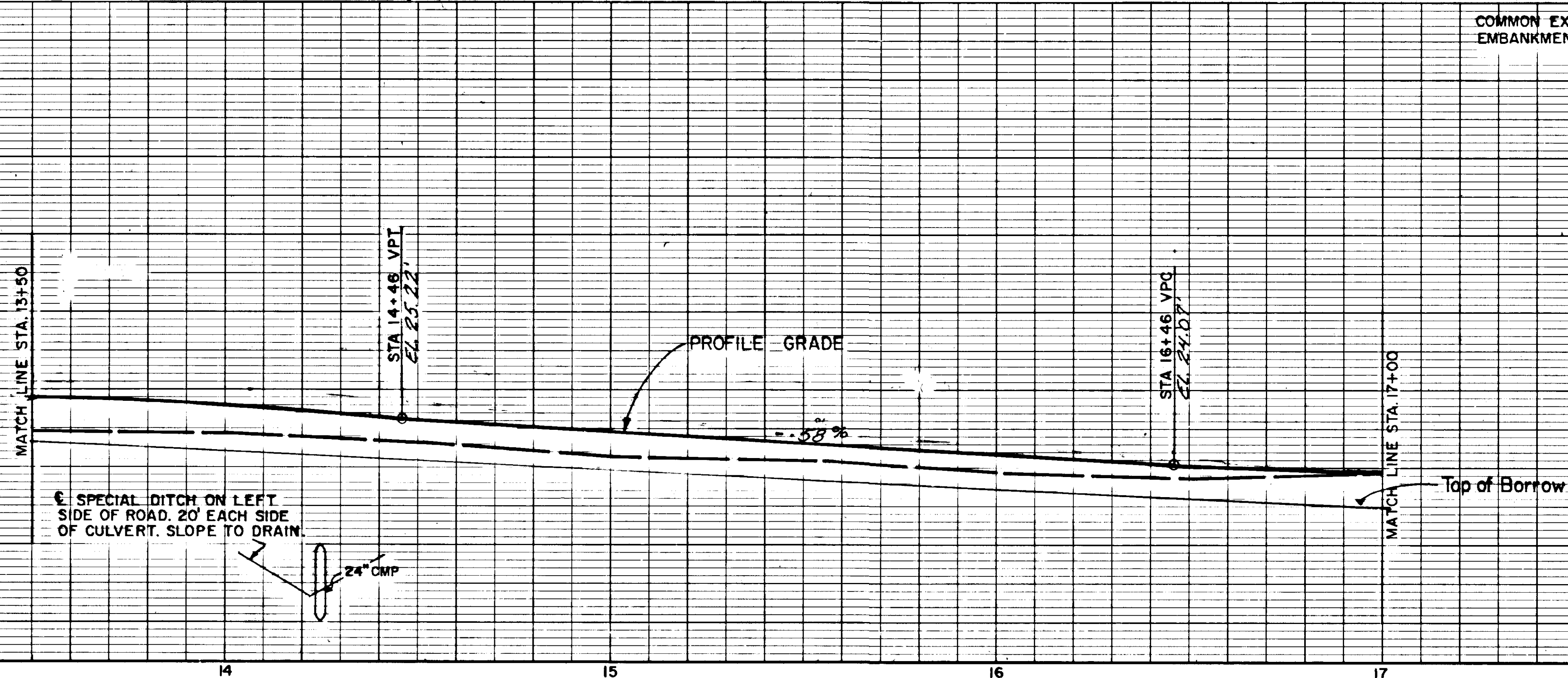
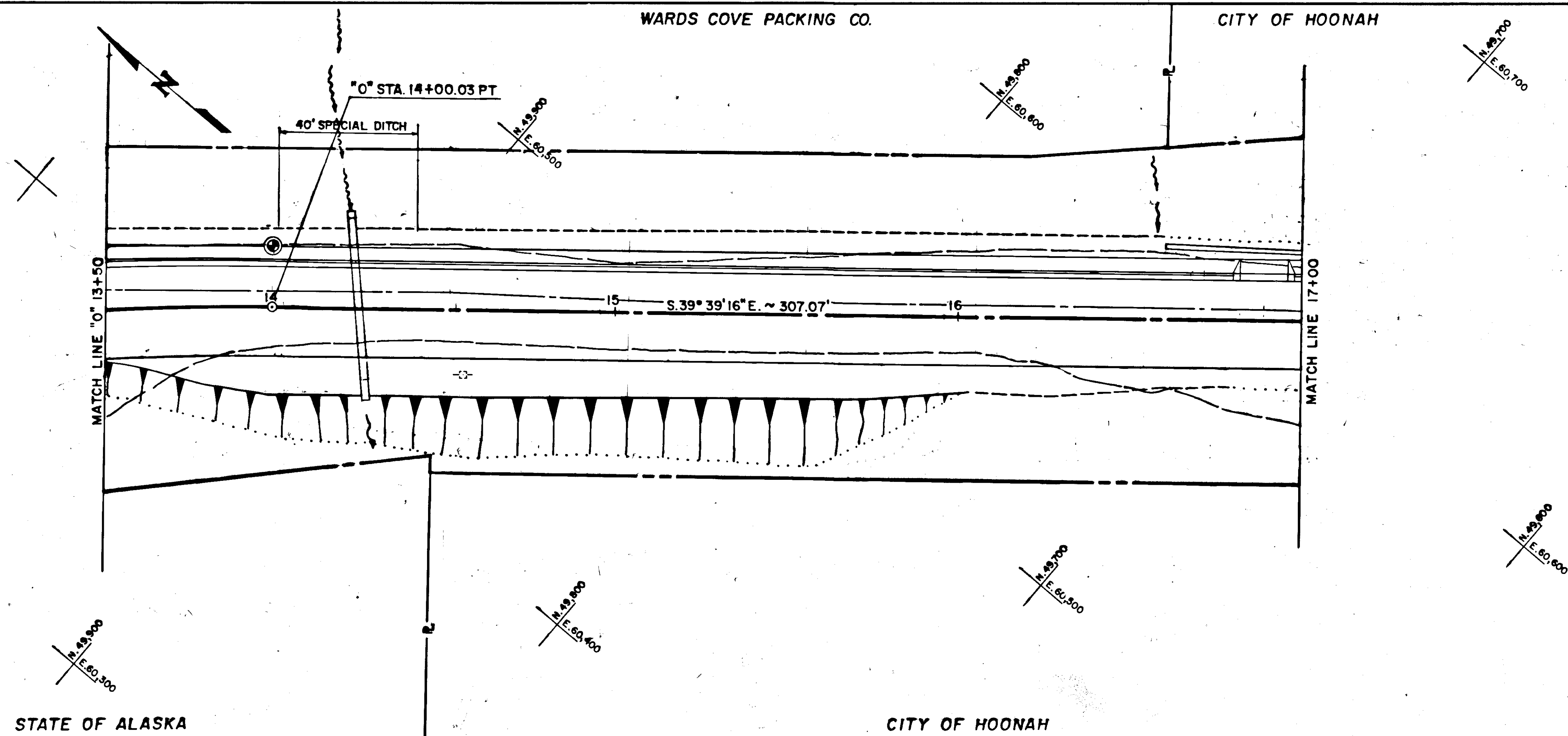
0+ STA. 9+36.34 PI

0+ LINE

$\Delta = 21^{\circ}34'57''$ LT.
D = 10°00'00"
T = 109.21'
L = 215.82'
R = 572.96'
S = 0.05
BT = 7+43
BFS = 8+69
EFS = 10+06
ET = 11+14

SEE NOTES 6

OIL FILL
PIPE

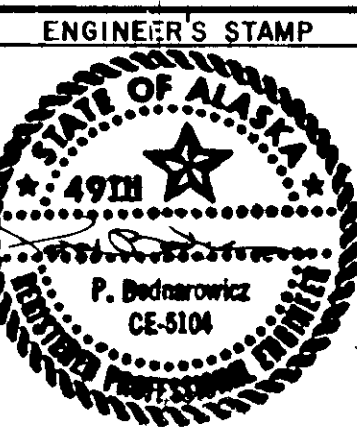


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

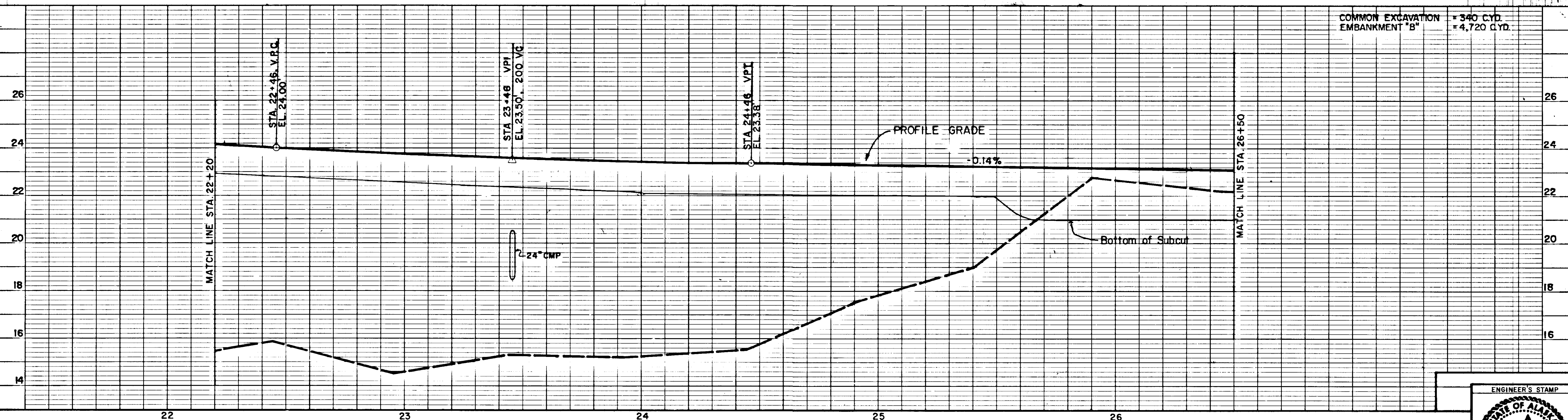
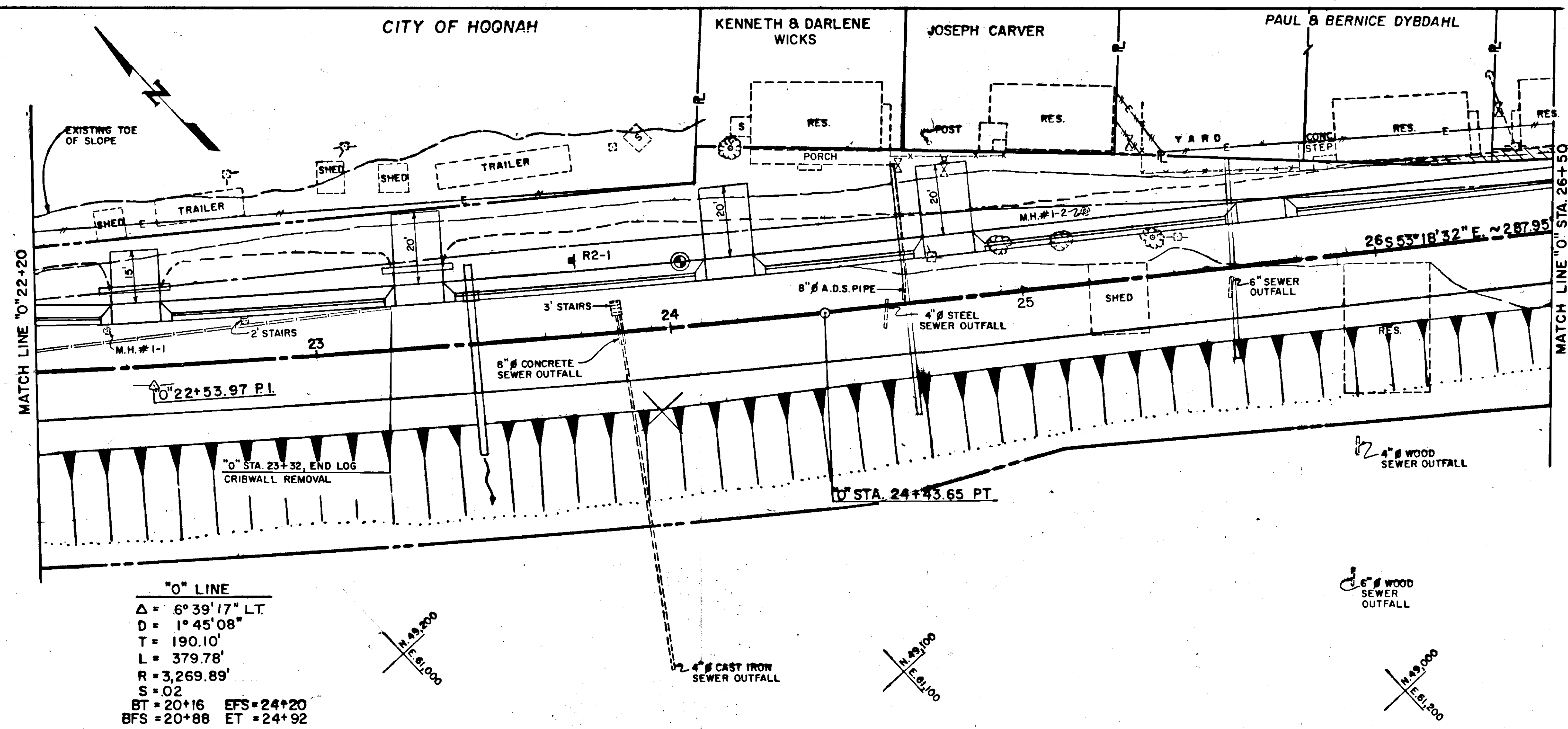
HOONAH ARTERIAL-STAGE II
PLAN & PROFILE
PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN GROUP CHIEF DATE
DESIGNED BY: _____
DRAWN BY: _____
DESIGN ENGINEER, GROUP "B" DATE
PREPARED BY: _____
PROJECT MANAGER LEAD DESIGNER

DESIGNED BY: D.R.
DRAWN BY: _____
CHECKED BY: P.B.
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 9 OF 65



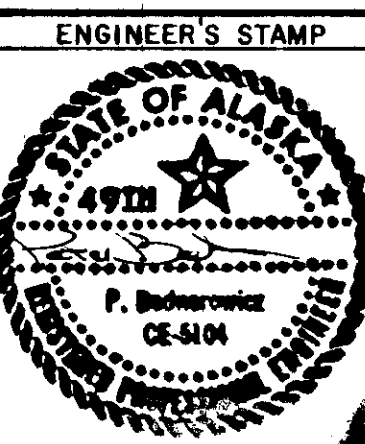
Y	DATE	DESCRIPTION OF CHANGE

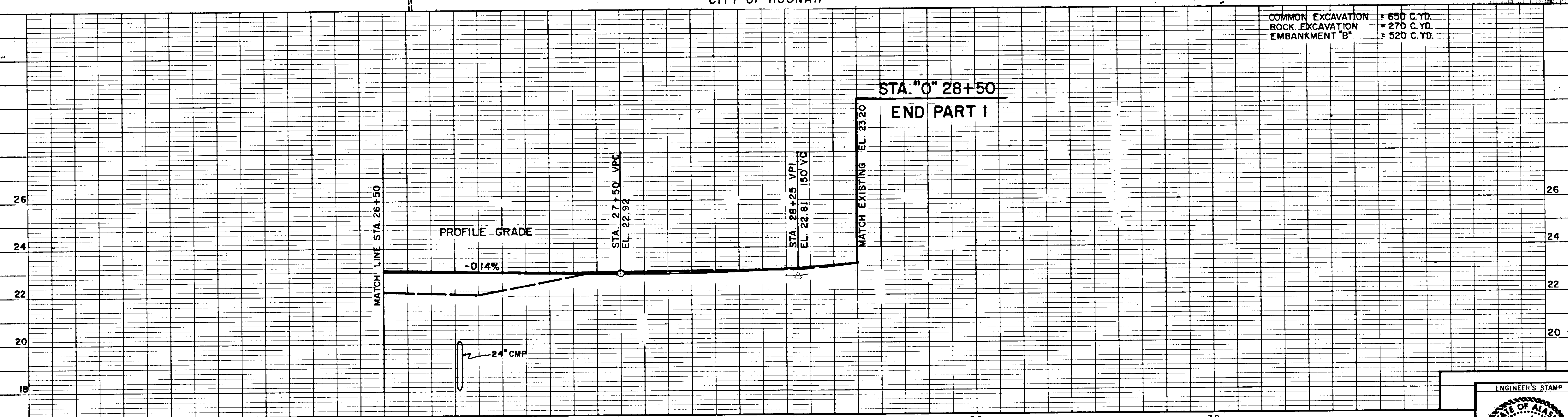
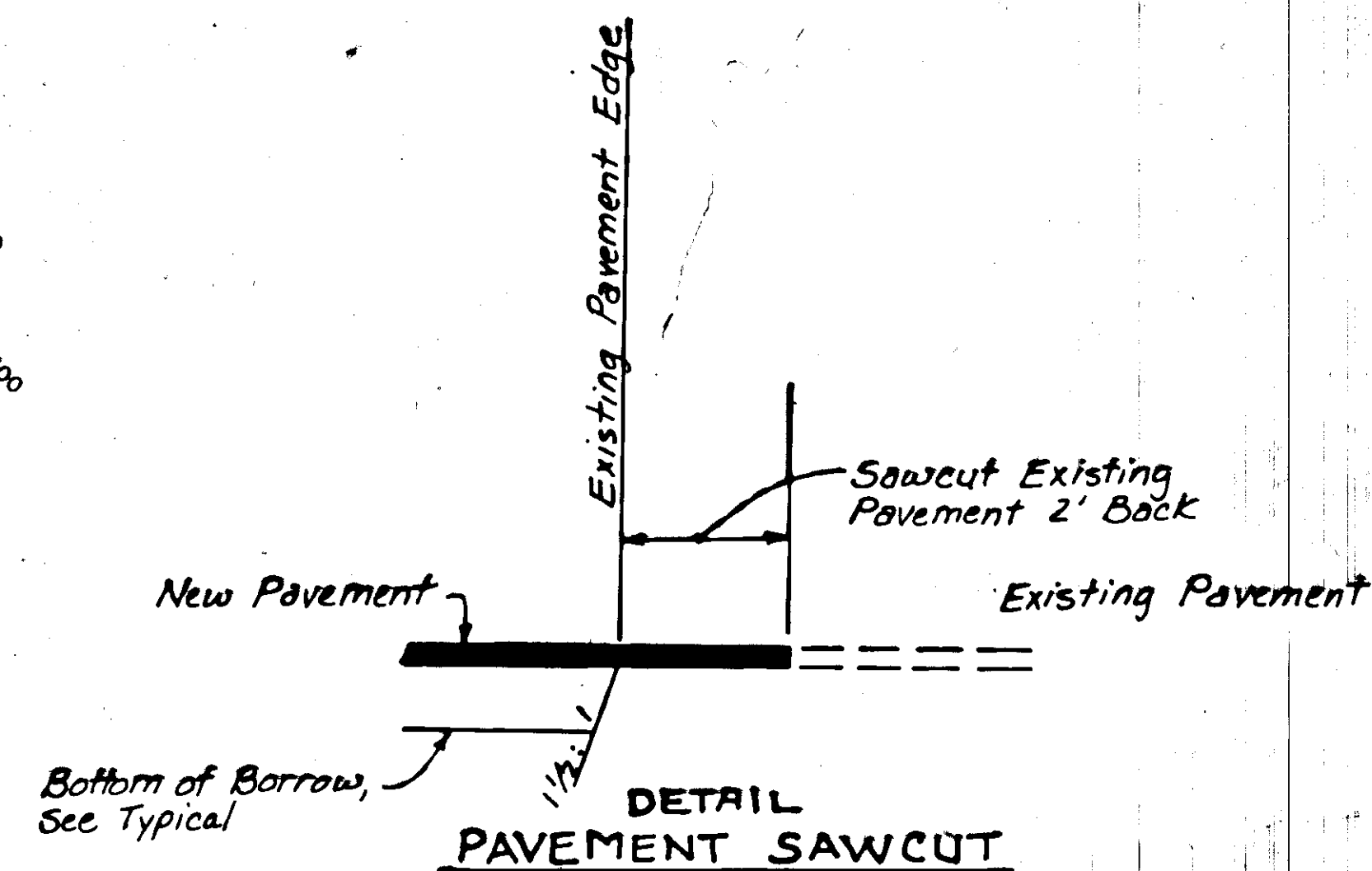
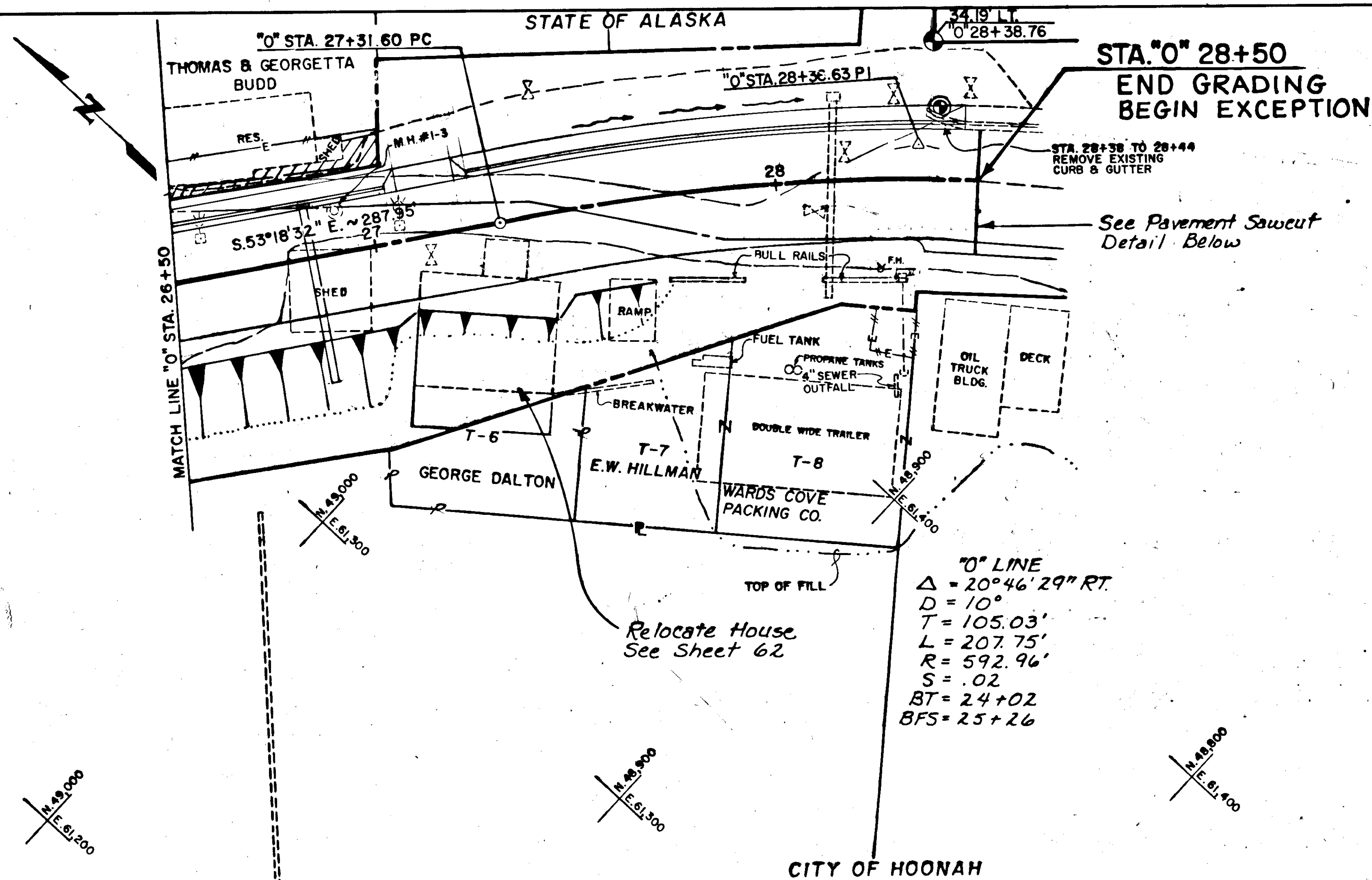


STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION		
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

HOONAH ARTERIAL-STAGE II
PLAN & PROFILE
 PROJECT NO. RS-0918 (4) 69305

APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1"=20'
RECOMMENDED BY:	DRAWN BY:	VERT. SCALE: 1"=2'
PREPARED BY:	CHECKED BY:	DATE:
PROJECT MANAGER	LEAD DESIGNER	SHEET 11 OF 65



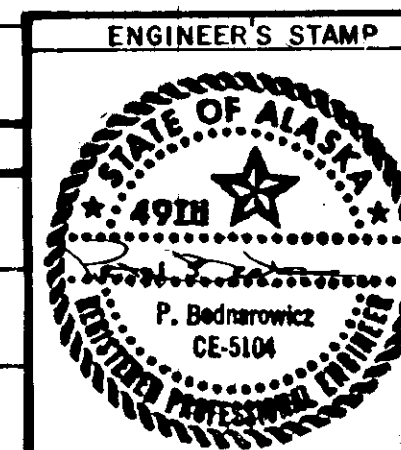


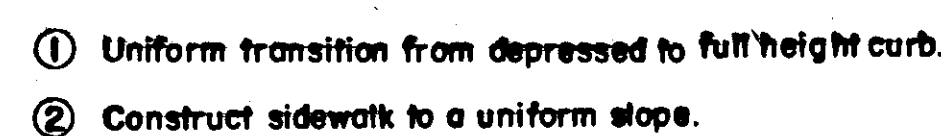
COMMON EXCAVATION = 650 C. YD.
 ROCK EXCAVATION = 270 C. YD.
 EMBANKMENT "B" = 520 C. YD.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION		
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

HOONAH ARTERIAL-STAGE II PLAN & PROFILE PROJECT NO. RS-0918(4) 69305

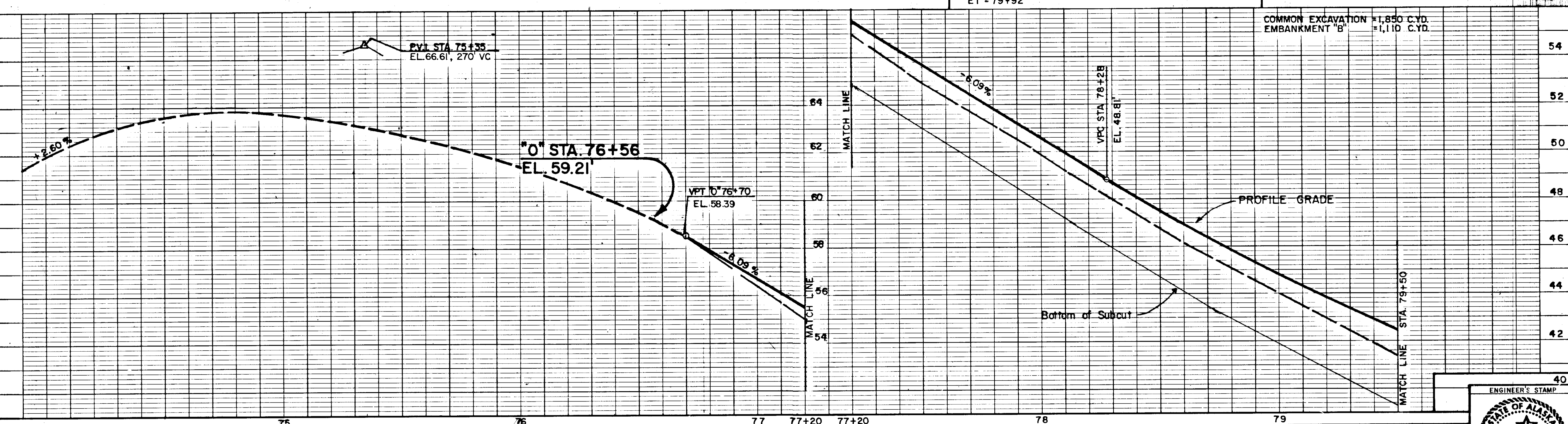
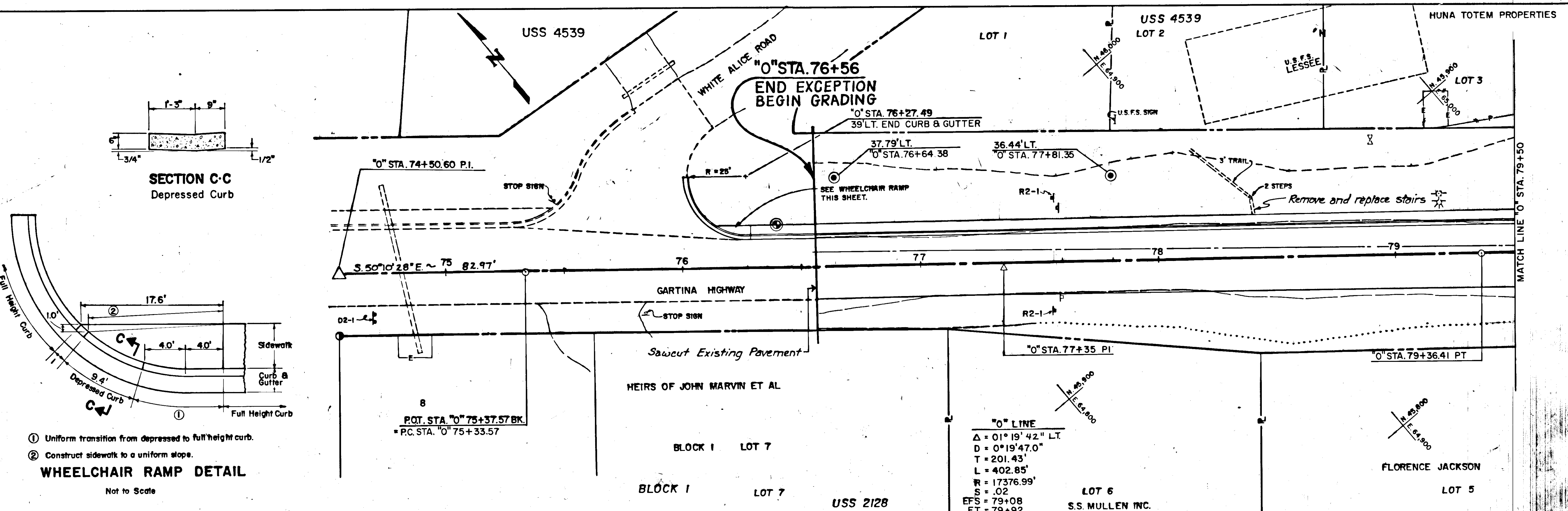
APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1" = 20'
RECOMMENDED BY:	D.R.	VERT. SCALE: 1" = 2'
DESIGN GROUP CHIEF	DATE	
DESIGN ENGINEER, GROUP "B"	DATE	
PREPARED BY:	DRAWN BY:	CHECKED BY:
PROJECT MANAGER	W. D. A.	P. B.
LEAD DESIGNER		
		SHEET 12 OF 65





WHEELCHAIR RAMP DETAIL

Not to Scale



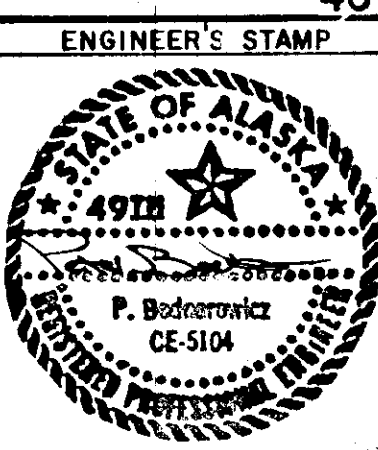
			STATE OF ALASKA	
			DEPARTMENT OF TRANSPORTATION	
			& PUBLIC FACILITIES	
			SOUTHEAST REGION DESIGN & CONSTRUCTION	
BY	DATE	DESCRIPTION OF CHANGE		
RECORD OF REVISIONS				

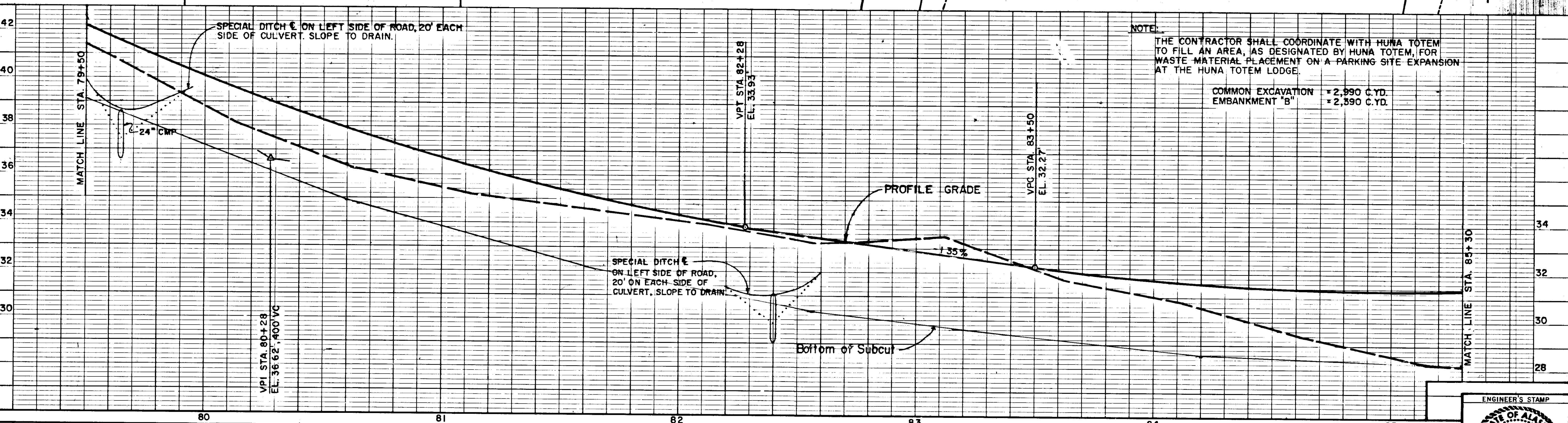
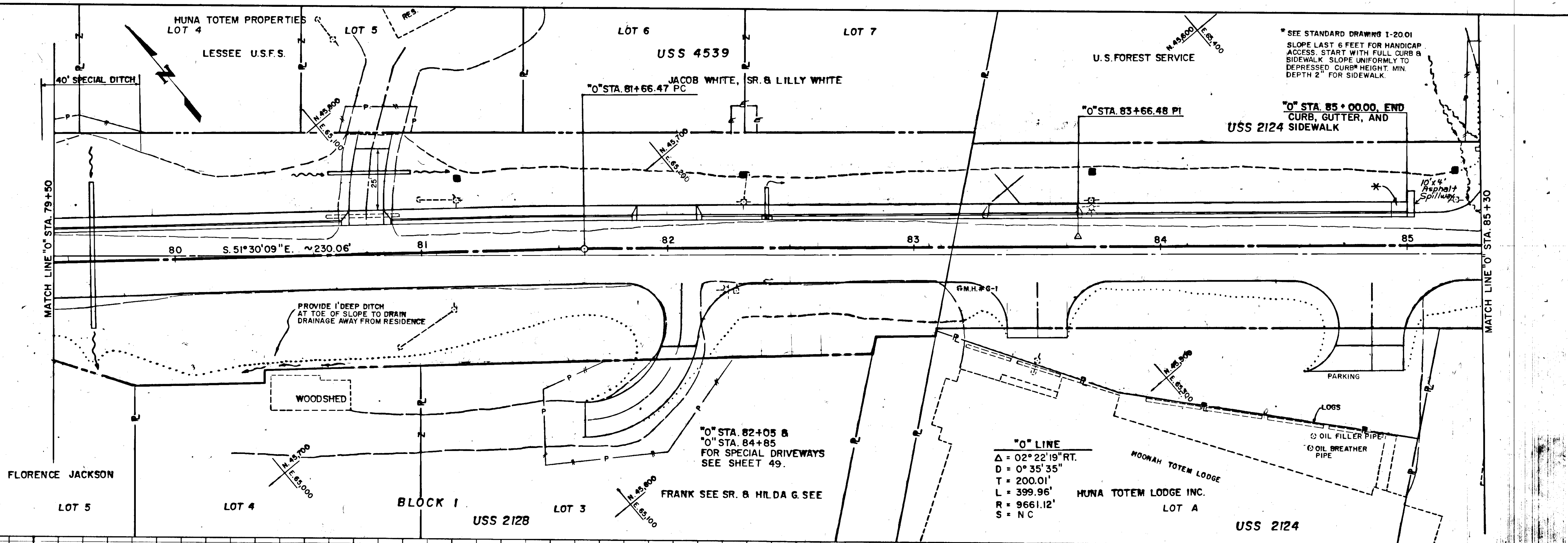
HOONAH ARTERIAL-STAGE II

PLAN & PROFILE

PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____ DESIGN GROUP CHIEF _____ DATE	DESIGNED BY: D.R.	HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 2'
RECOMMENDED BY: _____ DESIGN ENGINEER, GROUP "B" _____ DATE	DRAWN BY: W.D.A.	DATE:
PREPARED BY: _____ PROJECT MANAGER _____ LEAD DESIGNER	CHECKED BY: F.B.	SHEET 13 OF 65





NOTE:
THE CONTRACTOR SHALL COORDINATE WITH HUNA TOTEM TO FILL AN AREA, AS DESIGNATED BY HUNA TOTEM, FOR WASTE MATERIAL PLACEMENT ON A PARKING SITE EXPANSION AT THE HUNA TOTEM LODGE.

COMMON EXCAVATION = 2,990 C.YD.
EMBANKMENT "B" = 2,390 C.YD.

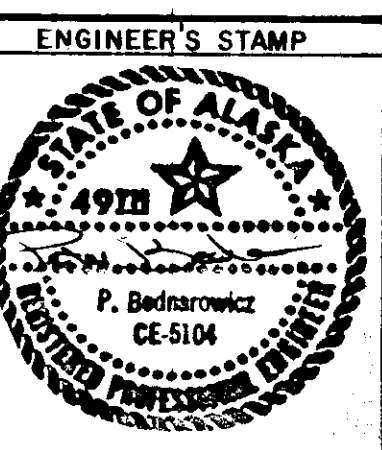
DATE	DESCRIPTION OF CHANGE

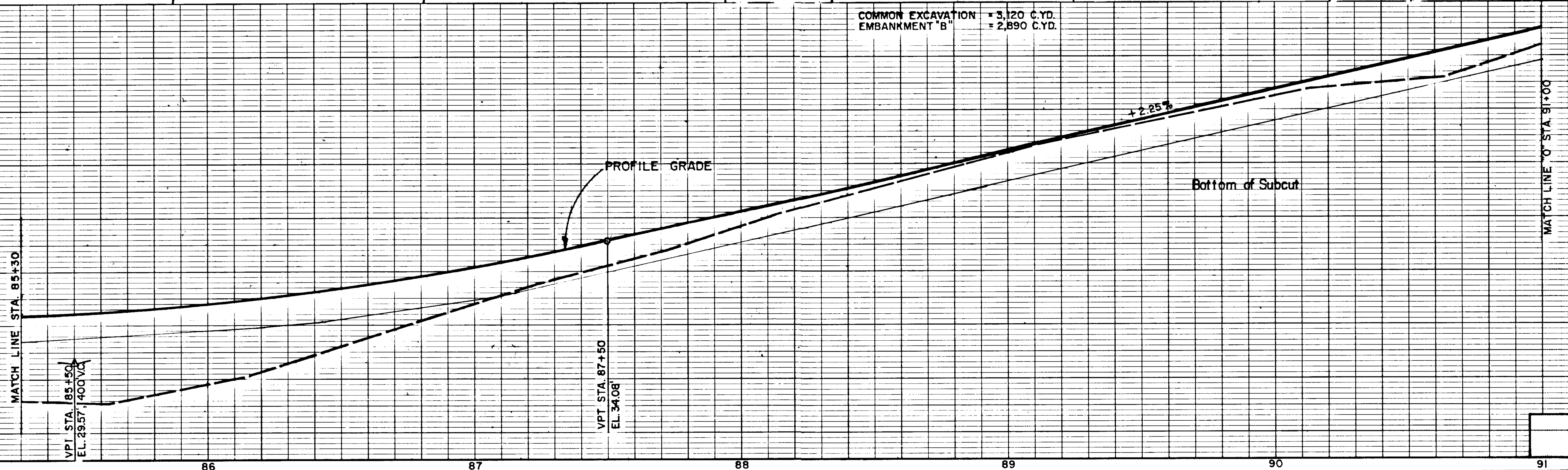
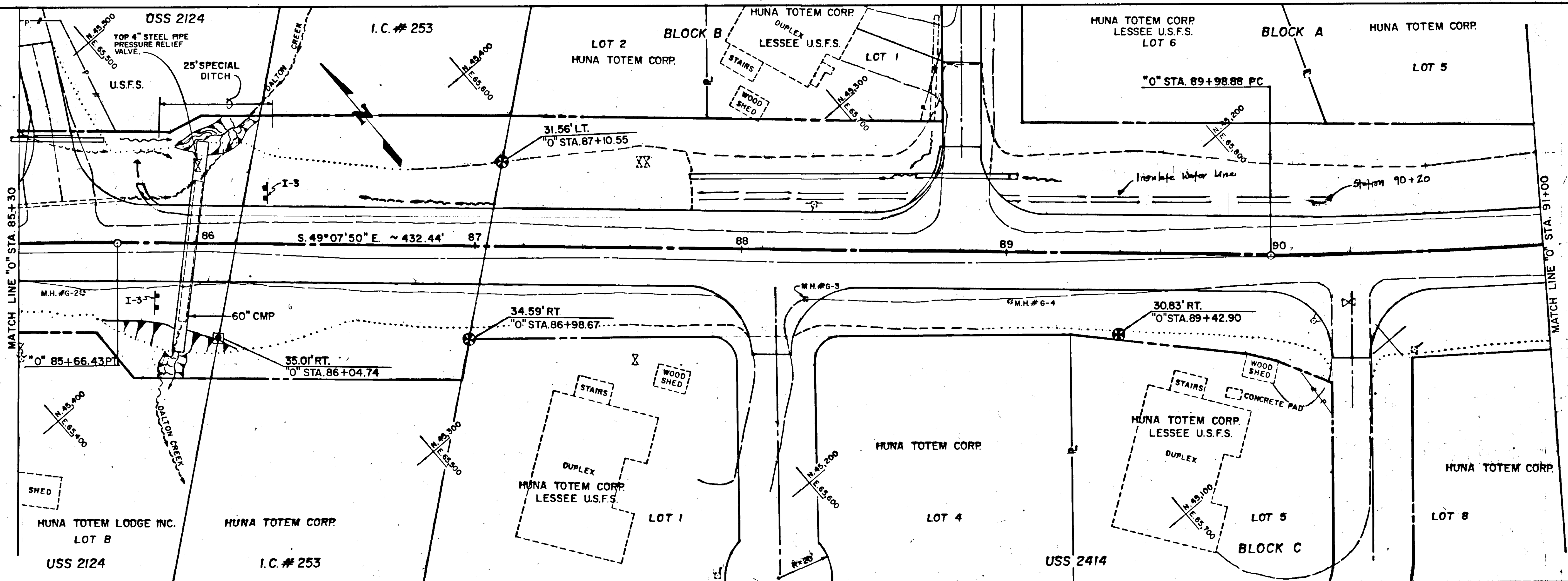
RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
PLAN & PROFILE
PROJECT NO. RS-0918(4) 69305

APPROVED BY: DESIGN GROUP CHIEF DATE	DESIGNED BY: D.R. DATE	HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 2'
RECOMMENDED BY: DESIGN ENGINEER, GROUP "B" DATE	DRAWN BY: W.D.A. DATE	CHECKED BY: P.B.
PREPARED BY: PROJECT MANAGER	LEAD DESIGNER	SHEET 14 OF 65





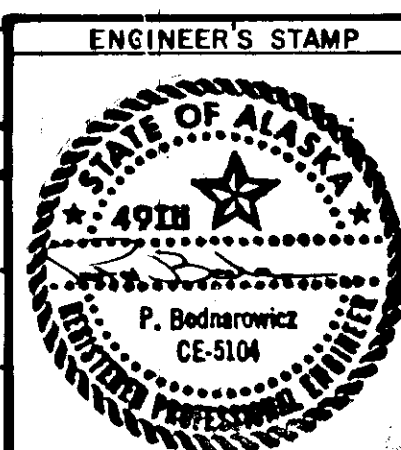
BY	DATE	DESCRIPTION OF CHANGE

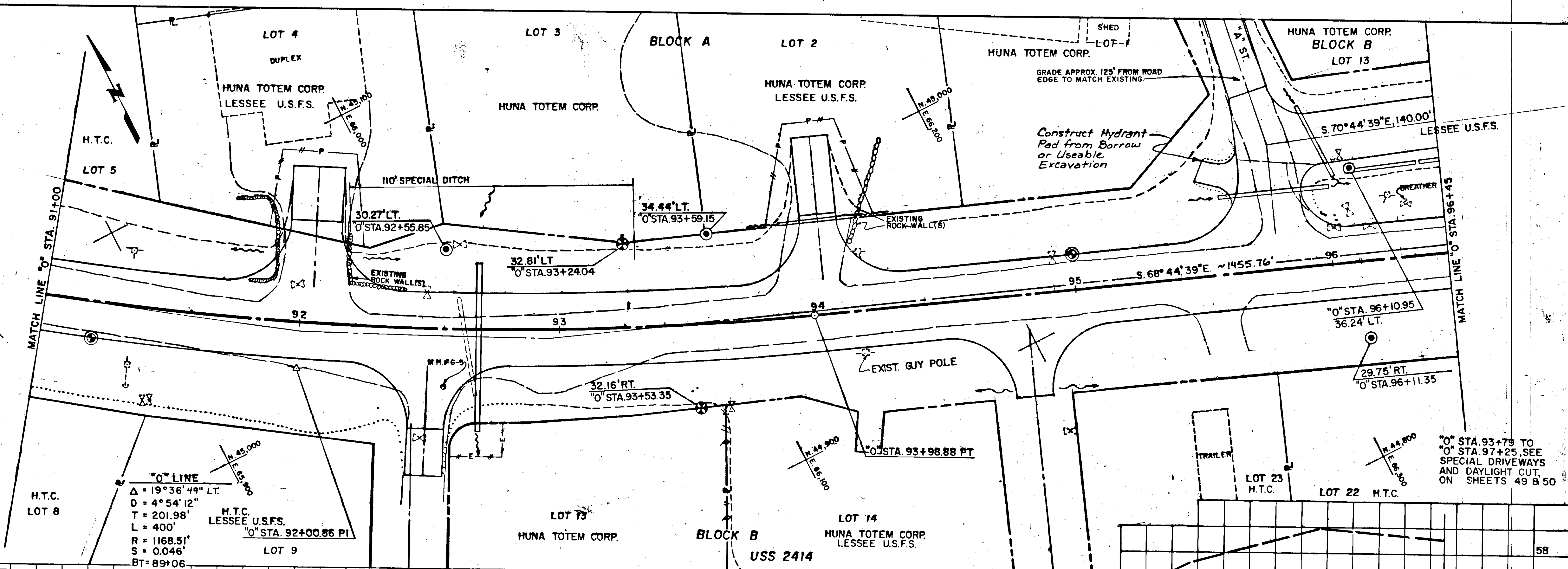
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II PLAN & PROFILE PROJECT NO. RS-0918(4) 69305

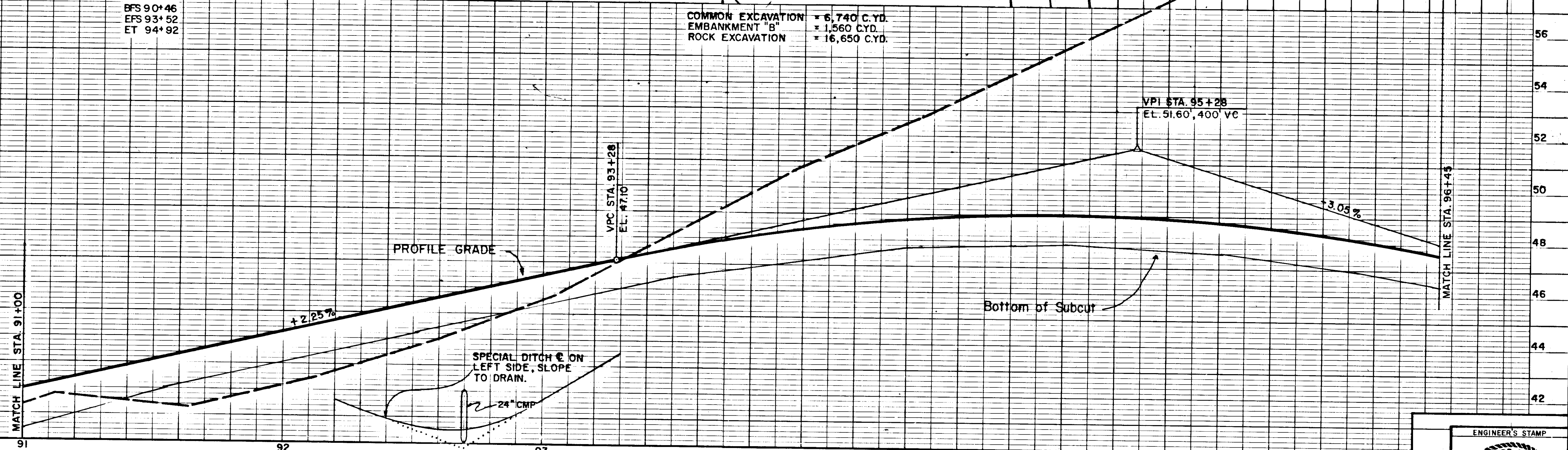
APPROVED BY:	DESIGNED BY:
RECOMMENDED BY:	DRAWN BY:
PREPARED BY:	CHECKED BY:
PROJECT MANAGER	LEAD DESIGNER

DESIGNED BY:	HORIZ. SCALE: 1" = 20'
DRAWN BY:	VERT. SCALE: 1" = 2'
CHECKED BY:	SHEET 15 OF 65





COMMON EXCAVATION = 6,740 C.YD.
 EMBANKMENT "B" = 1,560 C.YD.
 ROCK EXCAVATION = 16,650 C.YD.



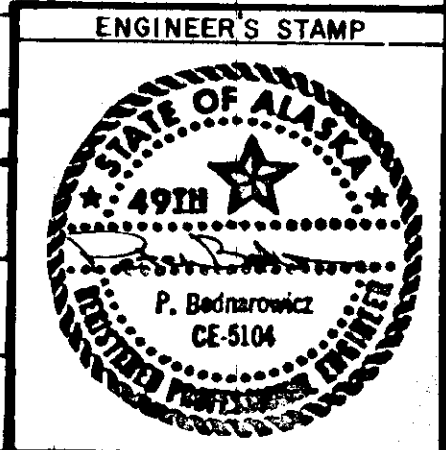
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

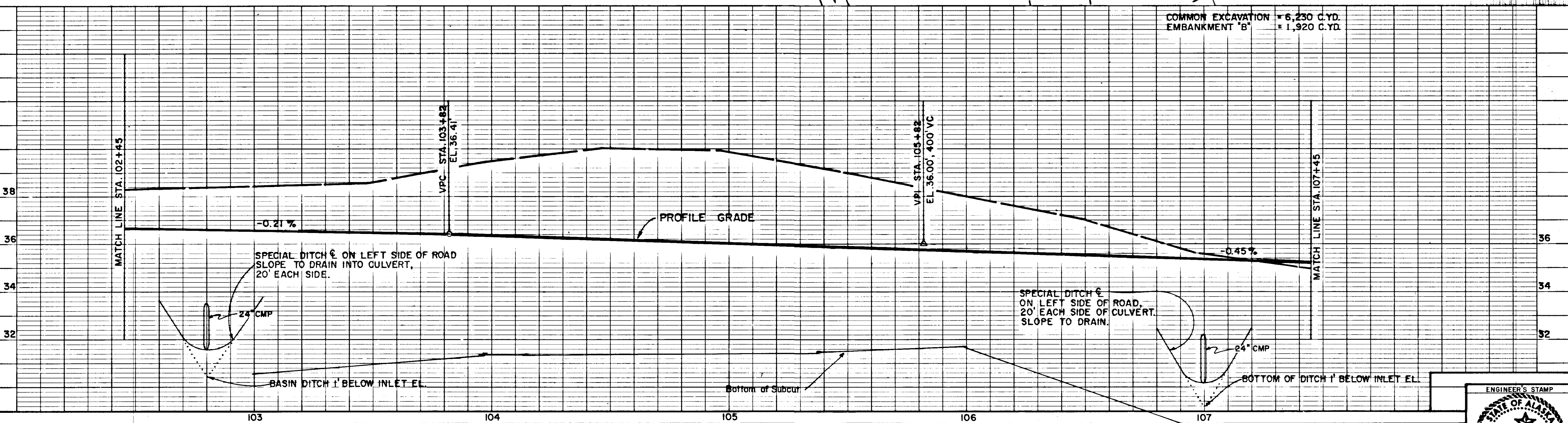
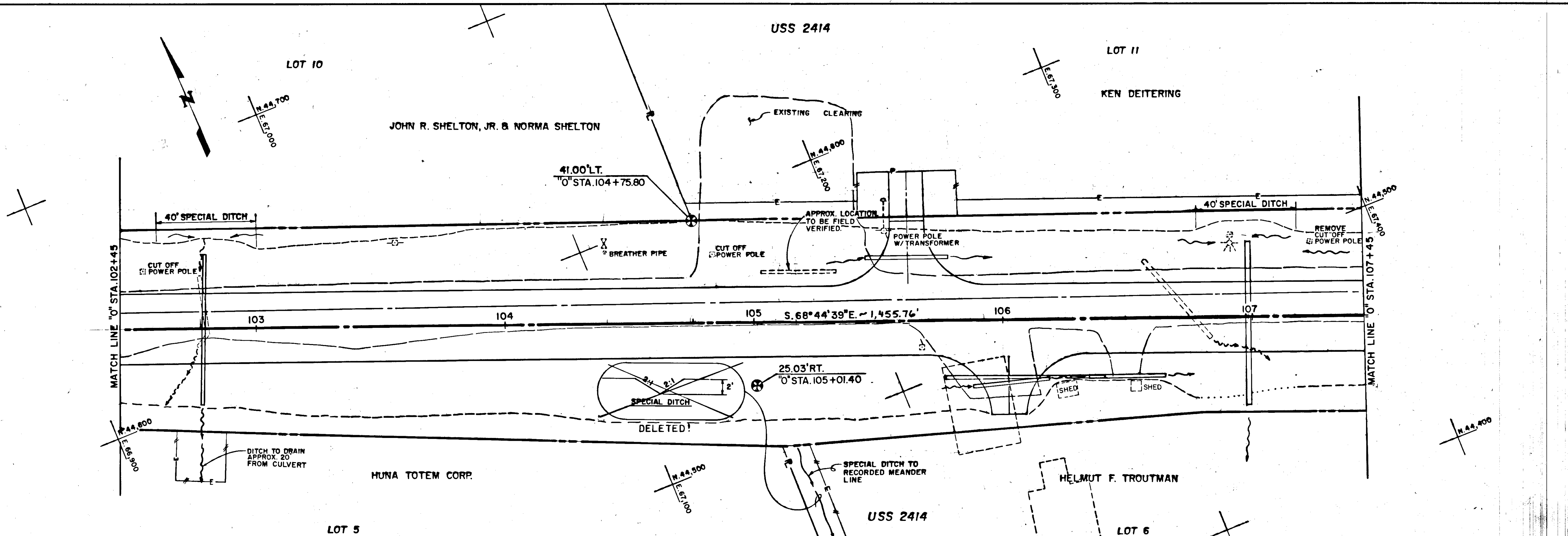
HOONAH ARTERIAL-STAGE II
 PLAN & PROFILE
 PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGNED BY:	DATE
RECOMMENDED BY:	DRAWN BY:	DATE
PREPARED BY:	CHECKED BY:	DATE
PROJECT MANAGER	LEAD DESIGNER	

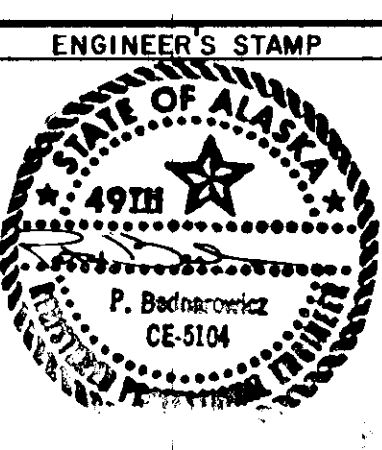
HORIZ. SCALE: 1"=20'
 VERT. SCALE: 1"=2'

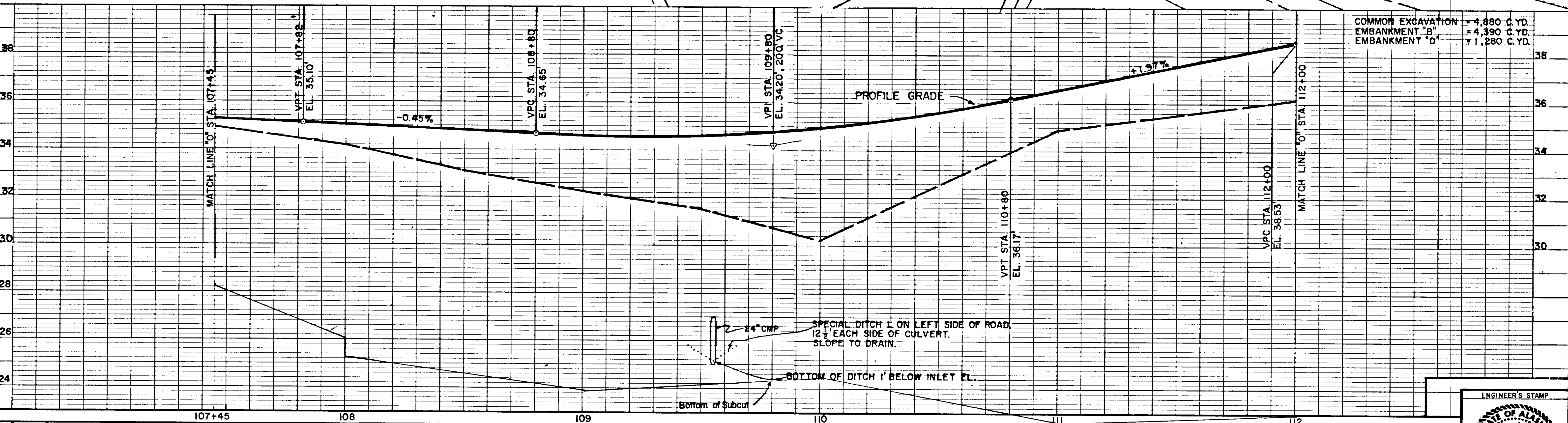
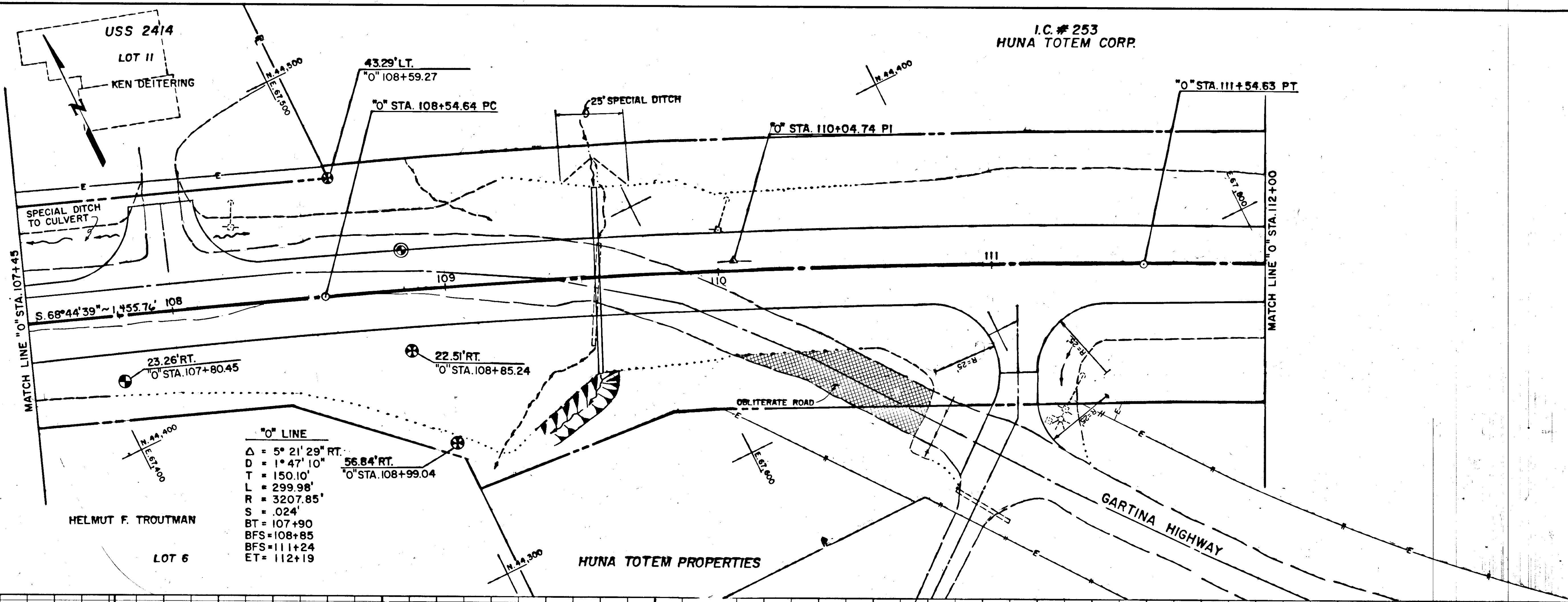
SHEET 16 OF 65





Y DATE DESCRIPTION OF CHANGE RECORD OF REVISIONS		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION	HOONAH ARTERIAL-STAGE II PLAN & PROFILE PROJECT NO. RS-0918(4) 69305	APPROVED BY: _____ RECOMMENDED BY: _____ PREPARED BY: _____ DESIGN GROUP CHIEF DATE _____ DESIGN ENGINEER, GROUP "B" DATE _____ PROJECT MANAGER LEAD DESIGNER	DESIGNED BY: D.R. DRAWN BY: W.D.A. CHECKED BY: P.B. DATE: _____	HORIZ. SCALE: 1"=20' VERT. SCALE: 1"=2' DATE: _____ SHEET 18 OF 65
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COMMON EXCAVATION = 4,880 C.YD.
 EMBANKMENT "B" = 4,390 C.YD.
 EMBANKMENT "D" = 1,280 C.YD.

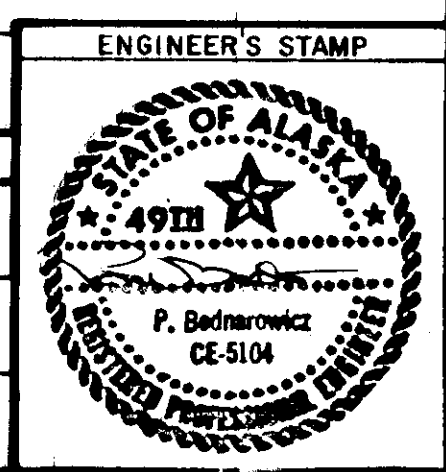
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION	
DATE	DESCRIPTION OF CHANGE

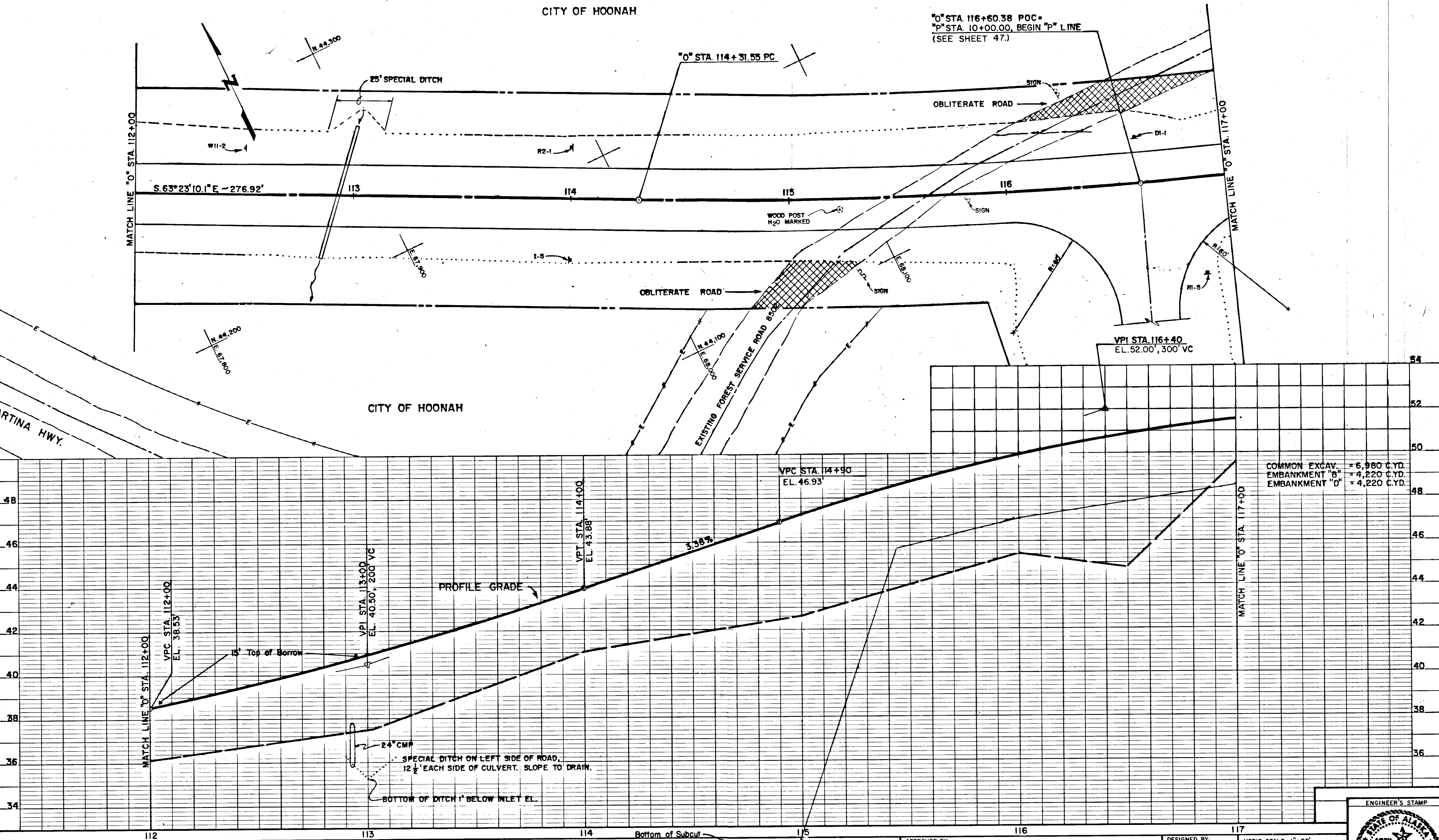
HOONAH ARTERIAL-STAGE II

PLAN & PROFILE

PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1"=20'
RECOMMENDED BY:	P.B.	VERT. SCALE: 1"=2'
DESIGN GROUP CHIEF	DRAWN BY:	DATE:
DATE	W.D.A.	
DESIGN ENGINEER, GROUP "B"	CHECKED BY:	
DATE	P.B.	
PROJECT MANAGER	LEAD DESIGNER	SHEET 19 OF 65





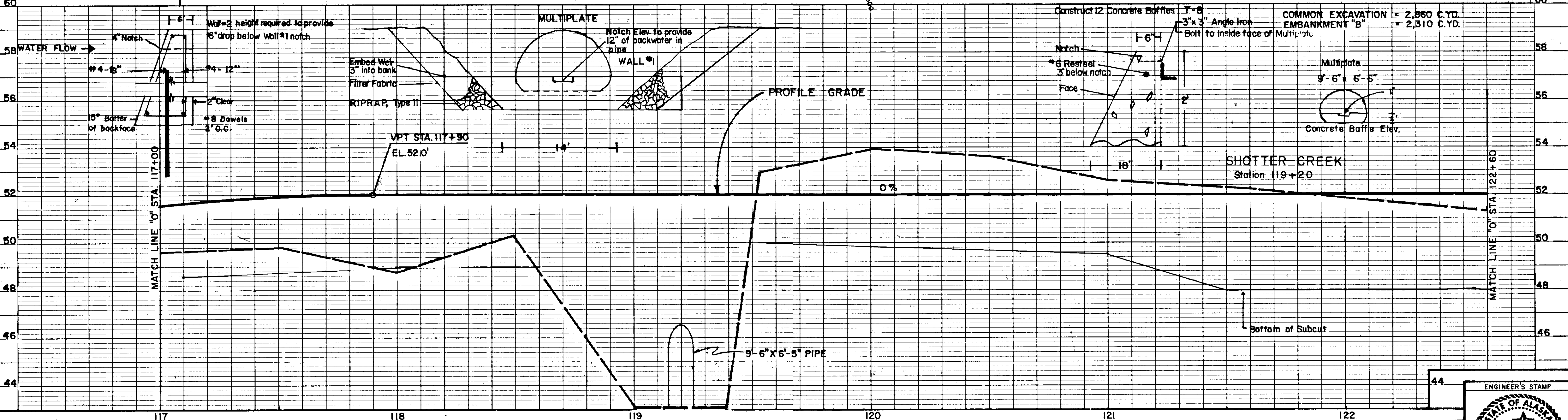
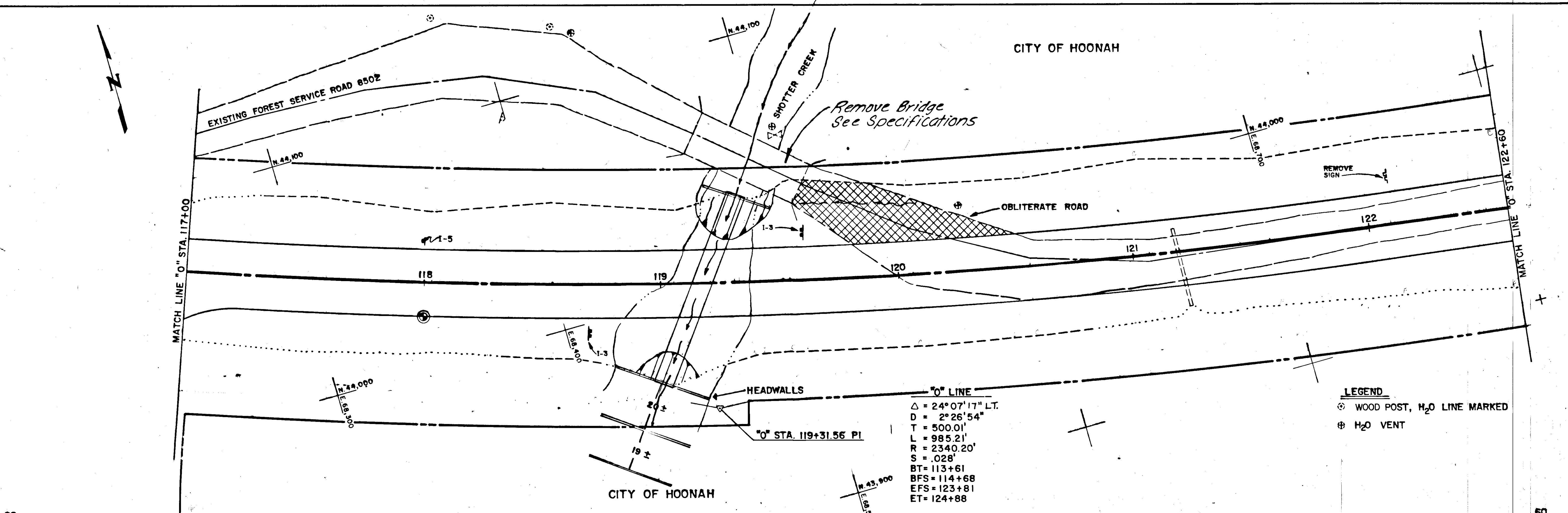
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
PLAN & PROFILE
 PROJECT NO. RS-0918 (4) 69305

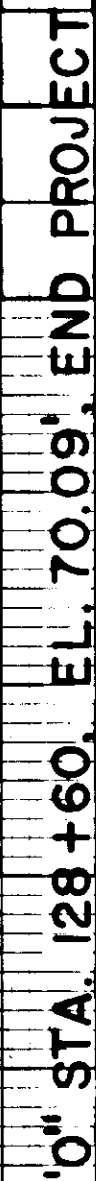
APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1"=20'
	P.B.	VERT. SCALE: 1"=2'
RECOMMENDED BY:	DRAWN BY:	DATE:
	W.D.A.	
PREPARED BY:	CHECKED BY:	SHEET 20 OF 65
	P.B.	
PROJECT MANAGER	LEAD DESIGNER	





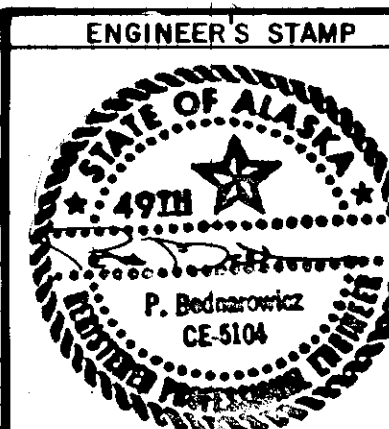
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION			HOONAH ARTERIAL-STAGE II PLAN & PROFILE PROJECT NO. RS-0918(4) 69305			APPROVED BY: _____ DESIGN GROUP CHIEF _____ DATE _____ RECOMMENDED BY: _____ DESIGN ENGINEER, GROUP "B" _____ DATE _____ PREPARED BY: _____ PROJECT MANAGER _____ LEAD DESIGNER _____		DESIGNED BY: _____ P.B. _____ DRAWN BY: _____ W.D.A. _____ CHECKED BY: _____ P.B. _____		HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 2' DATE: _____ SHEET 21 OF 65													
RECORD OF REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION OF CHANGE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			NO.	DATE	DESCRIPTION OF CHANGE										ENGINEER'S STAMP 								
NO.	DATE	DESCRIPTION OF CHANGE																					

Δ = 4°44'11"LT.
D = 3°30'30"
T = 67.54'
L = 135.00'
R = 1633.13'
S = .042'
BT = 126+38
BFS = 127+68
ET = MATCH EXISTING
TRANSITION AT 2+85



HOONAH ARTERIAL-STAGE II
PLAN & PROFILE
PROJECT NO. RS-0918(4) 69305

DESIGNED BY: P.B.	HORIZ. SCALE: 1"=20' VERT. SCALE: 1"=2'
DRAWN BY: W. D. A.	DATE:
CHECKED BY: P.B.	SHEET 22 OF 65



DRIVEWAY/APPROACH SUMMARY						
"O" STATION	OFFSET		RADIUS		WIDTH	REMARKS
	LT.	RT.	LT.	RT.		
8+82		X	25'	25'	20'	
10+00		X	25'	25'	96'	
18+55		X	25'	15'	100'	MATCH CITY DOCK
82+05		X	15'	25'	14'	
83+45		X	25'	25'	24'	
83+50	X		25'	25'	24'	
84+85		X	18'	25'	24'	
85+45	X		25'	25'	14'	
88+12		X	25'	25'	14'	
88+82	X		25'	25'	14'	
90+28		X	25'	25'	14'	
92+05	X		25'	25'	20'	ROCK WALLS TO BE REMOVED
92+50		X	25'	25'	14'	
94+90		X	25'	25'	20'	
94+03	X		25'	25'	14'	
94+80		X	25'	25'	14'	
95+79	X		25'	25'	14'	
95+79	X		15'	10'	20'	on approach of 95+79
98+14		X	25'	25'	14'	
99+40	X		25'	25'	24'	
101+06		X	20'	25'	24'	
101+74		X	25'	25'	20'	
101+82	X		25'	25'	24'	
105+17	X		25'	25'	14'	
106+02		X	25'	25'	14'	
108+00	X		25'	25'	24'	
111+10		X	25'	25'	14'	
125+65		X	50'	50'	26'	FOR FUTURE ROAD
"P" 15 +14	X		100'	25'	50'	FOR FUTURE ROAD

SEE STANDARD DRAWING I-4000.

CURB CUT SUMMARY				
"O" STATION	OFFSET		WIDTH	REMARKS
	LT.	RT.		
9+52	X		7'	Handicap Access
19+02	X		7'	Handicap Access
10+89	X		14'	
17+78	X		28'	
22+55	X		14'	
23+30	X		14'	
24+18	X		14'	
24+80	X		14'	
25+70	X		14'	
27+11	X		14'	
80+78	X		14'	
82+00	X		24'	FOR FUTURE USE

Stations refer to centerline of curb cut.

CHAIN LINK FENCE SUMMARY		
"O" STATION TO "O" STATION	LENGTH	REMARKS
97+10 TO 98+15 LT.	105'	WITH AN EXTRA 10' ALONG PROPERTY LINE.

MONUMENT SUMMARY					
"O" STATION	OFFSET		MON.	CASE	REMARKS
	LT.	RT.			
3+32.46	15'		X	X	
10+60		17.5'	X	X	
14+00	17.5'		X	X	
18+05	17.5'		X	X	
21+60	17.5'		X	X	
24+05	17.5'		X	X	
28+40	17.5'		X	X	
76+40	17.5'		X	X	
91+20		13.5'	X	X	
95+00	13.5'		X	X	
108+90	13.5'		X	X	
118+00		13.5'	X	X	
126+00	20'		X	X	

SEE SHEET 24 FOR RIGHT-OF-WAY MONUMENT SUMMARY

GUARD RAIL INSTALLATION SUMMARY					
"O" STATION TO "O" STATION	LENGTH (L.F.)		TERM.	REMARKS	
	LEFT	RIGHT	END SEC.		
2+85	8+55		579		REMOVE 640' & INSTALL 579'

INSULATION BOARD SUMMARY				
"O" STATION	LENGTH	UNDER CULVERT	UNDER INLET	UNDER PIPE
20+95	4'			6'
26+84	4'			4'
79+65	4'			4'
82+40	4'			4'
85+95	4'			2 @ 8'
92+69	4'			6'
101+05	4'			6'
102+80	4'			6'
106+97	4'			6'
109+55	4'			6'
123+46	4'			4'
126+35	4'			4'

FOR PIPE INSULATION DETAIL SEE SHEET 30

PIPE & CULVERT REMOVAL					
"O" STATION	SIZE	OFFSET		REMARKS	
		LT.	RT.		
10+53	30"x60"		X		
10+55	24"x84"		X		VERIFY BURIED CULVERT
10+71	24"x84"		X		VERIFY BURIED CULVERT
14+26	48"x47"		X		
20+97	24"x30"		X		
23+86	8"x8"		X		CONCRETE SEWER PIPE
23+86	4"x94"		X		CAST IRON SEWER PIPE
24+61	4"x46"		X		STEEL SEWER PIPE
24+65	8"x40"		X		A.D.S. PIPE
25+59	6"x40"		X		SEWER PIPE
80+73	12"x30"	X			OFFSET 16'
85+45	12"x41"	X			OFFSET 15'
85+94	36"x53"		X		
92+63	12"x38"	X			OFFSET 15'
92+71	18"x42"		X		
99+52	12"x53"	X			APPROACH CULVERT NOT SHOWN
100+82	18"x40"		X		
100+86	18"x35"		X		
101+96	1"x40"		X		PVC WATERLINE NOT SHOWN
102+82	18"x30"		X		
105+17	18"x30"	X			APPROX. LOCATION
106+76	18"x42"		X		
109+56	18"x38"		X		
121+19	18"x34"		X		
123+46	18"x31"		X		
126+11	18"x30"		X		

SEWER CONNECTION ADJUSTMENTS			
"O" STATION	OFFSET		REMARKS
	LEFT	RIGHT	
92+76		15'	RECONNECT
92+98		15'	"
93+70		13'	CAP AT R/W LINE
93+89		32'	" " " "
94+80	38'		RECONNECT
95+30	38'		"
95+90		40'	CAP AT R/W LINE
* 95+90	42'		(RECONNECT FOR 97+20)
96+52		38'	CAP AT R/W LINE

* CONNECT EXISTING SERVICE RT. & NEW SERVICE LT. PROVIDE 6" D.I. LINE TO "A" STREET MANHOLE. PROVIDE SERVICE RT. ON PEDERSON'S DRIVEWAY.

MANHOLE ADJUSTMENT AND RECONSTRUCTION				
"O" STATION	M.H. NO.	OFFSET		REMARKS
		LT.	RT.	
19+21	1-0		12'	RECONSTRUCT
22+42	1-1	13'		RECONSTRUCT
25+20	1-2	17'		ADJUST
26+92	1-3	10'		ADJUST
83+18	G-1		18'	RECONSTRUCT
85+54	G-2		19'	RECONSTRUCT
88+26	G-3		18'	ADJUST
89+02	G-4		18'	ADJUST
92+57	G-5		22'	RECONSTRUCT
93+50			27'	NEW MH.
96+00			27'	NEW MH.
* 96+54	G-6		14'	REMOVE
95+90		45'		NEW MH.

* MAY BE RELOCATED TO 95+90

WATER SERVICE CONNECTION			
"O" STATION	OFFSET	REMARKS	
	LT. RT.		
93+60		32'	RECONNECT 1"
94+92.90		53'	CAP FOR FUTURE 2"
94+99	36'		RECONNECT 1"
95+74		40'	CAP FOR FUTURE 2"
95+82		40'	" " " 3/4"
95+82	52'		2" TEE TO 1-1/2" & 3/4" **
96+62		38'	CAP FOR FUTURE 2"
97+80		40'	NEW SERVICE 3/4"
99+38.40	42'		CAP FOR FUTURE 2" I
100+30		35'	RECONNECT 1"
101+90.84		35'	CAP FOR FUTURE 2"
101+95.90	35'		" " " 3/4"
103+66.70		40'	" " " "
105+75.80	36'		" " " "
106+97.10		35'	RECONNECT 3/4"
107+42.40	30'		CAP FOR FUTURE 3/4"
107+88	30'		" " " 2"
109+75	25'		" " " "

** 3/4" SERVICE LINE TO 28' LT. STA. 97+20 & RECONNECT 1-1/2" ON "A" ST.

111+00	2
96+66	1
93+49	2
99+20	2
95+80	2
25+84	3/4
52+00	3/4

WATER UTILITY ADJUSTMENTS					
"O" STATION	OFFSET		F.H. ADJUST.	WATER VALVE BOX	REMARKS
	LT.	RT.			
19+04		4'			
19+30	28'		+		
19+20					
24+66	40'				
25+33	38'				
25+80	32'				
26+40	35'				
27+14		5'			
28+10		7'			
28+17	5'				
28+30	22'				
28+47		6'			
28+40	27'		+		
83+27					
88+17	5'				3"
88+85.67	15'				6"
88+95	10'				6"
90+17		25'	+		
90+28	10'				6"
90+28		16'			6"
92+00	13'				10"
92+49	15'				3"
93+60		32'		2	
94+92	12'				
93+30	20'				Box for gate valve
101+68					
* 95+72	42'	42'	1		RELOCATED FROM 96+08
85+78					
86+00	30'				Relocate Pressure Release Valve
85+76					
87+60	35'			2	
91+45		35'		2	
100+72	30'				RELOCATED connect to 10" D.I. raw water
101+90		17'			
92+50		35'			
123+50	20'				ADJUST BREATHER

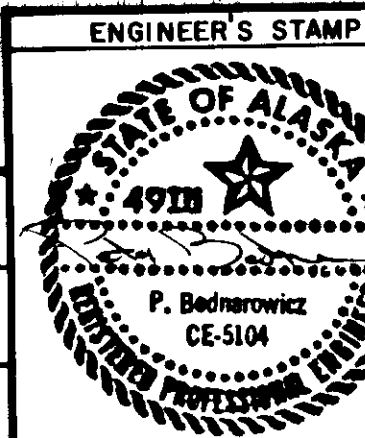
* PROVIDE 6" D.I. LINE TO HYDRANT ON "A" STREET. FROM 10" RAW WATER.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
SUMMARIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP _____
PREPARED BY: _____
PROJECT MANAGER _____
LEAD DESIGNER _____

DESIGNED BY: _____
DRAWN BY: W.D.A.
CHECKED BY: _____
DATE: _____
SHEET 23 OF 65



BY	DATE	DESCRIPTION OF CHANGE
		RECORD OF REVISIONS

SIGN SUMMARY

STATION	OFFSET LT. RT.	CODE NO.	LEGEND	SIZE	AREA S.F.	NO. POSTS	FACING TRAFFIC	REMARKS
7+72	17'	W11-2	ADVANCE CROSSING	30"x30"	6.25	1	SEB	
7+72	17'	W11-2	PED. XING	18"x24"	3.00		SEB	
8+20	21'	W8-3	PAVEMENT ENDS	36"x36"	9.00	2	NWB	
10+10	21'	D1-1	Hoonah	56"x12"	4.65	2	NEB	
10+58	28'	D3-1	Cannery Rd.	45"x8"	2.50	1	NEB	
10+58	28'	R1-1	Stop	30"x30"	6.25		NEB	
11+32	21'	W11-2	ADVANCE CROSSING	30"x30"	6.25	1	NWB	
11+32	21'	W11-2	PED. XING	18"x24"	3.00		NWB	
13+00	21'	I-8	FERRY	24"x36"	6.00	1	NWB	
17+22	21'	W11-2	ADVANCE CROSSING	30"x30"	6.25	1	SEB	
17+22	21'	W11-2	PED. XING	18"x24"	3.00		SEB	
20+82	21'	W11-2	ADVANCE CROSSING	30"x30"	6.25	1	NWB	
20+82	21'	W11-2	PED. XING	18"x24"	3.00		NWB	
11+80	21'	R2-1	SPEED LIMIT 20	30"x36"	7.50	1	SEB	
6+50	21'	R2-1	SPEED LIMIT 20	30"x36"	7.50	1	NWB	
74+70	21'	D2-1	Airport 1 MILE	47"x12"	3.92	2	SEB	
77+55	21'	R2-1	Speed Limit 30	30"x36"	7.50	1	SEB	
77+55	21'	R2-1	Speed Limit 30	30"x36"	7.50	1	NWB	
85+80	21'	I-3	Dalton Creek	42"x24"	7.00	2	SEB	
86+22	21'	I-3	Dalton Creek	42"x24"	7.00	2	NWB	
112+50	21'	W11-2	PED. SYMBOL	30"x30"	6.25	1	NWB	
114+00	21'	R2-1	Speed Limit 30	30"x36"	7.50	1	NWB	
114+00	21'	I-5	Airport Symbol	24"x24"	4.00	1	EB	
114+00	21'	I-5	Airport	2-6"x24"	2.00		EB	
116+60	21'	D1-1	Hoonah	56"x12"	4.65	2	NB	Facing NB, Airport Road
116+88	44'	R1-5	Stop	30"x30"	6.25	1	NEB	
118+00	21'	I-5	Airport Symbol	24"x24"	4.00	1	WB	
118+00	21'	I-5	Airport	2-6"x24"	2.00		WB	
118+70	21'	I-3	Shutter Creek	44"x24"	7.20	2	EB	
119+60	21'	I-3	Shutter Creek	44"x24"	7.20	2	WB	
124+10	21'	R2-1	Speed Limit 30	30"x36"	7.50	1	WB	
126+75	21'	W5-1	Road Narrows	36"x36"	9.00	1	EB	
127+00	28'		Forest Service			2	EB	Move Existing, See Note 7
128+00	18'	W8-3	Pavement Ends	36"x36"	9.00	1	EB	
11+75	18'	R2-1	Speed Limit 20	30"x36"	7.50	1	SB	
17+50	18'	W8-3	Pavement Ends	36"x36"	9.00	1	SB	
14+00	18'	R2-1	Speed Limit 20	30"x36"	7.50	1	NB	

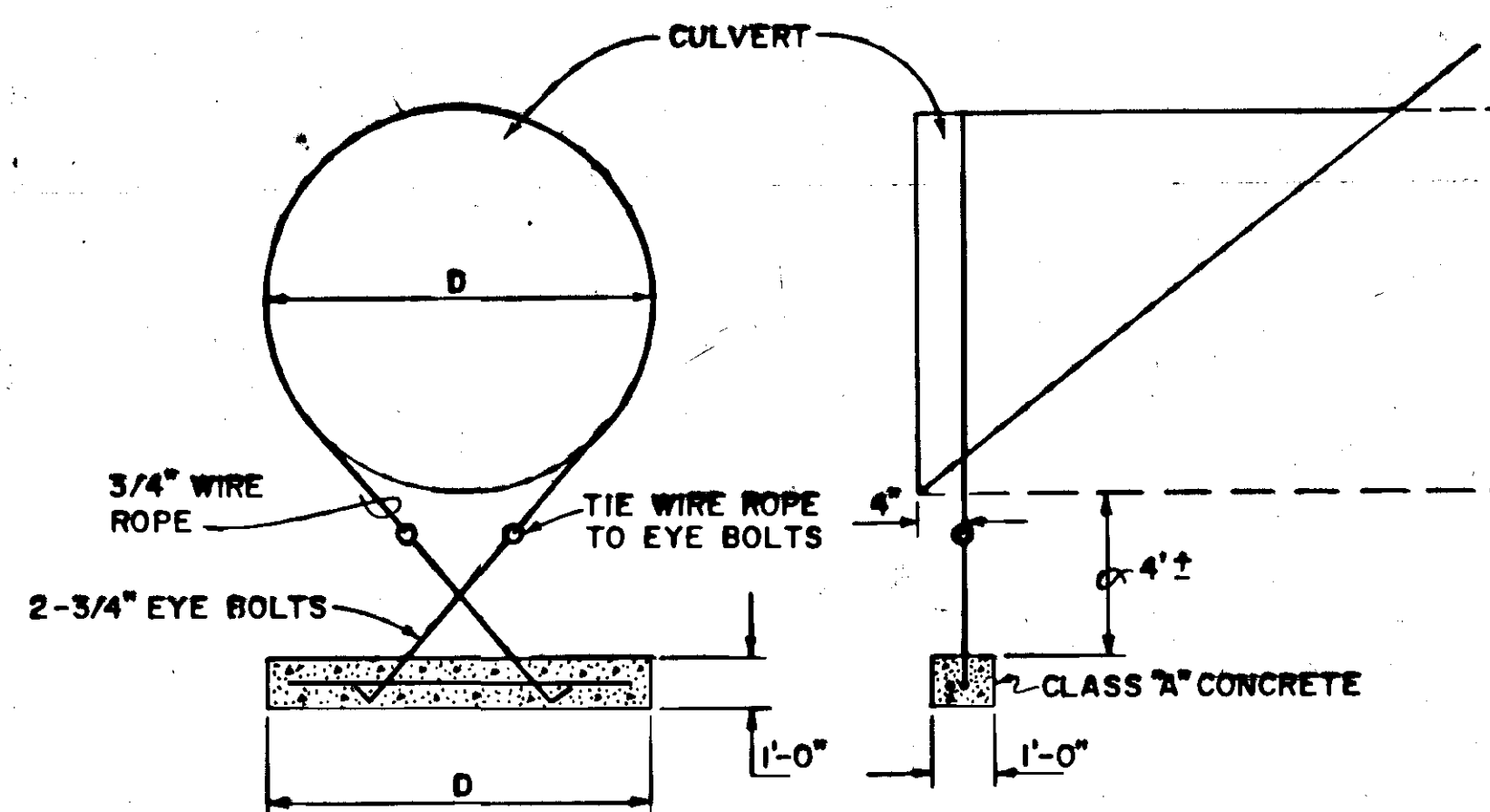
REMOVAL OF STRUCTURES & OBSTRUCTIONS

STATION	SIDE	DESCRIPTION
21+46 to 28+50	APPR. 30' RT.	LOG CRIB WALL
22+82	12' LT.	STAIRS
27+72 to 27+92	21' RT.	BULL RAIL
28+09 to 28+29	23' RT.	BULL RAIL
23+88	5' LT.	STAIRS
25+27	4' RT.	20'X15' SHED
26+92	1' RT.	20'X20' SHED
27+65	20' RT.	10'X15' RAMP
27+75	23' RT.	20'X10' DOCK
78+40	18' LT.	STAIRS
94+20	25' LT.	ROCK WALLS TO BE REMOVED IN R/W
92+05	15' LT.	ROCK WALLS TO BE REMOVED
105+85	16' RT.	SHED
106+25	25' RT.	"
106+53	25' RT.	"
115+00 to 116+50	LT. & RT.	COLD DECKED LOGS EACH SIDE OF EXIST. RD.
119+10 to 119+62	APPR. 50' LT.	SHOTTER CR. BRIDGE & ABUTMENTS.
100+50	14' RT.	SHED
99+80	16' RT.	STAIRS

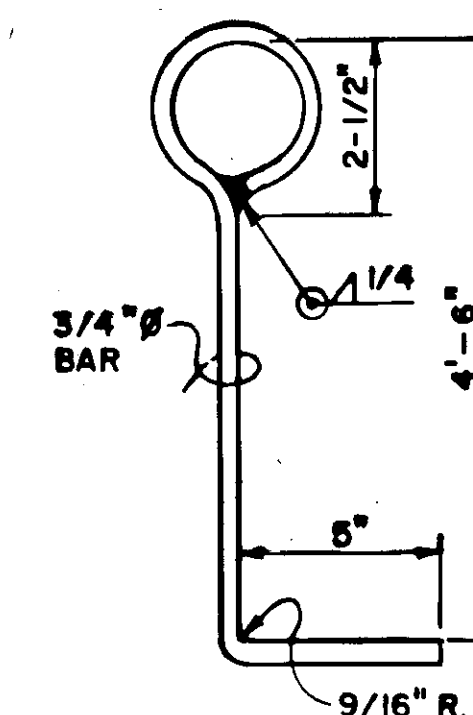
SALVAGE SIGN SUMMARY

STATION	SIDE	DESCRIPTION
115+82	3' RT.	F.S. TRAFFIC SIGN & POST
116+25	43' LT.	F.S. TRAFFIC SIGN & 2 POSTS
115+32	34' RT.	F.S. TRAFFIC SIGN & 2 POSTS
118+35	70' LT.	F.S. TRAFFIC SIGN & POST
122+10	20' LT.	F.S. TRAFFIC SIGN & 2 POSTS
115+23	4' RT.	WOODPOST WATERLINE MARKER
123+10	16' LT.	F.S. TRAFFIC SIGN & 2 POSTS
124+00	16' LT.	F.S. TRAFFIC SIGN & POST

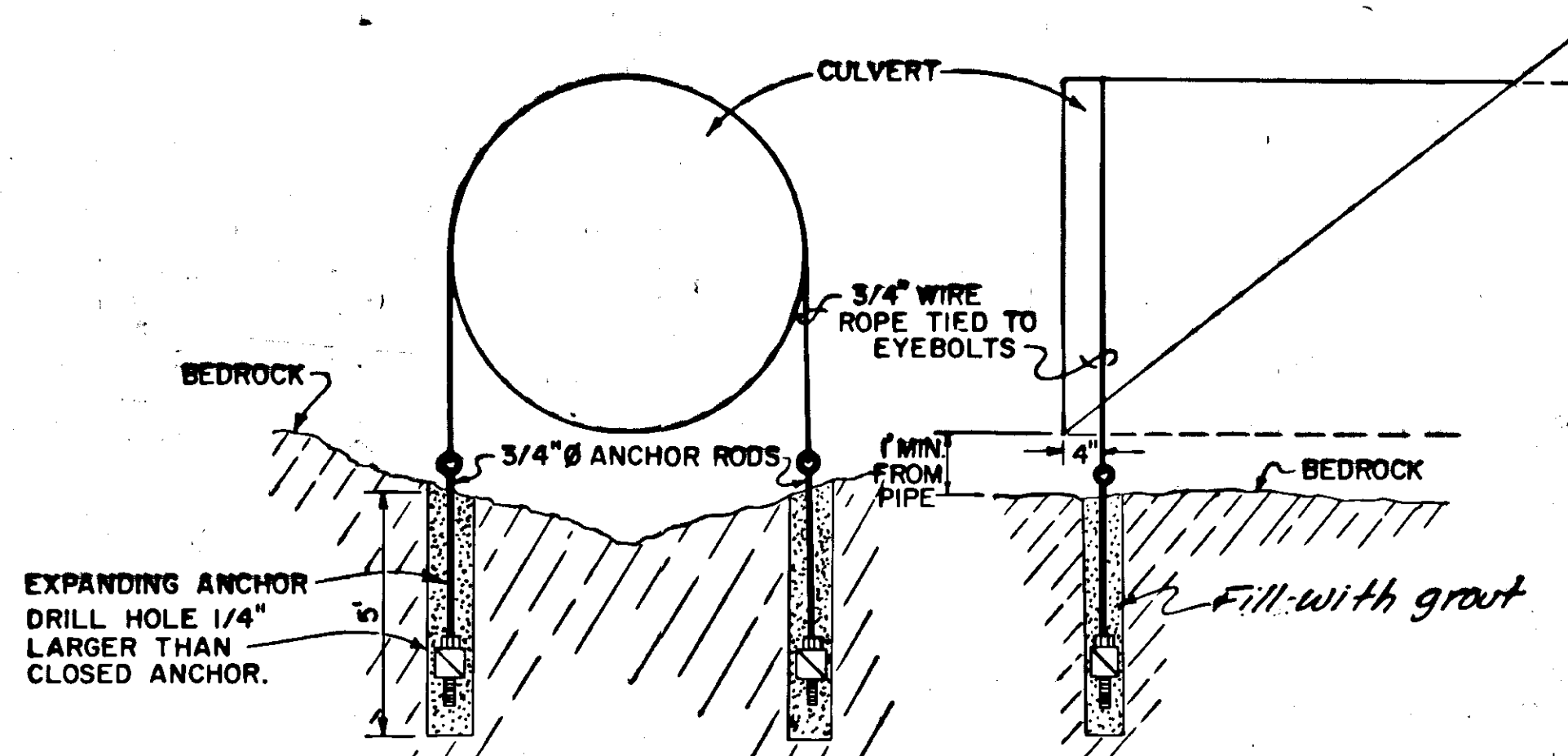
SEE SIGNING SUMMARY NOTE 5



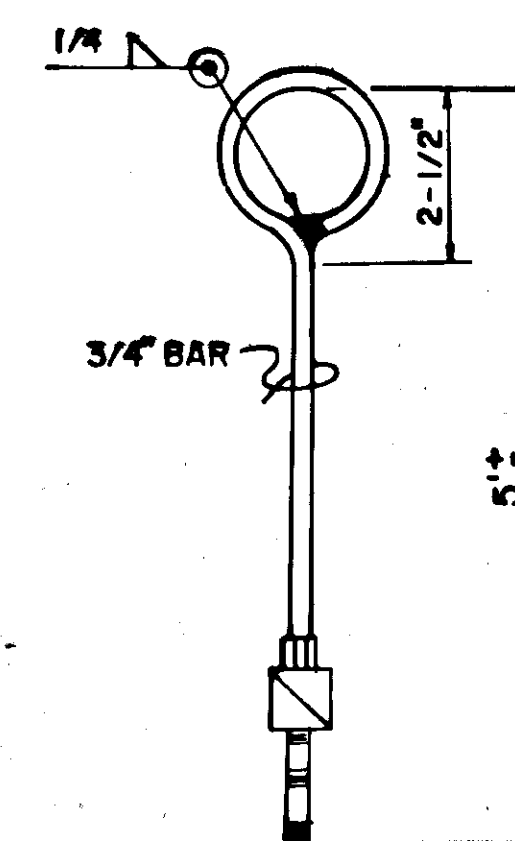
CULVERT DEADMAN DETAIL, 48"Ø & LARGER PIPES



EYE BOLT DETAIL



CULVERT DEADMAN DETAIL, 48"Ø & LARGER PIPES, IN ROCK



ANCHOR BOLT DETAIL

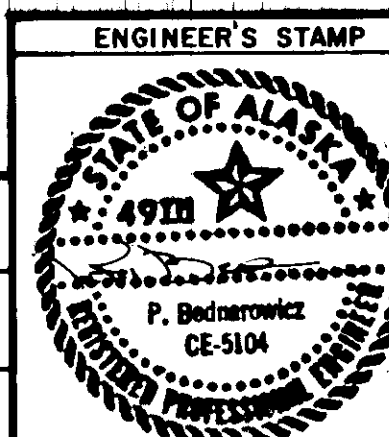
NOTE: ALL MATERIALS FOR THE CULVERT DEADMAN SHALL BE ALUMINUM OR STAINLESS STEEL, EXCEPT FOR REBAR IN CONCRETE.

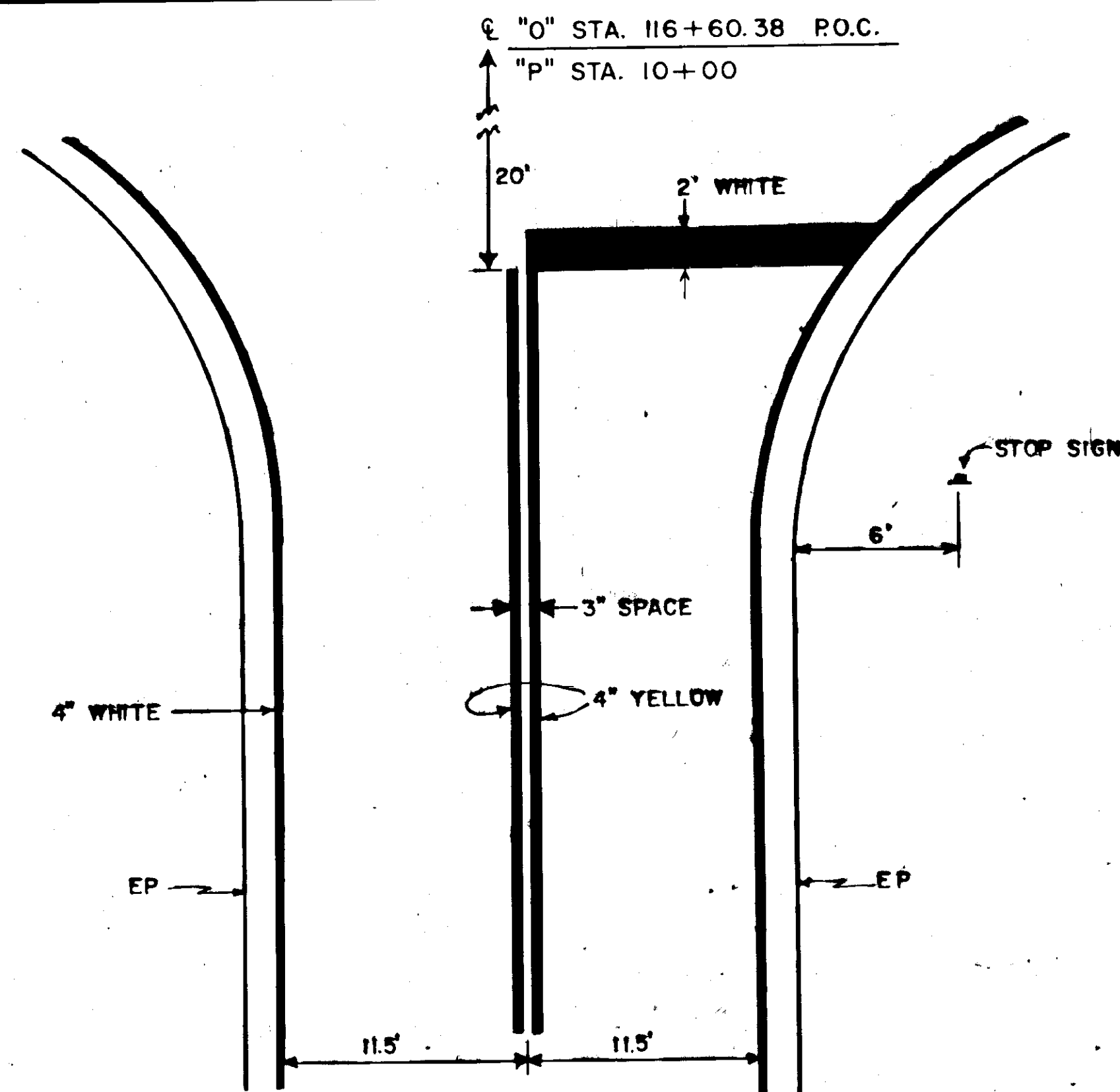
-SIGNING SUMMARY NOTES-

1. SIGN LOCATIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO MINOR REVISIONS.
2. POST LENGTHS SHALL BE DETERMINED AS PER STD. DRAWING S-05.00.
3. 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.
4. ALL POSTS SHALL BE INSTALLED WITH THE SLEEVE TYPE EMBEDMENT IN ACCORDANCE WITH STD. DWG. S-30.01.
5. EXISTING SIGNS AND POSTS REMOVED SHALL BE DISMANTLED BY THE CONTRACTOR AND STOCKPILED AT THE HOONAH CITY MAINTENANCE SHOP
6. ALL NEW SIGNS SHALL BE UNFRAMED UNLESS OTHERWISE NOTED.
7. THE EXISTING SIGN TO BE RE-USED IN THIS CONTRACT SHALL BE INSTALLED WITH NEW POSTS.

STATE OF ALASKA	HOONAH ARTERIAL-STAGE II
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	SUMMARIES
SOUTHEAST REGION DESIGN & CONSTRUCTION	PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGNED BY:	SCALE:
RECOMMENDED BY:	DRAWN BY:	DATE:
PREPARED BY:	CHECKED BY:	SHEET 25 OF 65





AIRPORT ROAD INTERSECTION

EDGE STRIPES			
"O" STA. LEFT	L.F.	"O" STA. RIGHT	L.F.
7+00 to 8+50	150	7+00 to 8+62	176
		8+81 to 9+57	104
		10+51 to 18+06	777
		19+04 to 28+30	941
		75+01 to 84+73	986
85+00 to 126+90	4,190	84+95 to 116+48	3,186
		116+72 to 126+90	1,047
"P" STA. LEFT	L.F.	"P" STA. RIGHT	L.F.
10+50 to 16+80	838	10+50 to 16+80	630

SEE NOTE 2

DOUBLE NO PASSING STRIPES		
STATION	L.F.	APPROX.
"O" 7+00 to 8+61	161	
"O" 8+82 to 9+56	74	
"O" 10+52 to 18+06	754	
"O" 19+55 to 28+30	875	
"O" 75+01 to 84+73	972	
"O" 84+95 to 107+00	2,205	
"O" 110+00 to 116+48	648	
"O" 116+72 to 121+70	498	
"O" 123+60 to 126+90	330	
"P" 10+50 to 16+80	830	

SEE NOTE 2

CENTER STRIPES (dashed)		
STATION	L.F.	APPROX.
"O" 107+00 to 110+00	300	
"O" 121+70 to 123+60	190	

SEE NOTE 2

STOP BAR

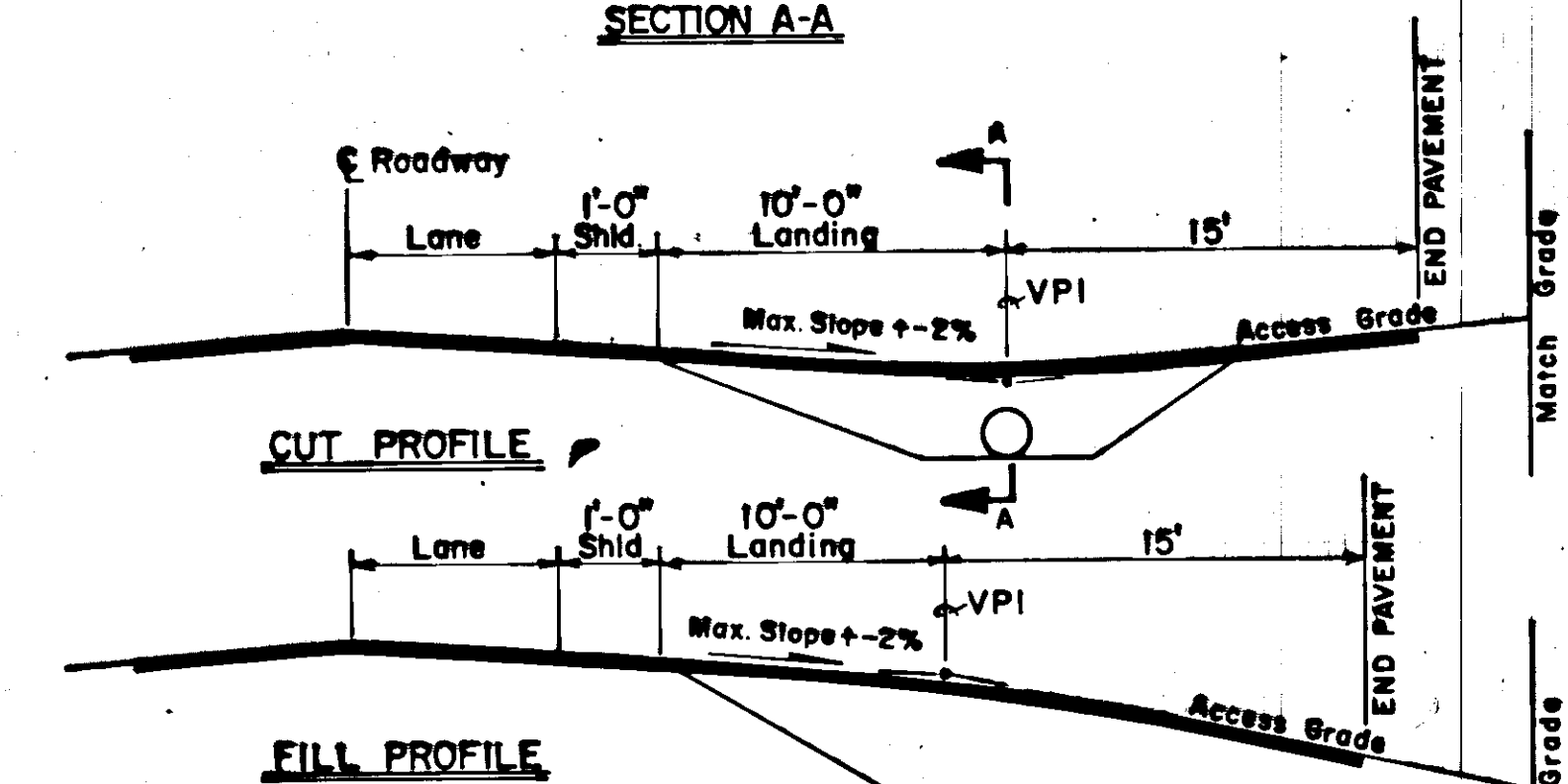
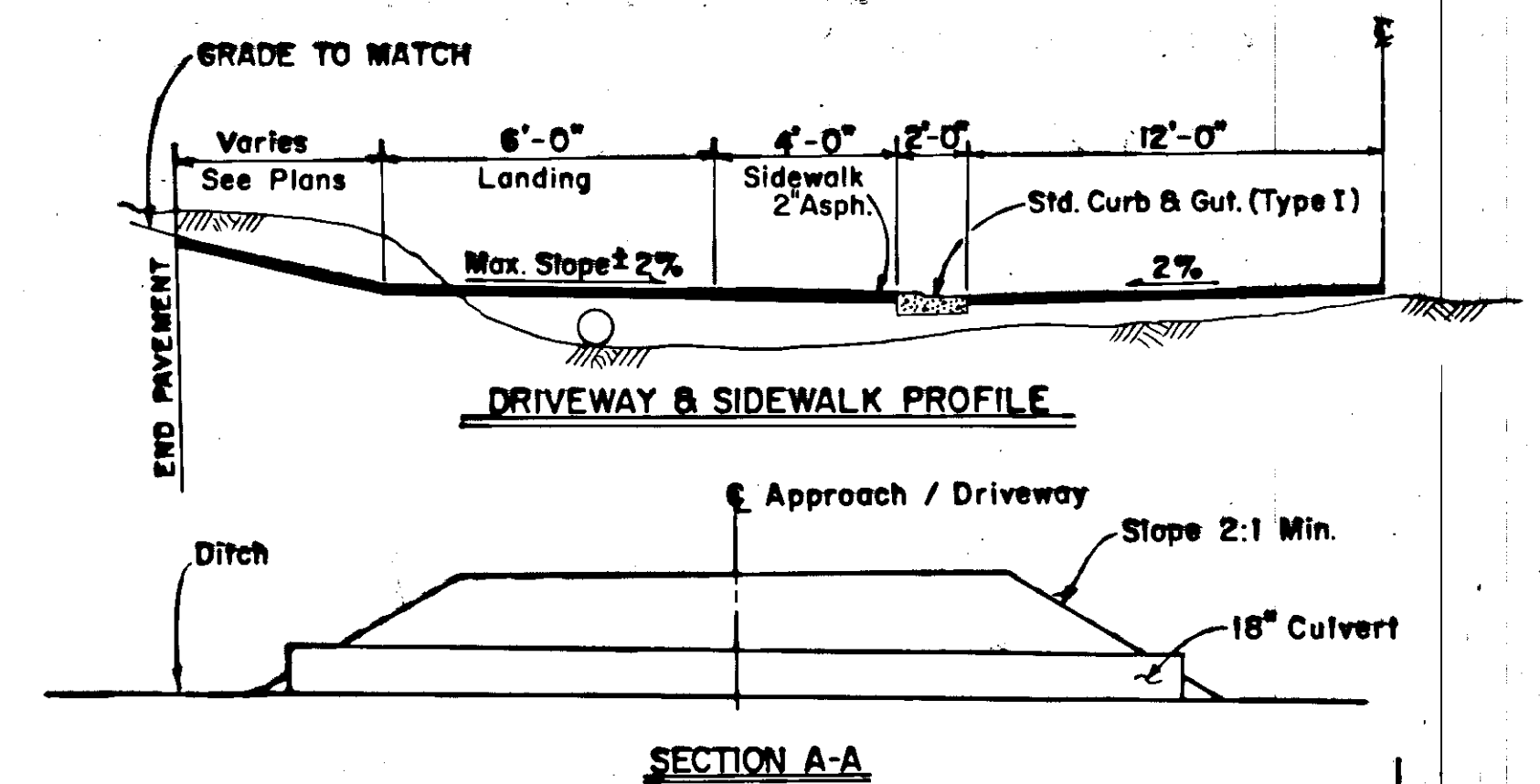
STATION	APPR. L.F.
"P" 10+22	57'

CROSSWALK

STATION	APPR. L.F.
"O" 9+52	26'
"O" 19+02	35'

NOTES

- PAVEMENT MARKINGS SHALL CONSIST OF CENTERLINE AND SHOULDER, IN ACCORDANCE WITH STANDARD DRAWING T-21.01, AND THE ALASKA TRAFFIC MANUAL.
- ALL STATIONS ON STRIPING TABLES ARE APPROXIMATE. THE PROJECT ENGINEER WILL BE RESPONSIBLE FOR MAKING THE BEGINNING AND ENDING OF THE PASSING AND NO PASSING STRIPES.

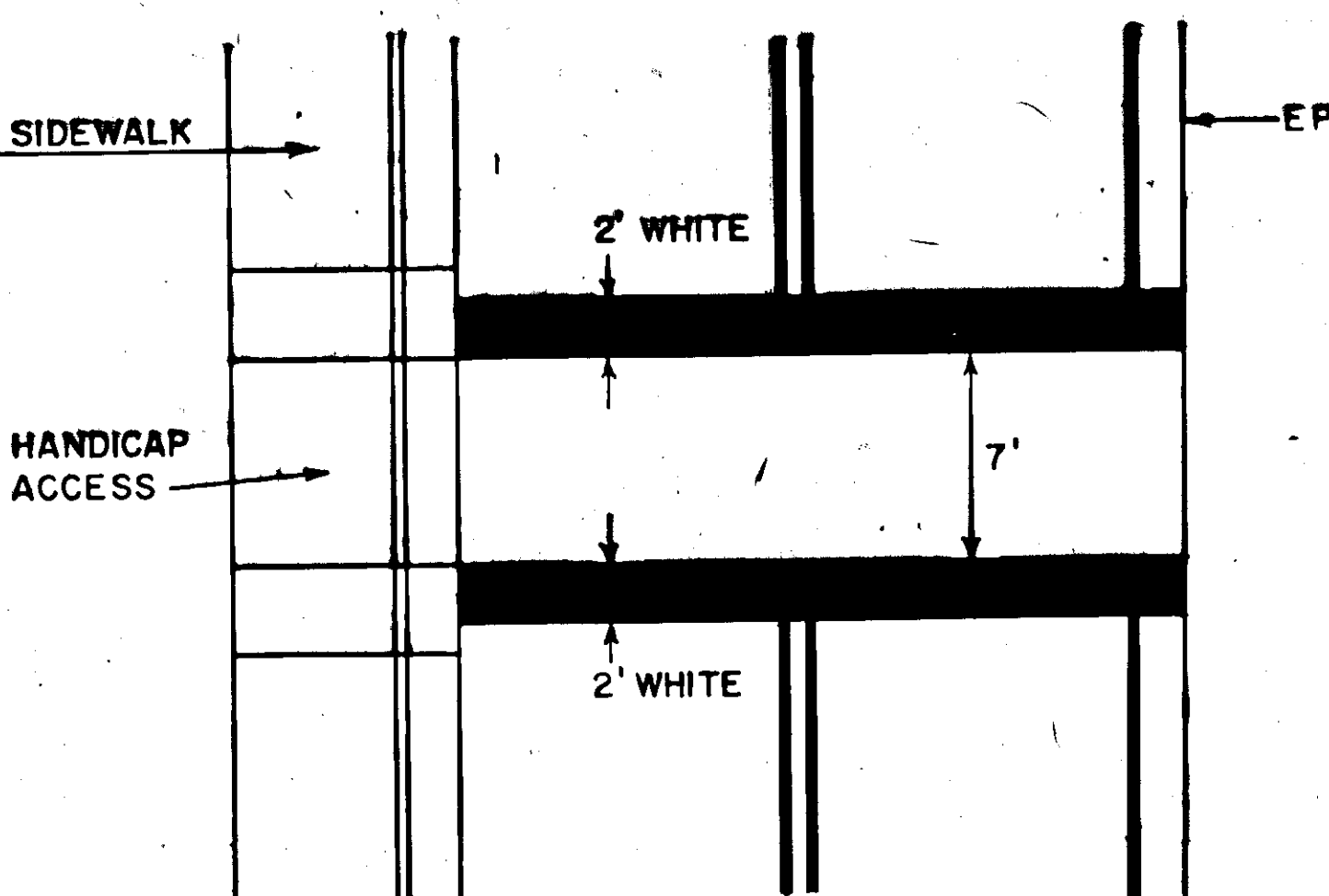


DRIVEWAY PROFILES

Plan and profile for Special Approaches, See Sheet 49A50.

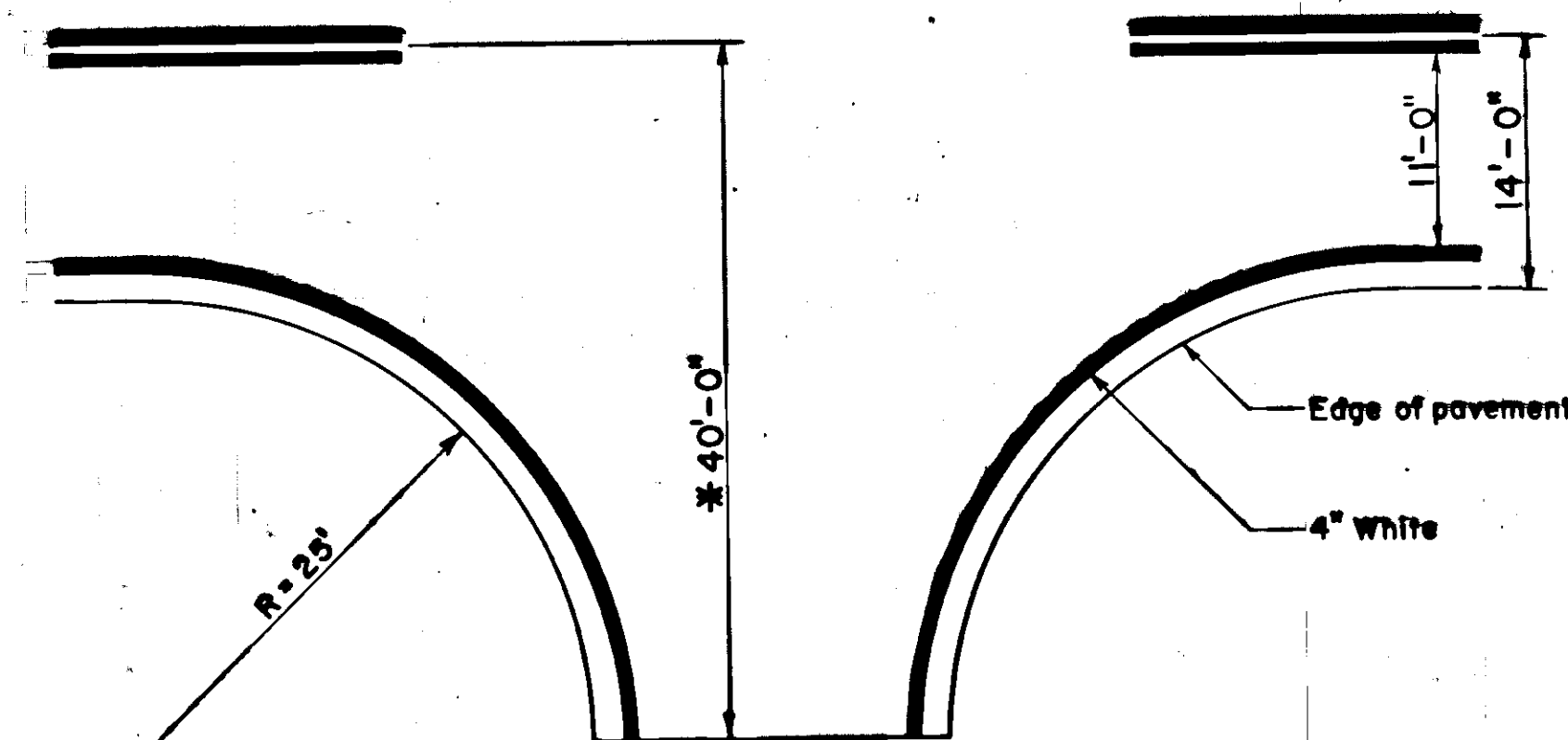
DRIVEWAY NOTES:

PAVING LIMITS FOR DRIVEWAYS SHALL BE 25' OR TO R/W, WHICHEVER IS LESS.



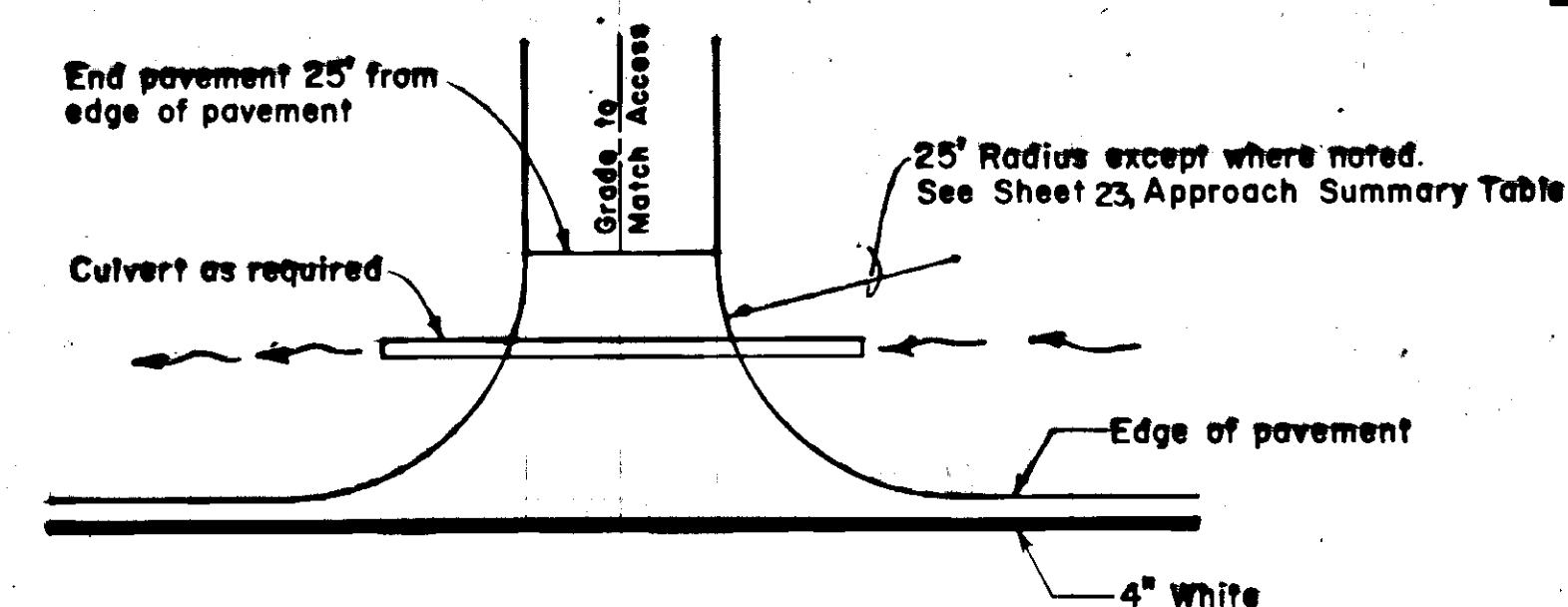
CROSSWALK MARKING

STA. "O" 9+52
STA. "O" 19+02



TYPICAL APPROACH I

STA. "O" 7+00 to 28+50
* Approach 18+55 is less-end at existing dock.



TYPICAL APPROACH II

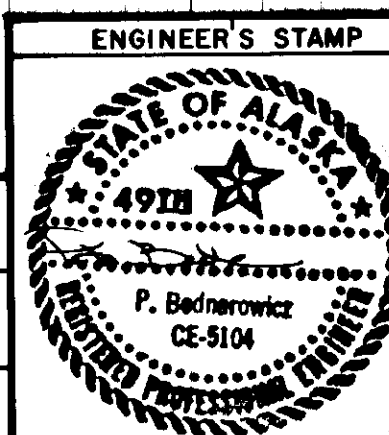
STA. "O" 76+56 to 126+40
STA. "P" 10+15 to 16+80

BY	DATE	DESCRIPTION OF CHANGE

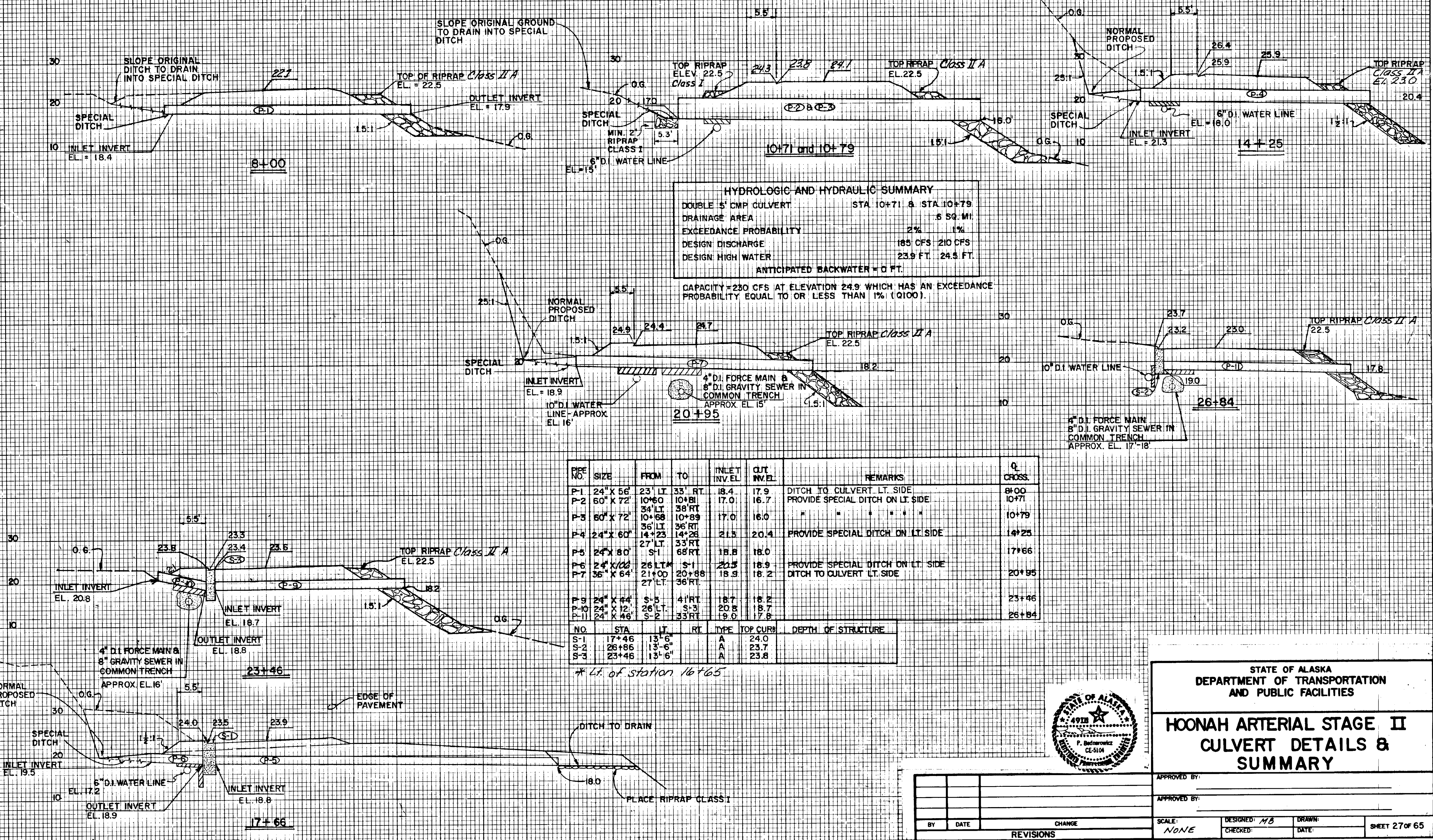
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
STRIPING PLAN & TYPICAL APPROACH
PROJECT NO. RS-0918 (4) 69305

APPROVED BY:	DESIGNED BY:	SCALE:
DESIGN GROUP CHIEF	M.B.	
RECOMMENDED BY:	DRAWN BY:	DATE:
DESIGN ENGINEER, GROUP "A"	T.H.	
PREPARED BY:	CHECKED BY:	SHEET 26 OF 65
PROJECT MANAGER	LEAD DESIGNER	



Note: All Class I Riprap shall be 2 feet thick



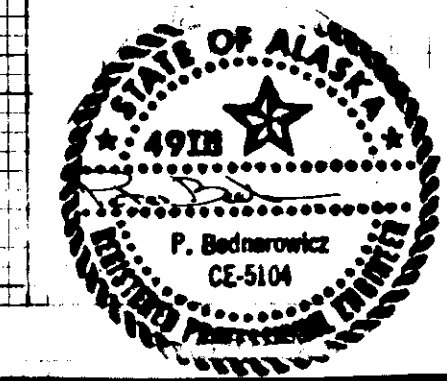
HYDROLOGIC AND HYDRAULIC SUMMARY	
DOUBLE 5' CMP CULVERT	STA 10+71 & STA 10+79
DRAINAGE AREA	6 SQ. MI.
EXCEEDANCE PROBABILITY	2% 1%
DESIGN DISCHARGE	185 CFS 210 CFS
DESIGN HIGH WATER	23.9 FT. 24.5 FT.
ANTICIPATED BACKWATER = 0 FT.	

CAPACITY = 230 CFS AT ELEVATION 24.9 WHICH HAS AN EXCEEDANCE PROBABILITY EQUAL TO OR LESS THAN 1% (Q100).

PIPE NO.	SIZE	FROM	TO	INLET INV. EL.	OUT INV. EL.	REMARKS	Q CROSS.
P-1	24" X 56"	23' LT	33' RT	18.4	17.9	DITCH TO CULVERT LT. SIDE	8+00
P-2	60" X 72"	10+60	10+81	17.0	16.7	PROVIDE SPECIAL DITCH ON LT. SIDE	10+71
P-3	60" X 72"	10+68	10+89	17.0	16.0	" " " " " "	10+79
P-4	24" X 60"	14+23	14+26	21.3	20.4	PROVIDE SPECIAL DITCH ON LT. SIDE	14+25
P-5	24" X 80"	S-1	33' RT	18.8	18.0	" " " " " "	17+66
P-6	24" X 100"	26' LT	S-1	20.5	18.9	PROVIDE SPECIAL DITCH ON LT. SIDE	20+95
P-7	36" X 64"	21+00	20+88	18.9	18.2	DITCH TO CULVERT LT. SIDE	20+95
P-8	24" X 44"	S-3	41' RT	18.7	18.2	" " " " " "	23+46
P-9	24" X 12"	26' LT	S-3	20.8	18.7	" " " " " "	26+84
P-10	24" X 46"	S-2	33' RT	19.0	17.8	" " " " " "	26+84

NO.	STA.	LT.	RT.	TYPE	TOP CURB	DEPTH OF STRUCTURE
S-1	17+46	13'-6"		A	24.0	
S-2	26+86	13'-6"		A	23.7	
S-3	23+46	13'-6"		A	23.8	

* Lt. of station 16+65



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES

HOONAH ARTERIAL STAGE II
 CULVERT DETAILS &
 SUMMARY

APPROVED BY: _____
 APPROVED BY: _____
 SCALE: NONE
 DESIGNED: MB
 CHECKED: _____
 DRAWN: _____
 DATE: _____
 SHEET 27 OF 65

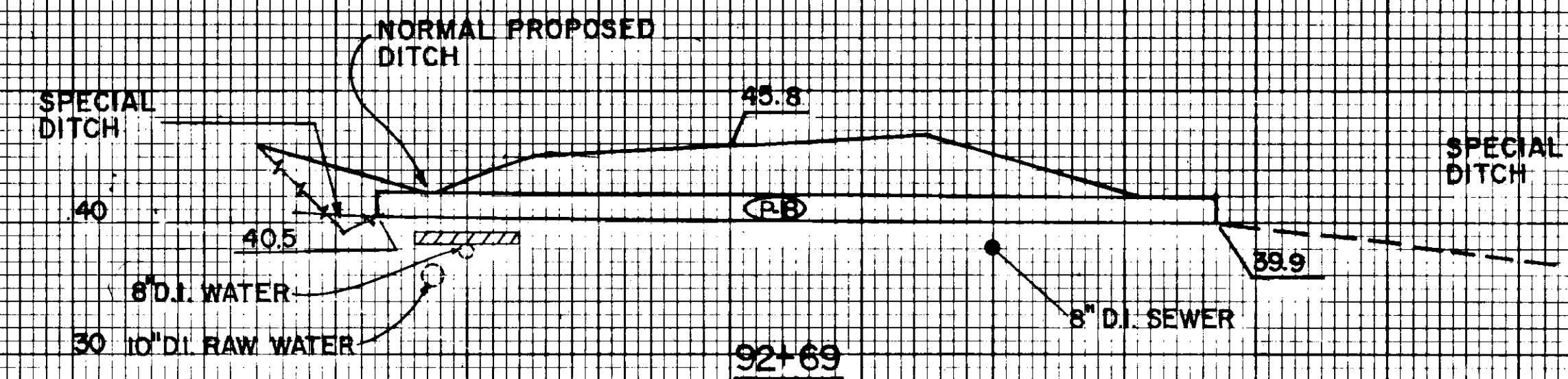
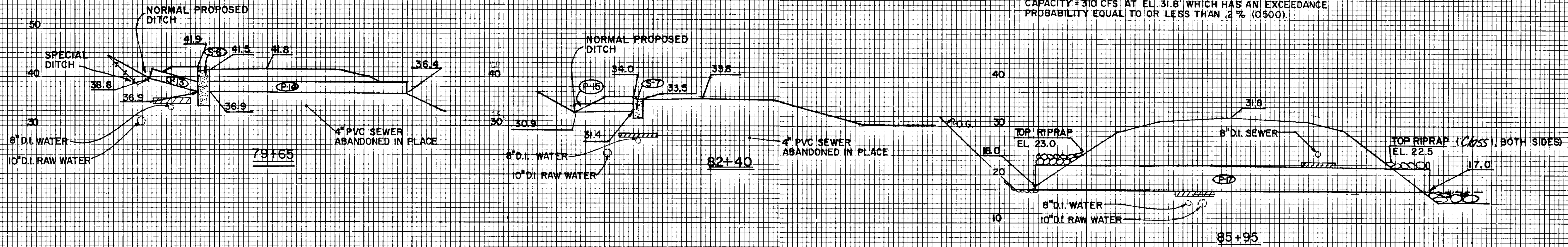
BY: _____ DATE: _____ CHANGE: _____
 REVISIONS

Note: All Class I Riprap
shall be 2 feet thick

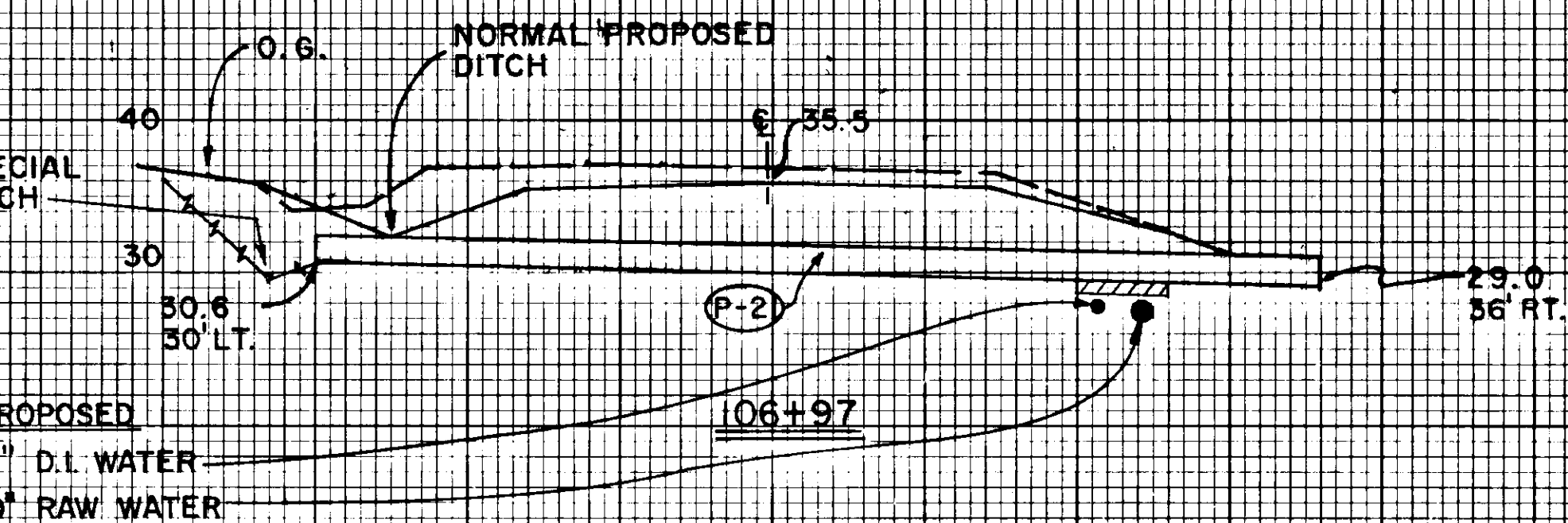
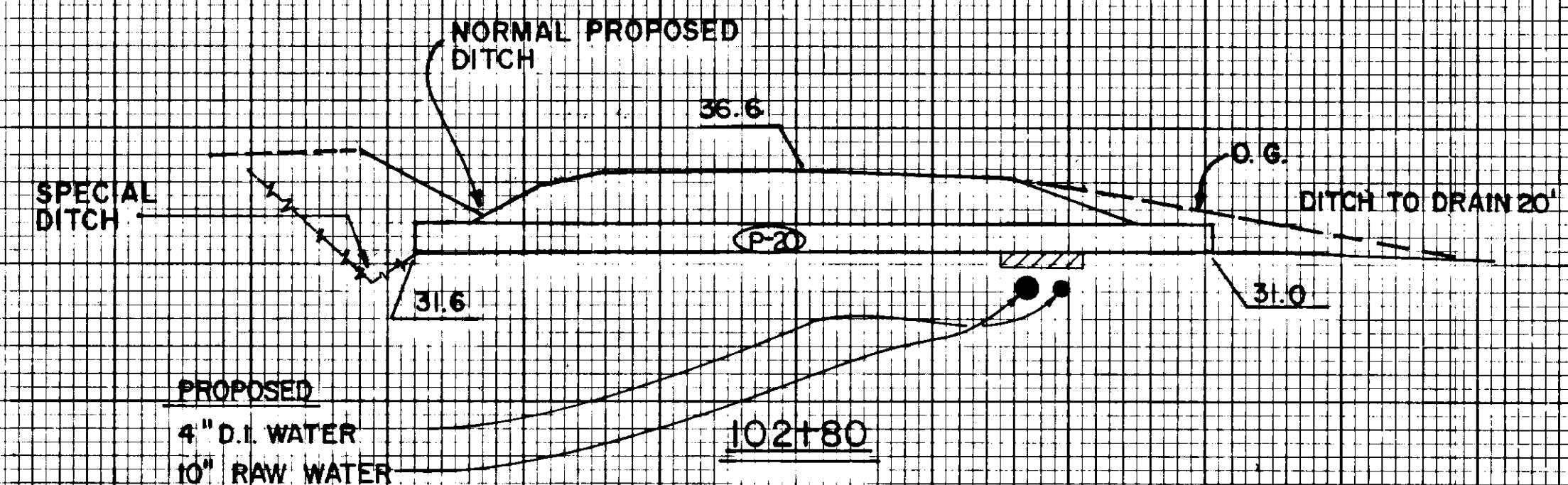
HYDROLOGIC AND HYDRAULIC SUMMARY

SINGLE 5 CMP CULVERTS	STA. 86+00
DRAINAGE AREA	5 SQ. MI.
EXCEEDANCE PROBABILITY	2% 1%
DESIGN DISCHARGE	169 CFS 191 CFS
DESIGN HIGH WATER	23.2 FT. 24.5 FT.
ANTICIPATED BACKWATER=0 FT.	

CAPACITY=310 CFS AT EL. 31.8' WHICH HAS AN EXCEEDANCE
PROBABILITY EQUAL TO OR LESS THAN 2% (0500).



PIPE NO.	SIZE	FROM	TO	INVERT IN. EL.	OUTLET IN. EL.	REMARKS	C CROSS.
P-13	24" X 14'	25' LT.	S-6	38.8	36.9	PROVIDE SPECIAL DITCH	79+65
P-14	24" X 42'	S-6	29' RT.	36.9	36.4		82+40
P-15	18" X 14'	25' LT.	S-7	31.4	30.9		
P-17	60" X 82'	85+98 41' LT.	85+80 41' RT.	18.0	17.0		85+95
P-18	24" X 64'	26' LT.	38' RT.	40.5	39.9	PROVIDE SPECIAL DITCH ON LT. SIDE	92+69
P-20	24" X 58'	28' LT.	30' RT.	31.6	31.0	PROVIDE SPECIAL DITCH ON LT. SIDE	102+80
P-21	24" X 66'	30' LT.	36' RT.	30.6	29.0	PROVIDE SPECIAL DITCH ON LT. SIDE PROVIDE DITCH TO DRAIN RT. SIDE	106+97
P-22	24" X 74'	35' LT.	38' RT.	25.2	24.0		109+59
P-23	24" X 68'	113+00 27' LT.	112+87 37' RT.	36.1	35.4		112+94
P-24	117" X 79"	119+29 32' LT.	119+02 42' RT.	42.0	38.0		119+20
P-25	24" X 78'	35' LT.	43' RT.	46.4	45.6	PROVIDE SPECIAL DITCH LT. SIDE	123+46
P-26	24" X 66'	26' LT.	40' RT.	53.8	52.0	PROVIDE SPECIAL DITCH LT. SIDE	126+35



NO.	STA.	LT.	RT.	TYPE	TOP CURB	DEPTH STRUCT.
S-6	79+65	13'-6"		A	41.9	
S-7	82+40	13'-6"		A	34.0	



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

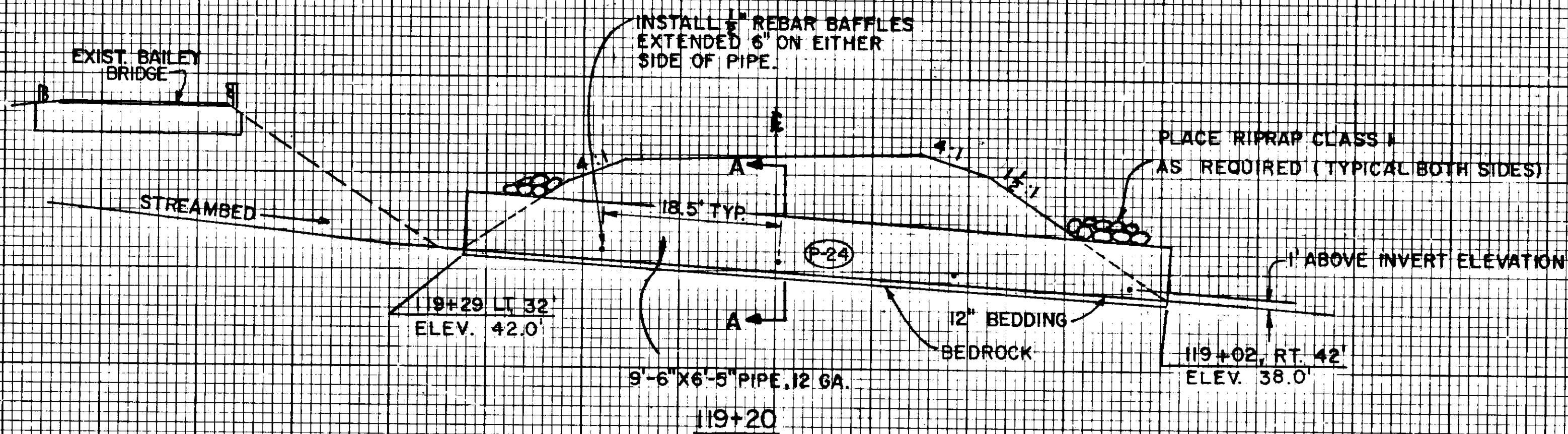
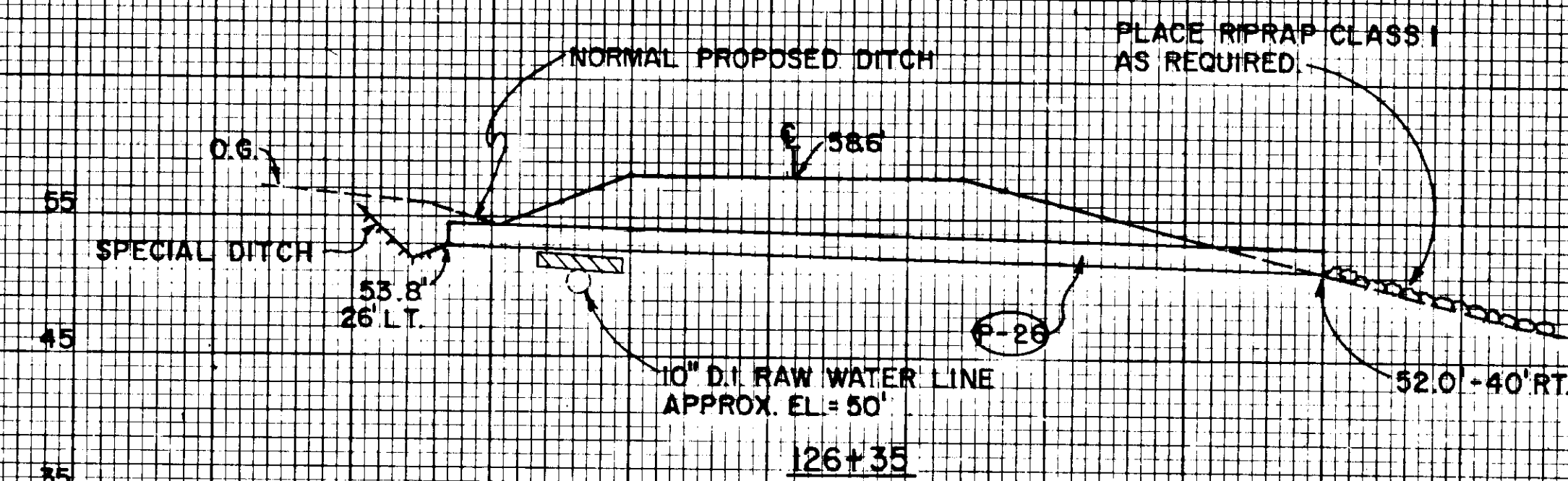
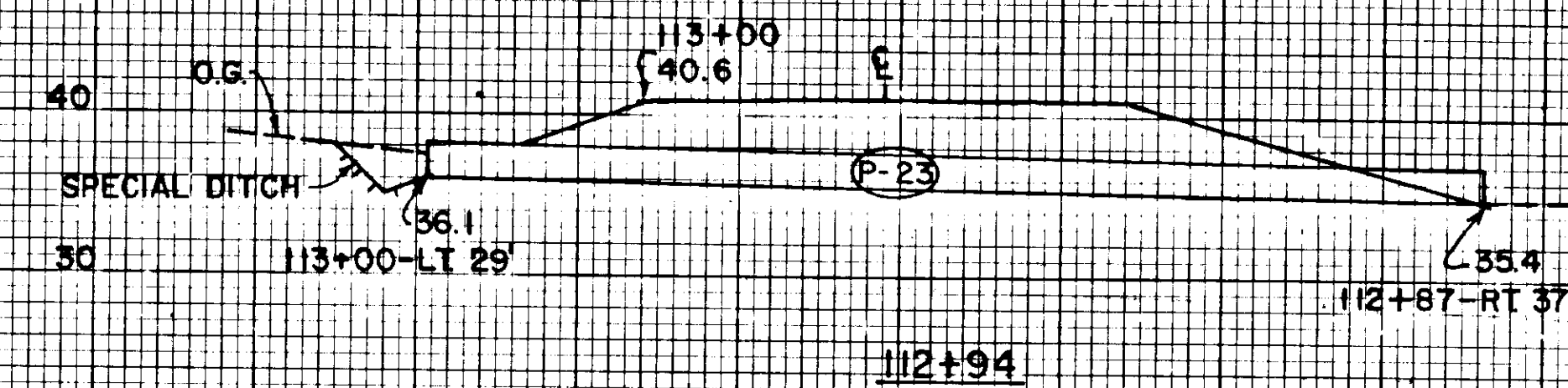
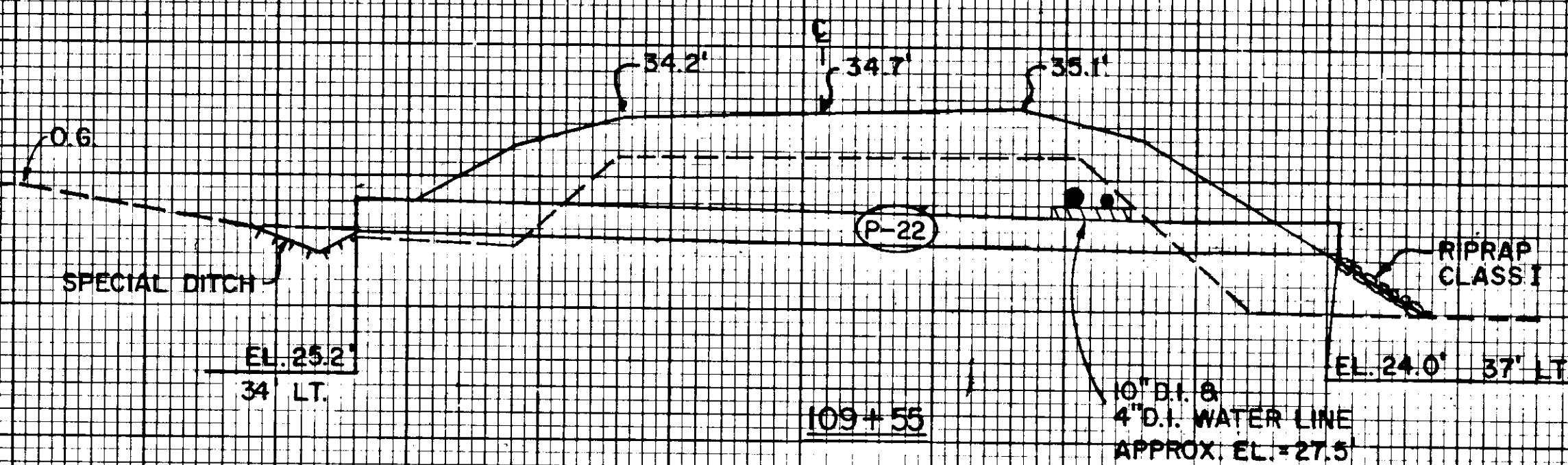
HOONAH ARTERIAL STAGE II CULVERT DETAILS & SUMMARY

APPROVED BY:	
APPROVED BY:	
SCALE:	DESIGNED: 4/8 CHECKED:
BY:	DATE:
CHANGE:	DRAWN: Cda DATE:
REVISIONS:	SHEET 28 of 65

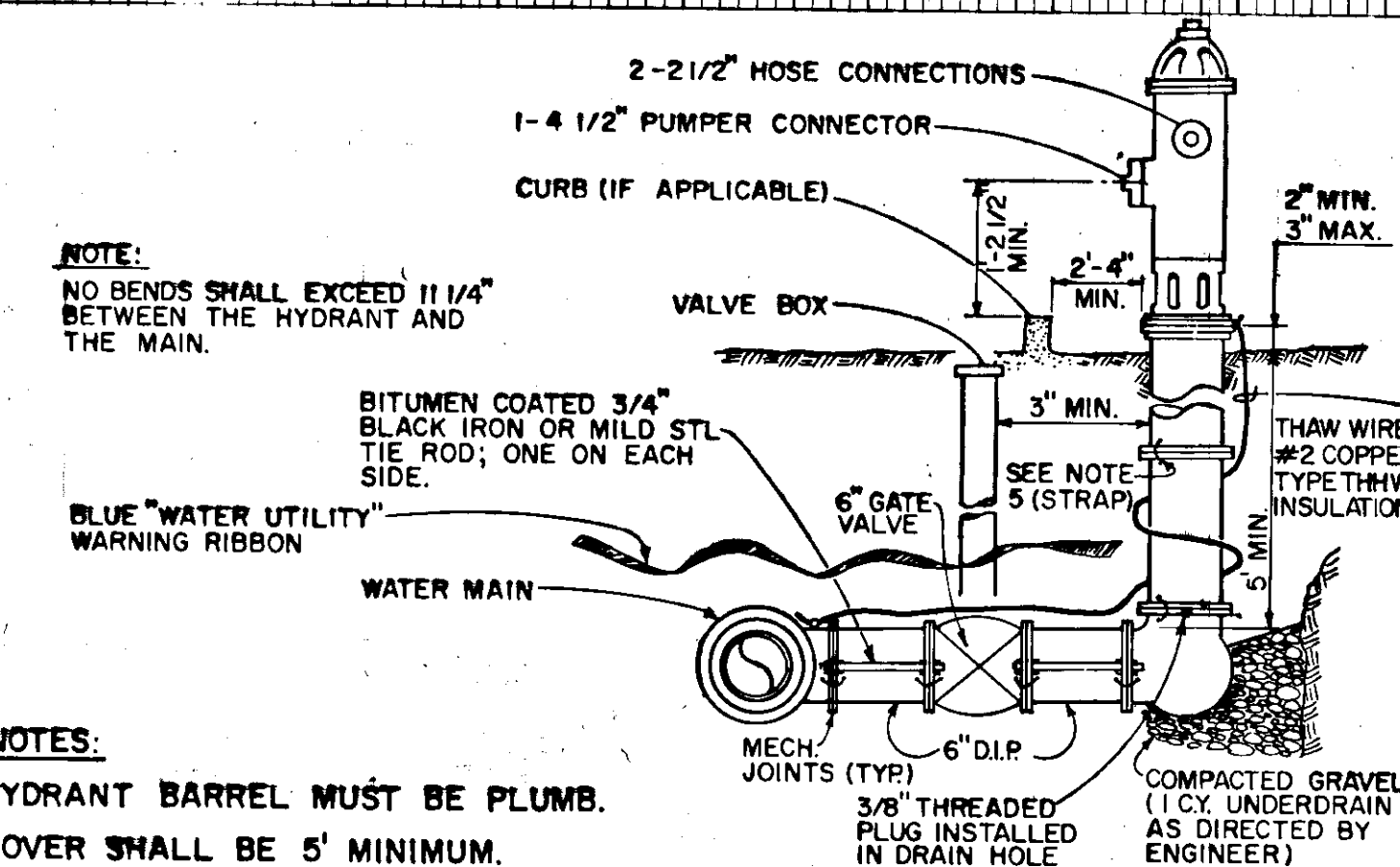
PROJECT NO. RS-0918(4) 69305

K-E PLATE 3, CROSS SECTION
Kruppel & Esser Co.

Note: All Class 1 Riprap
shall be 2 feet thick



DRIVEWAY CULVERTS						
SIZE	LT.	RT.	INLET INV. EL.	OUTLET INV. EL.	REMARKS	℄ APPROCH
18" X 24'	24'		22+43 21.1	22+67 21.0		22+55
18" X 24'	24'		23+18 21.0	23+42 20.7		23+30
18" X 34'	32'		80+61 35.8	80+95 34.8		80+78
18" X 36'	39'		85+27 29.0	85+63 28.0		85+45
18" X 34'	27'		88+99 34.3	88+65 33.5		88+82
18" X 30'	37'		94+18 45.3	93+88 44.9		94+03
18" X 40'	37'		95+60 44.2	96+00 44.0		95+79
18" X 24'	37'		98+03 38.9	98+27 38.1		98+14
18" X 44'	27'		99+17 37.0	99+61 36.0		99+40
24" X 42'	27'		101+41 33.7	102+03 33.5		101+82
18" X 34'	27'		105+45 32.6	105+79 32.5		105+62
18" X 34'	26'		106+85 32.5	106+19 32.4		106+02
18" X 30'	23'		106+35 32.3	106+65 32.0		106+50



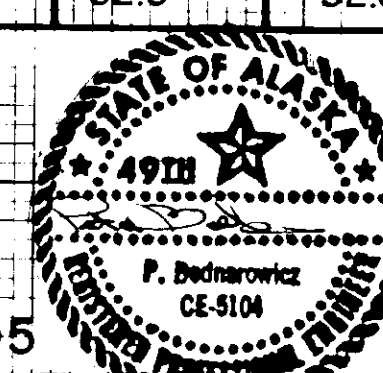
- NOTES:**
- 1. HYDRANT BARREL MUST BE PLUMB.**
 - 2. COVER SHALL BE 5' MINIMUM.**
 - 3. VALVE BOX SHALL BE SITUATED OUTSIDE ANY DITCH SECTION; OR IN ACCESS PAD.**
 - 4. ALL HYDRANTS SHALL BE PAINTED CATERPILLAR YELLOW. HYDRANT BARREL, JUST BELOW CAP, SHALL HAVE NUMBER OF FEET TO VALVE PRINTED IN BLACK 1/2" BLOCK LETTERS. ALL HYDRANTS WITH PLUG DRAINS SHALL HAVE THE TOP CAP PAINTED BLUE.**
 - 5. INSTALL CONTINUITY STRAPS BETWEEN ALL FIRE HYDRANT ASSEMBLY PIPE SPOOLS AND WATER MAIN. (#2 COPPER WIRE). REFER TO SPECIFICATIONS FOR DETAILS OF INSTALLATION.**
 - 6. MEGALUG IS AN ACCEPTABLE ALTERNATE FOR THE MECHANICAL JOINT RESTRAINT PIPE SHOWN.**
 - 7. HYDRANTS TO BE RELOCATED TO A NEW STATION SHALL BE ACCOMPLISHED BY A NEW MAINLINE TAP AND INSTALLATION AS DETAILED BELOW. NO 90° BENDS SHALL BE ALLOWED.**
- MECH JOINTS (TYPE 6" D.I.P.)
3/8" THREADED PLUG INSTALLED IN DRAIN HOLE
- COMPACTED GRAVEL (1 CY UNDER DRAIN AS DIRECTED BY ENGINEER)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HOONAH ARTERIAL STAGE II CULVERT DETAILS & SUMMARY

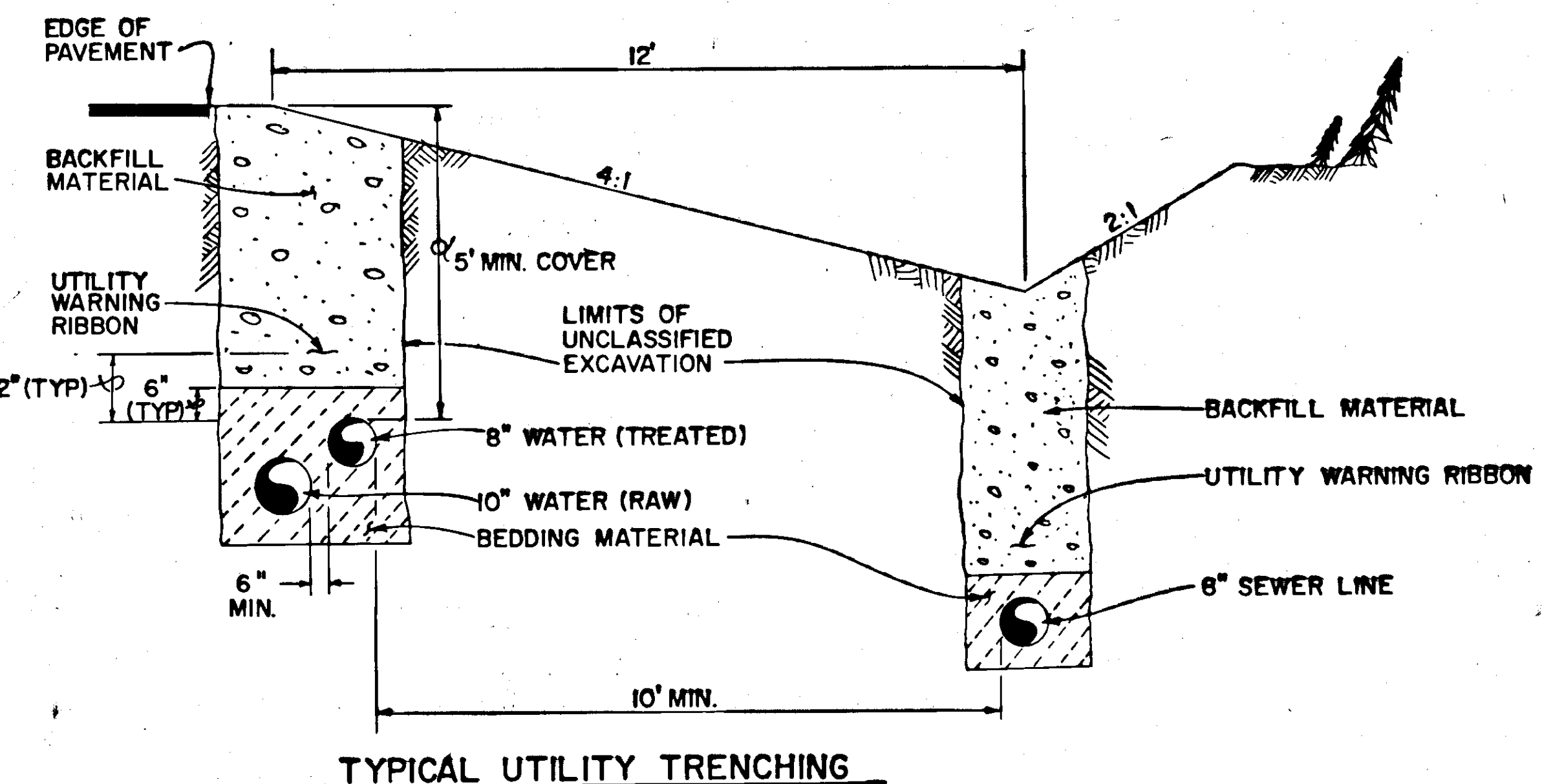
APPROVED BY: _____		SHEET 29 of 65	
APPROVED BY: _____		SHEET 29 of 65	
SCALE: <i>NONE</i>	DESIGNED: <i>MB</i>	DRAWN: _____	SHEET 29 of 65
CHECKED: _____	DATE: _____	_____	

PROJECT NO. RS-0918 (4) 69305

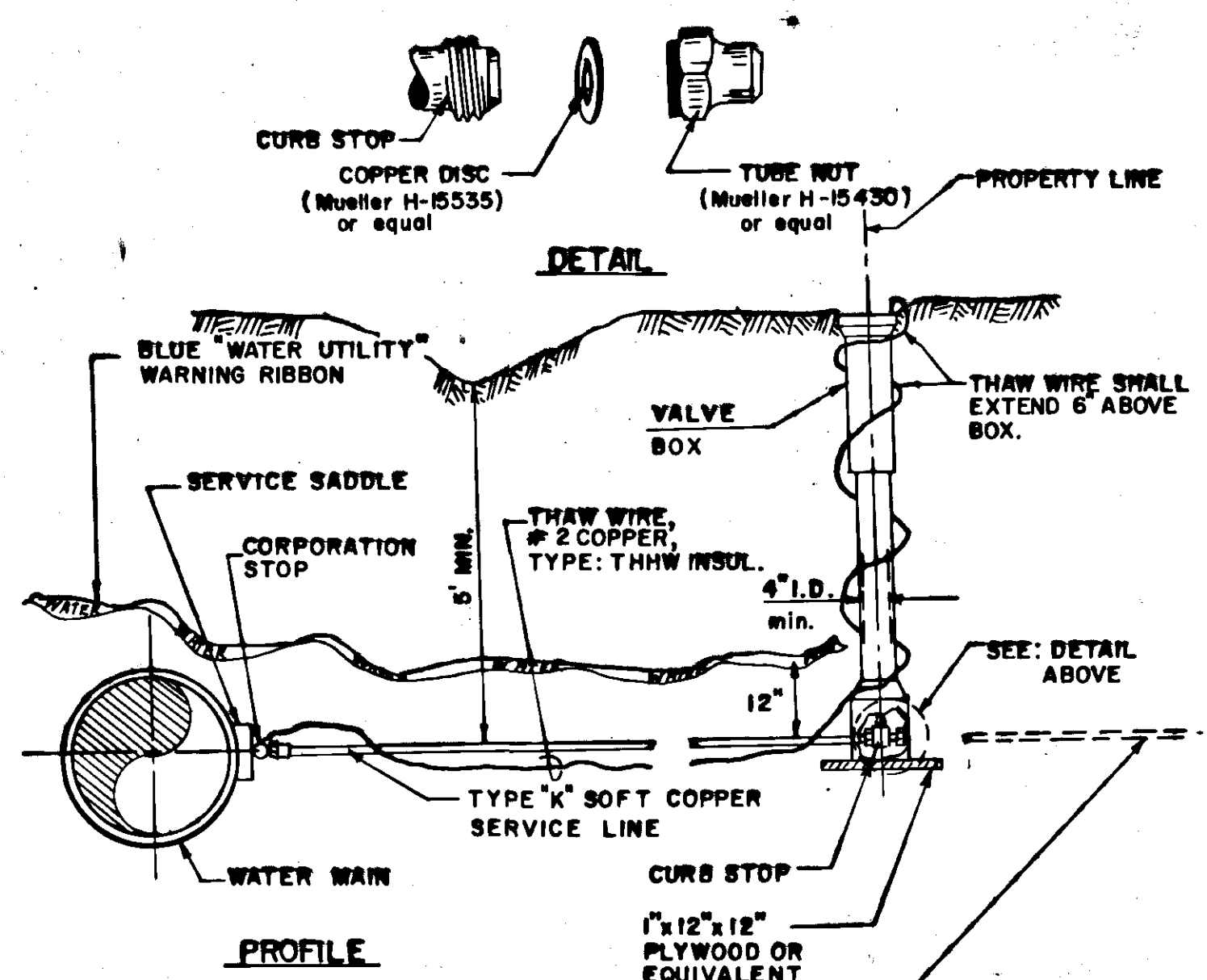


K+E PLATE 3, CROSS SECTION
KRIEGER & ESSEB CO.

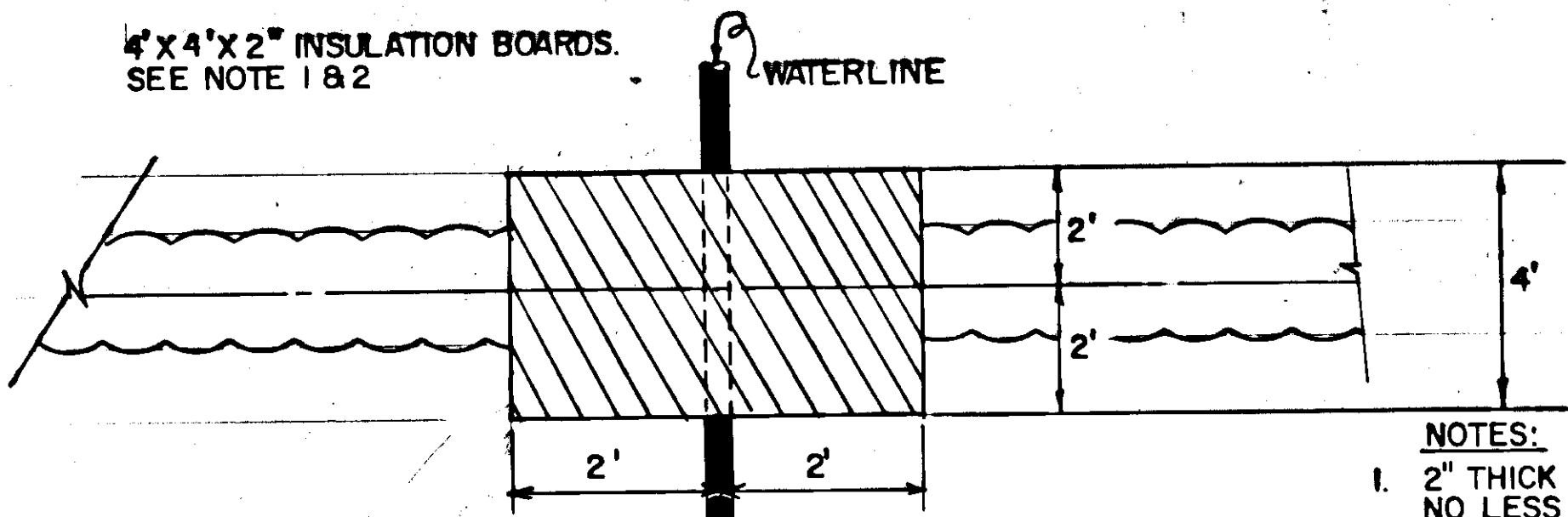
BY	DATE	CHANG
REVISIONS		



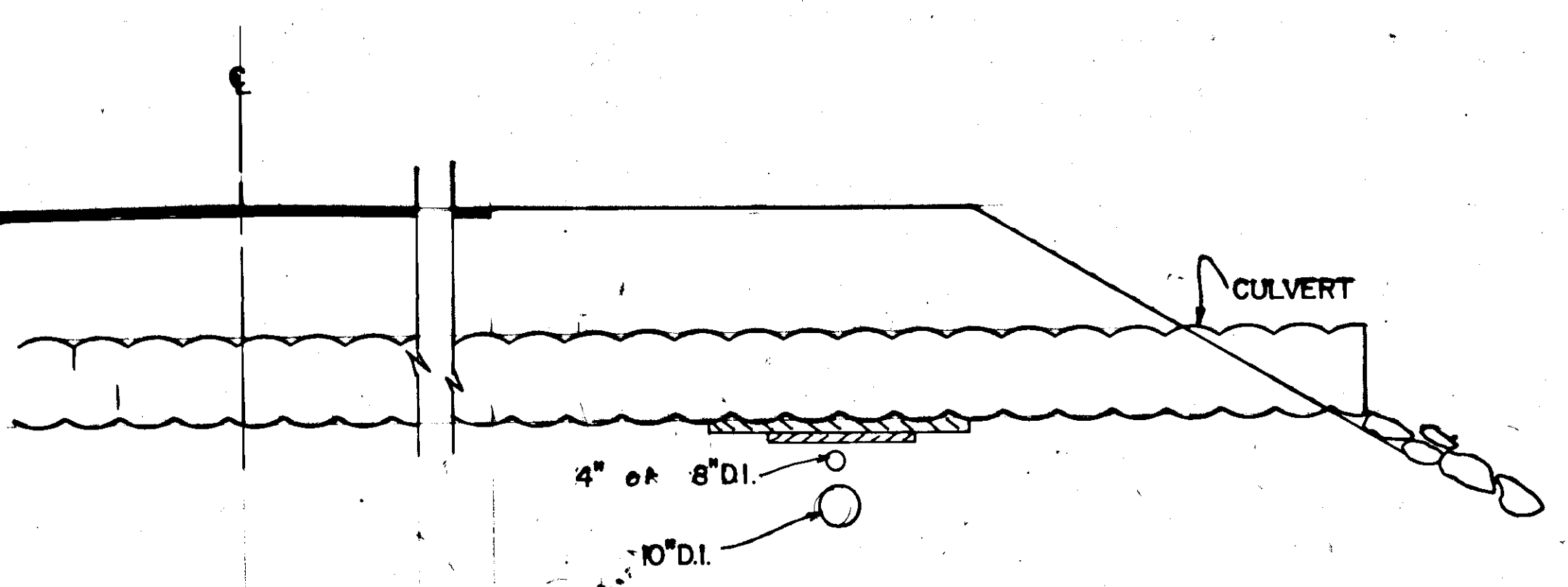
- NOTES:**
1. USE MUELLER CORPORATION STOP No. H15025 OR EQUAL.
 2. USE MUELLER CURB STOP No. H15201 OR EQUAL FOR COPPER TO COPPER CONNECTIONS.
 3. USE MUELLER CURB STOP No. H15174 OR EQUAL FOR COPPER TO IRON CONNECTIONS.
 4. COPPER TUBE CONNECTIONS SHALL BE FLARED UNIONS.
 5. THAW WIRE SHALL BE CONNECTED TO THE SERVICE SADDLE TAKE-UP NUT WITH A SOLDERLESS LUG.
 6. THAW WIRE MUST NOT BE RUN INSIDE VALVE BOX.



WATER SERVICE

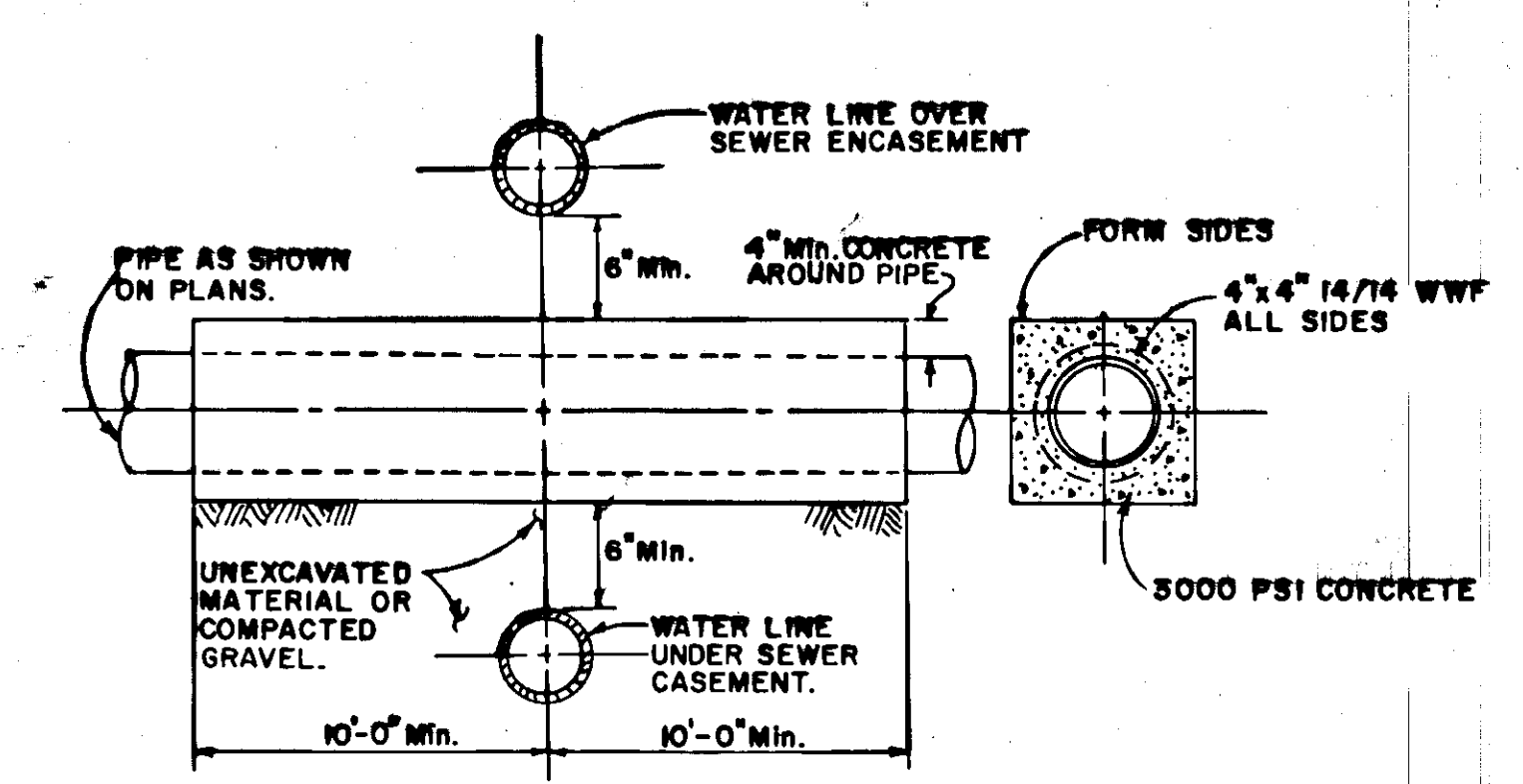


- NOTES:**
1. 2" THICK x 4' LONG INSULATION BOARD WITH NO LESS THAN A R-8 RATING FOR ALL WATER PIPE ABOVE OR BELOW CULVERT PIPES, OR AS SHOWN ON CULVERT DETAILS, SHEET 27, 28, & 29.
 2. Stack 4' insulation boards over full length of any seams in insulation boards.
 3. A MINIMUM OF 5' BETWEEN PIPES MUST BE MAINTAINED IF NO INSULATION BOARD IS USED.



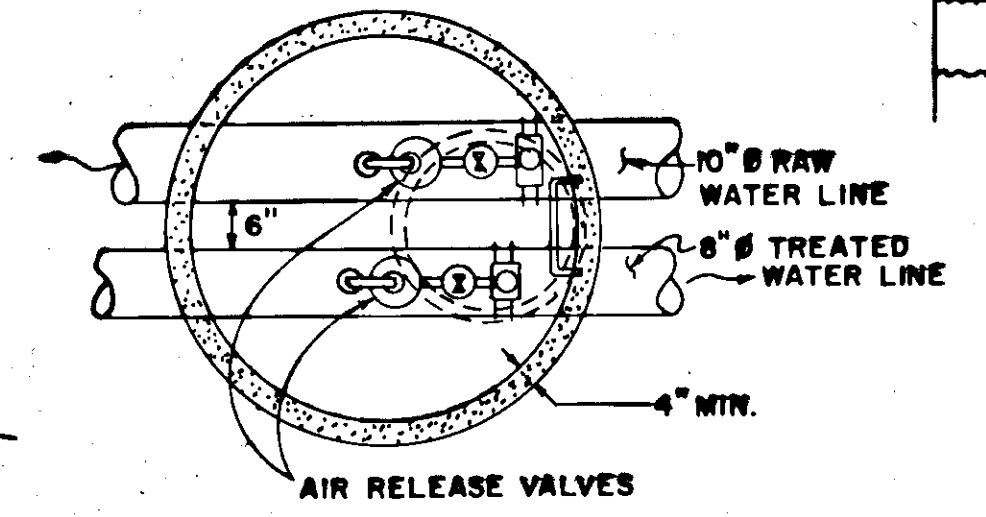
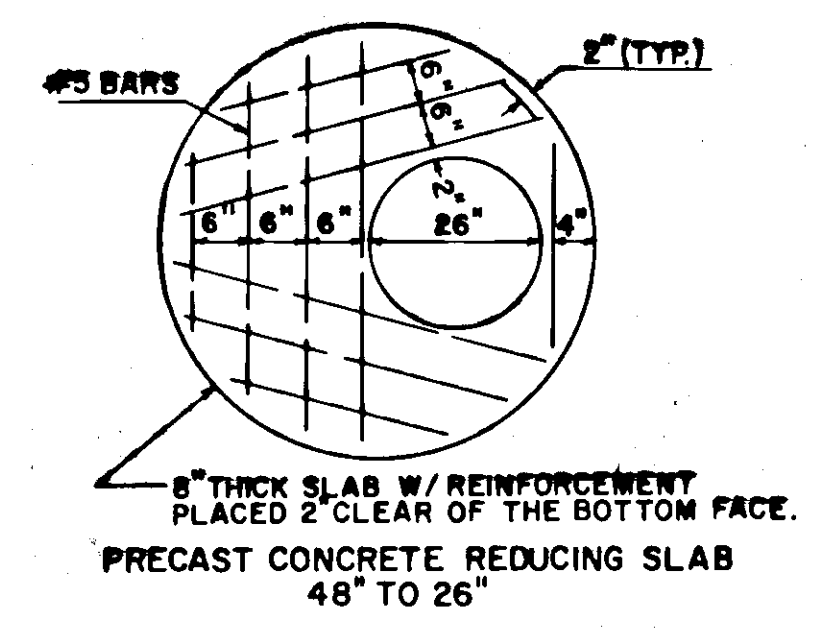
TYPICAL WATER & CULVERT CROSSING DETAIL

SEE SHT. 5 FOR SUMMARY TABLE

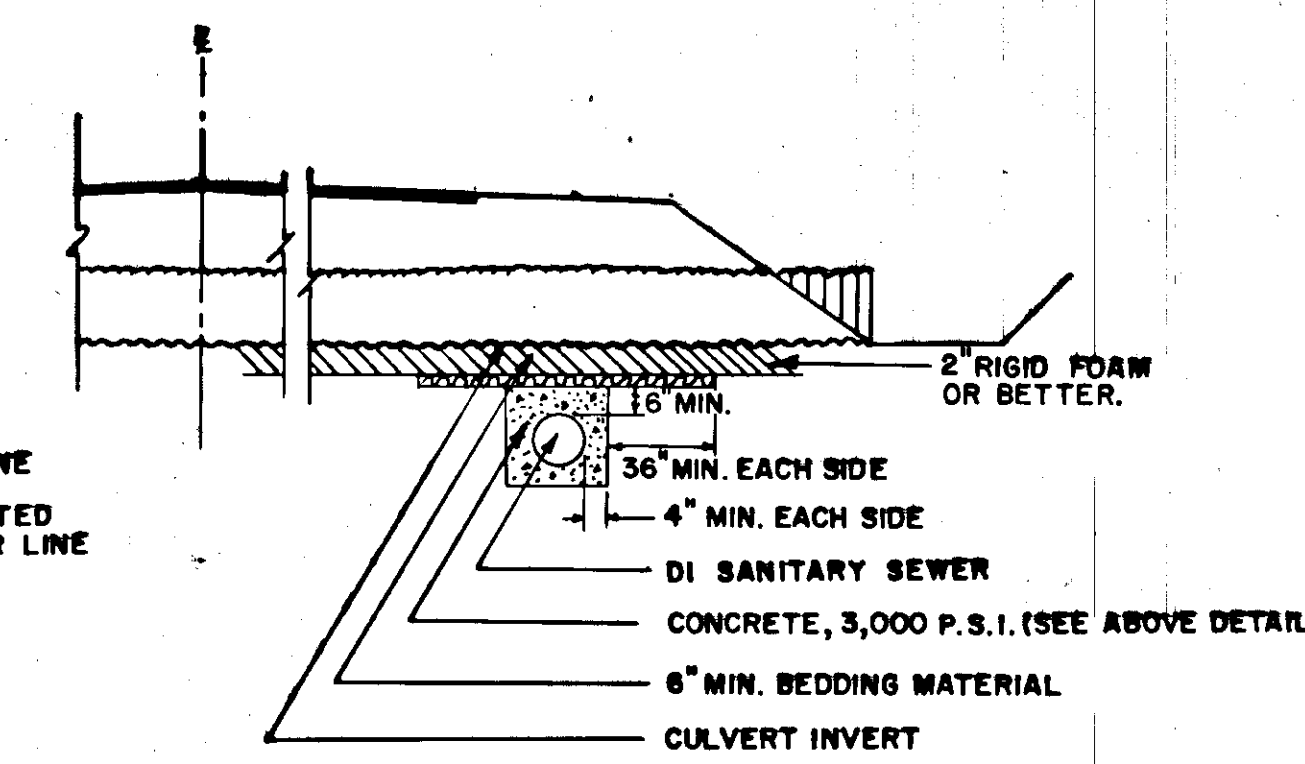


- NOTES:**
1. CAST IRON PIPE WITH LEAD CALKED OR OTHER APPROVED CONNECTIONS MAY BE USED IN LIEU OF CONCRETE ENCLOSEMENT.
 2. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 P.S.I.

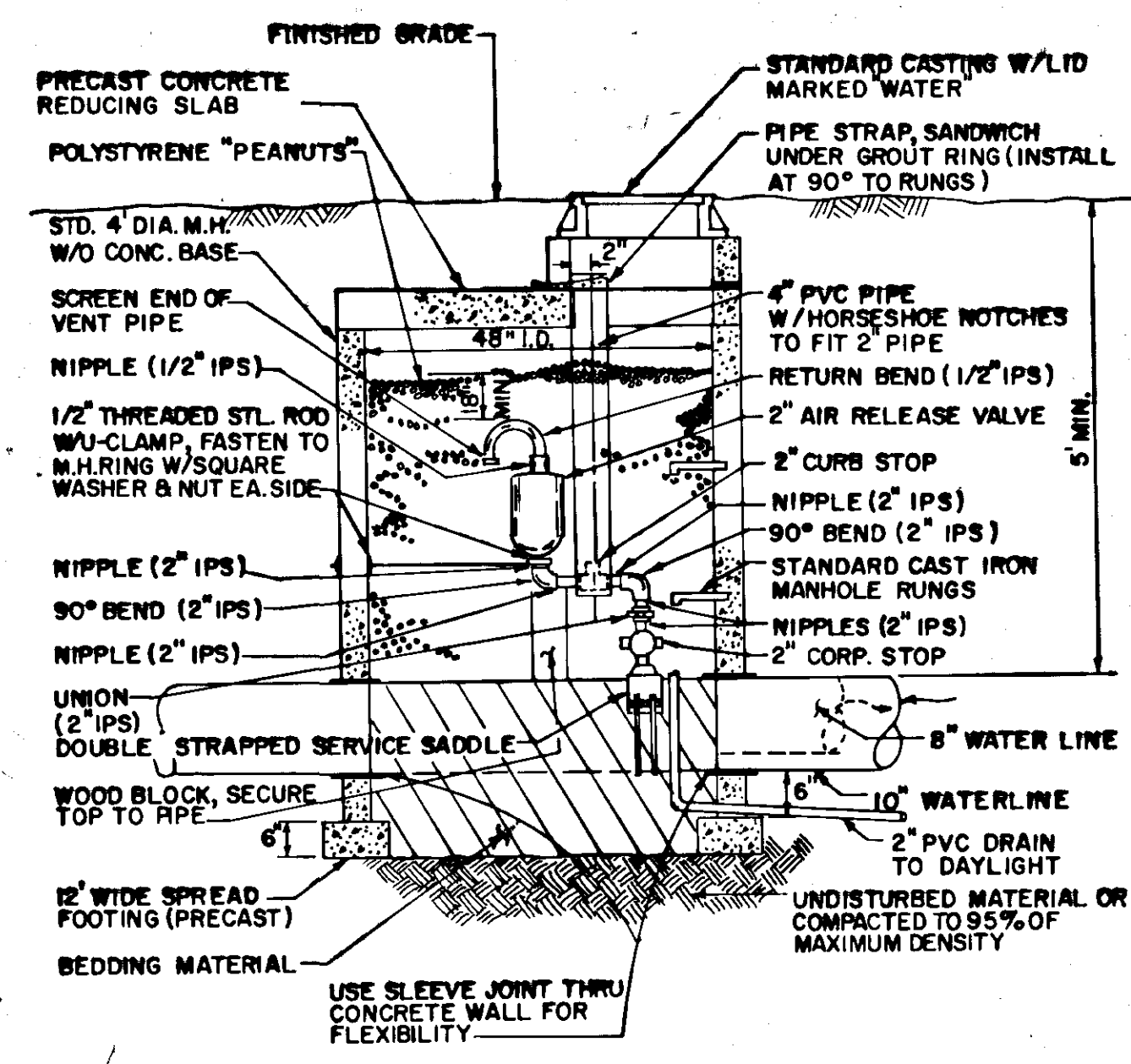
TYPICAL SEWER & WATER CROSSING ENCLOSEMENT DETAIL



**TOP VIEW
AIR RELEASE
MANHOLE**



**TYPICAL SEWER
CULVERT CROSSING DETAIL**

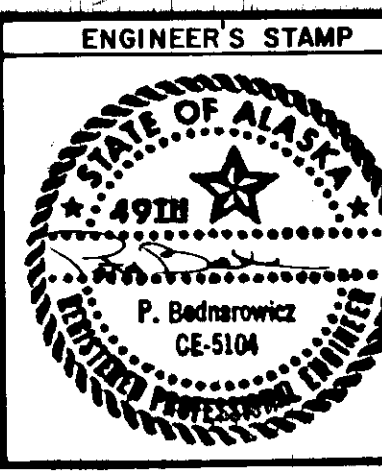


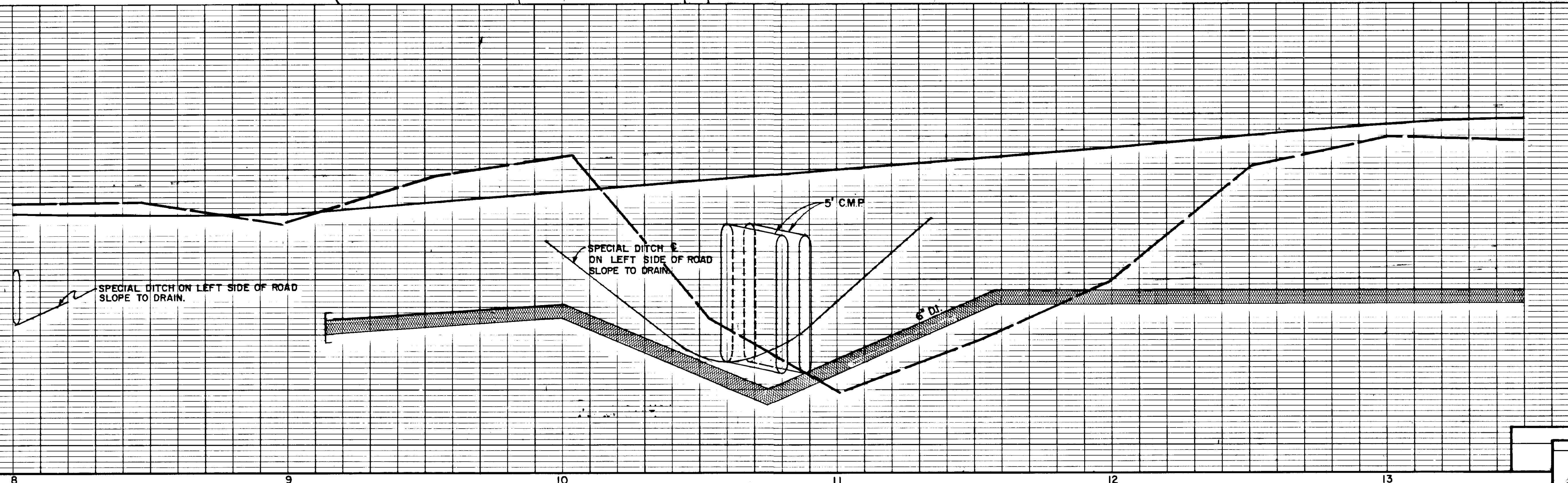
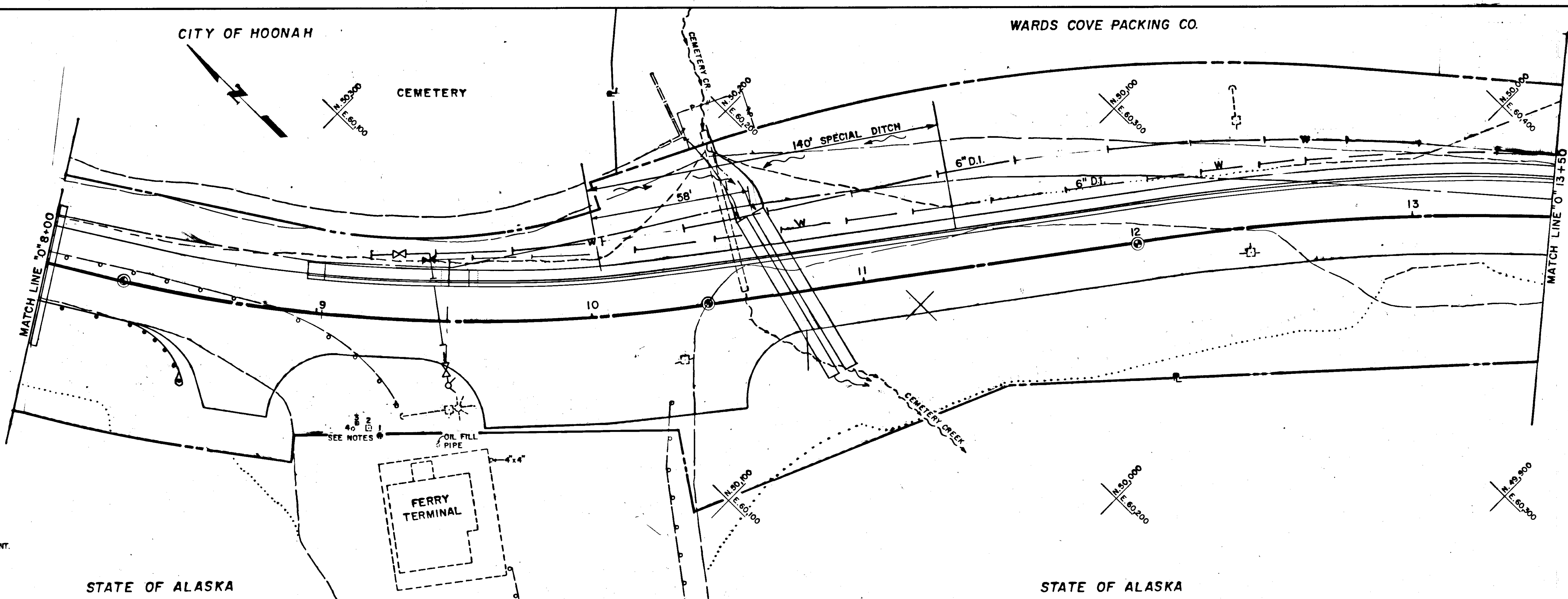
AIR RELEASE VALVE MANHOLE

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION		
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

HOONAH ARTERIAL - STAGE II
TYPICAL SECTIONS & DETAILS
PROJECT NO. RS-0918 (4) 69305

APPROVED BY:	DESIGNED BY:	SCALE:
DESIGN GROUP CHIEF	M.B.	NONE
RECOMMENDED BY:	DRAWN BY:	DATE:
DESIGN ENGINEER, GROUP	W.A.	
PREPARED BY:	CHECKED BY:	SHEET 30 OF 65
PROJECT MANAGER	P.B.	
LEAD DESIGNER		





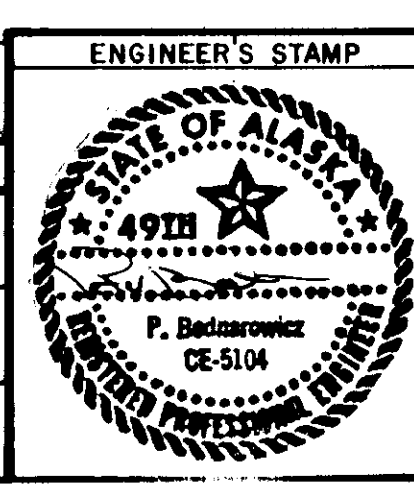
DATE	DESCRIPTION OF CHANGE

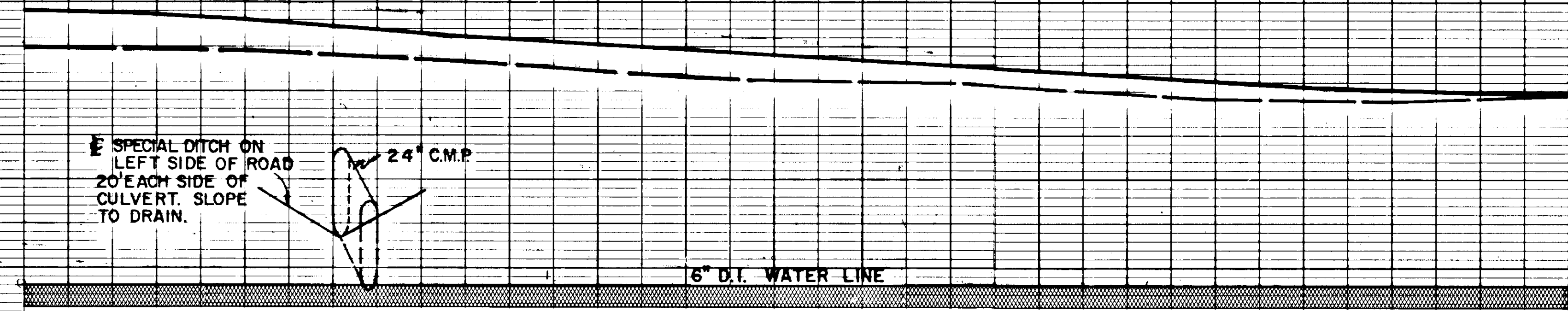
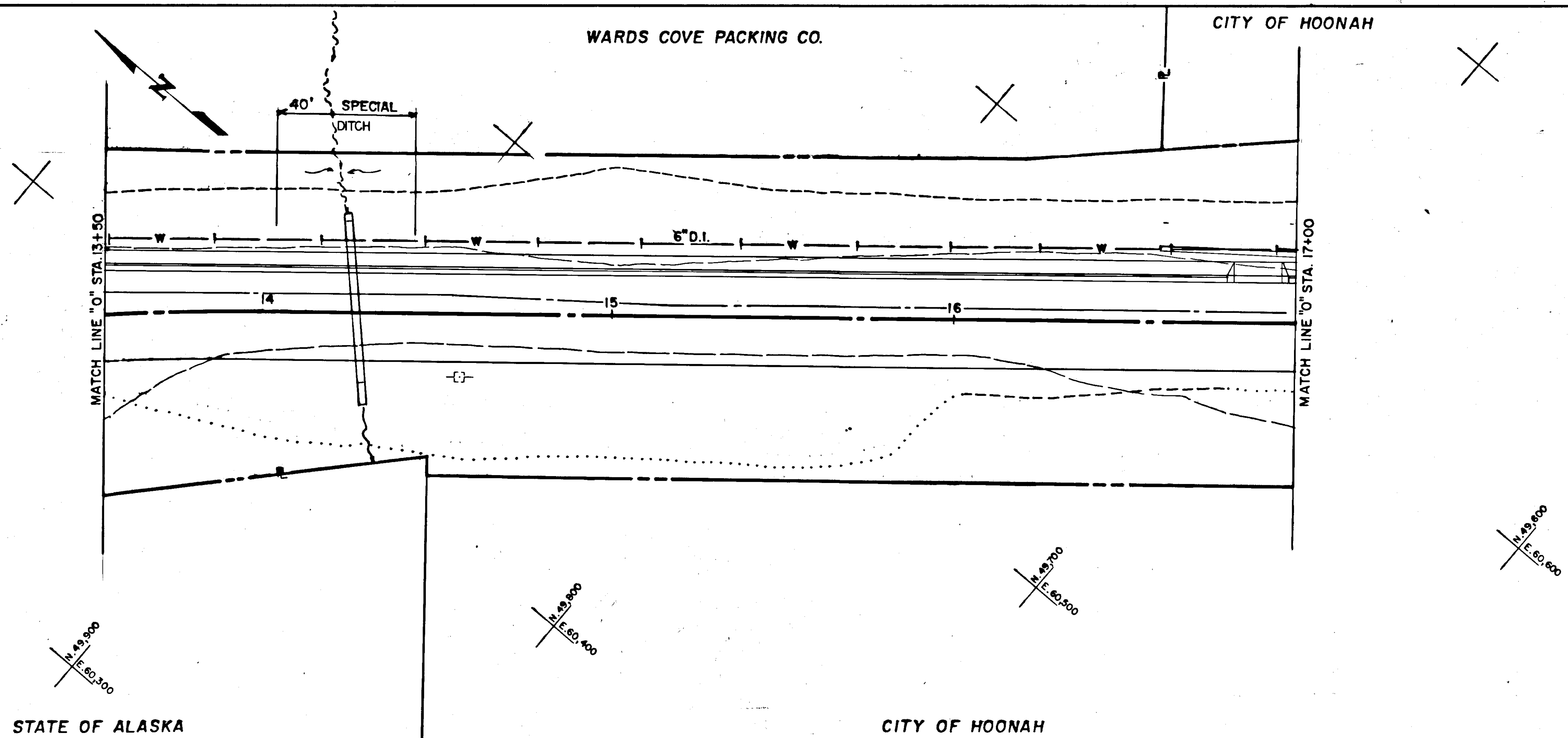
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
UTILITIES
PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP "A"
PREPARED BY: _____
PROJECT MANAGER

DESIGNED BY: _____
D.R.
DRAWN BY: _____
W.D.A.
CHECKED BY: _____
P.B.
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 32 OF 65





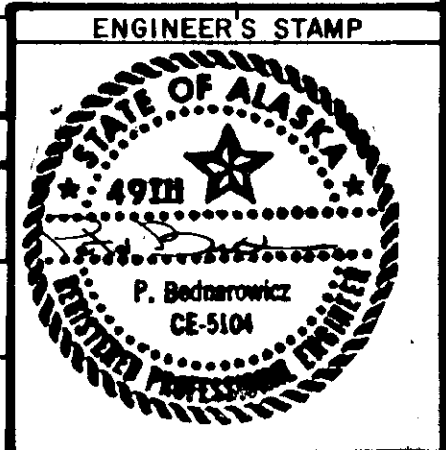
DATE	DESCRIPTION OF CHANGE

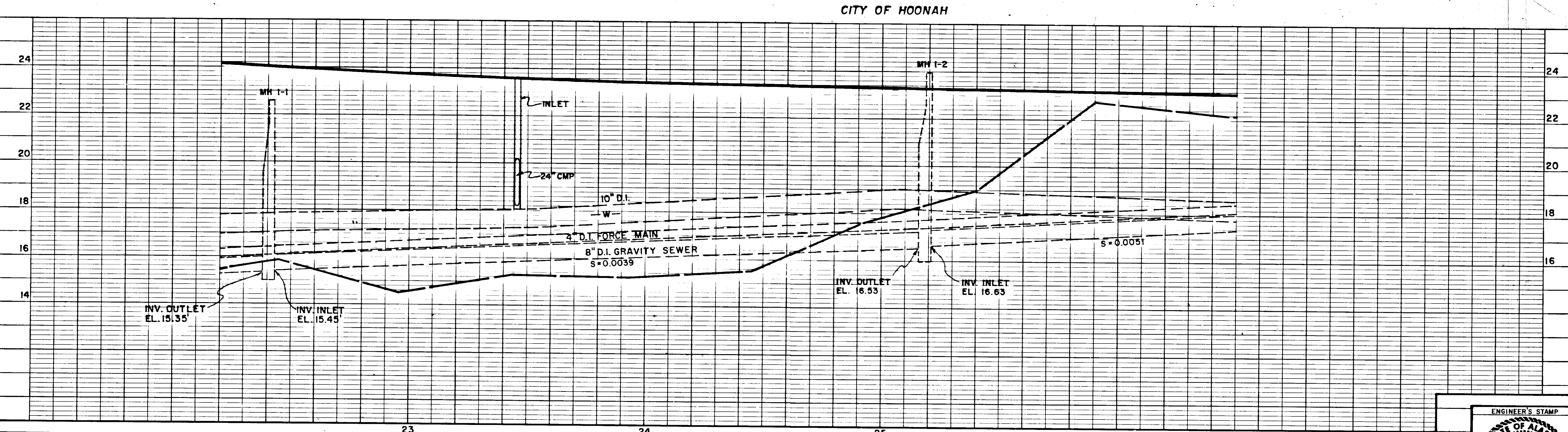
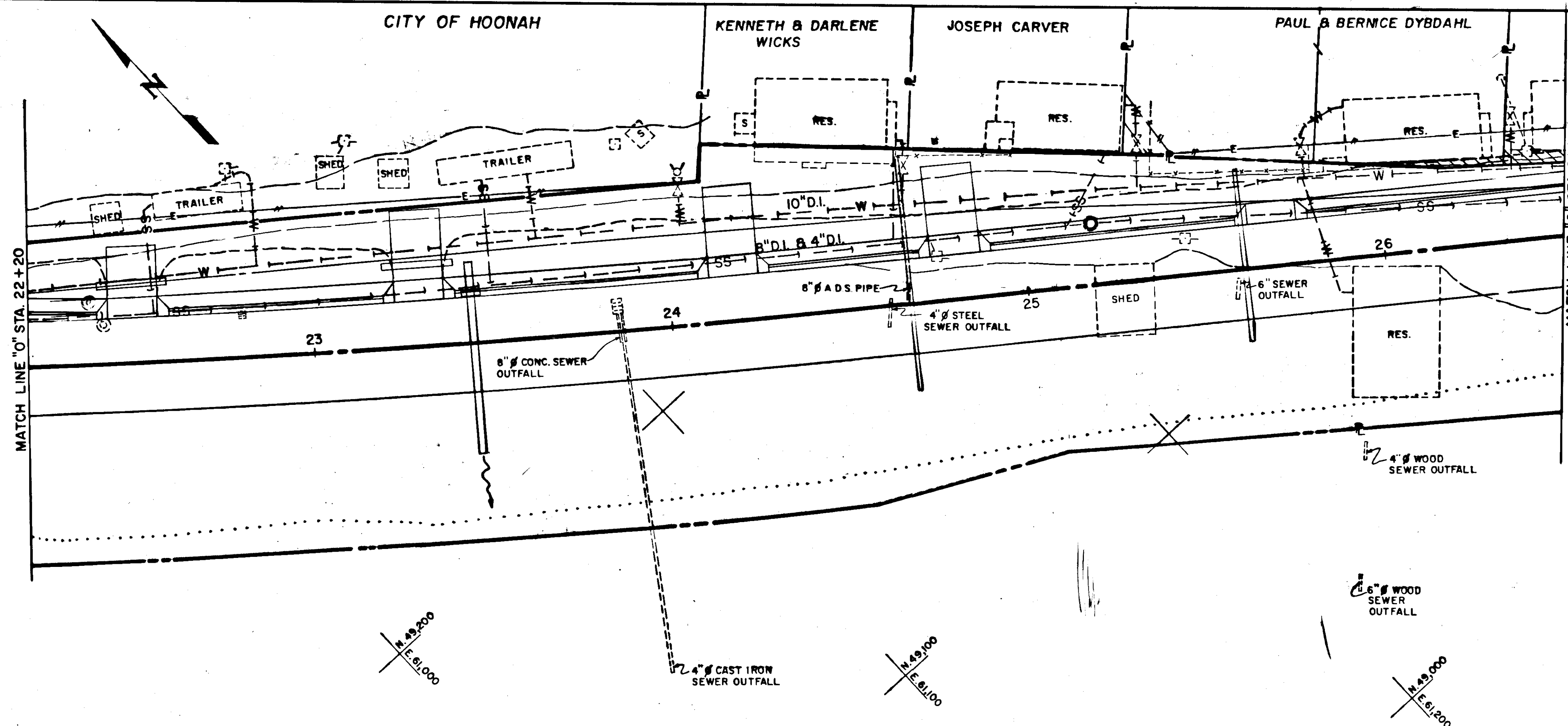
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____ DATE _____
DESIGNED BY: _____
RECOMMENDED BY: _____ DATE _____
DESIGN ENGINEER, GROUP "B"
PREPARED BY: _____ DATE _____
PROJECT MANAGER LEAD DESIGNER

DESIGNED BY: D.R.
DRAWN BY: W.D.A.
CHECKED BY: P.B.
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 33 OF 65





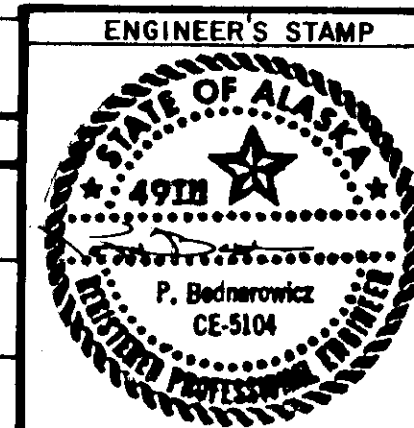
BY	DATE	DESCRIPTION OF CHANGE

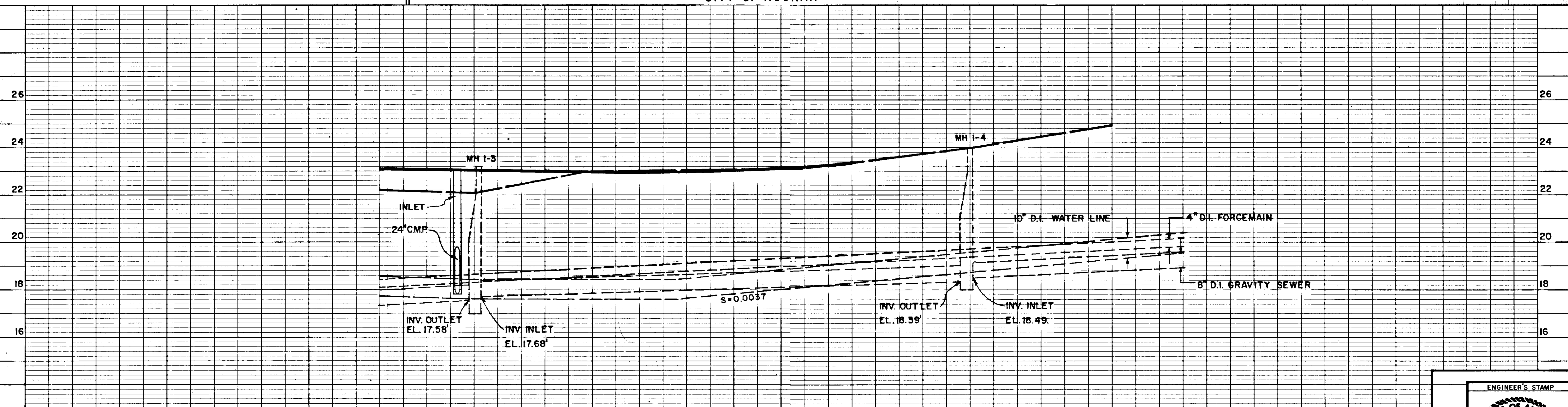
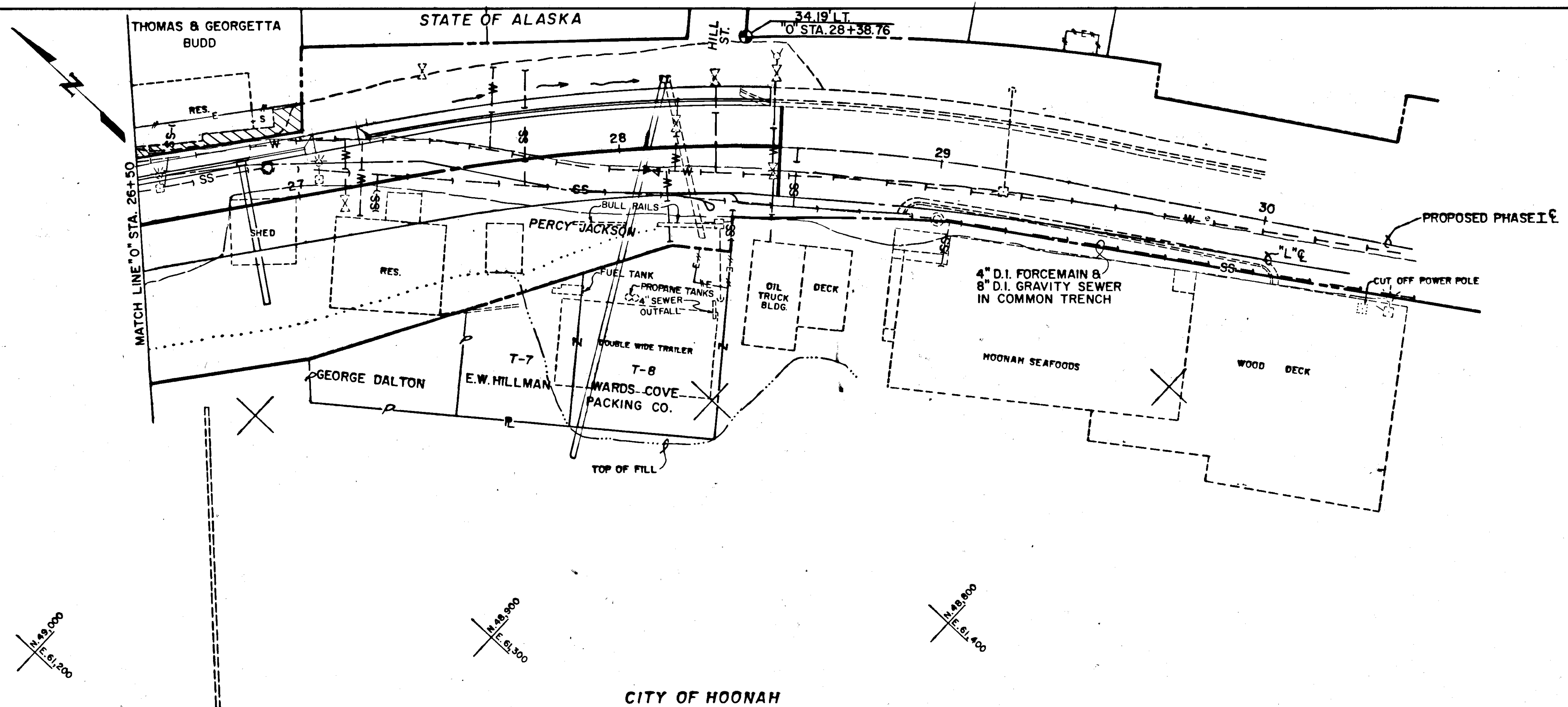
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____ DATE _____
DESIGNED BY: _____
RECOMMENDED BY: _____ DATE _____
DESIGN ENGINEER, GROUP "B"
PREPARED BY: _____ DATE _____
PROJECT MANAGER _____ LEAD DESIGNER _____

DESIGNED BY: D.R.
DRAWN BY: W.D.A.
CHECKED BY: P.B.
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 35 OF 65





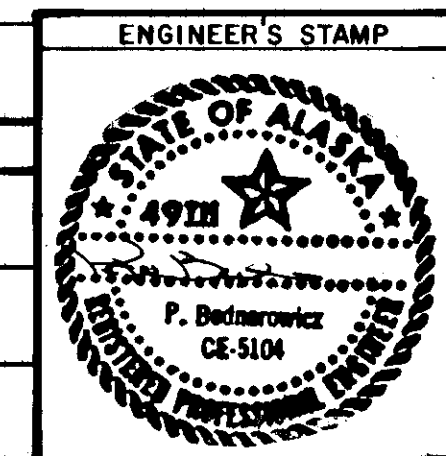
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

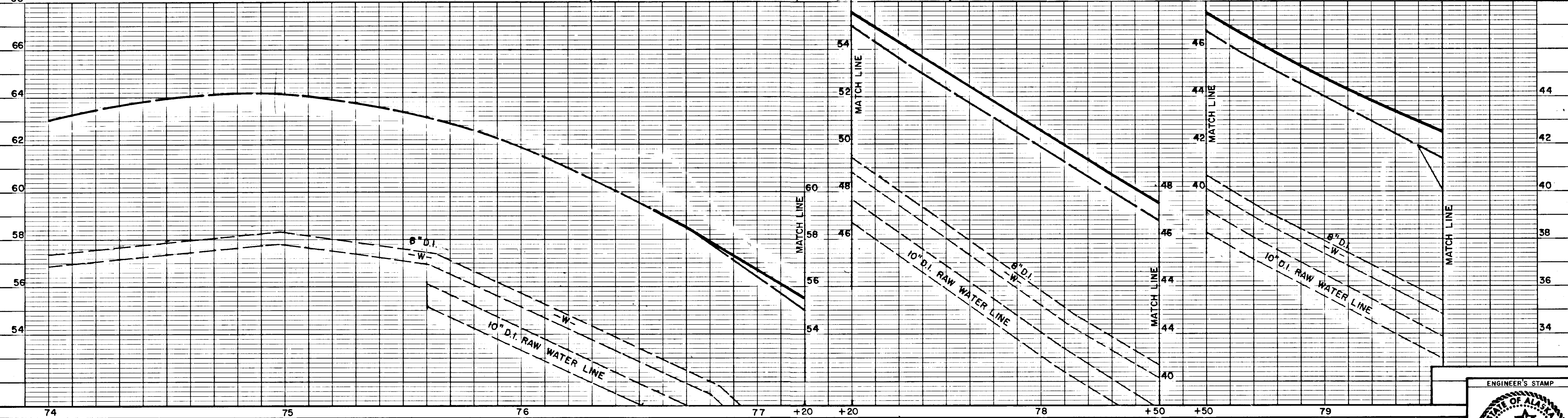
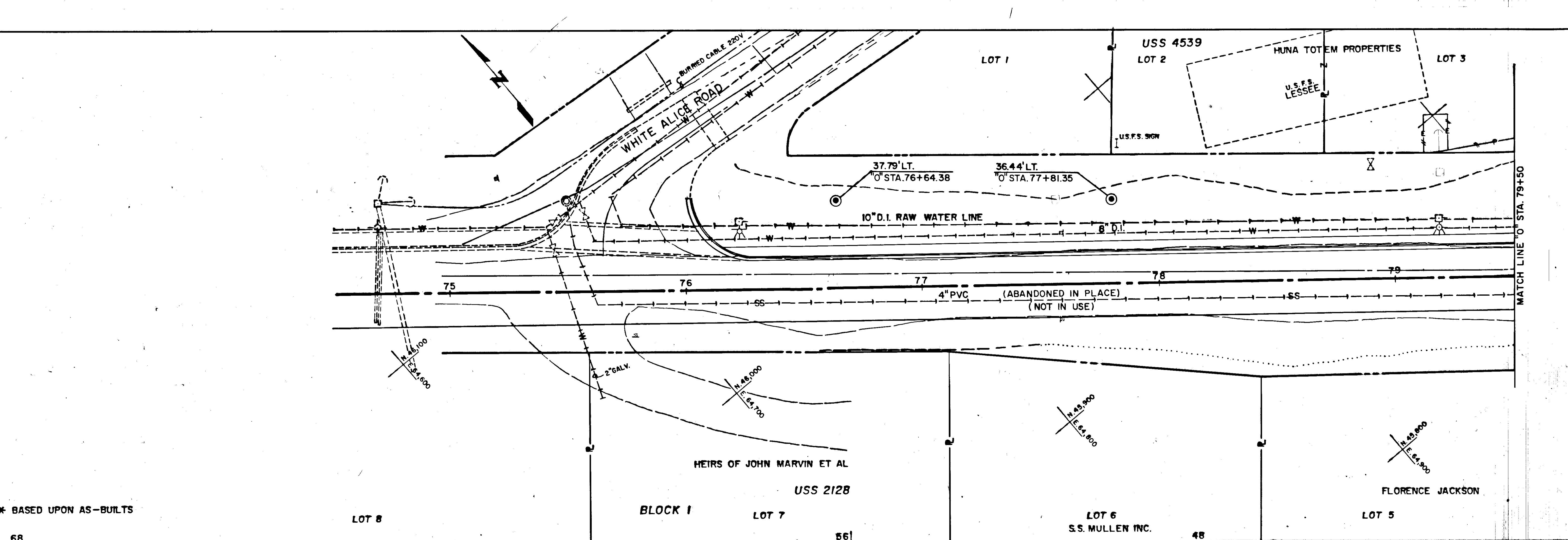
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP "B"
PREPARED BY: _____
PROJECT MANAGER

DESIGNED BY: D.R.
DRAWN BY: W.D.A.
CHECKED BY: P.B.
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 36 OF 65





BY	DATE	DESCRIPTION OF CHANGE

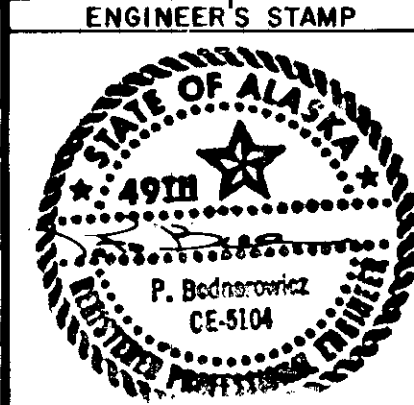
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

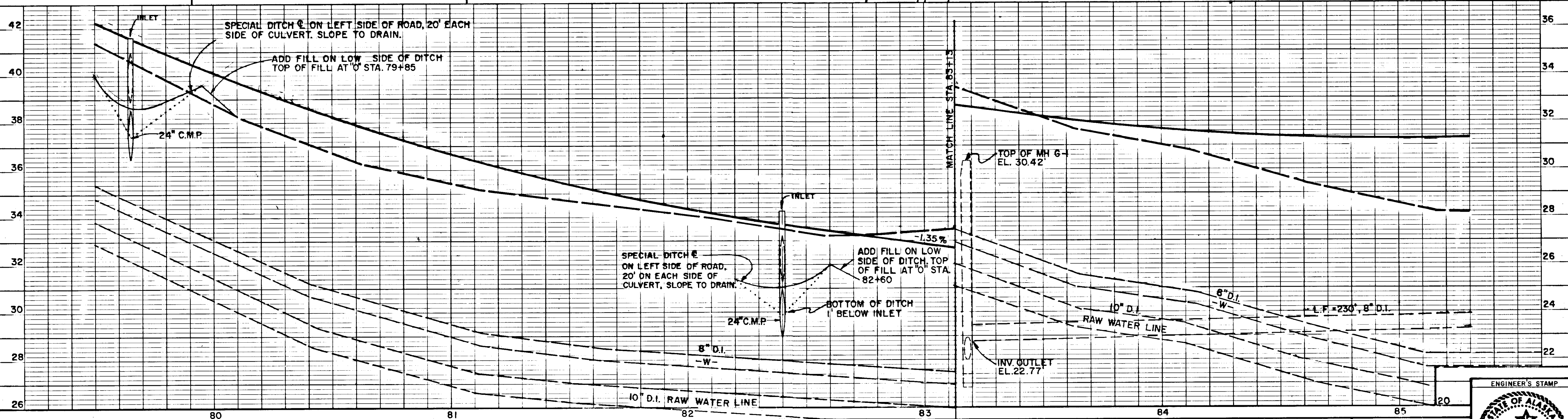
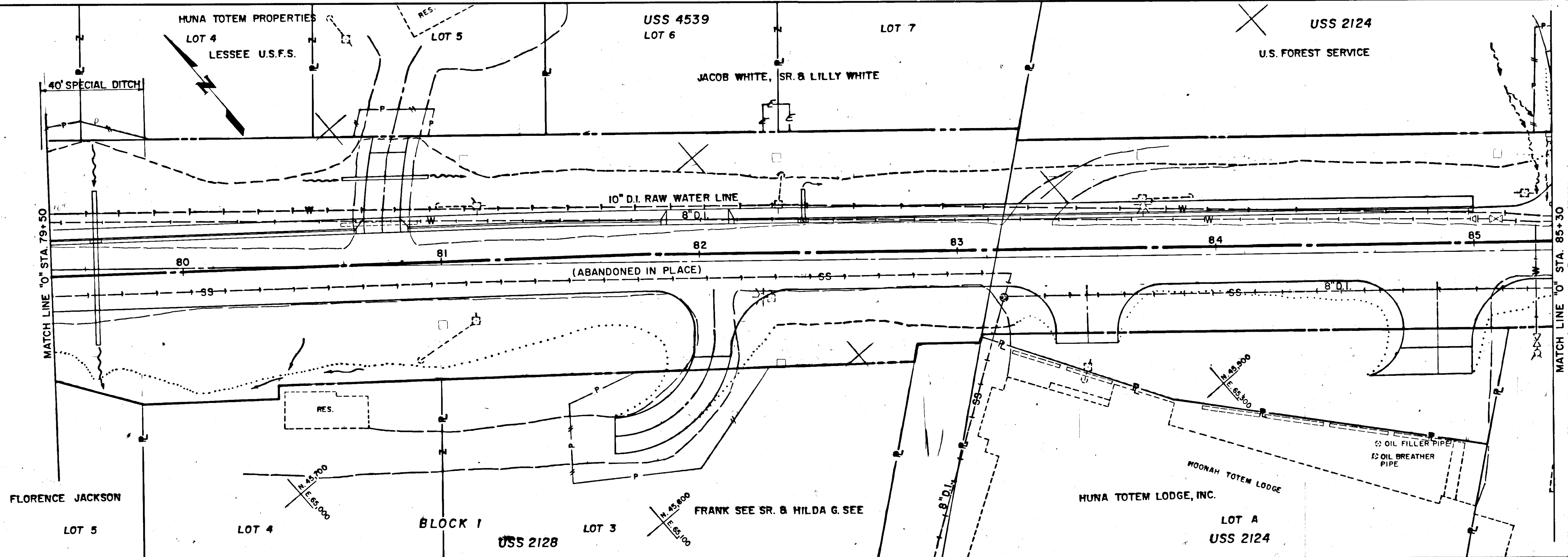
HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP "B" _____
PREPARED BY: _____
PROJECT MANAGER _____

DESIGNED BY: _____
P.B. _____
DRAWN BY: _____
W.B.A. _____
CHECKED BY: _____
P.B. _____

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 37 OF 65





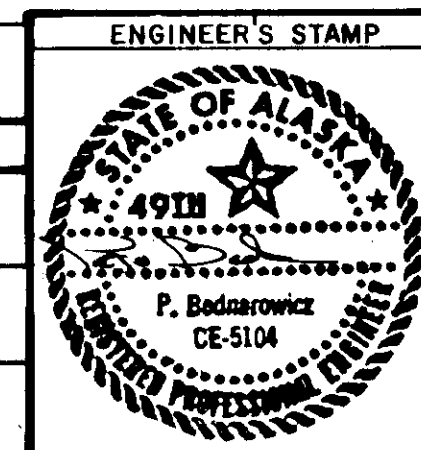
BY	DATE	DESCRIPTION OF CHANGE

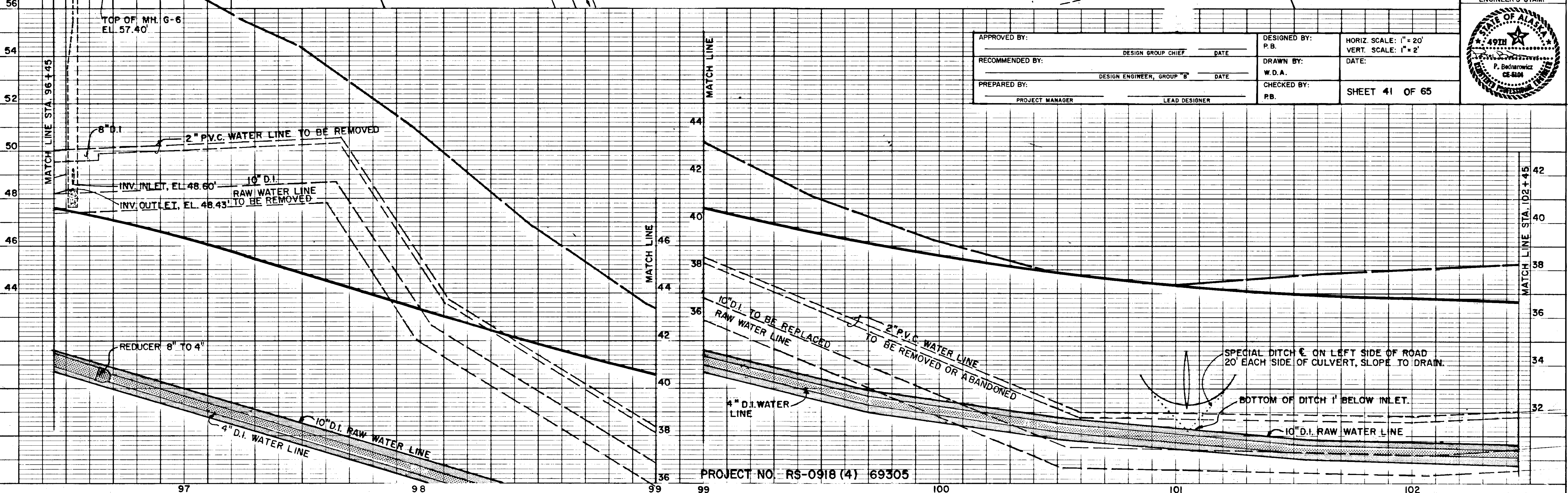
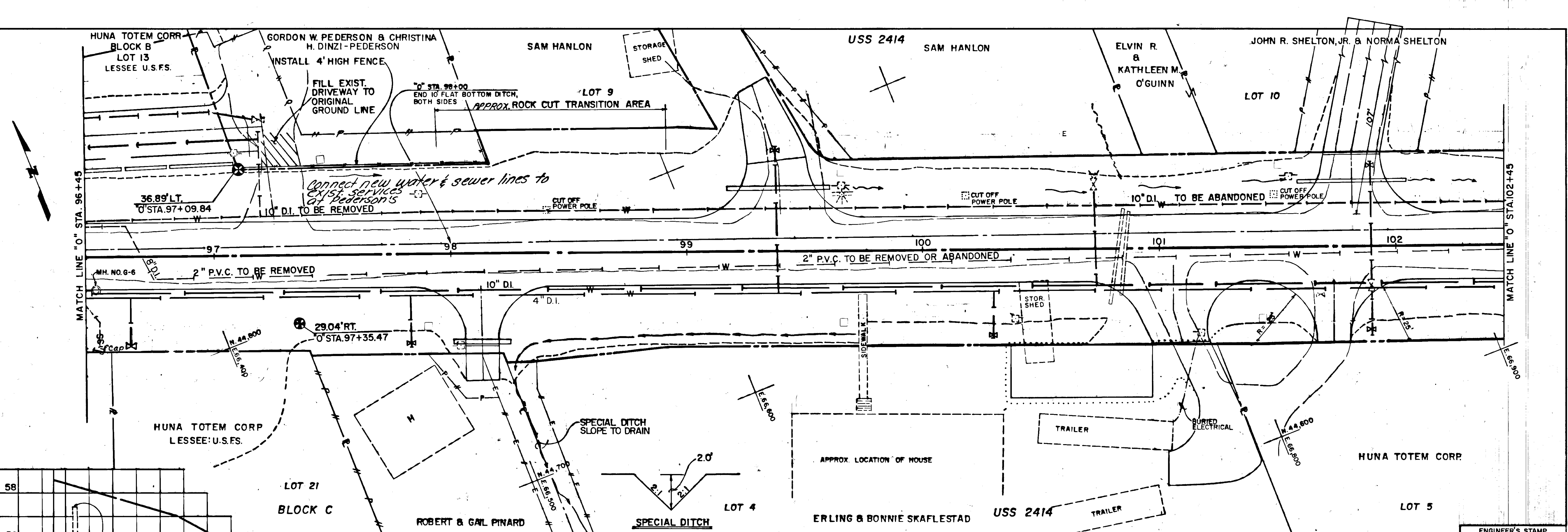
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

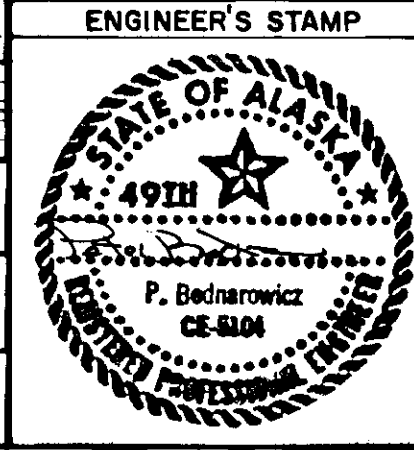
APPROVED BY:	DESIGNED BY:
RECOMMENDED BY:	DRAWN BY:
PREPARED BY:	CHECKED BY:
PROJECT MANAGER	LEAD DESIGNER

DESIGNED BY:	HORIZ. SCALE: 1"=20'
DRAWN BY:	VERT. SCALE: 1"=2'
CHECKED BY:	DATE:
P.B.	SHEET 38 OF 65

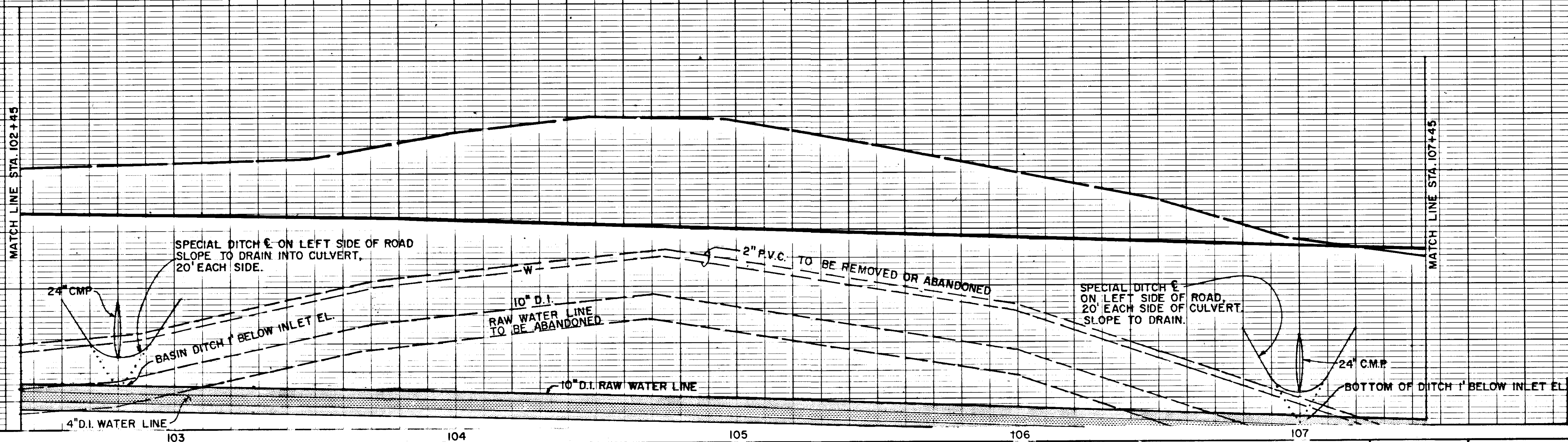
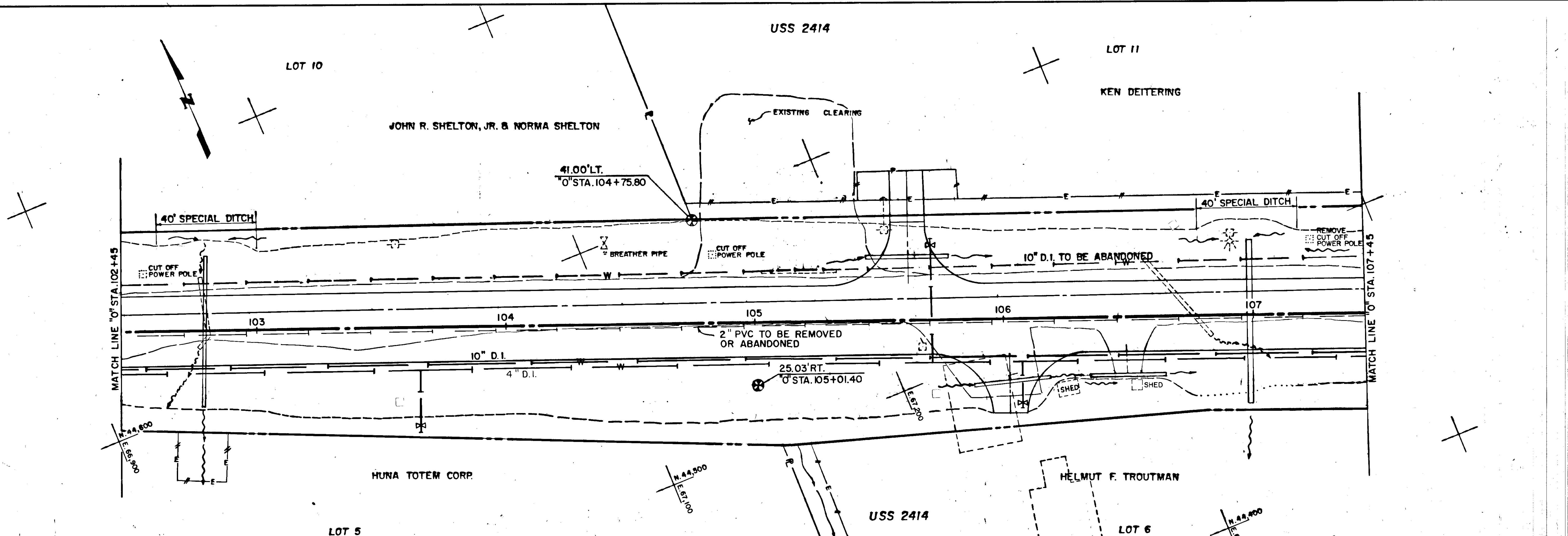




APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1" = 20'
RECOMMENDED BY:	P.B.	VERT. SCALE: 1" = 2'
DESIGN GROUP CHIEF	DATE	DATE:
DESIGN ENGINEER, GROUP "B"	DATE	DATE:
PREPARED BY:	CHECKED BY:	SHEET 41 OF 65
PROJECT MANAGER	LEAD DESIGNER	



PROJECT NO. RS-0918 (4) 69305



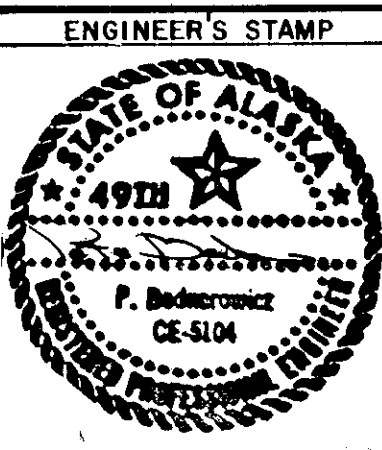
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918 (4) 69305

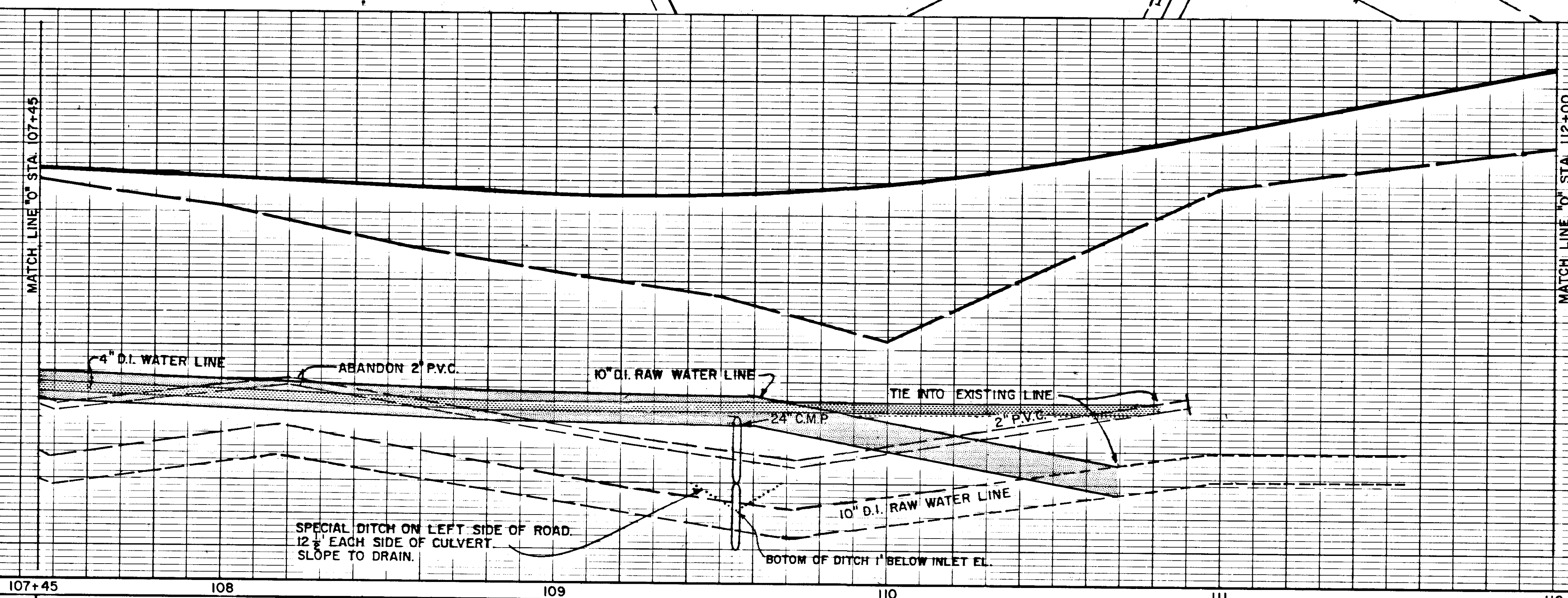
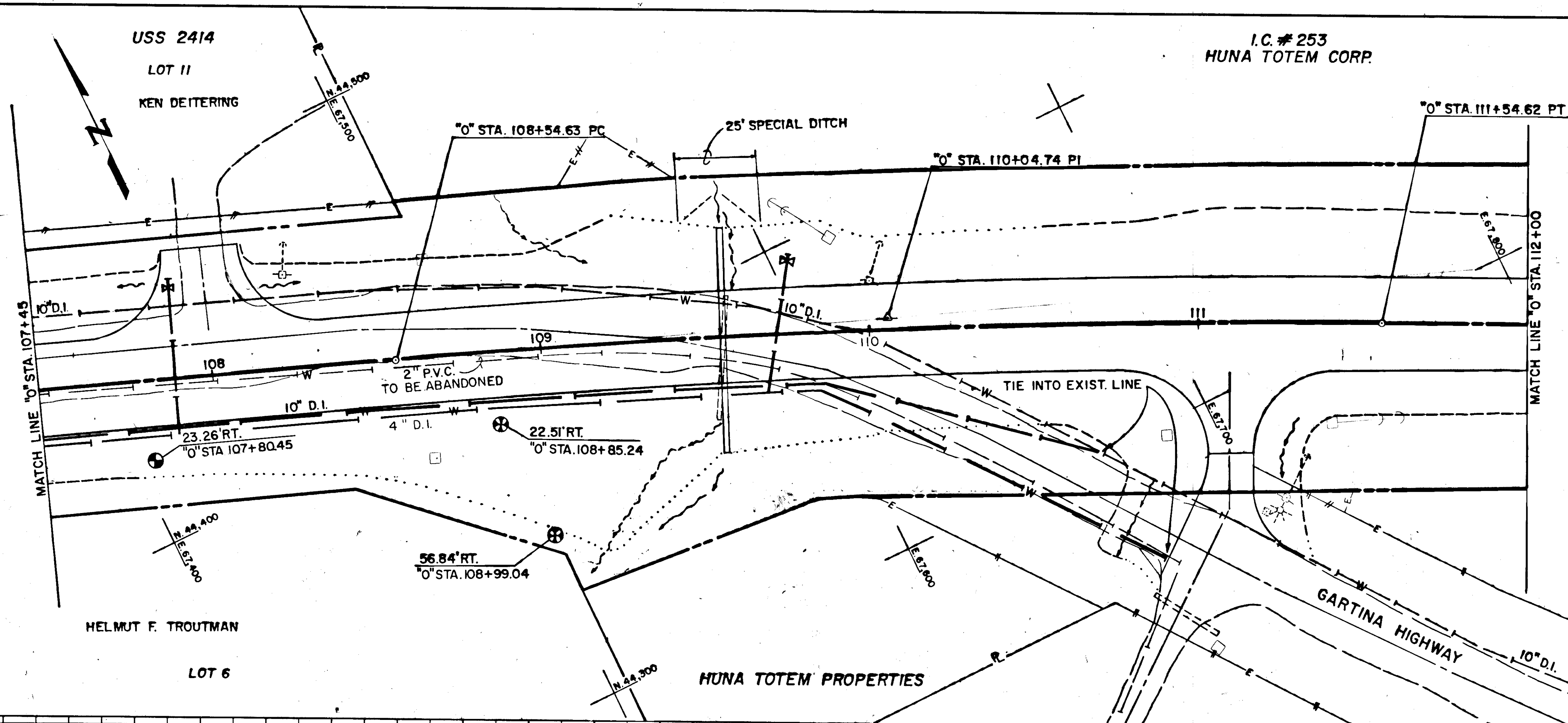
APPROVED BY:	DESIGNED BY:
RECOMMENDED BY:	D.R.
DESIGN ENGINEER, GROUP "B"	DRAWN BY:
DATE	W.D.A.
DATE	CHECKED BY:
PROJECT MANAGER	P.B.
LEAD DESIGNER	

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE:
SHEET 42 OF 65



USS 2414
LOT 11
KEN DEITERING

I.C. #253
HUNA TOTEM CORP.



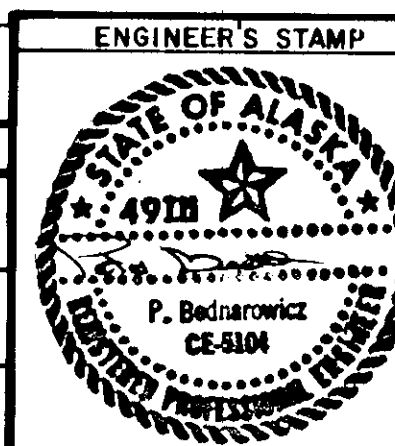
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

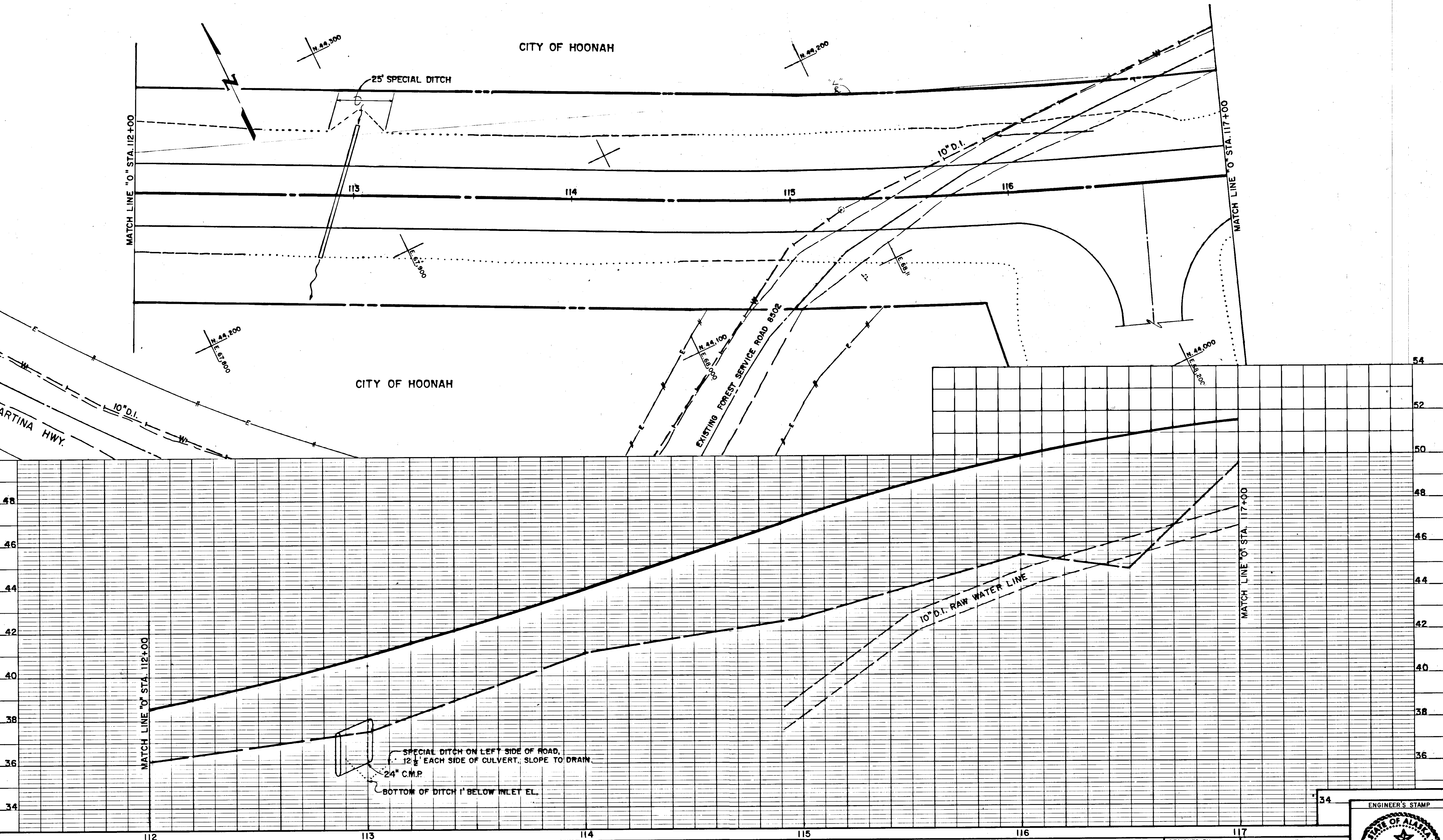
HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
DESIGNED BY: _____
RECOMMENDED BY: _____
DESIGN ENGINEER, GROUP _____
PREPARED BY: _____
PROJECT MANAGER _____

DESIGNED BY: _____
P.B. _____
DRAWN BY: _____
R.K.S. _____
CHECKED BY: _____
M.B. _____

HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE: _____
SHEET 43 OF 65



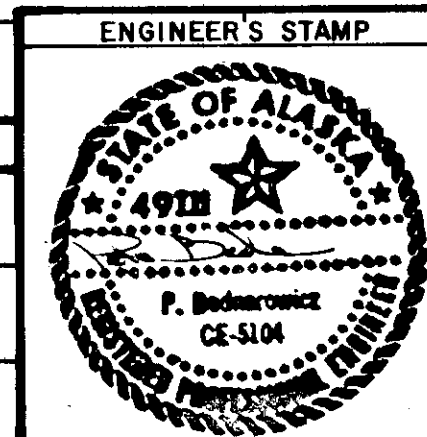


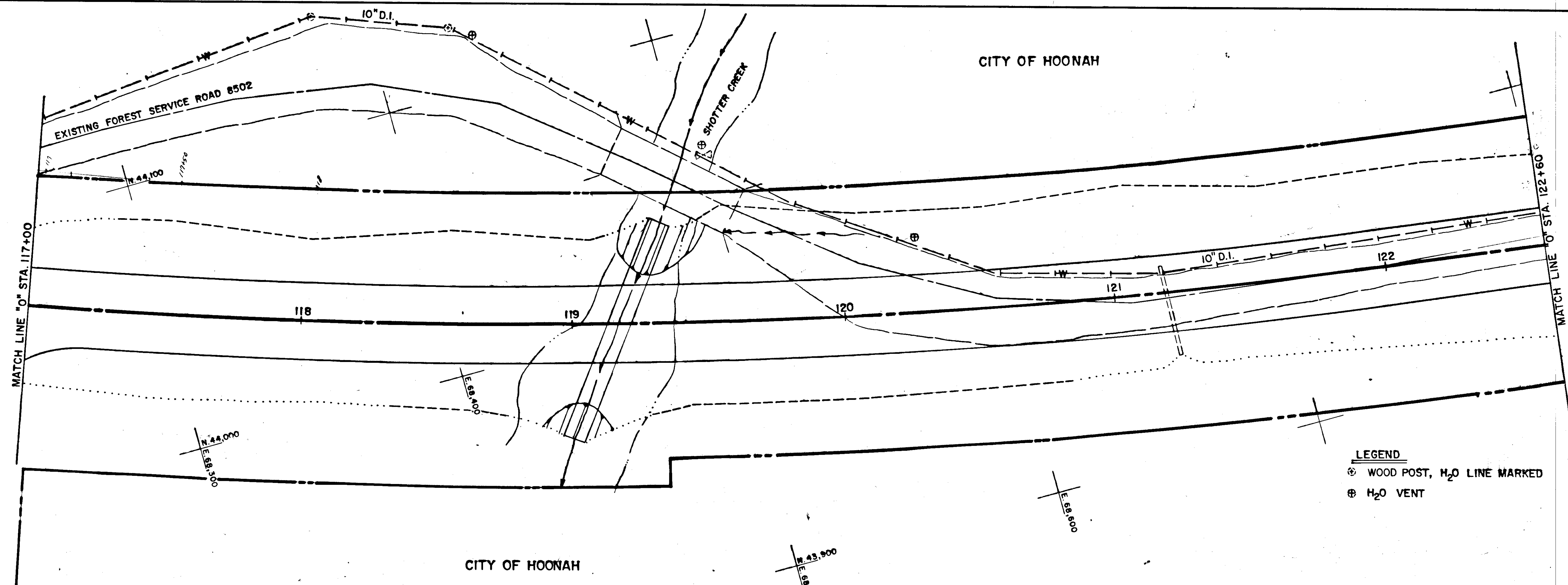
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

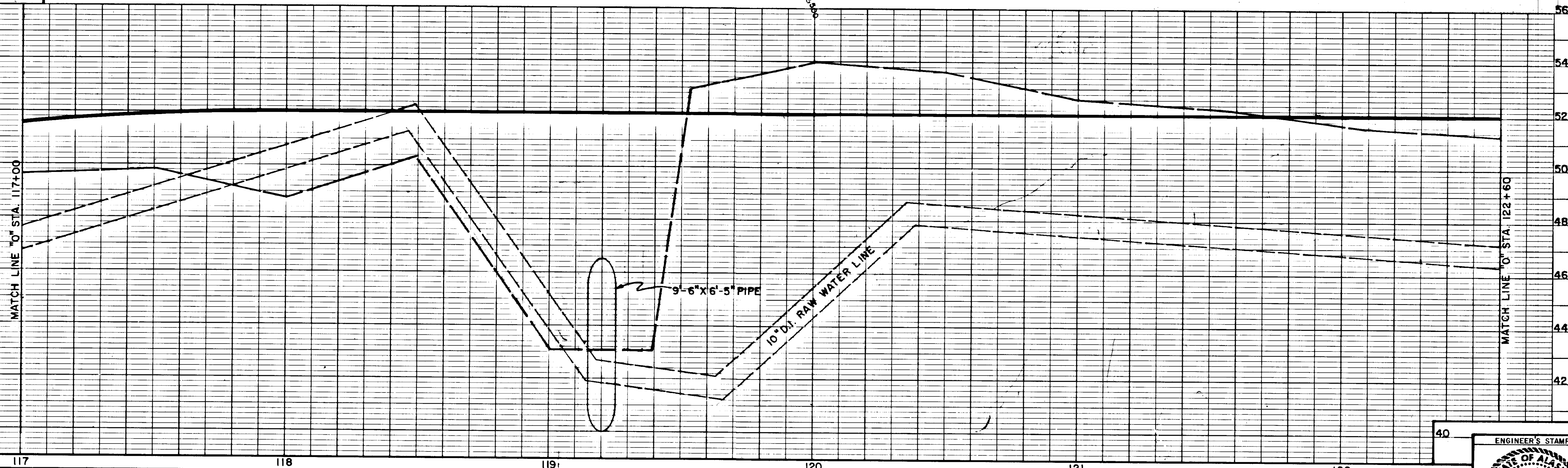
HOONAH ARTERIAL-STAGE II UTILITIES PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGNED BY:	HORIZ. SCALE: 1"=20'
RECOMMENDED BY:	DRAWN BY:	VERT. SCALE: 1"=2'
PREPARED BY:	CHECKED BY:	DATE:
PROJECT MANAGER	LEAD DESIGNER	SHEET 44 OF 65





LEGEND
⊗ WOOD POST, H₂O LINE MARKED
⊕ H₂O VENT



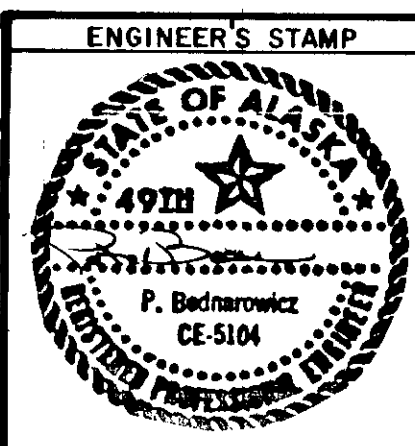
DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

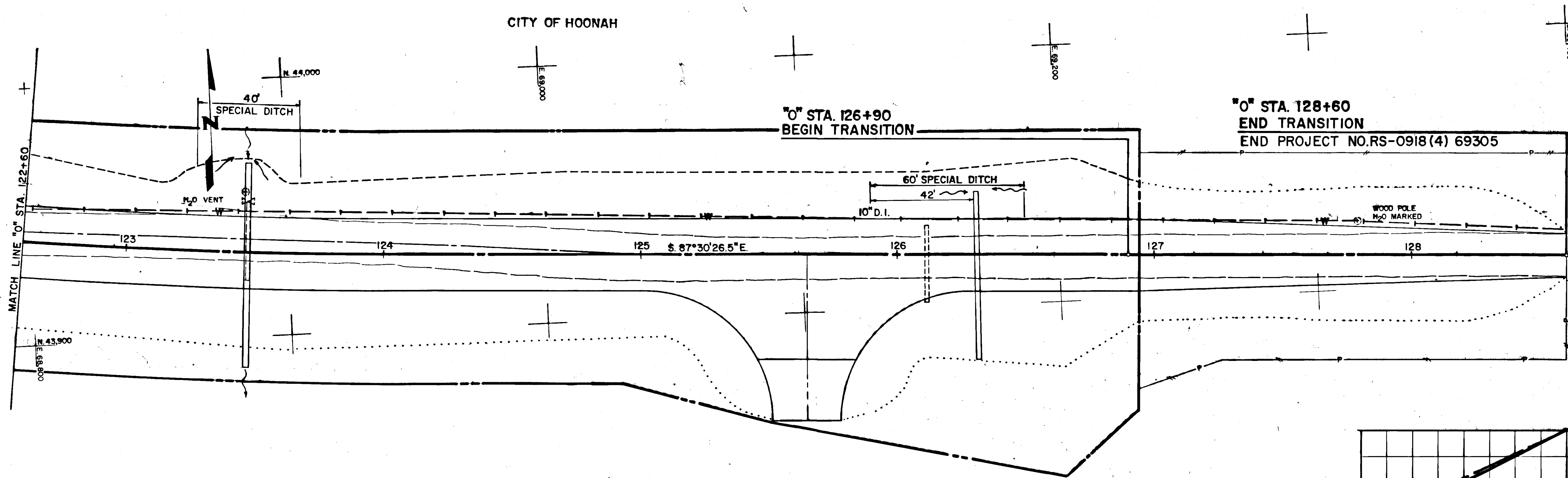
HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGNED BY:
DESIGN GROUP CHIEF	P.B.
DATE	DATE
RECOMMENDED BY:	DRAWN BY:
DESIGN ENGINEER, GROUP "B"	W.D.A.
DATE	DATE
PREPARED BY:	CHECKED BY:
PROJECT MANAGER	P.B.
LEAD DESIGNER	

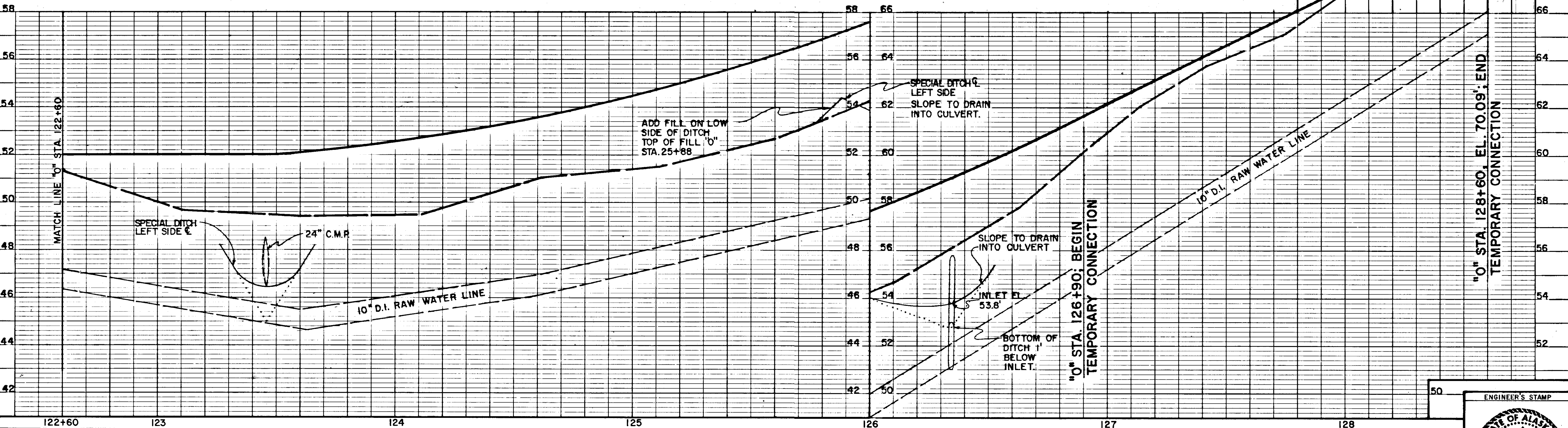
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'
DATE:
SHEET 45 OF 65



CITY OF HOONAH



CITY OF HOONAH



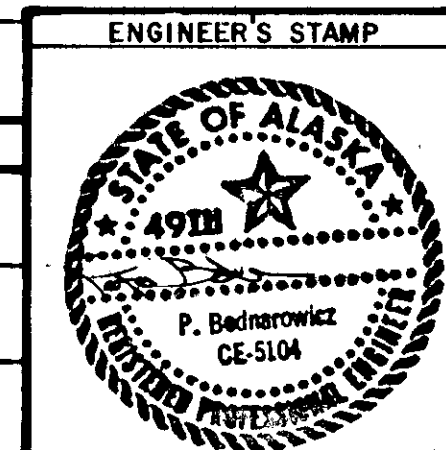
DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II
UTILITIES
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
PROJECT MANAGER: _____
LEAD DESIGNER: _____

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
DATE: _____
DATE: _____
DATE: _____



"O" CURVE DATA
 $\Delta = 24^\circ 07' 16.5''$ LT.
 $D = 02^\circ 26' 54''$
 $T = 500.01'$
 $L = 985.21'$
 $R = 2,340.20'$

"P" CURVE DATA
 $\Delta = 22^\circ 35' 27.6''$ LT.
 $D = 07^\circ 45' 00''$
 $T = 147.67'$
 $L = 291.50'$
 $R = 739.30'$
 $S = 0.04'/\text{FT.}$
 $B.T. = "P" 10+15$
 $B.F.S. = "P" 11+22$
 $E.F.S. = "P" 13+05$
 $E.T. = "P" 14+13$

To be seeded
 (includes
 transition)
 See Note 2
 sheet 4

USEABLE EXCAVATION OF
 BORROW TYPE "B"
 See Table below

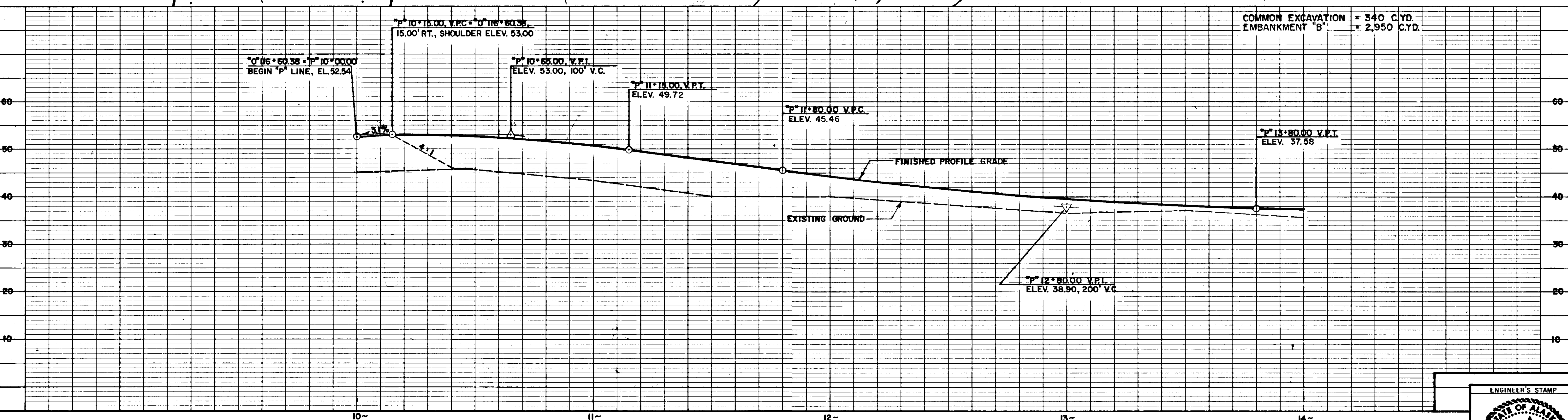
TYPICAL SECTION

NOTE:
 ALL GENERAL NOTES ON SHEET 4 APPLY TO THE
 ABOVE SECTION.

DEPTH OF BORROW

STATION TO STATION	EXISTING ROADBED	
	Inside	Outside
"P" 10+15 TO "P" 15+15	12"	12"
"P" 15+15 TO "P" 16+80	42"	76"
"P" 16+80 TO "P" 18+50	-	-

COMMON EXCAVATION = 340 C.YD.
 EMBANKMENT "B" = 2,950 C.YD.



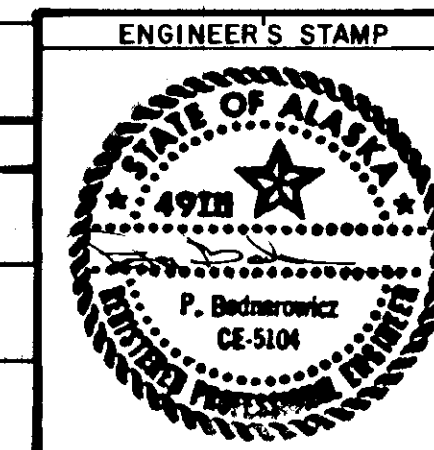
BY	DATE	DESCRIPTION OF CHANGE

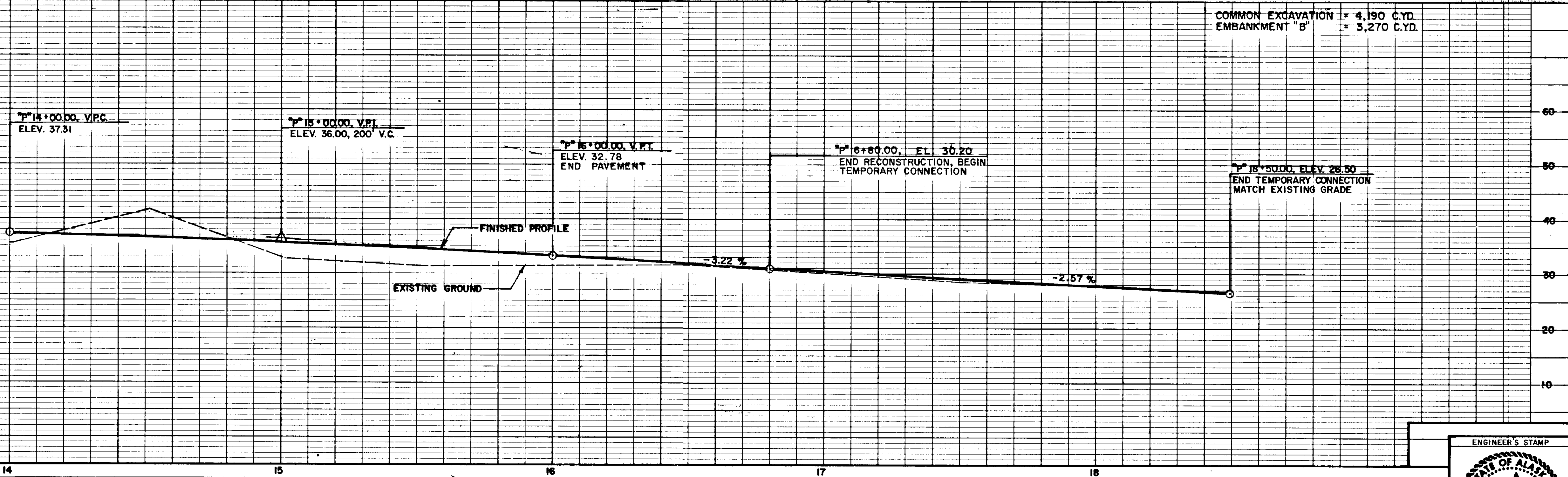
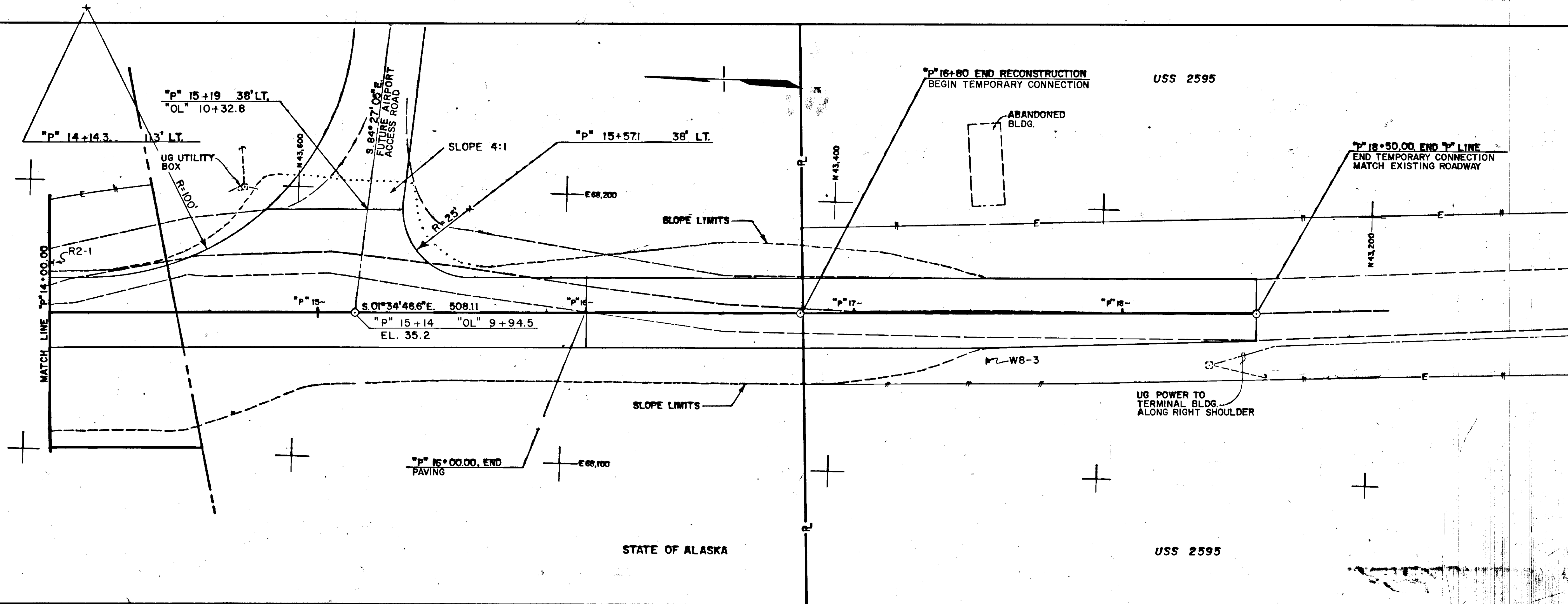
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
AIRPORT INTERSECTION
"P" LINE PLAN & PROFILE
 PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____
 DESIGN GROUP CHIEF _____ DATE _____
 RECOMMENDED BY: _____
 DESIGN ENGINEER, GROUP "A" _____ DATE _____
 PREPARED BY: _____
 PROJECT MANAGER _____ LEAD DESIGNER _____

DESIGNED BY: _____
 DRAWN BY: **JM**
 CHECKED BY: _____
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 10'
 DATE: 7/8/88
 SHEET 47 OF 65





COMMON EXCAVATION = 4,190 C.Y.D.
EMBANKMENT "B" = 3,270 C.Y.D.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

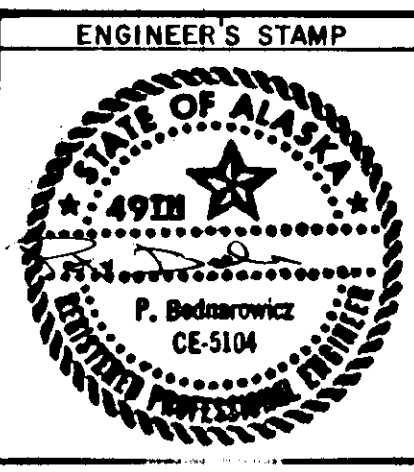
HOONAH ARTERIAL - STAGE II AIRPORT INTERSECTION "P" LINE PLAN & PROFILE

PROJECT NO. RS-0918 (4) 69305

APPROVED BY: _____ DATE: _____
DESIGNED BY: _____
RECOMMENDED BY: _____ DATE: _____
DESIGN ENGINEER, GROUP "A"
PREPARED BY: _____
PROJECT MANAGER

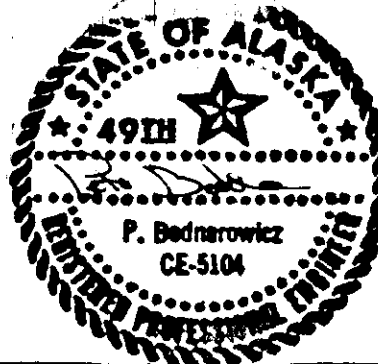
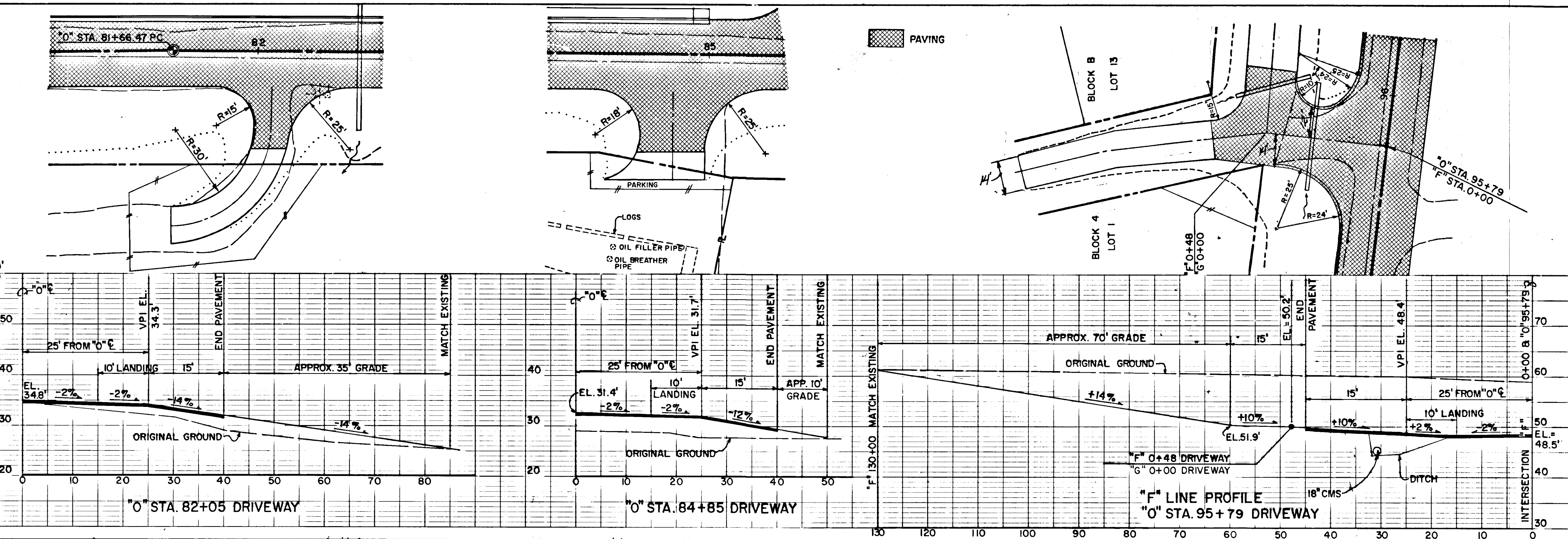
DESIGNED BY: _____
DRAWN BY: JEM
CHECKED BY: _____
LEAD DESIGNER

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 10'
DATE: 7/8/88
SHEET 48 OF 65



DATE	DESCRIPTION OF CHANGE

PLAN SCALE 1"=20'
PROFILE SCALE 1"=10'



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
SPECIAL DRIVEWAYS
PLAN & PROFILE
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____
APPROVED BY: _____

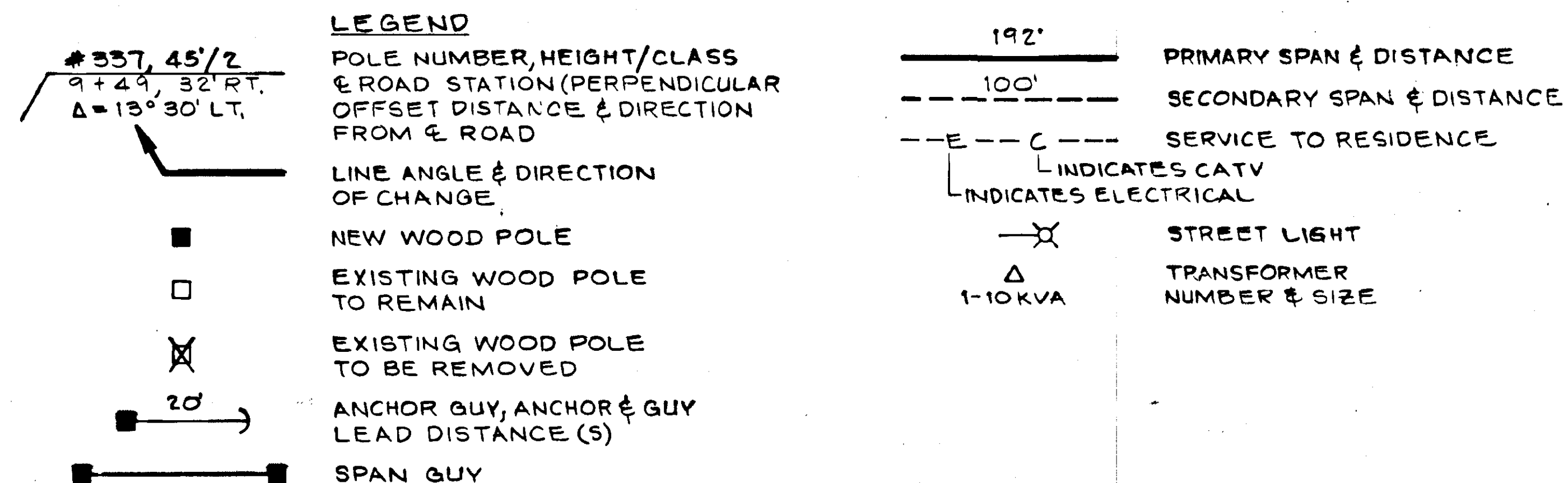
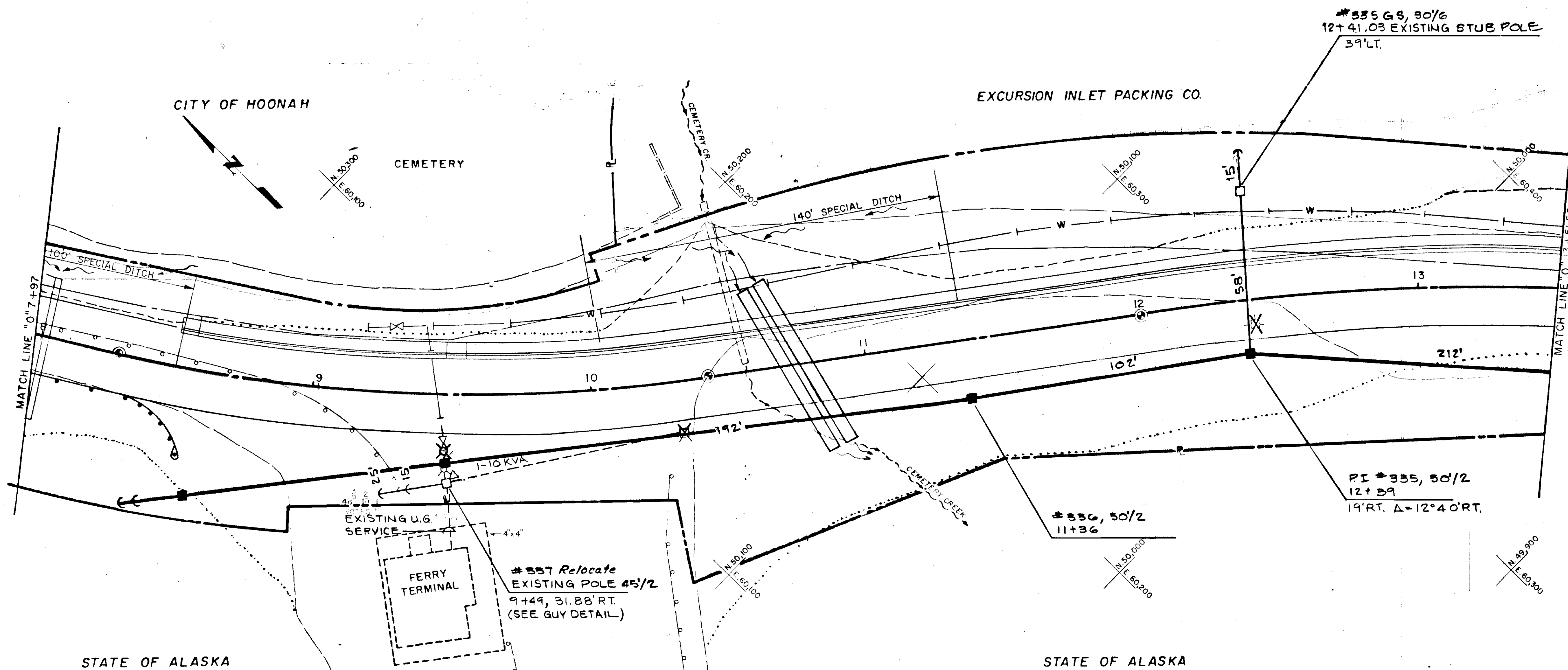
BY: _____ DATE: _____ CHANGE: _____

SCALE: AS DEPICTED DESIGNED: M.B. DRAWN: W.D.A.
CHECKED: P.B. DATE: 2/89

REVISIONS

SHEET 49 OF 65

NOTE:
THIS SHEET TO BE USED FOR
ELECTRICAL SYSTEM CONSTRUCTION
ONLY. THE HIGHWAY PLAN AND
PROFILE SHEETS SHALL TAKE
PRECEDENCE IN THE CASE OF
CONFLICTS FOR ROAD ALIGNMENT
GRADES, SIDE SLOPES, CULVERT
ELEVATIONS AND LOCATIONS, ETC.

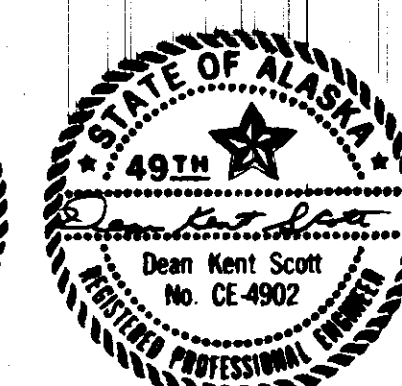
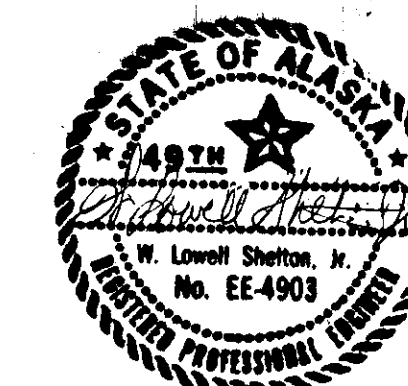


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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
0	3/10/89	OKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					
DES.	80	CIVIL	REV.	ELEC.	REV.
DWN.	80	MECH.	REV.	STRUC.	REV.
CK'D.	KTOC	APPR.	J. Scott	DATE	3/10/89

R.W. BECK
AND ASSOCIATES, INC.

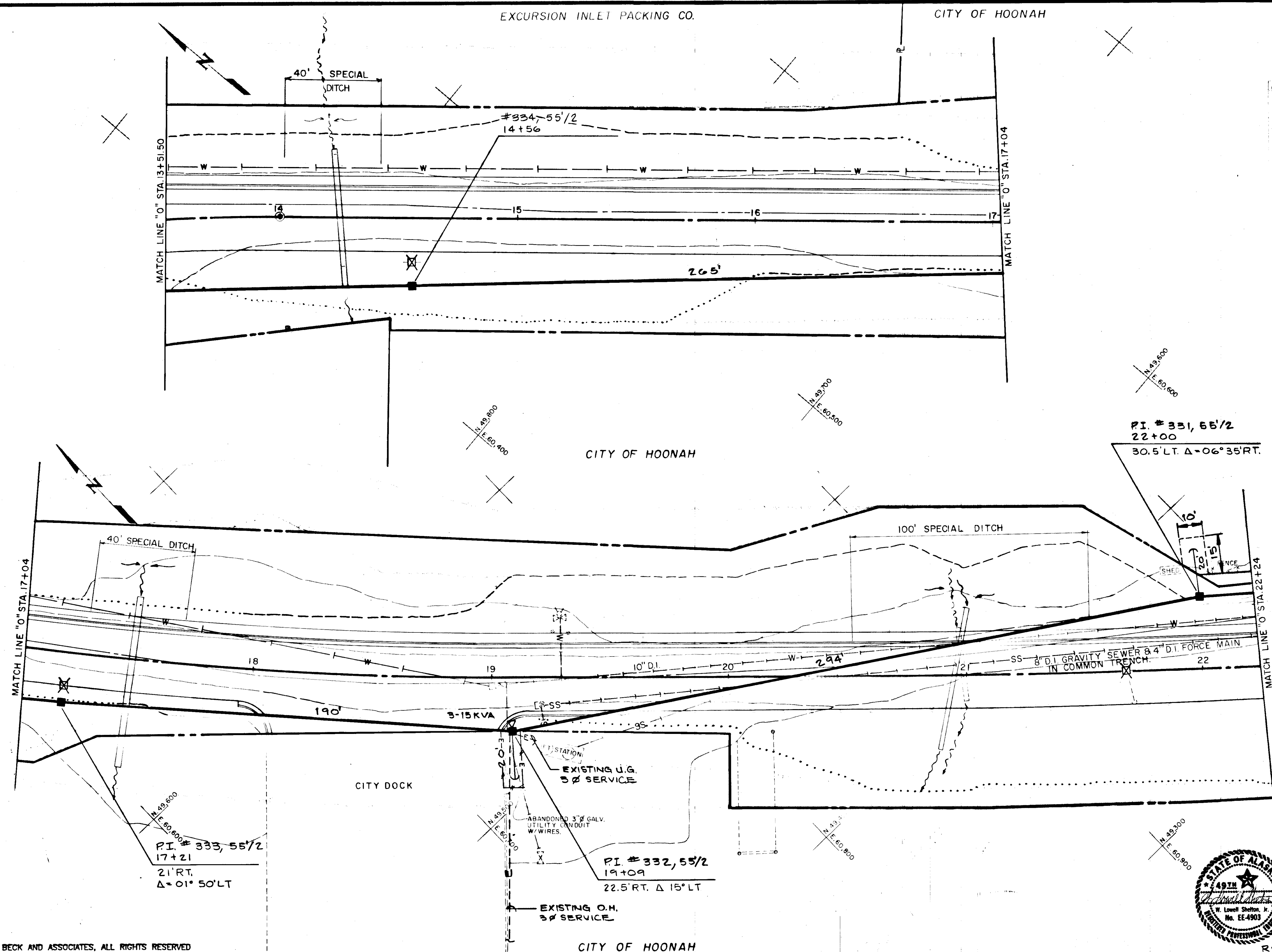
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
TRANSMISSION LINE PLAN



RWB NO. 840-E-1.0

W/O
EE-1971-EA1-AA
DWG. NO.

51



NOTE:
THIS SHEET TO BE USED FOR
ELECTRICAL SYSTEM CONSTRUCTION
ONLY. THE HIGHWAY PLAN AND
PROFILE SHEETS SHALL TAKE
PRECEDENCE IN THE CASE OF
CONFLICTS FOR ROAD ALIGNMENT
GRADES, SIDE SLOPES, CULVERT
ELEVATIONS AND LOCATIONS, ETC.

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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
0	3/10/89	DKS	KTOL		ISSUED FOR BID
DRAWING REVISION RECORD					
DES.	80	CIVIL	REV.	ELEC.	REV.
DWN.	80	MECH.	REV.	STRUC.	REV.
CK'D.	KTOL	APPROV.	3/10/89	DATE	3/10/89

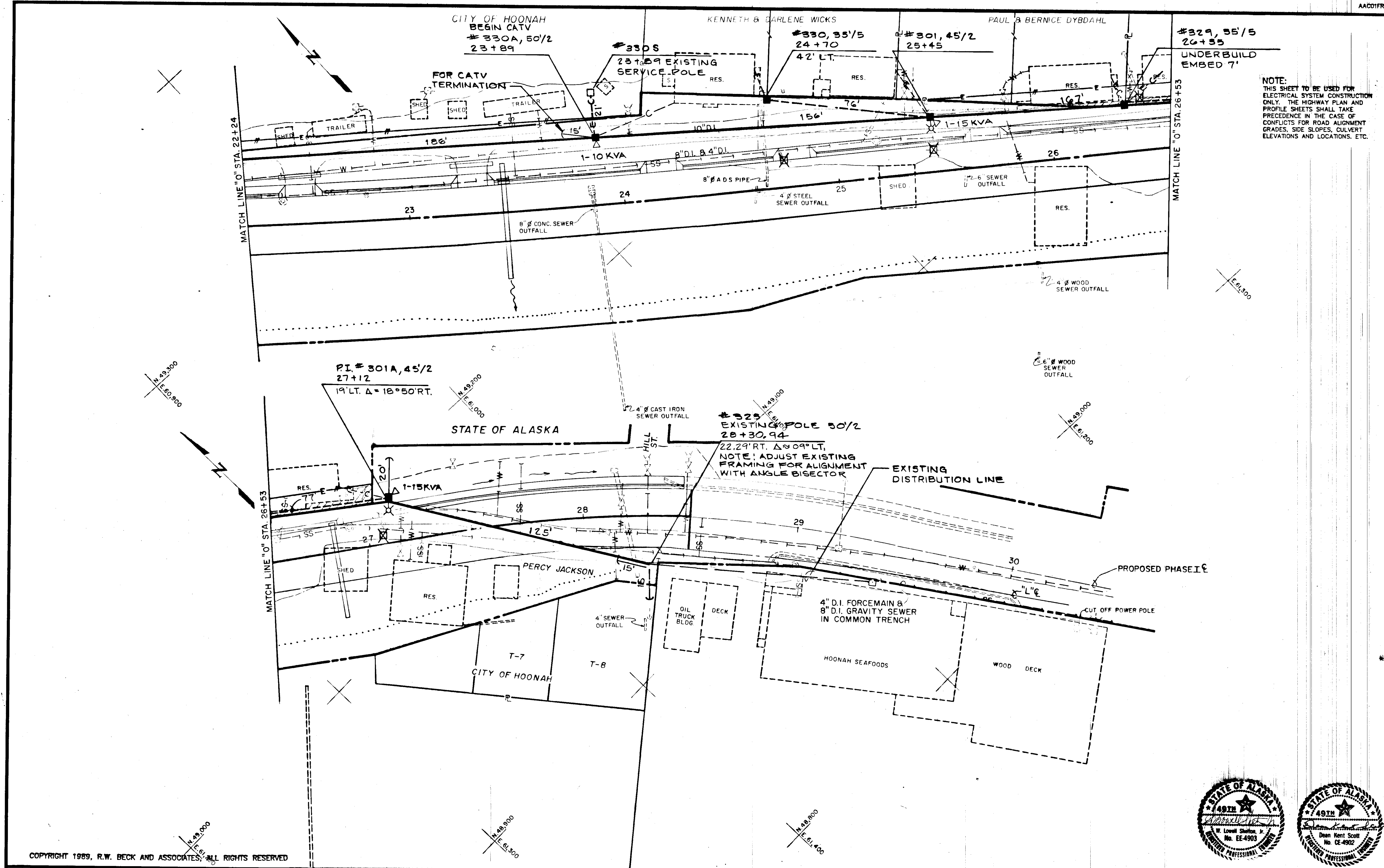
R.W. BECK
AND ASSOCIATES, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0818(4)
TRANSMISSION LINE PLAN

RWB NO. 840-E-2.0

W/O
EE-1971-EA1-AA
DWG. NO.

52



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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
0	3/10/89	DKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					
DES.	80	CIVIL	REV.	ELEC.	REV.
DWN.	80	MECH.	REV.	STRUC.	REV.
CK'D.	KTOC	APPD.	3/10/89	DATE	3/10/89

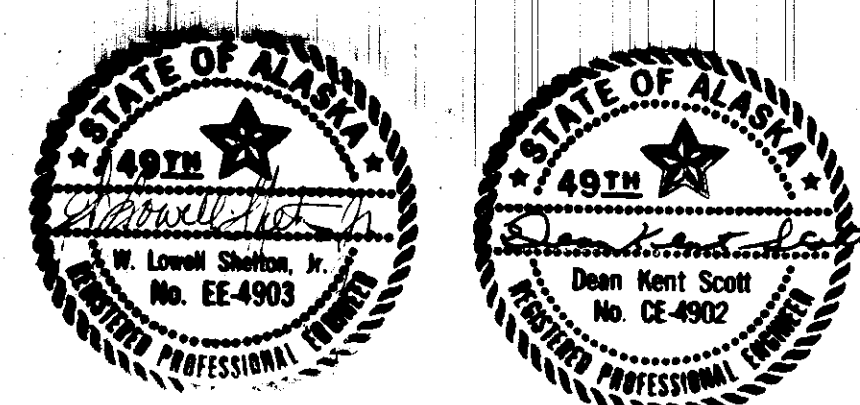
R.W. BECK
AND ASSOCIATES, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)

TRANSMISSION LINE PLAN

RWB NO. 840-E-3.0

W/O
EE-1971-EA1-AA
DWG. NO. 53



EXISTING DISTRIBUTION LINE

LOT 1

USS 4539

LOT 2

LOT 3

P.I. #104, 45/2

79+20

45' LT., Δ=04° RT.

#103
EXISTING POLE 45/2
76+23, 23' LT.
Δ=07° LT.

#103A, 45/2
77+57

U.S.F.S. SIGN

U.S.F.S.

NOTE:
THIS SHEET IS TO BE USED FOR
ELECTRICAL SYSTEM CONSTRUCTION
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PROFILE SHEETS SHALL TAKE
PRECEDENCE IN THE CASE OF
CONFLICTS FOR ROAD ALIGNMENT
GRADES, SIDE SLOPES, CULVERT
ELEVATIONS AND LOCATIONS, ETC.

CAP ON REBAR 135'

RAW WATER LINE

6" D.I.

162'

75

76

77

78

79

EXISTING DISTRIBUTION LINE TYP.

MATCH LINE "O" STA. 79+46

USS 4539
LOT 6

LOT 7

USS 2124

END 3rd PRIMARY
BEGIN 1st PRIMARY
#107, 45/2
83+72

#108, 50/3
85+10

#105, 50/2
81+10

#106, 50/2
82+31

LOT 4

LOT 5

40' SPECIAL DITCH

40' SPECIAL DITCH

1-25 KVA

1-10 KVA

3-25 KVA

1-15 KVA CSP

10" D.I. RAW WATER LINE

(ABANDONED IN PLACE)

80

82

83

84

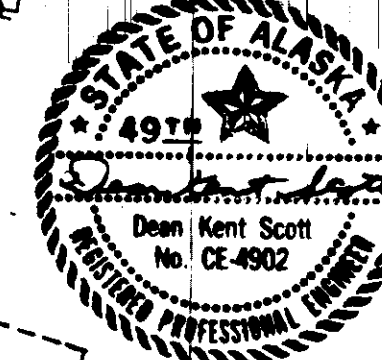
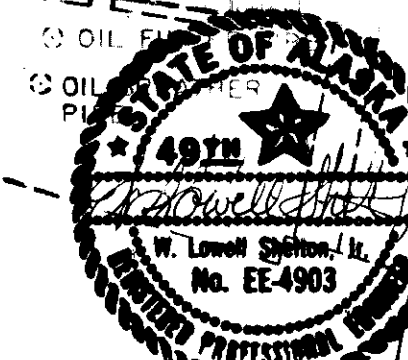
85

#105A, 40/5
81+00
25' RT.

#106, 35/5
82+31, 43' RT.

#107-1,
EXISTING 35/6
83+50

HOONAH TOTEM LODGE



RWB NO. 840-E-4.1

LOT A
USS 2124

LOT 5
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BLOCK 1

LOT 3

USS 2128

101C

REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
1	6/7/90	DKS	KTOC		REISSUED FOR BID
0	3/19/89	DKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					
DES.	60	CIVIL	REV.		
DWN.	60	MECH.	REV.		
CK'D.	KTOC	APP'D.			
DATE	3/10/89				

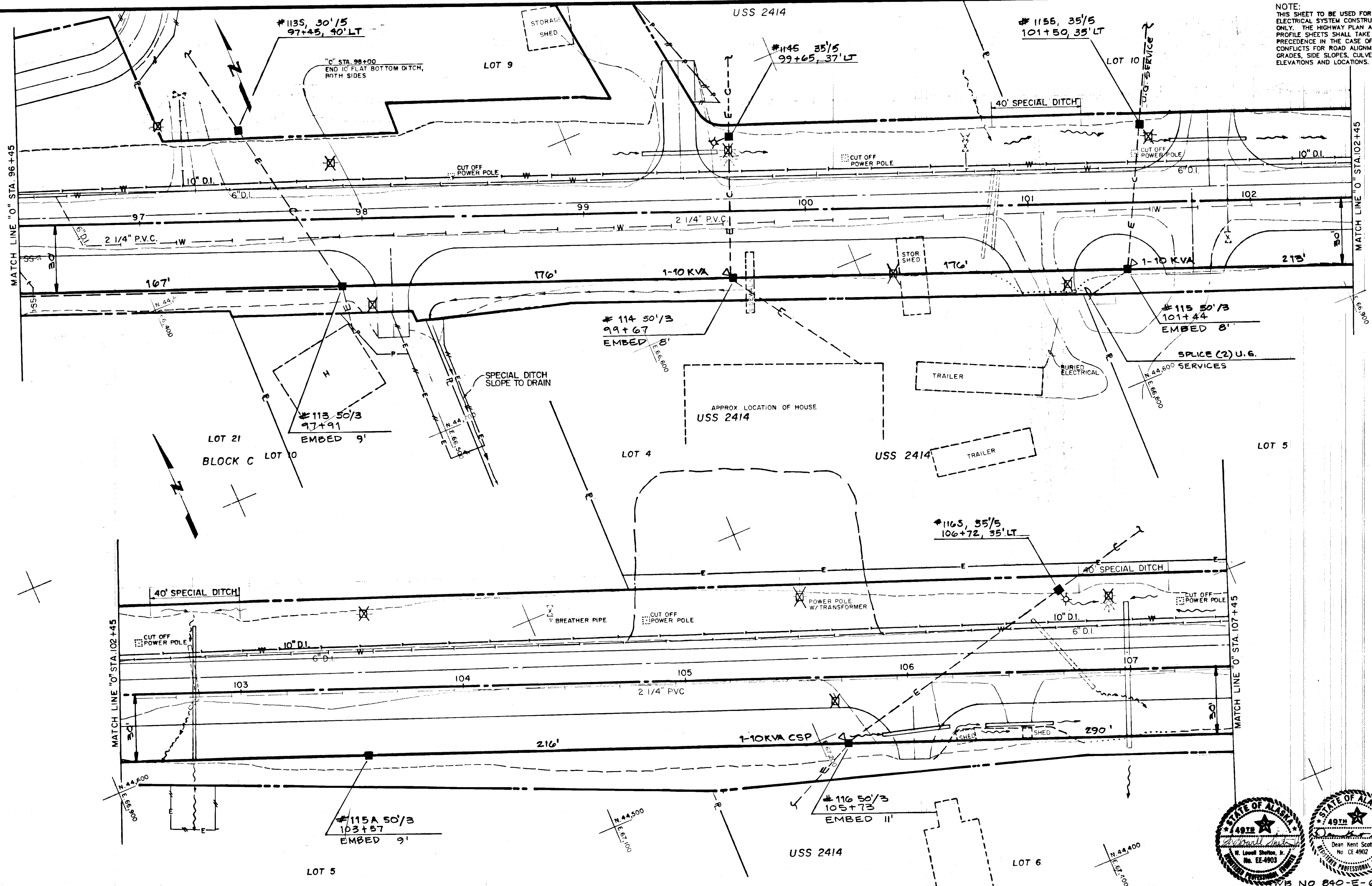
R.W. BECK
AND ASSOCIATES, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
TRANSMISSION LINE PLAN

W/O
EE-1971-EA1-AA
DWG. NO.
54

RWB NO. 840-E-5.1									
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HOONAH ARTERIAL - UTILITIES RELOCATION PROJECT NO. RS-0918(4)									
TRANSMISSION LINE PLAN									
W/O EE-1971-EA1-AA DWG. NO. 55									

NOTE:
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ELECTRICAL SYSTEM CONSTRUCTION
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PROFILE SHEETS SHALL TAKE
PRECEDENCE IN THE CASE OF
CONFLICTS FOR ROAD ALIGNMENT
GRADES, SIDE SLOPES, CULVERT
ELEVATIONS AND LOCATIONS, ETC.

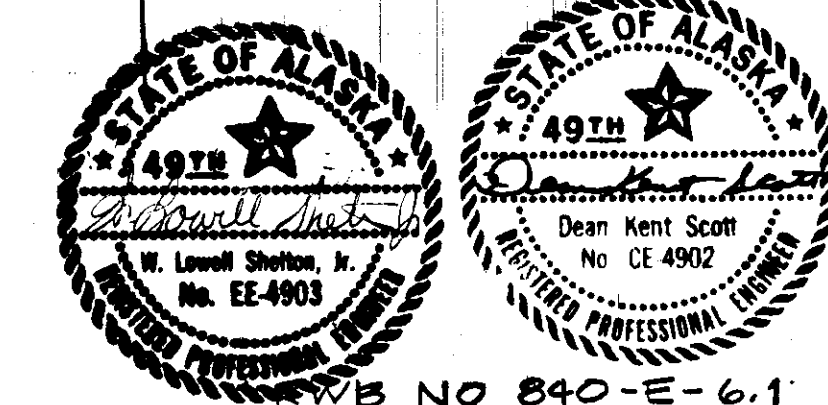


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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
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0	3/10/89	DKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					

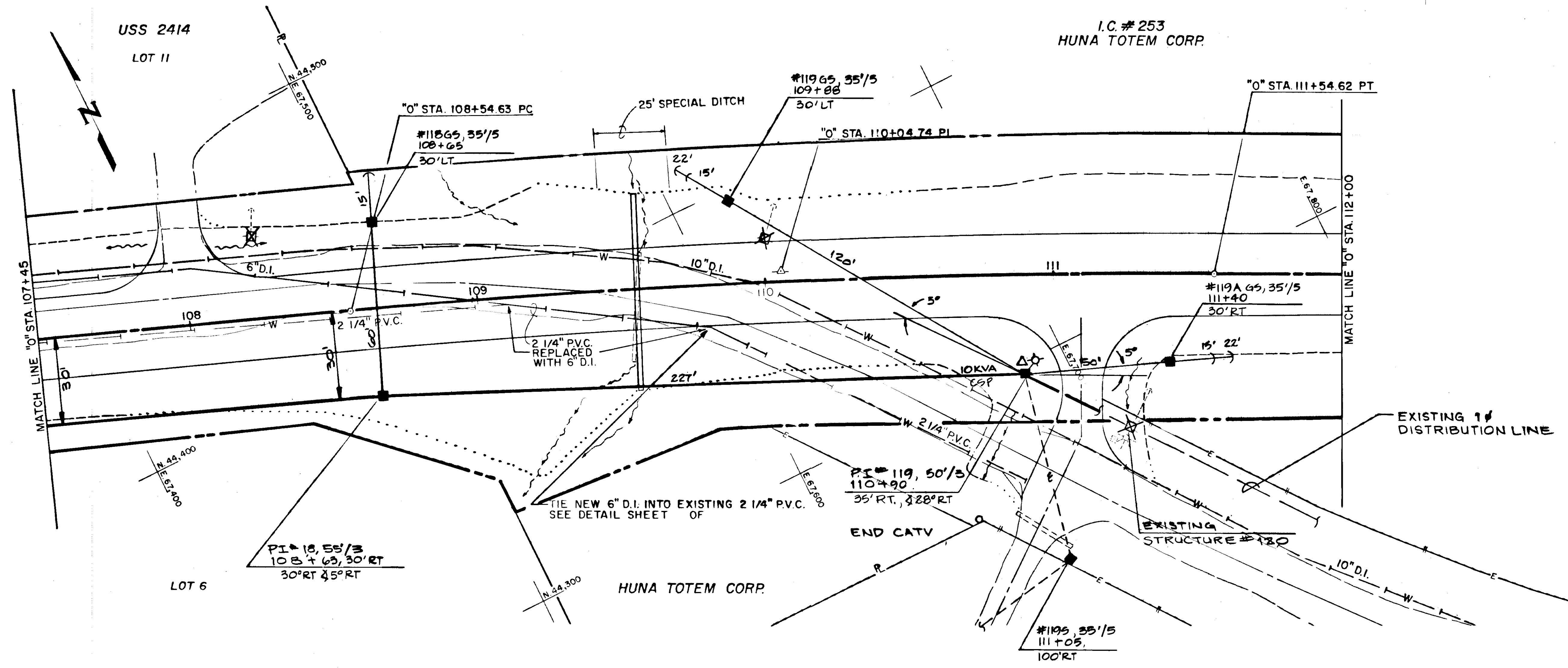
R.W. BECK
AND ASSOCIATES, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
TRANSMISSION LINE PLAN



W/O
EE-1971-EA1-AA
DWG. NO. 56

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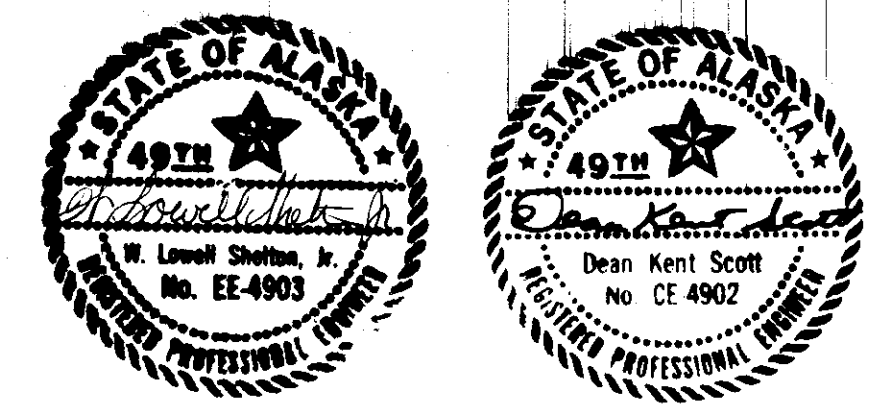
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DRAWING REVISION RECORD					

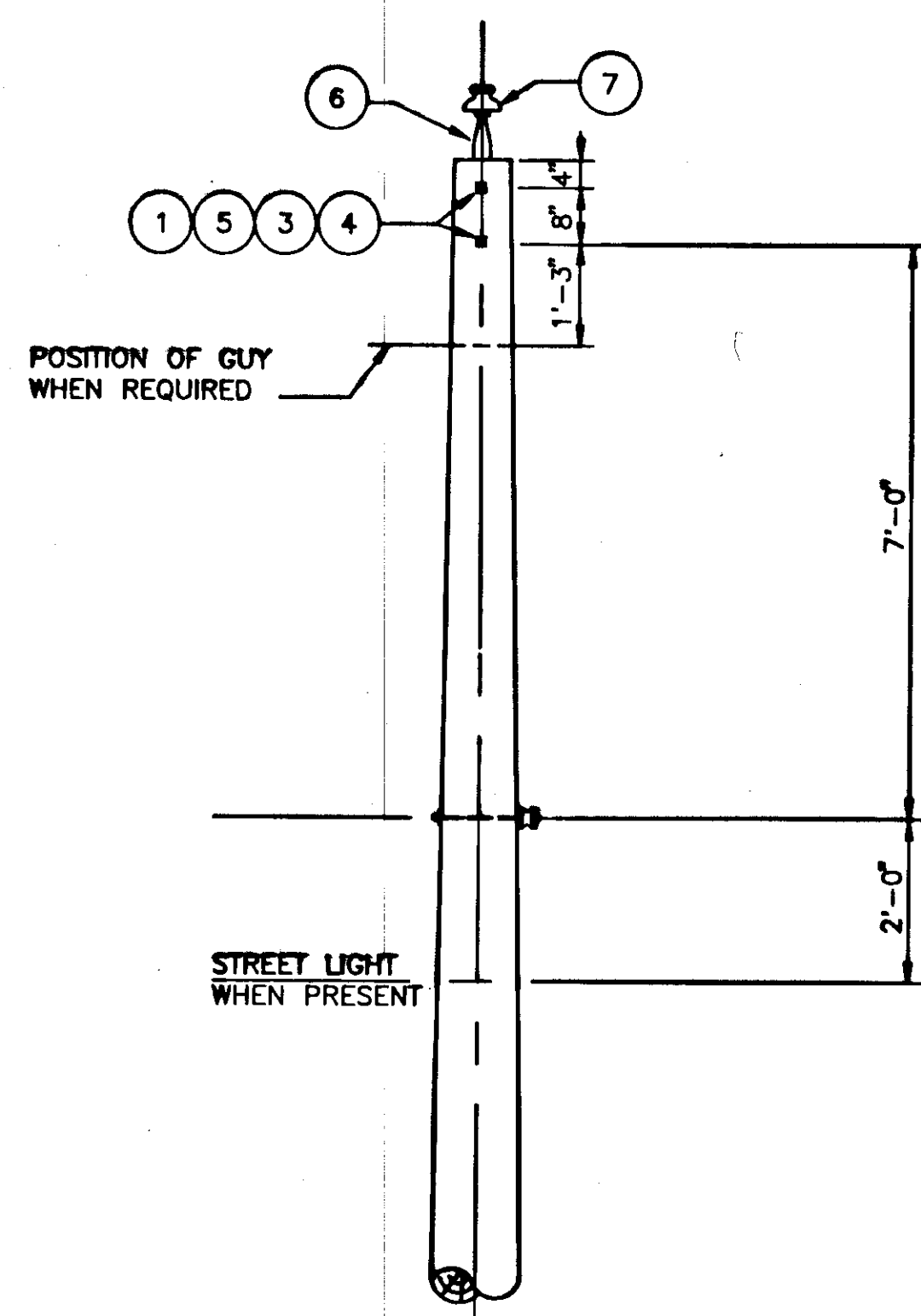
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DWN.	60	MECH.	REV.	STRUC.	REV.
CK'D.	KTOC	APP'D.	3/10/89	DATE	

R.W. BECK
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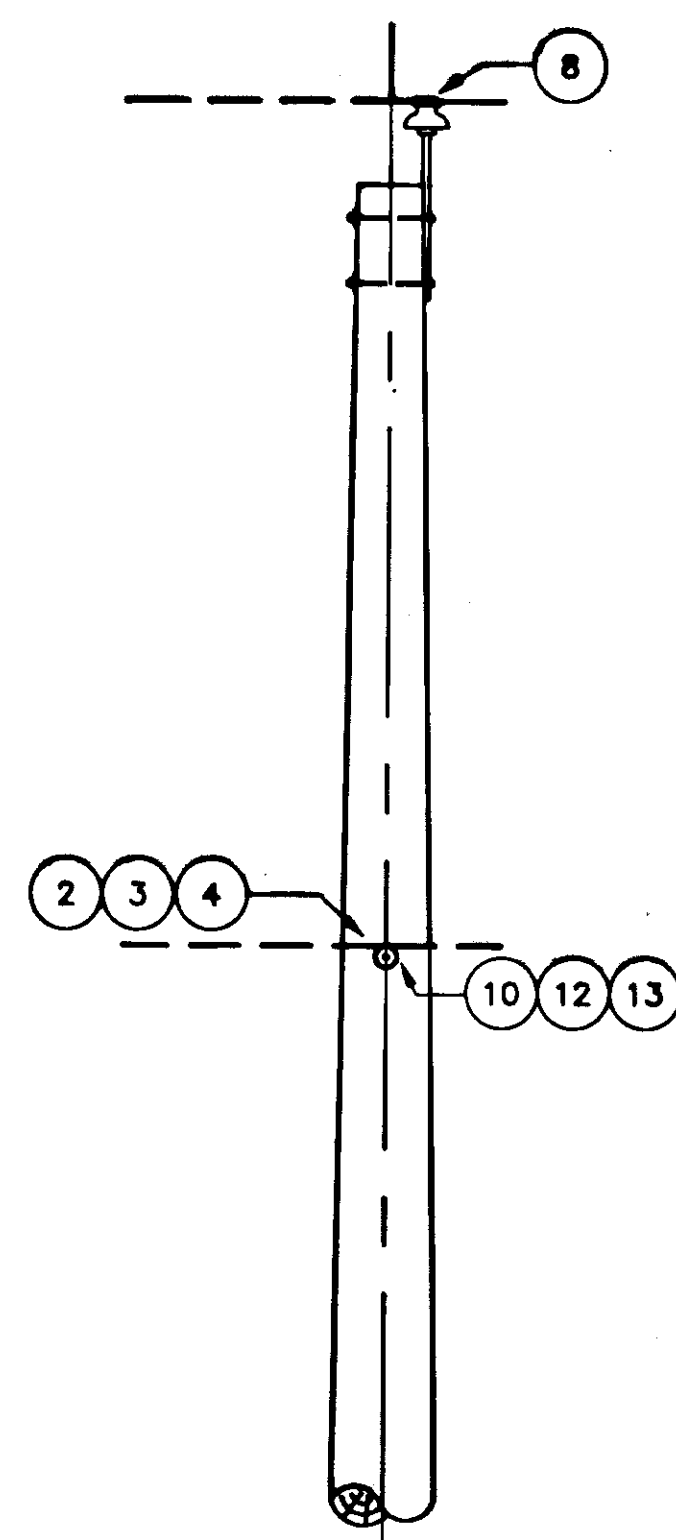
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
TRANSMISSION LINE PLAN

W/O
EE-1971-EA1-AA
DWG. NO.
57

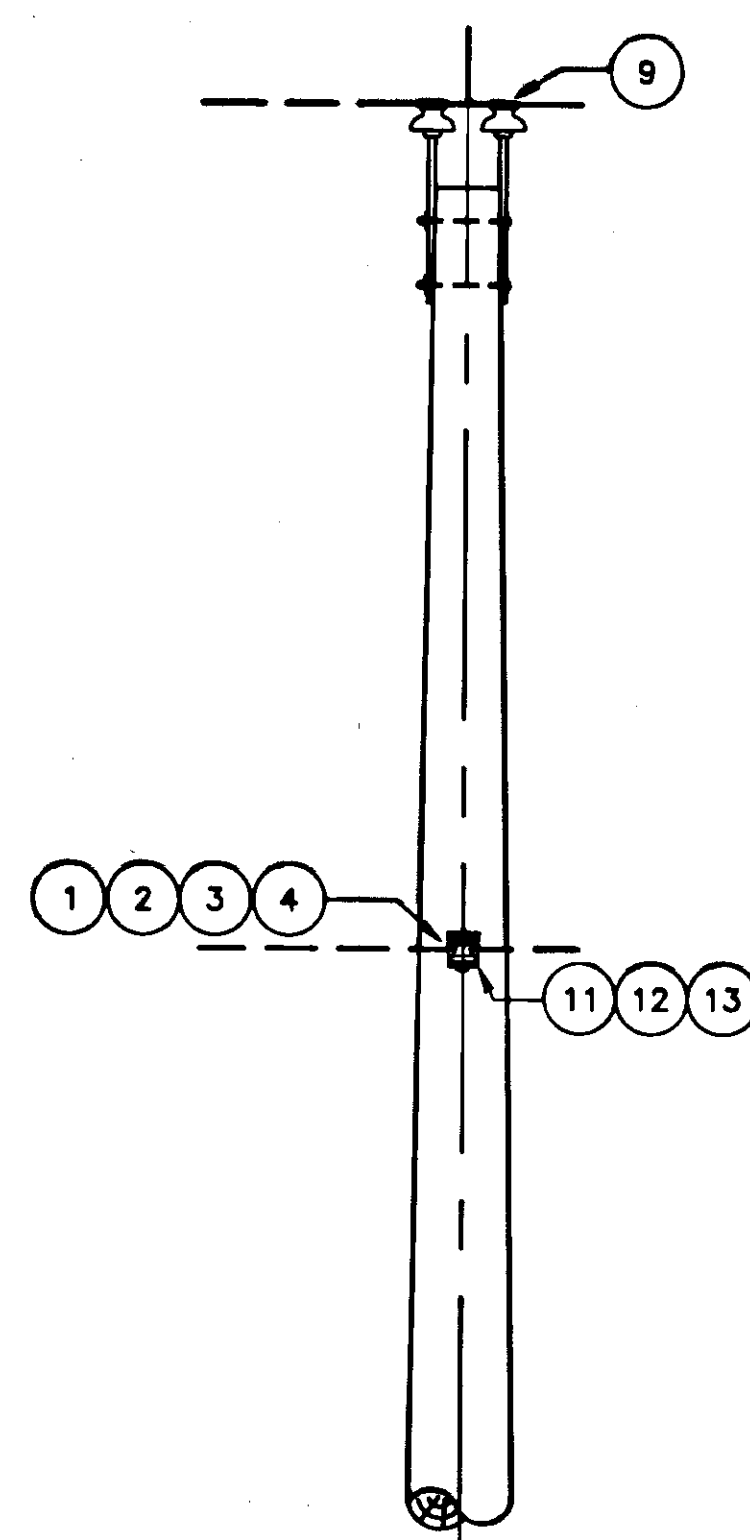




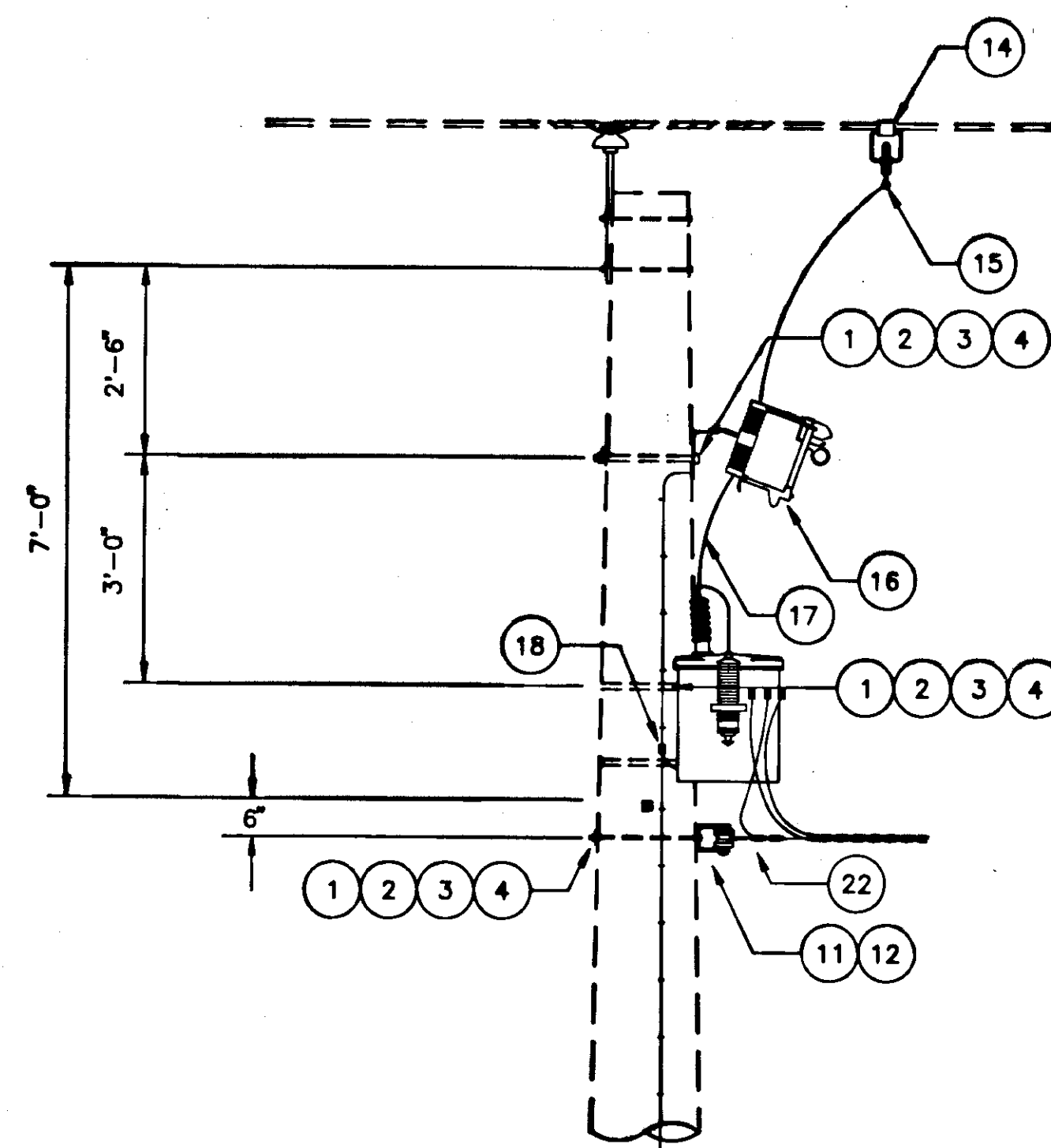
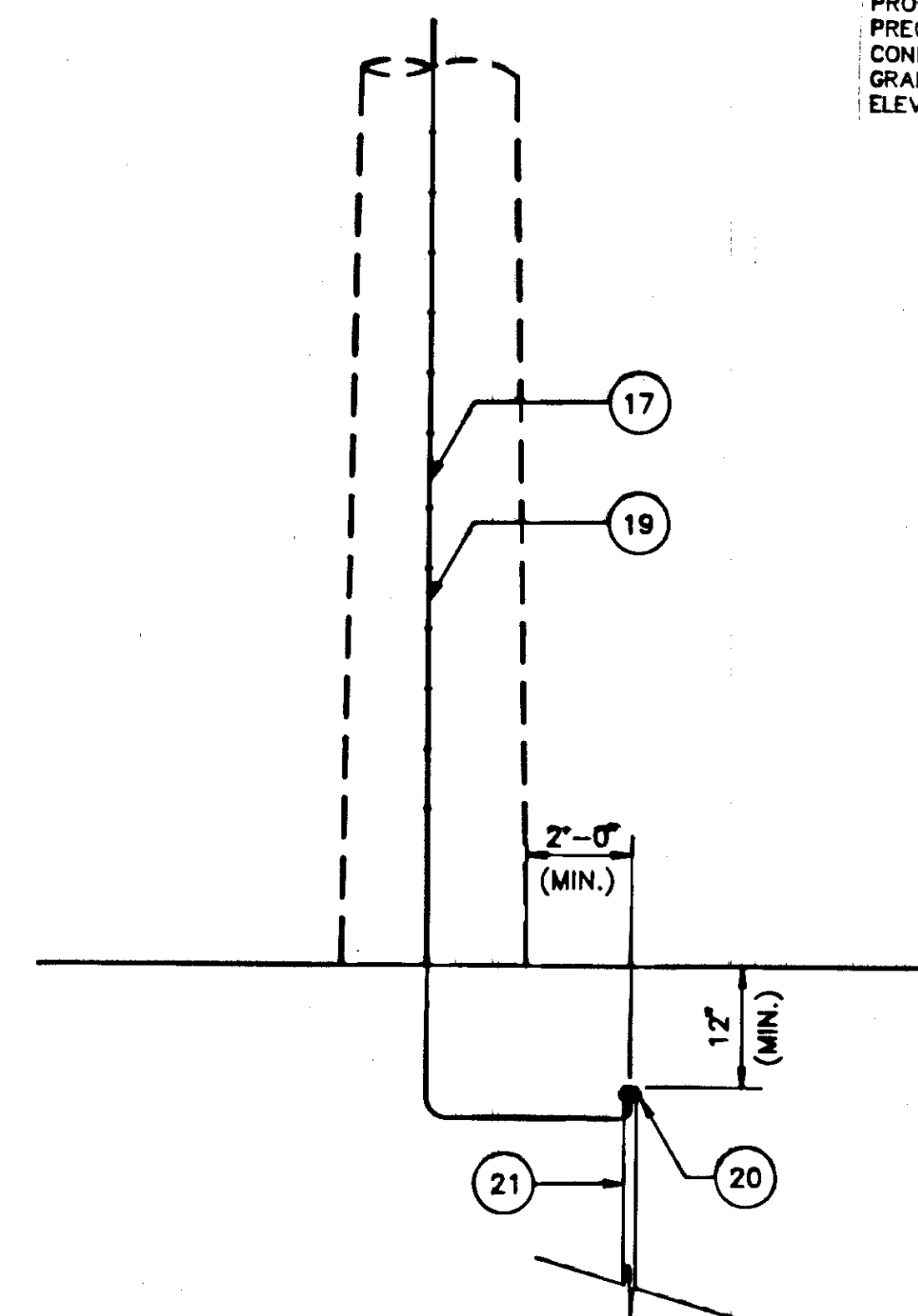
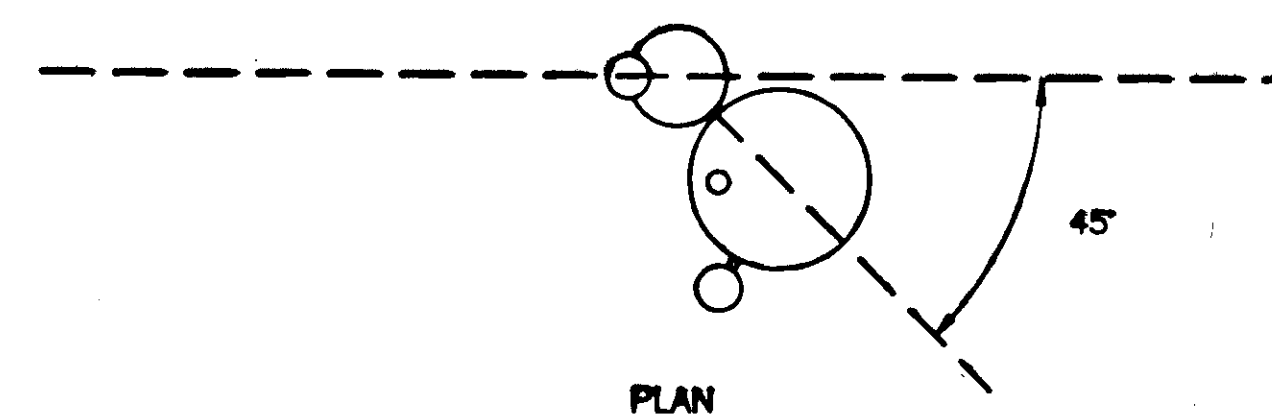
TYPE A1 AND A1-1



TYPE A1



TYPE A1-1

SINGLE PHASE TRANSFORMER
TYPE G-9WITH K-14C
TYPE G-10, G-39, G-105 SIMILARGROUNDING ASSEMBLY
TYPE M2-1

TRANSFORMER ASSEMBLY

G-9 SINGLE PHASE TRANSFORMER ON SINGLE PHASE TANGENT
 G-10 SINGLE PHASE TRANSFORMER ON DEADEND
 G-39 SINGLE PHASE TRANSFORMER ON THREE PHASE TANGENT
 G-105 CSP TRANSFORMER ON SINGLE PHASE TANGENT

MATERIAL LIST							
ITEM NO.	DESCRIPTION	REA APPROVED MATERIAL LIST	QUANTITY				
			A1	A1-1	G-9	M2-1	K14C
1	BOLT, MACHINE, 5/8" X AS REQD. WITH NUT	0638-05-XX	2	3	3	-	1
2	WASHER, CURVED, 2-1/4" X 2-1/4", 11/16 HOLE	7101-00-00	1	1	3	-	1
3	WASHER, SPRING FOR 5/8" BOLT	7105-00-00	3	3	3	-	1
4	LOCKNUT, MF 5/8"	4290-30-00	3	3	3	-	1
5	WASHER, SQUARE, 2-1/4" X 2-1/4", 11/16 HOLE	7102-00-00	2	2	-	-	-
6	PIN, POLE TOP	4561-00-00	1	2	-	-	-
7	INSULATOR, PIN, C-NECK, CLASS 55-3	3425-00-00	1	2	-	-	-
8	TIE, WRAPLOCK, C-NECK, #2 ACSR	6790-13-00	1	-	-	-	-
9	TIE, DOUBLE SUPPORT, #2 ACSR	6790-12-00	-	1	-	-	-
9A	TIE, DOUBLE SIDE, #2 ACSR	6790-15-00	-	-	-	-	-
10	BOLT, SINGLE UPSET, 5/8 X AS REQD.	0635-05-XX	1	-	-	-	-
11	CLEVIS, RIGID, INSULATOR	1230-13-00	-	1	-	-	1
12	INSULATOR, SPOOL, 3" GREY	3426-00-00	1	1	-	-	1
13	TIE, SPOOL, #2 ACSR	6790-11-00	1	1	-	-	-
14	STIRRUP, BAIL, #2 ACSR	5400-02-00	-	-	1	-	-
15	CLAMP, HOT LINE #6-#2	1741-00-00	-	-	1	-	-
16	CUTOUT, OPEN TYPE, WITH BRACKET	1830-00-00	-	-	1	-	-
17	WIRE, #6 Cu SOLID, SOFT DRAWN	7250-06-01	-	-	AS RQD	AS RQD	-
18	CONNECTOR, COMPRESSION	1700-00-XX	-	-	AS RQD	AS RQD	-
19	STAPLES, COPPERWELD	6160-00-00	-	-	AS RQD	AS RQD	-
20	CLAMP, GROUND ROD 5/8	1731-00-00	-	-	-	1	-
21	ROD, GROUND, COPPERWELD, 5/8 X 8'	5380-00-00	-	-	-	1	-
22	CLAMP, WEDGE, FLEX BAIL	1178-00-00	-	-	-	-	1

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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
0	3/10/89	DKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					

DES. KTOC	CIVIL REV.	ELEC. REV.
DWN. HLS	MECH. REV.	STRUC. REV.
CK'D. DKS	APP'D. <i>[Signature]</i>	DATE 3/10/89

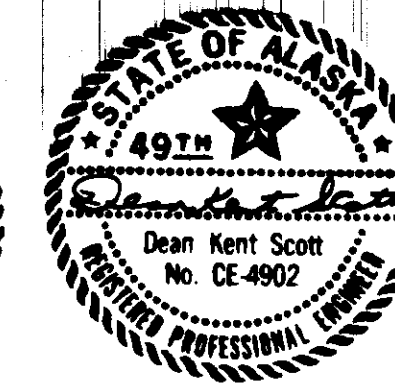
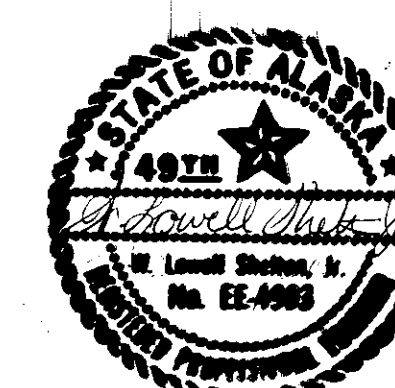
R.W. BECK
AND ASSOCIATES, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
FRAMING DETAILS 1

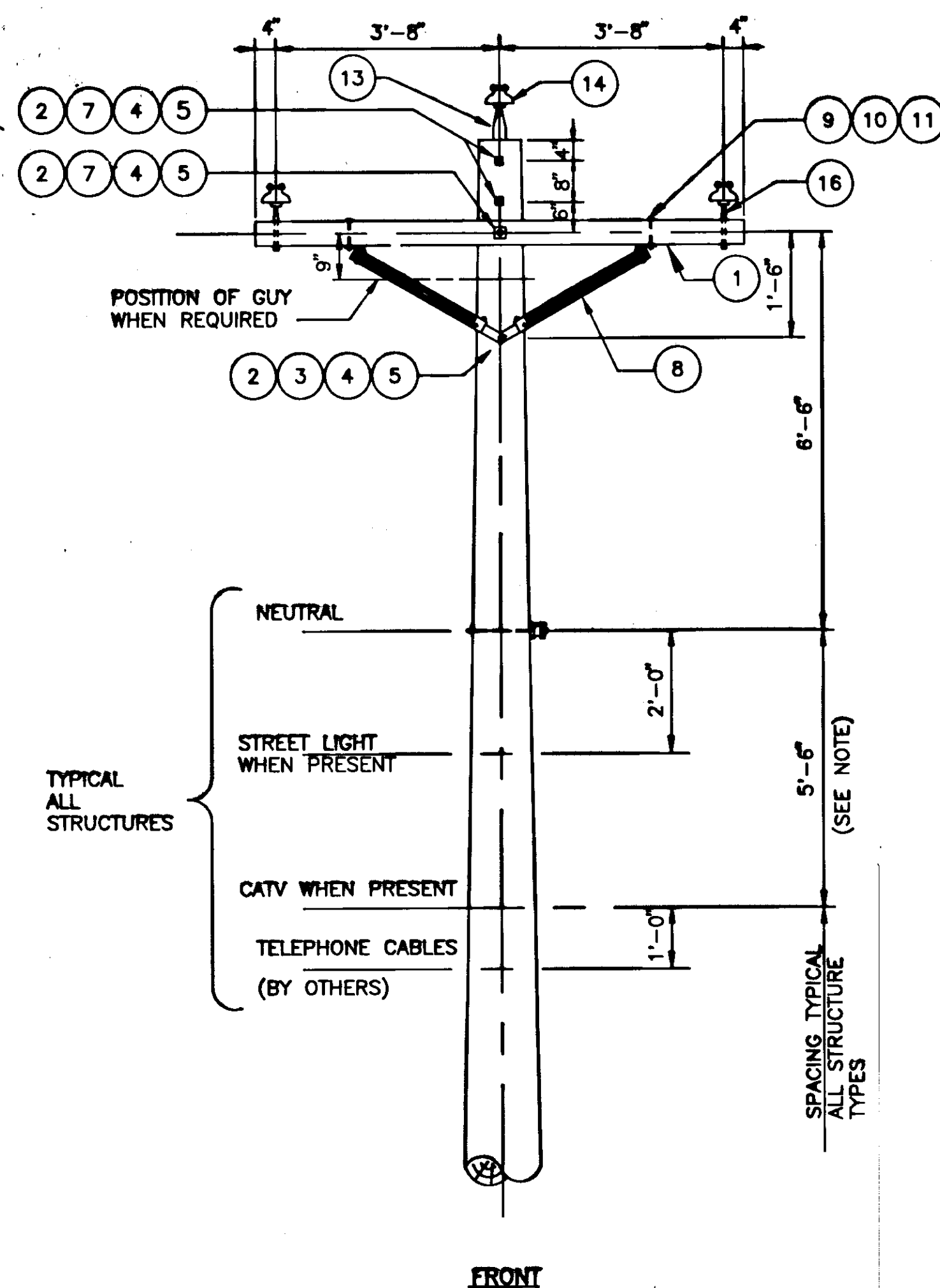
RWB NO. 840-E-8.0

W/O
EE-1971-EA1-AA
DWG. NO.
58

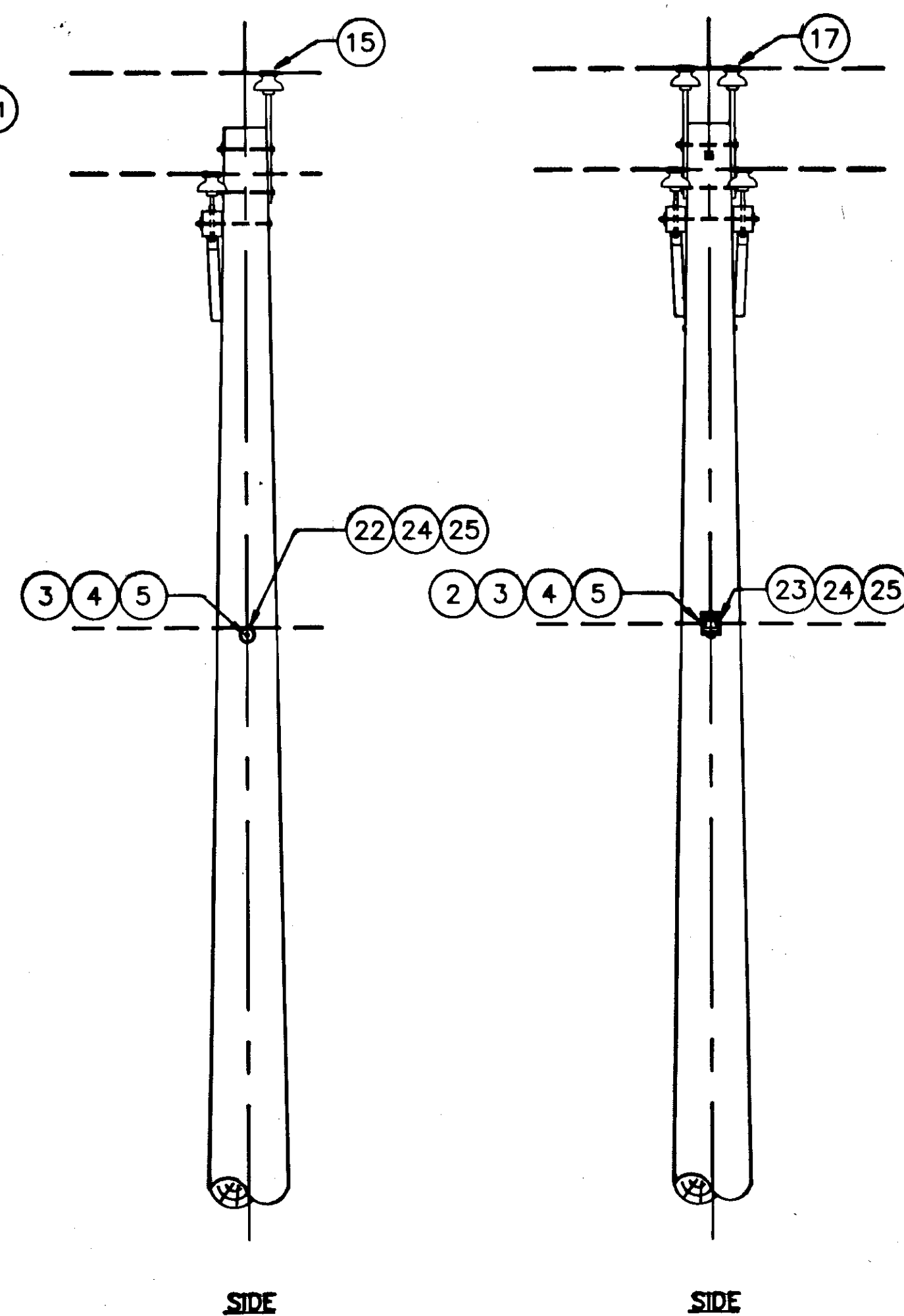
NOTE:
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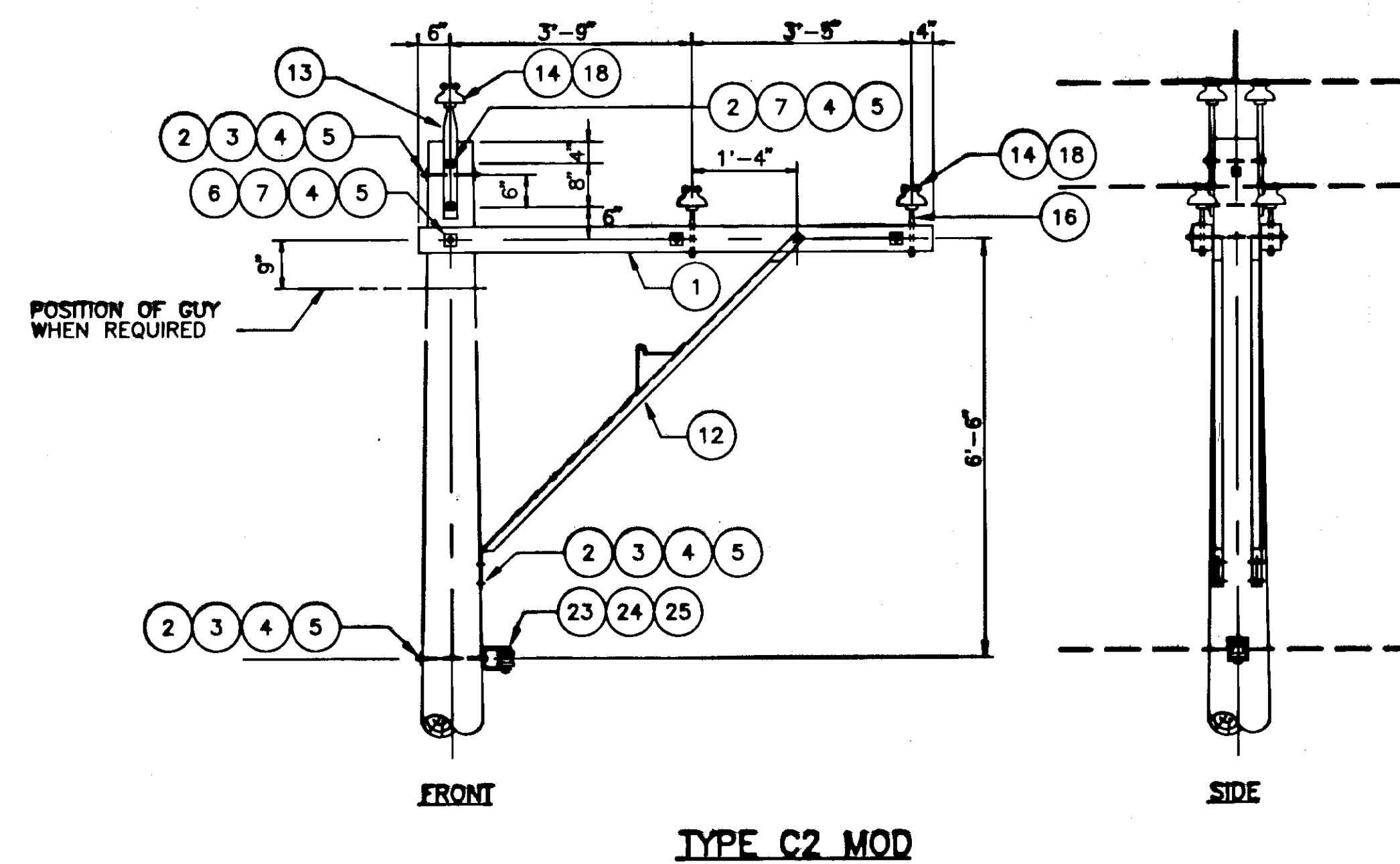


TYPE C1 AND C2

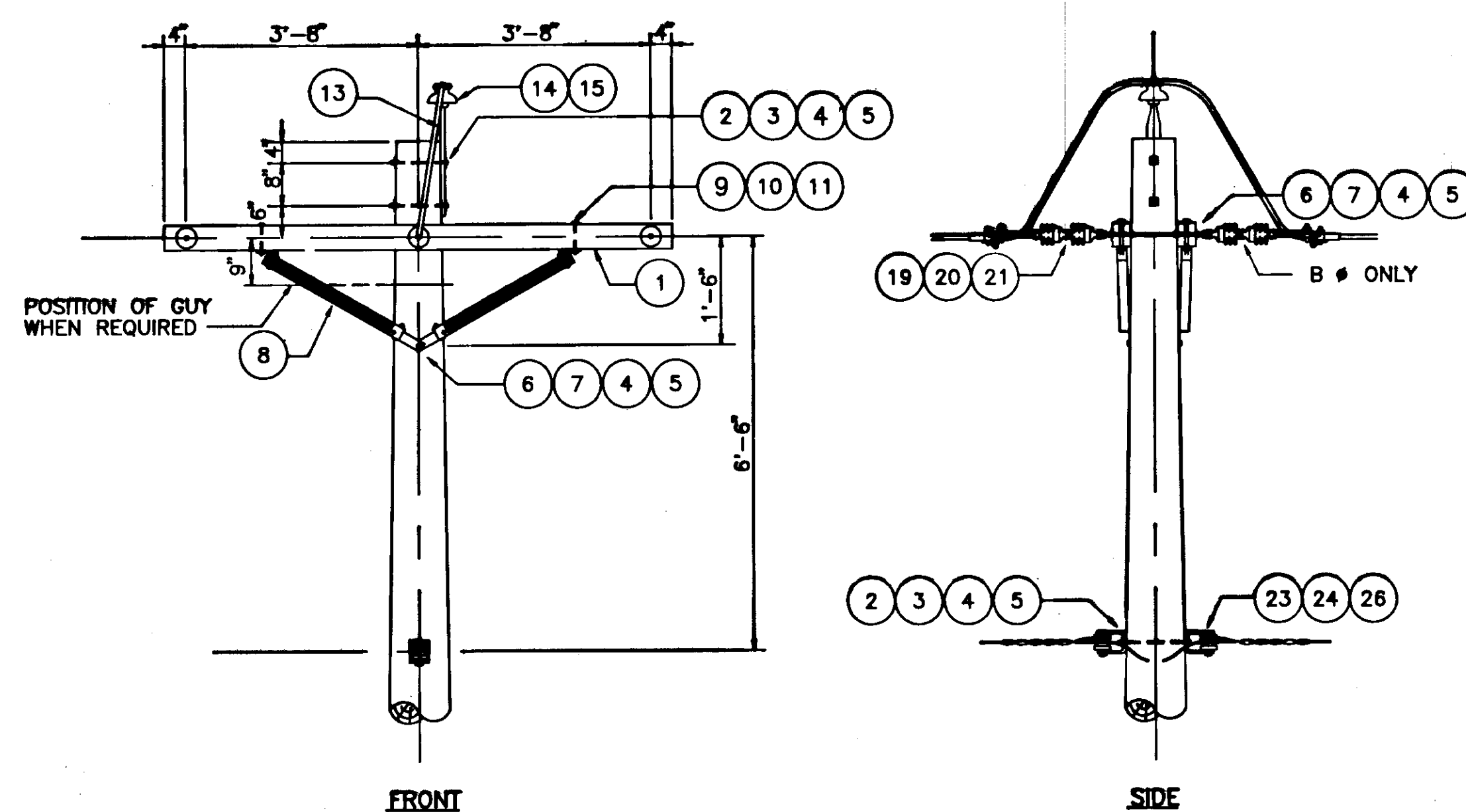


TYPE C1

TYPE C2



TYPE C2 MOD



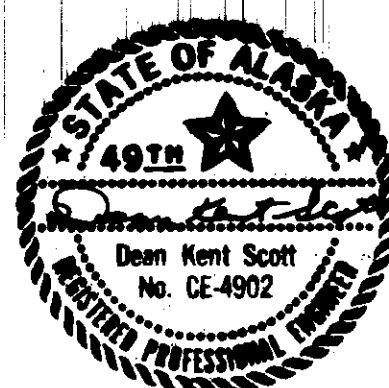
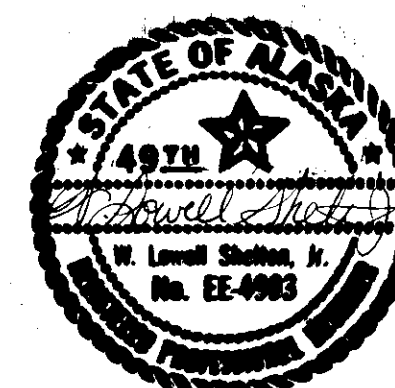
TYPE C7 & A5 COMBINED

MATERIAL LIST								
ITEM NO.	DESCRIPTION	REA APPROVED MATERIAL NO.	QUANTITY					
			C1	C2	C2 MOD	C7	C7&A5	A5
1	CROSSARM, WOOD, 3-5/8" X 4-5/8" X 8"	1820-00-00	1	2	2	2	2	-
2	BOLT, MACHINE, 5/8" X AS REQD., WITH NUT	0638-05-XX	4	4	5	1	3	3
3	WASHER, CURVED, 2-1/4" X 2-1/4", 11/16" HOLE	7101-00-00	2	2	3	1	3	3
4	WASHER, SPRING FOR 5/8" BOLT	7105-00-00	5	12	11	9	11	3
5	LOCKNUT, MF 5/8"	4290-30-00	5	12	11	6	7	3
6	BOLT, DOUBLE ARMING 5/8" X AS REQD.	0633-05-XX	-	4	3	4	4	1
7	WASHER, SQUARE 2-1/4" X 2-1/4", 11/16 HOLE	7102-00-00	1	14	12	12	12	2
8	BRACE, CROSSARM, WOOD, 28"	0753-51-00	2	4	-	4	4	-
9	BOLT, MACHINE 1/2" X 6" WITH NUT	0638-04-06	2	4	2	4	4	-
10	WASHER, ROUND, 1-3/8" DIA., 9/16" HOLE	7102-00-00	2	4	2	4	4	-
11	LOCKNUT, 1/2"	4290-20-00	2	4	2	4	4	-
12	BRACE, ALLEYARM, 7'	0755-32-00	-	-	2	-	-	-
13	PIN, POLE TOP	4561-00-00	1	2	2	-	1	1
14	INSULATOR, PIN, C-NECK, CLASS 55-3	3425-00-00	3	6	6	-	1	1
15	TIE, WRAPLOCK, C-NECK, #2 ACSR	6790-13-00	3	-	-	-	1	1
16	PIN, CROSSARM	4540-00-00	2	4	4	-	-	-
17	TIE, DOUBLE SUPPORT #2 ACSR	6790-12-00	-	3	-	-	-	-
18	TIE, DOUBLE SIDE #2 ACSR	6790-15-00	-	-	3	-	-	-
19	NUT, OVALEYE 5/8"	4290-00-00	-	-	-	3	4	2
20	INSULATOR, SUSPENSION, 6" DIA., CLASS 52-1	3428-00-00	-	-	-	6	8	4
21	DEADEND, AUTOMATIC, #2 ACSR	1175-10-00	-	-	-	3	4	2
22	BOLT, SINGLE UPSET, 5/8 X AS REQD.	0635-05-XX	1	-	-	-	-	-
23	CLEVIS, RIGID, INSULATOR	1230-13-00	-	1	1	1	2	2
24	INSULATOR, SPOOL, 3" GREY	3426-00-00	-	1	1	1	2	2
25	TIE, SPOOL, #2 ACSR	6790-11-00	1	1	1	-	-	-
26	CLAMP, WEDGE, FLEX BAIL	1178-00-00	-	-	-	1	2	2

NOTE:

SPACING BETWEEN NEUTRAL AND CATV POSITIONS
TO BE REDUCED TO 3'-6" AT THE FOLLOWING
STRUCTURE LOCATIONS:

336
335
109
116



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1	6/7/90	DKS	KTOC		REISSUED FOR BID
0	3/10/89	DKS	KTOC		ISSUED FOR BID
REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
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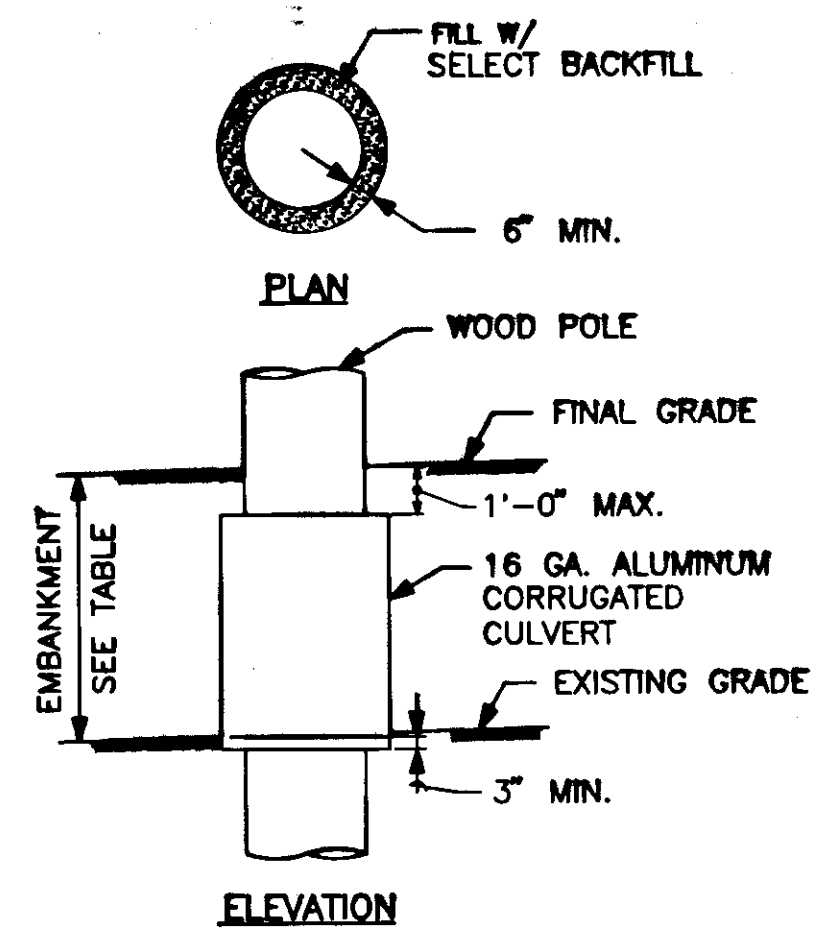
DES.	KTOC	CIVIL	REV.	ELEC.	REV.
DWN.	HLS	MECH.	REV.	STRUC.	REV.
CHK'D.	DKS	APP'D.	DATE	3/10/89	

R.W. BECK
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
FRAMING DETAILS 2

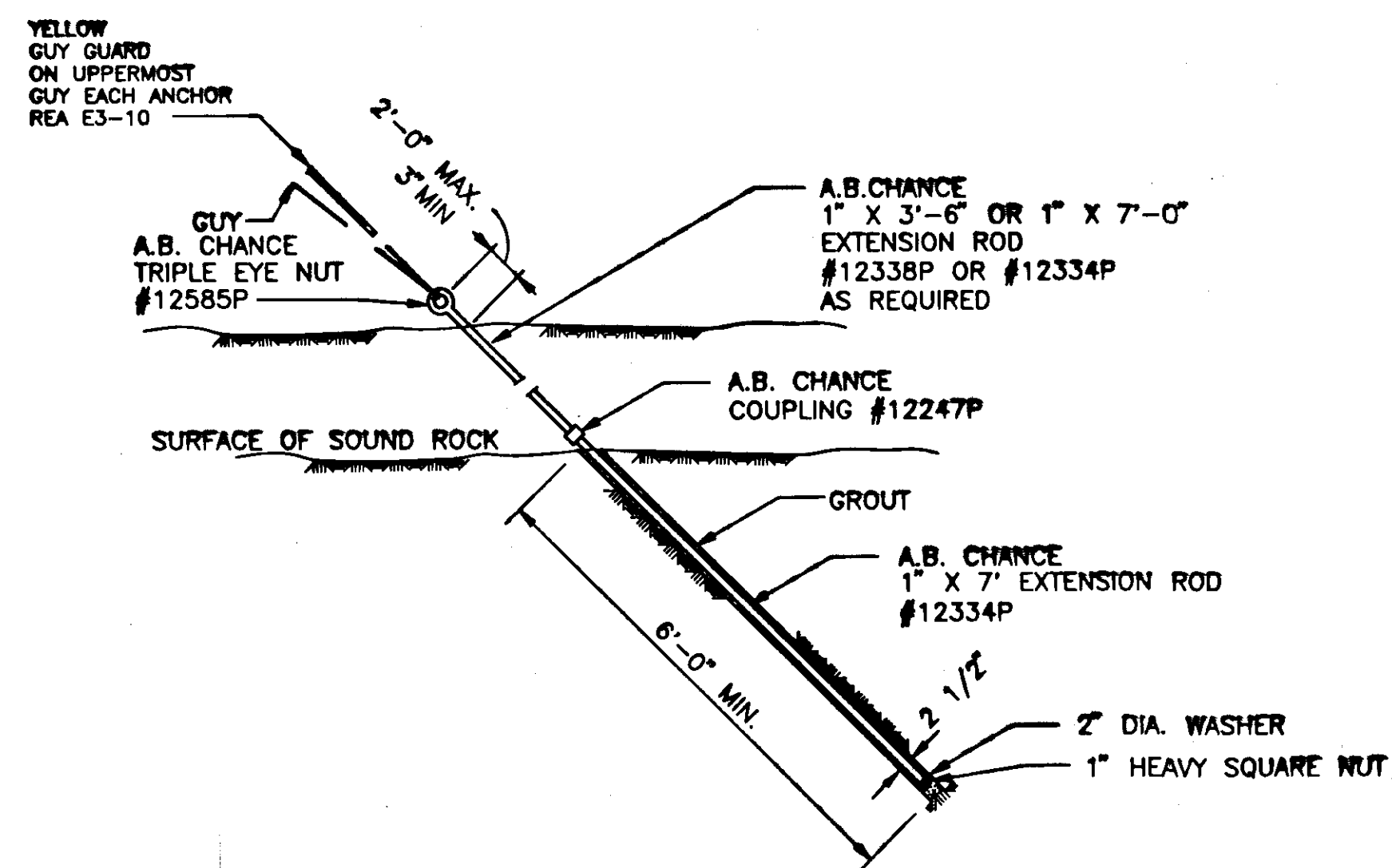
W/O
EE-1971-EA1-AA
DWG. NO.
59

RWB NO. 840-E-9.1

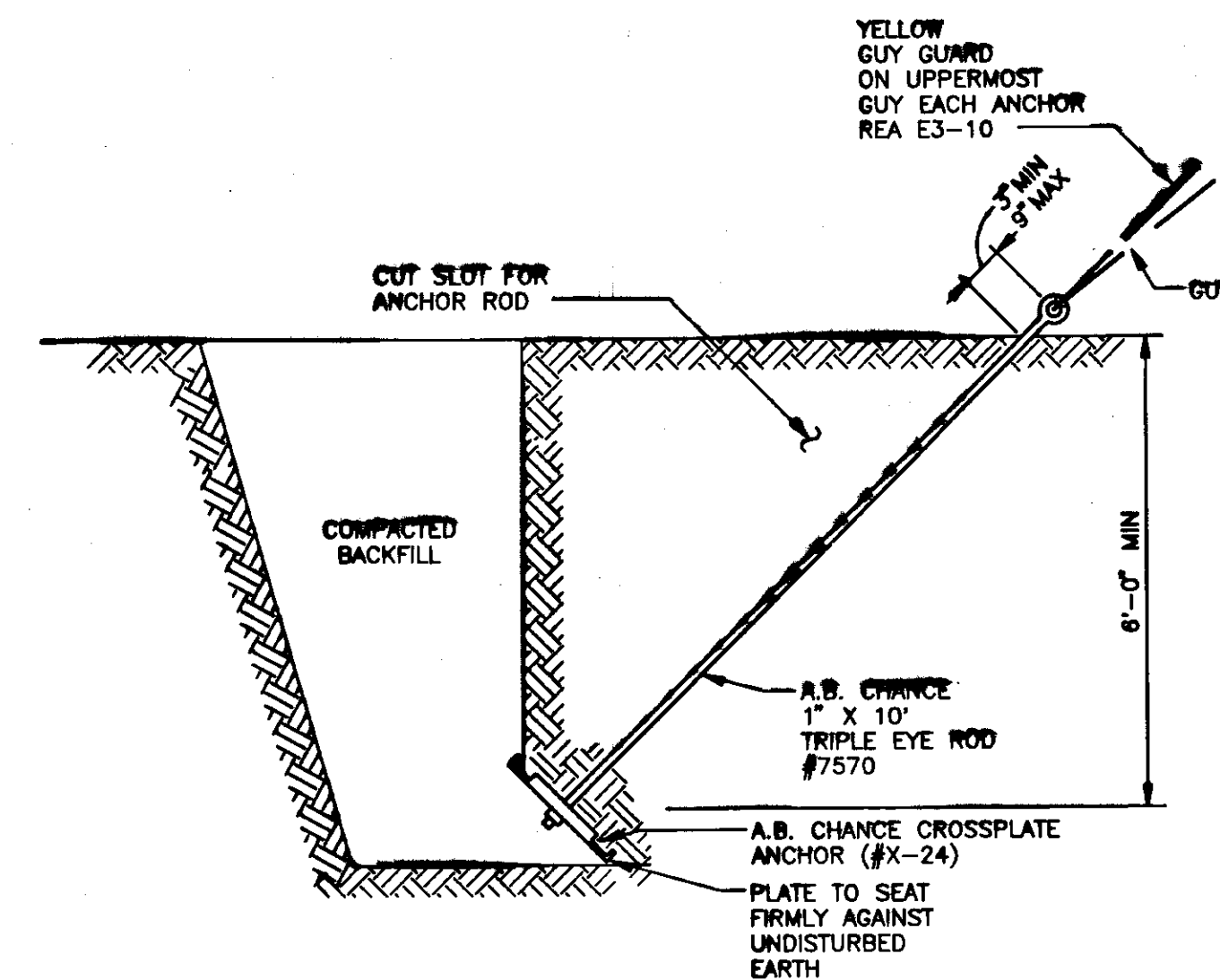


POLE PROTECTION DEVICE

STATION	APPROX. EMBANKMENT DEPTH
11 + 36	8'-6"
12 + 41	7'-0"
14 + 56	4'-0"
17 + 21	5'-0"

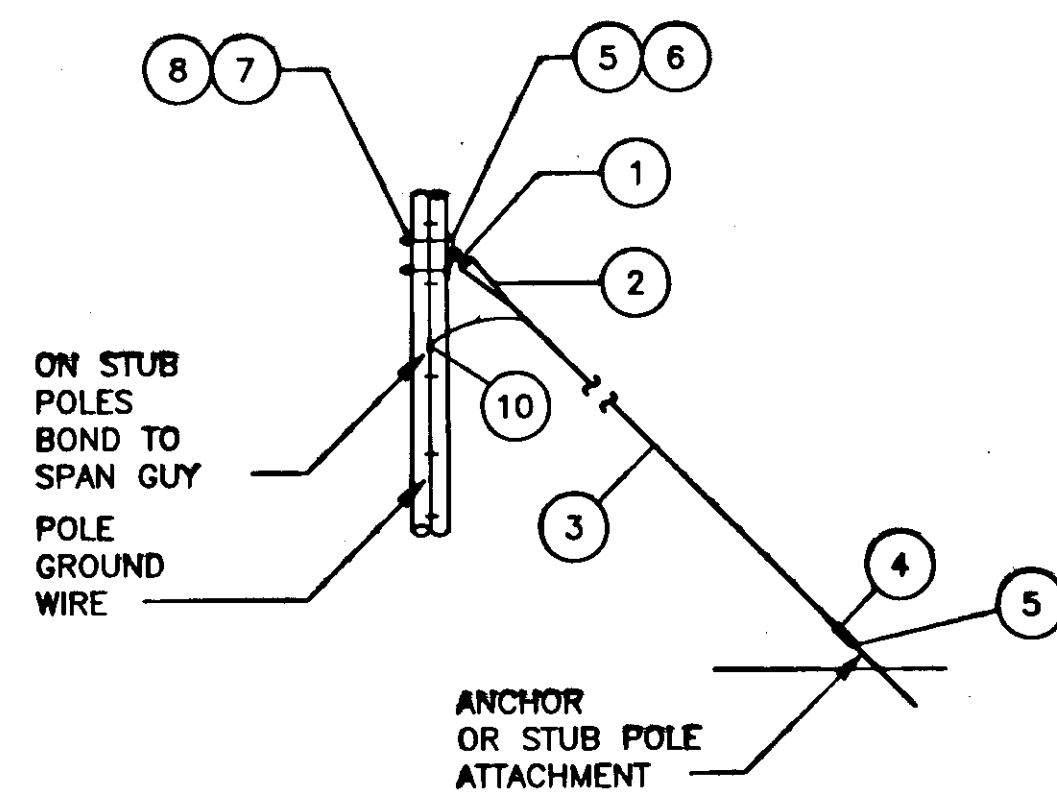


GUY ANCHOR TYPE F5-4 (ROCK)



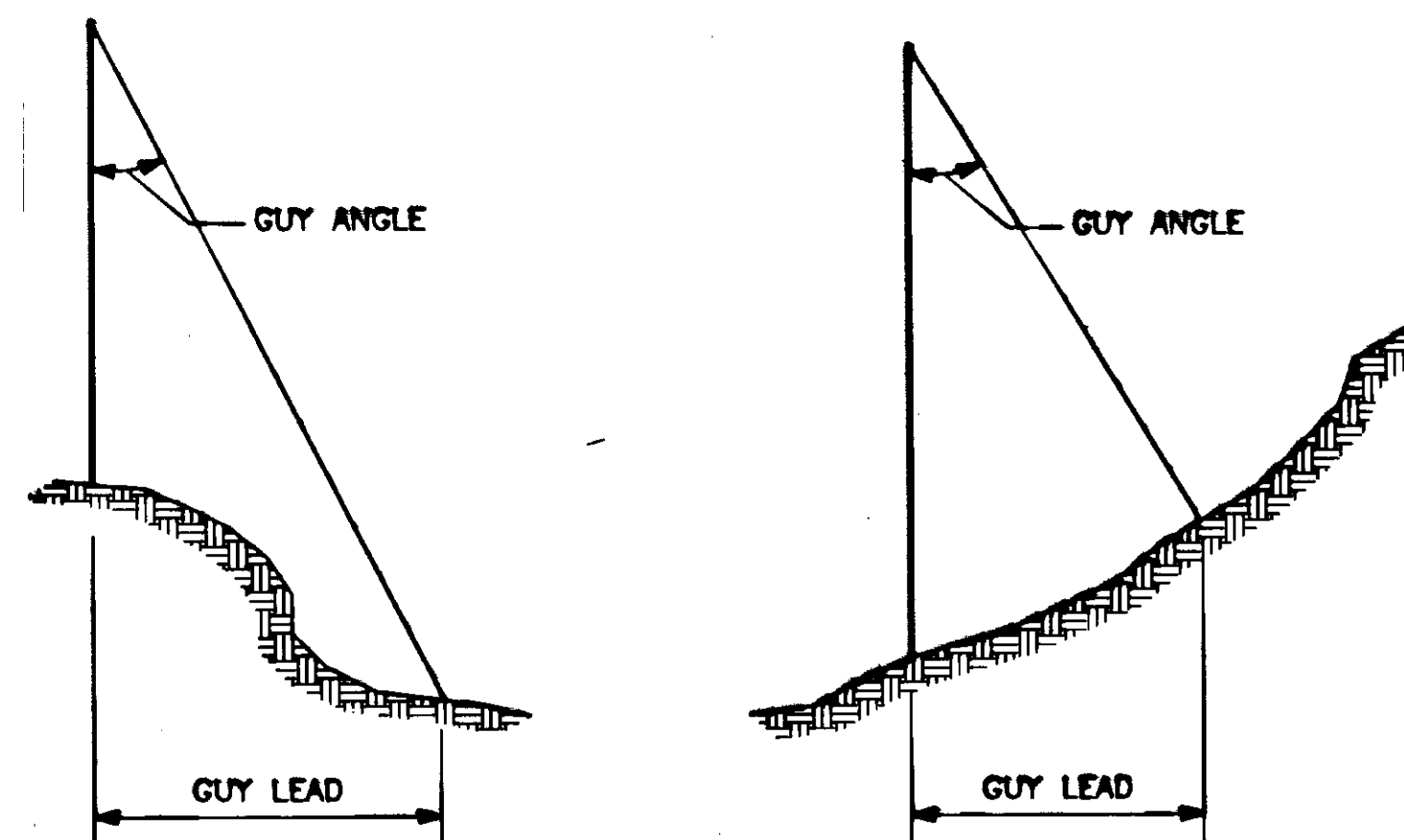
GUY ANCHOR TYPE F1-3P (PLATE)

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GUY ASSEMBLY TYPES E1-2, E1-2S, AND E2-2

BILL OF MATERIALS					
ITEM	DESCRIPTION	REA APPROVED MATERIAL NO.	QUANTITY		
			E1-2	E1-2S	E2-2
1	CLEVIS THIMBLE	6780-32-11	1	1	1
2	GUY GRIP, PREFORMED	1175-00-00	1	1	1
3	WIRE, 3/8" GUY, (10M UTILITY GRADE)	7300-00-00	AS REQ'D	AS REQ'D	AS REQ'D
4	STRAND VISE, 3/8"	1173-41-00	1	1	1
5	POLE EYE PLATE, GUYING	0215-07-00	1	1	1
6	BOLT, MACHINE, 5/8" X AS REQ'D	0638-05-XX	2	2	2
7	WASHER, CURVED	7101-00-00	2	2	2
8	NUT, THIMBLEYE, 5/8"	4290-60-63	-	2	-
9	NUT, LOCK, 5/8"	4290-30-00	2	-	2
10	CONNECTOR, CRIMPET	- -	2	2	2
11	CLAMP, ANCHOR ROD BONDING	1171-00-00	1	1	-



TYPICAL GUY TERMINOLOGY

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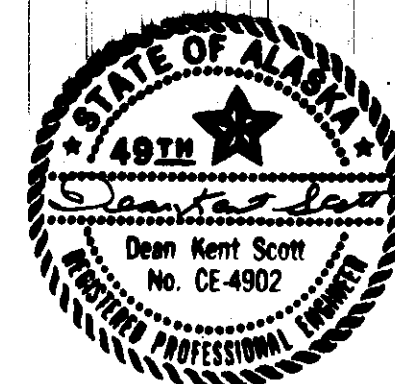
REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
0	3/10/89	DKS	KTOC		ISSUED FOR BID
DRAWING REVISION RECORD					

DES.	KTOC	CIVIL REV.	ELEC. REV.
DWN.	HLS	MECH. REV.	STRUC. REV.
CHK'D.	DKS	APP'D.	DATE 3/10/89

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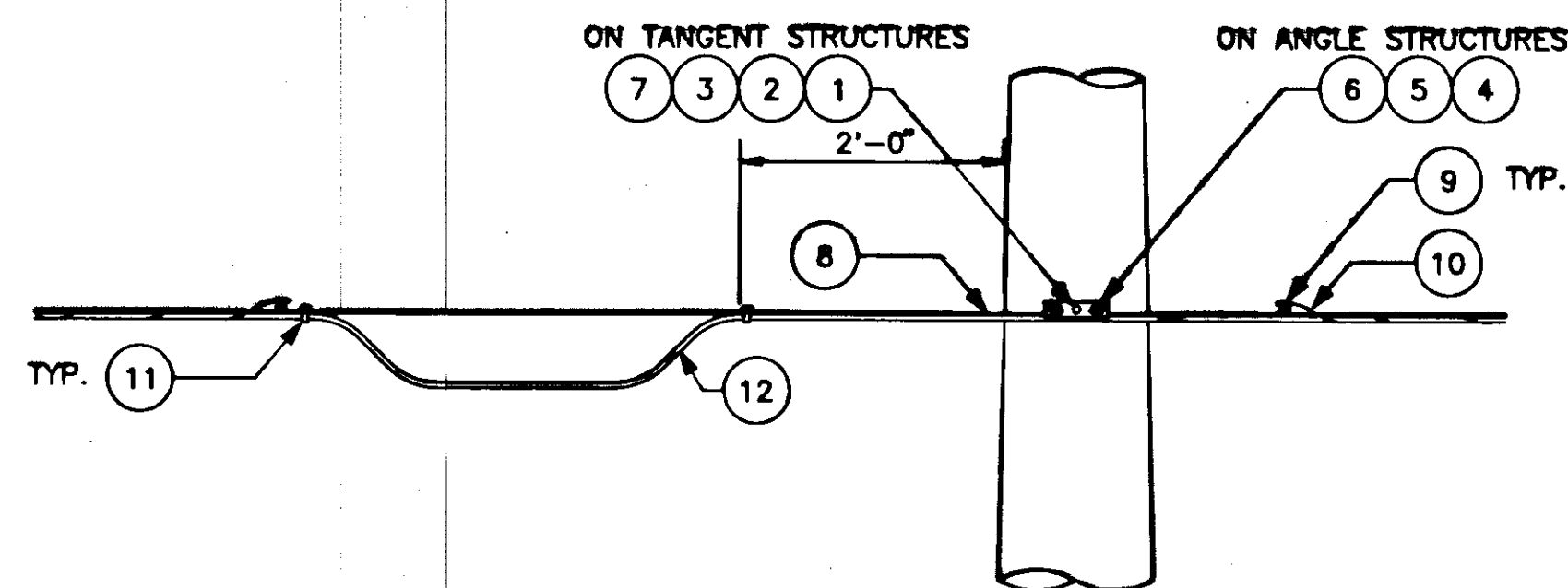
STATE OF ALASKA
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HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
GUY AND ANCHOR DETAILS

W/O EE-1971-EA1-AA
DWG. NO. 60

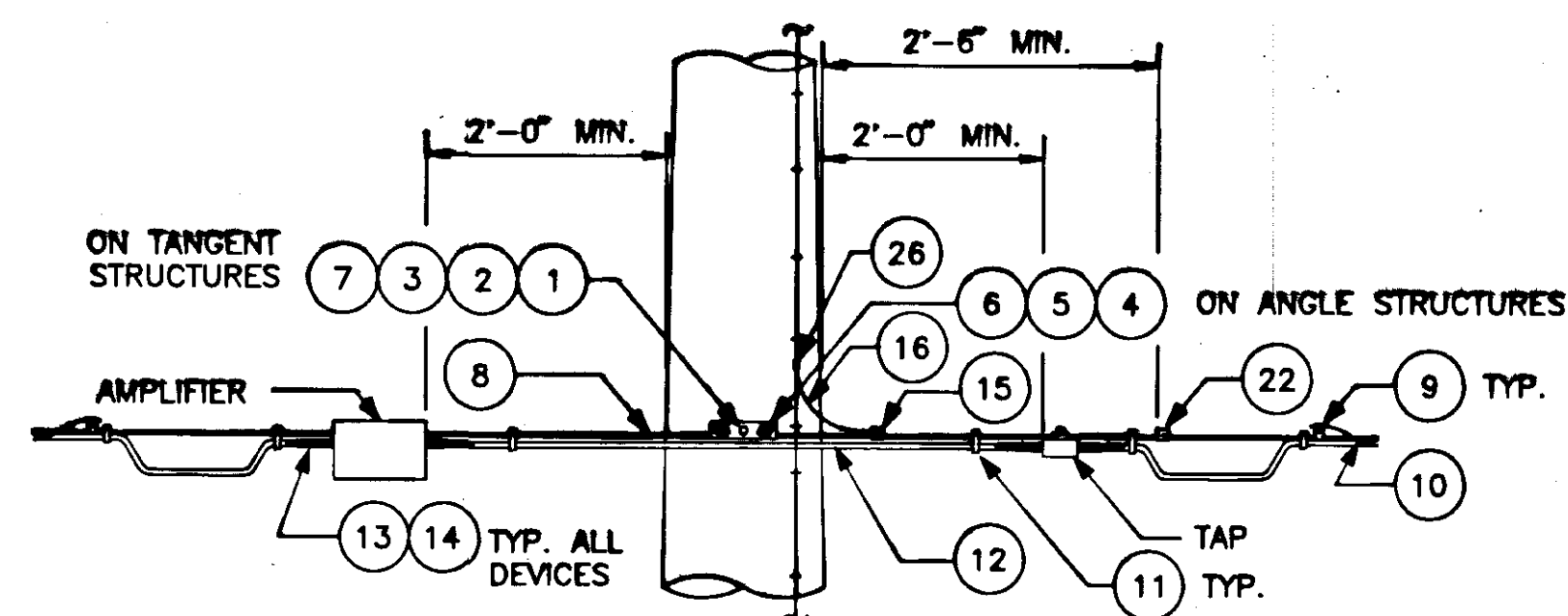


RWB NO. 840-E-11.0

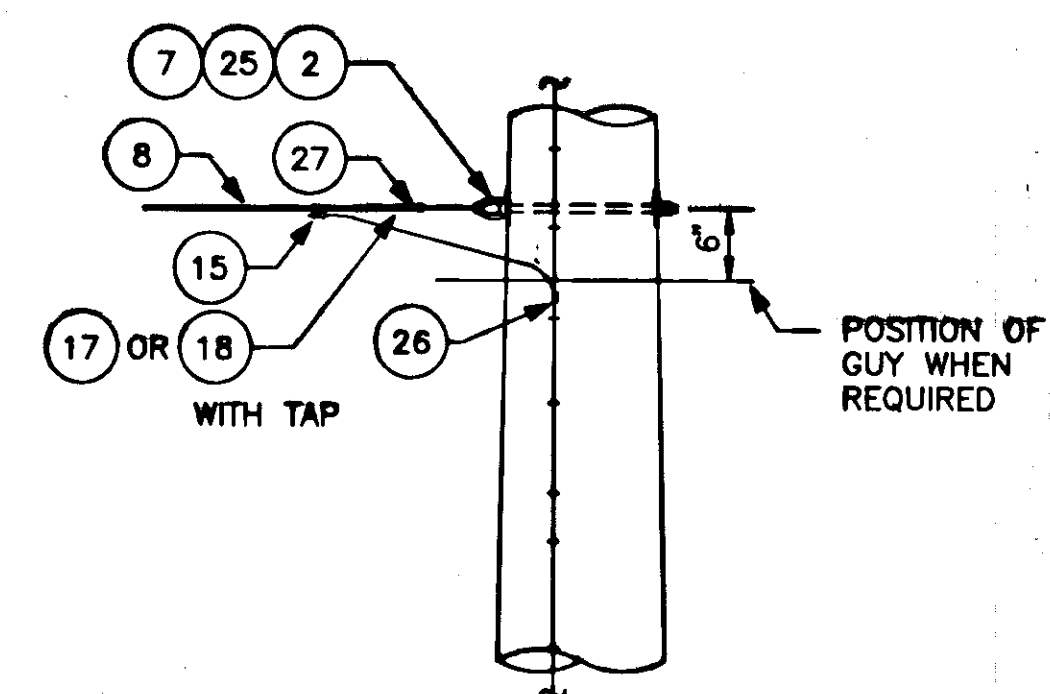
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TYPICAL CATV INSTALLATION
AT POLE WITH NO DEVICE



TYPICAL CATV INSTALLATION
WITH ONE OR TWO DEVICES



TYPICAL CATV DEADEND INSTALLATION

CATV MATERIAL LIST		
ITEM NO.	DESCRIPTION	MANUFACTURER AND CATALOG NUMBER
1	BOLT 5/8" X AS REQD. LENGTH	JN J113
2	WASHER, CURVED 3" X 3" X 1/4"	JN J25088.1
3	CLAMP, SUSPENSION	JN J7901
4	CLAMP, SUSPENSION	JN J8584
5	BOLT 3/4" X AS REQD. LENGTH	JN J8583
6	NUT, LOCK, 3/4" BOLT	D 26-0902U
7	NUT, LOCK, 5/8" BOLT	P AST10-5-C100
8	STRAND, 1/4" 7 WIRE EHS, 6650 LBS	CS P3-75-500JCA
9	CLAMP, LASHING "E"	GE EMI-500-B3
10	WIRE, LASH TYPE S.S. 430, .045" DIA.	RAY TCS-17-06-S
11	TIE, SUPPORT & SPACER	B K-1
12	COAXIAL CABLE	GE GRS-500-TR-DU-03
13	CONNECTOR, CABLE	GE GTR-M
14	HEAT SHRINK	JN J6519 HDG
15	CLAMP, BONDING	CS F5967BV
16	#6 Cu, SOLID, SOFT DRAWN, LENGTH AS REQD.	D 27-00860
17	TERMINATOR, CABLE	RE DE1500
18	TERMINATOR, "KS" PORT	JN J8054
19	WOOD MOLDING 1/2" X 8"	PLP GDE-1104LA
20	STAPLES, FOR WOOD MOLDING	CS F5967BVM
21	RG 59 COAXIAL CABLE 67% BONDING	
22	CLAMP, SPAN "O"	
23	GRIP, RG 59	
24	NOT USED	
25	BOLT, THIMBLE EYE 5/8" DIA.	
26	CRIMPET, COPPER	
27	GRIP, GUY, DEADEND	
28	RG 59 COAXIAL CABLE 67% BONDING, MESSENGER	

LIST OF MANUFACTURER'S ABBREVIATIONS

B	BLACKBURN
CS	COMM/SCOPE
D	DIAMOND
GE	GILBERT ENGINEERING
JN	JOSLYN
P	PANDUIT
PLP	PREFORMED LINE PRODUCTS
RAY	RAYCHEM
RE	RELIABLE ELECTRIC/UTILITY PRODUCTS

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REV.	DATE	BY	CHK'D	APPROVALS	DESCRIPTION
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DRAWING REVISION RECORD					
DES.	EO	CIVIL	REV.	ELEC.	REV.
DWN.	HLS	MECH.	REV.	STRUC.	REV.
CHK'D	KTOC	APP'D	DATE	3/10/89	

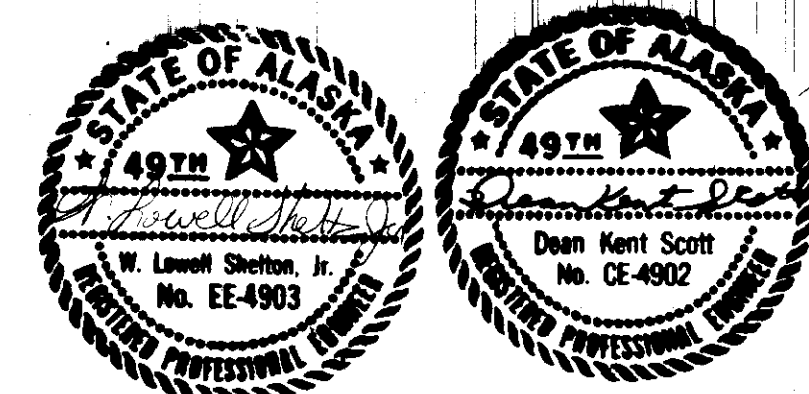
R.W. BECK
AND ASSOCIATES, INC.

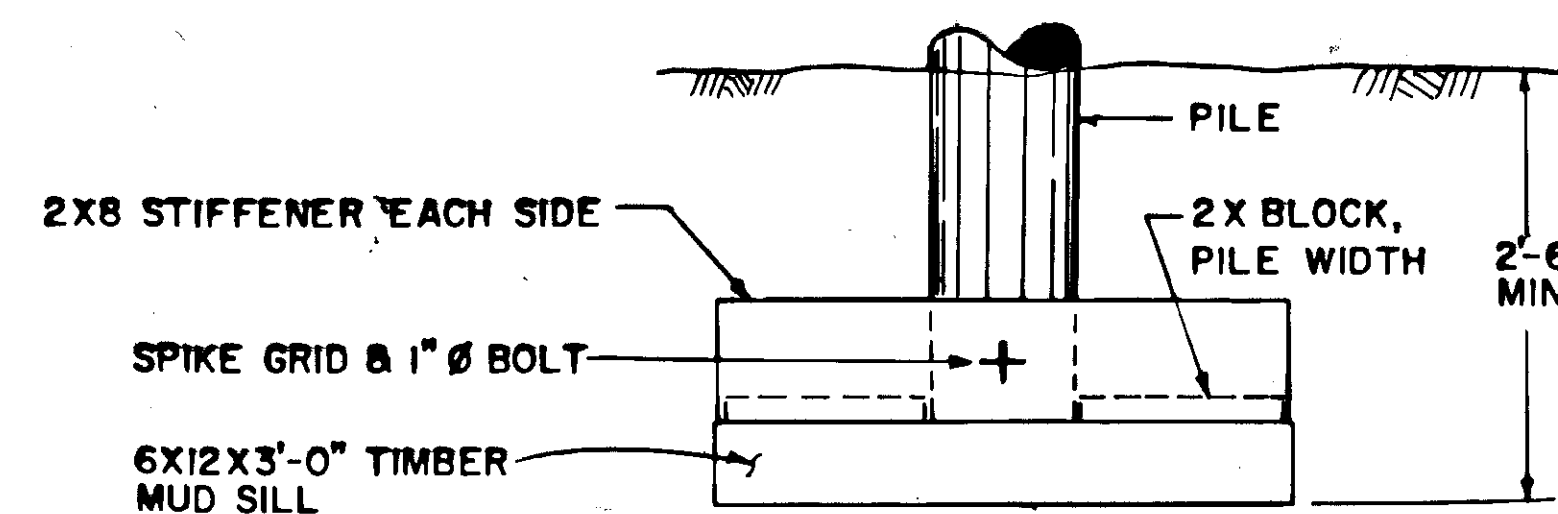
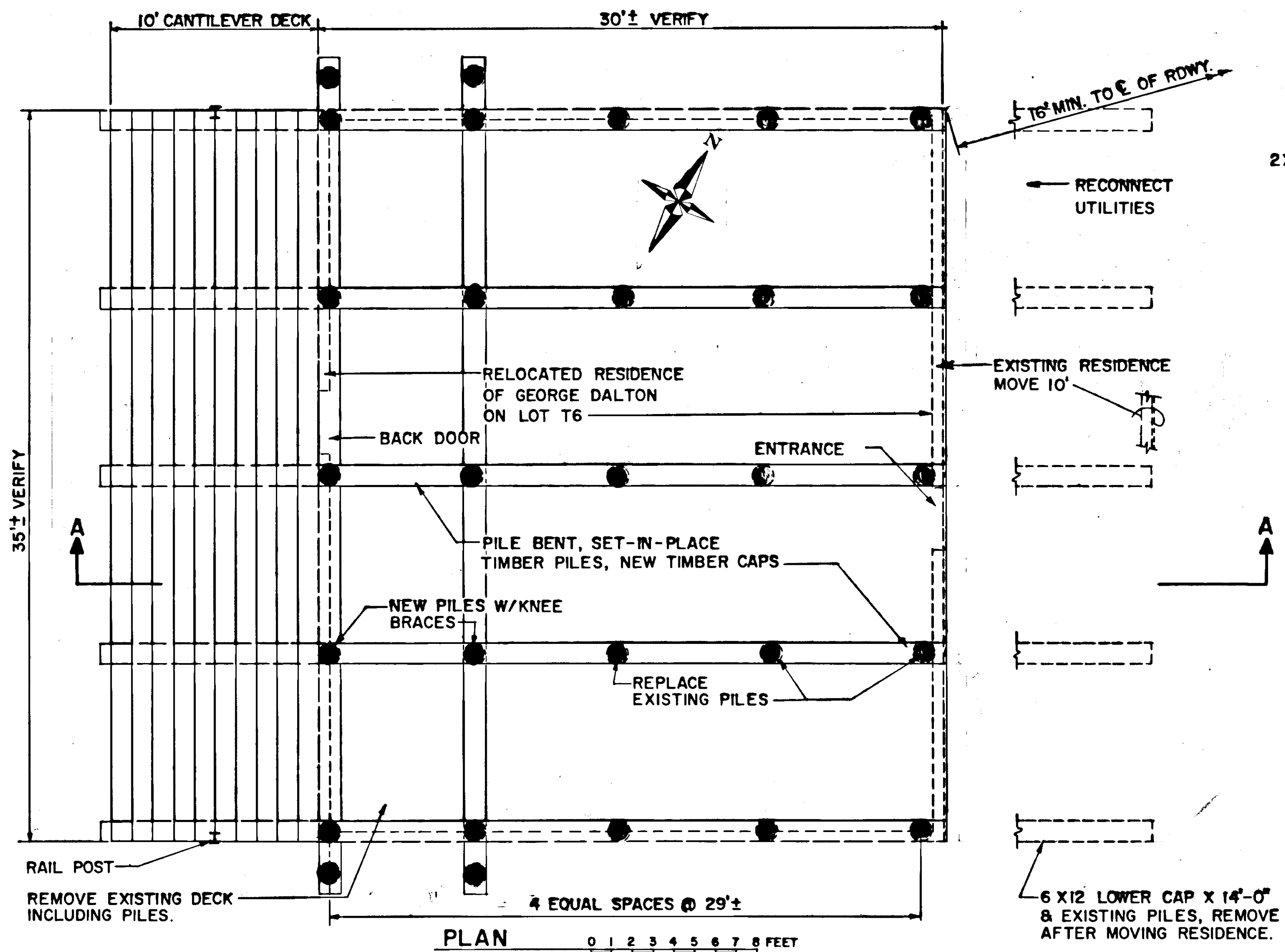
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HOONAH ARTERIAL - UTILITIES RELOCATION
PROJECT NO. RS-0918(4)
FRAMING DETAILS 3

RWB NO. 840-E-10.0

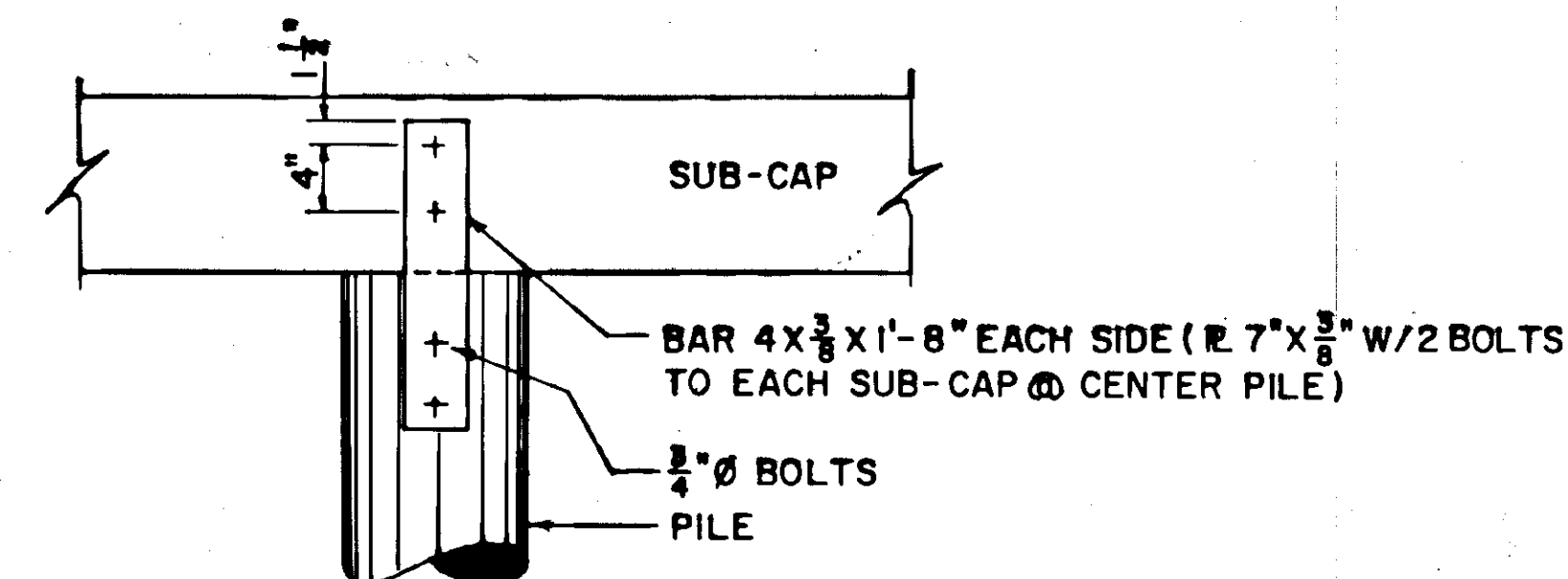
W/O
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DWG. NO.

61





TYP. MUD SILL
(SEE WEST ELEV. FOR EXCEPTIONS)



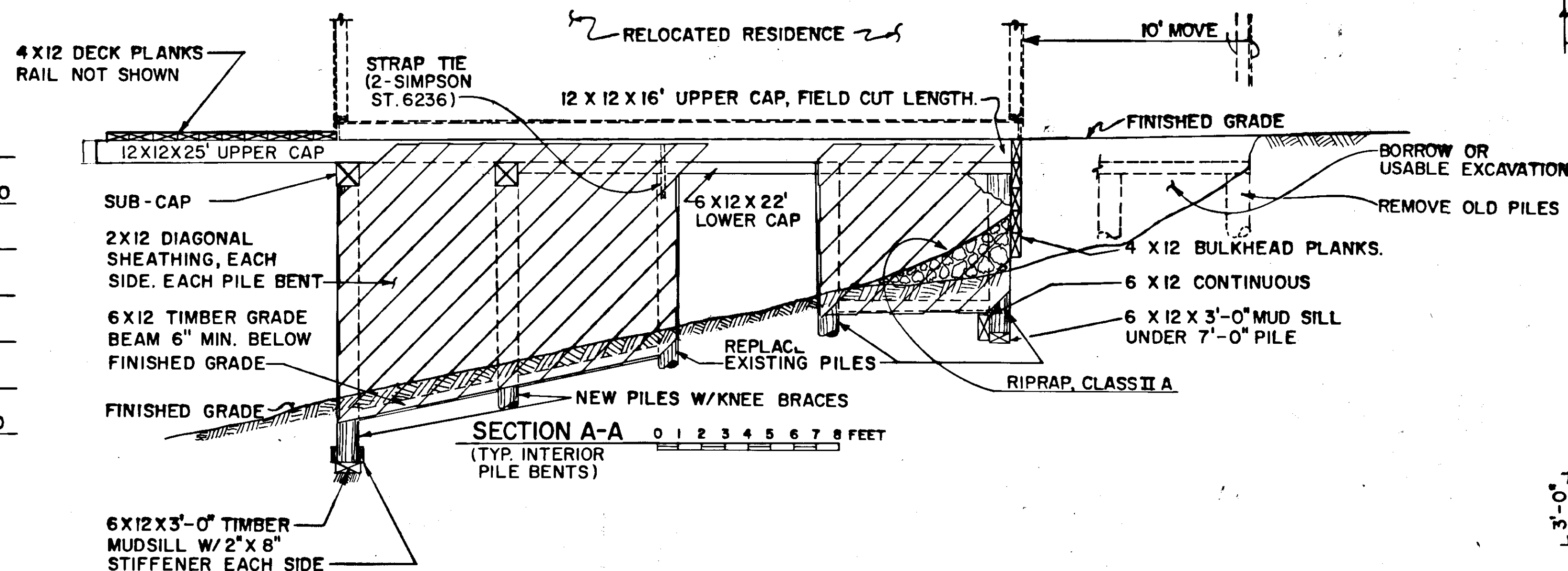
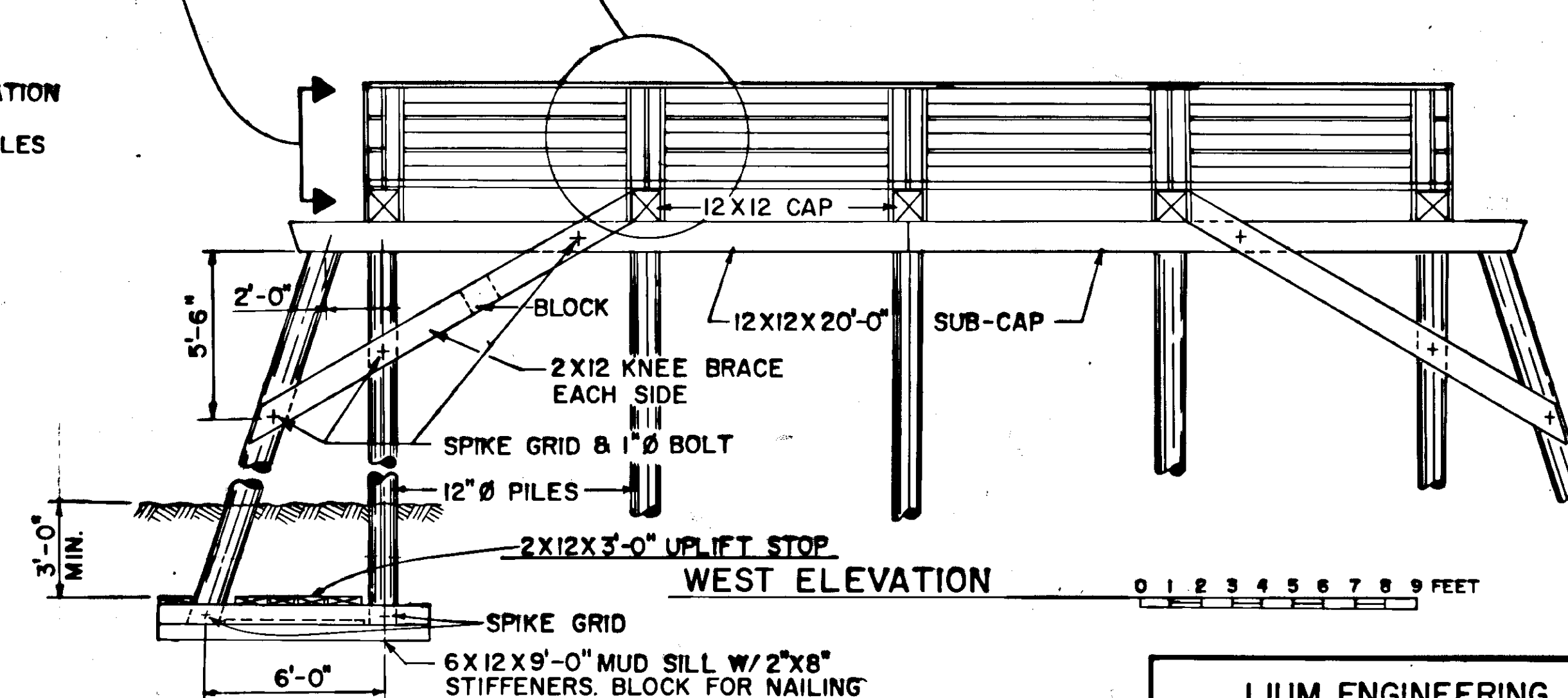
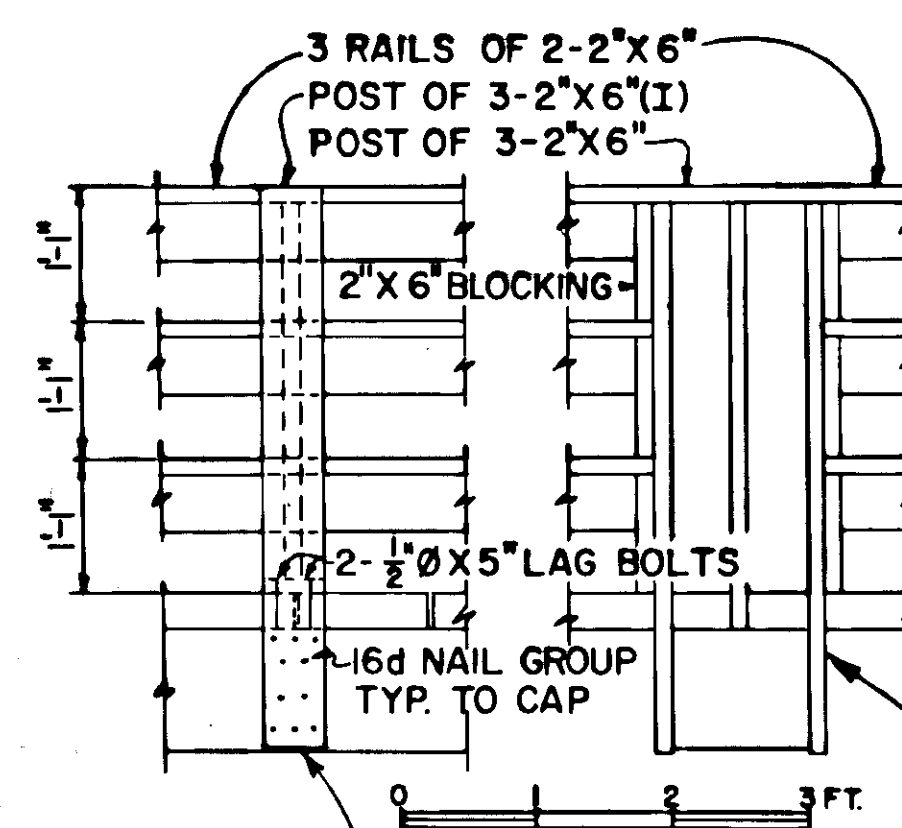
SUB-CAP/PILE CONNECTION

FOUNDATION NOTES

- TIMBER:** STRUCTURAL TIMBERS (6x12 TO 12x12) SHALL BE S4S #1 WESTERN HEMLOCK OR DOUGLAS FIR. SHEATHING, PLANKING, AND RAILING (2x6 TO 4x12) SHALL BE S4S #2 DOUGLAS FIR OR BETTER.
- TREATMENT:** RAIL MEMBERS, DECK PLANKS, AND BULKHEAD PLANKS SHALL BE PRESSURE TREATED WITH ACZA FOR GROUND CONTACT. ALL OTHER TIMBER AND PILES SHALL BE PRESSURE TREATED WITH CREOSOTE FOR SEAWATER IMMERSION.
- HARDWARE:** STEEL SHAPES, PLATES, AND BARS SHALL CONFORM TO ASTM A-36. BOLTS SHALL CONFORM TO ASTM A-307, 0.325 HARDWARE SHALL BE HOT DIP GALVANIZED.

FASTENING SCHEDULE

- BLOCKING TO FOOTING:** 20d COMMON @ 6"
- STIFFENER TO BLOCKING:** 20d COMMON @ 4"
- STIFFENER TO PILING:** SINGLE CURVE SPIKE GRID (SAME)
- KNEE BRACE TO PILING:** FLAT SPIKE GRID (SEE DETAIL)
- KNEE BRACE TO SUB-CAP:** STRAP TIES (2 SIMPSON ST2122)
- SUB-CAP TO PILING:** FRAMING ANCHORS (4 SIMPSON A3)
- LOWER CAP TO PILING:** PILE BENT SHEATHING
- UPPER CAP TO RESIDENCE:** 3-16d COMMON
- UPPER CAP TO LOWER CAP:** 2-5/16" SPIKES (PREDRILL)
- SHEATHING:**



ELEV. 20

ELEV. 10

BY	DATE	DESCRIPTION OF CHANGE

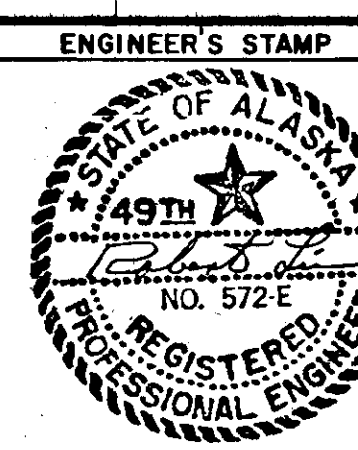
RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL-STAGE II DALTON RESIDENCE RELOCATION PROJECT NO. RS-0918(4) 69305

APPROVED BY:	DESIGN GROUP CHIEF	DATE
RECOMMENDED BY:	DESIGN ENGINEER, GROUP	DATE
PREPARED BY:	PROJECT MANAGER	LEAD DESIGNER

LIUM ENGINEERING JUEAU, ALASKA	
DESIGNED BY: RL.	SCALE: AS SHOWN
DRAWN BY: B.A.	DATE:
CHECKED BY: P.B.	SHEET 62 OF 65

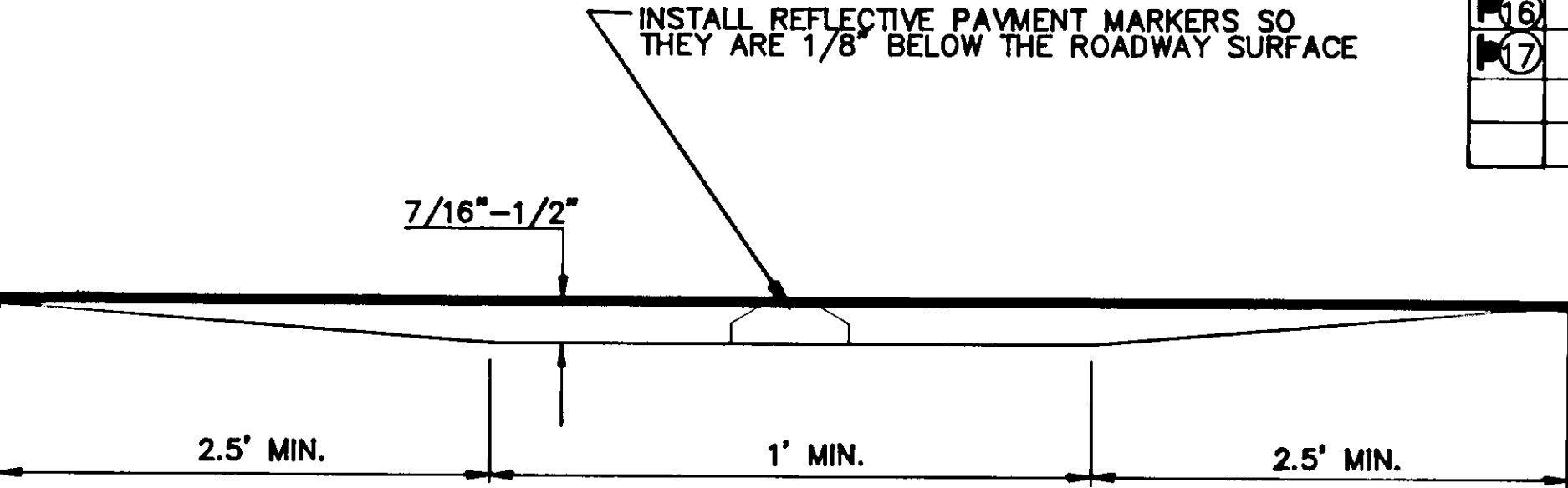
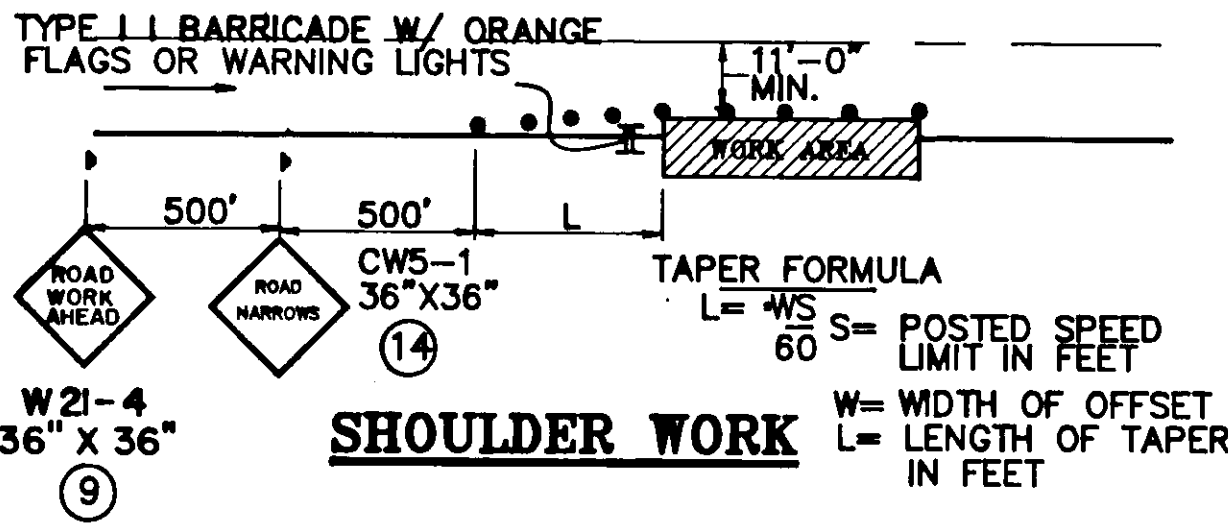


PERMANENT CONSTRUCTION SIGNS					
NO.	CODE	LEGEND	SIZE	NO. OF POSTS	QTY.
①	CW20-1B	ROAD CONSTRUCTION 1000 FT.	48"X48"	2	2
②	CW20-1A	ROAD CONSTRUCTION 500 FT.	48"X48"	2	3
④	G20-2	END CONSTRUCTION	60"X24"	2	3
⑤	CW20-1F	ROAD CONSTRUCTION AHEAD	48"X48"	2	1

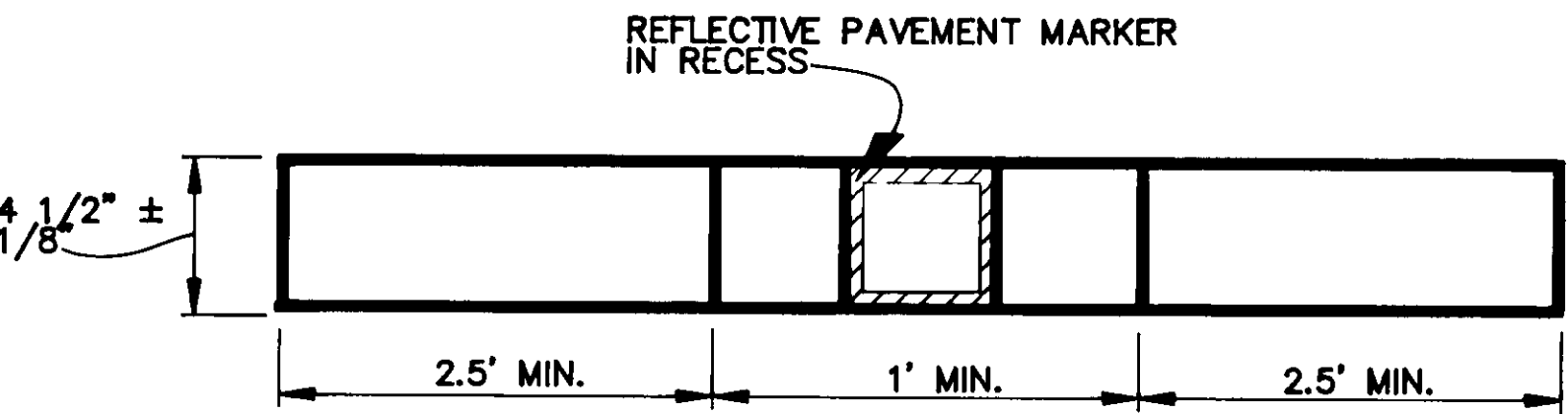
TRAFFIC CONTROL DEVICES SYMBOLS AND EST. OF QUANTITIES				
NO.	LEGEND	CODE	SIZE	QTY.
III	TYPE III BARRICADES			17
I	TYPE II BARRICADES			
●	TRAFFIC CONE			
①	ROAD CLOSED	R11-2	48"X30"	15
②	DETOUR RIGHT	M4-10R	18"X48"	4
③	DETOUR LEFT	M4-10L	18"X48"	2
④		CW1-3R	36"X36"	1
⑤	15 MPH	CW13-1	24"X24"	2
⑥		CW1-3L	36"X36"	1
⑨	ROAD CONSTRUCTION AHEAD	CW20-1F	48"X48"	8
⑩	ROAD CLOSED AHEAD	CW20-3F	48"X48"	6
⑪	DETOUR AHEAD	CW20-2F	48"X48"	6
⑫	ONE LANE ROAD	CW20-4F	48"X48"	8
⑬	FLAGMAN AHEAD (SYMBOL)	CW20-7a	36"X36"	8
⑭	ROAD NARROWS	CW5-1	36"X36"	6
⑮	BLASTING ZONE 1000 FT.	CW22-1	48"X48"	2
⑯	TURN OFF 2-WAY RADIO	CW22-2	42"X36"	2
⑰	END BLASTING ZONE	CW22-3	42"X36"	2

GENERAL NOTES

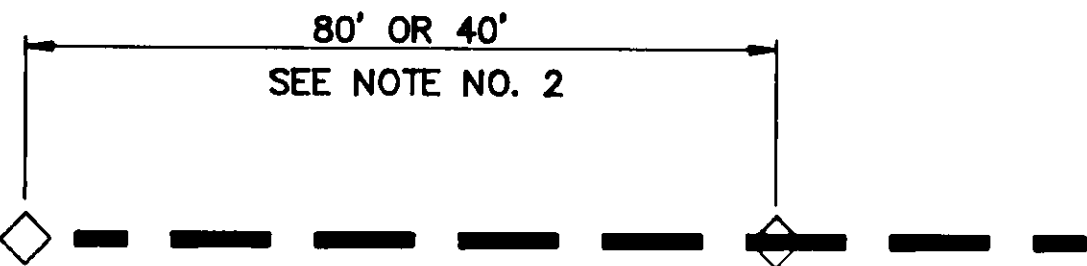
1. MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT X 1 FOOT, HOWEVER CLOSER SPACING IS ENCOURAGED WHERE NEEDED.
2. MINIMUM HEIGHT OF CONES WILL BE 28".
3. ALL SIGN LOCATIONS ARE APPROXIMATE. LOCATIONS MAY VARY AT THE DIRECTION OF THE PROJECT ENGINEER.
4. WHEN THERE ARE NO EXPLOSIVES WITHIN THE BLASTING ZONE, SIGNS PERTAINING TO BLASTING ZONES SHALL BE REMOVED OR COVERED.



SECTION X-X



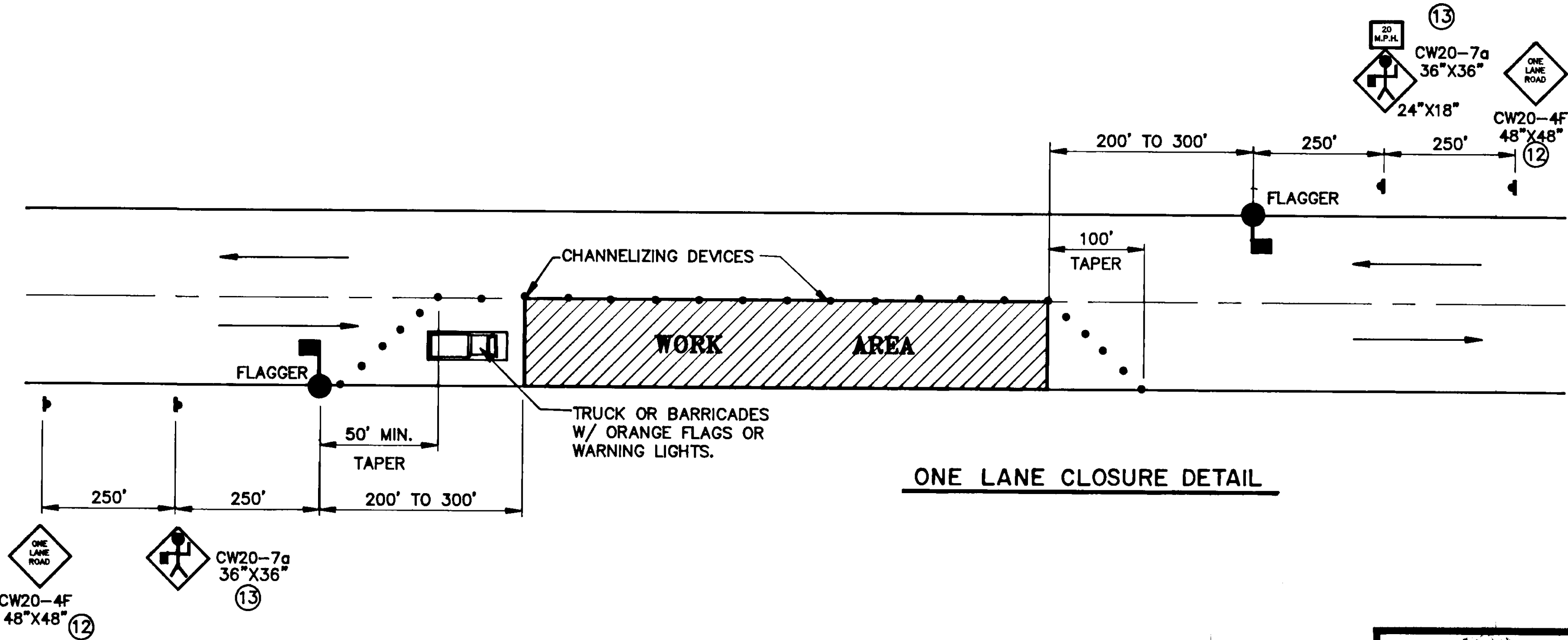
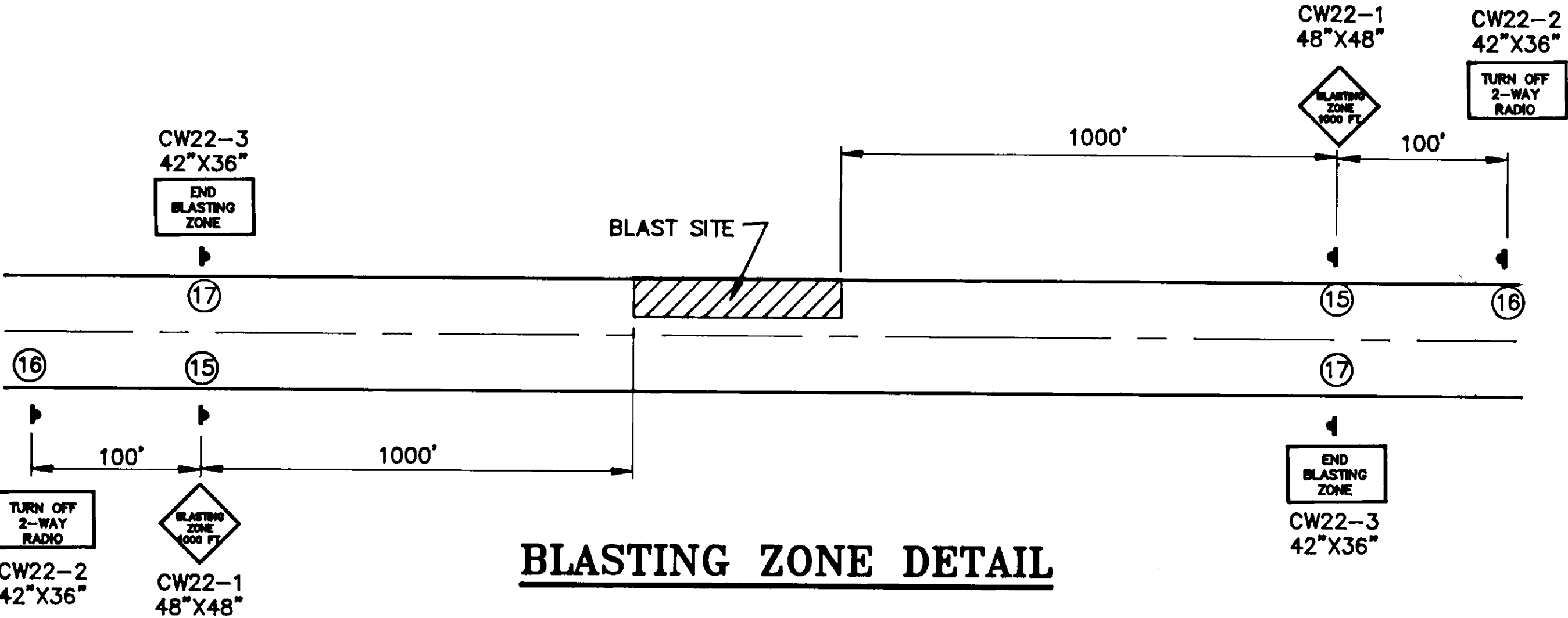
PLAN TWO-WAY TRAFFIC



INSTALLATION REFLECTIVE PAVEMENT MARKER DETAILS

RECESSED PAVEMENT MARKER NOTES

1. INSTALL REFLECTIVE PAVEMENT MARKERS BETWEEN STATION 65+00 TO 127+00.
2. R.P.M.'S SHALL BE PLACED BETWEEN THE DASHED CENTERLINE STRIPE (AT 80' O.C.) OR BETWEEN DOUBLE NO PASSING STRIPES ON CURVES (AT 40' O.C.)
3. INSTALLATION OF R.P.M.'S SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. RECESSED PAVEMENT MARKERS SHALL BE YELLOW.



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

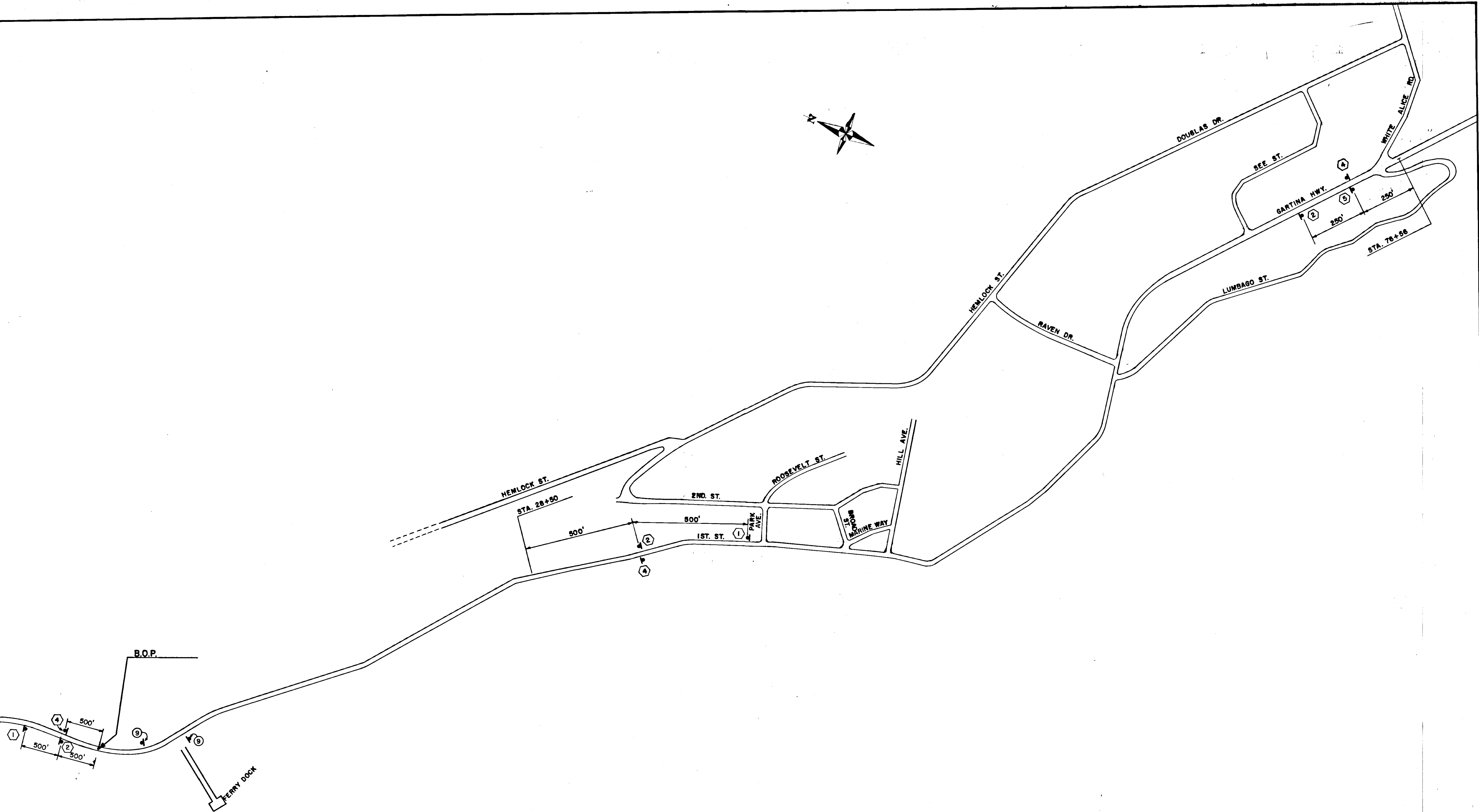
DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
TRAFFIC CONTROL PLAN
PROJECT NO. RS-0918(4) 69305

DESIGNED BY:	PROJECT NO. RS-0918(4)
DRAWN BY: AUTOCADD/CSA	DATE:
CHECKED BY:	SHEET 63 OF 65



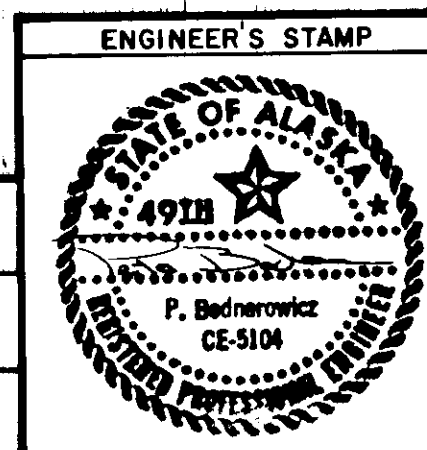


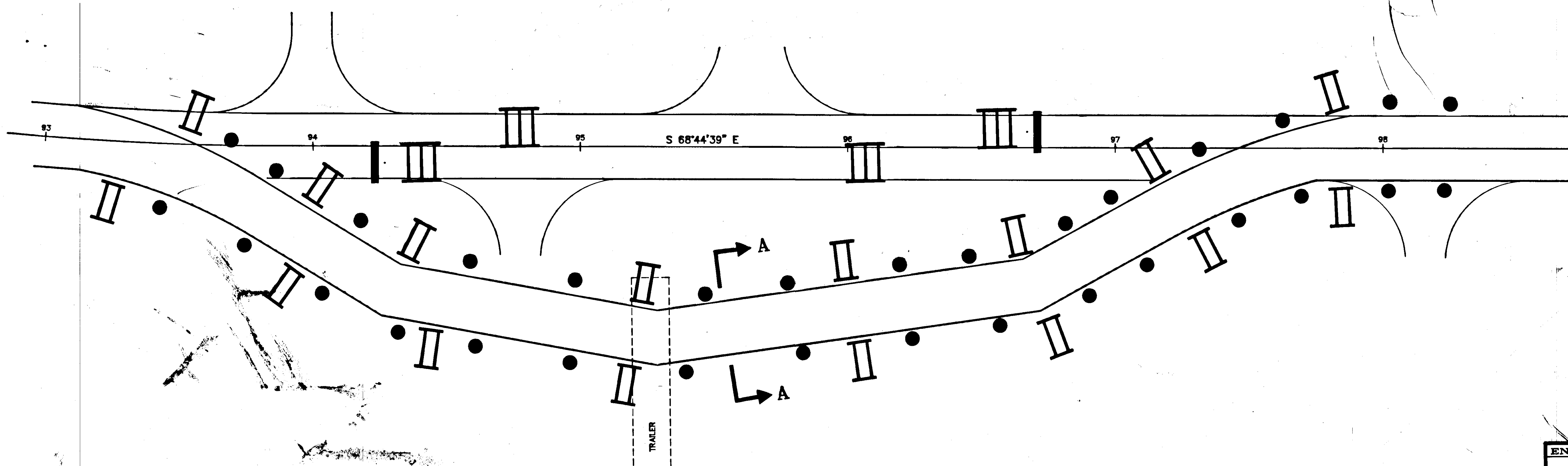
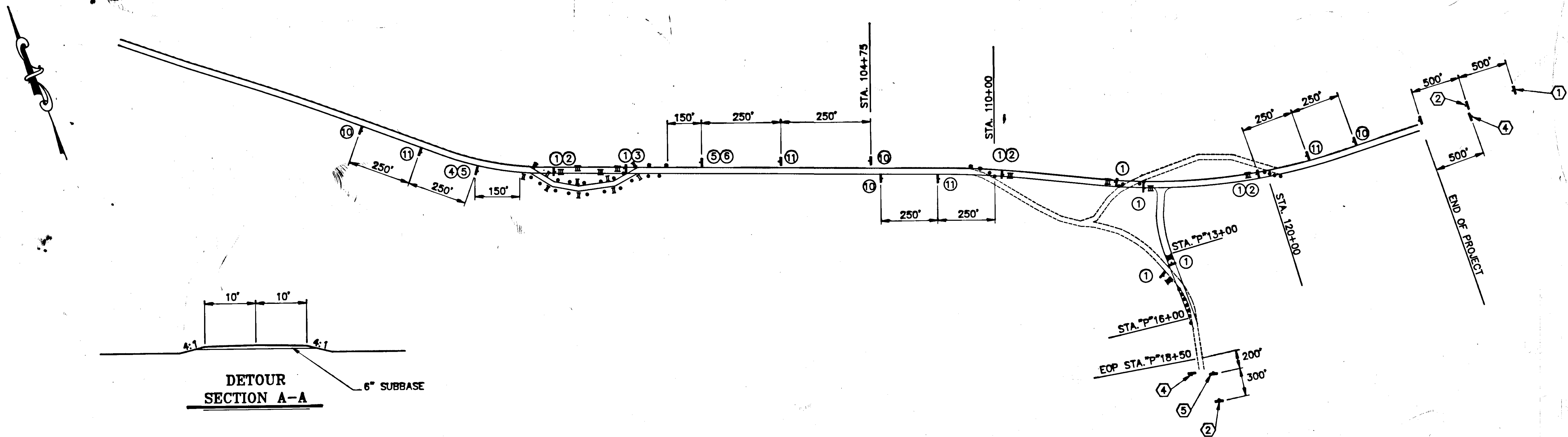
BY	DATE	DESCRIPTION OF CHANGE
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
TRAFFIC PLAN
PROJECT NO. RS-0918(4) 69305

APPROVED BY: _____ DESIGN GROUP CHIEF	DESIGNED BY: R.P.	SCALE: 1" = 200'
RECOMMENDED BY: _____ DESIGN ENGINEER, GROUP	DRAWN BY: B.A.	DATE:
PREPARED BY: _____ PROJECT MANAGER	CHECKED BY: J.A.	SHEET 64 OF 65
_____ LEAD DESIGNER		





NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

HOONAH ARTERIAL - STAGE II
PROJECT No. RS-0918 (4) 69305

DESIGNED BY:	PROJECT No.
DRAWN BY: AutoCAD / BWB	DATE:
CHECKED BY:	SHEET 65 OF 65

