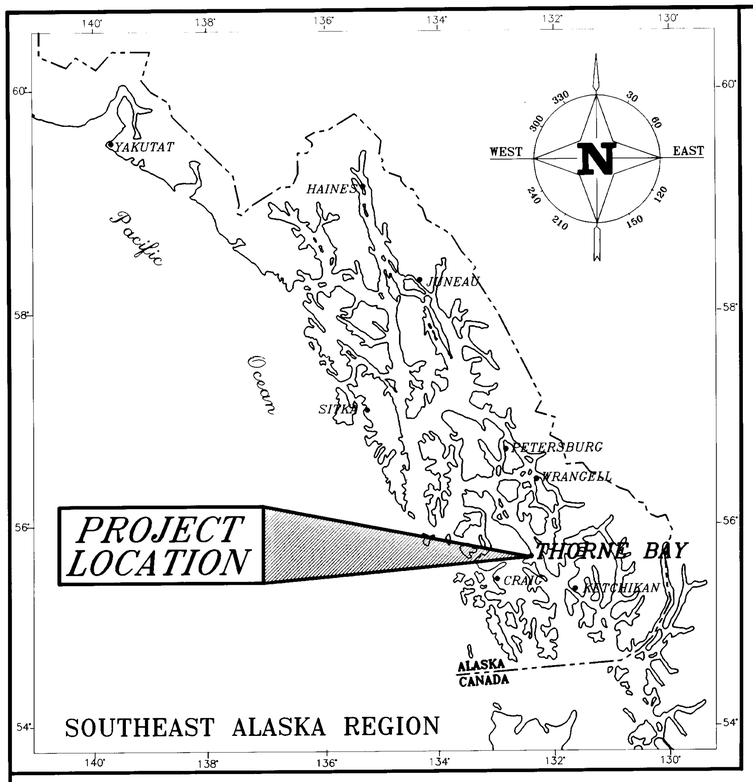


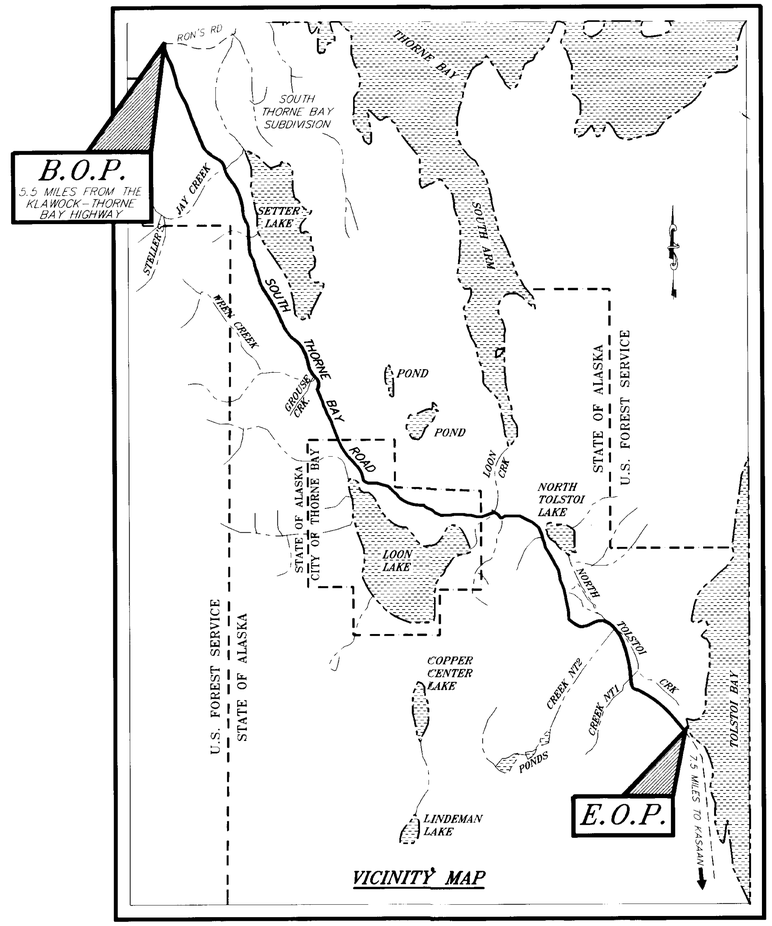
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*

SOUTH THORNE BAY ROAD TO KASAAN ROAD

PROJECT NO. STP-0003(46)-71947

GRADING AND DRAINAGE



INDEX OF SHEETS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

E-00.00, S-00.00, S-05.00, S-30.01

(THESE STANDARD DRAWINGS ARE ATTACHED TO THE BACK OF THE CONTRACT DOCUMENT AND SPECIFICATION ASSEMBLY).

NOTE

THIS PROJECT WAS DESIGNED BY AND CONSTRUCTED FOR THE CITY OF THORNE BAY.

DESIGN DESIGNATION

ADT 1997	45
ADT 2017	50
DHV 20% (2017)	10
% T	16.5%
V	20 MPH
EAL'S	21,000

PROJECT SUMMARY

LENGTH OF GRADING ..... 28,428 FEET OR 5.4 MILES

THE FOLLOWING EXCEPTIONS TO DESIGN STANDARDS WERE APPROVED ON SEPTEMBER 19, 1995:

CONSTRUCTION OF A ONE LANE ROADWAY 20 MPH DESIGN SPEED, AND CONSTRUCTION OF THE LOG STRINGER BRIDGE WITHOUT APPROVED BRIDGE RAIL.

"AS-BUILT" PLANS
CONTRACTOR: McCallen Construction
PROJECT ENGINEER: Mark Figley
Begin Construction: 3-11-96
End Construction: 3-21-97
Contract Amount: $1,889,071.51

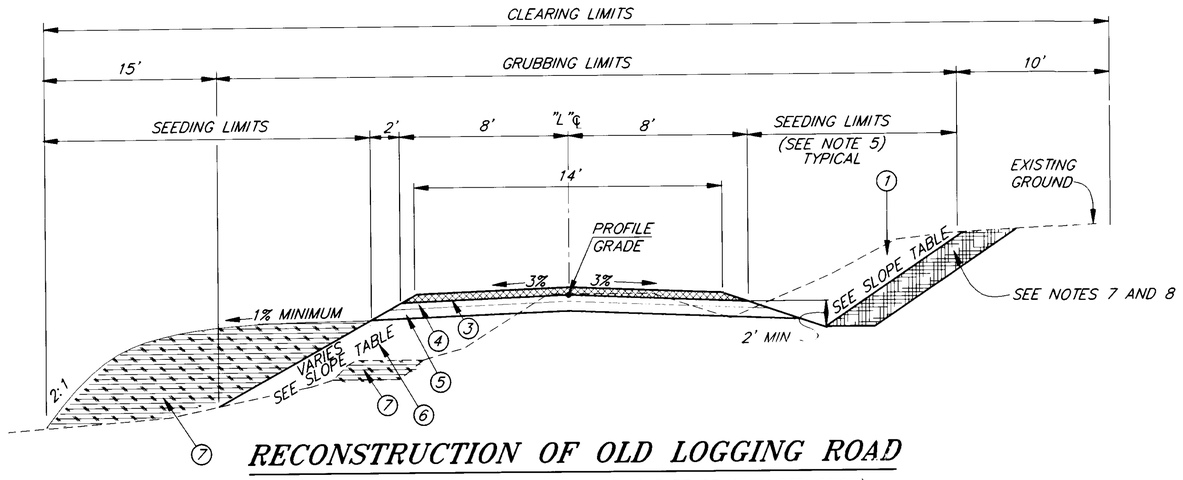
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED _____ Date 11/7/95
Regional Preconstruction Engineer

APPROVED _____ Date _____
Director, S.E. Region Design & Construction

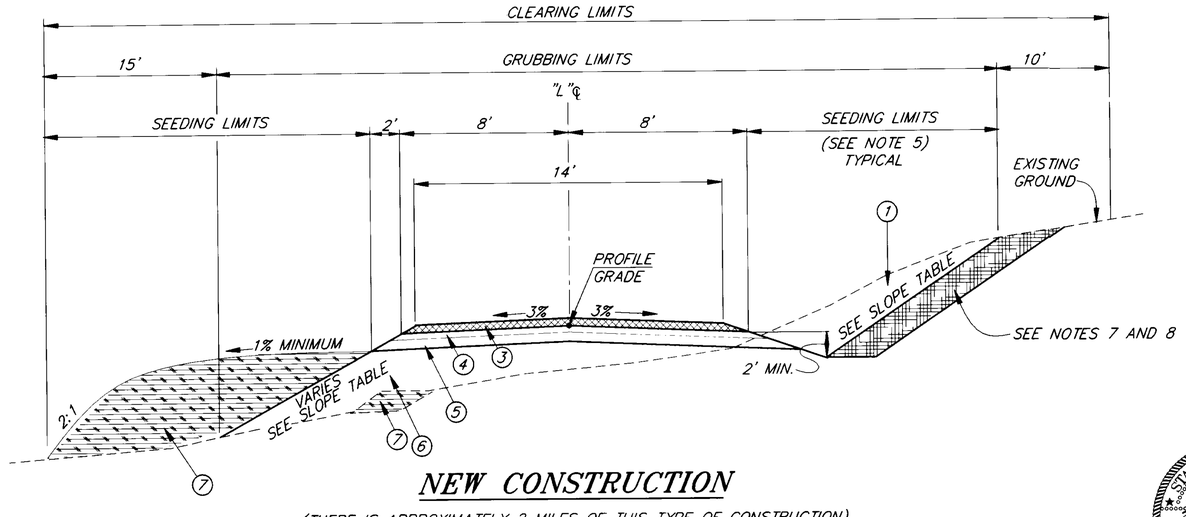
PROJECT NUMBER:	ENGINEER'S SEAL	ENGINEER'S SEAL
71947	STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER	STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER
DATE: 1995		
SHEET 1 OF 22		

P:\PDW\71947\DR\-TSHEET 1=1



RECONSTRUCTION OF OLD LOGGING ROAD

(THERE IS APPROXIMATELY 3.5 MILES OF THIS TYPE OF RECONSTRUCTION)



NEW CONSTRUCTION

(THERE IS APPROXIMATELY 2 MILES OF THIS TYPE OF CONSTRUCTION)

GENERAL NOTES

1. THERE HAS NOT BEEN AN ENGINEERING GEOLOGY OR SOILS REPORT COMPLETED ON THIS PROJECT. HOWEVER, SOME PRELIMINARY SOIL PROBES WERE COMPLETED ALONG THE "P" LINE. THAT INFORMATION IS CONTAINED IN APPENDIX D, ATTACHED TO THE CONTRACT DOCUMENTS. BASED ON THAT INFORMATION AND A FIELD INSPECTION, IT HAS BEEN DETERMINED THAT ALL EXCAVATION EXCEPT ROCK IS CONSIDERED WASTE.

2. THE ALIGNMENT AND GRADE ARE SUBJECT TO MINOR REVISIONS AS APPROVED BY THE ENGINEER. INFORMATION ON THE PERCENT OF GRADE, THE MAXIMUM ALGEBRAIC DIFFERENCE IN GRADES, AND THE MINIMUM LENGTH OF VERTICAL CURVES CAN BE OBTAINED FROM SECTION 642 OF THE SPECIFICATIONS.

3. EACH CURVE SHALL BE SUPERELEVATED WITH 4% SUPER ROTATED ABOUT THE CENTERLINE ("L") FOR THE ENTIRE LENGTH OF THE CURVE. A 100 FOOT SUPERELEVATION TRANSITION SHALL BE USED AT EACH END OF ALL CURVES.

4. THE REMOVAL OF STRUCTURES AND OBSTRUCTIONS ON THIS PROJESCT CONSISTS OF THE FOLLOWING: 1.) REMOVAL OF ANY METAL WITHIN THE CLEARING LIMITS, 2.) THE REMOVAL OF BEAVER DAMS NEAR THE INLETS OF CULVERTS AS DIRECTED, 3.) THE REMOVAL OF EXISTING TIMBER STRUCTURES.

   THE METAL CONSISTS OF DRUMS, CABLE, ETC. FROM A PREVIOUS LOGGING OPERATION. ALL METAL SHALL BE DISPOSED OF AT THE CITY OF THORNE BAY'S LANDFILL AND THE BEAVER DAMS SHALL BE DISPOSED OF IN THE WASTE BERM.

5. ALL SLOPES EXCEPT ROCK SLOPES SHALL BE SEEDED, SEE NOTES ON SHEET 9.

6. THE RIGHT OF WAY FOR THIS PROJECT IS SUBJECT TO THE PROVISIONS OF THE DIVISION OF LAND'S EARLY ENTRY PERMIT NO. 105577. A COPY OF THAT PERMIT IS LOCATED IN APPENDIX "A". THE EARLY ENTRY PERMIT IS FOR A RIGHT OF WAY CORRIDOR THAT IS 200 FEET WIDE, 100 FEET ON EACH SIDE OF THE "L" LINE.

7. A 6 FOOT FLAT BOTTOM DITCH SHALL BE PROVIDED ON THE INSIDE OF ALL CURVES WHERE THE RADIUS IS LESS THAN 350 FEET, ON ALL CUT SLOPES GREATER THAN 10 FEET IN HEIGHT AND IN MUSKEG SIDESLOPE CONSTRUCTION AREAS.

8. ALL PIONEERING OPERATIONS REQUIRED TO ACCESS THE TOP OF CUT SLOPES OR TOE OF FILL SLOPES SHALL NOT UNDERCUT FINAL CUT SLOPES, DEPOSIT USEABLE EXCAVATION OUTSIDE THE TOE OF THE ROADWAY FILL, OR RESTRICT DRAINAGE.

9. PRIOR TO FALLING ANY TIMBER ON STATE LANDS, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY IN KETCHIKAN, AND THE PROJECT ENGINEER.

   THE DEPARTMENT OF NATURAL RESOURCES ADDRESS IN KETCHIKAN IS AS FOLLOWS:

   DEPARTMENT OF NATURAL RESCOURCES
   DIVISION OF FORESTRY
   2030 SEALEVEL DRIVE, SUITE 217
   KETCHIKAN, ALASKA 99901
   PHONE NO. (907) 225-3070

10. PLACEMENT OF THE TURNOUTS AND TWO LANE SECTION SHOWN ON THE PLAN AND PROFILE SHEETS ARE APPROXIMATE AND WILL BE ADJUSTED BY THE ENGINEER TO PROVIDE A SAFE TWO-DIRECTIONAL, ONE LANE ROADWAY WITH INTERVISIBLE TURNOUTS. CONSTRUCTION OF ADDITIONAL TWO-LANE SEGMENTS MAY BE REQUIRED WHEN THE FINAL HORIZONTAL AND VERTICAL ALIGNMENTS ARE ESTABLISHED BY THE ENGINEER.

LABELING INDEX

1	EXCAVATION (SEE SECTION 207 OF THE SPECIFICATIONS AND NOTE 1 ABOVE)
3	4" OF SUBBASE, GRADING "B" (FUTURE WORK, NOT IN THIS CONTRACT)
4	8" OF SELECTED MATERIAL, TYPE "D"
5	MINIMUM DEPTH OF EMBANKMENT VARIES. SEE TABLE BELOW. ALSO SEE SECTION 207 OF THE SPECIFICATIONS.
6	EMBANKMENT. SEE SECTION 207 OF THE SPECIFICATIONS.
7	WASTE BERM-SEE SECTION 207 OF THE SPECIAL PROVISIONS FOR DETAILS.

MINIMUM EMBANKMENT DEPTHS

FOUNDATION MATERIAL	DEPTH (INCHES)
ROCK	8
GRANULAR SOIL	12
SILT	24
MUSKEG	48

DEPTH MAY BE ADJUSTED BY THE ENGINEER

SLOPE TABLE

MATERIAL	CUT	FILL
GRANULAR SOILS	1.5:1	1.5:1
MUSKEG	0.5:1	1.25:1
ROCK	0.25:1	1.5:1
SILT	1.5:1	N/A

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\DR\-TYP1 1=1

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

TYPICAL SECTIONS

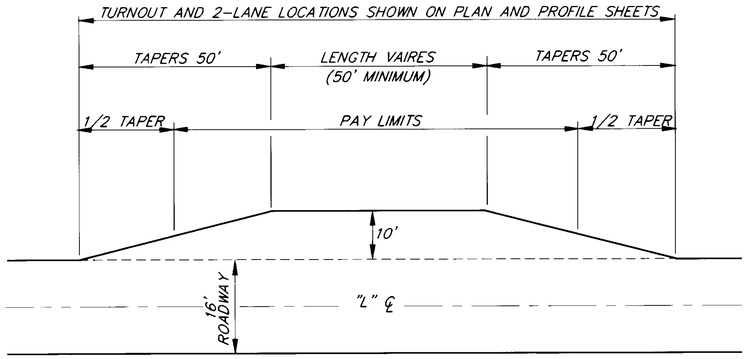
DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 2 OF 22

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM		UNIT	QUANTITY
120(1)	DBE ADJUSTMENT		CONTINGENT SUM	ALL REQ'D.
201(6)	SELECTIVE TREE REMOVAL		EACH	6 ~~50~~
203(13)	DITCH BLOCK		EACH	19 ~~100~~
203(14)	SELECTED MATERIAL, TYPE "D", 8" DEPTH		SQUARE YARD	80244.15 ~~65,000~~
203(15)	Extra Select Material Handling	C.O.3	Lump Sum	All Req'd.
207(1)	COMPOSITE ROAD CONSTRUCTION		LANE STATION	518.49 ~~410~~
109(1)	COE Shutdown Impact Costs	C.O.3	Lump Sum	All Req'd.
~~510(1)~~ 510(1a)	LOON CREEK CROSSING	C.O.2	LUMP SUM	ALL REQ'D.
603(17-24)	24 INCH PIPE		LINEAR FOOT	2,751 ~~2,520~~
603(17-36)	36 INCH PIPE		LINEAR FOOT	634 ~~560~~
603(17-48)	48 INCH PIPE		LINEAR FOOT	190 ~~200~~
603(17-60)	60 INCH PIPE		LINEAR FOOT	60
603(19-66X51)	PIPE ARCH		LINEAR FOOT	60 ~~40~~
603(19-81X59)	PIPE ARCH		LINEAR FOOT	120 ~~100~~
603(19-95X67)	PIPE ARCH		LINEAR FOOT	60
603(19-117X79)	PIPE ARCH		LINEAR FOOT	120
109(2)	Wetlands Reclaimation & Creation	C.O.4	Lump Sum	All Req'd.
615(1)	STANDARD SIGNS		SQUARE FOOT	66.25
618(1)	SEEDING		ACRE	~~0~~ 3
618(3)	WATER FOR SEEDING		M. GAL	~~0~~ 50
640(1)	MOBILIZATION AND DEMOBILIZATION		LUMP SUM	ALL REQ'D.
641(1)	TEMPORARY EROSION AND POLLUTION CONTROL ADMIN.		LUMP SUM	ALL REQ'D.
641(2)	TEMPORARY EROSION AND POLLUTION CONTROL		CONTINGENT SUM	ALL REQ'D.
641(4)	ROCK CHECK DAMS		EACH	1 ~~100~~
641(5)	HAND SEEDING		MSF	1,286.5 ~~100~~
641(6)	SOIL STABILIZATION MATTING		MSF	26.1 ~~40~~
641(7)	SILT FENCING		LINEAR FOOT	2,000
641(8)	STRAW BALES		EACH	50
642(2)	TWO PERSON SURVEY PARTY		HOUR	46 ~~50~~
642(3)	AS-BUILT		LUMP SUM	ALL REQ'D.
643(1)	ROAD CLOSURE GATE		LUMP SUM	ALL REQ'D.
644(1)	FIELD OFFICE		LUMP SUM	ALL REQ'D.
644(2)	FIELD LABORATORY		LUMP SUM	ALL REQ'D.
~~644(6)~~ 644(6a)	ENGINEERING TRANSPORTATION	C.O.1	LUMP SUM	ALL REQ'D.
644(1)	Additional Contractor Furnished Services	C.O.3	Lump Sum	All Req'd.

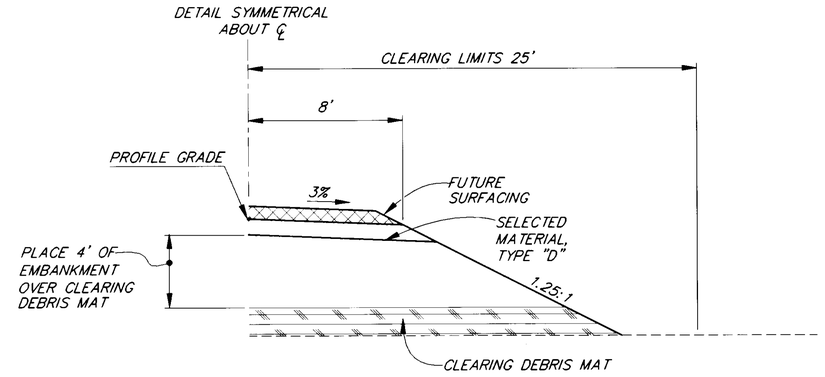
BASIS OF ESTIMATE

ITEM NO.	ESTIMATING FACTOR
207(1)	COMPOSITE ROAD CONSTRUCTION - INCLUDES APPROXIMATELY 40 ACRES OF CLEARING, 25 ACRES OF GRUBBING AND 170,000 CUBIC YARDS OF EXCAVATION, 100,000 CUBIC YARDS OF EMBANKMENT, 700 CUBIC YARDS OF CLASS II RIPRAP, AND THE REQUIRED CONSTRUCTION SURVEYS.
510(1)	LOON CREEK CROSSING ~~NATIVE LOG STRINGER BRIDGE,~~ 40' steel girder bridge EMBANKMENT MATERIAL AND GEOTEXTILE AS NOTED ON SHEET 6.
643(1)	2 GATES REQUIRED
644(1 & 2)	1 EACH REQUIRED
644(6)	3 TRUCKS AND 1 BOAT REQUIRED



TURNOUT OR 2 LANE WIDENING DETAILS

(SYMMETRICAL ABOUT CENTERLINE)



MUSKEG CONSTRUCTION DETAIL

APPROXIMATE AREAS ARE AS FOLLOWS, OTHER AREAS WILL BE AS DIRECTED.

"L" STATION		"L" STATION
140+00	TO	144+00
156+00	TO	158+00
161+00	TO	167+00
201+00	TO	203+00
208+00	TO	213+00

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\POW\71947\DR\-EST 1=1		
BY:	DATE:	DESCRIPTION OF CHANGE:

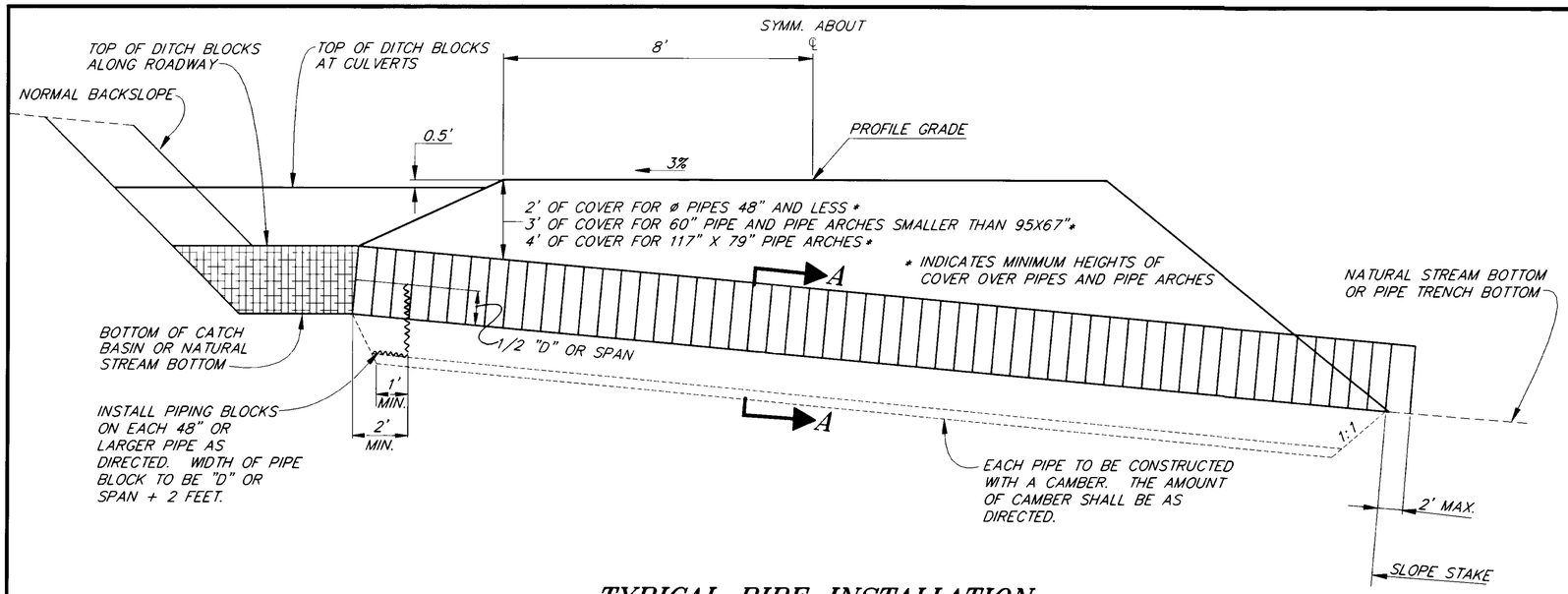
RECORD OF REVISIONS

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

PRINCE OF WALES ISLAND — THORNE BAY, ALASKA
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947
ESTIMATE OF QUANTITIES

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 3 OF 22

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

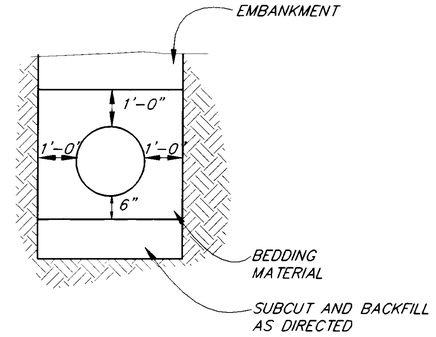


TYPICAL PIPE INSTALLATION

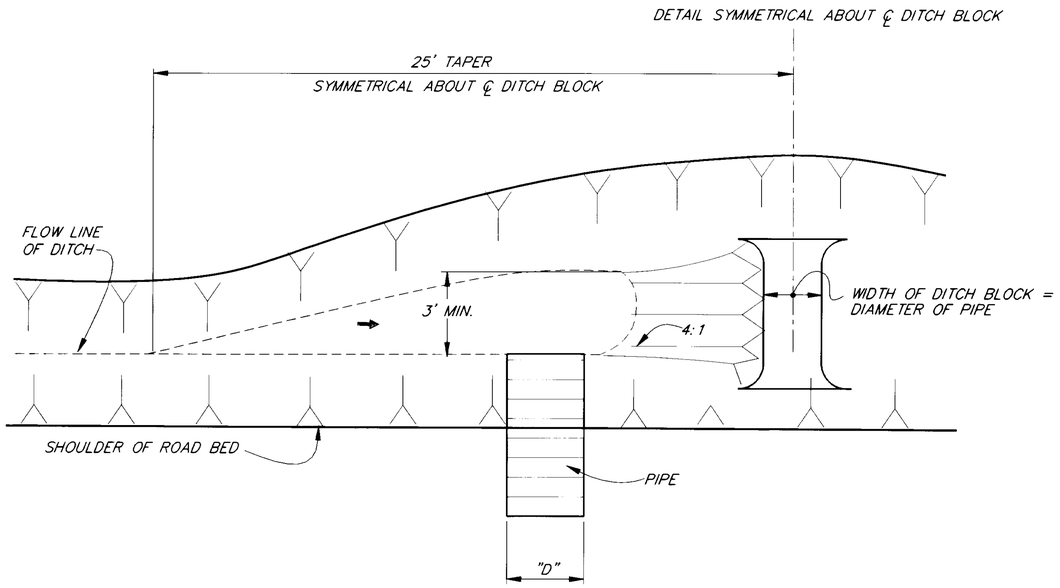
SEE SHEET FOR ADDITIONAL INSTALLATION DETAILS ON PIPE ARCHES

PIPE NOTES

1. PIPE LOCATIONS AS SHOWN ON THE PLAN AND PROFILE SHEETS ARE APPROXIMATE.
2. PIPE ALIGNMENTS AND GRADIENTS SHALL MATCH THE NATURAL STREAM BEDS, UNLESS OTHERWISE DIRECTED, OR HAVE A MINIMUM PIPE GRADE OF 2%.
3. ALL PIPE AND PIPE ARCHES SHALL BE FURNISHED IN 12 GAUGE (0.105"±). ALL PIPE ARCHES SHALL BE FURNISHED IN 3" X 1" CORRUGATIONS.
4. ALL PIPES SHALL BE INSTALLED AS NOTED IN THE EROSION AND SEDIMENT CONTROL PLAN.



SECTION A–A



TYPICAL DITCH BLOCK DETAIL AT CULVERTS ON GRADES OF 6 PERCENT OR MORE

HYDROLOGIC AND HYDRAULIC DATA FOR PIPES OVER 48 INCHES

STREAM NAME	APPROX. "P" LINE STATION	APPROX. AREA ACRE	DESIGN AREA Q50	DESIGN HIGH WATER D	EXCEEDANCE PROBABILITY	Ⓑ NATURAL STREAM GRADE AT CROSSING	PIPE OR BRIDGE DATA SIZE	PIPE OR BRIDGE DATA ESTMTD. LENGTH
STELLER'S JAY CREEK	38+30 Ⓐ	364	300	1.0	0.02	2%	117 X 79	~~50~~ 60'
WREN CREEK NORTH CHANNEL	~~98+80~~ ~~102+20~~ Ⓐ	290	230	1.0	0.02	~~2%~~ 0%	81 X 59	~~45~~ 60'
WREN CREEK SOUTH CHANNEL	~~99+63~~ ~~103+05~~ Ⓐ	230	180	1.0	0.02	~~2%~~ 1%	95 X 67	~~45~~ 60'
GROUSE CREEK	100+50 ~~103+80~~ Ⓐ	290	230	1.0	0.02	~~1%~~ 0%	81 X 59	~~45~~ 60'
LOON CREEK CROSSING	182+75± Ⓐ	1290	1030	1.0	0.02	3%	BRIDGE	
UNNAMED	181+00 ~~185+25~~			1.0	0.02	~~*~~ 0%	48"	~~65~~ 80'
UNNAMED	194+00 ~~200+20~~			1.0	0.02	~~*~~ 0%	48"	~~45~~ 50'
~~UNNAMED~~	~~212+70~~			~~1.0~~	~~0.02~~	*	~~48"~~	~~40~~
UNNAMED	219+93 ~~223+00~~			1.0	0.02	~~*~~ 0%	60"	60
NORTH TOLSTOI CR. TRIBUTARY #2	~~234+70~~ Ⓐ	~~LL1+00~~317	310	1.0	0.02	4%	117 X 79	~~55~~ 60'
NORTH TOLSTOI CR. TRIBUTARY #1	~~257+30~~ Ⓐ	~~250+00~~327	72	1.0	0.02	3%	66 X 51	~~40~~ 60'
UNNAMED	~~278+55~~ Ⓐ	~~210+20~~120	97	1.0	0.02	~~*~~ 1%	48	~~45~~ 60'

Ⓐ SEE APPENDIX "A" FOR IN-WATER WORK DATES AND OTHER RESTRICTIONS * MATCH SLOPE OF EXISTING STREAM BEDS.

Ⓑ PIPE CAMBER NOT REQUIRED

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\DR\-DRAIN1 1=1		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

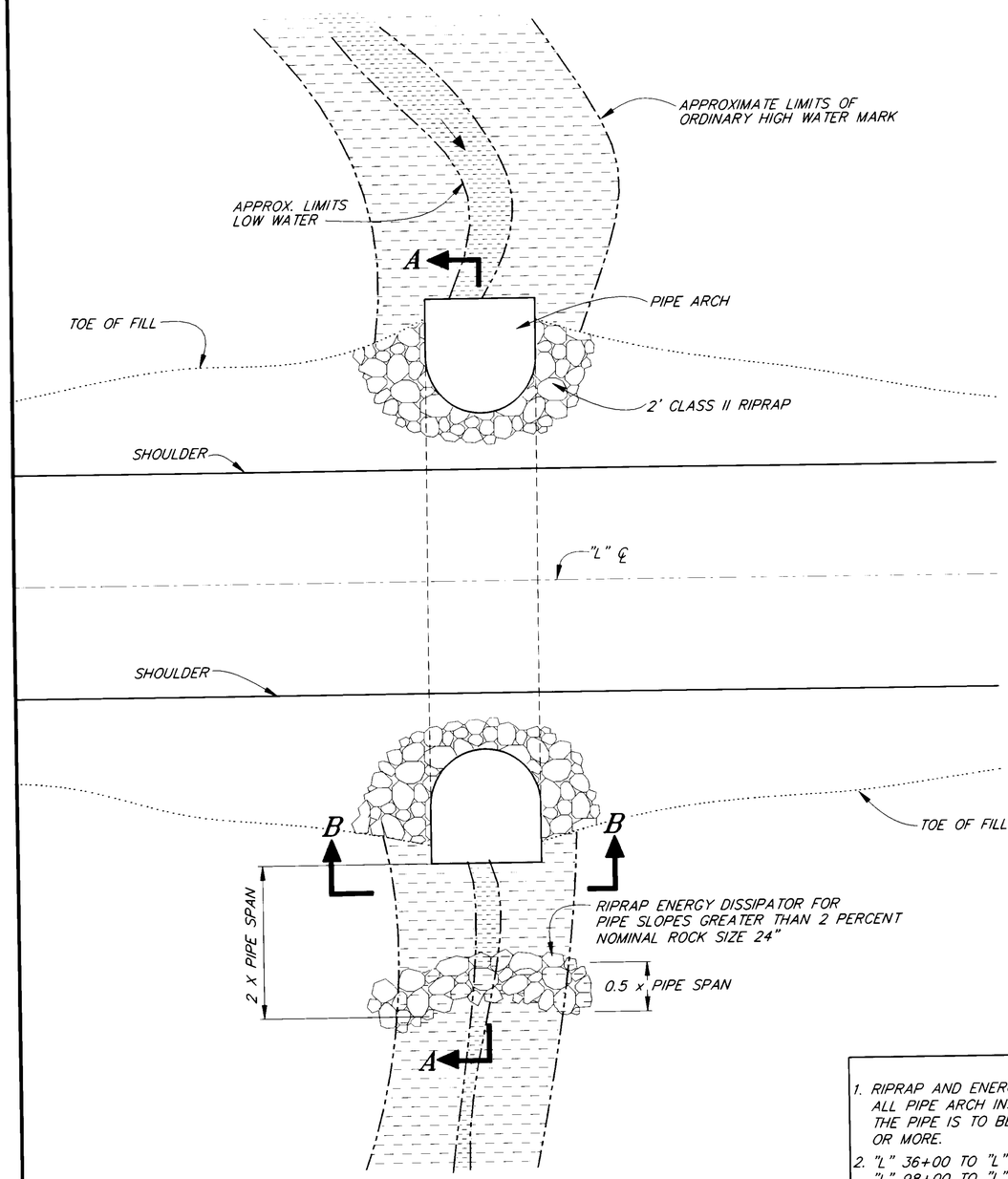
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

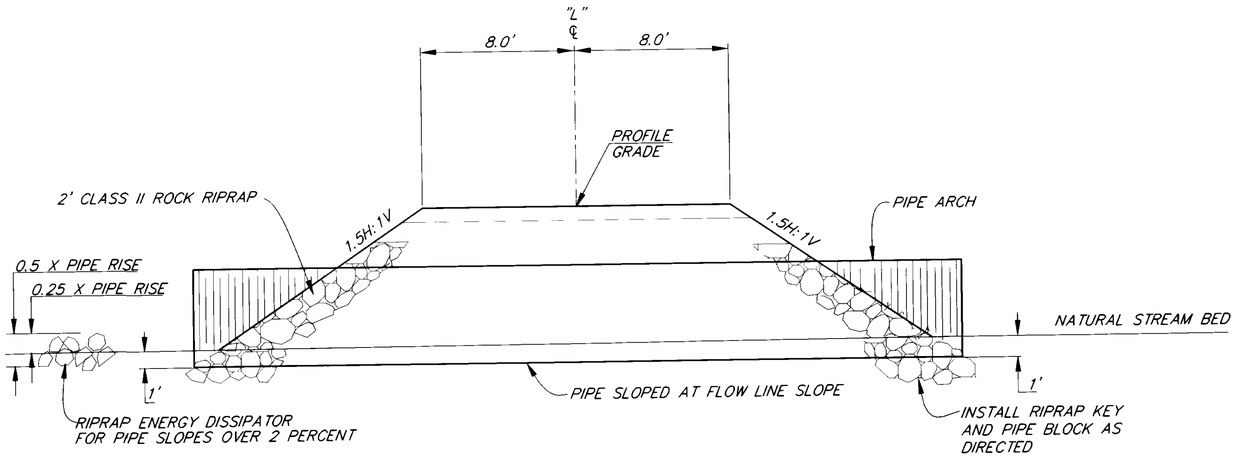
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

DRAINAGE DETAILS

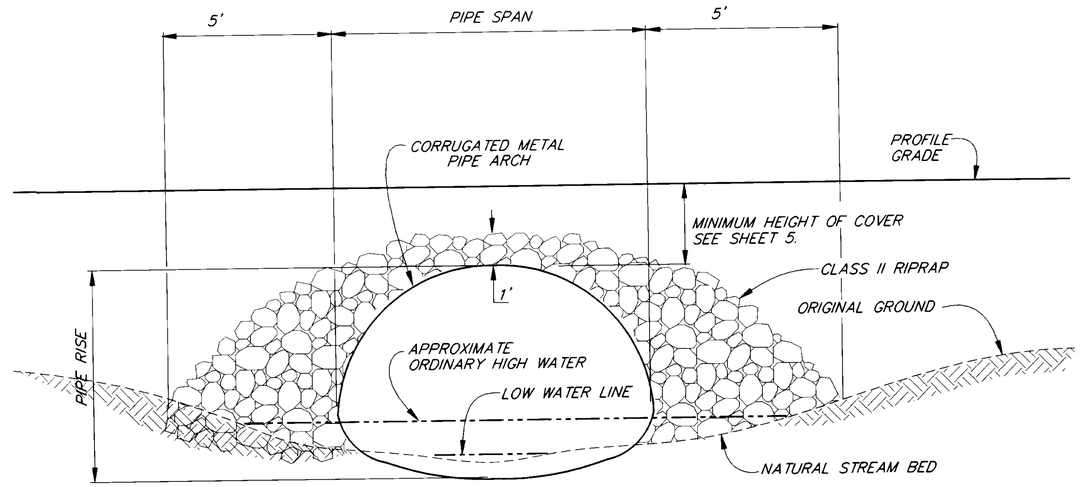
DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 4 OF 22



PLAN
PIPE ARCH



SECTION A–A



SECTION B–B

NOTES:

1. RIPRAP AND ENERGY DISSIPATORS REQUIRED AT ALL PIPE ARCH INSTALLATIONS WHERE THE GRADE THE PIPE IS TO BE INSTALLED ON IS 2 PERCENT OR MORE.
2. "L" 36+00 TO "L" 38+00 AND "L" 98+00 TO "L" 101+00 RT., INSTALL 2 FEET OF CLASS II RIPRAP ON ALL EMBANKMENT SLOPES.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th — STEPHEN W. DENTON — CE-7946 — REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th — TRACY W. MOORE — CE-4932 — REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\194\DR\PIPARCH 1-1		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

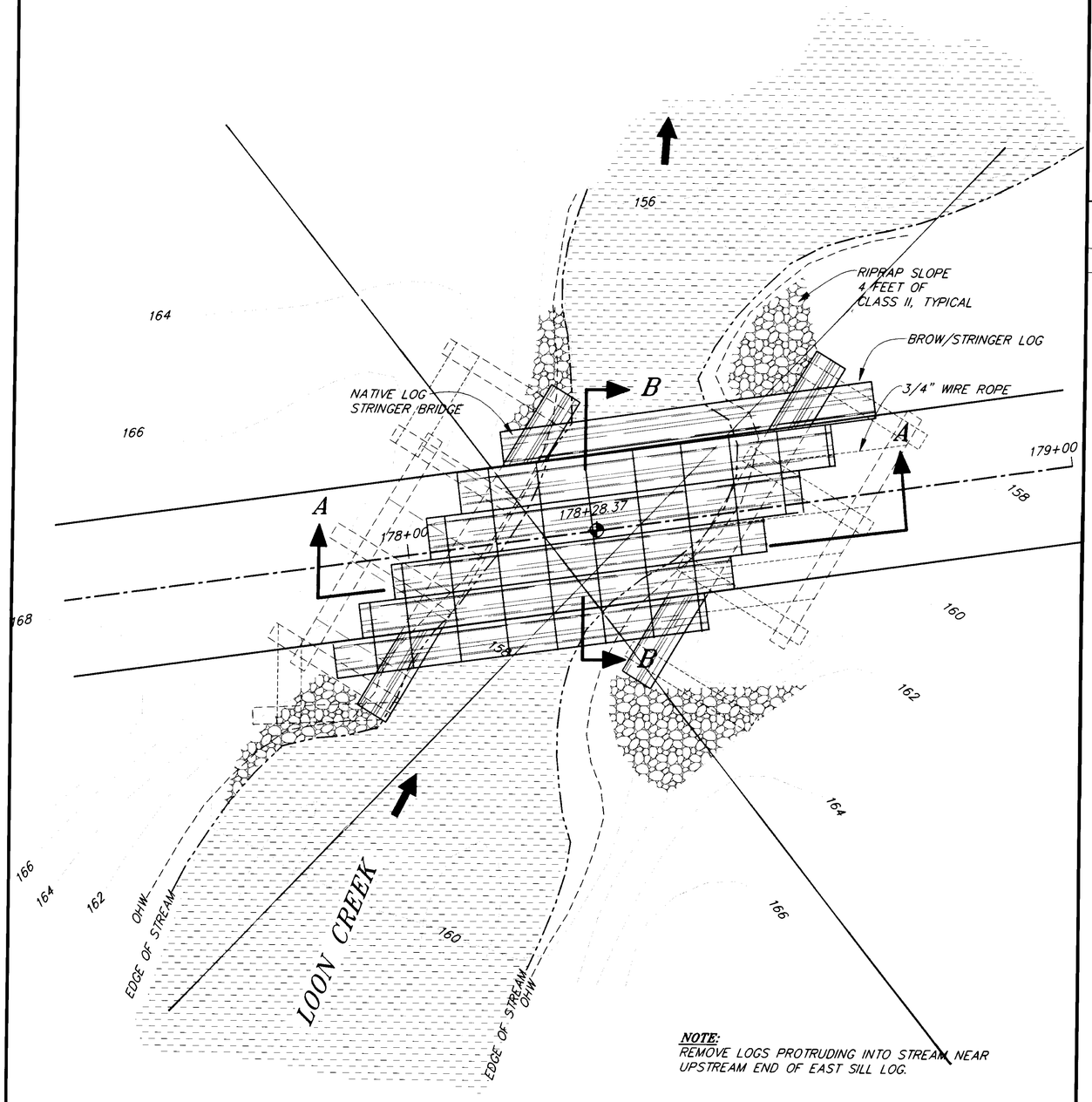
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

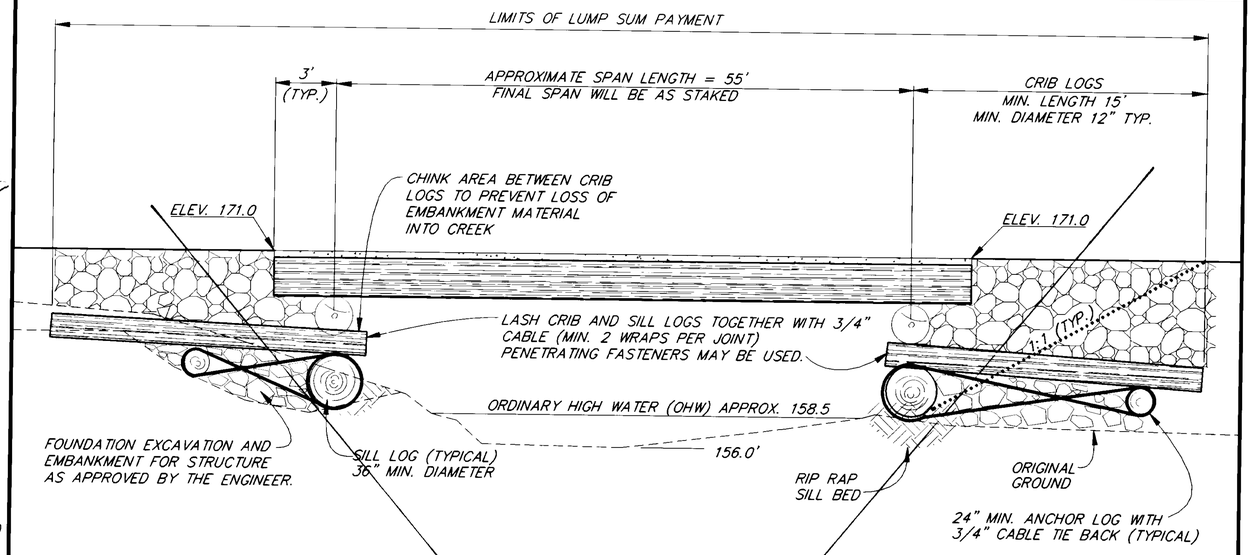
DRAINAGE DETAILS

DESIGNED BY: C. HAKARI	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 5 OF 22

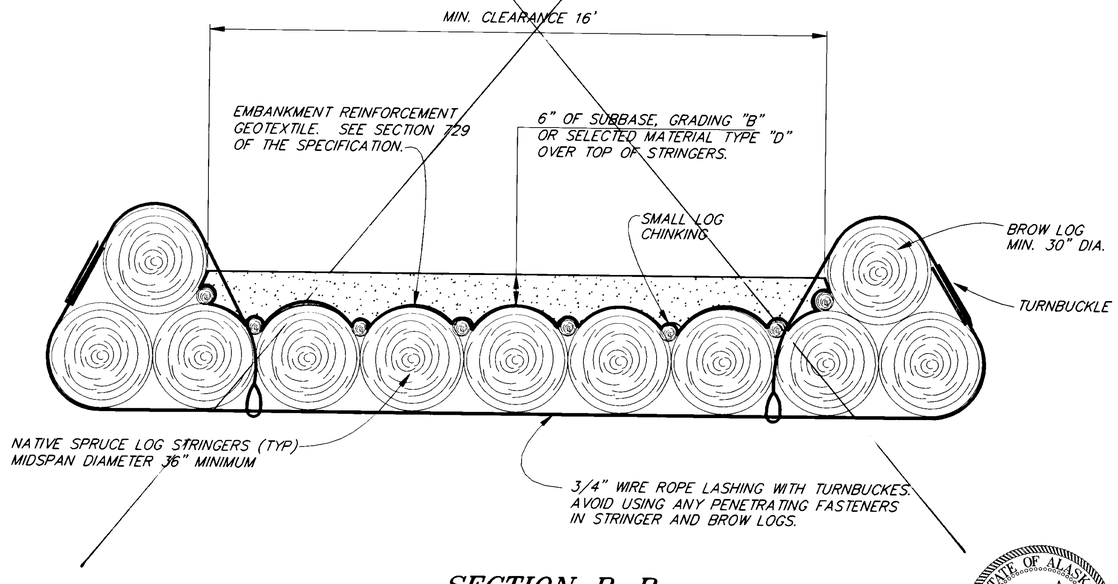


NOTE:
REMOVE LOGS PROTRUDING INTO STREAM NEAR UPSTREAM END OF EAST SILL LOG.

LOON CREEK BRIDGE SITE PLAN



SECTION A–A



SECTION B–B

Not Used

STATE OF ALASKA
49th
STEPHEN W. DENTON
CE-7946
REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\POW\71947\DR\-BRIDGE2 1=20 (1=40 HALF)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
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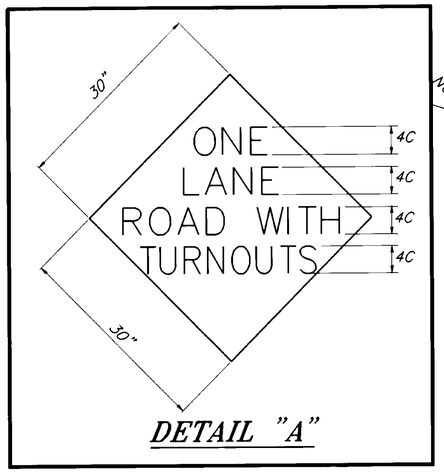
LOON CREEK BRIDGE DETAILS

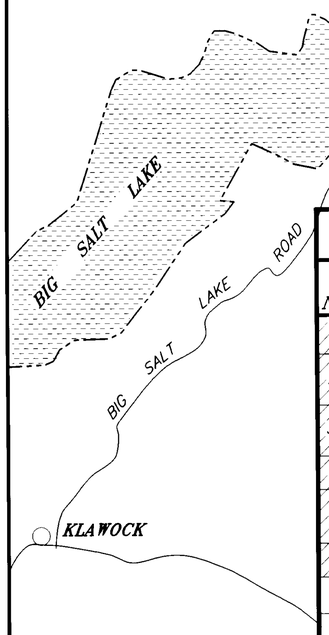
DESIGNED BY: C. HAKARI	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 6 OF 22

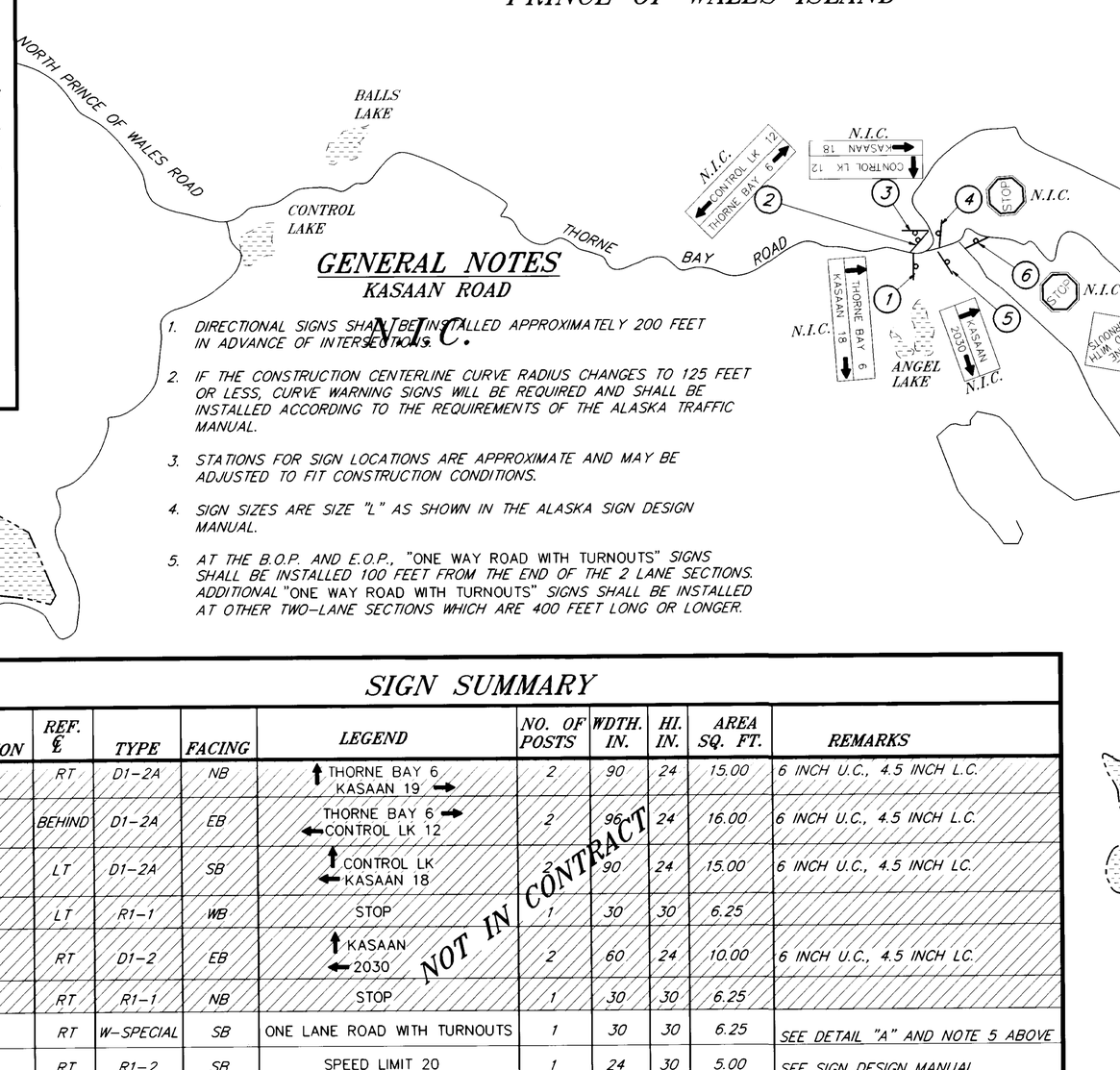
STATE OF ALASKA
49th
TRACY W. MOORE
CE-7932
REGISTERED PROFESSIONAL ENGINEER



DETAIL "A"

PRINCE OF WALES ISLAND





GENERAL NOTES

KASAAN ROAD

1. DIRECTIONAL SIGNS SHALL BE INSTALLED APPROXIMATELY 200 FEET IN ADVANCE OF INTERSECTIONS.
2. IF THE CONSTRUCTION CENTERLINE CURVE RADIUS CHANGES TO 125 FEET OR LESS, CURVE WARNING SIGNS WILL BE REQUIRED AND SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS OF THE ALASKA TRAFFIC MANUAL.
3. STATIONS FOR SIGN LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT CONSTRUCTION CONDITIONS.
4. SIGN SIZES ARE SIZE "L" AS SHOWN IN THE ALASKA SIGN DESIGN MANUAL.
5. AT THE B.O.P. AND E.O.P., "ONE WAY ROAD WITH TURNOUTS" SIGNS SHALL BE INSTALLED 100 FEET FROM THE END OF THE 2 LANE SECTIONS. ADDITIONAL "ONE WAY ROAD WITH TURNOUTS" SIGNS SHALL BE INSTALLED AT OTHER TWO-LANE SECTIONS WHICH ARE 400 FEET LONG OR LONGER.

N.I.C.

SIGN SUMMARY

NOT IN CONTRACT

NO.	STATION	REF. ℄	TYPE	FACING	LEGEND	NO. OF POSTS	WDTH. IN.	HI. IN.	AREA SQ. FT.	REMARKS
1	–	RT	D1-2A	NB	↑ THORNE BAY 6 KASAAN 19 →	2	90	24	15.00	6 INCH U.C., 4.5 INCH L.C.
2	–	BEHIND	D1-2A	EB	THORNE BAY 6 → ← CONTROL LK 12	2	96	24	16.00	6 INCH U.C., 4.5 INCH L.C.
3	–	LT	D1-2A	SB	↑ CONTROL LK ← KASAAN 18	2	90	24	15.00	6 INCH U.C., 4.5 INCH LC.
4	–	LT	R1-1	WB	STOP	1	30	30	6.25	
5	–	RT	D1-2	EB	↑ KASAAN ← 2030	2	60	24	10.00	6 INCH U.C., 4.5 INCH LC.
6	–	RT	R1-1	NB	STOP	1	30	30	6.25	
7	–	RT	W-SPECIAL	SB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
8	B.O.P.	RT	R1-2	SB	SPEED LIMIT 20	1	24	30	5.00	SEE SIGN DESIGN MANUAL
9	E.O.P.	LT	R2-1	NB	SPEED LIMIT 20	1	24	30	5.00	SEE SIGN DESIGN MANUAL
10	–	LT	W-SPECIAL	NB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
11	RON'S ROAD/ B.O.P.	LT	R1-1	EB	STOP	1	30	30	6.25	
12	43+00	LT	W-SPECIAL	NB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
13	53+00	RT	W-SPECIAL	SB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
14	32+00	LT	W-SPECIAL	NB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
15	36+50	RT	W-SPECIAL	SB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
16	102+50	LT	W-SPECIAL	NB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
17	106+25	RT	W-SPECIAL	SB	ONE LANE ROAD WITH TURNOUTS	1	30	30	6.25	SEE DETAIL "A" AND NOTE 5 ABOVE
							TOTAL		66.25 SQ.FT.	

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th — STEPHEN W. DENTON — CE-7946 — REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th — TRACY W. MOORE — CE-7932 — REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\DR\-MAP 1=1 (1=2 HALF)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES ISLAND — THORNE BAY, ALASKA

SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

SIGNING AND SUMMARIES

DESIGNED BY: JON AHLGREN	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 7 OF 22

LEGEND

⟸ = INDICATES DIRECTION OF STREAM FLOW

)(= INDICATES LOCATIONS WHERE SILT FENCES ARE TO BE INSTALLED AS SHOWN ON SHT. 10

×××××× = SILT FENCE(S)–APPROXIMATE LOCATIONS. SEE DETAILS AND NOTES ON SHEET 10

TOLSTOI BAY

7.5 MILES TO KASAAN

E.O.P.

CRK

TOLSTOI

NT CRK. TR #1

NT CRK. TR #2

NORTH

NORTH TOLSTOI LAKE

PONDS

U.S. FOREST SERVICE

STATE OF ALASKA

LOGGING ROAD

LOON CRK

SOUTH ARM

THORNE BAY

POND

POND

LOON LAKE

COPPER CENTER LAKE

LINDEMAN LAKE

CITY OF THORNE BAY

SOUTH THORNE BAY SUBDIVISION

SETTER LAKE

GROUSE CRK.

WREN CREEK

B.O.P.

RON'S ROAD

STELLER'S

5.5 MILES TO THORNE BAY ROAD/KLAWOCK HIGHWAY

JAY CREEK

STATE OF ALASKA

U.S. FOREST SERVICE

EROSION PLAN

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th TRACY W. MOORE CE-7932 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\DR\-EROSION 1=1		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

EROSION & SEDIMENT CONTROL PLAN

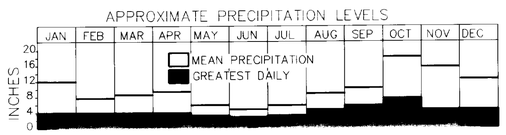
DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 8 OF 22

TEMPORARY EROSION AND SEDIMENT CONTROL NOTES

1. THE AREA TO BE GRUBBED UNDER THIS PROJECT IS APPROXIMATELY 25 ACRES, WHILE THE AREA TO BE CLEARED IS APPROXIMATELY 40 ACRES.

2. COPIES OF THE LATEST EDITION OF THE CONTRACTOR GUIDANCE FOR PREPARING AND EXECUTING STORM WATER POLLUTION PREVENTION PLANS CAN BE OBTAINED BY WRITING MR. JERRY MURPHY, 3132 CHANNEL DRIVE, JUNEAU, ALASKA 99801-7898; OR BY CALLING HIM AT (907) 465-2985. THERE IS A $20.00 CHARGE FOR EACH COPY OF THE BOOKLET.

3. THE MEAN PRECIPITATION RATE IN THE THORNE BAY AREA IS APPROXIMATELY 120 INCHES PER YEAR AND INCLUDES ABOUT 40 INCHES OF SNOW AT THE HIGHER ELEVATIONS. THE FOLLOWING GRAPH INDICATES THE APPROXIMATE MEAN ANNUAL PRECIPITATION LEVELS AND THE GREATEST DAILY RAIN FALL LEVELS IN THE THORNE BAY AREA.



4. THE FOLLOWING TEMPORARY EROSION AND SEDIMENT CONTROL MATERIALS SHALL BE STOCK-PILED IN THORNE BAY PRIOR TO BEGINNING ANY GRUBBING OR EXCAVATION ACTIVITIES:
   A. 20,000 SQ. FT. OF SOIL STABILIZATION MATERIAL
   B. 2,000 LINEAR FEET OF SILT FENCE.
   C. 50 STRAW BALES
   D. ALL SEEDING AND FERTILIZER REQUIRED TO COMPLETE THE HAND SEEDING OPERATION.

5. PRIOR TO BEGINNING ANY GRUBBING OR EXCAVATION ACTIVITIES NEAR THE FOLLOWING ANADROMOUS FISH STREAMS, SILT FENCES AND CHECK DAMS, AS DETAILED ON SHEET 10 SHALL BE INSTALLED. INSTALLATION OF THESE SILT FENCES MAY BE COMPLETED AT ANYTIME. HOWEVER,, THE INSTALLATION OF THE FISH PROOF FENCES, DAMS, PUMPS, SUMPS, PIPES ETC., MAY ONLY BE COMPLETED DURING THE IN-WATER DATES NOTED IN APPENDIX A & B.

NAME OF STREAM	APPROXIMATE "P" LINE STATION
STELLER'S JAY CREEK	38+30
NORTH CHANNEL WREN CREEK	102+20
SOUTH CHANNEL WREN CREEK	103+05
GROUSE CREEK	103+80
LOON CREEK	183+70
NORTH TOLSTOI CREEK, TRIBUTARY NO. 2.	234+70
NORTH TOLSTOI CREEK, TRIBUTARY NO. 1.	257+30

INSTALLATION OF OTHER SILT FENCES WILL BE AS DIRECTED AND PAID FOR UNDER ITEM 641(2).

SILT FENCES LOCATED WITHIN THE EMBANKMENT LIMITS MAY BE ABANDONED IN PLACE.

SILT FENCE LOCATED OUTSIDE EMBANKMENT LIMITS SHALL BE REMOVED SO THAT THE SILT IS NOT DEPOSITED IN THE STREAM.

THE USED SILT FENCING FABRIC SHALL BE REMOVED FROM THE PROJECT LIMITS.

THE SILT FENCES INSTALLED PARALLEL TO THE STREAM AND OUTSIDE THE ROADBED LIMITS SHALL BE MAINTAINED UNTIL THE GRANULAR SLOPES DRAINING TO THESE STREAMS HAVE BEEN SEEDED AND A UNIFORM (PERENNIAL) VEGETATIVE COVER IS GROWING ON 70 PERCENT OF THE AREA(S) REQUIRING SEEDING.

6. SEEDING OF GRANULAR SLOPES. ALL SLOPES COMPLETED BETWEEN APRIL 15 AND SEPTEMBER 15 SHALL BE HAND SEEDED EVERY 14 DAYS OR UPON COMPLETION OF 10,000 SQUARE FEET OF SLOPE.

   SLOPES COMPLETED BETWEEN SEPTEMBER 16 AND APRIL 14 SHALL BE COVERED WITH SOIL STABILIZATION MATTING AND SEEDED BETWEEN APRIL 15 AND SEPTEMBER 15.

   SEEDING DATES MAY BE ADJUSTED TO FIT THE WEATHER CONDITIONS OCCURING DURING CONSTRUCTION OF THE SLOPES.

   PRIOR TO FINAL INSPECTION, HAND SEEDED AREAS NOT SHOWING A UNIFORM PERENNIAL VEGETATIVE COVER OF 70 PERCENT SHALL BE HYDRO SEEDED AND PAID FOR UNDER ITEM 618(1).

7. THE CONTRACTOR IS REQUIRED TO IDENTIFY THE INSTALLATIONS OF THE SILT FENCES IN THE S.W.P.P.P. AND PRESENT THE S.W.P.P.P. 5 DAYS PRIOR TO THE PRECONSTRUCTION CONFERENCE.

8. AS THE ROADWAY IS CONSTRUCTED, CHECK DAMS SHALL BE INSTALLED AT THE TOE OF GRANULAR CUTS AS REQUIRED TO STOP SEDIMENT FROM REACHING THE ANADROMOUS FISH STREAMS.

9. IF GRANULAR CUT SLOPES BEGIN TO SHOW EVIDENCE OF SHEET OR RILL TYPE EROSION, SILT FENCES SHALL BE INSTALLED ALONG THE SLOPE AS DIRECTED.

10. ROCK CHECK DAMS AS DETAILED ON SHEET 12 SHALL BE INSTALLED AS SOON AS THE DITCHLINE IS ESTABLISED.

11. SILT FENCE SHALL BE INSTALLED ALONG THE DOWNHILL SIDE OF THE ROADWAY TO PROTECT WATER BODIES. THESE LOCATIONS SHALL BE ESTABLISED BY THE ENGINEER AND ARE AREAS WHERE THERE IS INSUFFICIENT NATURAL COVER TO ADEQUATELY FILTER SEDIMENT.

PERMANENT EROSION AND SEDIMENT CONTROL NOTES

1. CHECK DAMS INSTALLED AS TEMPORARY EROSION CONTROL MEASURES ALONG THE TOE OF GRANULAR SLOPE(S) OR ON GRADES OF 6 PERCENT OR GREATER, SHALL BE CLEANED OF SEDIMENTS AND BE LEFT IN PLACE AS DITCH BLOCKS.

2. DITCH BLOCK/CHECK DAMS SHALL BE INSTALLED PRIOR TO DITCHES OUTLETTING INTO ANADROMOUS FISH STREAMS.

3. PRIOR TO FINAL INSPECTION, HAND SEEDED AREAS NOT SHOWING A UNIFORM PERENNIAL VEGETATIVE COVER OF 70 PERCENT SHALL BE HYDRO SEEDED AND PAID FOR UNDER ITEM 618(1).

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-7932 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\DR\-NOTES 1=1		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

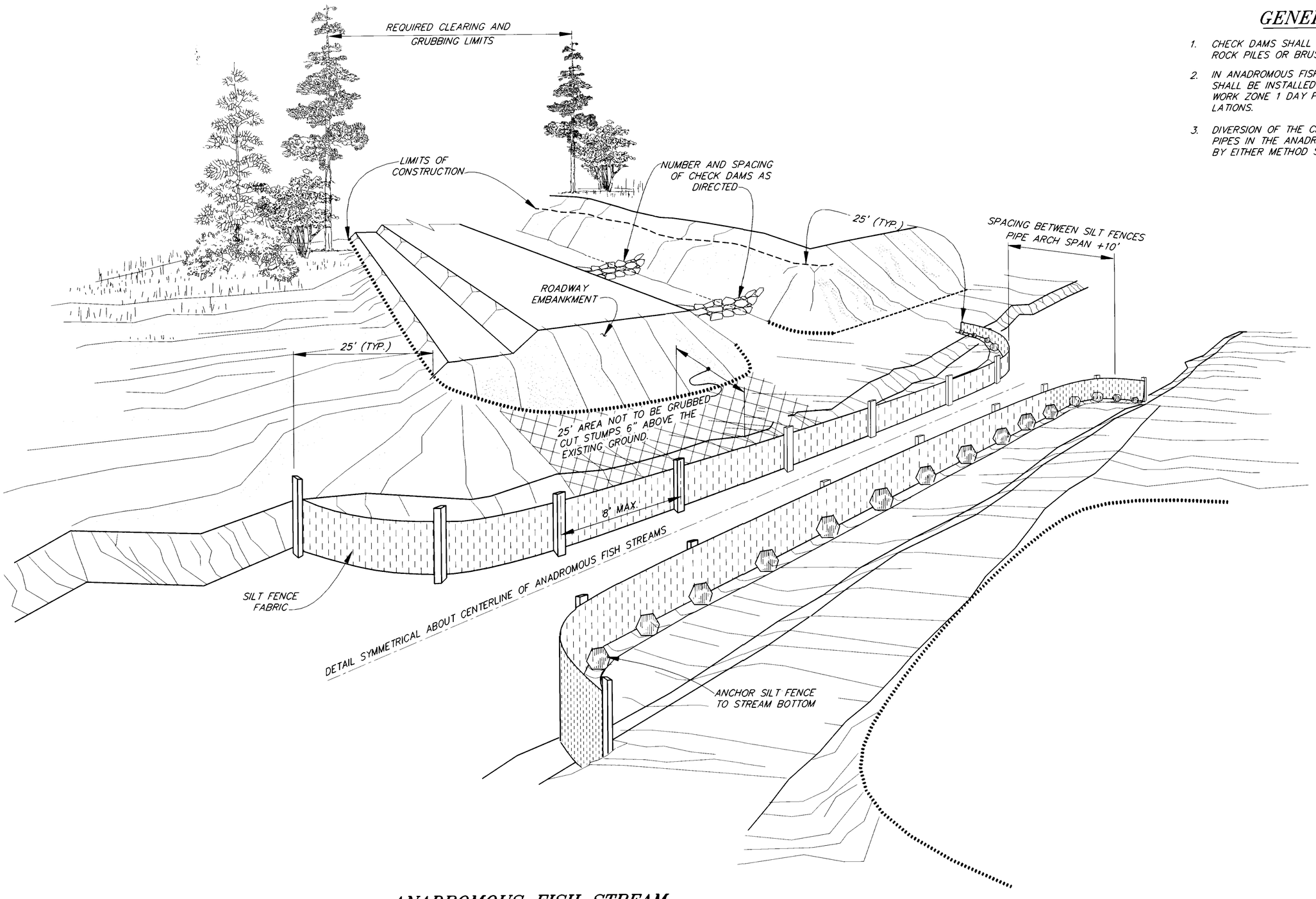
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947
EROSION & SEDIMENT CONTROL NOTES

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 9 OF 22

GENERAL NOTES

1. CHECK DAMS SHALL CONSIST OF STRAW BALES, ROCK PILES OR BRUSH BERMS AT THE CONTRACTOR'S OPTION.
2. IN ANADROMOUS FISH STREAMS, THE FISH PROOF FENCES SHALL BE INSTALLED AND THE FISH EXCLUDED FROM THE WORK ZONE 1 DAY PRIOR TO BEGINNING THE PIPE INSTALLATIONS.
3. DIVERSION OF THE CREEK DURING INSTALLATION OF THE PIPES IN THE ANADROMOUS FISH CREEKS MAY BE DONE BY EITHER METHOD SHOWN ON SHEET 11.



ANADROMOUS FISH STREAM CROSSING DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\POW\71947\DR\-FENCE1 1=1 (1=2 HALF)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

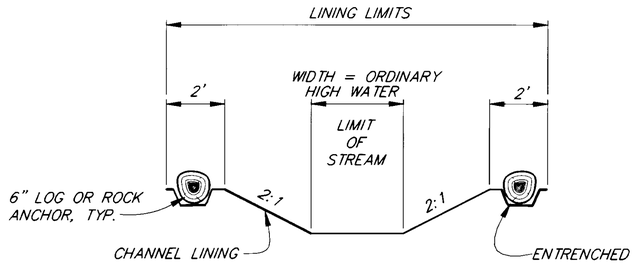
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

EROSION AND SEDIMENT CONTROL

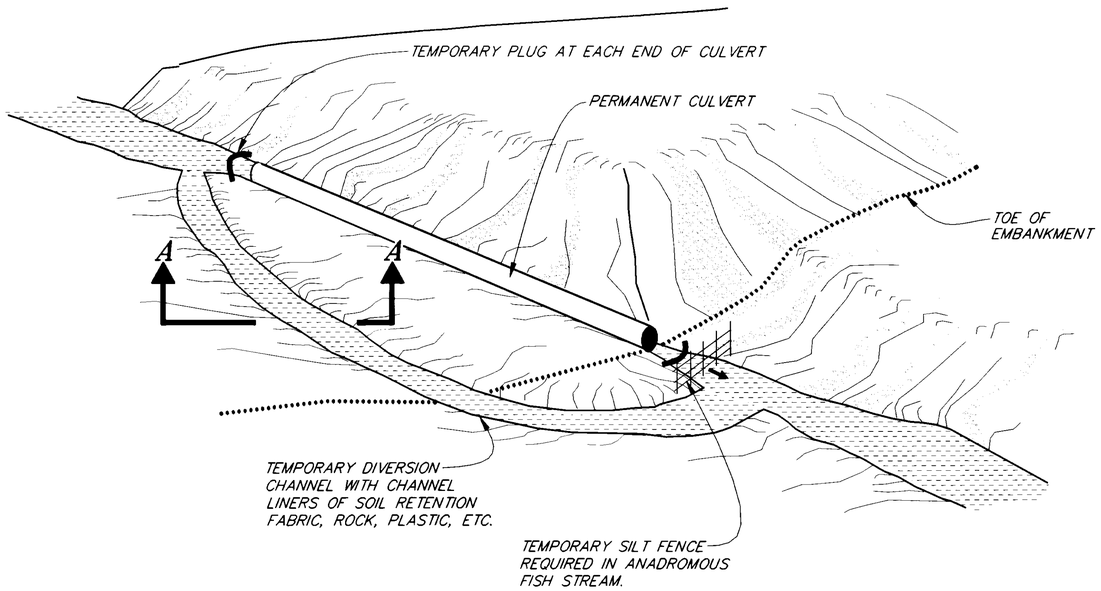
DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 10 OF 22

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER



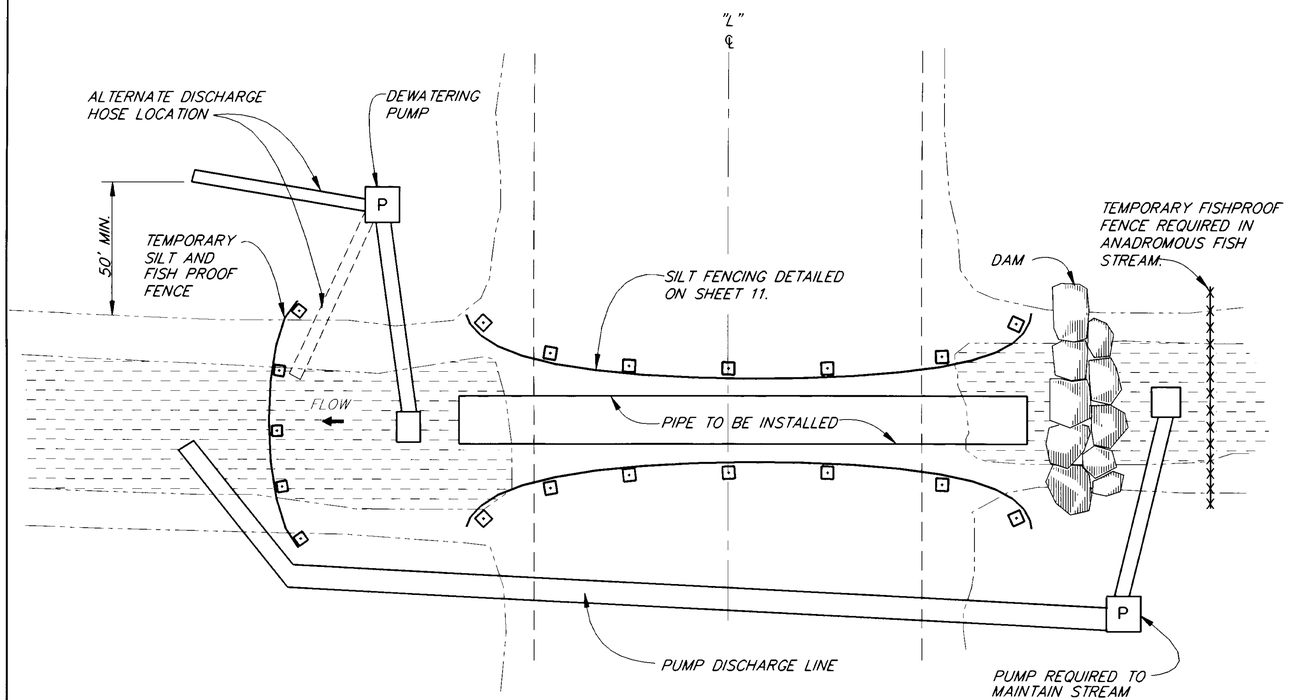
SECTION A-A



TYPICAL CULVERT INSTALLATION DETAIL USING A DIVERSION CHANNEL

GENERAL NOTES

1. THE CONTRACTOR MAY USE EITHER DETAIL TO INSTALL THE PIPES ON THIS PROJECT OR PROPOSE OTHERS IN HIS S.W.P.P.P.
2. THE INSTALLATION OF SILT AND FISH PROOF FENCES ARE ONLY REQUIRED IN ANADROMOUS FISH STREAMS.



TYPICAL CULVERT INSTALLATION DETAIL USING PUMPS

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\POW\71947\DR\-BARRIER 1=1 (1=2 HALF)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

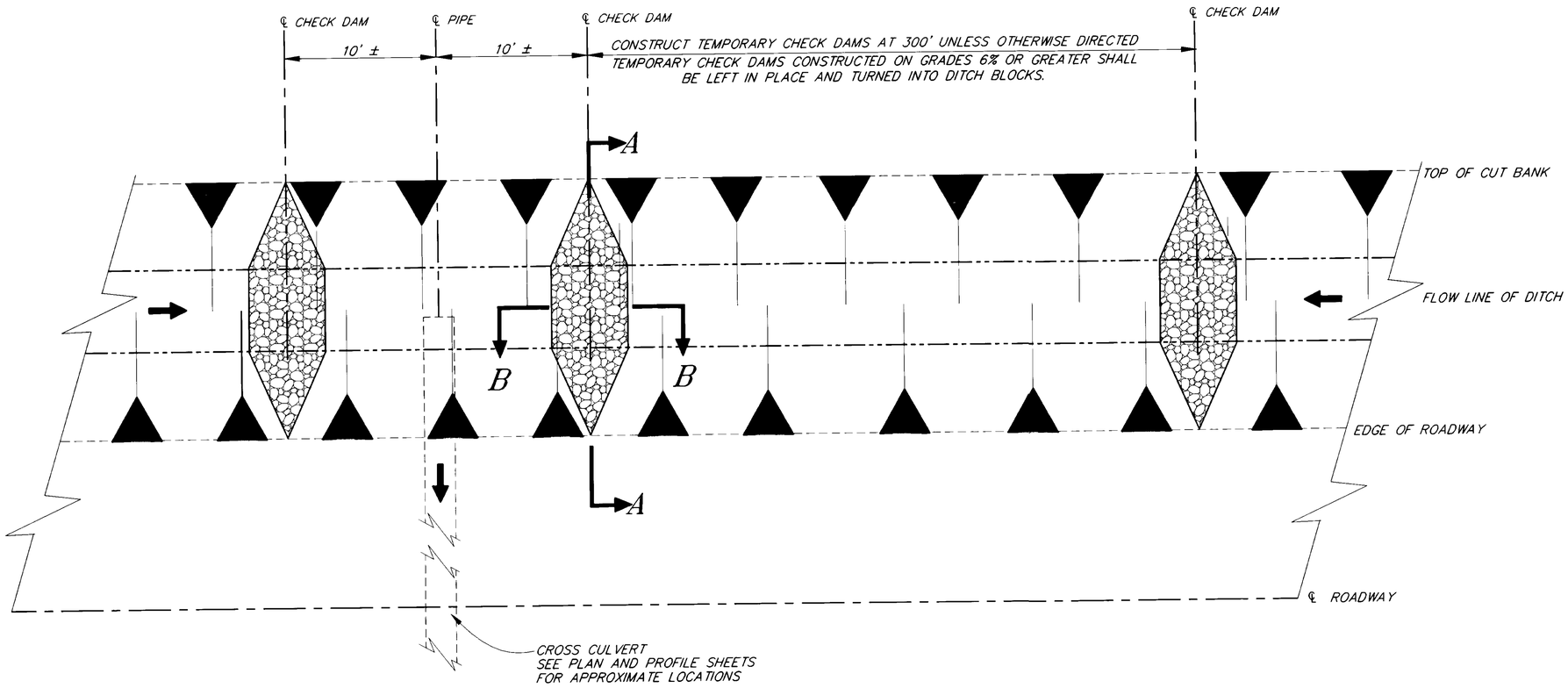
PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

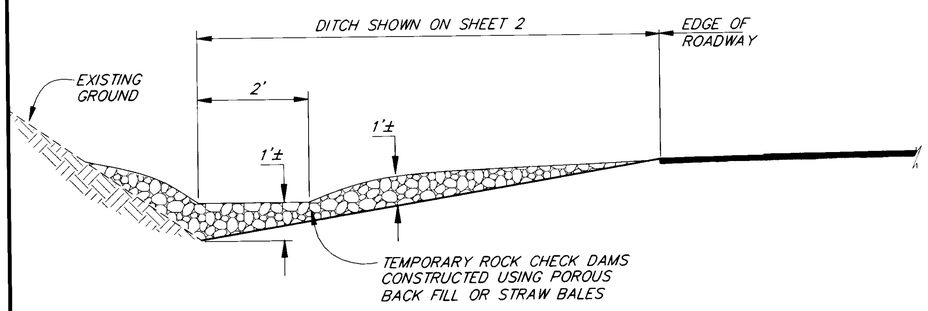
EROSION AND SEDIMENT CONTROL

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 11 OF 22

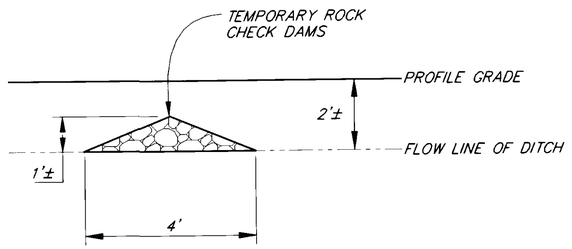
STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER



PLAN



SECTION A–A



SECTION B–B

TEMPORARY ROCK CHECK DAM/DITCH BLOCK DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\POW\71947\DR\-SOILDAM 1=1

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES, ISLAND — THORNE BAY, ALASKA

SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46)-71947

EROSION & SEDIMENT CONTROL PLAN

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 71947
DRAWN BY: C. ANDERSON	DATE: 1995
CHECKED BY: T. MOORE	SHEET 12 OF 22

STATE OF ALASKA
49th
STEPHEN W. DENTON
CE-7946
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
49th
TRACY W. MOORE
CE-7932
REGISTERED PROFESSIONAL ENGINEER

LEGEND

2 LN (LT OR RT) = CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.

TOL OR TOR = CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.

THE P AND PR-LINES ARE BASIS OF THE LOCATION SURVEY. THE L-LINE IS THE ℄ THAT THE PROJECT WILL BE BUILT TO.

HORIZONTAL CONTROL

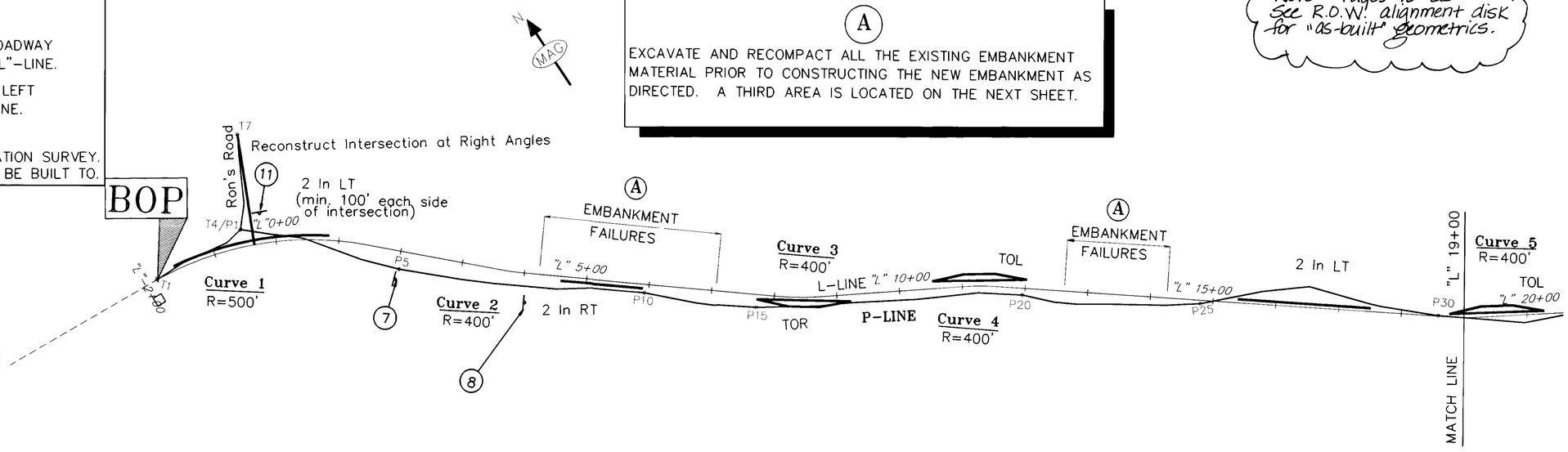
THE BASIS OF HORIZONTAL CONTROL FOR THE P-LINE IS A MAGNETIC COMPASS READING. THE ASSUMED COORDINATES FOR T1 ARE N.10,000.00, E.000.00.

STAKING NOTICE

L-LINE PI'S SHALL BE LOCATED USING HORIZONTAL OFFSETS FROM THE 2 NEAREST UNDISTURBED P-LINE POINTS. COORDINATES FOR THE P-LINE AND L-LINE CAN BE FOUND IN APPENDIX C.

Note: Pages 13-22 See R.O.W. alignment disk for "as-built" geometrics.

Ⓐ EXCAVATE AND RECOMPACT ALL THE EXISTING EMBANKMENT MATERIAL PRIOR TO CONSTRUCTING THE NEW EMBANKMENT AS DIRECTED. A THIRD AREA IS LOCATED ON THE NEXT SHEET.

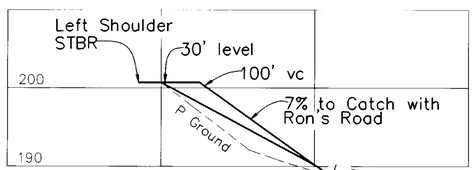


VERTICAL CONTROL

THE BASIS OF THE VERTICAL CONTROL FOR THE P-LINE IS AN ASSUMED ELEVATION OF 200.00' FOR POINT T1.

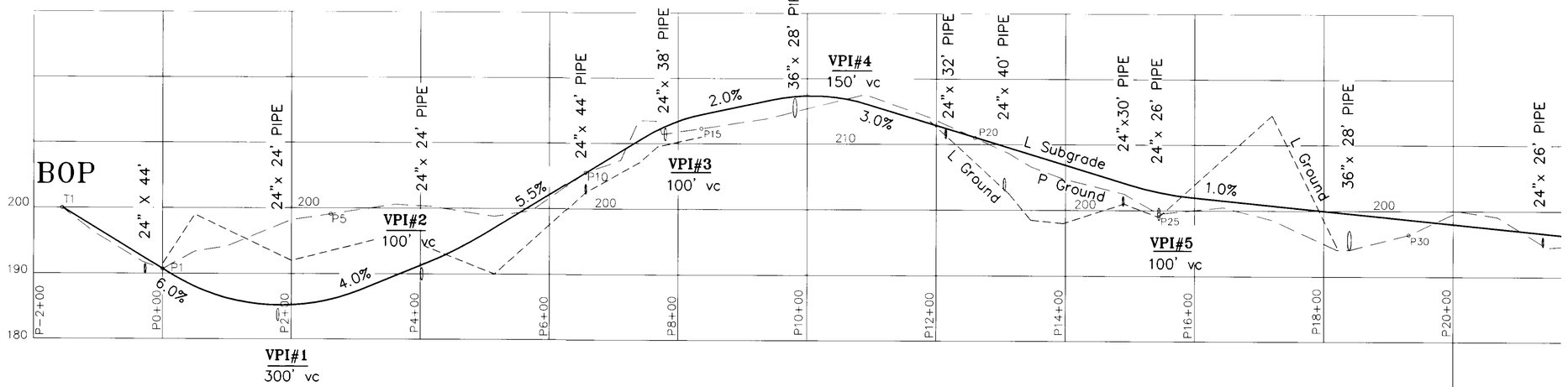
STAKING NOTICE

STAKE THE VPI'S USING THE STATIONS AND ELEVATIONS LOCATED IN APPENDIX "C"



PROFILE

RON'S ROAD INTERSECTION



NOTE: STATIONING SHOWN IN THE PLAN VIEW IS BASED ON THE "L" LINE. THE STATIONING SHOWN IN THE PROFILE VIEW IS BASED ON THE PROFILE STATION 0+00 WHICH IS NOT SHOWN IN THE PLAN VIEW. USE P# POINTS TO COORDINATE THE PLAN AND PROFILE.

DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN1.SCR

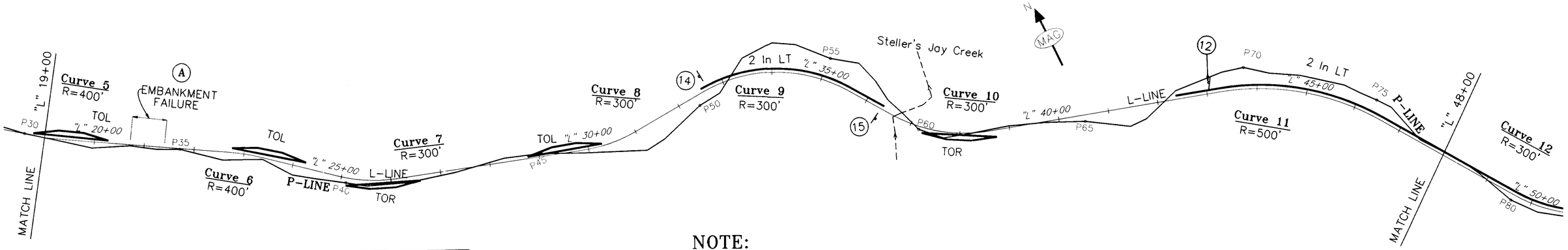
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES ISLAND THORNE BAY, ALASKA
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947
PLAN AND PROFILE
STA. "L" -2+00 TO STA. "L" 19+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 13 OF 22

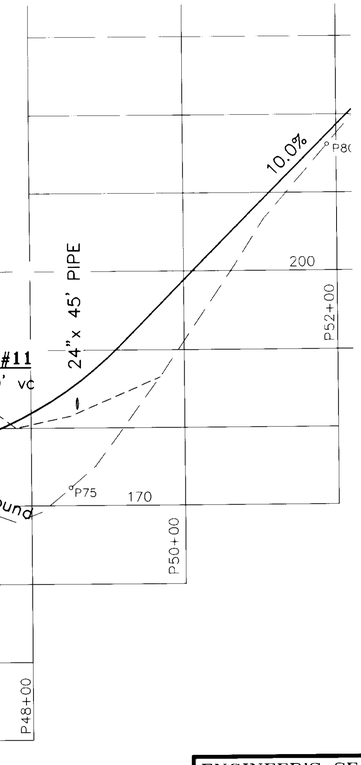


LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.

NOTE:

"L" 36+00 TO "L" 38+00, RT.
INSTALL 2' OF CLASS II RIPRAP
ON ALL EMBANKMENT SURFACES



NOTE: STATIONING SHOWN IN THE PLAN VIEW IS BASED ON THE "L" LINE. THE STATIONING SHOWN IN THE PROFILE VIEW IS BASED ON THE PROFILE STATION 0+00 WHICH IS NOT SHOWN IN THE PLAN VIEW. USE P# POINTS TO COORDINATE THE PLAN AND PROFILE.

DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN2.SCR		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

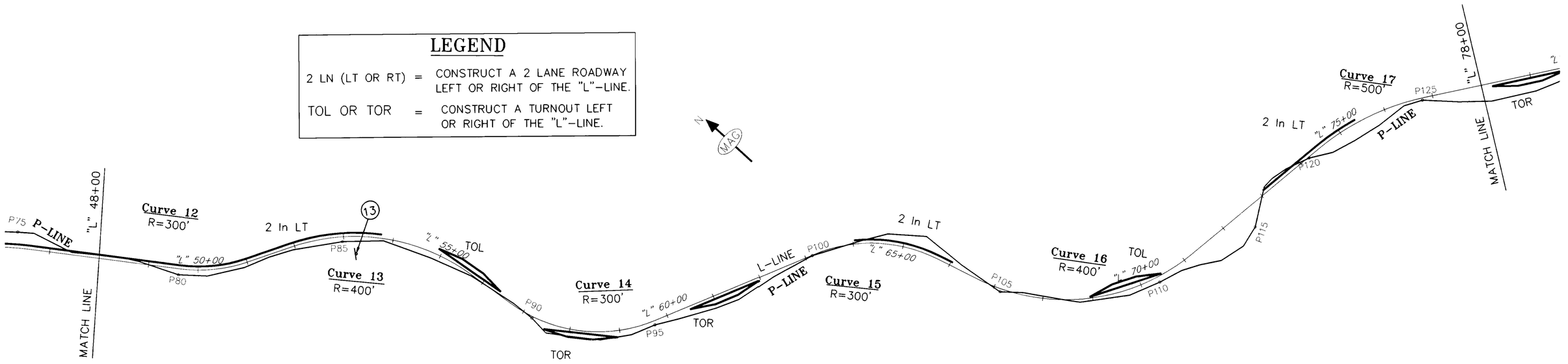
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

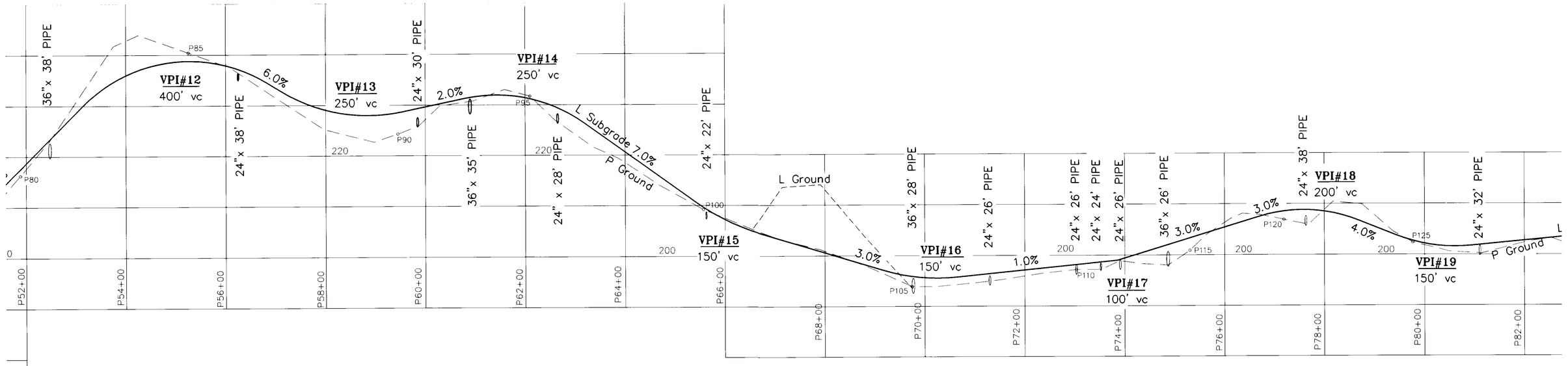
PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947
PLAN AND PROFILE
STA. "L" 19+00 TO STA. "L" 48+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 14 OF 22

LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.





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DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL

STATE OF ALASKA 49th STEPHEN W. DENTONEY CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN3.SCR

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

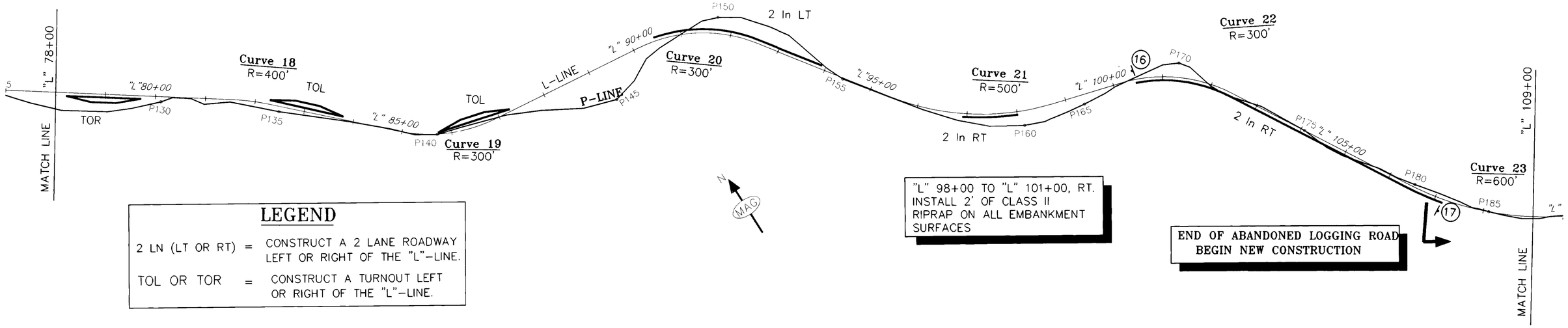
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947

PLAN AND PROFILE

STA. "L" 48+00 TO STA. "L" 78+00

DESIGNED BY: *S. Denton*	PROJECT NO. *71947*
DRAWN BY: *S. Denton*	DATE: *1995*
CHECKED BY: *T.W. MOORE*	SHEET *15* OF *22*

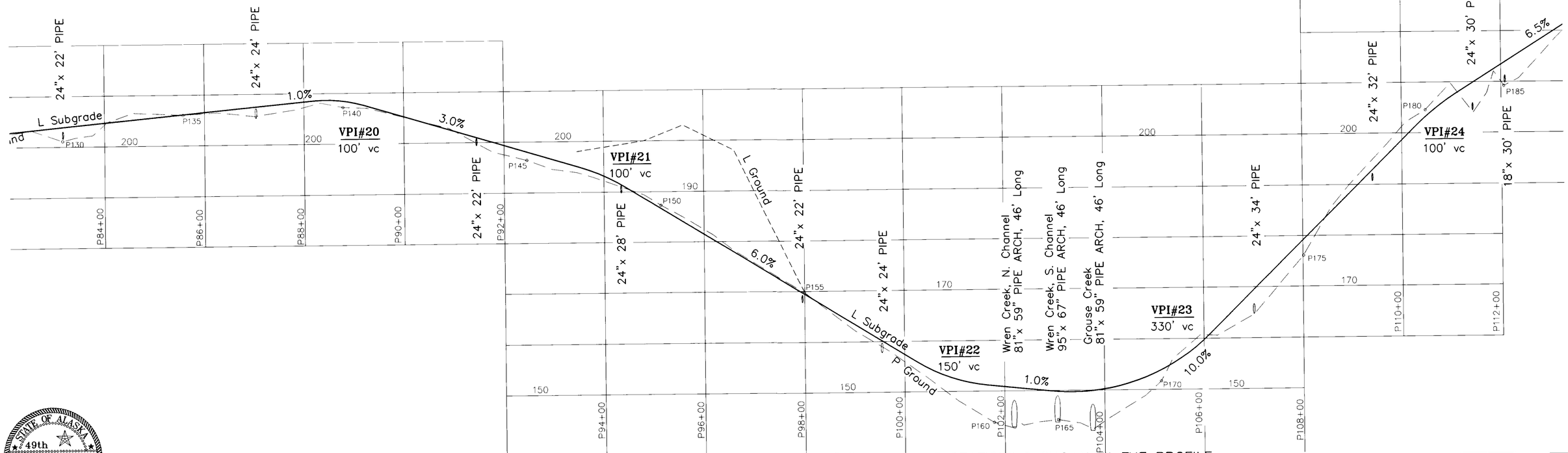


LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.

"L" 98+00 TO "L" 101+00, RT.
INSTALL 2' OF CLASS II
RIPRAP ON ALL EMBANKMENT
SURFACES

END OF ABANDONED LOGGING ROAD
BEGIN NEW CONSTRUCTION



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DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN4.SCR		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

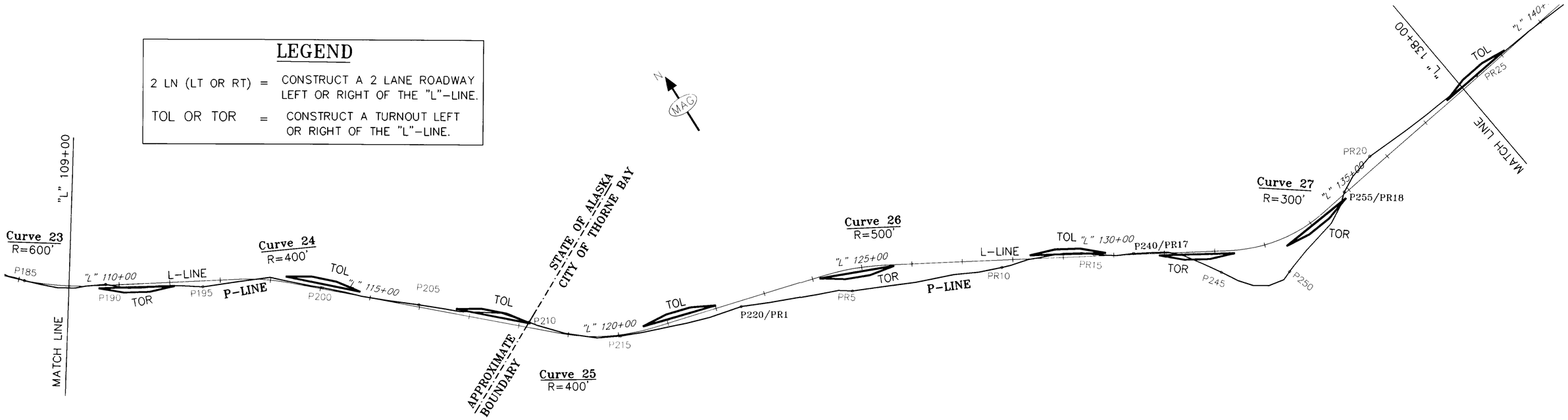
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

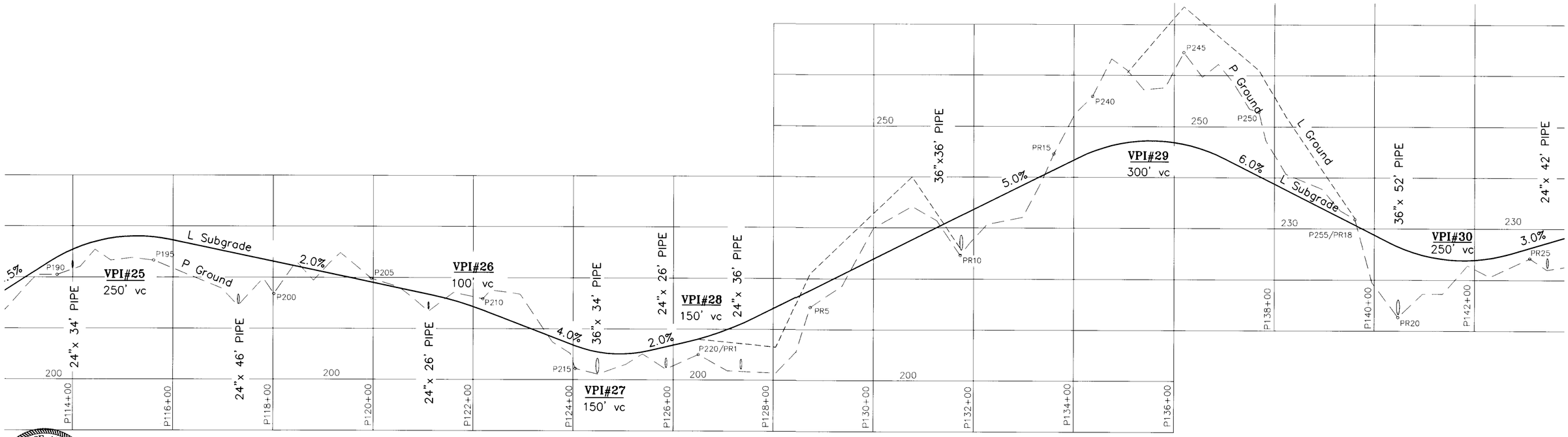
PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947
PLAN AND PROFILE
STA. "L" 78+00 TO STA. "L" 109+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 16 OF 22

LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.





NOTE: STATIONING SHOWN IN THE PLAN VIEW IS BASED ON THE "L" LINE. THE STATIONING SHOWN IN THE PROFILE VIEW IS BASED ON THE PROFILE STATION 0+00 WHICH IS NOT SHOWN IN THE PLAN VIEW. USE P# POINTS TO COORDINATE THE PLAN AND PROFILE.

DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN5.SCR

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

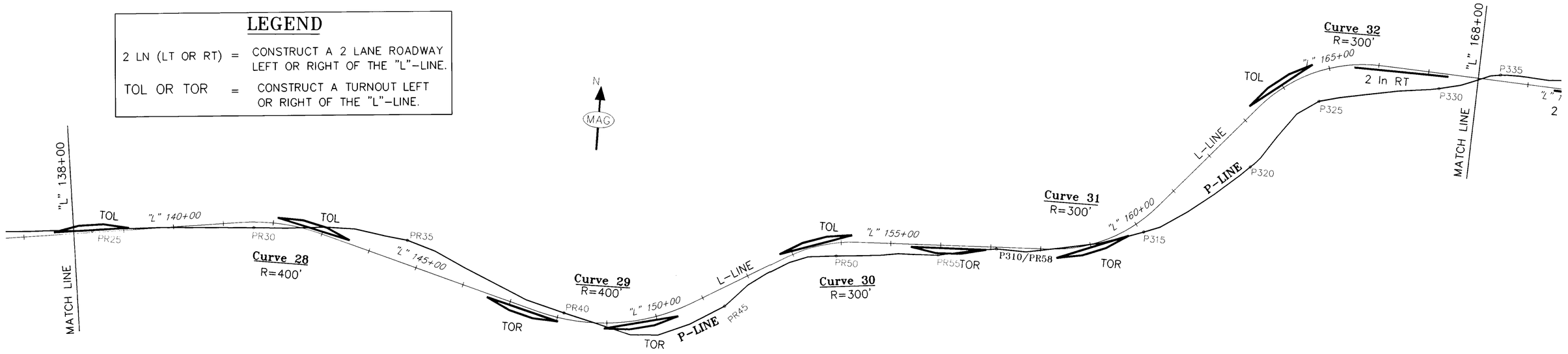
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

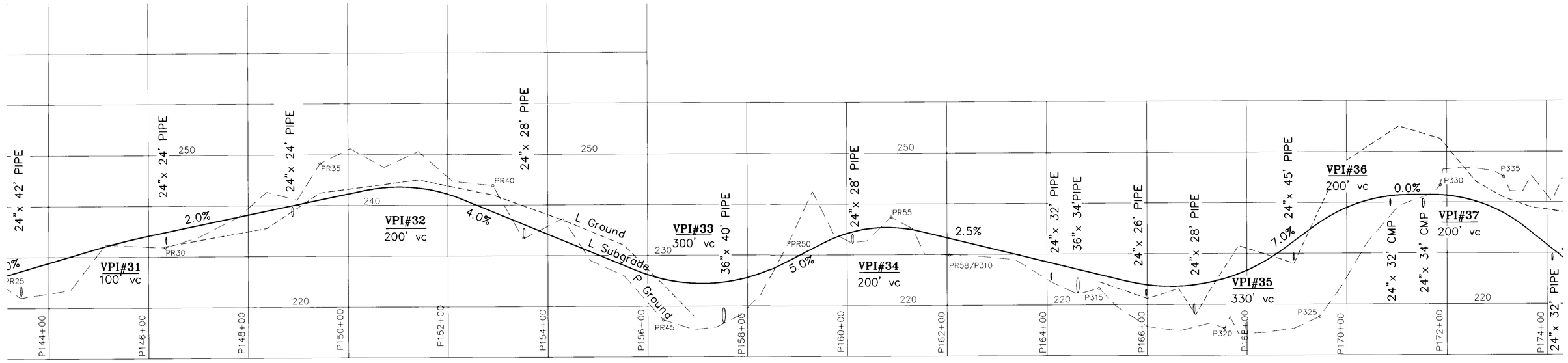
PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947
PLAN AND PROFILE
STA. "L" 109+00 TO STA. "L" 138+00

DESIGNED BY: *S. Denton*	PROJECT NO. *71947*
DRAWN BY: *S. Denton*	DATE: *1995*
CHECKED BY: *T.W. MOORE*	SHEET *17* OF *22*

LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"–LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"–LINE.





NOTE: STATIONING SHOWN IN THE PLAN VIEW IS BASED ON THE "L" LINE. THE STATIONING SHOWN IN THE PROFILE VIEW IS BASED ON THE PROFILE STATION 0+00 WHICH IS NOT SHOWN IN THE PLAN VIEW. USE P# POINTS TO COORDINATE THE PLAN AND PROFILE.

DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN6.SCR

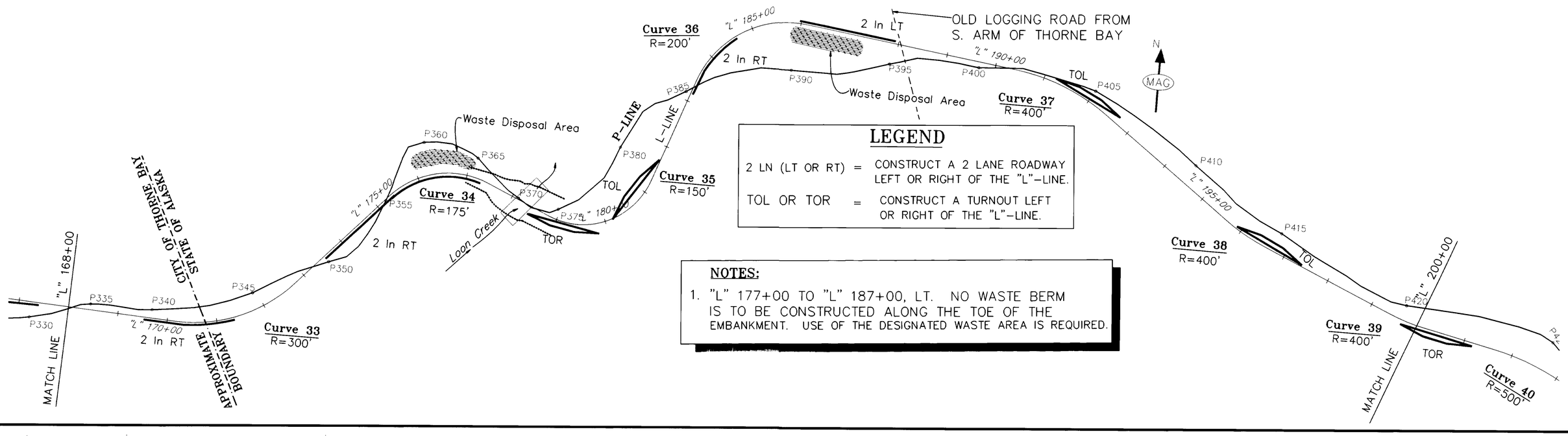
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) – 71947
PLAN AND PROFILE
STA. "L" 138+00 TO STA. "L" 168+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 18 OF 22

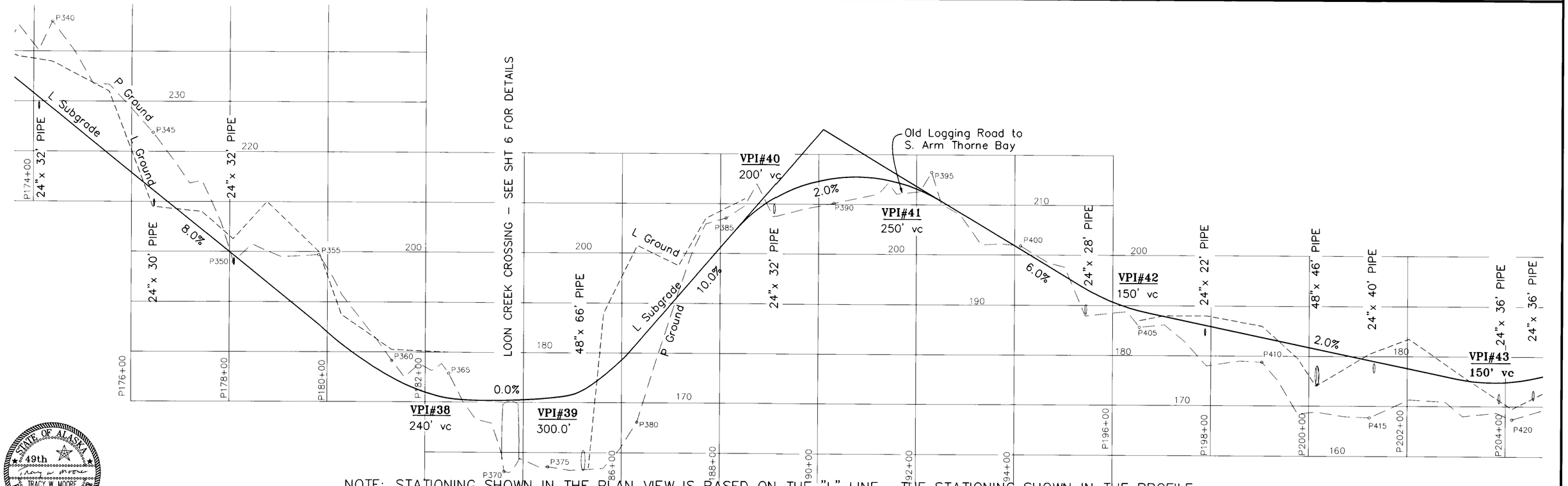


LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"–LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"–LINE.

NOTES:

1. "L" 177+00 TO "L" 187+00, LT. NO WASTE BERM IS TO BE CONSTRUCTED ALONG THE TOE OF THE EMBANKMENT. USE OF THE DESIGNATED WASTE AREA IS REQUIRED.



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DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN7.SCR

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

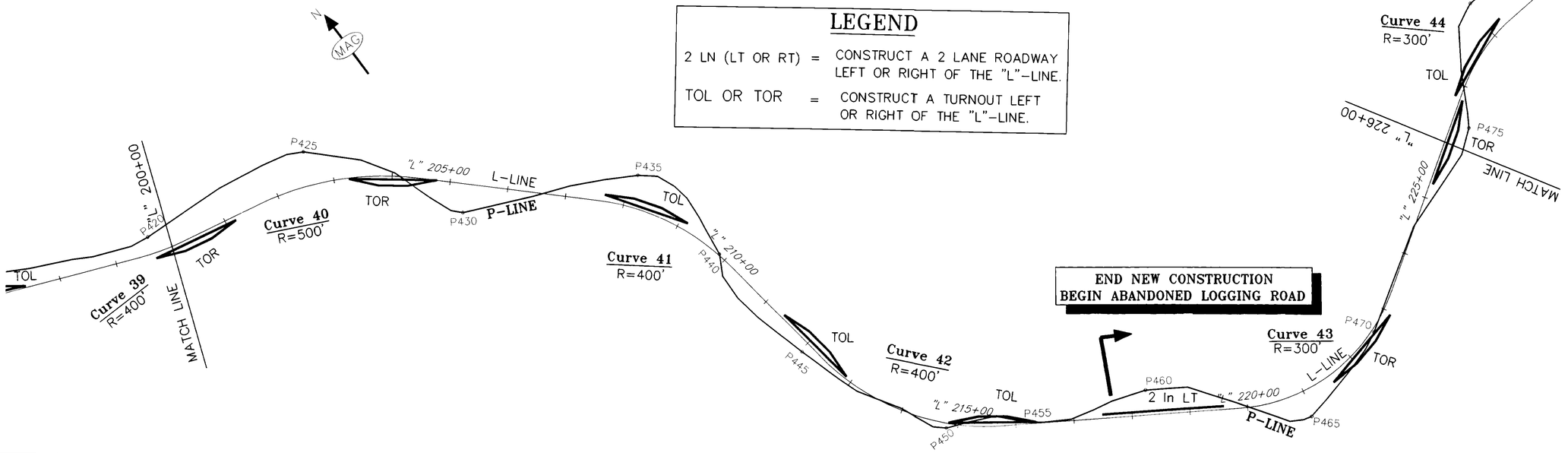
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

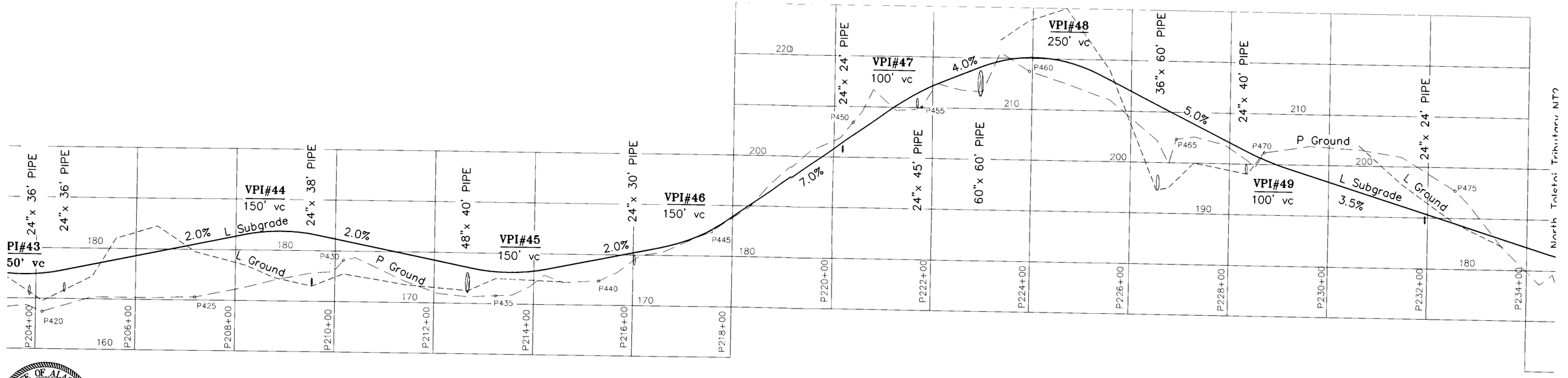
PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) – 71947

PLAN AND PROFILE

STA. "L" 168+00 TO STA. "L" 200+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 19 OF 22





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DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\POW\71947\EN\PSPLAN3 PLAN8.SCR

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

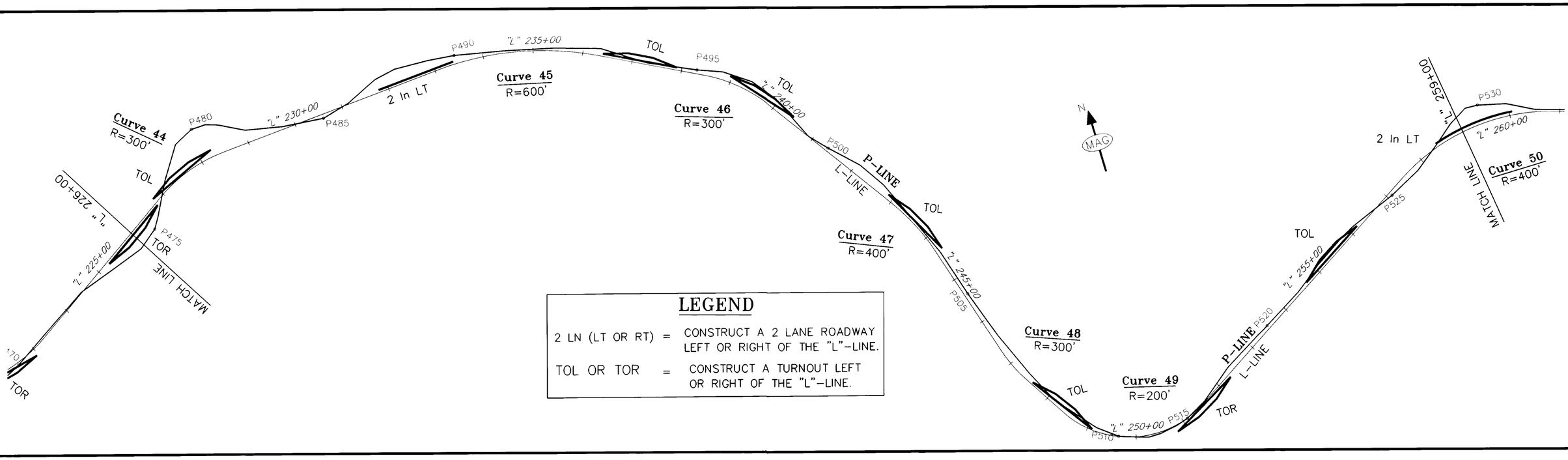
PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) – 71947
PLAN AND PROFILE
STA. "L" 200+00 TO STA. "L" 226+00

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 20 OF 22

ENGINEER'S SEAL

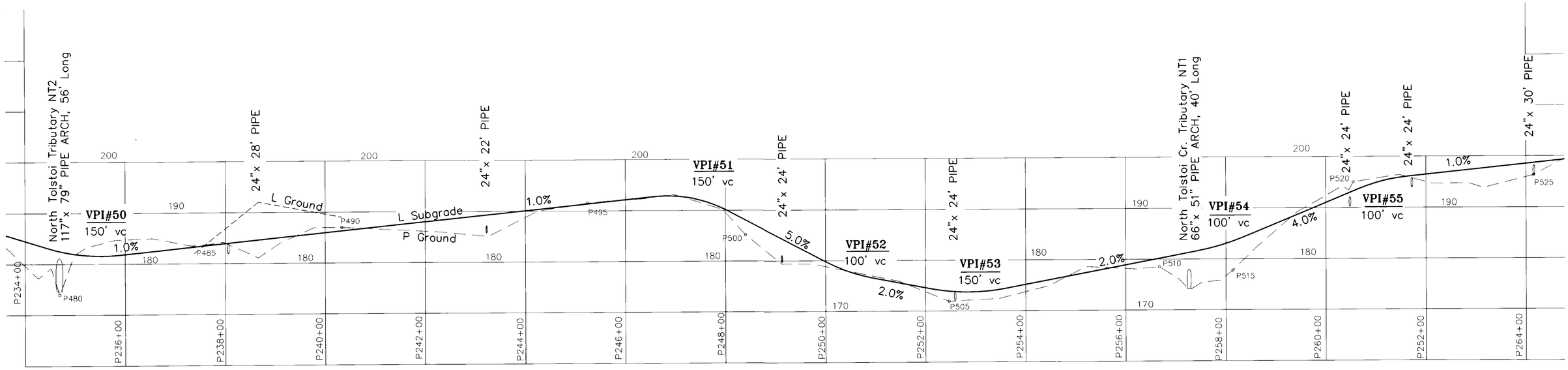
STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER



LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"-LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"-LINE.



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DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN9.SCR

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

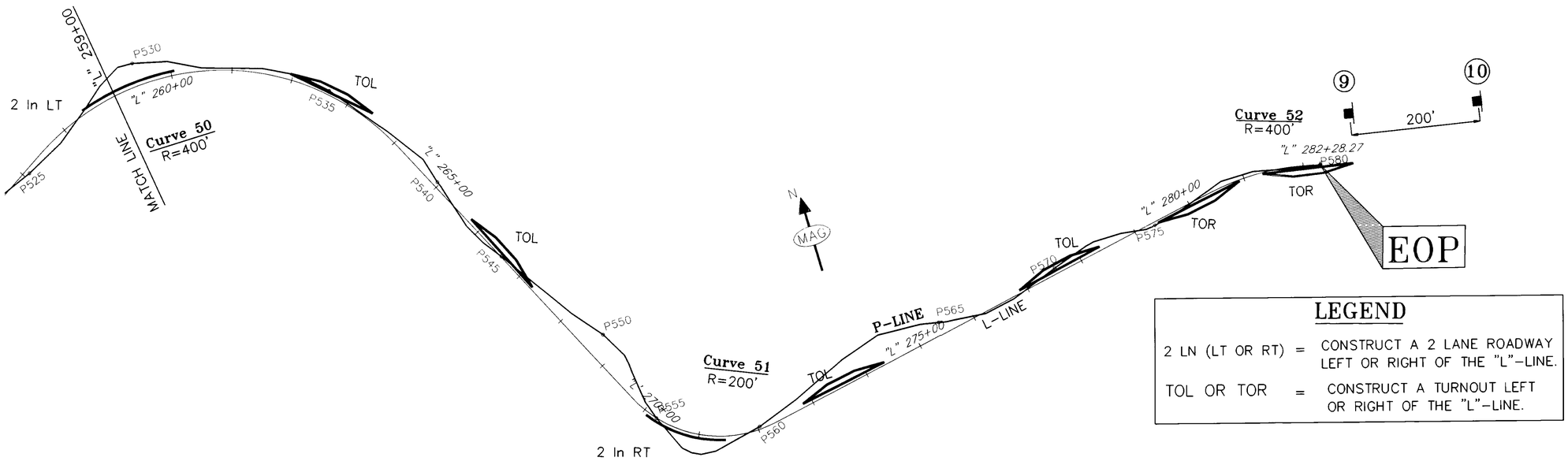
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) - 71947

PLAN AND PROFILE

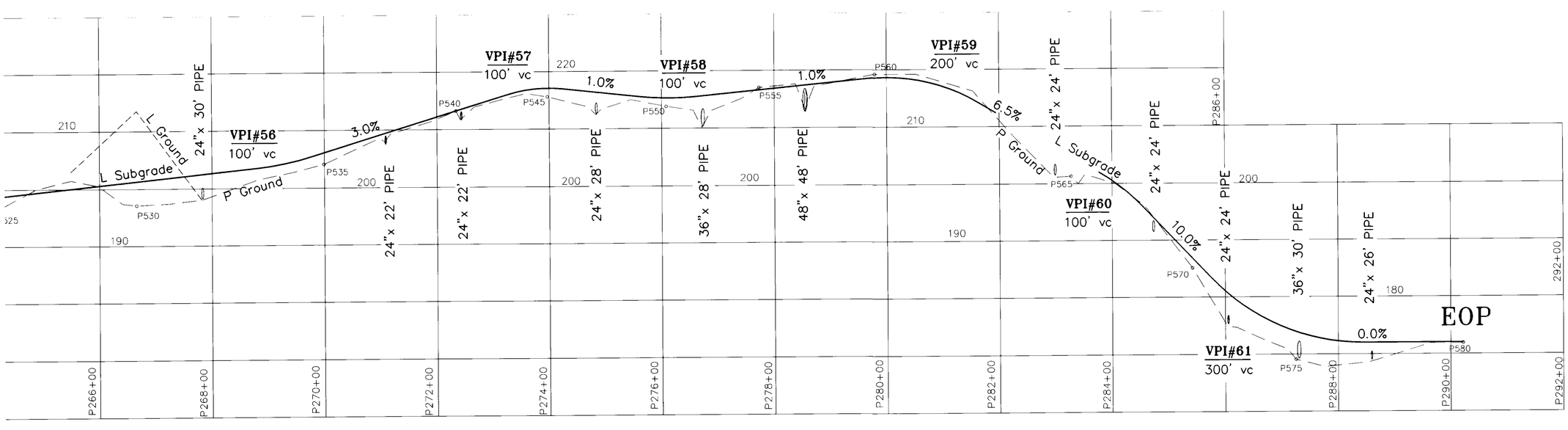
STA. "L" 226+00 TO STA. "L" 259+00

DESIGNED BY: *S. Denton*	PROJECT NO. *71947*
DRAWN BY: *S. Denton*	DATE: *1995*
CHECKED BY: *T.W. MOORE*	SHEET *21* OF *22*



LEGEND

2 LN (LT OR RT)	=	CONSTRUCT A 2 LANE ROADWAY LEFT OR RIGHT OF THE "L"–LINE.
TOL OR TOR	=	CONSTRUCT A TURNOUT LEFT OR RIGHT OF THE "L"–LINE.



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DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

STATE OF ALASKA 49th TRACY W. MOORE CE-4932 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
STATE OF ALASKA 49th STEPHEN W. DENTON CE-7946 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\POW\71947\EN\PSPLAN3 PLAN10.SCR		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

PRINCE OF WALES ISLAND *THORNE BAY, ALASKA*
SOUTH THORNE BAY ROAD TO KASAAN ROAD
GRADING AND DRAINAGE
PROJECT NO. STP-0003(46) – 71947

PLAN AND PROFILE

STA. "L" 259+00 TO STA. "L" 282+28.27

DESIGNED BY: S. Denton	PROJECT NO. 71947
DRAWN BY: S. Denton	DATE: 1995
CHECKED BY: T.W. MOORE	SHEET 22 OF 22