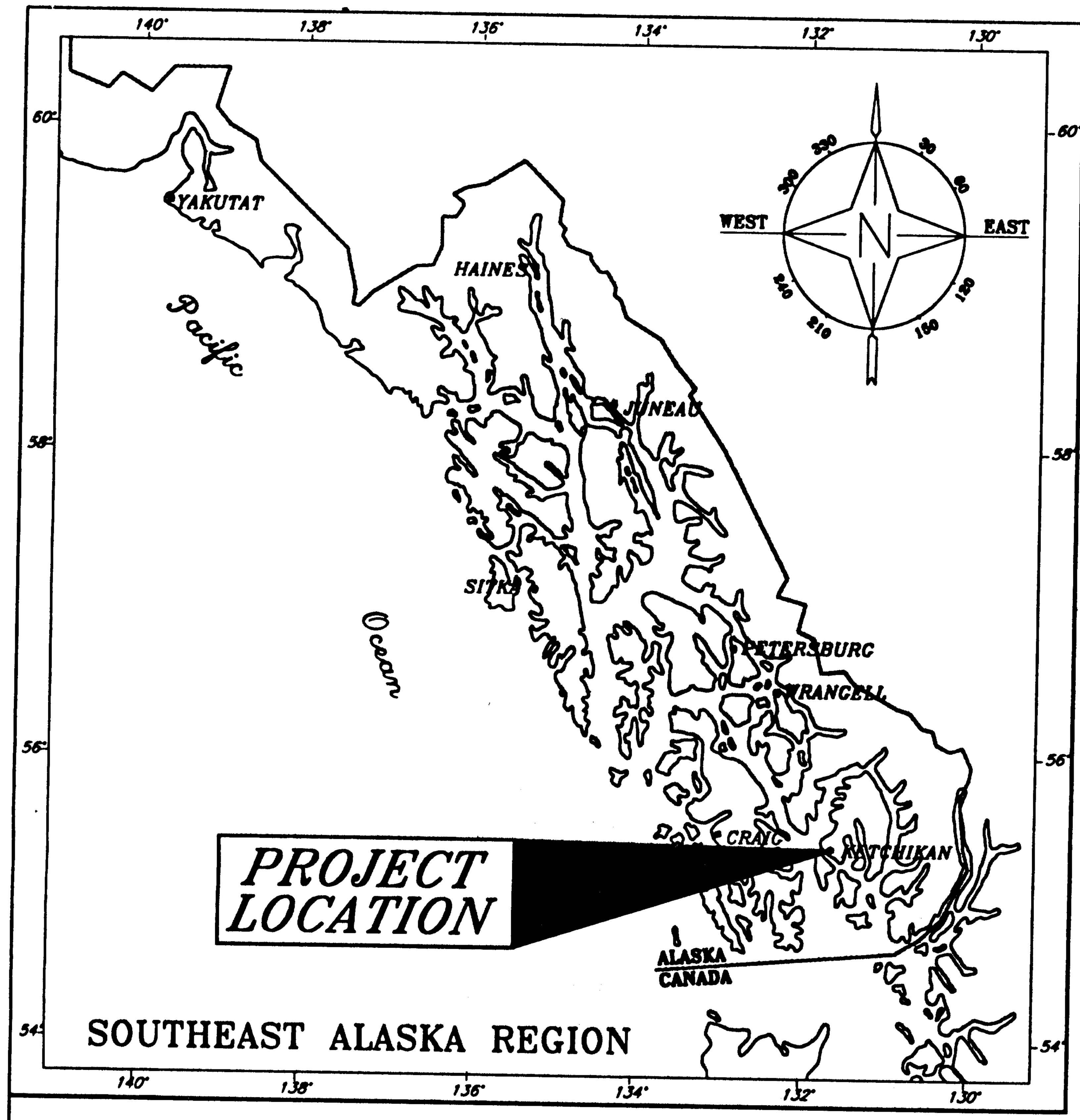


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN

S. TONGASS HWY. OVERLAY - DEERMOUNT ST. TO SAXMAN

GRINDING, PAVING, AND TRAFFIC MARKINGS

STP-0902-(26)
PROJECT NO. 67811

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	ESTIMATE OF QUANTITIES
4	TRAFFIC CONTROL PLAN
5	DELINEATOR DETAILS
6	CHECK DAM DETAILS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1SE, C-01.03 (M), C-02.01(M), G-00.01 (M), T-21.02 (M)

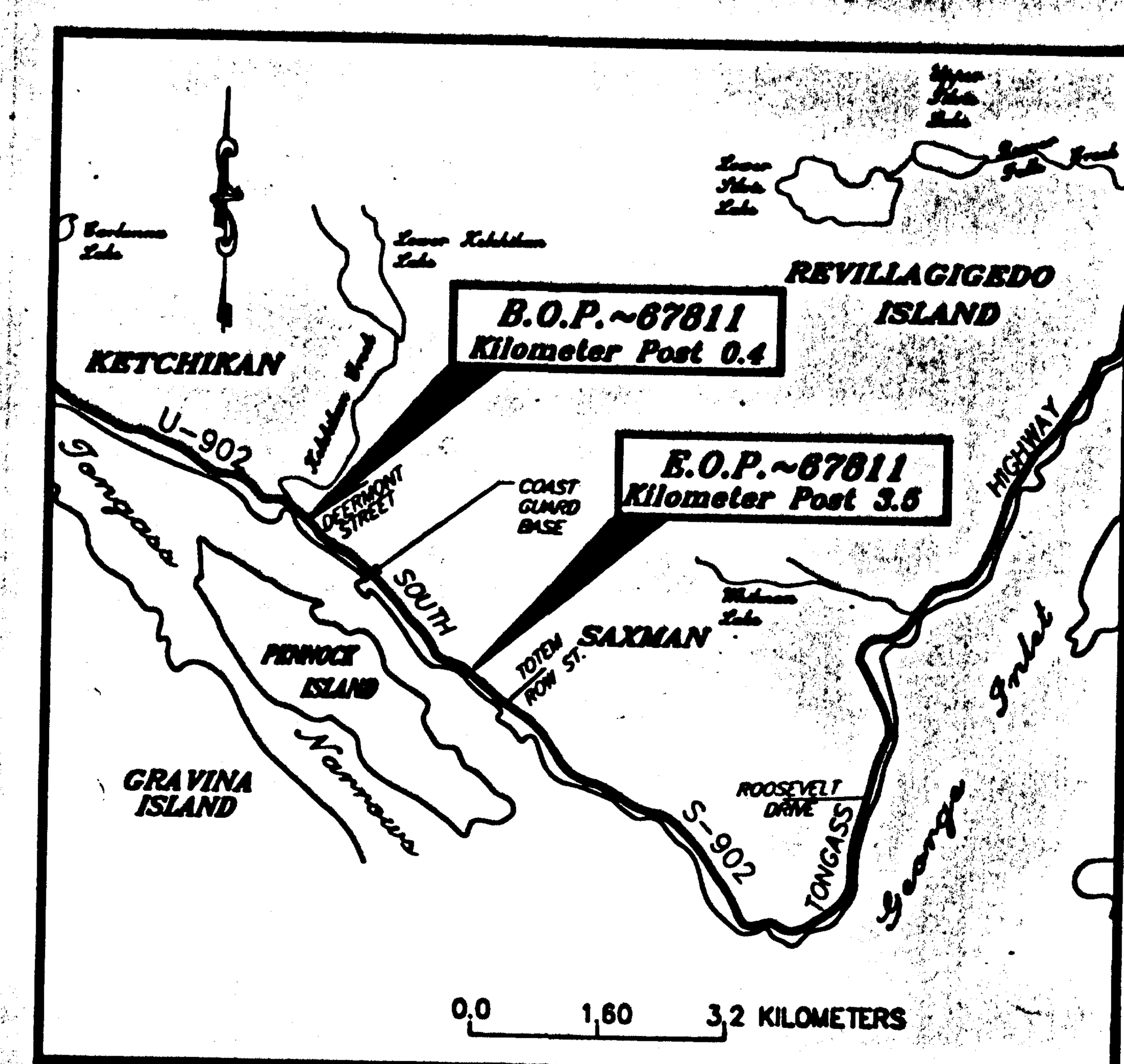
As Built Plans
Begin: 9-10-99 End: 8-15-00
Project Engineer: Allen Shepard
Contractor: South Coast Inc.

DESIGN DESIGNATION

ADT 1999 = 7,410
ADT 2004 = 8,520
DHV = 900
% T = 2.8%
V = 50 km (30 MPH) DEERMOUNT ST. TO C.G. BASE
70 km (45MPH) C.G. BASE TO SAXMAN
EAL'S = 200,000

PROJECT SUMMARY

CDS ROUTE NO. 291400
CDS 2.61 TO 4.0
LENGTH OF PROJECT & PAVING = 3.119km (1.87 Mi.)
WIDTH OF PAVING = 7.62 m (25 Ft.)



VICINITY MAP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

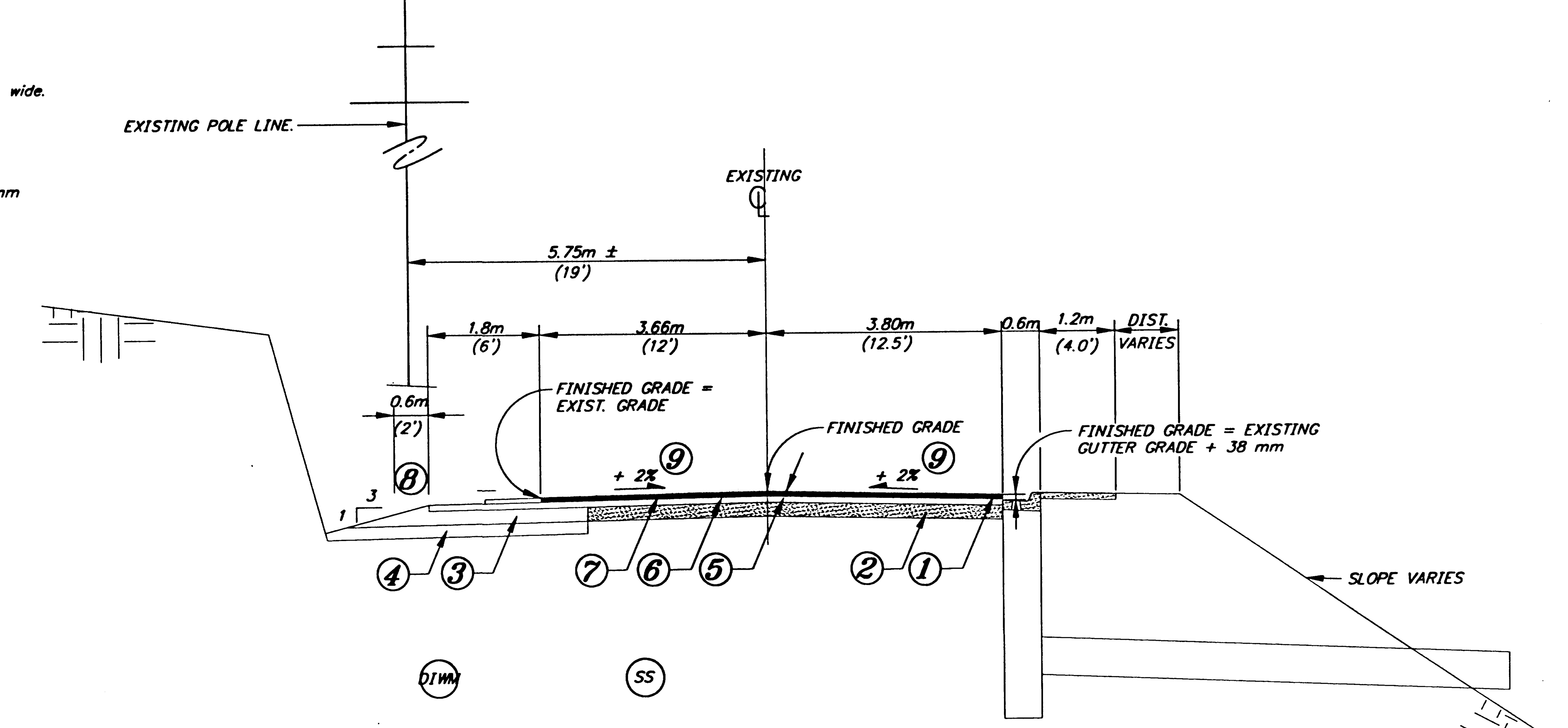
APPROVED ______ Date 7/7/99
Preconstruction Engineer

APPROVED ______ Date 7/7/99
Director, S.E. Region

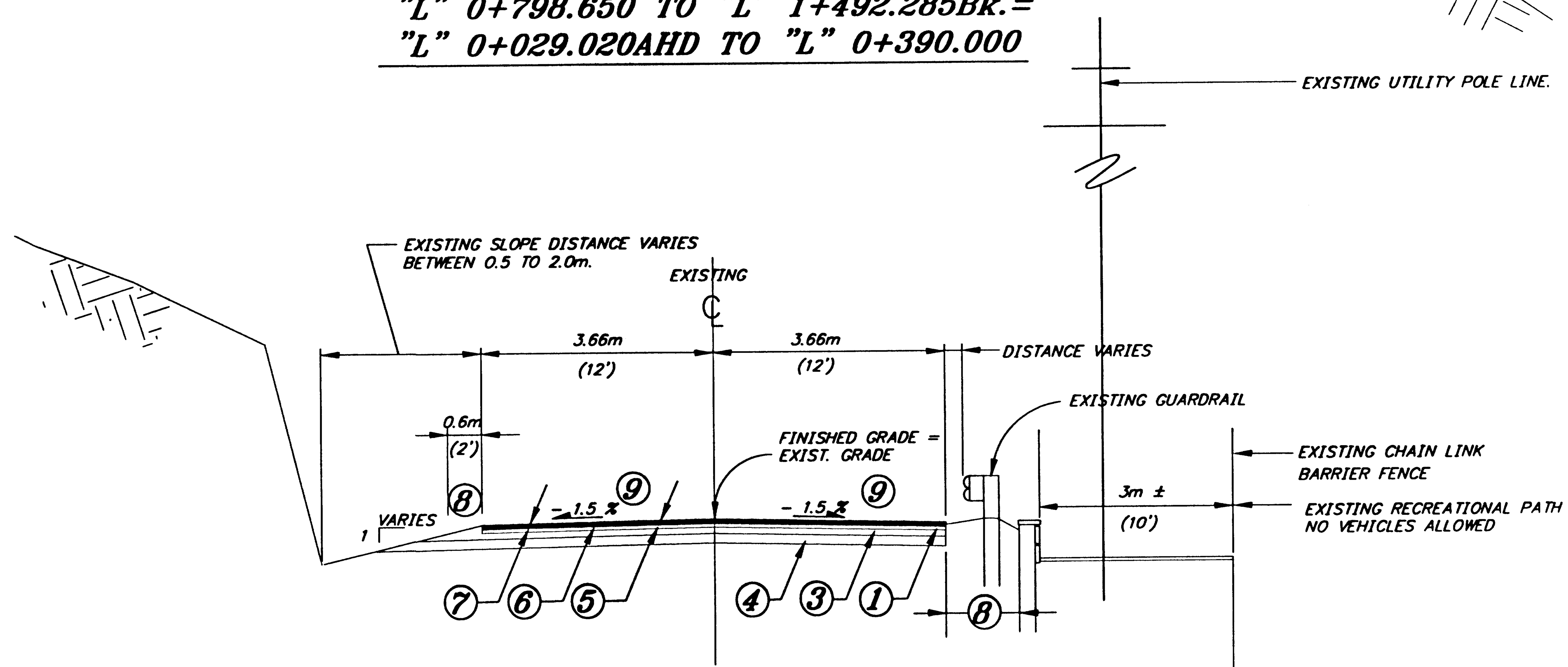
PROJECT NUMBER:	ENGINEER'S SEAL
67811	STATE OF ALASKA 49th Duane F. Boerfinger CE-7567 REGISTERED PROFESSIONAL ENGINEER
DATE: JULY 1999	
SHEET 1 OF 6	

LEGEND

1. 100 mm to 200 mm OF EXISTING ASPHALT PAVEMENT
2. 150 mm OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 6.7 m wide.
3. EXISTING BASE COURSE LAYER
4. EXISTING SUBBASE LAYER
5. 38 mm (1.5") OF ASPHALT COLD PLANING. RUTS DEEPER THAN 38 mm SHALL NOT BE PLANED, BUT SHALL BE FILLED AS THE PAVEMENT REQUIRED UNDER ITEM NO. 7 IS CONSTRUCTED.
6. STE-1 FOR TACK COAT
7. 38 mm (1.5") OF ASPHALT CONCRETE PAVEMENT
8. LINEAR GRADING. THE WIDTH OF LINEAR GRADING FROM STATION 10+00 TO 10+60 SHALL BE AS DIRECTED, APPROXIMATELY 2 METERS.
9. THESE RATES OF CROSS SLOPE AND THE EXISTING SUPER ELEVATION DATA SHALL BE USED UNLESS OTHERWISE DIRECTED AT THE PRE PAVING CONFERENCE. A PRE PAVING CONFERENCE IS REQUIRED BY SECTION 401 OF THE SPECIFICATIONS.



"L" 0+798.650 TO "L" 1+492.285Bk.= "L" 0+029.020AHD TO "L" 0+390.000



"L" 0+390.000 TO "L" 2+455.000

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\KTN\67811\DR\ -TYP2		
PLOT: PAPERSPACE: PLOT TO FIT HALF / PLOT TO FIT FULL		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN — ALASKA

S. TONGASS HWY. OVERLAY - DEERMOUNT STREET TO SAXMAN
FED. NO. STP-0902-(26 ~ PROJECT NO. 67811

TYPICAL SECTIONS

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 67811
DRAWN BY: K. KLEMMETSON	DATE: JULY 1999
CHECKED BY: D. DOERFLINGER	SHEET 2 OF 6

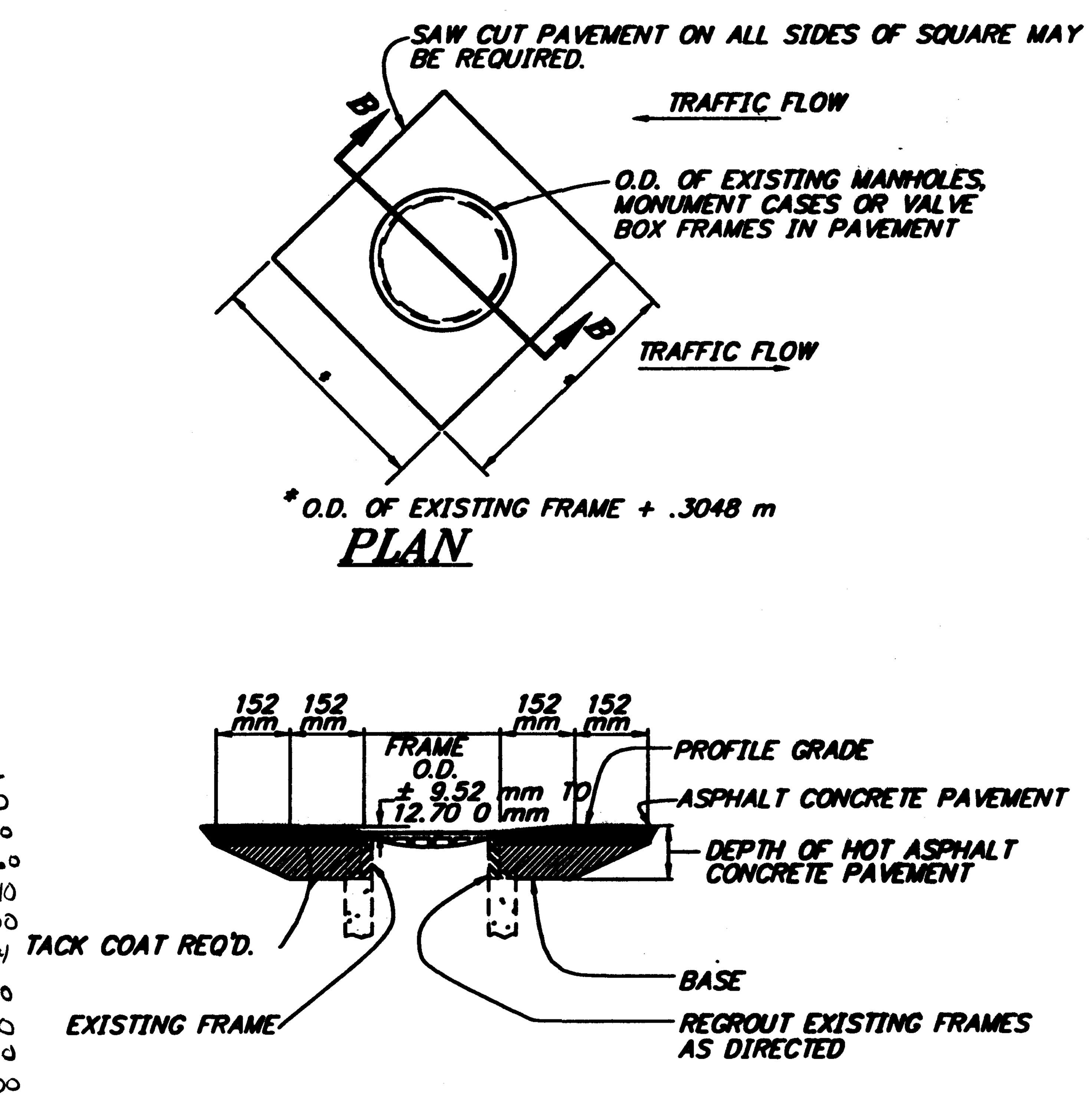
STATE OF ALASKA — Duane P. Doerflinger — CE-7567 — REGISTERED PROFESSIONAL ENGINEER

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY	Amount
120(1)	DBE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.	
202(14)	SAW CUTS	METER	~~20~~ 36.3	
203(11)	LINEAR GRADING	KILOMETER	~~10~~ 11.40	
401(1)	ASPHALT CONCRETE, TYPE II, CLASS B	MEGAGRAM	3,500 2781.14	
401(2)	ASPHALT CEMENT, GRADE PG 58-28	MEGAGRAM	Del. ~~210~~ CO#3	
402(1)	STE-1 ASPHALT FOR TACK COAT	MEGAGRAM	~~11~~ 3.05	
408(1)	ASPHALT COLD PLANING	SQUARE METER	Del. ~~24,250~~ CO#3	
604(4)	ADJUST EXISTING MANHOLE	EACH	~~18~~ 16	
606(13)	REMOVAL AND INSTALLATION OF GUARDRAIL REFLECTORS, TYPE A	LUMP SUM	ALL REQUIRED	
615(5)	DELINEATOR, FLEXIBLE	EACH	~~25~~ 22	
627(10)	ADJUSTMENT OF VALVE BOX	EACH	27	
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED	
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED	
641(3)	EROSION AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED	
641(4)	TEMPORARY SEDIMENT FILTER	EACH	~~15~~ 9	
641(5)	TEMPORARY ROCK CHECK DAM	EACH	~~5~~ 0	
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED	
642(9)	REFERENCE EXISTING MONUMENT	EACH	~~15~~ 7	
642(11)	ADJUST EXISTING MONUMENT CASE	EACH	Deleted 10 CO#9	
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED	
643(3)	PERMANENT CONSTRUCTION SIGN	LUMP SUM	ALL REQUIRED	
643(14)	INTERIM PAVEMENT MARKING	KILOMETER	~~3.2~~ 5.4	
643(15)	FLAGGING	HOUR	~~300~~ 964	
643(18)	WATERING	KILOLITER	~~100~~ 0	
643(19)	LANE CLOSURE	HOUR	~~150~~ 304.5	
643(28)	POWER BROOMING	HOUR	~~10~~ 50	
670(10)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQUIRED	
670(11)	METHYL METHACRYLATE TRANSVERSE PAVEMENT MARKING LINES	SQUARE METER	Deleted ~~18~~ CO#6	
670(13)	REMOVAL AND DISPOSAL OF RECESSED METAL PAVEMENT MARKING FRAMES	LUMP SUM	ALL REQUIRED	
202(1)	Removal of Structures & Obstructions CO#8	LS /	All Req'd	$7,379.00
401(9)	AMHS Terminal Paving CO#2	LS /	All Req'd	11,868.00
401(10)	PreLevel Hot Asphalt Paving CO#3	Mg / $60.00	655.41	39,324.60
401(11)	Asphalt Cement PG 58-22 CO#3	Mg / $210.00	179.04	37,598.40
401(12)	Maintenance Asphalt CO#7	LS /	All Req'd	14,628.00
408(2)	Cold Asphalt Planing, 50 mm Depth CO#3	SM / $2.30	23,417.8	53,860.94
603(1-450)	450 mm C.S.P. CO#1	LS /	All Req'd	7,800.00
604(8)	Supply New Manhole Frames & Lids CO#4	LS /	All Req'd	2,509.00
627(11)	Reconstruct Existing Valve Boxes CO#5	LS /	All Req'd	6,900.00
642(12)	Replace Existing Monuments & Cases CO#9	LS /	All Req'd	9,084.00
670(14)	Temp. Pavement Markings CO#6	LS /	All Req'd	13,500.00

BASIS OF ESTIMATE

ITEM NO.	ITEM	FACTOR OR QUANTITY
401 (1)	ASPHALT CONCRETE PAVEMENT	2,500 g/m²/mm (116# /SY/INCH DEPTH)
401 (2)	ASPHALT CEMENT	6% OF 401(1)
402 (1)	STE-1 ASPHALT TACK COAT	0.360 L/m² 975 L/mg (0.8 GAL/SY - 240 GAL/TON @ 60 F)
408 (1)	ASPHALT COLD PLANING	APPROXIMATELY 900 m³ TO STOCKPILE
604 (4)	ADJUST EXISTING MH	10 MH(S) HAVE 760 MM LIDS, 1 HAS A 1050 MM LID, & 2 HAVE 1200 MM SQ. CONC. LIDS. ALL MH LIDS SALL BE REPLACED. SEE JOHN KLEINEGGER WITH KPU FOR REPLACEMENT CONC. LIDS TO INSTALLED. THE 10 - 760 MM LIDS SHALL BE REPLACED WIT OLYMPIC FOUNDRY FRAME & COVER # MH30D/T
615 (5)	DELINEATORS, FLEXIABLE	10 TYPE A & 15 TYPE B
627 (10)	ADJUSTMENT OF VALVE BOX	21 @ 150 mm AND 6 @ 100 mm
670(10 & 11)	METHYL METHACRYLATE PAVE'T MARKINGS	7 km OF 100 mm WHITE, 6.2 km OF 100 mm DOUBLE YELLOW.
670 (13)	REMOVAL & DISPOSAL OF RECESSED METAL PAVEMENT MARKING FRAMES	APPROXIMATELY 150 METAL MARKERS



SECTION B-B

FRAME ENCASEMENT DETAIL

GENERAL NOTES

1 ALL EXISTING DRIVEWAYS AND CITY STREETS SHALL BE PLANED TO FORM A VERTICAL MATCH JOINT AT 3.66 METERS. UNPAVED DRIVEWAYS OR STREET APPROACHES SHALL BE REGRADED TO MATCH THE NEW PAVED SURFACE WITH RAP AS DIRECTED.

2 THE PROPOSED PAVED SURFACE SHALL MATCH THE EXISTING PAVED SURFACE AT THE BOP AND THE EOP. THESE MATCH JOINTS SHALL BE COMPLETED BY MAKING A SAW CUT 38 MM DEEP AND HAND CHIPPING THE EDGE LEFT BY COLD PLANING OPERATION TO FORM A VERTICAL MATCH JOINT THAT'S ACCEPTABLE TO THE ENGINEER.

3 THE CONTRACTOR SHALL REFERENCE ALL THE EXISTING PAVEMENT MARKINGS PRIOR TO BEGINNING ANY COLD PLANING WORK. THE EXISTING MARKINGS, INCLUDING ANY NO PASSING GROOVE(S), SHALL BE REFERENCED ON COPIES OF THE PLANS AND PROVIDED TO THE ENGINEER.

4 EXISTING PLASTIC AND CAST IRON RECESSED PAVEMENT MARKERS EXIST WITHIN THE PROJECT LIMITS.

5 THE CITY OF KETCHIKAN HAS AN ORDINANCE PERTAINING TO NOISE LEVELS IN RESIDENTIAL AREAS BETWEEN THE HOURS OF 11 PM AND 6 AM. IF THE CONTRACTOR PLANS TO COMPLETE ANY WORK DURING THOSE HOURS HE SHALL COMPLY WITH THE CITY'S ORDINANCES.

EROSION & SEDIMENT CONTROL NOTES

1 KETCHIKAN IS LOCATED IN THE SOUTHERN PORTION OF SOUTHEAST ALASKA, IN A MARITIME CLIMATE. SUMMERTIME TEMPERATURES VARY FROM 7 TO 18 DEGREES C ((44) to 65 DEGREES F) WITH AN EXTREME HIGH OF 68 DEGREES C (90 DEGREES F). THE AVERAGE ANNUAL RAINFALL IN KETCHIKAN IS 5100 MM (200 INCHES) PER YEAR.

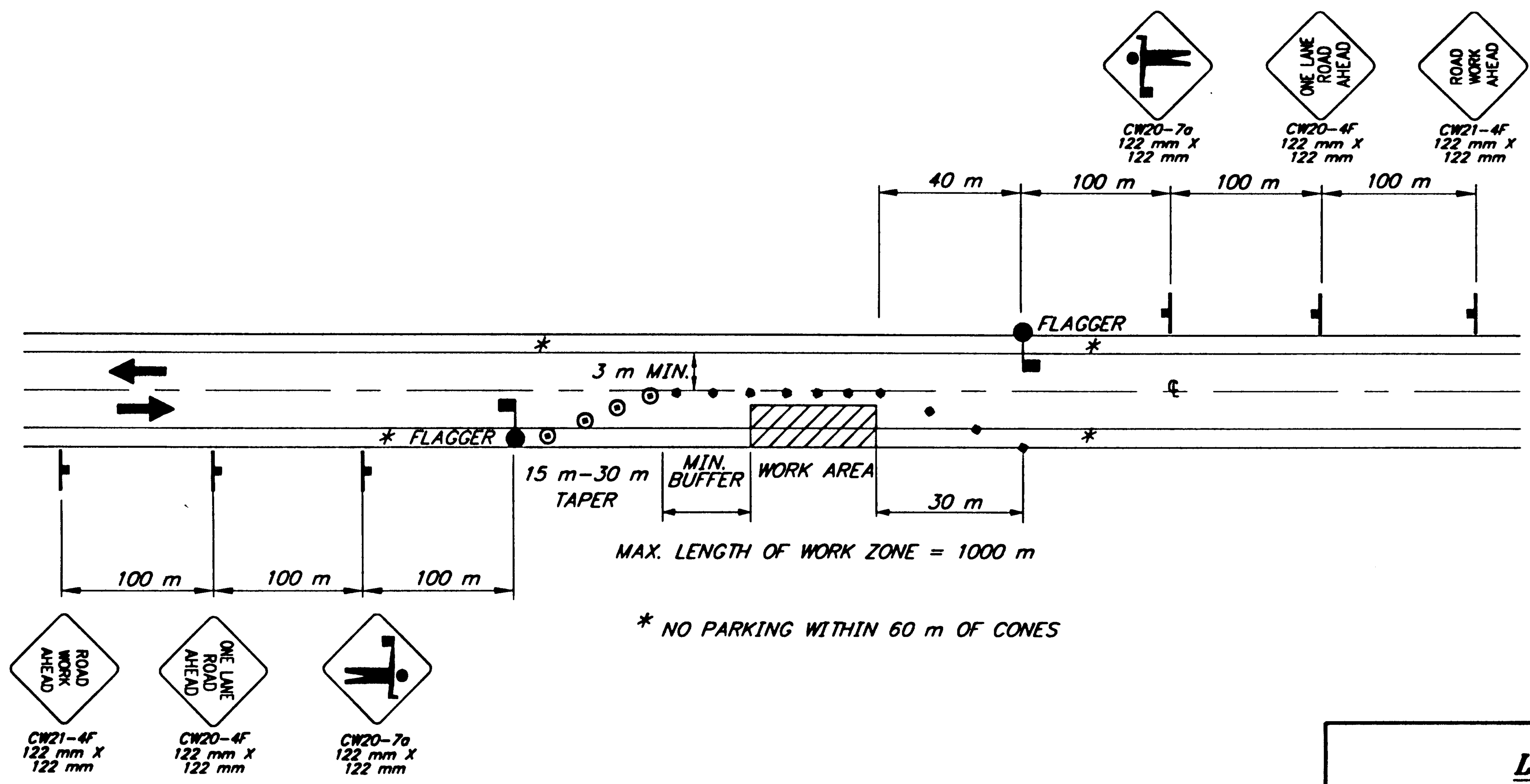
2 THERE WILL BE LESS THAN 2 ha OF THE EARTH'S SURFACE EXPOSED BY THIS PROJECT.

3 PRIOR TO BEGINNING ANY WORK THE TEMPORARY SEDIMENT FILTERS AND TEMPORARY CHECK DAMS SHALL BE INSTALLED. TEMPORARY SEDIMENT FILTERS SHALL BE INSTALLED IN EACH EXISTING CATCH BASIN AND TEMPORARY CHECK DAMS SHALL INSTALLED WHEREVER THE EXISTING DITCH OUTFALL INTO A WATERCOURSE THAT LEADS TO TONGASS NARROWS. THE TEMPORARY SEDIMENT FILTER(S) AND CHECK DAM(S) SHALL BE MAINTAINED ON A WEEKLY BASIS TO THE SATISFACTION OF T THE ENGINEER. SHEET 6 CONTAINS A DETAIL FOR CONSTRUCTING TEMPORARY CHECK DAMS.

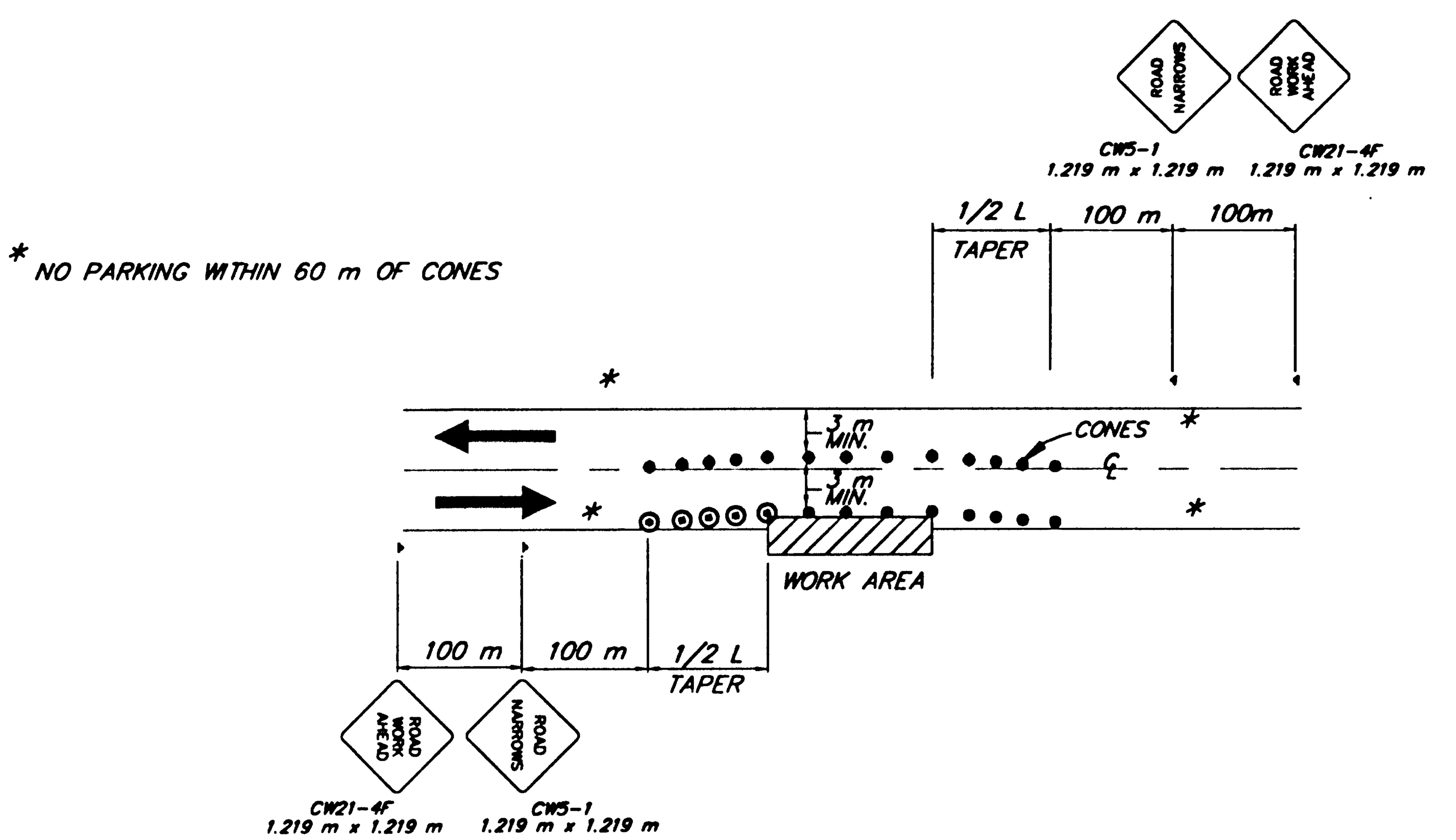
PERMANENT EROSION AND SEDIMENT CONTROL NOTES

1 PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIST OF PAVING A FEW MORE SQUARE METERS OF THE ERODIABLE SOILS WITHIN THE EXISTING ROW.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



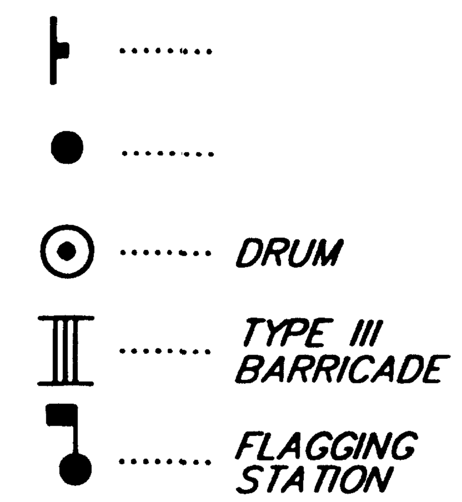
SINGLE LANE CLOSURE TWO LANE ROAD



ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 3 METERS TO CENTERLINE) THE SIGNS AND CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

LEGEND



L= W x T

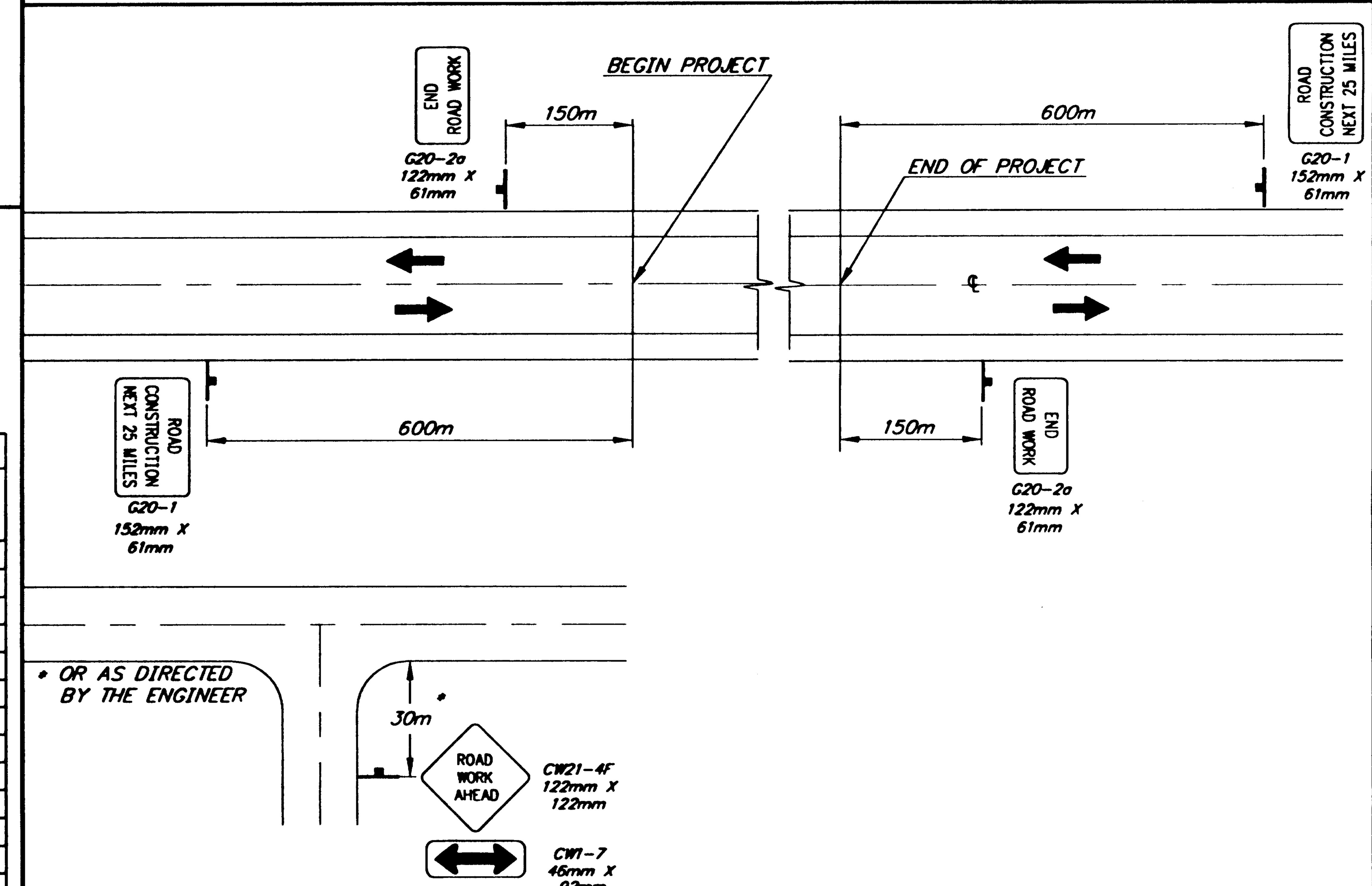
WHERE:
L= LENGTH OF TAPER
W= WIDTH OF OFFSET
T= TAPER FACTOR

TCP TABLE SETUP

SPEED (KILOMETERS PER HOUR)	SPEED (MILES PER HOUR)	BUFFER/ LENGTH (m)	CONE/DRUM SPACING (m)	TAPER FACTOR (T)
25	16	9	5	4:1
30	19	11	6	6:1
35	22	14	7	8:1
40	25	17	8	10:1
45	28	21	9	13:1
50	31	26	10	16:1
55	34	35	11	19:1
60	37	43	12	23:1
65	40	52	13	27:1
70	43	62	14	32:1
75	47	75	15	47:1
80	50	85	16	50:1
85	53	98	17	53:1
90	56	110	18	56:1

TRAFFIC CONTROL NOTES

1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
2. TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
3. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 4m.
4. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
5. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS OR WHEN DIRECTED.
6. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS LESS THAN 100m AND VISIBLE FROM THE FLAGGER STATION. A SINGLE FLAGGER WILL BE REQUIRED AT MAJOR APPROACH ROADS WHEN DIRECTED.
7. CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
8. THE MAXIMUM LENGTH OF A WORK ZONE SHALL BE 1000 m. THE MAXIMUM VEHICLE DELAY SHALL BE 5 MINUTES. IF THE SHORTENED WORK ZONE DOES NOT REDUCE THE DELAY TO LESS THAN 5 MINUTES THE CONTRACTOR SHALL RESCHEDULE HIS WORK TO A TIME WITH LESS TRAFFIC.
9. THE CONTRACTOR SHALL PROTECT PEDESTRIANS AND BIKERS FROM FUMES, DUST, DEBRIS, OR WATER THAT ARE A RESULT OF THIS CONSTRUCTION ACTIVITY.
10. PEDESTRIAN AND BICYCLE TRAFFIC ACESS SHALL BE MAINTAINED AT ALL TIMES.
11. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
12. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, GRINDING, PAVINING, AND CHANGES IN THE LANE CONFIGURATIONS.
13. TWO WAY TWO LANE TRAFFIC SHALL BE MAINTAINED FROM 7:30 TO 8:30 AM AND 4:30 TO 6:00 PM.



PERMANENT CONSTRUCTION SIGNING

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\KTN\67811\DR\-TCP1		
PLOT: PLOT HALF TO FIT/ FULL TO FIT		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

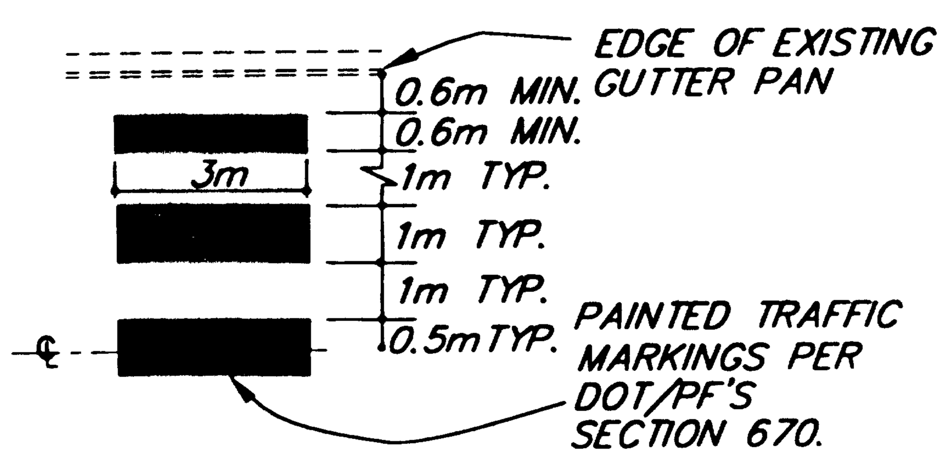
JUNEAU — ALASKA

S. TONGASS HWY. OVERLAY
DEERMOUNT STREET TO SAXMAN
FED. NO. STP-0902(26) ~ PROJECT NO. 67811

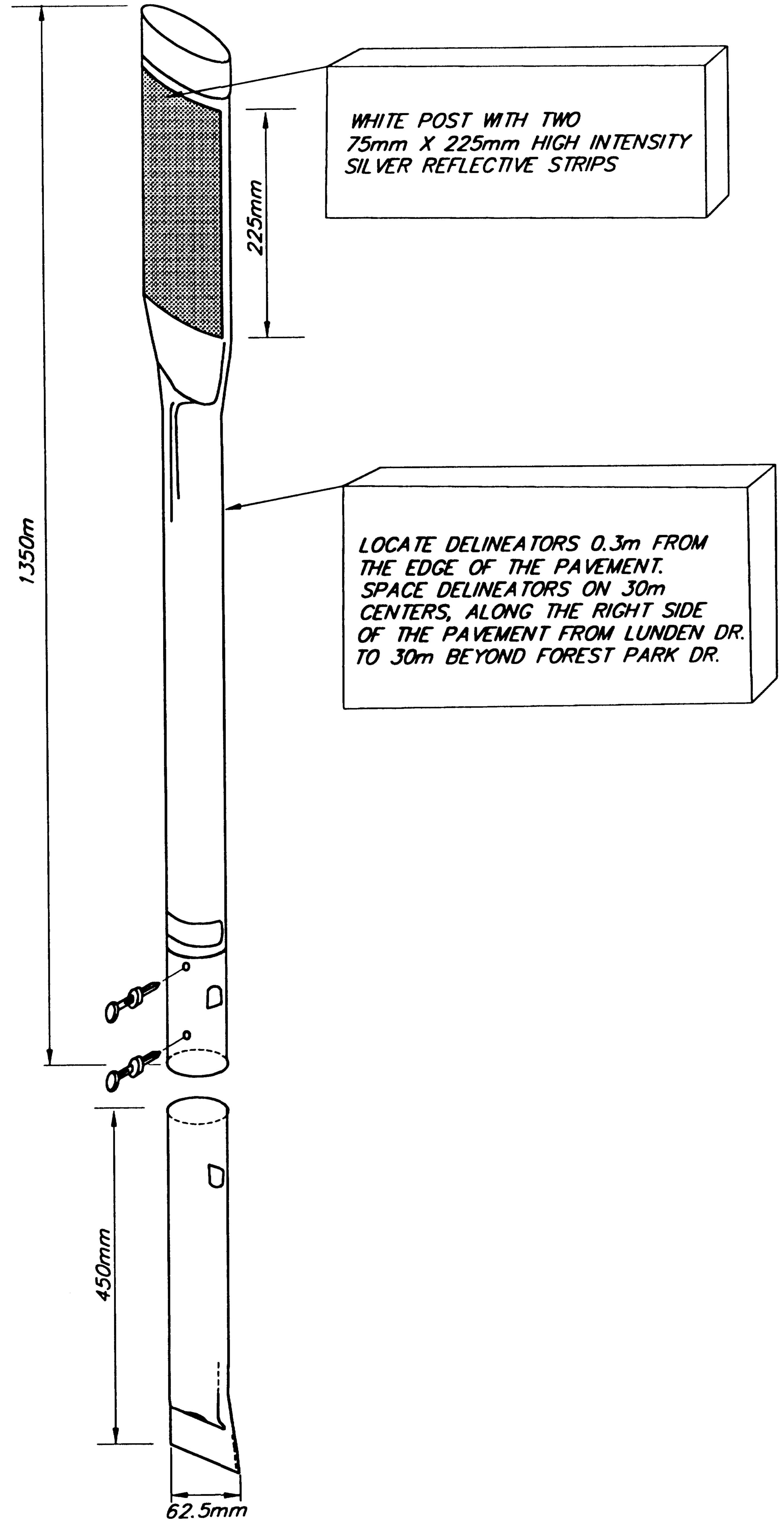
TRAFFIC CONTROL PLAN

DESIGNED BY: K. MATTSON	PROJECT NO. 67811
DRAWN BY: K. KLEMMETSON	DATE: JULY 1999
CHECKED BY: M. LUKSHIN	SHEET 4 OF 6

STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER



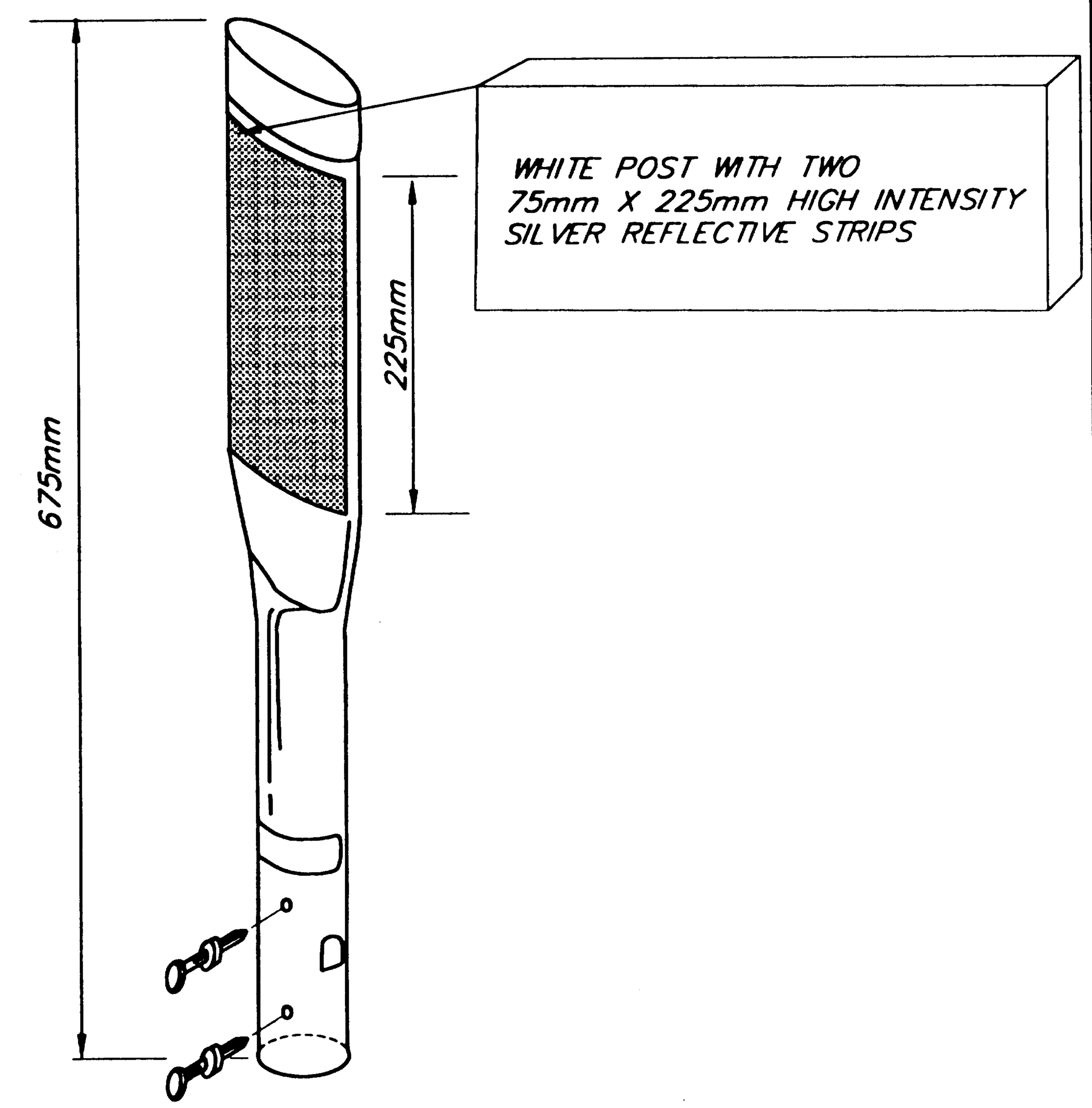
TRANSVERSE CROSSWALK MARKING DETAIL AT DEERMOUNT ST.



TYPE "A" FLEXIBLE RDWY DELINEATOR (ALONG STH)

FLEXIBLE DELINEATORS NOTES

1. APPROXIMATELY TYPE "A" DELINEATORS ARE REQUIRED AND APPROXIMATELY 12 TYPE "B" DELINEATORS ARE REQUIRED.
2. GUARDRAIL ENDS SHALL BE MARKED WITH TYPE "B" DELINEATORS. STEEL POST GUARDRAIL SHALL BE DRILLED PRIOR TO SECURING DELINEATOR WITH SELF TAPPING SCREWS.



TYPE "B" FLEXIBLE GUARDRAIL DELINEATOR (AT GUARDRAIL ENDS)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

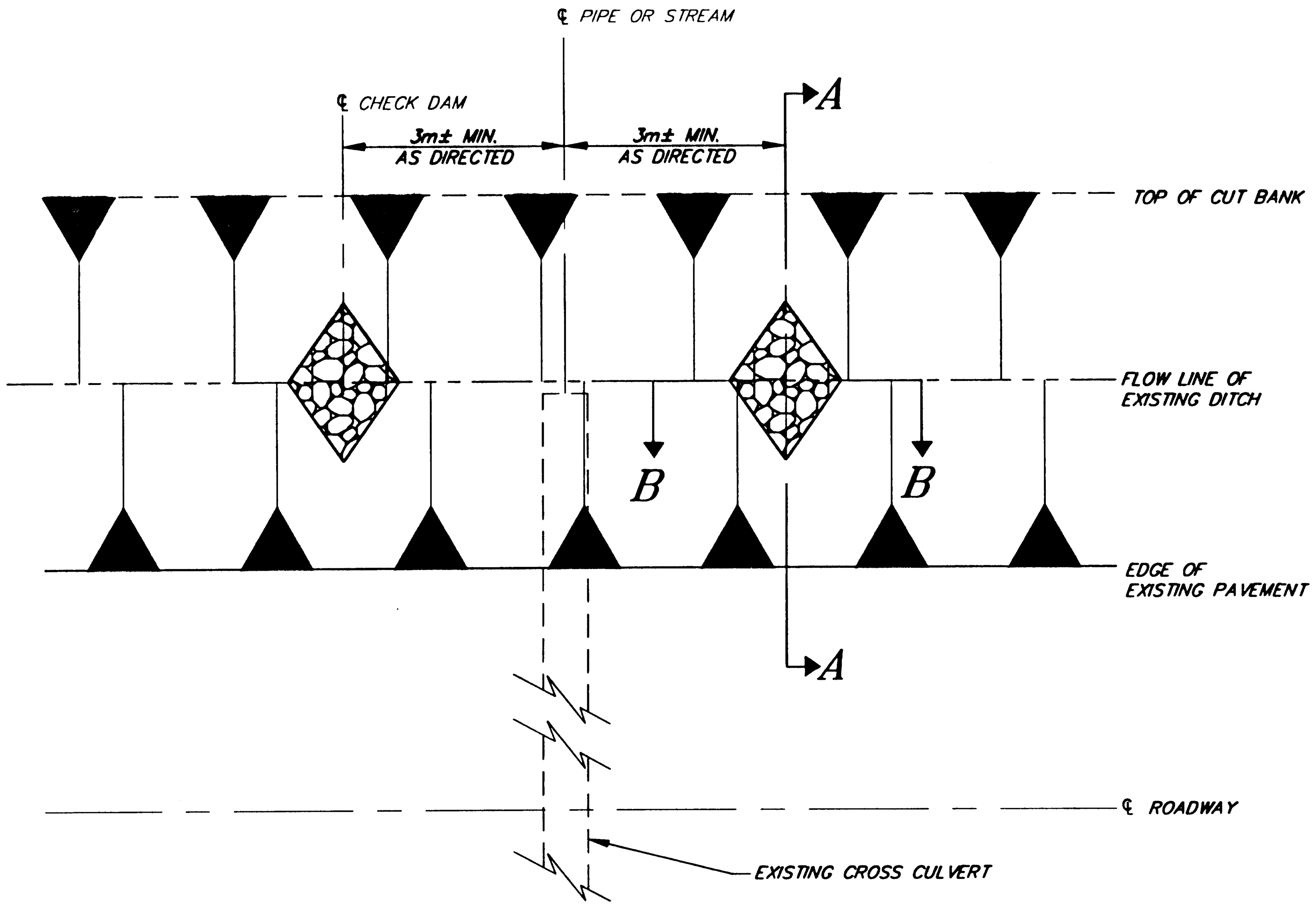
PATH: Q: \JNU\67811\DR\-MISDET2		
PLOT: PLOT: HALF TO FIT / FULL TO FIT		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

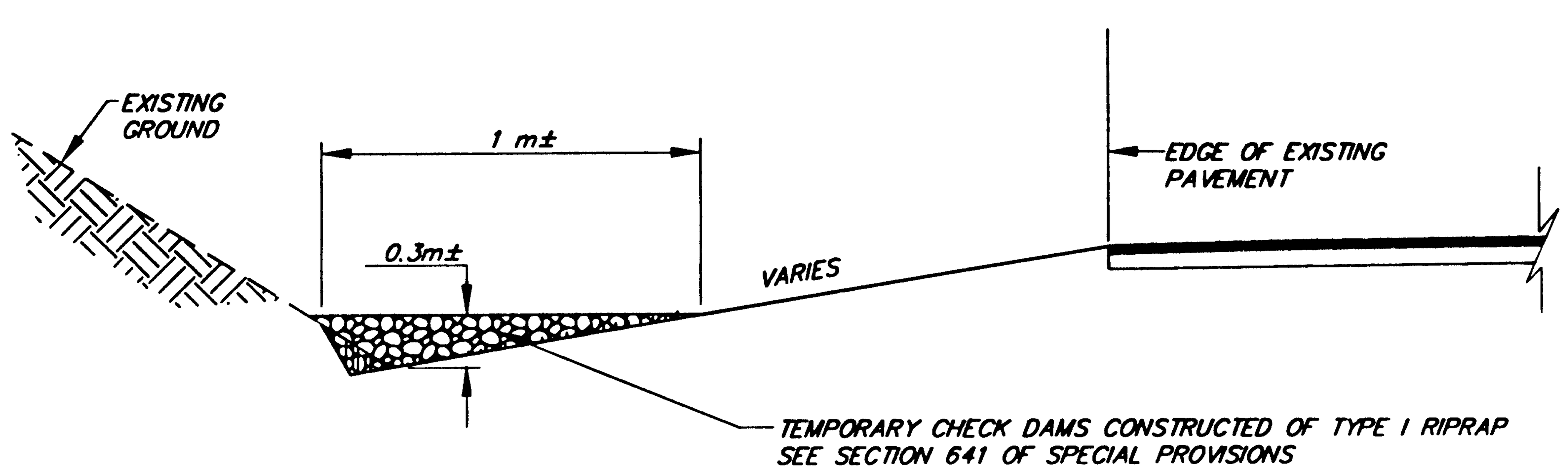
KETCHIKAN — S. TONGASS HWY. OVERLAY - DEERMOUNT STREET TO SAXMAN — ALASKA
FED No. STP-0902(26)~ PROJECT No. 67811
DELINEATOR DETAILS

DESIGNED BY:	M. Lukshin	67811
DRAWN BY:	K. Klemmetson	DATE: July 1999
CHECKED BY:	E. CAVAGNARO	SHEET 5 OF 6

STATE OF ALASKA · 49th · Michael Lukshin · CE-8737 · REGISTERED PROFESSIONAL ENGINEER



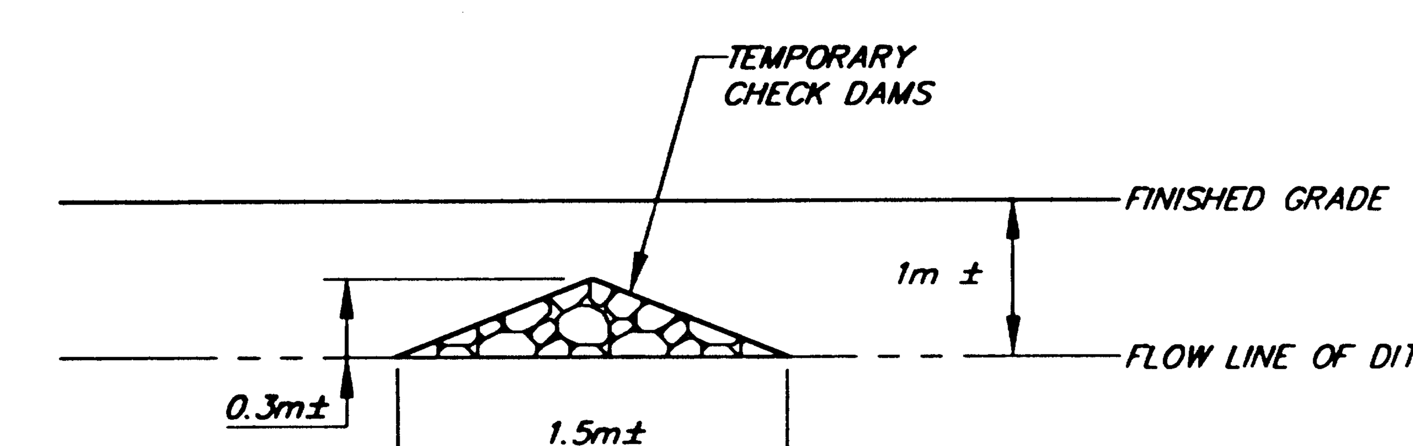
PLAN



SECTION A-A

NOTES

1. THE TEMPORARY CHECK DAMS SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION SO THAT SEDIMENT DOES NOT REACH TONGASS NARROWS.
2. THE TEMPORARY CHECK DAMS SHALL NOT BE REMOVED UNTIL THE FINAL PAVING IS COMPLETED.



SECTION B-B

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\KTN\67811\DR\-DET2 PLOT: HALF TO FIT / FULL TO FIT

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN — ALASKA

S. TONGASS HWY. OVERLAY – DEERMOUNT STREET TO SAXMAN
STP-0970 (2) ~ PROJECT NO. 71637

CHECK DAM DETAILS

DESIGNED BY: E. CAVAGNARO	PROJECT NO. 67811
DRAWN BY: E. CAVAGNARO	DATE: JULY 1999
CHECKED BY: D. DOERFLINGER	SHEET 6 OF 6