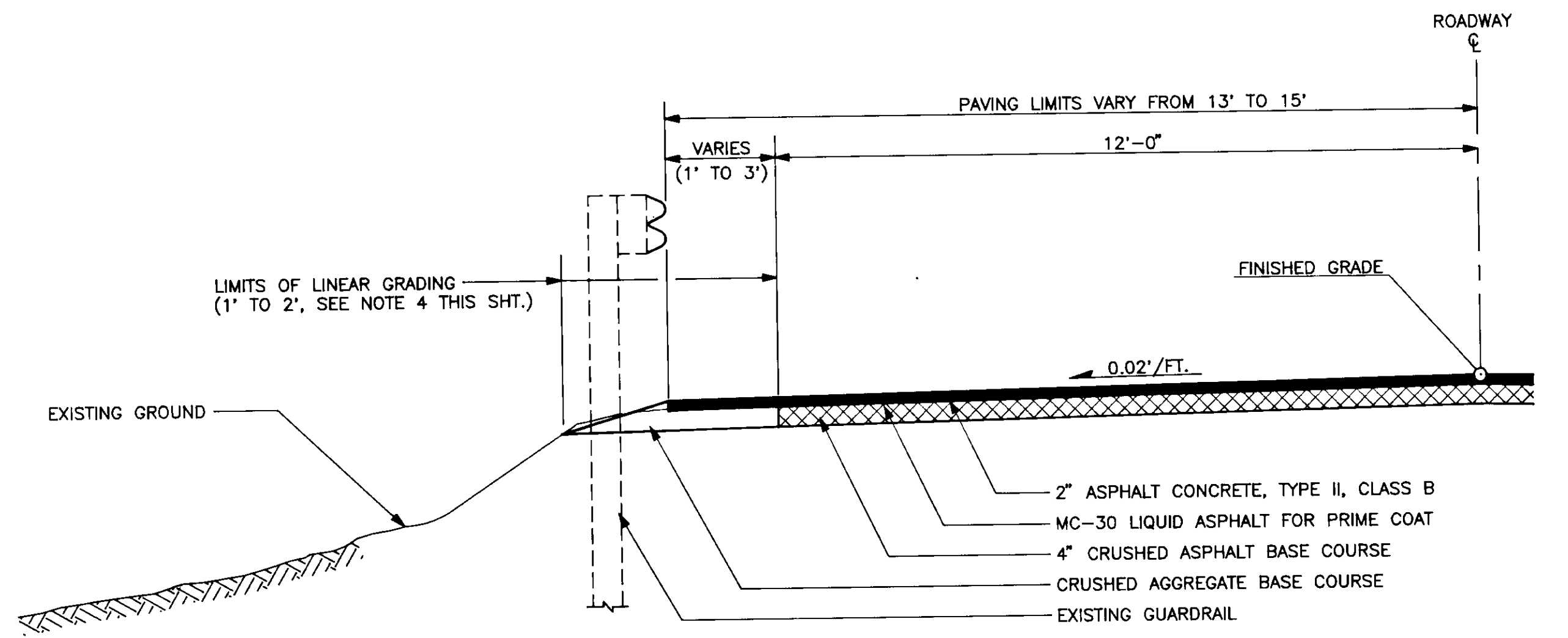
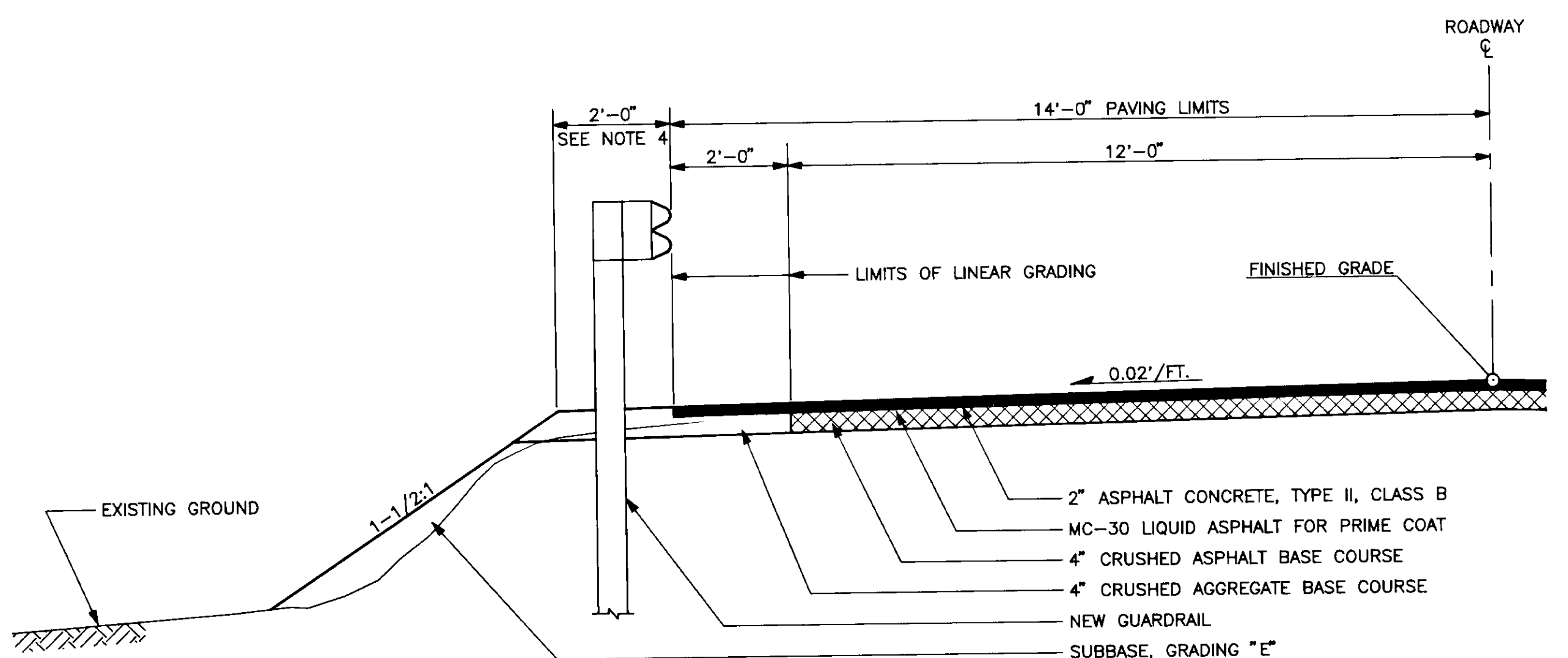


TYPICAL SECTION OF IMPROVEMENT - STA. 509+30 TO STA. 843+09



TYPICAL SECTION IN AREAS OF EXISTING GUARDRAIL



TYPICAL SECTION IN AREAS OF NEW GUARDRAIL

RECONSTRUCTION AREAS	
BEGIN STATION	END STATION
509 + 50	510 + 00
530 + 00	531 + 00
588 + 00	592 + 00
694 + 00	695 + 00
700 + 00	706 + 00

TYPICAL SECTION NOTES

1. THE DEPTH OF PULVERIZING FOR CRUSHED ASPHALT BASE COURSE SHALL BE 4 INCHES, AS MEASURED FROM THE SURFACE OF THE EXISTING PAVEMENT.
2. THE EXISTING PAVEMENT DEPTH VARIES FROM 1 INCH TO 1-1/2 INCHES.
3. IN RECONSTRUCTION AREAS AND OTHER AREAS WHERE IMPORTED AGGREGATE IS REQUIRED, THE DEPTH OF CRUSHED ASPHALT BASE COURSE SHALL BE INCREASED AS NECESSARY. HOWEVER, THE DEPTH OF PULVERIZATION OF THE EXISTING ASPHALT AND BASE MATERIAL SHALL REMAIN AT 4 INCHES BELOW THE EXISTING PAVEMENT SURFACE.
4. AFTER REGRADING OF THE FORESLOPES TO MATCH THE TOP OF THE NEW PAVEMENT, PRIME COAT SHALL BE APPLIED TO THE FORESLOPE IN GUARD RAIL AREAS. THE AREA TO BE PRIMED SHALL BE FROM THE EDGE OF THE NEW PAVEMENT TO SIX INCHES BEYOND THE BACK OF THE GUARD RAIL POSTS.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

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

PETERSBURG
MITKOF HIGHWAY RECONSTRUCTION
TYPICAL SECTION

PREPARED BY
ARCTIC SLOPE CONSULTING GROUP, INC.
Engineers • Architects • Scientists • Surveyors

DESIGNED BY:	J.M.M.B.	SCALE	NOT TO SCALE
DRAWN BY:	J.E.M.	DATE:	SEPT. 1991
CHECKED BY:	D.L.M.	SHEET	2 OF 11



ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
120 (1)	DBE ADJUSTMENT	C. S.	ALL REQ'D
202 (4)	REMOVAL OF CULVERT PIPE	L. F.	1723
207 (1)	LINEAR GRADING	STATION	341
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	3,800
304 (1)	SUBBASE, GRADING "E"	TON	12,600
308 (1)	CRUSHED ASPHALT BASE COURSE	S. Y.	87,100
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS B	TON	10,700
401 (2)	AC-5 ASPHALT CEMENT	TON	642
403 (1)	MC-30 LIQUID ASPHALT FOR PRIME COAT	TON	102
602 (2)	STRUCTURAL PLATE PIPE-ARCH SPAN 11'-5", RISE 7'-3", 8 GA. WITH 7 GA. INVERT PL'S	L. F.	100
603 (17-18)	18 INCH PIPE	L. F.	105
603 (17-24)	24 INCH PIPE	L. F.	560
603 (17-30)	30 INCH PIPE	L. F.	488
603 (17-36)	36 INCH PIPE	L. F.	62
603 (17-42)	42 INCH PIPE	L. F.	222
603 (17-48)	48 INCH PIPE	L. F.	258
603 (17-60)	60 INCH PIPE	L. F.	68
603 (17-66)	66 INCH PIPE	L. F.	118
606 (1)	W-BEAM GUARDRAIL	L. F.	900
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	L. F.	358
606 (6)	END ANCHORAGES	EACH	4
611 (1)	RIPRAP, CLASS II	C. Y.	56
615 (1)	STANDARD SIGNS	S. F.	79.5
637 (1)	BACKWATER CONTROL STRUCTURES	EACH	2
639 (1)	RESIDENCE DRIVEWAYS	EACH	2
639 (2)	SERVICE DRIVEWAYS	EACH	2
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	HOUR	10
643 (2)	TRAFFIC MAINTENANCE	L. S.	ALL REQ'D
643 (3)	PERMANENT CONSTRUCTION SIGNING	L. S.	ALL REQ'D
643 (4)	CONSTRUCTION SIGN	EA/DAY	822
643 (5)	TYPE II BARRICADE	EA/DAY	1,096
643 (7)	TRAFFIC CONE	EA/DAY	6,850
643 (13)	TEMPORARY PAVEMENT MARKING	STATION	335
643 (15)	FLAGGING	HOUR	2,190
643 (18)	WATERING	M-GAL	200
644 (1)	FIELD OFFICE	L. S.	ALL REQ'D
644 (2)	FIELD LABORATORY	L. S.	ALL REQ'D
645 (1)	TRAINING PROGRAM	MAN-HOUR	500
670 (1)	PAINTED TRAFFIC MARKINGS	L. S.	ALL REQ'D
670 (8)	RECESSED PAVEMENT MARKERS	EACH	457

BASIS OF ESTIMATE

ITEM	DESCRIPTION	ESTIMATING FACTOR
301(1)	CRUSHED AGGREGATE BASE COURSE	1.96 TONS/CY
304(1)	SUBBASE, GRADING E	1.96 TONS/CY
401(1)	ASPHALT CONCRETE, TYPE II	116 LBS/SY-IN
401(2)	AC-5, ASPHALT CEMENT	6% OF 401(1)
403(1)	MC-30 LIQUID ASPHALT FOR PRIME COAT	APPLICATION RATE 0.30 GAL/SY; 256 GAL/TON

HORIZONTAL & VERTICAL CONTROL POINTS

MONUMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
MH-36A	506+01.5	12.0 FT. LT	67958.760	212691.244	97.47
MH-37-1	512+37.7	11.4 FT. LT	67397.936	212991.692	106.62
MH-38-1	537+56.7	12.0 FT. LT	65261.405	214320.106	118.73
MH-39-1	556+24.2	12.0 FT. LT	63653.237	215267.632	61.05
MH-40-1	581+49.0	10.6 FT. RT	61159.389	215671.725	56.73
MH-41-1	599+60.4	10.2 FT. RT	59498.545	216395.003	106.21
MH-42-1	633+93.9	11.9 FT. RT	56379.031	217829.349	105.85
MH-43-1	666+55.4	11.5 FT. RT	53416.491	219193.593	94.15
MH-44-1	687+11.8	11.4 FT. RT	51548.989	220055.238	68.73
MH-45-1	696+74.5	16.1 FT. RT	50764.515	220613.254	49.50
MH-46-1	709+01.0	11.4 FT. RT	49914.982	221496.948	35.49
MH-47-1	716+53.8	11.1 FT. LT	49633.847	222195.121	51.05
MH-48-1	742+18.1	8.8 FT. LT	48680.510	224575.023	44.93
MH-49-1	760+44.3	11.3 FT. RT	47694.346	226112.430	48.62
MH-50-1	784+70.8	11.6 FT. RT	46430.951	228183.799	28.52
MH-51-1	798+07.0	11.5 FT. LT	46177.592	229494.069	36.10
MH-52-1	842+63.4	13.3 FT. RT	44466.667	233609.198	38.35

DRIVEWAY GEOMETRY SUMMARY

STATION	LOCATION	WIDTH	PAVEMENT RETURN RADIUS	REMARKS
530+54	RT	15'	25'	SERVICE (TELE-COMMUNICATIONS SITE)
551+90	RT	15'	25'	RESIDENTIAL
583+91	RT	15'	25'	RESIDENTIAL
623+91	LT	15'	25'	SERVICE (RECREATIONAL SHOOTING RANGE)

GENERAL NOTES:

- HORIZONTAL CONTROL:** THE BASIS OF HORIZONTAL CONTROL IS THE LINE OF SIGHT BETWEEN CONTROL POINT MONUMENTS "MH-37-1" AND "MH-38-1" WITH A BEARING OF S 31° 52' 18" E.

THE BASIS OF COORDINATES IS THE CONTROL POINT MONUMENT "MH-37-1" WITH ISOLATED COORDINATES OF N 67397.936 AND E 212991.692.
- VERTICAL CONTROL:** THE BASIS OF VERTICAL CONTROL IS THE TOP OF THE CONTROL POINT MONUMENT "MH-37-1" WITH AN ASSUMED ELEVATION OF 106.62 FEET.
- THE B.O.P. IS LOCATED AT THE STRIPED CENTERLINE OF MITKOF HIGHWAY AT AN APPROXIMATE BEARING AND DISTANCE OF N 30° 22' 18" W, 307.923 FEET FROM CONTROL POINT MONUMENT "MH-37-1". THE E.O.P. IS LOCATED AT THE STRIPED CENTERLINE OF MITKOF HIGHWAY AT THE END OF THE EXISTING PAVEMENT.
- THE CONTROL POINT MONUMENTS LISTED ON THIS SHEET ARE BELIEVED TO BE IN PLACE AT THE TIME OF ADVERTISING FOR BIDS AND MAY BE USED BY THE CONTRACTOR TO ASSIST IN ESTABLISHING CONTROL FOR THE PROJECT. IF USED, THE CONTRACTOR SHOULD VERIFY THAT THE CONTROL POINT MONUMENTS HAVE NOT BEEN DISTURBED.
- THE LOCATIONS OF CONSTRUCTION ITEMS SHOWN ON THE PLANS ARE SUBJECT TO MINOR REVISIONS.
- CONTROL FOR TURN-OUT CONSTRUCTION IS BASED ON THE RECONSTRUCTED MITKOF HIGHWAY.

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

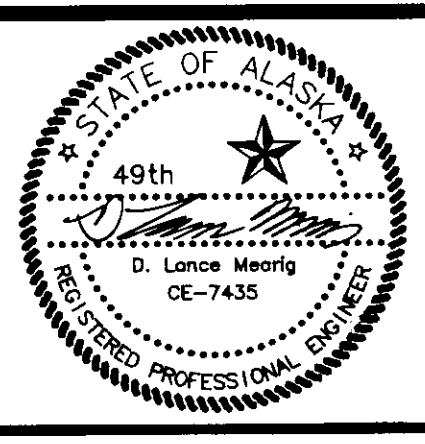
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

PETERSBURG
MITKOF HIGHWAY RECONSTRUCTION
ESTIMATE OF QUANTITIES

PREPARED BY
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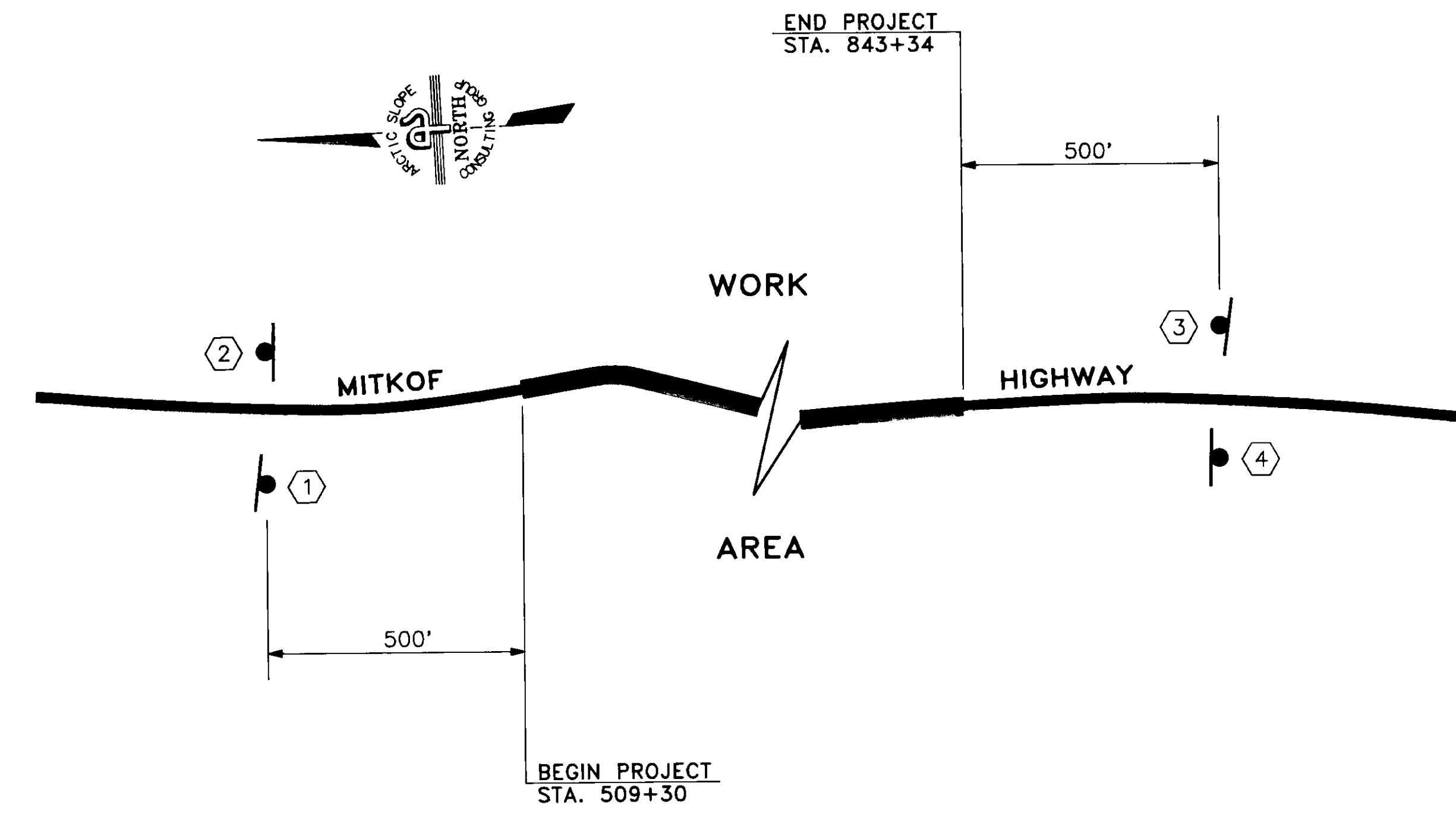
DESIGNED BY: *J.M.M.B.*
DRAWN BY: *J.A.M.*
CHECKED BY: *D.L.M.*

SCALE
NOT TO SCALE
DATE:
SEPT. 1991
SHEET 3 OF 11



TRAFFIC CONTROL NOTES

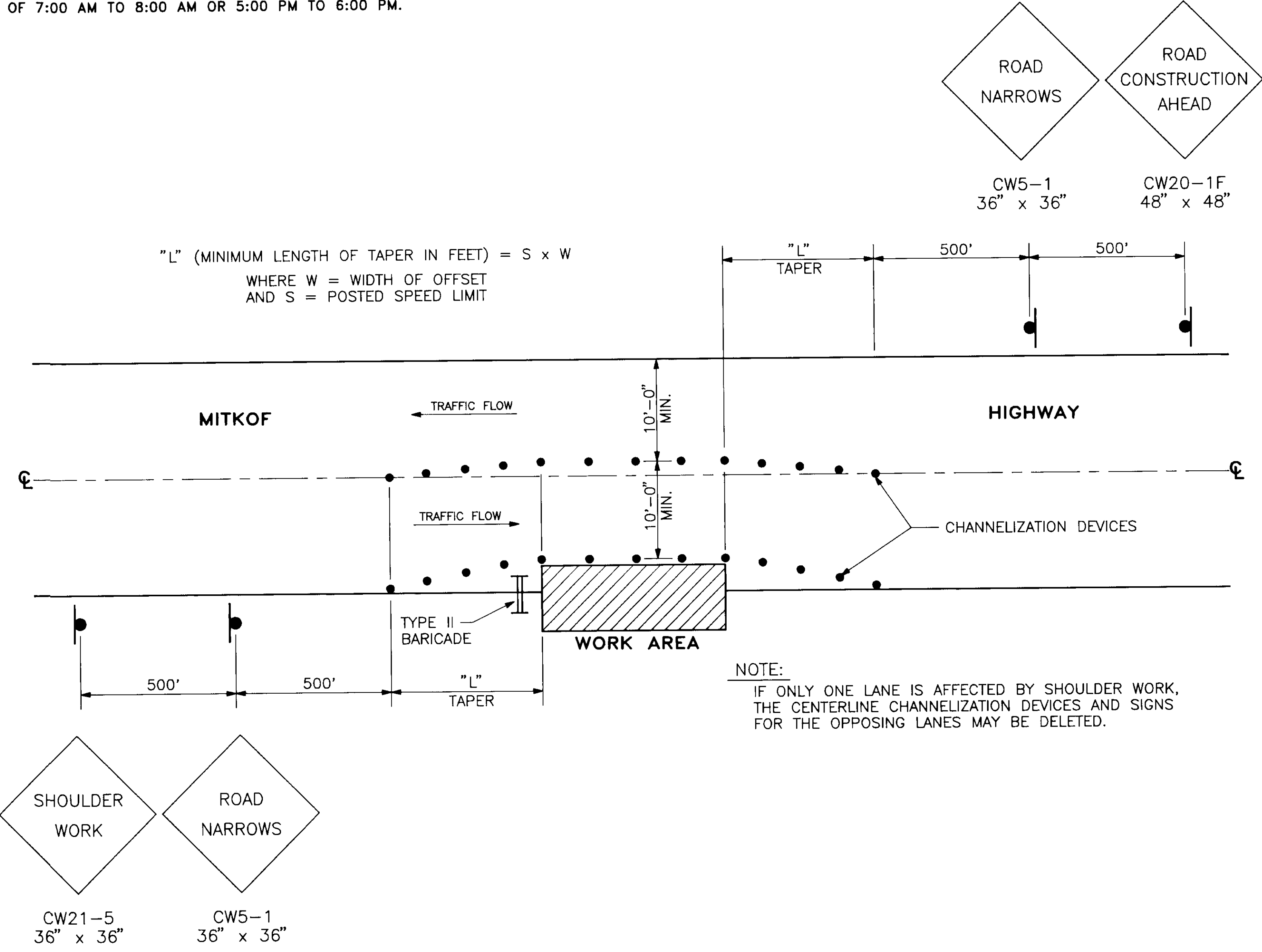
- TWO WAY COMMUNICATION SHALL BE MAINTAINED BETWEEN FLAGGERS AT ALL TIMES, WITH VISUAL SIGNALS OR RADIO CONTACT.
- ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. STANDARD DRAWING C-03.01 SHALL BE USED FOR LANE CLOSURES.
- NO DELAY OR LANE CLOSURES SHALL BE ALLOWED BETWEEN THE HOURS OF 7:00 AM TO 8:00 AM OR 5:00 PM TO 6:00 PM.



PERMANENT CONSTRUCTION SIGN DETAIL

PERMANENT CONSTRUCTION SIGN SCHEDULE						
SIGN	STATION	OFFSET	TYPE	LEGEND	SIZE	FACING
①	501+00	26' RT.	G20-1	ROAD CONSTRUCTION NEXT 7 MILES	60" X 36"	NORTH
②	501+00	26' LT.	G20-2	END CONSTRUCTION	60" X 24"	SOUTH
③	848+00	26' LT.	G20-1	ROAD CONSTRUCTION NEXT 7 MILES	60" X 36"	SOUTH
④	848+00	26' RT.	G20-2	END CONSTRUCTION	60" X 24"	NORTH

NOTES:
1. ALL PERMANENT CONSTRUCTION SIGNING SHALL BE POST MOUNTED.



TRAFFIC CONTROL FOR SHOULDER WORK

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

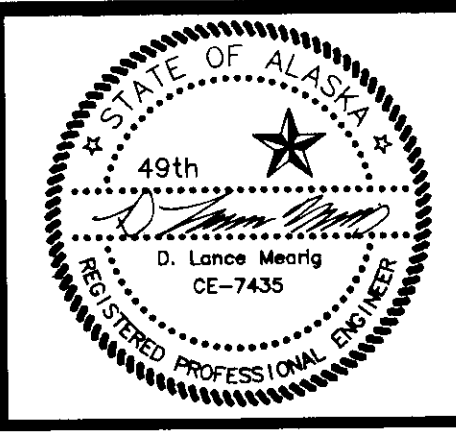
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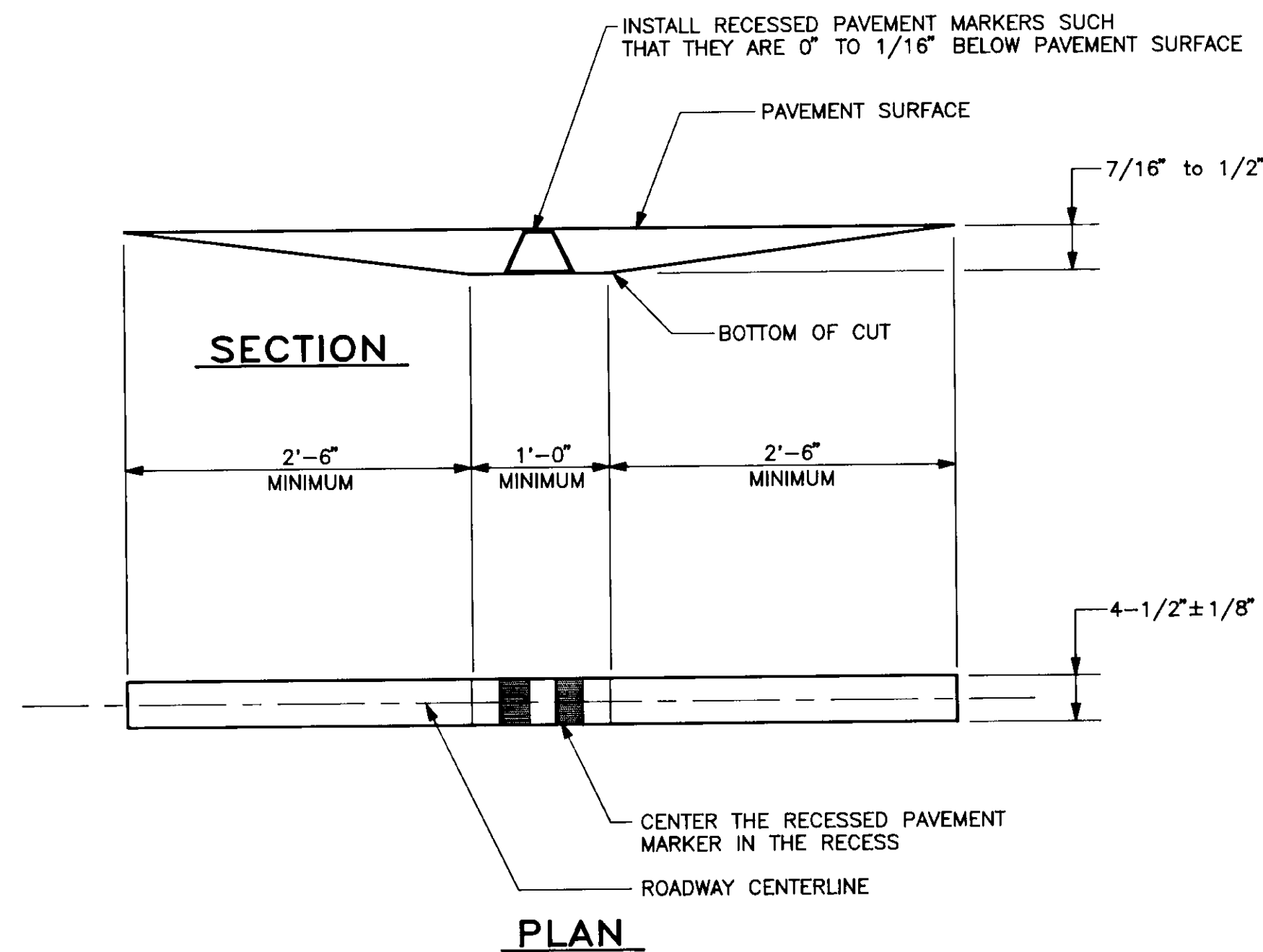
STATE OF ALASKA
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PETERSBURG
MITKOF HIGHWAY RECONSTRUCTION
TRAFFIC CONTROL PLAN

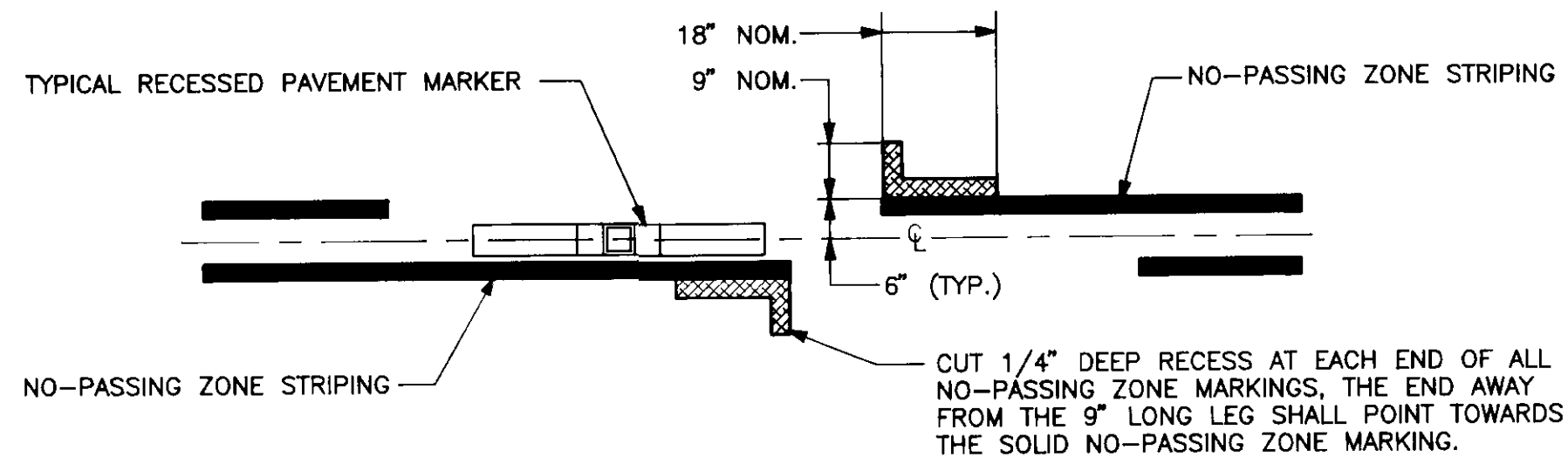
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DESIGNED BY:	J.M.M.B.	SCALE	NOT TO SCALE
DRAWN BY:	J.A.M.	DATE:	SEPT. 1991
CHECKED BY:	D.L.M.	SHEET	4 OF 11





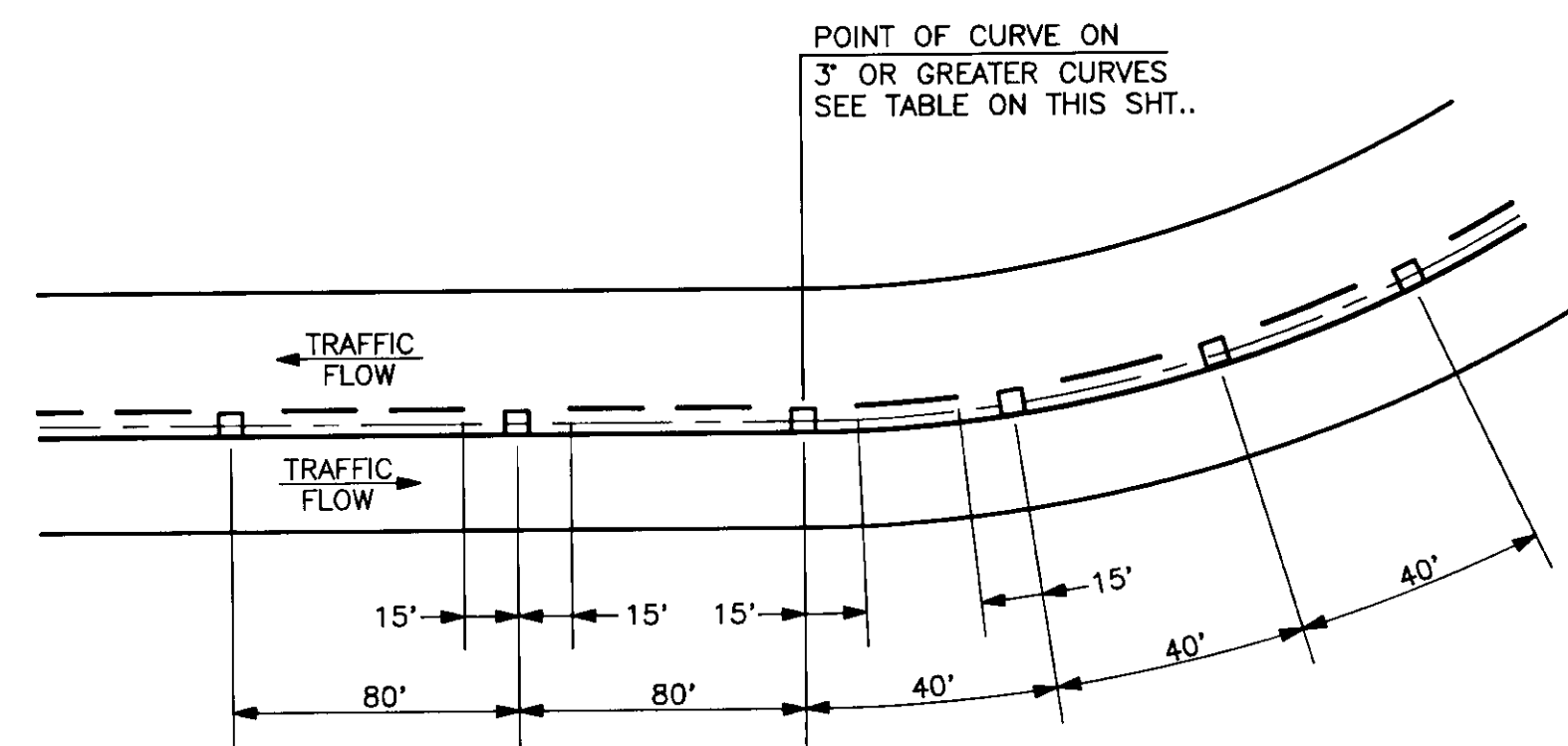
RECESSED PAVEMENT MARKER DETAIL



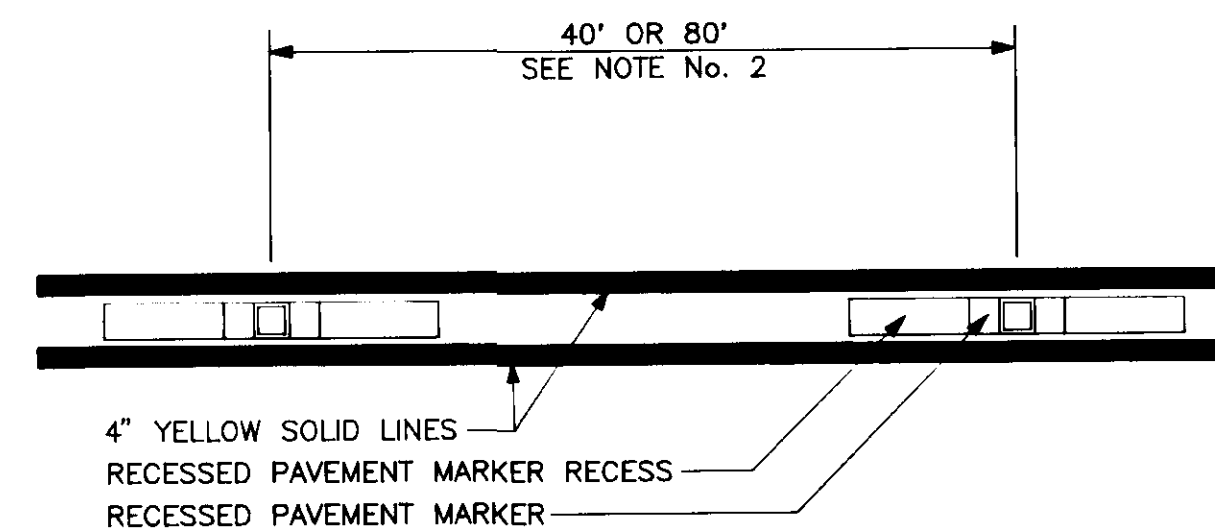
NO-PASSING ZONE MARKING GROOVE DETAIL

NOTES:

1. INSTALL RECESSED PAVEMENT MARKERS (RPM's) BETWEEN STATIONS 508+00 AND 843+09.
2. RECESSED PAVEMENT MARKERS SHALL BE SPACED EVERY 80' ON TANGENTS AND ON CURVES WITH A DEGREE OF CURVATURE LESS THAN 3'. ON CURVES WITH A DEGREE OF CURVATURE OF 3' OR GREATER THE RPM'S SHALL BE SPACED EVER 40'.
3. RECESSED PAVEMENT MARKERS SHALL NOT BE PLACED IN INTERSECTIONS WITH PUBLIC ROADWAYS. RPM PLACEMENT SHALL BE IN ACCORDANCE WITH THE DETAILS ON THIS SHEET.
4. ONLY PUBLIC ROADWAYS SHALL BE MARKED AS AN INTERSECTION APPROACH AS SHOWN ON THE DETAIL ON THIS SHEET.
5. ON ALL ROADWAY SECTIONS WITH DOUBLE LINES (BROKEN OR SOLID) RPM'S SHALL BE PLACED BETWEEN THE LINES. ON SECTIONS WITH SINGLE BROKEN LINES THE RPM'S SHALL BE PLACED ON THE CENTERLINE BETWEEN THE STRIPES.
6. THE LOCATIONS OF ALL PASSING AND NO-PASSING ZONES SHALL BE DETERMINED AND LOCATED IN THE FIELD BY THE ENGINEER.
7. NO-PASSING GROOVES SHALL BE SUBSIDIARY TO RECESSED PAVEMENT MARKERS.



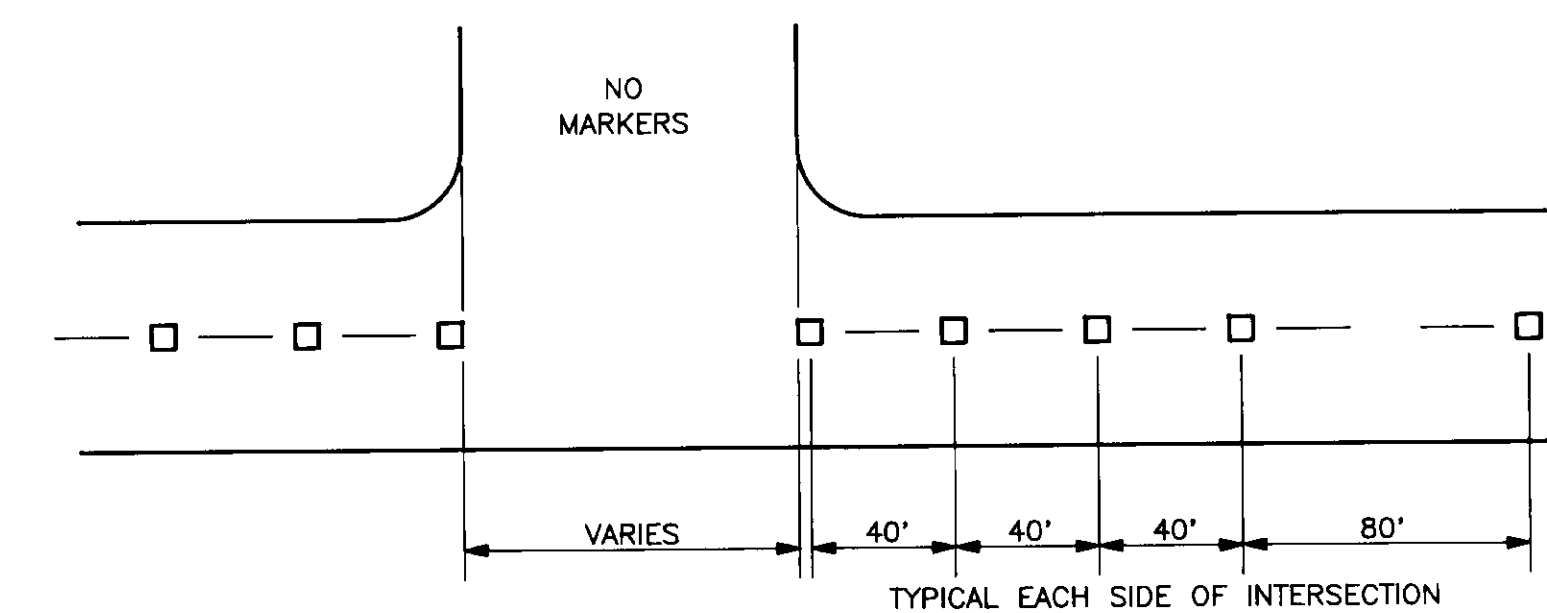
RECESSED PAVEMENT MARKER DETAIL FOR CURVES OF 3° OR GREATER



RECESSED PAVEMENT MARKER INSTALLATION DETAILS

CURVES REQUIRING 40' REFLECTIVE PAVEMENT MARKER SPACING		
STATION		DEGREE OF CURVATURE
FROM	TO	
552+01	558+62	03'30" RIGHT
703+96	712+80	03'00" LEFT
780+61	789+58	03'00" LEFT
792+35	797+93	03'00" RIGHT

NOTE:
CURVES WITH A DEGREE OF CURVATURE OF LESS THAN 03'00' SHALL USE AN 80' RPM SPACING.



RECESSED PAVEMENT MARKER DETAIL FOR INTERSECTION APPROACHES

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MITKOF HIGHWAY RECONSTRUCTION
CONSTRUCTION DETAILS

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