

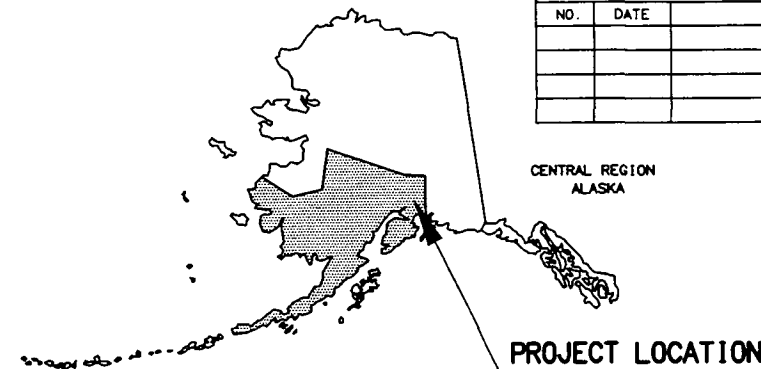
GLENN HIGHWAY MP 100-109
CARIBOU CREEK

PROJECT NUMBER IM-BR-OA1-5(19) / 55264

THE FOLLOWING DESIGN PLAN SET IS PRELIMINARY AND REFLECTS THE DESIGN AS OF MAY 17, 2002
THE PROJECT IS ANTICIPATED TO BE ADVERTISED IN THE LATER PART OF JUNE 2002

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



REVISIONS		
NO.	DATE	DESCRIPTION

YEAR	STATE	PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
2002	ALASKA	IM-BR-0A1-5(19) 55264	A1	
ROUTE: 135 000		MILEPOINT: MP 100-109		

INDEX	
SHEET NO.	DESCRIPTION
A1 TO A_	TITLE, LEGEND, SURVEY CONTROL
B1 TO B11	TYPICAL SECTIONS
C1 TO C2	ESTIMATE OF QUANTITIES
D1 TO D8	SUMMARY SHEETS
E1 TO E_	DETAILS
F1 TO F50	PLAN AND PROFILE
J1 TO J_	SIGNING AND STRIPING
K1 TO K7	TRAFFIC CONTROL PLANS
M1 TO M5	AUTOMATED TRAFFIC RECORDERS
N1 TO N_	CARIBOU CREEK BRIDGE SHEETS
R1 TO R_	R/W MAPS
W1 TO W_	WALL SHEETS

PROJECT SUMMARY		
DESCRIPTION	WIDTH	LENGTH
GLENN HIGHWAY	10.8	14 851
BRIDGE NO. 1179	10.99	160

THE FOLLOWING STANDARD DRAWINGS
APPLY TO THIS PROJECT:

A-1[M]
D-01.02[M], D-04.20[M], D-06.10[M], D-09.00[M],
D-10.02[M], D-20.05[M], D-24.00[M], D-26.04[M],
D-35.02[M]
E-13.00[M]
G-00.01[M], G-04.06S[M], G-04.07W[M], G-09.04S[M],
G-09.04W[M], G-10.01[M], G-20.00[M], G-25.20W[M],
G-29.03S[M], G-29.03W[M], G-45.03[M], G-46.02[M]
I-81.00[M]
M-13.01[M], M-16.01[M], M-20.12[M], M-23.12[M]
S-00.00[M], S-05.01[M], S-20.00[M], S-30.02[M],
S-34.02[M]
T-20.01[M], T-21.02[M], T-34.01[M]

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

REVIEW PRE-PS & E
Central Region
Date: May 17, 2002

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER DATE
CONCUR:

DIRECTOR, CONSTRUCTION & OPERATIONS DATE
CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

PROPOSED HIGHWAY RECONSTRUCTION PROJECT

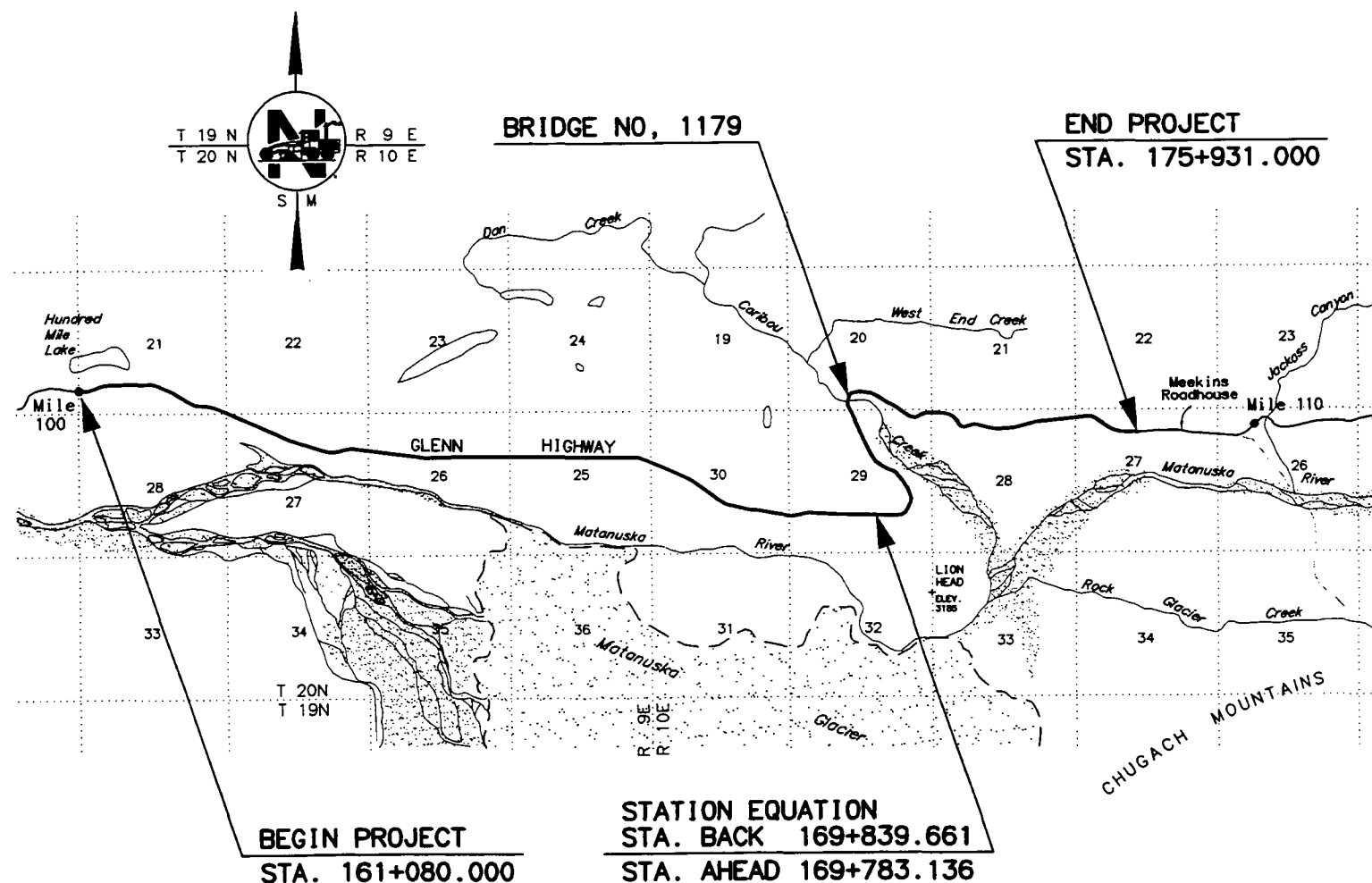
GLENN HIGHWAY MP 100-109

CARIBOU CREEK

IM-BR-0A1-5(19) / 55264

GRADING, PAVING, BRIDGE REPLACEMENT, WALLS, DRAINAGE, SIGNING & STRIPING

PRELIMINARY



LEGEND	
SYMBOL	DESCRIPTION
mm	MILLIMETER
m	METER
m ²	SQUARE METER
m ³	CUBIC METER
ha	HECTARE
kL	KILOLITER
Mg	MEGAGRAM
V	VERTICAL
H	HORIZONTAL

DESIGN DESIGNATION	
A.D.T. 2001	1050
A.D.T. 2021	1160
D.H.V. (%)	14.7%
V. (km/h)	80
D.	55/45
T. (%)	24.8
EAL (2021)	324 000

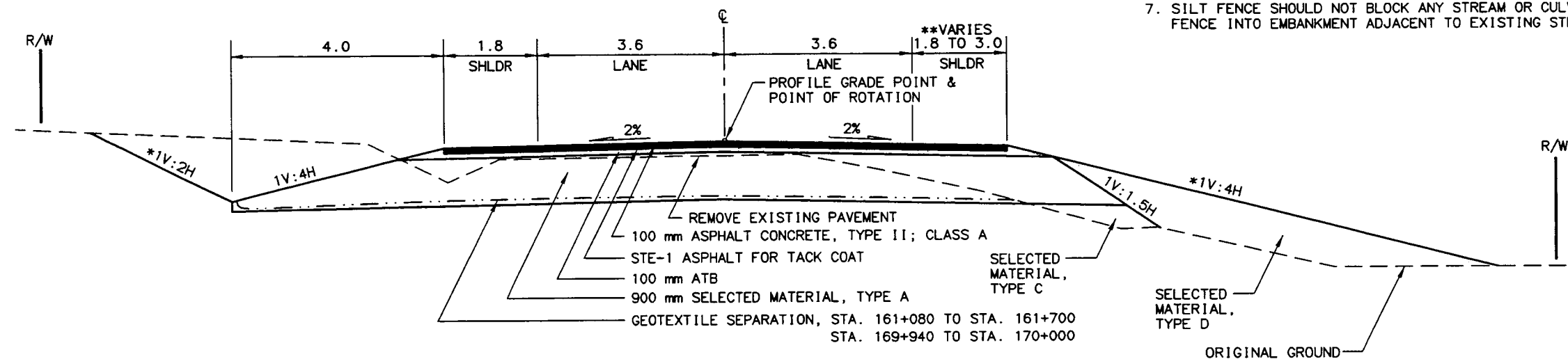
NOTE:

ALL DIMENSIONS ARE METRIC. DIMENSIONS ARE
SHOWN IN METERS UNLESS OTHERWISE NOTED.

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	B1	B11

GENERAL NOTES:

1. SUPERELEVATION TRANSITIONS SHALL BE CONSTRUCTED SUCH THAT ONE-THIRD OF THE TRANSITION LENGTH IS WITHIN THE HORIZONTAL CURVE AND TWO-THIRDS OF THE LENGTH IS ON THE TANGENT UNLESS OTHERWISE NOTED ON THE PLANS.
2. TRANSITIONS FOR SLOPE CHANGES SHALL BE 30 METERS IN LENGTH OR AS DIRECTED BY THE ENGINEER.
3. CLEARING LIMITS SHALL EXTEND 3 METERS BEYOND THE SLOPE LIMIT OR TO EDGE OF RIGHT-OF-WAY, WHICHEVER IS LESS, OR AS SHOWN ON TYPICAL SECTION.
4. DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED.
5. SLOPES 1V:1.5H SHALL BE HYDROMATTED. THE CONTRACTOR SHALL SEED SLOPES FROM THE HINGE POINT TO THE SLOPE CATCH. OTHER AREAS WITHIN THE RIGHT-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE SEEDED.
6. ALL ORGANIC MATERIALS ON THE FORESLOPE OF AN EXISTING EMBANKMENT SHALL BE REMOVED BEFORE ANY NEW EMBANKMENT IS BENCHMARKED INTO IT.
7. SILT FENCE SHOULD NOT BLOCK ANY STREAM OR CULVERT OUTFALL. TIE BACK SILT FENCE INTO EMBANKMENT ADJACENT TO EXISTING STREAM OR CULVERT OUTFALL.



GLENN HIGHWAY

STA. 161+080.00 TO STA. 162+510
 STA. 162+750 TO STA. 162+920
 STA. 164+160 TO STA. 165+230
 STA. 165+530 TO STA. 165+630
 STA. 166+010 TO STA. 166+340
 STA. 167+590 TO STA. 168+400
 STA. 169+720 TO STA. 170+020
 STA. 173+240 TO STA. 173+920
 STA. 174+600 TO STA. 175+180
 STA. 175+440 TO STA. 175+931.00

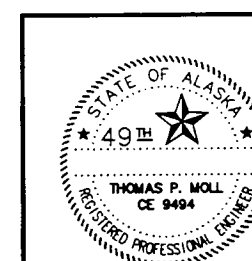
* VARIES, SEE SLOPE EXCEPTION TABLE
 ** SEE F SHEETS

CUT SLOPE EXCEPTIONS

STATION TO STATION	OFFSET	SLOPE
164+160 TO 164+250	LT.	1V:1.5H
165+530 TO 165+630	LT.	1V:1.5H
166+010 TO 166+020	LT.	1V:1.5H
166+050 TO 166+120	LT.	1V:1.5H
168+390 TO 168+400	LT.	1V:1.5H
169+720 TO 169+900	LT.	1V:1.5H
169+940 TO 170+000	LT.	1V:1.5H
175+470 TO 175+500	LT.	1V:1.5H

FILL SLOPE EXCEPTIONS

STATION TO STATION	OFFSET	SLOPE
169+720 TO 169+830	RT.	1V:3H



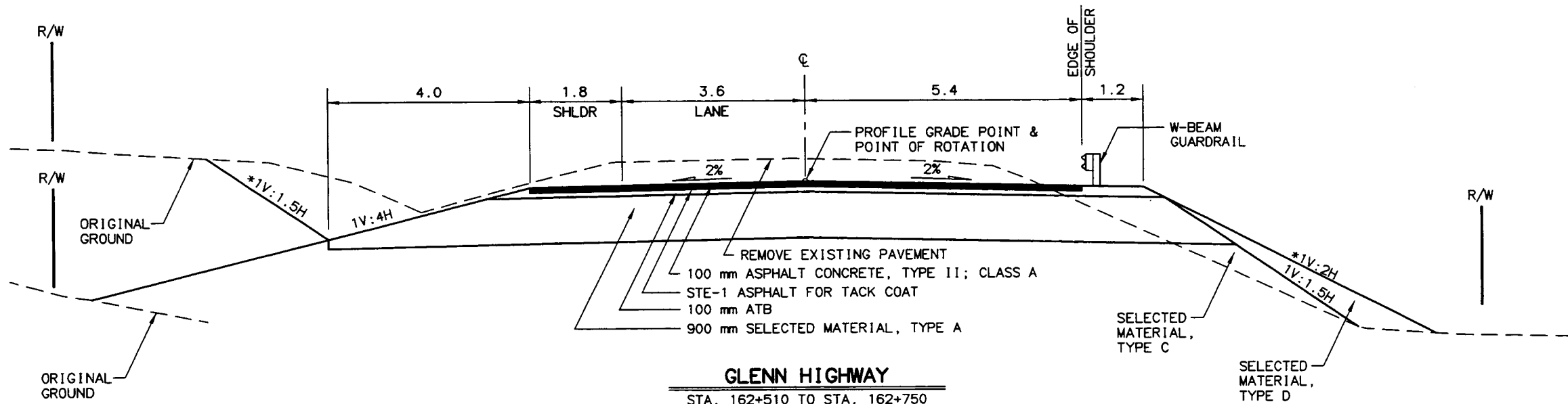
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	B2	B11

PRELIMINARY

FILL SLOPE EXCEPTIONS		
STATION TO STATION	OFFSET	SLOPE
163+590 TO 163+820	RT.	1V:1.5H
164+070 TO 164+090	RT.	1V:1.5H
165+650 TO 165+750	RT.	1V:1.5H
168+550 TO 168+800	RT.	1V:1.5H
168+990 TO 169+420	RT.	1V:1.5H
173+940 TO 174+110	RT.	1V:1.5H
174+370 TO 174+550	RT.	1V:1.5H

CUT SLOPE EXCEPTIONS		
STATION TO STATION	OFFSET	SLOPE
163+920 TO 163+960	LT.	1V:2H
165+330 TO 165+500	LT.	1V:2H



GLENN HIGHWAY

- STA. 162+510 TO STA. 162+750
- STA. 162+920 TO STA. 164+160
- STA. 165+230 TO STA. 165+530
- STA. 165+630 TO STA. 166+010
- STA. 166+340 TO STA. 167+590
- STA. 168+400 TO STA. 169+720
- STA. 173+920 TO STA. 174+600
- STA. 175+180 TO STA. 175+440

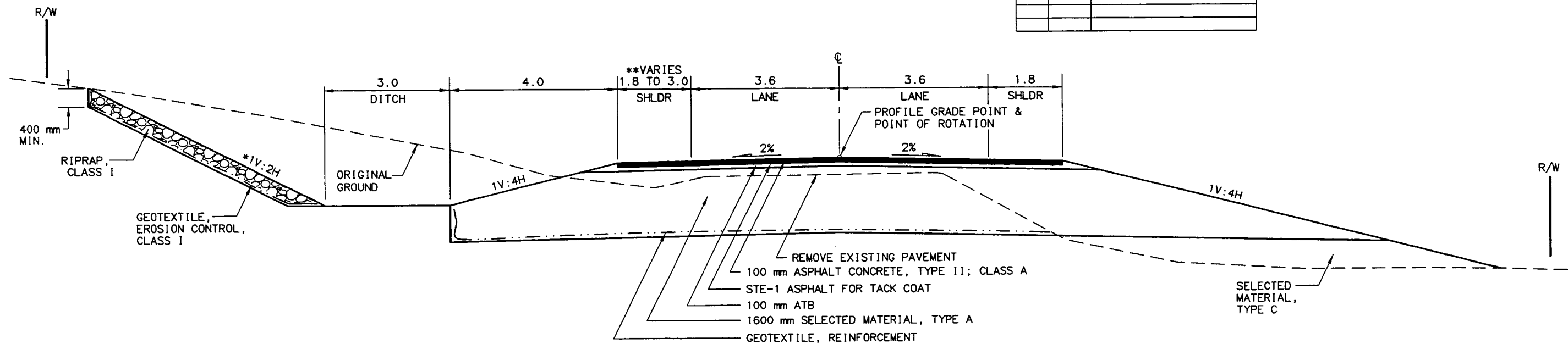
* VARIES, SEE SLOPE EXCEPTION TABLES



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK

TYPICAL SECTIONS

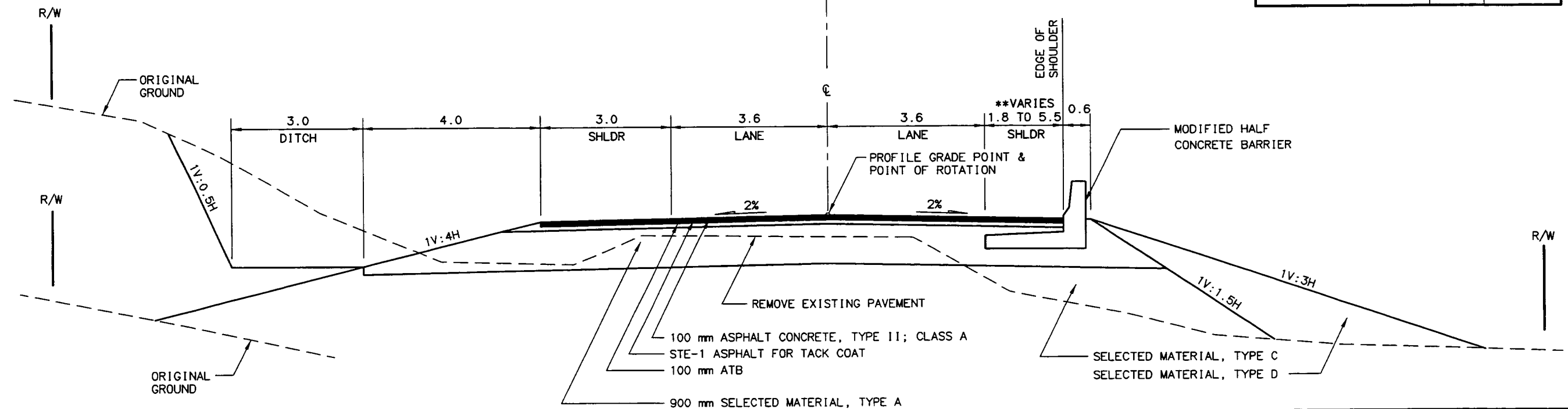
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	1M-BR-0A1-5(19)	2002	B3	B11



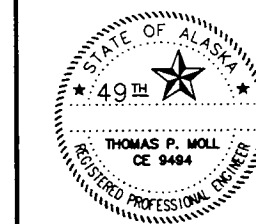
PRELIMINARY

GLENN HIGHWAY
STA. 170+020 TO STA. 170+490
* VARIES, SEE SLOPE EXCEPTION TABLE
** SEE F SHEETS

CUT SLOPE EXCEPTIONS		
STATION TO STATION	OFFSET	SLOPE
170+170 TO 170+260	RT.	1V:1.5H



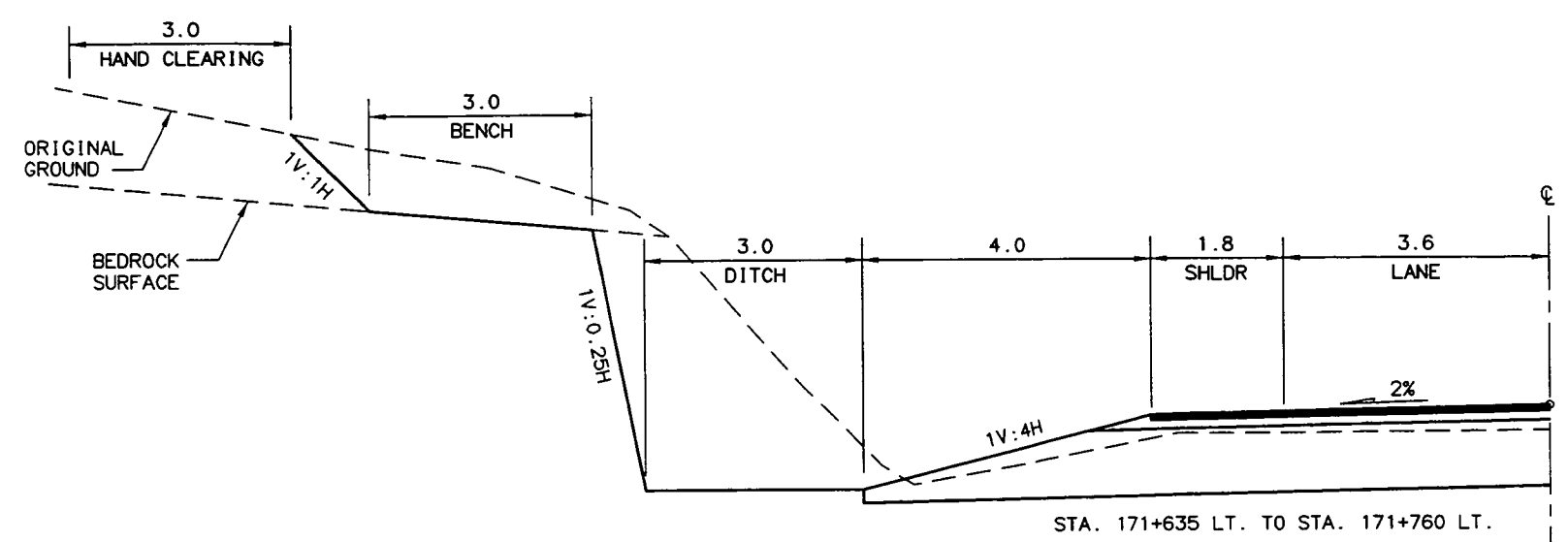
GLENN HIGHWAY
STA. 170+490 TO STA. 170+665
** SEE F SHEETS



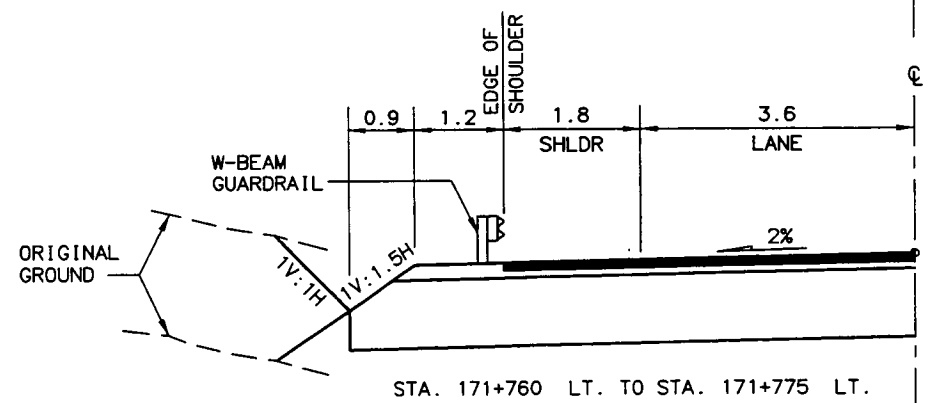
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

DESIGNED BY: 03/14/2002
 CHECKED BY: 06/05/04
 SCALE: 1"=50'
 SPECIFICATIONS: 1"=50'
 SCALE: 1"=50'
 COMPUTER: 1"=50'

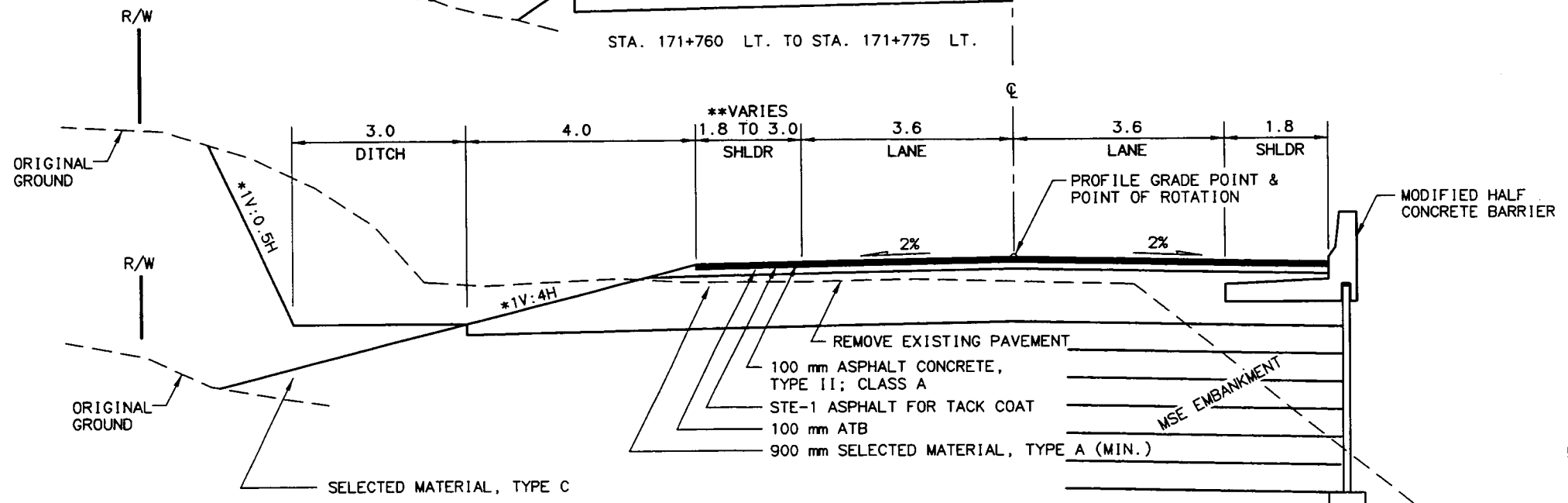
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B4	B11



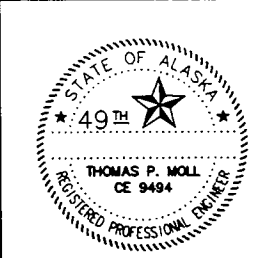
CUT SLOPE EXCEPTIONS		
STATION TO STATION	OFFSET	SLOPE
171+000 TO 171+235	LT.	1V:0.25H



PRELIMINARY

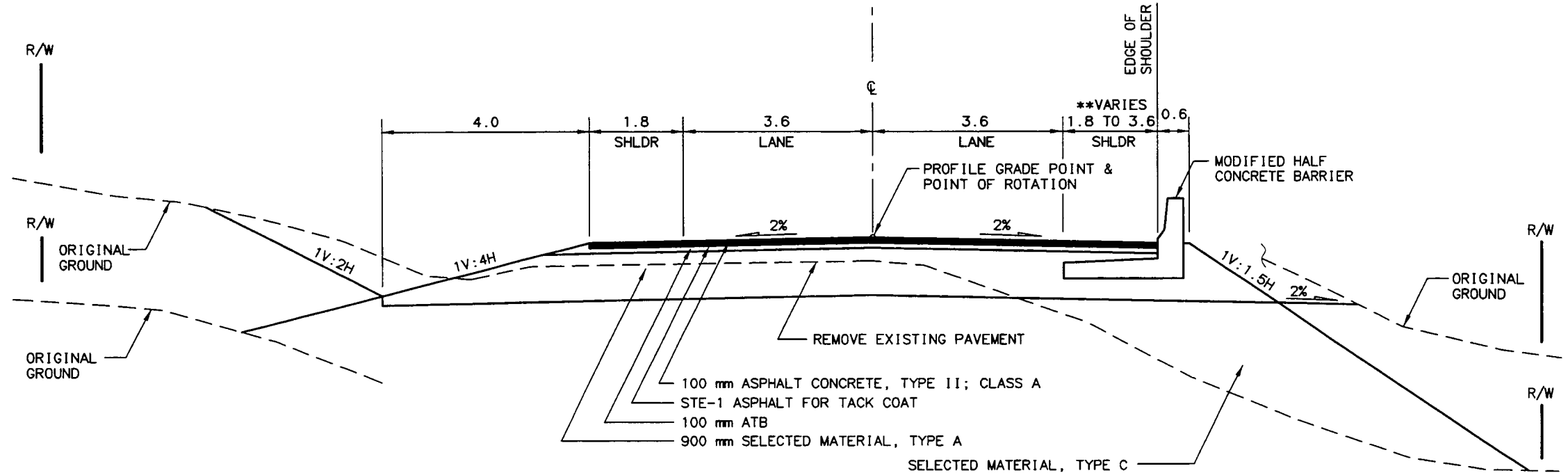
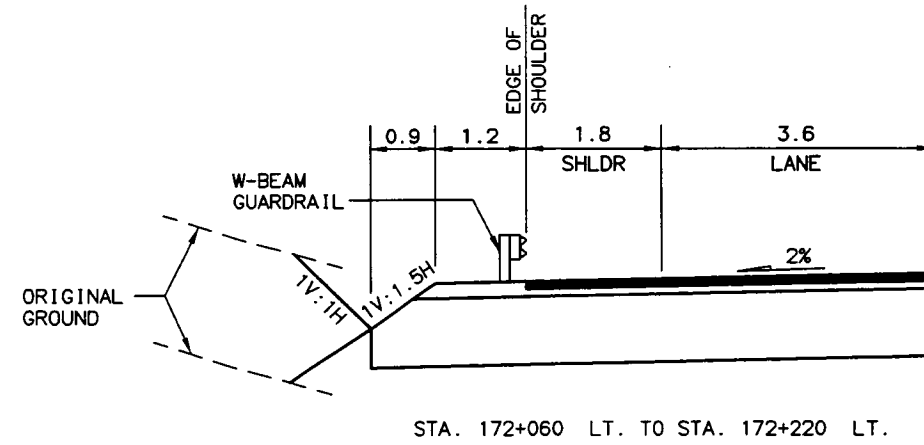
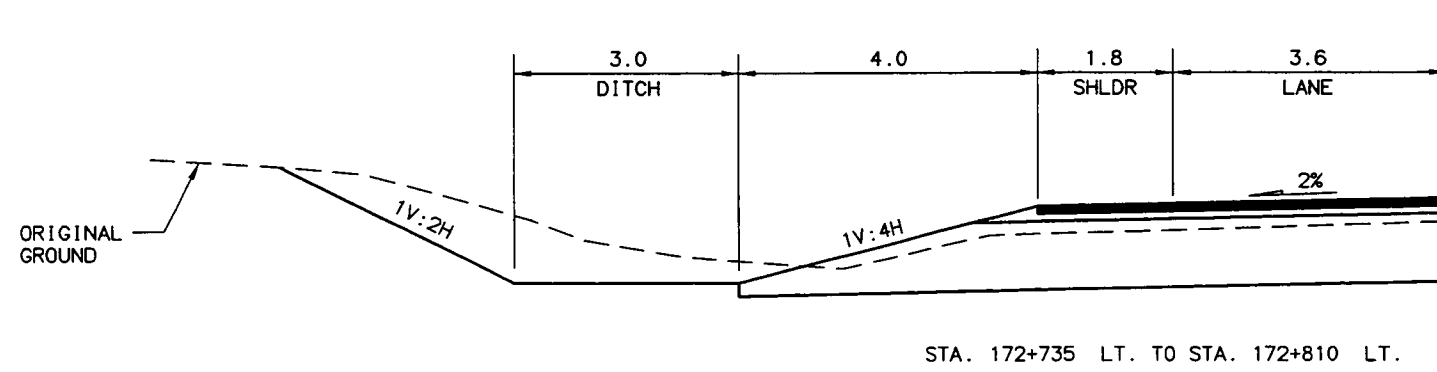


GLENN HIGHWAY
 STA. 170+665 TO STA. 170+775
 STA. 170+815 TO STA. 171+235
 STA. 171+635 TO STA. 171+775
 * VARIES, SEE SLOPE EXCEPTION TABLE
 ** SEE F SHEETS
 NOTE: SEE W SHEETS FOR WALL DETAILS



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

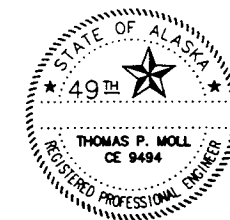
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B6	B11



GLENN HIGHWAY

STA. 172+060 TO STA. 172+220
STA. 172+735 TO STA. 173+240

* VARIES, SEE SLOPE EXCEPTION TABLE
** SEE F SHEETS



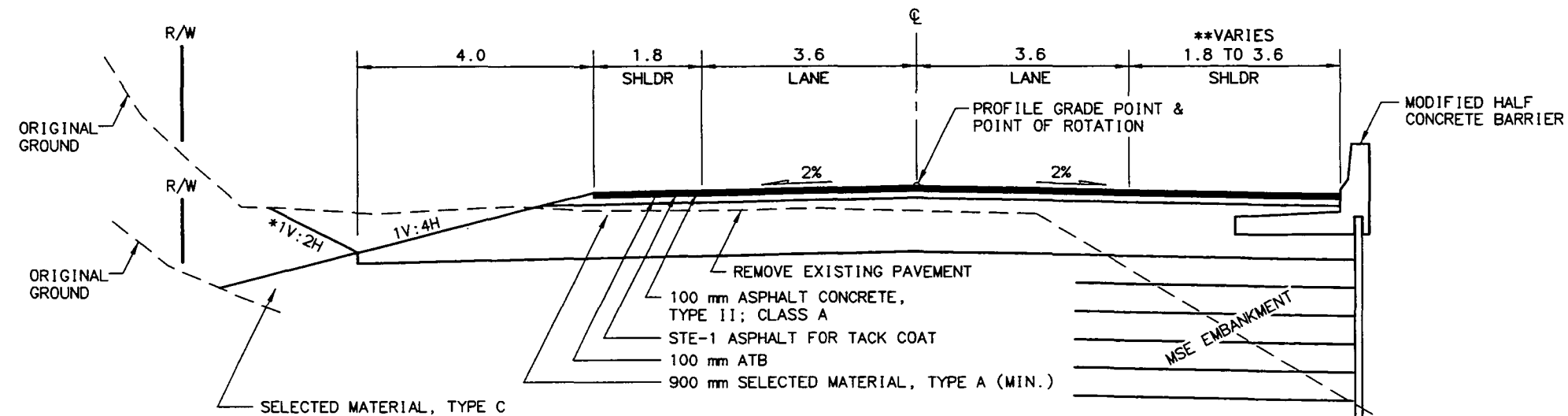
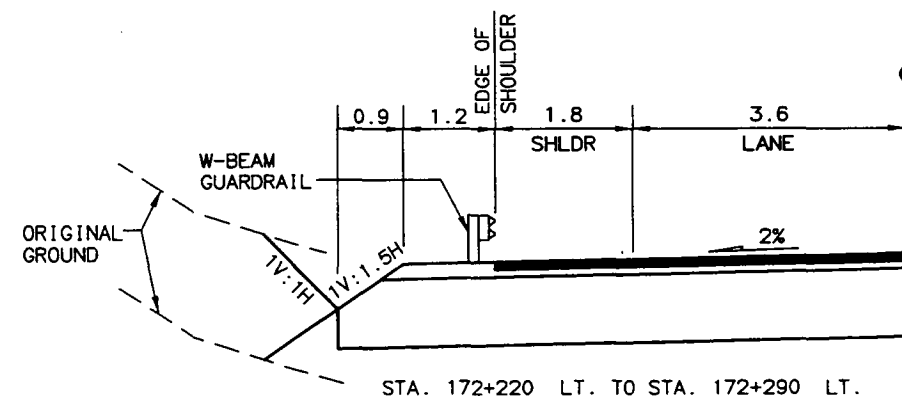
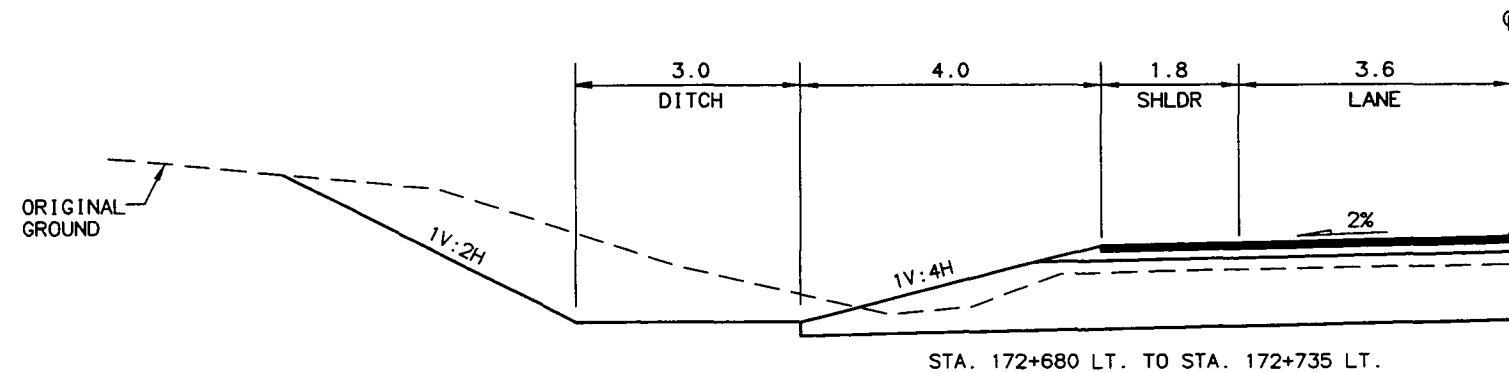
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK

TYPICAL SECTIONS

SPECIFICATIONS
SCALE 1"=50'
COMPUTER DESIGNATION
PLOT SCALE 1"=0.05mm
AUTOCAD-REBIE-51319c-1 TYPICAL.DWG
VIEW = B6
HALF PLOT SCALE 1"=0.1 mm
DESIGNED BY
CHECKED BY
DRAFTED BY
05/11/2002
07/12/01

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B7	B11

CUT SLOPE EXCEPTIONS		
STATION TO STATION	OFFSET	SLOPE
172+460 TO 172+480	LT.	1V:1.5H

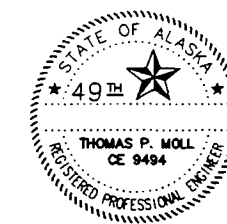


GLENN HIGHWAY

STA. 172+220 TO STA. 172+735

* VARIES, SEE SLOPE EXCEPTION TABLE
** SEE F SHEETS

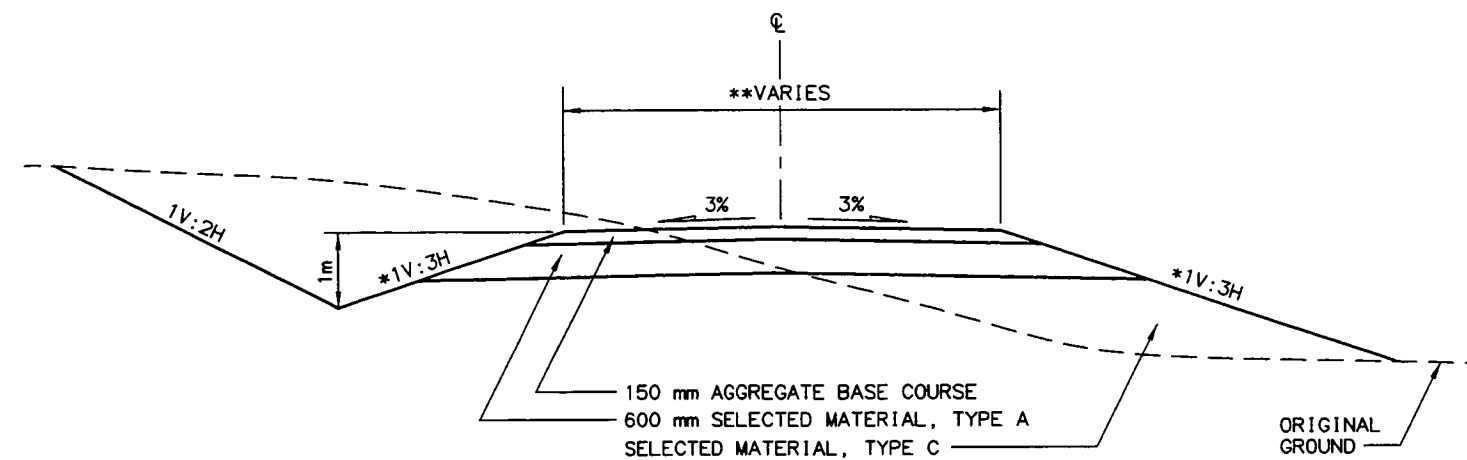
NOTE: SEE W SHEETS FOR WALL DETAILS



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

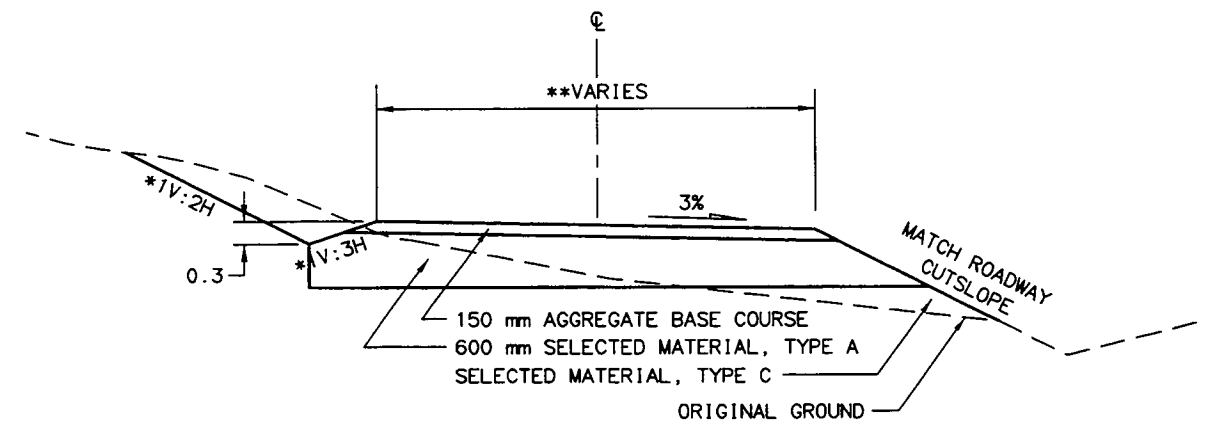
DESIGNED BY: [blank] DATE: 02/14/2002
CHECKED BY: [blank] DATE: 02/14/2002
DRAWN BY: [blank]
SCALE: 1"=50'
COMPUTER DESIGNATION: [blank]
PLOT SCALE: 1"=50' (0.05mm)
VIEW: 97
HALF PLOT SCALE: 1"=0.1mm
AUTOCAD: 14.0.0.0 (14.0.0.0)

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B8	B11



APPROACH TYPE A

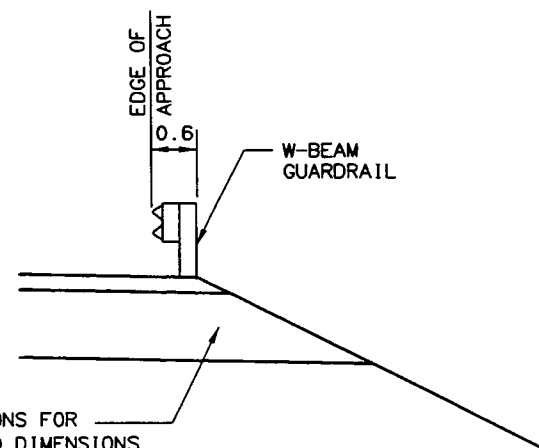
- * VARIES, SEE APPROACH SUMMARY
- ** WIDTH VARIES, SEE APPROACH SUMMARY



APPROACH TYPE B

(APPROACHES IN CUT AREAS)

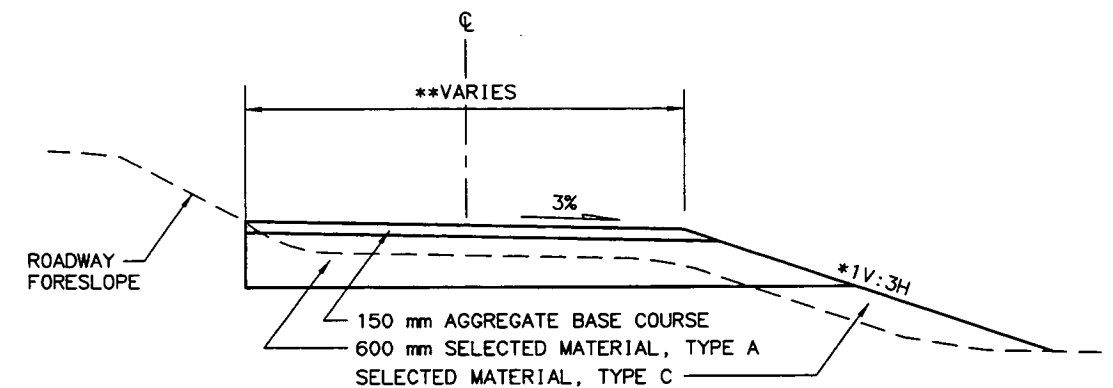
- * VARIES, SEE APPROACH SUMMARY
- ** WIDTH VARIES, SEE APPROACH SUMMARY



SEE TYPICAL SECTIONS FOR MATERIAL TYPES AND DIMENSIONS

APPROACHES

SHOULDER WIDENING BEHIND GUARDRAIL

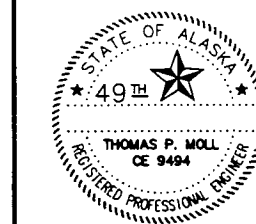


APPROACH TYPE C

(APPROACHES IN FILL AREAS)

- * VARIES, SEE APPROACH SUMMARY
- ** WIDTH VARIES, SEE APPROACH SUMMARY

PRELIMINARY

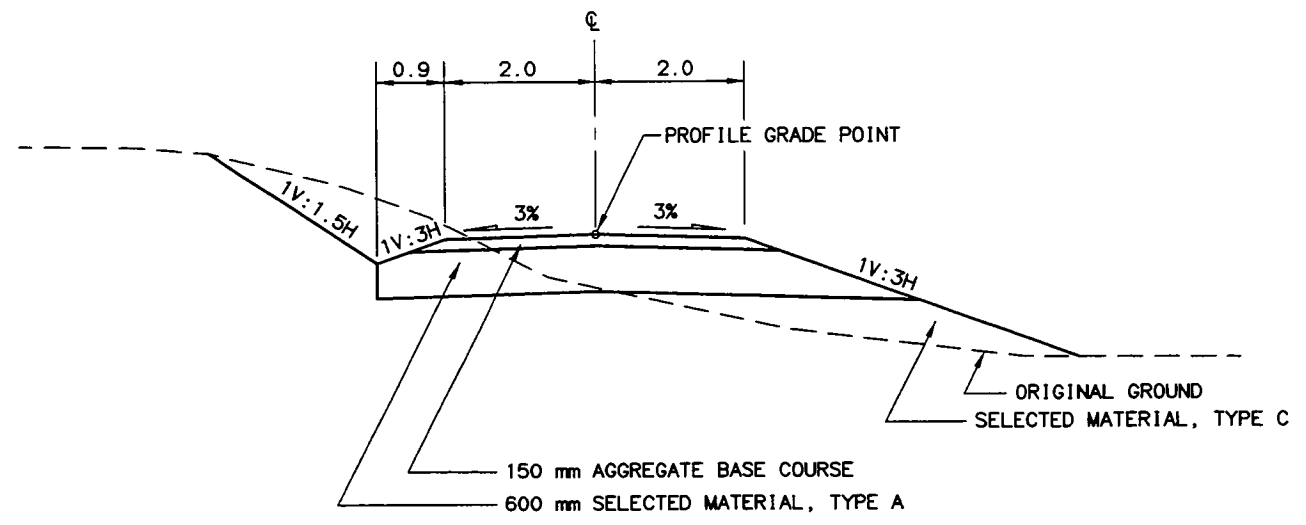


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

SPECIFICATIONS
SCALE 1:50
COMPUTER DESIGNATION
DESIGNED BY
CHECKED BY
DRAFTED BY
PLOT SCALE 1mm = 0.05m
VIEW - B9
HALF PLOT SCALE 1mm = 0.1 m
AUTOCAD-DEBIE-S1318-31TYPICALS.DWG
05/14/2002

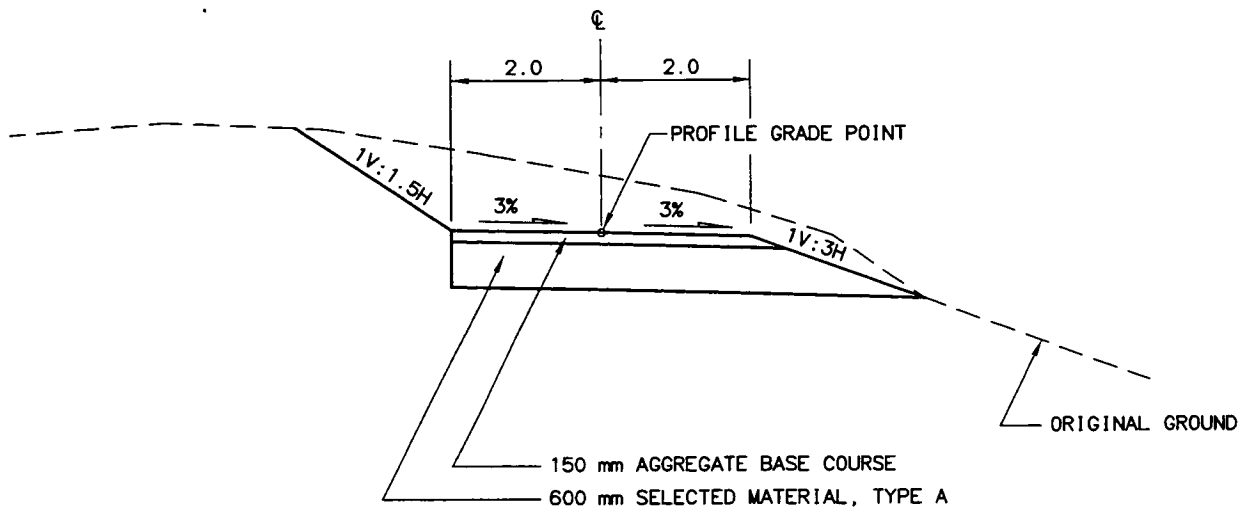
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	B9	B11

PRELIMINARY



ACCESS ROAD
STA. 42+000.0 TO STA. 42+280.0

RIVER ACCESS ROAD
STA. 2+205.0 TO STA. 2+369.4



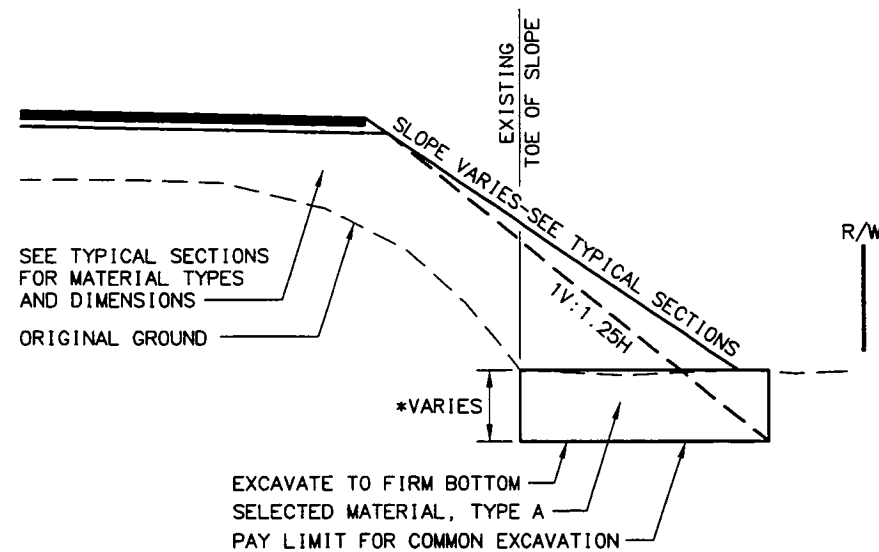
ACCESS ROAD
STA. 42+280.0 TO STA. 42+324.954

DESIGNED BY: [blank]
CHECKED BY: [blank]
DRAWN BY: [blank]
DATE: 05/14/2002
PLOT SCALE: 1" = 5'
PLOT VIEW: TOP
AUTOCAD-DEBBIE-5/13/03 YCC/CHP DWG
SPECIFICATIONS: [blank]
SCALE: 1" = 50'
COMPUTER REGISTRATION: [blank]



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
**GLENN HIGHWAY MP 107
CARIBOU CREEK
BRIDGE REPLACEMENT
ACCESS ROAD AND
RIVER ACCESS ROAD
TYPICALS**

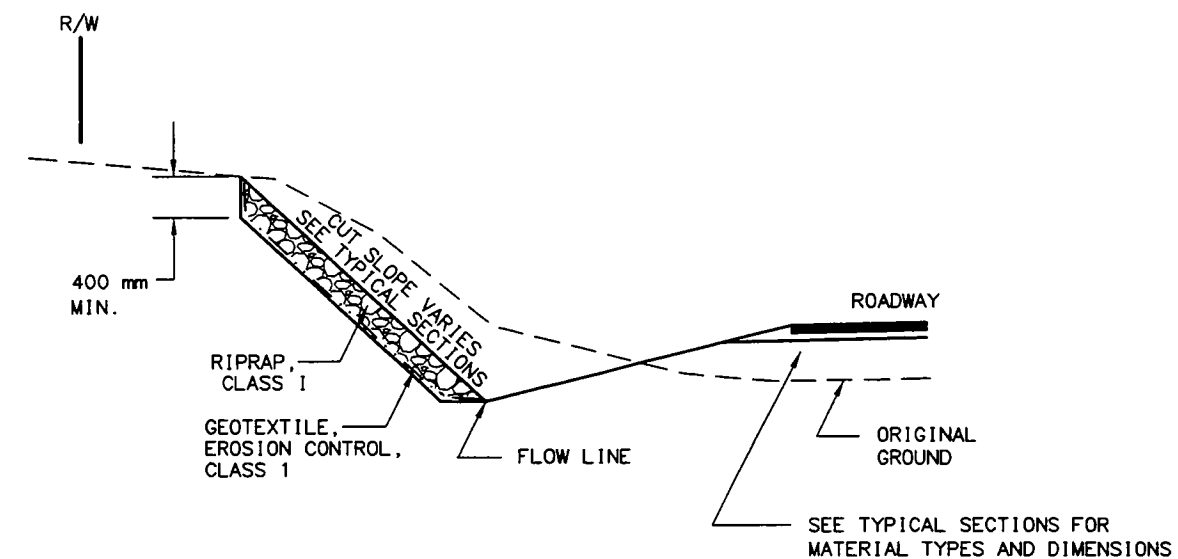
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B10	B11



SPECIAL EXCAVATION SECTION

STA. 163+225 TO STA. 163+340
 STA. 173+925 TO STA. 173+990
 STA. 174+010 TO STA. 174+100
 STA. 174+390 TO STA. 174+420
 STA. 174+455 TO STA. 174+540
 STA. 174+790 TO STA. 174+900

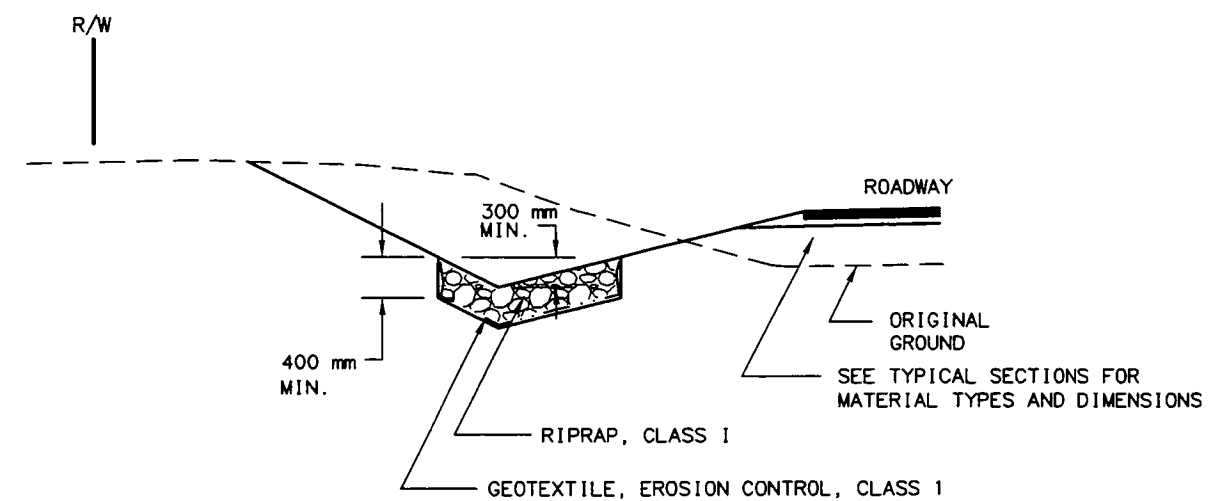
* ESTIMATED DEPTH OF EXCAVATION IS
 1 TO 1.5 METERS



ROCK BLANKET SECTION

STA. 171+760 LT. TO STA. 171+840 LT.

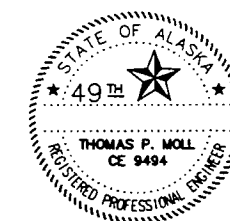
INSTALL ROCK BLANKET WHERE INDICATED IN THE PLANS
 AND AT LOCATIONS AS DIRECTED BY THE ENGINEER
 TO STABILIZE WEeping SLOPES



GLENN HIGHWAY DITCH PROTECTION

NOTE: SEE TYPICAL SECTIONS FOR DITCH GEOMETRY

PRELIMINARY



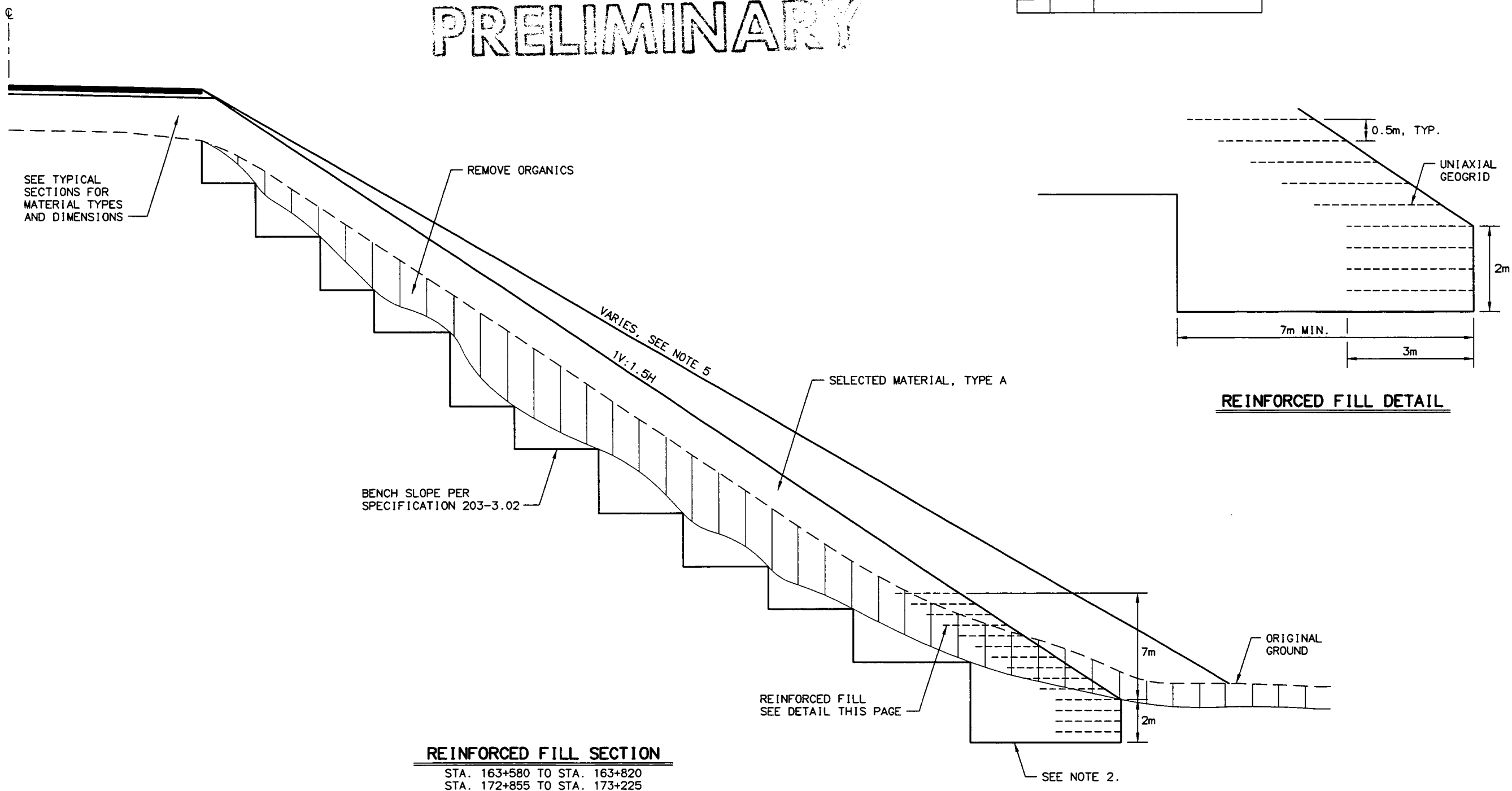
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK

TYPICAL SECTIONS

SPECIFICATIONS	DESIGNED BY	05/14/2002
SCALE 1:50	CHECKED BY	
COMPUTER DESIGNATION	DRAWN BY	
	VIEW - B6	
	HALF PLOT SCALE 1mm = 0.1m	
	AUTOCAD-REBUILT-5/13/02-TYPICALS.DWG	

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	B11	B11

PRELIMINARY



NOTES:

1. NO OVERLAP OF GEOGRID IS REQUIRED.
2. SUBGRADE AT BASE OF SLOPE MUST BE PROOF ROLLED WITH ROLLER OR RUBBER-TIRED VEHICLE. PRIOR TO FILL PLACEMENT, FOUNDATION SOILS MUST BE APPROVED BY THE ENGINEER.
3. SECURE GEOGRID WITH RETAINING PINS TO PREVENT MOVEMENT DURING FILL PLACEMENT.
4. MAINTAIN A MINIMUM 150mm OF FILL BETWEEN THE GEOGRID AND THE WHEELS OR TRACKS OF CONSTRUCTION EQUIPMENT.
5. SLOPE FLATTEN WITH SELECTED MATERIAL, TYPE D AS INDICATED ON TYPICAL SECTIONS.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
TYPICAL SECTIONS

DESIGNED BY
CHECKED BY
DRAFTED BY
05/15/2002
VIEW - CHALF. C/FULL
AUTOCAD - VERBIE - 5/15/02 - C/EST/ONG
SPECIFICATIONS
SCALE 1:1
COMPUTER DESIGNATION

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
201(3A)	CLEARING AND GRUBBING	ha	58.0
201(4A)	HAND CLEARING	ha	0.16
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQ'D
202(2)	REMOVAL OF PAVEMENT	m ²	127 282
202(4)	REMOVAL OF CULVERT PIPE	m	887
202(12)	DOUBLE MAIL BOX INSTALLATION	EACH	28
202(17)	REMOVAL OF BRIDGE NO. 548	L.S.	ALL REQ'D
203(1)	COMMON EXCAVATION	m ³	587 631
203(2)	ROCK EXCAVATION	m ³	185 197
203(6A)	BORROW, TYPE A	Mq	683 396
203(6C)	BORROW, TYPE C	Mq	114 965
203(9)	OBLITERATION OF ROADWAY	m ²	1130
203(12)	HORIZONTAL DRAIN HOLES	m	1340
203(16)	ROCK BOLTS	EACH	15
203(42)	MESH SLOPE PROTECTION	m ²	1500
205(1)	EXCAVATION FOR STRUCTURES	m ³	77 225
301(1)	AGGREGATE BASE COURSE	Mq	11 493
306(1)	ATB	Mq	48 304
401(1A)	ASPHALT CONCRETE, TYPE II; CLASS A	Mq	42 982
401(2)	ASPHALT CEMENT, GRADE PG 52-28	Mq	2363
401(6)	ASPHALT PRICE ADJUSTMENT	C.S.	ALL REQ'D
402(1)	STE-1 ASPHALT FOR TACK COAT	Mq	45
501(1)	CLASS A CONCRETE	L.S.	ALL REQ'D
501(2)	CLASS A-A CONCRETE	L.S.	ALL REQ'D
501(4)	CLASS A CONCRETE	m ³	1985
501(20)	CLASS DS CONCRETE (3.050 m DIA.)	m	104.6
501(21)	DS GROUT	L.S.	ALL REQ'D
502(1)	PRESTRESSED CONCRETE STRUCTURAL MEMBER (38 465 GIRDERS)	EACH	20
503(1)	REINFORCING STEEL	L.S.	ALL REQ'D
503(2)	EPOXY COATED REINFORCING STEEL	L.S.	ALL REQ'D
503(3)	REINFORCING STEEL	kg	121 709
505(5)	FURNISH STRUCTURAL STEEL PILES	m	551.7
505(6)	DRIVE STRUCTURAL STEEL PILES	EACH	22

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	C1	C2

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
507(2)	PEDESTRIAN RAILING	m	338.5
508(1)	WATERPROOFING MEMBRANE	L.S.	ALL REQ'D
511(1)	MECHANICALLY STABILIZED EMBANKMENT RETAINING WALLS	m ²	7130
514(1)	DRILLED SHAFT	L.S.	ALL REQ'D
514(2)	UNCLASSIFIED SHAFT EXCAVATION	m	104.6
514(4)	CASING	m	104.6
514(5)	INSTRUMENTATION AND DATA COLLECTION	L.S.	ALL REQ'D
522(1)	VIDEO MONITORING SYSTEM	L.S.	ALL REQ'D
603(17-450)	450 mm PIPE	m	321
603(17-600)	600 mm PIPE	m	724
603(17-900)	900 mm PIPE	m	169
603(17-1200)	1200 mm PIPE	m	30
603(20-450)	END SECTION FOR 450 mm PIPE	EACH	42
603(20-600)	END SECTION FOR 600 mm PIPE	EACH	31
603(20-900)	END SECTION FOR 900 mm PIPE	EACH	1
603(20-1200)	END SECTION FOR 1200 mm PIPE	EACH	2
604(1)	STORM DRAIN MANHOLE	EACH	10
604(5)	INLET, TYPE A	EACH	2
606(1)	W-BEAM GUARDRAIL	m	5529
606(6)	REMOVING AND DISPOSING OF GUARDRAIL	m	2190
606(9)	CONTROLLED RELEASE TERMINAL (CRT)	EACH	7
606(11)	EXTRUDER TERMINAL (ET-2000)	EACH	23
606(12)	GUARDRAIL/BRIDGE RAIL CONNECTION	EACH	4
606(18A)	MODIFIED HALF CONCRETE BARRIER	m	2584

PRELIMINARY



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

GLENN HIGHWAY
MP 100 - 109
CARIBOU CREEK

ESTIMATE OF QUANTITIES

DESIGNED BY
CHECKED BY
DRAWN BY
DATE
05/15/2002
NEW = CHANG, C201L
AUTOCAD-REBIE-S310W3 ACCESS LONG
SPECIFICATIONS
SCALE 1"=100'
COMPUTER DESCRIPTION

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
611(1A)	RIPRAP, CLASS I	m ³	5143
611(1B)	RIPRAP, CLASS II	m ³	25
615(1)	STANDARD SIGN	m ²	34.1
615(2)	REMOVE AND RELOCATE EXISTING SIGN	EACH	3
616(1)	40 mm DIA. THAW PIPE	m	901
618(2)	SEEDING	kg	1900
618(3)	WATER FOR SEEDING	kL	1640
619(3)	HYDRO MATTING	m ²	79 985
622(7A)	PORTA POTTIES	EACH	8
630(1)	GEOTEXTILE, SEPARATION	m ²	22 219
631(2A)	GEOTEXTILE, EROSION CONTROL, CLASS 1	m ²	13 868
631(2B)	GEOTEXTILE, EROSION CONTROL, CLASS 2	m ²	60
637(2)	REINFORCED FILL GEOGRID	m ²	342 090
639(6)	APPROACH	EACH	45
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQ'D
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQ'D
641(2)	TEMPORARY EROSION AND POLLUTION CONTROL	C.S.	ALL REQ'D
641(5)	SILT FENCE	m	920
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL REQ'D
642(3)	THREE PERSON SURVEY PARTY	HOUR	250
642(4)	SET PRIMARY MONUMENT	EACH	53
642(5)	SET SECONDARY MONUMENT	EACH	15
642(9)	REFERENCE EXISTING MONUMENT	EACH	15
642(10)	MONUMENT CASE	EACH	53
642(12)	FINAL TRAVERSE	L.S.	ALL REQ'D
643(2)	TRAFFIC MAINTENANCE	L.S.	ALL REQ'D
643(3)	PERMANENT CONSTRUCTION SIGNS	L.S.	ALL REQ'D
643(15)	FLAGGING	C.S.	ALL REQ'D
643(16)	PILOT CAR	HOUR	3800
643(23)	TRAFFIC PRICE ADJUSTMENT	C.S.	ALL REQ'D
643(25)	TRAFFIC CONTROL	C.S.	ALL REQ'D
643(30)	TEMPORARY CROSSING	L.S.	ALL REQ'D
643(31)	PUBLIC INFORMATIONAL PROGRAM	L.S.	ALL REQ'D
644(1)	FIELD OFFICE	L.S.	ALL REQ'D
644(2)	FIELD LABORATORY	L.S.	ALL REQ'D
644(3)	CURING SHED	L.S.	ALL REQ'D
644(7)	VEHICLE	EACH	6

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	C2	C2

PRELIMINARY

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	TOTAL
645(1)	TRAINING PROGRAM, 3 TRAINEES/APPRENTICES	LABOR HOUR	1500
646(1)	CPM SCHEDULING	L.S.	ALL REQ'D
647(2)	WIDE PAD DOZER, 48 kW MINIMUM	HOUR	500
669(1)	AUTOMATED TRAFFIC RECORDER	L.S.	ALL REQ'D
670(10B)	METHYL METHACRYLATE PAVEMENT MARKINGS	LITER	13 260

TABLE OF ESTIMATING FACTORS		
ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
203(6A)	BORROW, TYPE A	2.323 Mg/m ³
203(6C)	BORROW, TYPE C	2.323 Mg/m ³
301(1)	AGGREGATE BASE COURSE	2.371 Mg/m ³
306(1)	ATB	2.400 Mg/m ³
401(1)	ASPHALT CONCRETE, TYPE II; CLASS A	2.430 Mg/m ³
401(2)	ASPHALT CEMENT, GRADE PG 52-28	5.5% OF TOTAL WEIGHT OF 401(1)
402(1)	STE-1 ASPHALT FOR TACK COAT	0.00023 Mg/m ²



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

GLENN HIGHWAY
MP 100 - 109
CARIBOU CREEK

ESTIMATE OF QUANTITIES

DESIGNED BY
CHECKED BY
DATE 07/15/2002
BY /VS/DP
SPECIFICATIONS
SCALE 1"=1'
COMPUTER DESIGNATION
AUTOCAD: DEBIE-513P-A1-CORREARY.DWG

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-041-5(19)	2002	D1	D8

EARTHWORK SUMMARY

ZONE	STATION TO STATION	EXCAVATION					EMBANKMENT			
		COMMON EXCAVATION m ³	ROCK EXCAVATION m ³	EXCAVATION FOR STRUCTURES m ³	UNUSABLE COMMON EXCAVATION m ³	USABLE EXCAVATION AS C m ³	SELECTED MATERIAL TYPE A m ³	SELECTED MATERIAL TYPE C m ³	SELECTED MATERIAL TYPE D m ³	TOTAL EMBANKMENT m ³
1	161+080.00 TO 170+665	291 314	1907		233 853	59 368	139 161	259 317	111 984	560 252
2	170+665 TO 173+500	246 557	183 290	77 225	198 735	308 337	107 487	106 690	7797	540 510
3	173+500 TO 175+931.00	49 760			27 557	22 203	33 457	93 030	29 747	174 662
1-3	MISCELLANEOUS*				3806	30 704	20 509	11 064		
	LESS USABLE EXCAVATION AS C							(420 612)		
TOTAL: UNITS		587 631 m ³	185 197 m ³	77 225 m ³	463 951 m ³	420 612 m ³	300 614 m ³	49 489 m ³	149 528 m ³	
							698 330 Mg	114 965 Mg		

* INCLUDES EARTHWORK FOR APPROACHES, DETOURS, TEMPORARY ROAD, ACCESS ROAD, RIVER ACCESS APPROACH

EMBANKMENT = (COMMON EXCAVATION - EXCESS COMMON EXCAVATION) 0.83 + (ROCK EXCAVATION) 1.10 + SELECTED MATERIAL, TYPE A + SELECTED MATERIAL, TYPE C + USABLE SELECTED MATERIAL, TYPE C + USABLE SELECTED MATERIAL, TYPE D

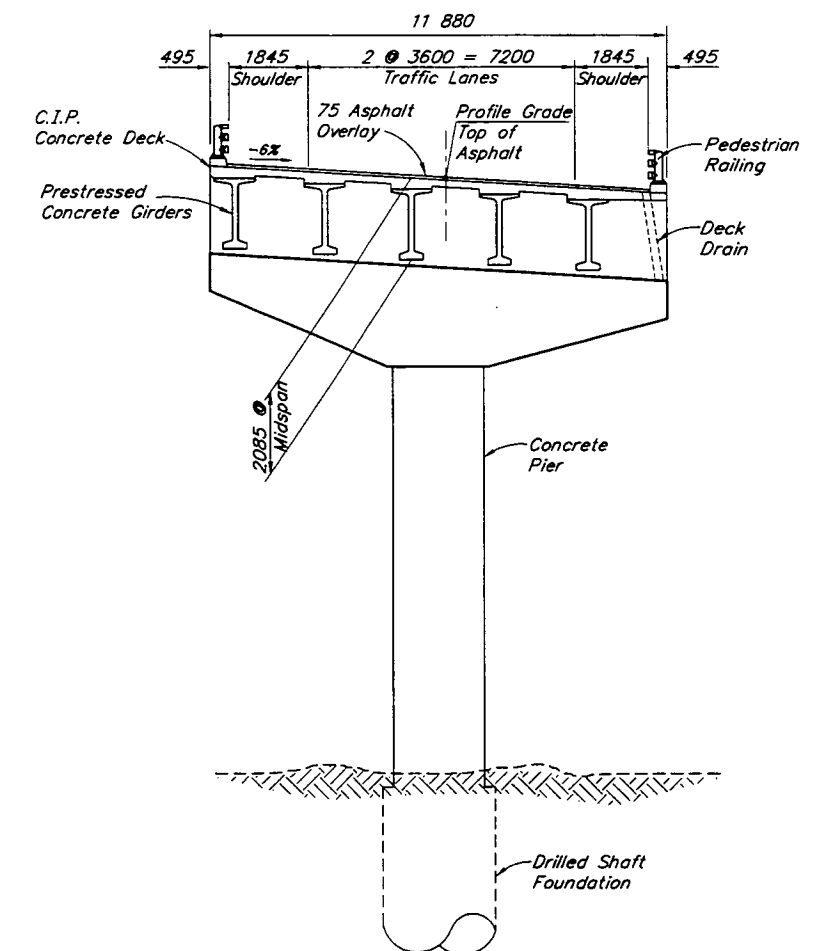
PRELIMINARY



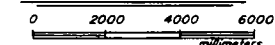
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
**GLENN HIGHWAY
MP 100-109
CARIBOU CREEK**
EARTHWORK SUMMARY
SHEET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-OAI-5115/53441	2002		

PRELIMINARY

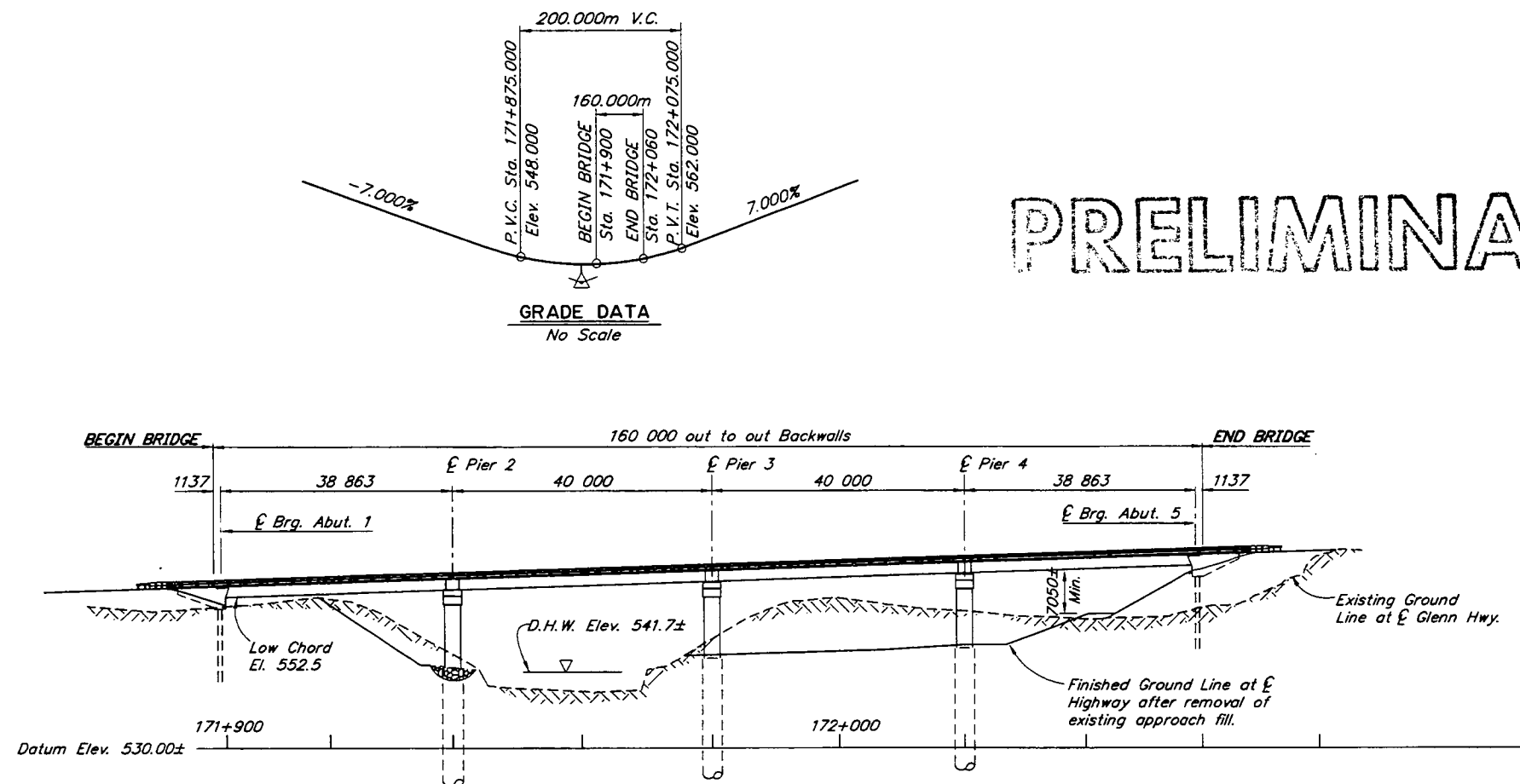


TYPICAL SECTION

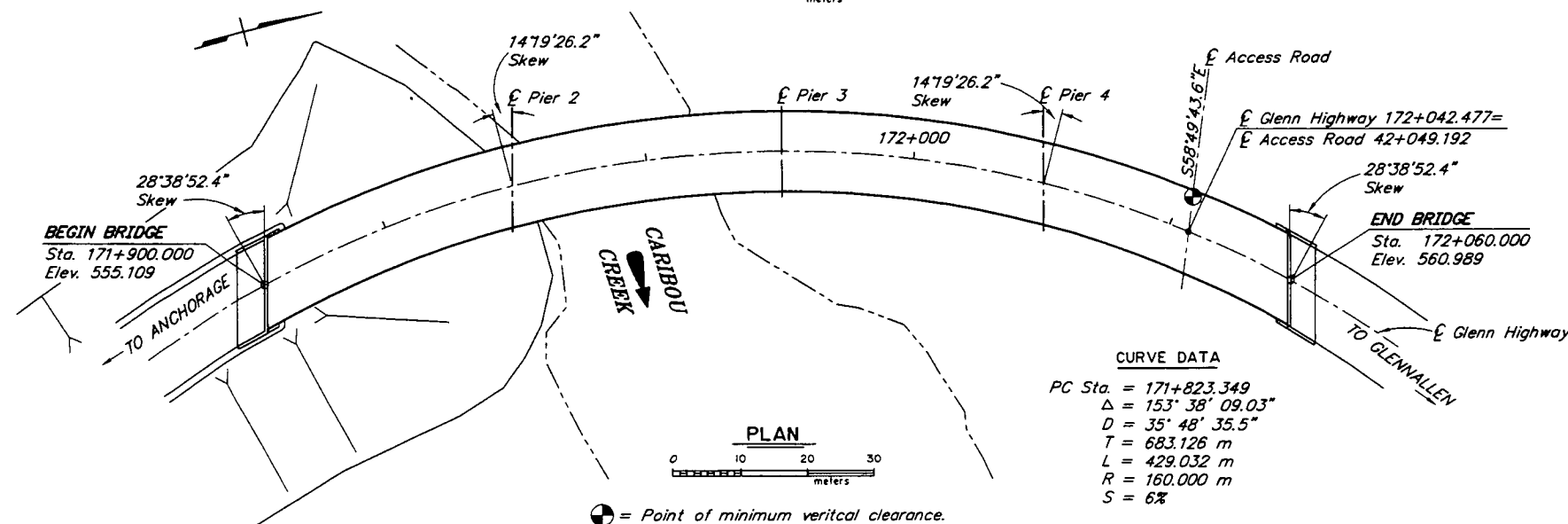
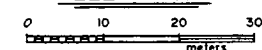


DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
FOUNDATION PLAN	3
ABUTMENT 1	4
ABUTMENT 5	5
WINGWALLS	6
DRILLED SHAFTS	7
PIER COLUMNS	8
PIER 2	9
PIER 3	10
PIER 4	11
FRAMING PLAN	12
TYPICAL SECTION	13
DECK	14
GIRDER DEFLECTION DIAGRAM	15
GIRDERS	16
END DIAPHRAGMS	17
PIER DIAPHRAGMS	18
INTERMEDIATE DIAPHRAGMS	19
EXPANSION JOINT	20
APPROACH SLAB	21
PEDESTRIAN RAILING	22
THREE BEAM TRANSITION	23
LOG OF TEST HOLES	

PRELIMINARY PLAN



ELEVATION



CURVE DATA

PC Sta. = 171+823.349
Δ = 153° 38' 09.03"
D = 35° 48' 35.5"
T = 683.126 m
L = 429.032 m
R = 160.000 m
S = 6%

⊙ = Point of minimum vertical clearance.

DESIGNED BY:	CHECKED:	LAYOUT BY:	CHECKED BY:
DRAWN BY:	CHECKED:	SPECIFICATIONS BY:	PLANS & SPEC. COMPARED:
QUANTITIES BY:	CHECKED:	APPROVAL RECOMMENDED BY:	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

CARIBOU CREEK BRIDGE
GLENN HIGHWAY
GENERAL LAYOUT



BRIDGE NO. 1179
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-0A1-5(15)/53441	2002		

NOTES

Design:.....AASHTO LRFD Bridge Design Specifications,
1998 Edition, with the latest Interim Specifications.

Live Load:.....HL 93

DESIGN LIVE LOAD DISTRIBUTION FACTORS			
GIRDER DESIGNATION	FORCE EFFECT	MULTIPLE LOADED LANES	SINGLE LOADED LANE
EXTERIOR	+Moment (near midspan)	0.88	0.69
	-Moment (at piers)	0.81	0.60
	Shear (near supports)	1.04	0.87
INTERIOR	+Moment (near midspan)	0.65	0.37
	-Moment (at piers)	0.74	0.41
	Shear (near supports)	0.74	0.56

Seismic Load:.....A=0.4g
Soil Type II, S = 1.2
Liquefaction Potential = Low

Dead Load:.....2.24 kPa for all paving.

Prestressed Concrete:.....See "Girders" Drawing.

Concrete:.....Use Class A-A Concrete for deck and approach slabs. $f'c=28$ MPa
Use Class DS Concrete for drilled shaft foundations. $f'c=28$ MPa

Use Class A Concrete for all other concrete unless otherwise noted. $f'c=28$ MPa

Reinforcing Steel:.....Use ASTM A706M reinforcing steel. $F_y=420$ MPa

Structural Steel:.....Use ASTM A709M Grade 250 Structural Steel unless otherwise noted. $F_y=250$ MPa

Galvanize all other structural steel embedded in or attached to concrete girders in conformance with AASHTO M111 or AASHTO M232 whichever is applicable.

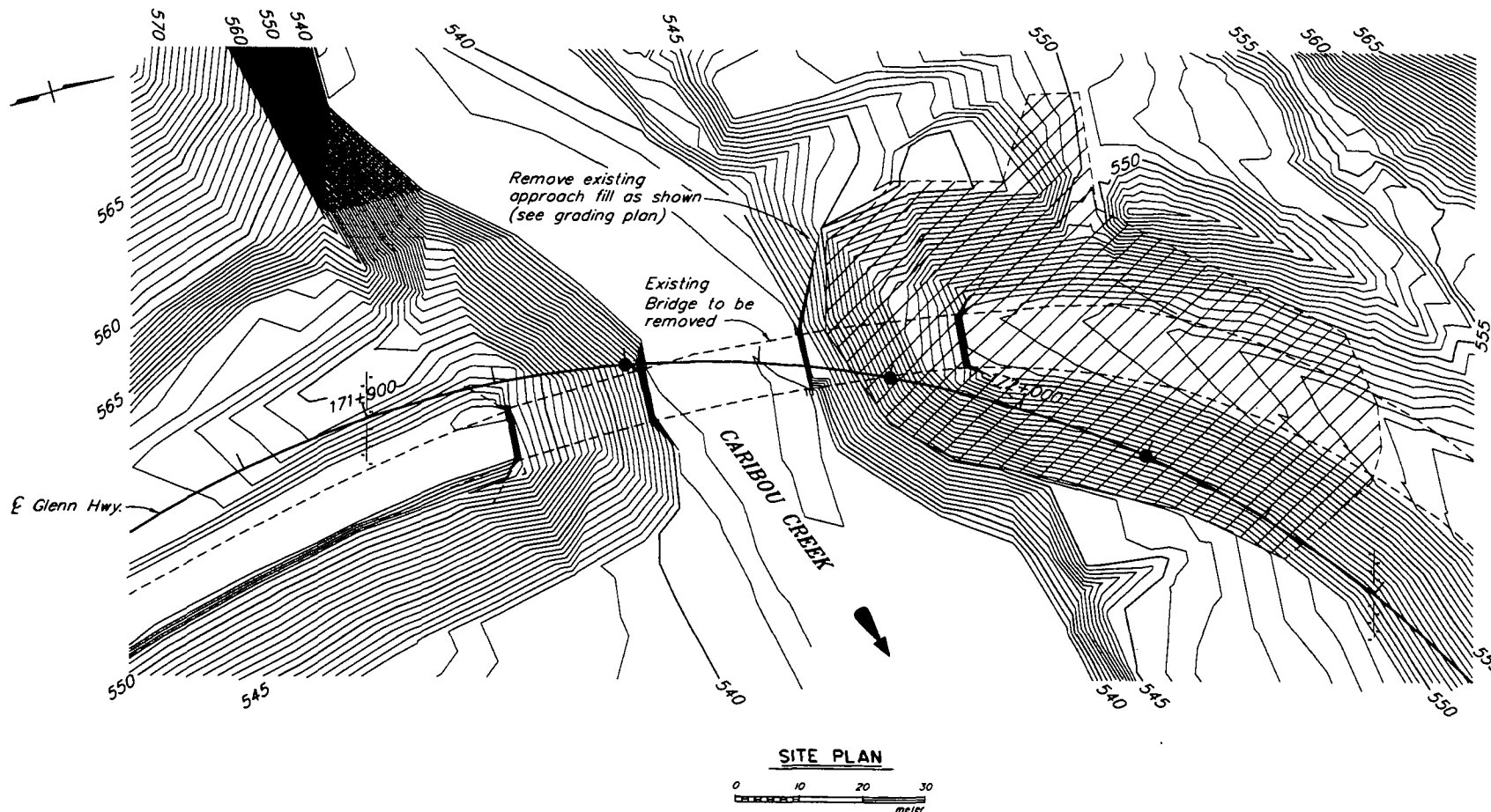
Piling:.....Use ASTM A709M, Grade 345. $F_y=345$ MPa
Pile Tip Reinforcement is required.

LOCATION	FOUNDATION TYPE	DESIRABLE * TIP ELEVATION	ESTIMATED TIP ELEVATION +	ULTIMATE CAPACITY	ALLOWABLE CAPACITY
Abutment 1	HP 360x174	538.5 m	538.5 m	2224 kN	890 kN
Pier 2	3050# Drilled Shaft	514.0 m	514.0 m	18 700 kN	7480 kN
Pier 3	3050# Drilled Shaft	504.0 m	504.0 m	18 700 kN	7480 kN
Pier 4	3050# Drilled Shaft	509.0 m	509.0 m	18 700 kN	7480 kN
Abutment 5	HP 360x174	520.0 m	520.0 m	2335 kN	850 kN

* Bedrock elevations slopes along length and width of bridge.

Abbreviations:.....
C = Centerline
P = Plate
& = and
@ = at
= diameter
Approx. = approximate
Abut. = Abutment
bot. = bottom
Br. = bridge
btwn. = between
Brg. = Bearings
C.I.P. = cast in place
Clr. = clear, clearance
Col. = column
CSL = crosshole sonic logging
dia. = diameter
D.H.W. = Design High Water
Dwg. = drawing
Elev. = elevation
e.f. = each face
f.f. = far face
Hwy. = highway
max. = maximum
min. = minimum
n.f. = near face
No. = number
spc. = space, spaces
Sta. = station
Symm. = symmetric
Typ. = typical

PRELIMINARY PLAN



PRELIMINARY

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	SUBST.	SUPERST.	TOTAL
202(17)	Removal of Bridge Number 548	LS	All Req'd	All Req'd	All Req'd
401(1A)	Asphalt Concrete, Type II, Class A	Megagram	---	363	363
401(2)	Asphalt Cement, Grade PG 52-28	Megagram	---	22	22
501(1)	Class A Concrete	LS-m ³	449.2	135.2	584.4
501(2)	Class A-A Concrete	LS-m ³	---	545.8	545.8
501(20)	Class DS Concrete (3.050 meter diameter)	m	104.6	---	104.6
501(21)	DS Grout	LS-m ³	159.8	---	159.8
502(1)	Prestressed Concrete Structural Members (38 465 Girders)	EA	---	20	20
503(1)	Reinforcing Steel	LS-kg	---	---	---
503(2)	Epoxy Coated Reinforcing Steel	LS-kg	---	---	---
505(5)	Furnish Structural Steel Piles	m	551.7	---	551.7
505(6)	Drive Structural Steel Piles	EA	22	---	22
507(2)	Pedestrian Railing	m	---	338.5	338.5
508(1)	Waterproofing Membrane	LS-m ²	---	1872	1872
514(1)	Drilled Shaft	LS	All Req'd	---	All Req'd
514(2)	Unclassified Shaft Excavation	m	104.6	---	104.6
514(3)	Test Holes	LS	All Req'd	---	All Req'd
514(4)	Casing	m	104.6	---	104.6
514(5)	Instrumentation and Data Collection	LS	All Req'd	---	All Req'd
606(12)	Guardrail / Bridge Rail Connection	EA	---	4	4
611(1)	Riprap, Class II	m ³	25	---	25
631(2B)	Geotextile, Erosion Control, Class 2	m ²	60	---	60
643(30)	Temporary Crossing	LS	All Req'd	All Req'd	All Req'd

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

HYDRAULIC & HYDROLOGIC SUMMARY

Flood Frequency (Yr.)	50 Yr.	100 Yr.	500 Yr.
Exceedance Probability (%)	2	1	0.2
Design Discharge (m ³ /sec)	264.8	292.3	357.5
Design High Water (m)	541.7	541.8	542.0
Anticipated Add'l Backwater (m)		0.0	
Contraction Scour (m)		0.8	1.0
Abutment Scour (m)		nc	nc
Pier Scour (m)		na	na

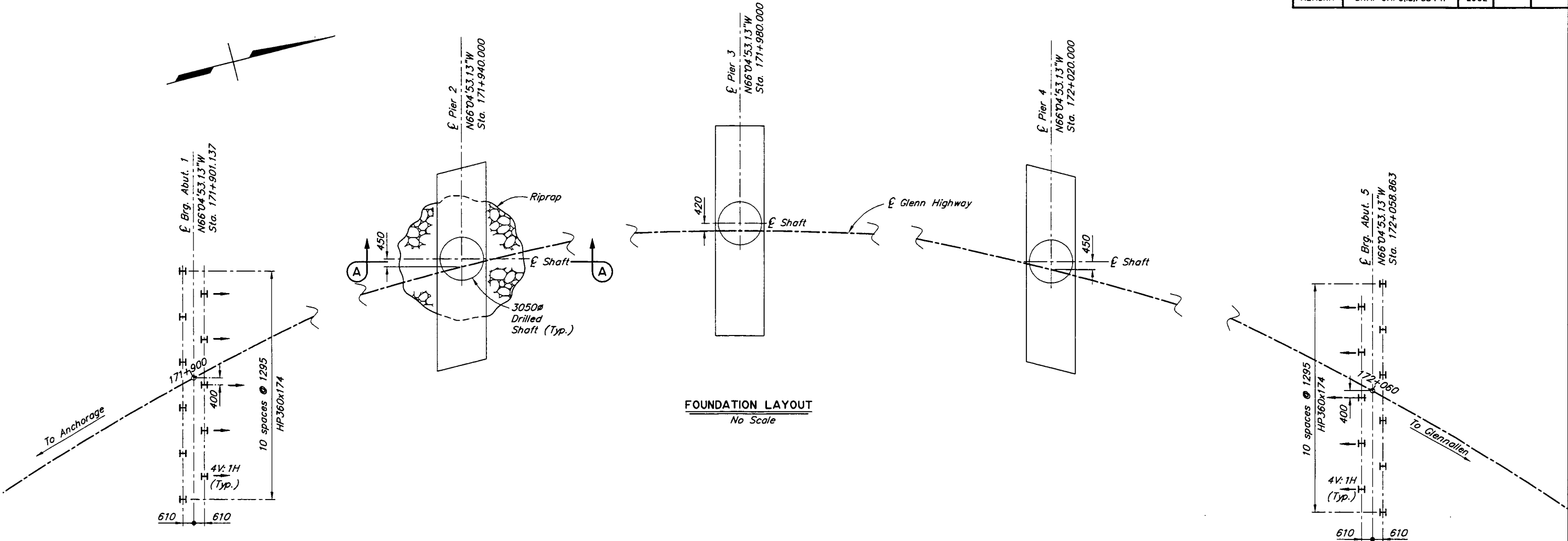
Drainage Area for this crossing: 748.5 square kilometers.

Hydraulic Capacity: >>>357.5 cms at Low Superstructure Elevation 552.5 m. which has an exceedance probability of equal to or less than 0.2 percent.

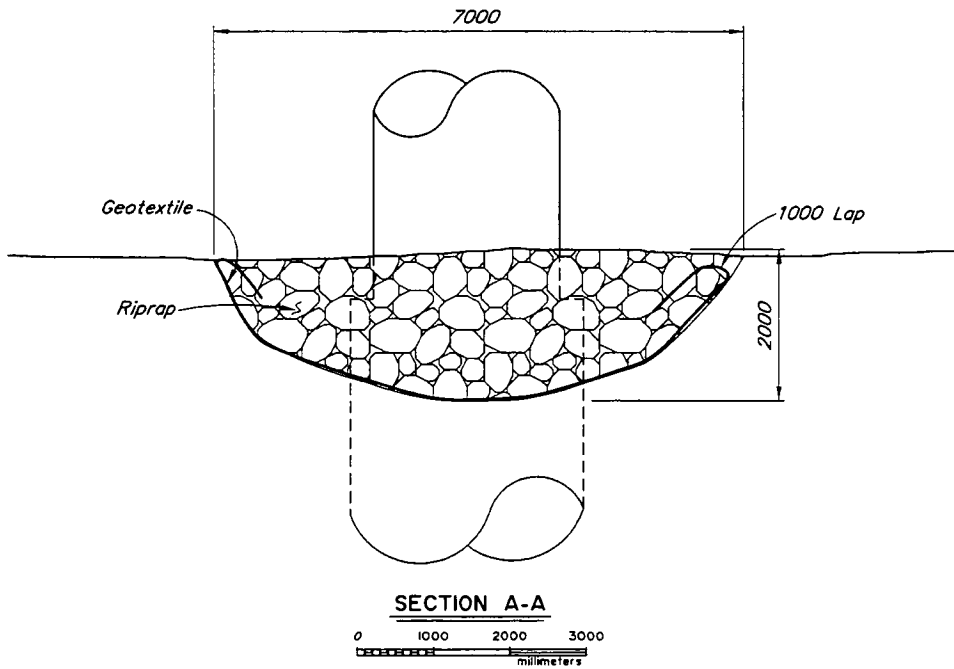
Total scour equals contraction scour + local scour.

DESIGNED BY:	CHECKED:	HYDRAULICS BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	CARIBOU CREEK BRIDGE GLENN HIGHWAY SITE PLAN	 BRIDGE NO. 1179 DWG. NO. 2
DRAWN BY:	CHECKED:	FOUNDATIONS REVIEWED BY:				
QUANTITIES BY:	CHECKED:					

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-OAI-5(15)/53441	2002		



FOUNDATION LAYOUT
No Scale

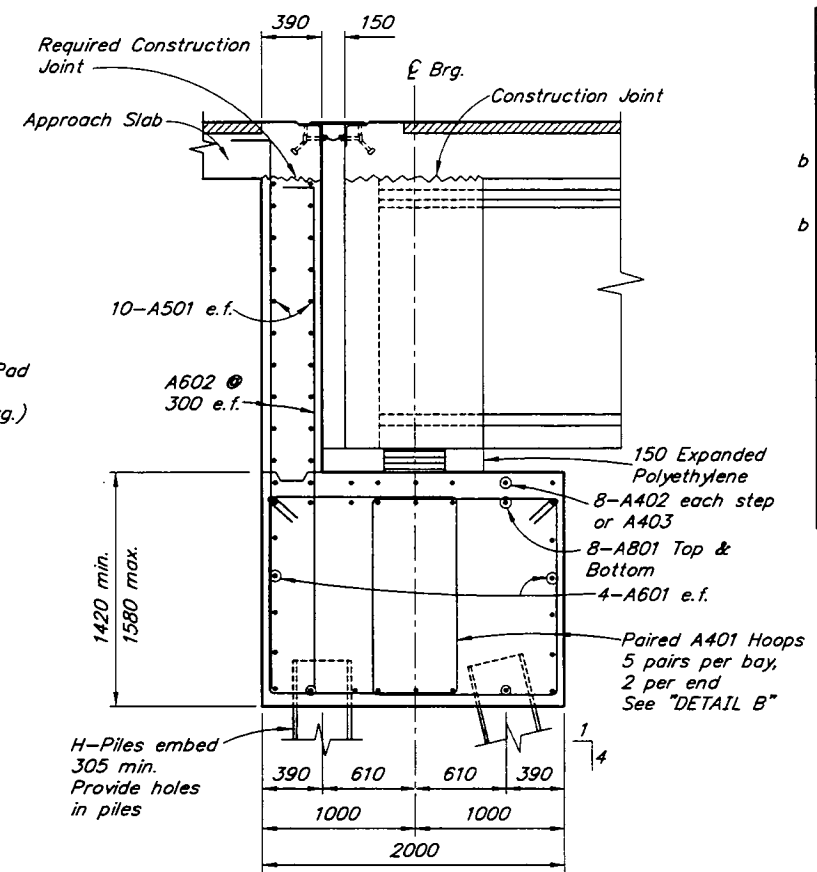
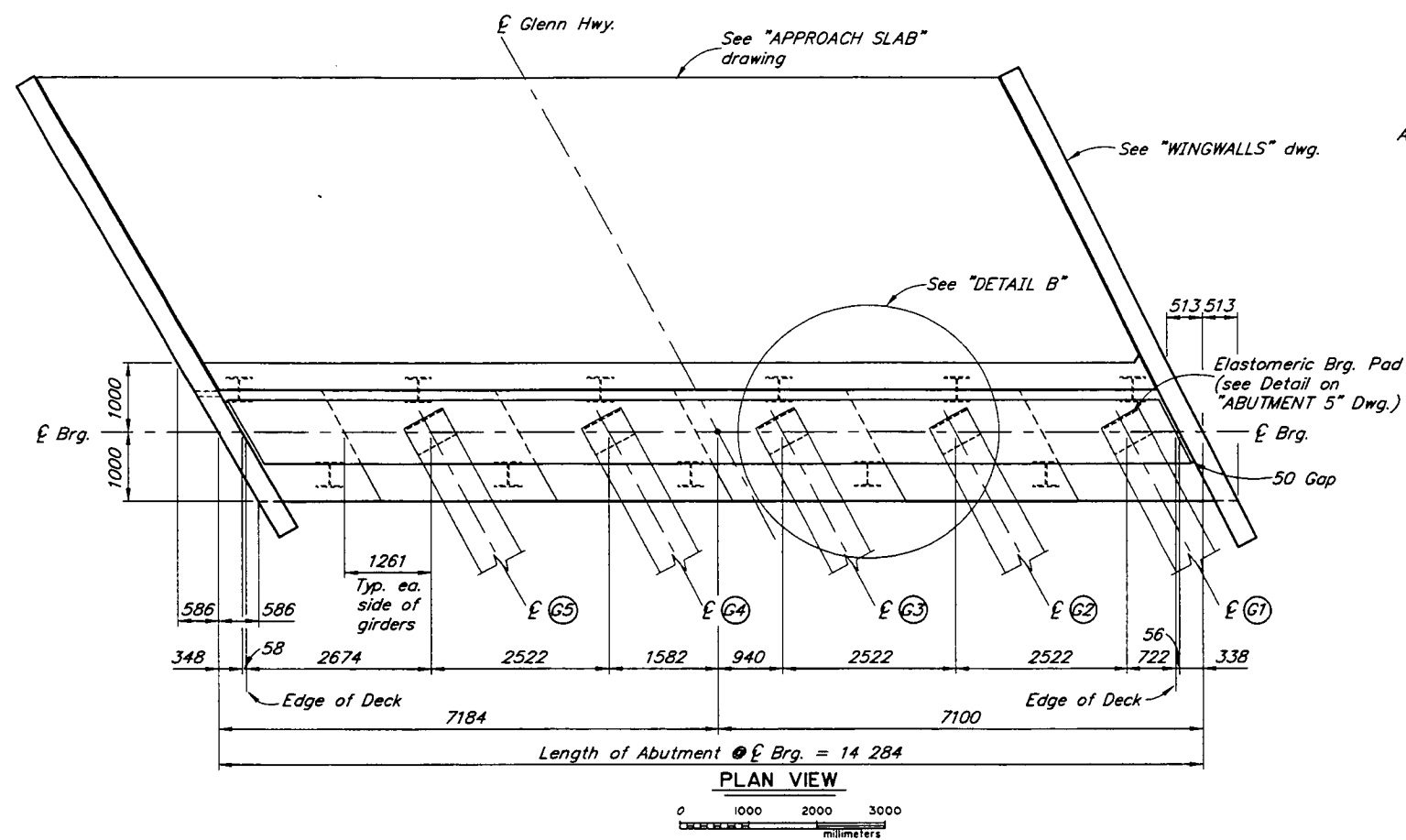


SECTION A-A

PRELIMINARY

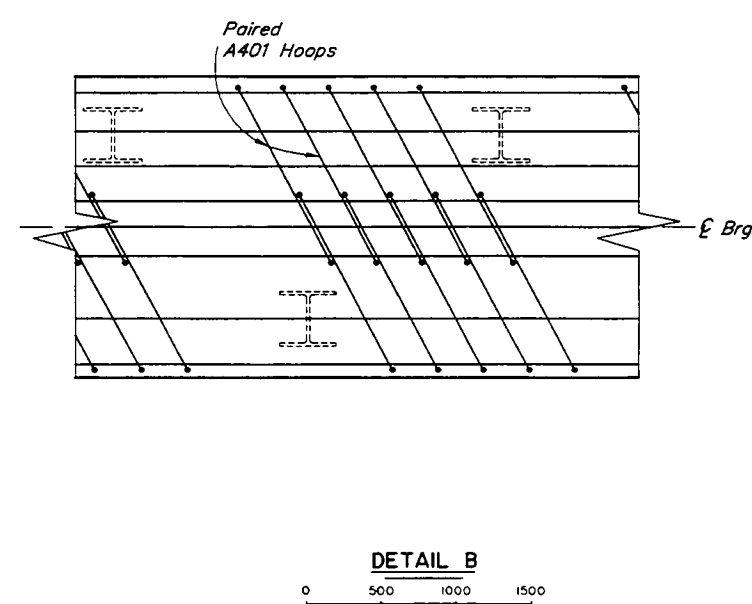
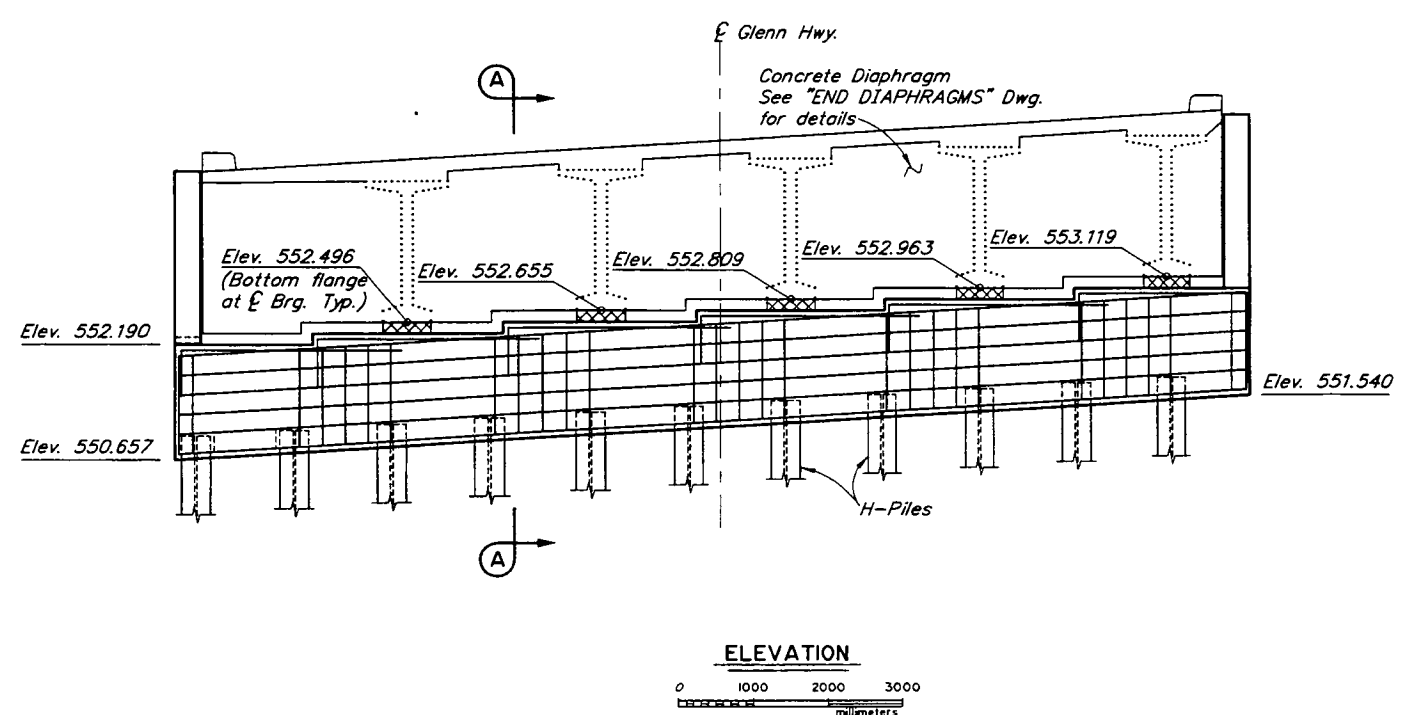
DESIGNED BY:	CHECKED:	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		CARIBOU CREEK BRIDGE GLENN HIGHWAY FOUNDATION PLAN	 BRIDGE NO. 1179 DWG. NO. 3
DRAWN BY:	CHECKED:					
QUANTITIES BY:	CHECKED:					

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-0AI-5115/53441	2002		



REINFORCING STEEL					BENDING DIAGRAM
MARK	SIZE	NO.	LENGTH	TYPE	
A401	4	29	5660	BENT	
A402	4	40	3200	BENT	
A403	4	8	2675	BENT	
A501	5	20	15 200	BENT	
A601	6	8	14 200	—	
A602	6	92	3700	BENT	
A801	8	16	14 200	—	

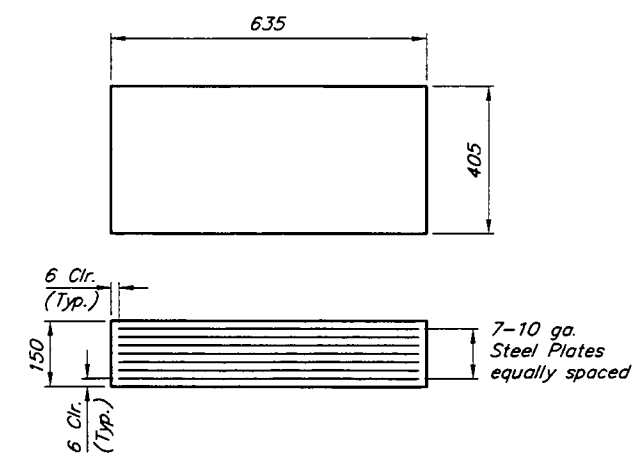
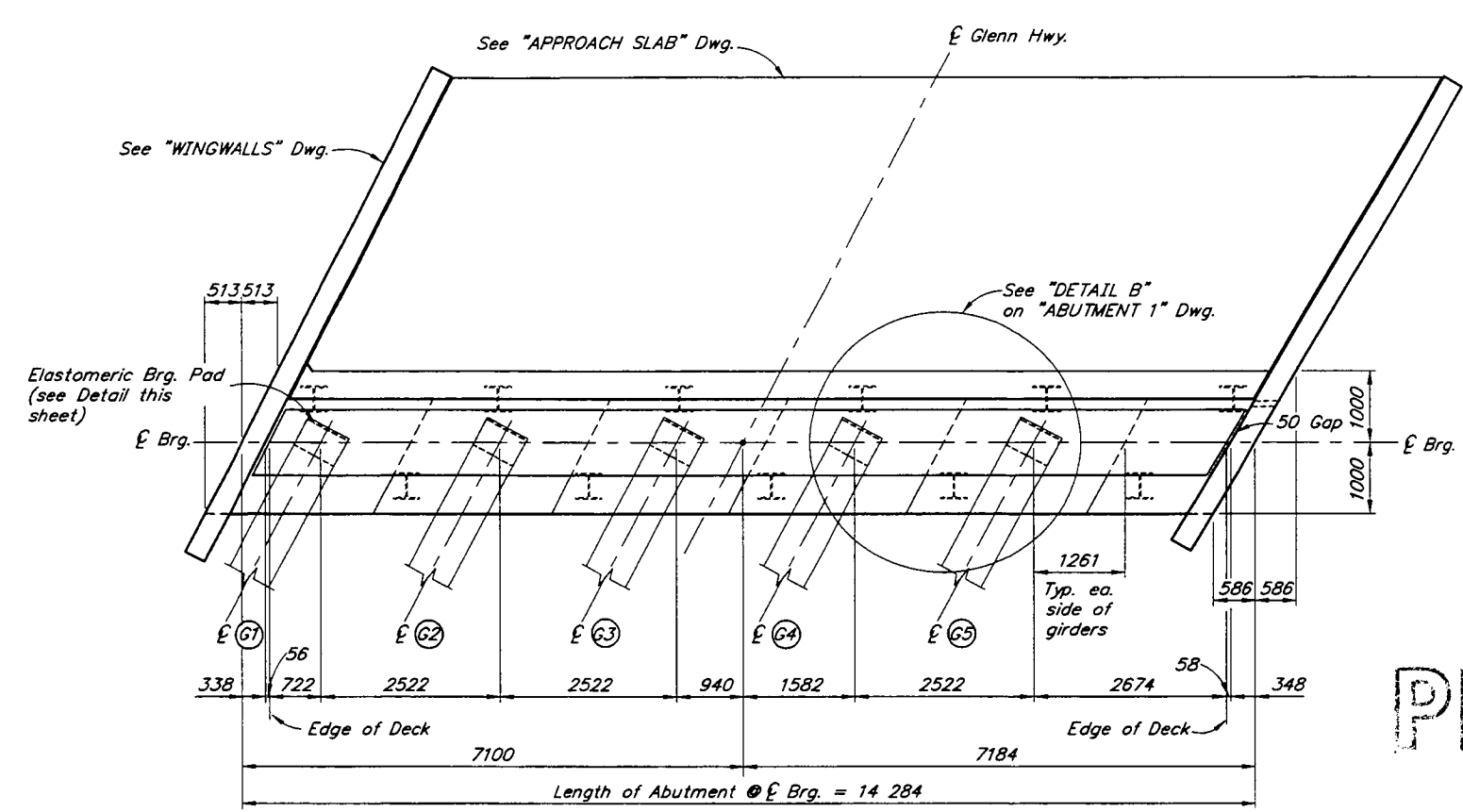
b - Epoxy Coated



PRELIMINARY

DESIGNED BY:	CHECKED:	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	CARIBOU CREEK BRIDGE GLENN HIGHWAY ABUTMENT 1	BRIDGE NO. 1179 DWG. NO. 4
DRAWN BY:	CHECKED:				
QUANTITIES BY:	CHECKED:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-OAI-5(15)/53441	2002		

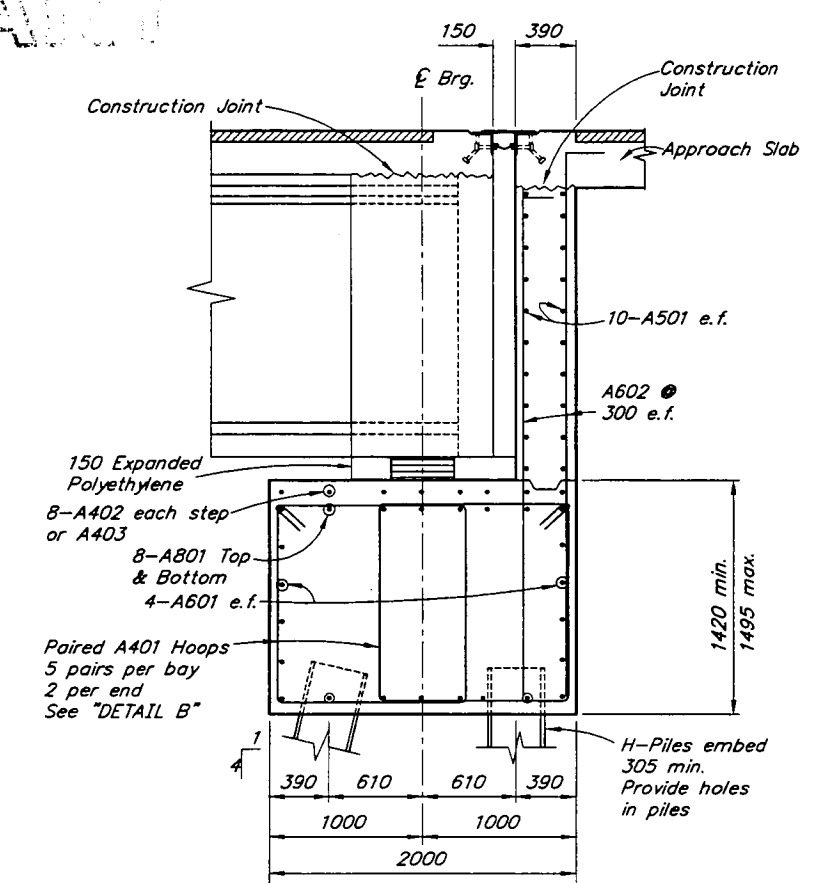
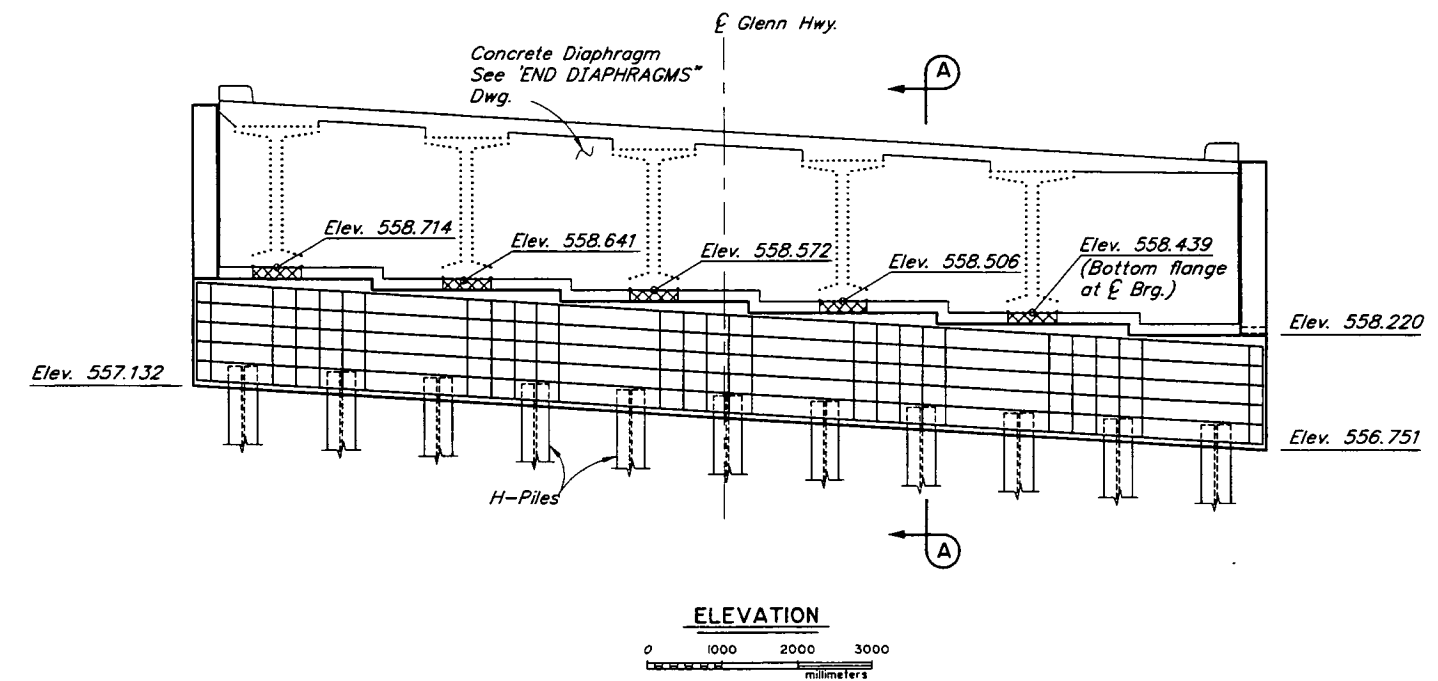


BEARING PAD DETAILS
(50 Durometer)
No Scale

REINFORCING STEEL					
MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	4	29	5660	BENT	
A402	4	40	3200	BENT	
A403	4	8	2675	BENT	
A501	5	20	15 200	BENT	
A601	6	8	14 200	---	
A602	6	92	3700	BENT	
A801	8	16	14 200	---	

b - Epoxy coated

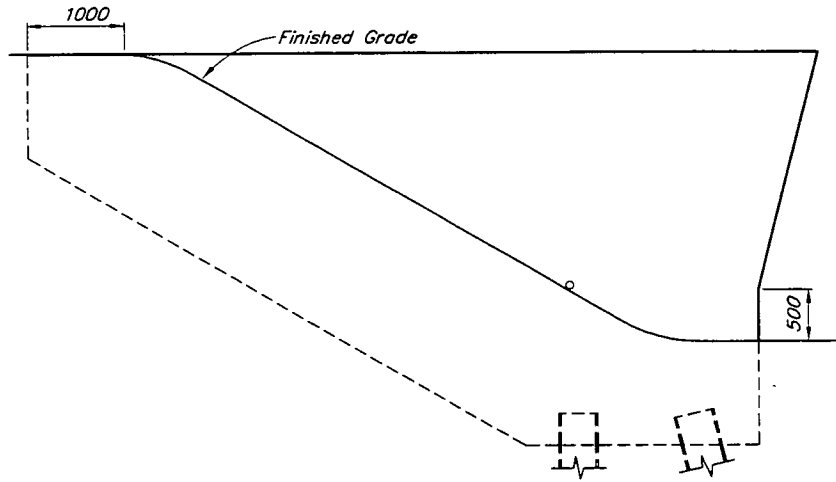
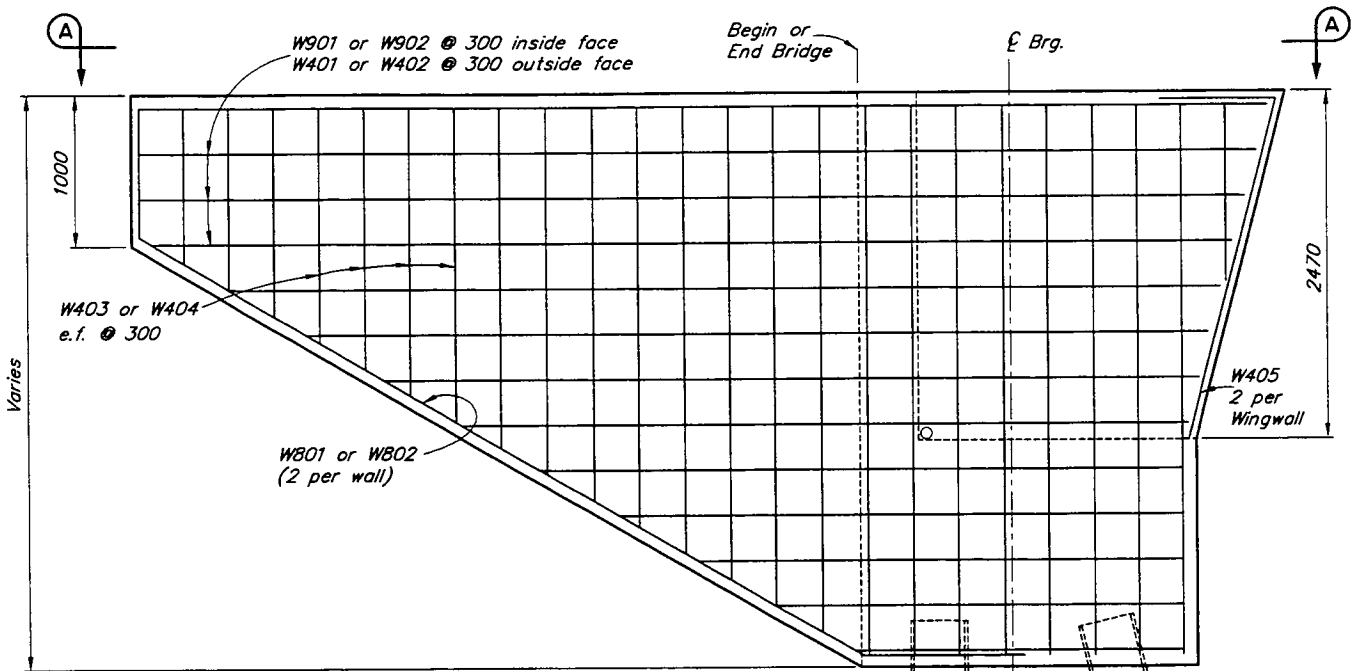
PRELIMINARY



SECTION A-A
0 500 1000 1500 millimeters

DESIGNED BY:	CHECKED:	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	CARIBOU CREEK BRIDGE GLENN HIGHWAY ABUTMENT 5	BRIDGE NO. 1179 DWG. NO. 5
DRAWN BY:	CHECKED:				
QUANTITIES BY:	CHECKED:				

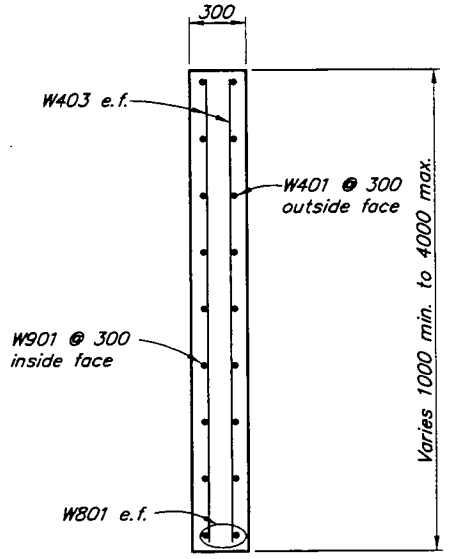
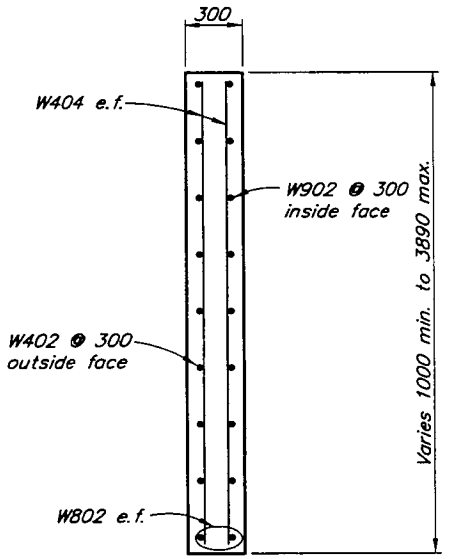
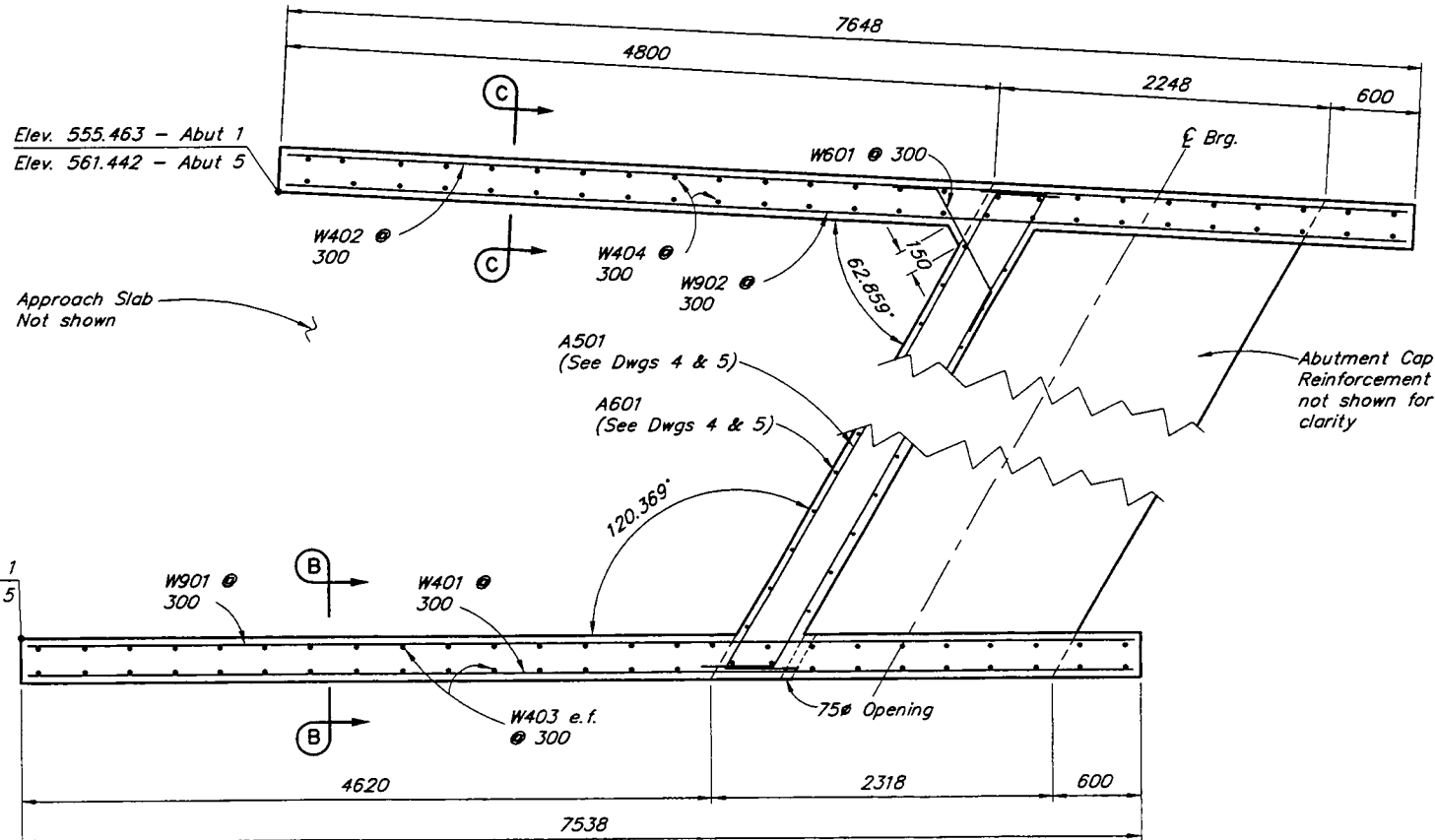
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-OAI-5(15)/53441	2002		



REINFORCING STEEL-ONE ABUTMENT					
MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401	4	13	Varies	—	7425 Max. 2660 Min.
W402	4	13	Varies	—	7425 Max. 2660 Min.
W403	4	25	Varies	—	W401, W901
W404	4	25	Varies	—	7535 Max. 2450 Min.
W405	4	4	3500	BENT	3765 Max. 895 Min.
W601	6	12	1785	BENT	W402, W902
W801	8	2	7720	BENT	W403
W802	8	2	7750	BENT	W404
W901	9	13	Varies	—	W405
W902	9	13	Varies	—	

WINGWALL DETAIL
(Abutment 1 shown,
Abutment 5 similar)

PRELIMINARY



SECTION C-C - WEST WALL

SECTION B-B - EAST WALL

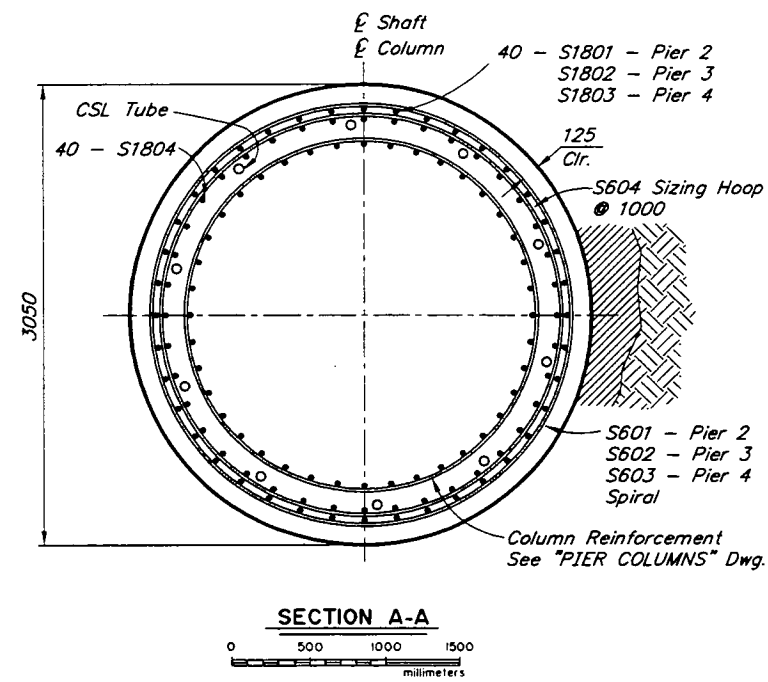
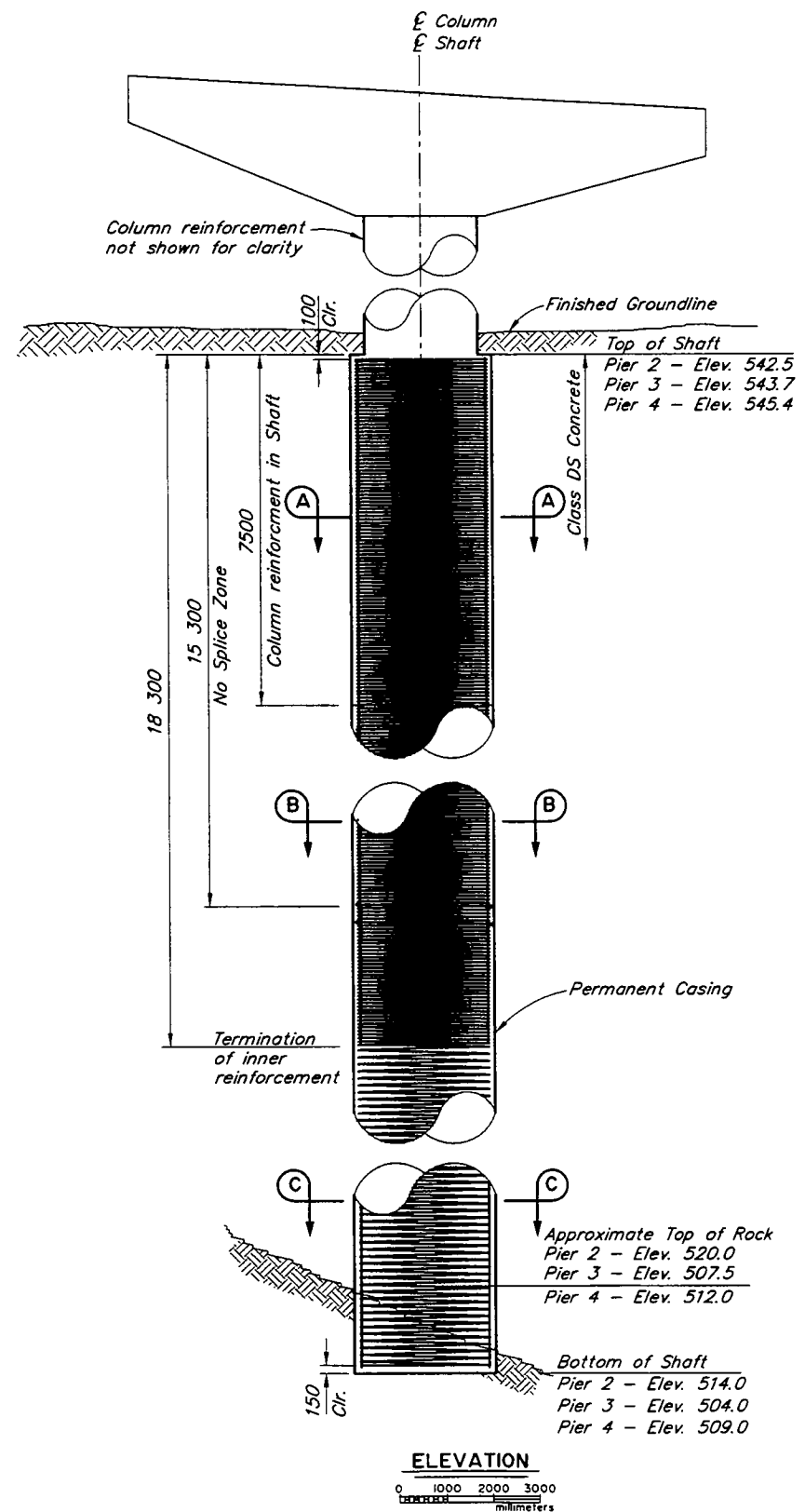
DESIGNED BY:	CHECKED:
DRAWN BY:	CHECKED:
QUANTITIES BY:	CHECKED:

PRELIMINARY PLAN

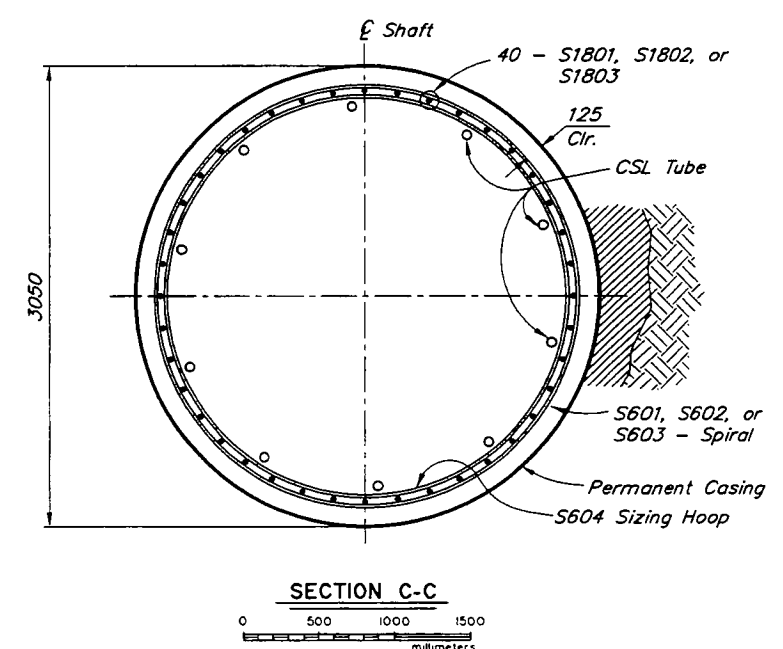
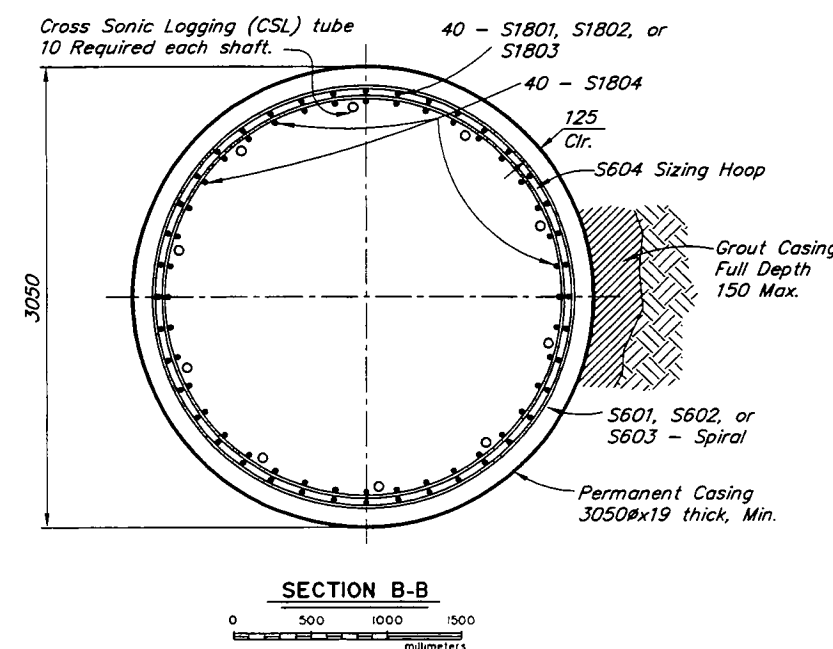
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

CARIBOU CREEK BRIDGE
GLENN HIGHWAY
WINGWALLS

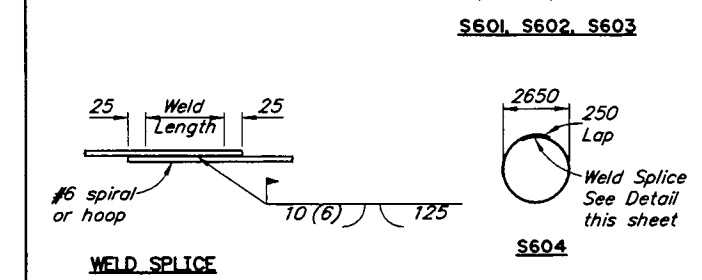
BRIDGE NO. 1179
DWG. NO. 6



PRELIMINARY



REINFORCING STEEL					
MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
S601	6	1	2 851 700	SPIRAL	
S602	6	1	3 535 100	SPIRAL	
S603	6	1	3 334 700	SPIRAL	
S604	6	106	8575	BENT	
S1801	18	40	28 250		
S1802	18	40	39 450		
S1803	18	40	36 250		
S1804	18	120	18 200		

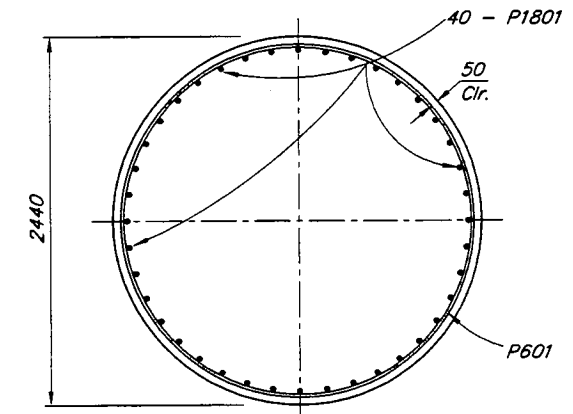


- a - Lap length required is not measured for payment and is not included in the pay quantities.
- b - Where spiral is discontinuous, weld end of spiral back onto itself.
- c - Lap splice not permitted.

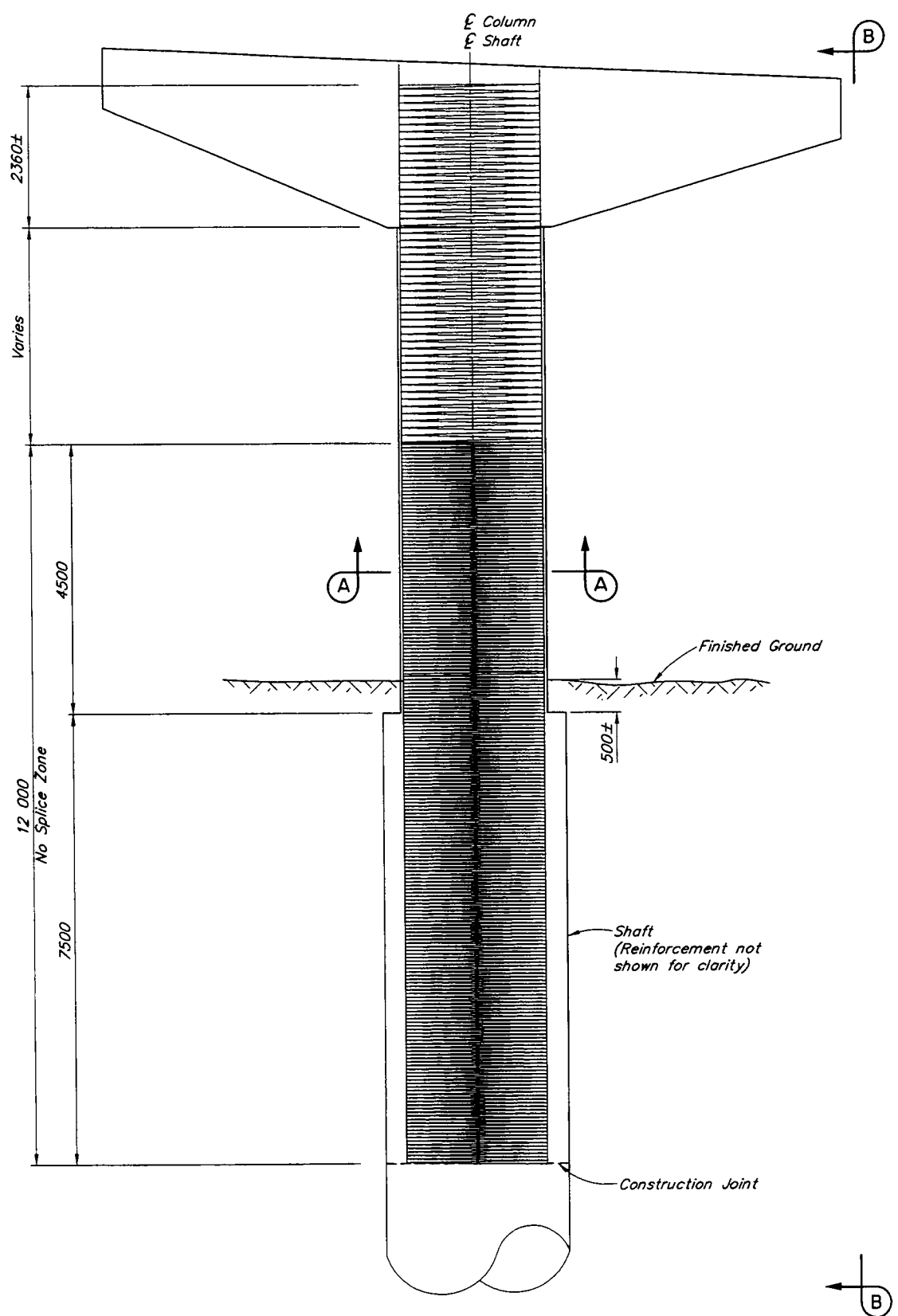
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRAF-OAI-5(15)/53441	2002		

REINFORCING STEEL-ONE PIER					
MARK	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
P601	6	1	1 852 600	SPIRAL	
P1801	18	40	17 960		

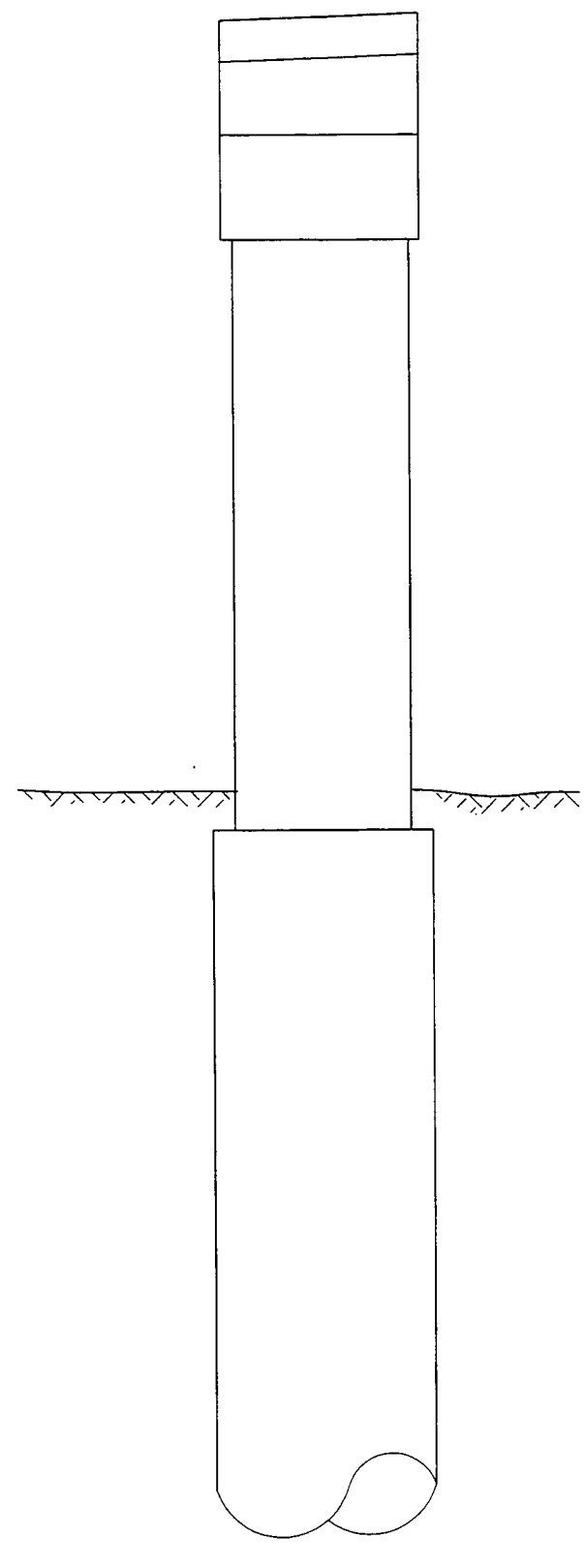
PRELIMINARY



SECTION A-A
0 500 1000 1500
millimeters



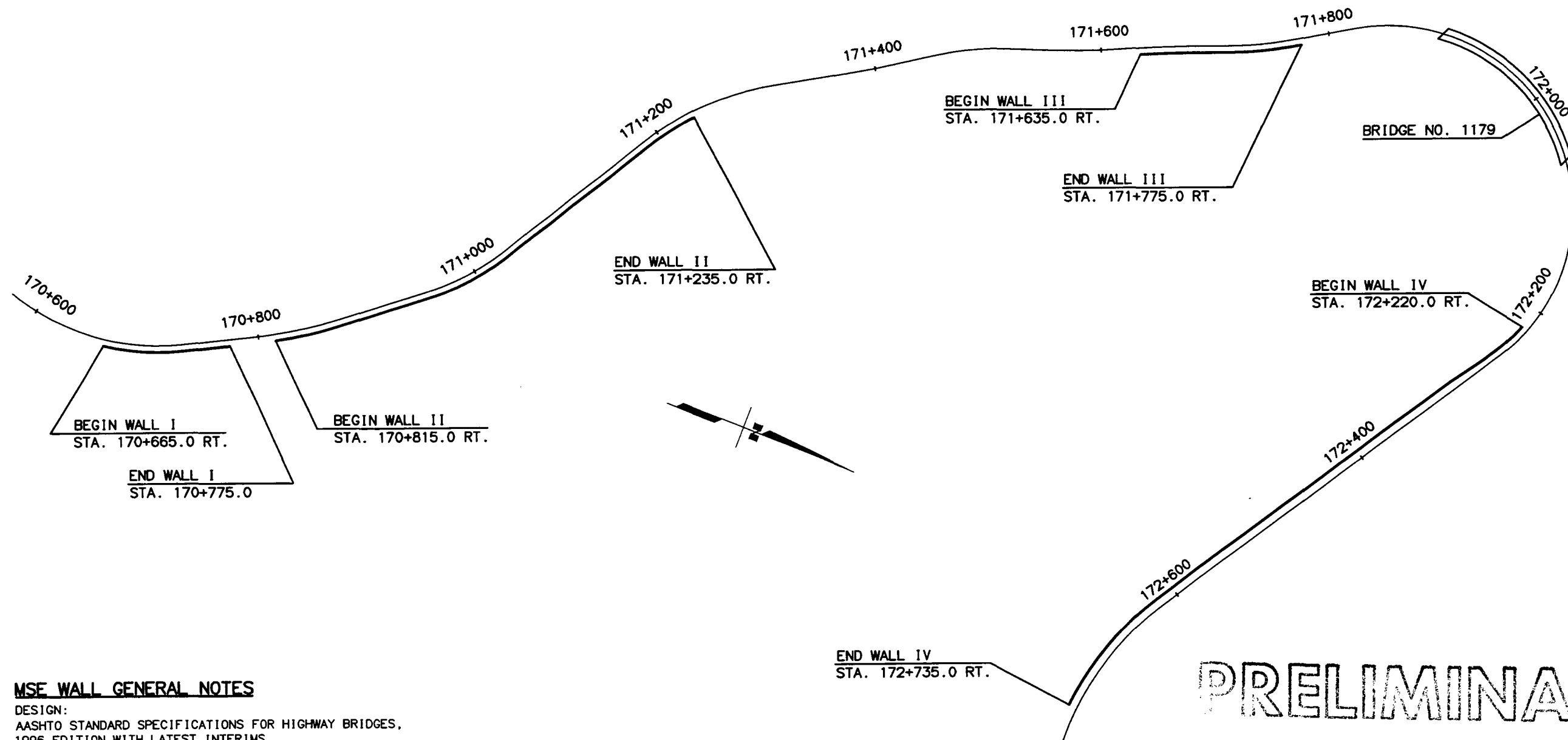
TYPICAL SECTION
0 1000 2000 3000
millimeters



VIEW B-B
0 1000 2000 3000
millimeters

DESIGNED BY:	CHECKED:	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	CARIBOU CREEK BRIDGE GLENN HIGHWAY PIER COLUMNS	 BRIDGE NO. 1179 DWG. NO. 8
DRAWN BY:	CHECKED:				
QUANTITIES BY:	CHECKED:				

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	W1	



MSE WALL GENERAL NOTES

DESIGN:
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES,
1996 EDITION WITH LATEST INTERIMS.

CONSTRUCTION:
STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY
CONSTRUCTION 1998 AND THE SPECIAL PROVISIONS.

	WALL I	WALL II	WALL III	WALL IV
MSE REINFORCED BACKFILL: SOIL UNIT WEIGHT = SOIL FRICTION ANGLE =	21.7 kN/m ³ 30°	21.7 kN/m ³ 30°	21.7 kN/m ³ 30°	21.7 kN/m ³ 30°
MSE RETAINED BACKFILL: SOIL UNIT WEIGHT = SOIL FRICTION ANGLE =	21.7 kN/m ³ 36°	21.7 kN/m ³ 36°	21.7 kN/m ³ 36°	21.7 kN/m ³ 36°
FOUNDATION SUBSOIL: SOIL UNIT WEIGHT = SOIL FRICTION ANGLE =	20.4 kN/m ³ 34°	20.4 kN/m ³ 34°	20.4 kN/m ³ 34°	20.4 kN/m ³ 34°

REFER TO PLAN AND PROFILE (F SHEETS) FOR ROADWAY GEOMETRY.



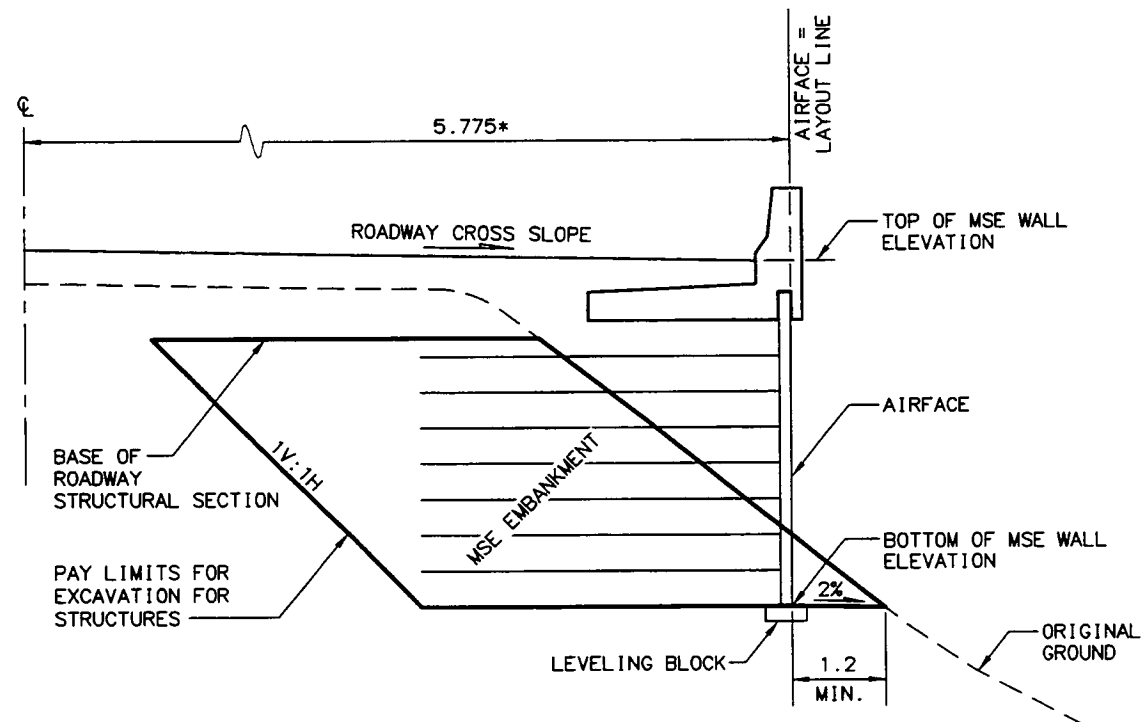
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

GLENN HIGHWAY
MP 100-109
CARIBOU CREEK

RETAINING WALLS
LAYOUT

DESIGNED BY
CHECKED BY
DRAFTED BY
VIEW: 2
AUTOCAD-DRAWING-51310-3-WALL.DET.dwg
SPECIFICATIONS
SHEET
COMPUTER DESIGNATION

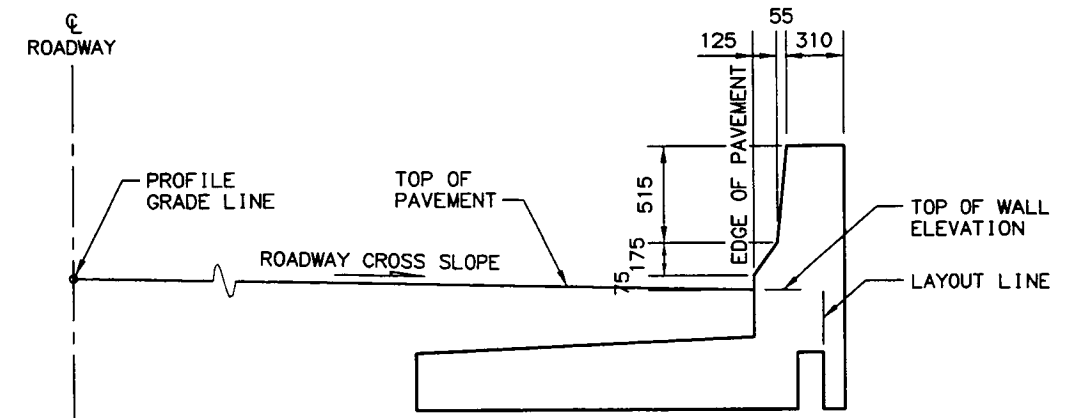
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	W2	—



TYPICAL WALL SECTION

- WALL I: STA. 170+665.0 RT. TO STA. 170+775.0 RT.
WALL II: STA. 170+815.0 RT. TO STA. 170+850.0 RT.
STA. 171+190.0 RT. TO STA. 171+235.0 RT.
WALL III: STA. 171+635.0 RT. TO STA. 171+775.0 RT.
WALL IV: STA. 172+220.0 RT. TO STA. 172+735.0 RT.

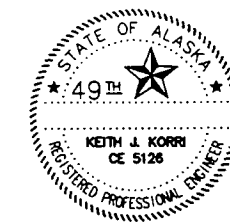
* OFFSET TO AIRFACE VARIES, SEE WALL IV PLAN AND PROFILE SHEETS.



MODIFIED HALF CONCRETE BARRIER

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS.

PRELIMINARY



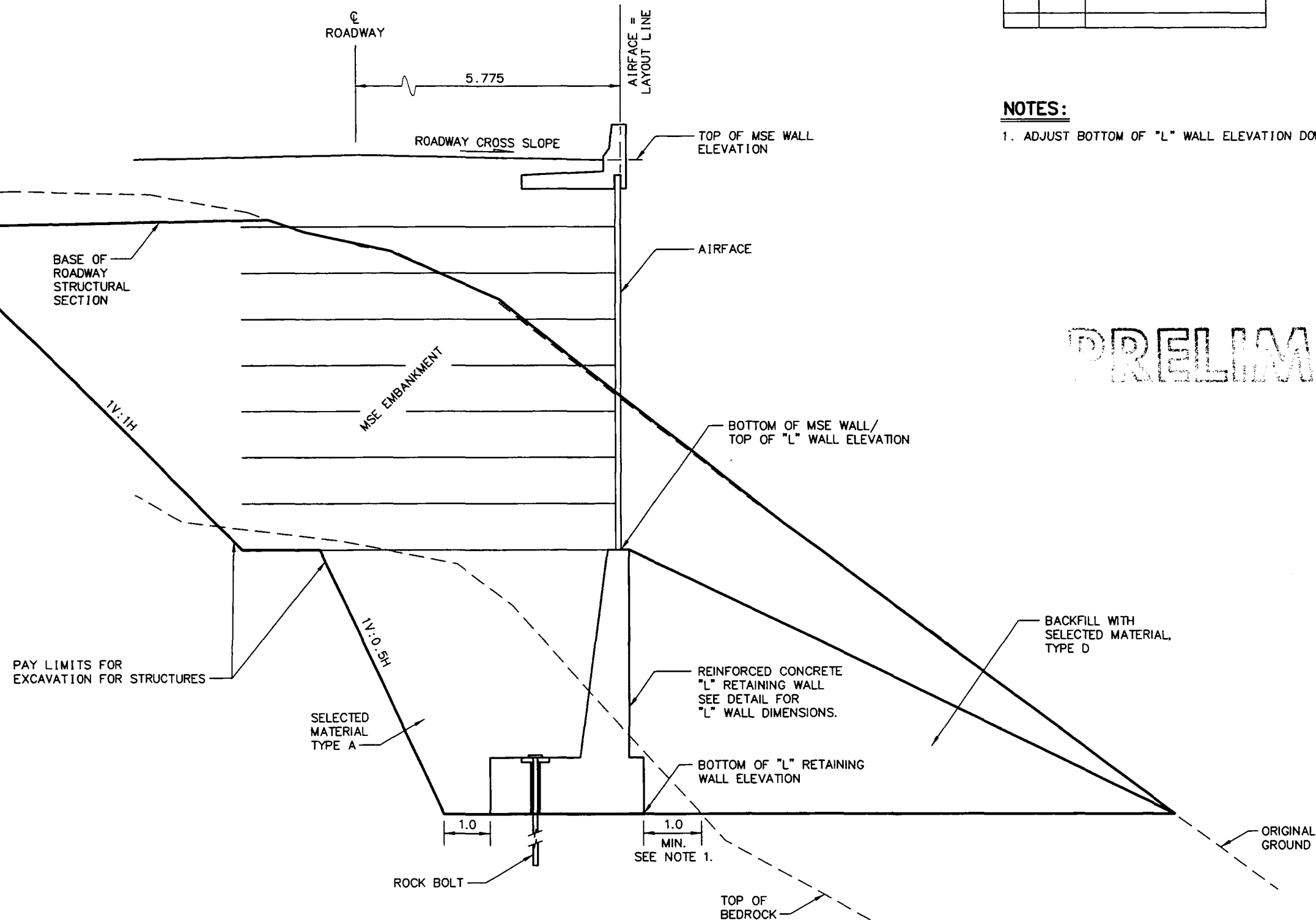
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
MSE WALL
TYPICAL SECTION

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	W3	

NOTES:

1. ADJUST BOTTOM OF "L" WALL ELEVATION DOWN TO OBTAIN MINIMUM DIMENSION GIVEN.

PRELIMINARY



TYPICAL WALL II SECTION
STA. 170+850.0 RT. TO STA. 171+190.0 RT.



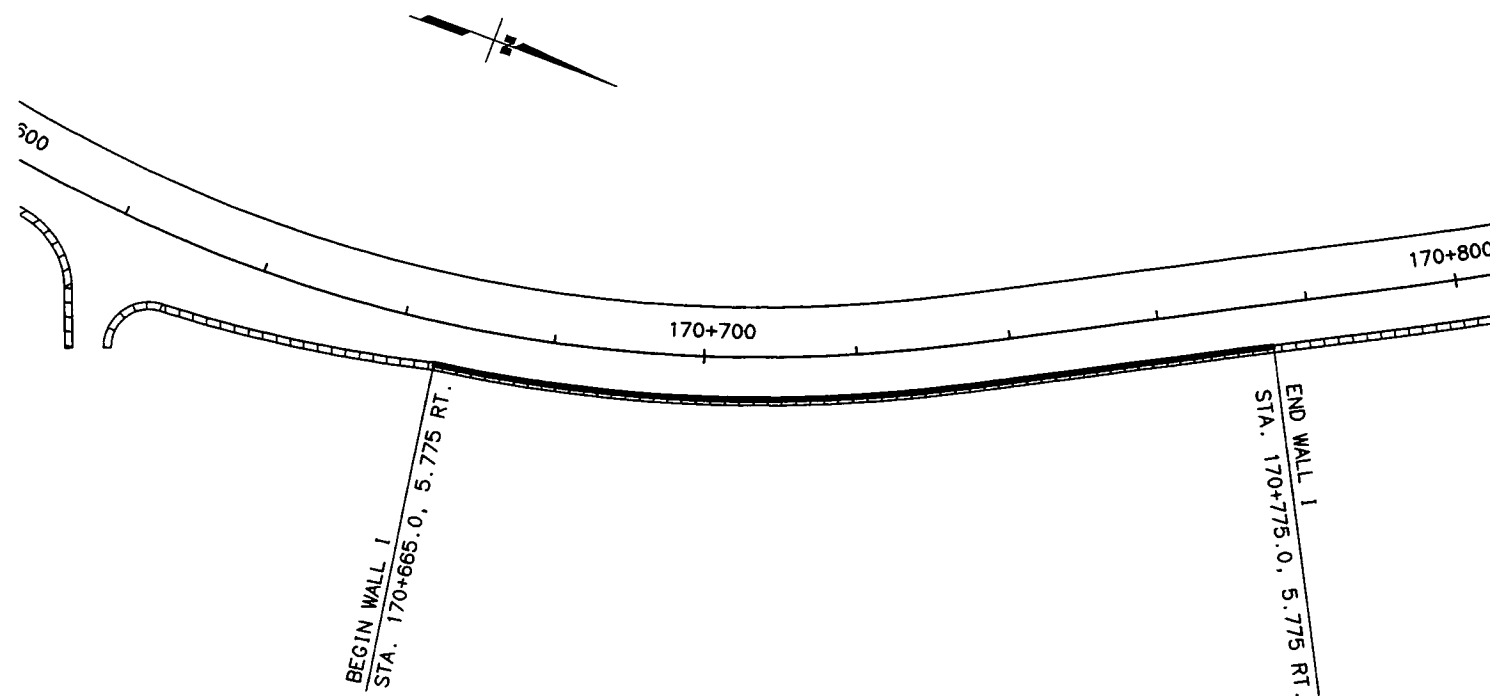
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
KEITH J. KORRI
CE 5126
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
**GLENN HIGHWAY
MP 100-109
CARIBOU CREEK**
**WALL II
TYPICAL SECTION**

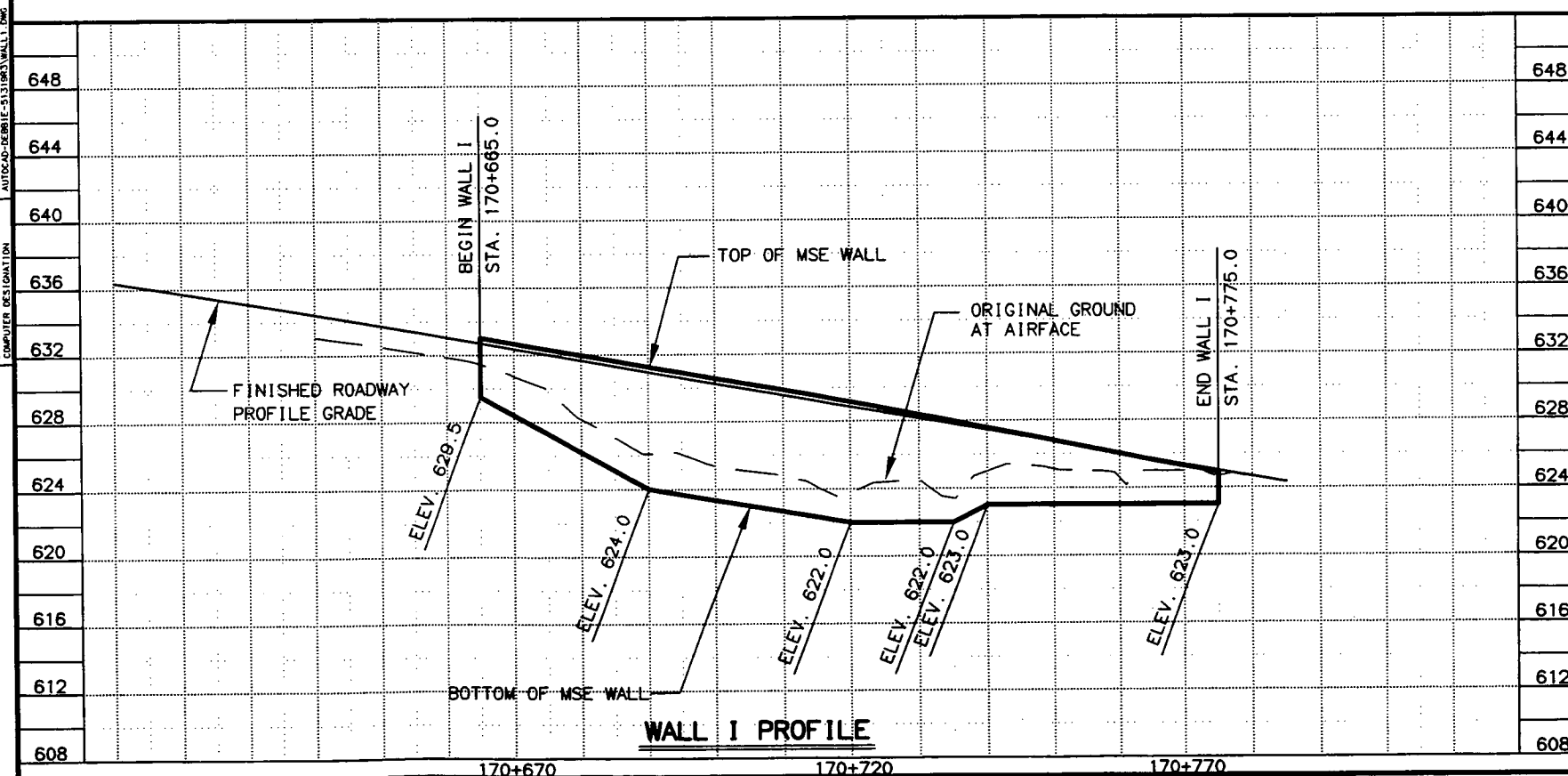
DESIGNED BY: 05/08/2002
CHECKED BY: 07/15/PL
DRAWN BY: 07/15/PL
VIEW: 3
AUTOCAD: 06/08/02-5130W-3 WALL.DWG
SPECIFICATIONS: SCALE: 1/4"=1'-0"
COMPUTER DESIGNATION:

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	W4	

PRELIMINARY



WALL I PLAN



WALL I PROFILE

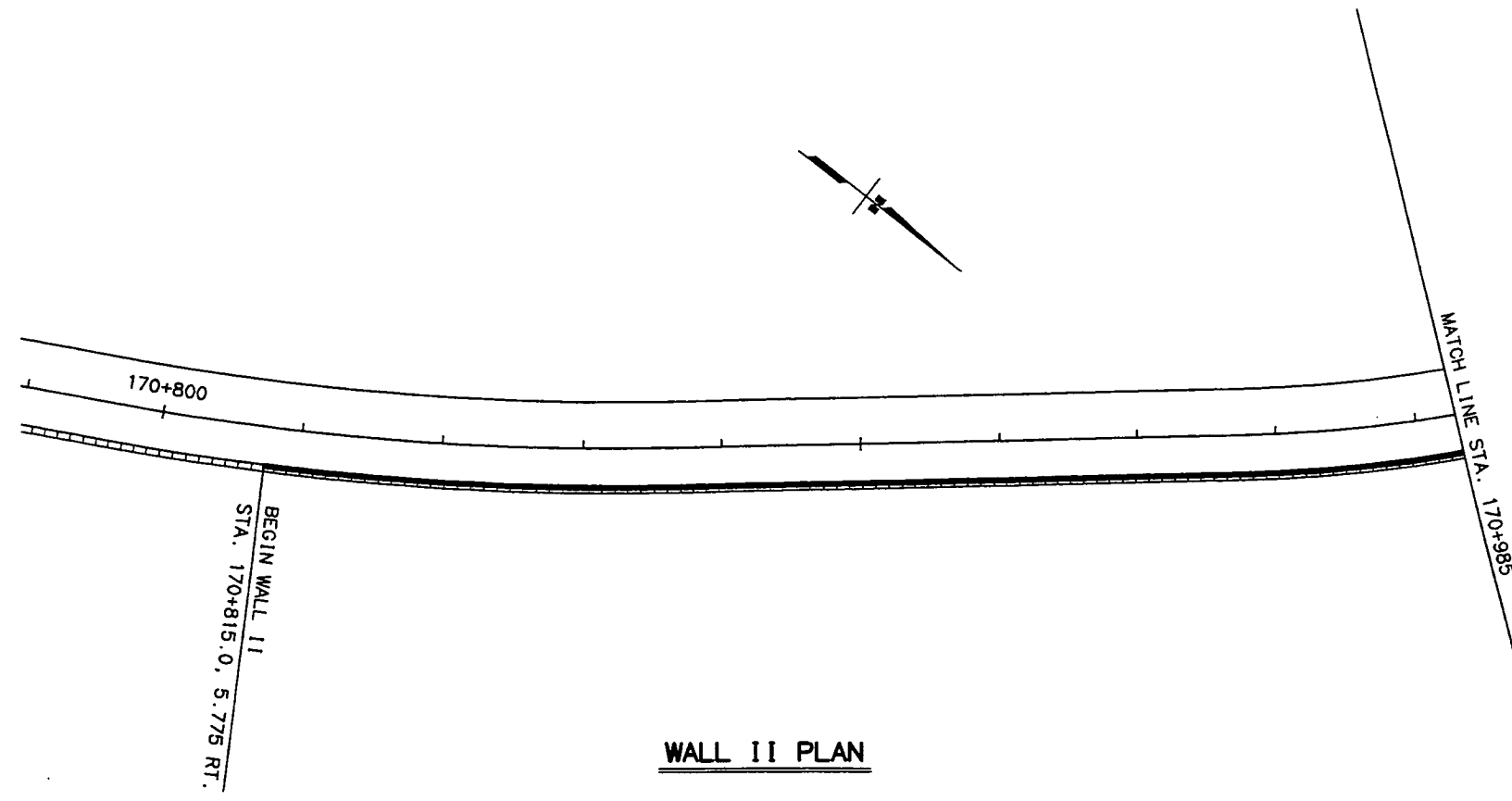


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
RETAINING WALLS
WALL I
PLAN AND PROFILE

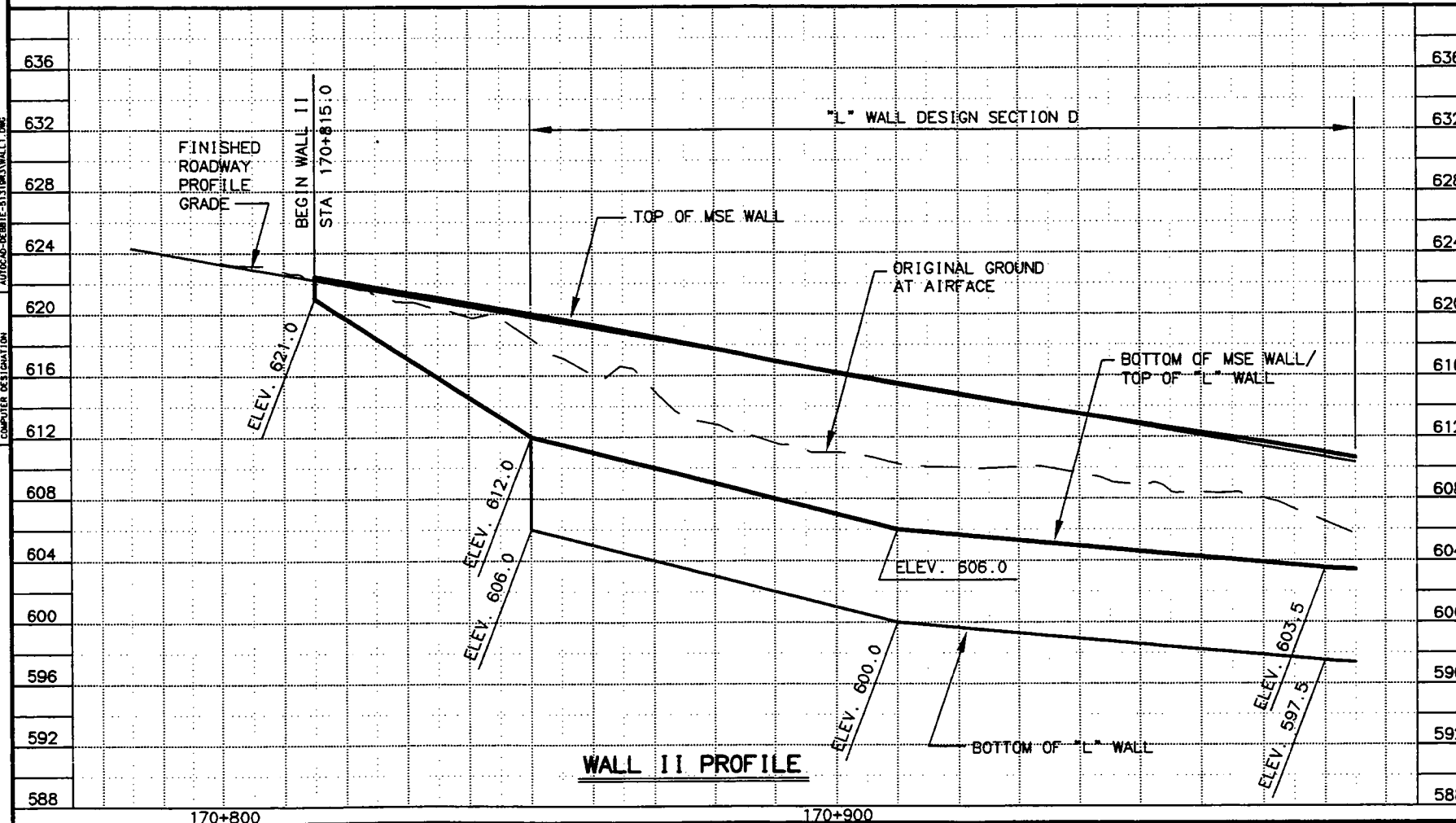
SPECIFICATIONS
SCALE 1"=50'
COMPUTER DESIGNATION
XREF: CERRROF WALL.DWG
AUTOCAD-DERIVE-513183 WALL I.DWG
DESIGNED BY
CHECKED BY
PLOT SCALE 1"=5'
PLOT VIEW: W1
5/2/02/2002
5/2/02/2002

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	W5	

PRELIMINARY



WALL II PLAN



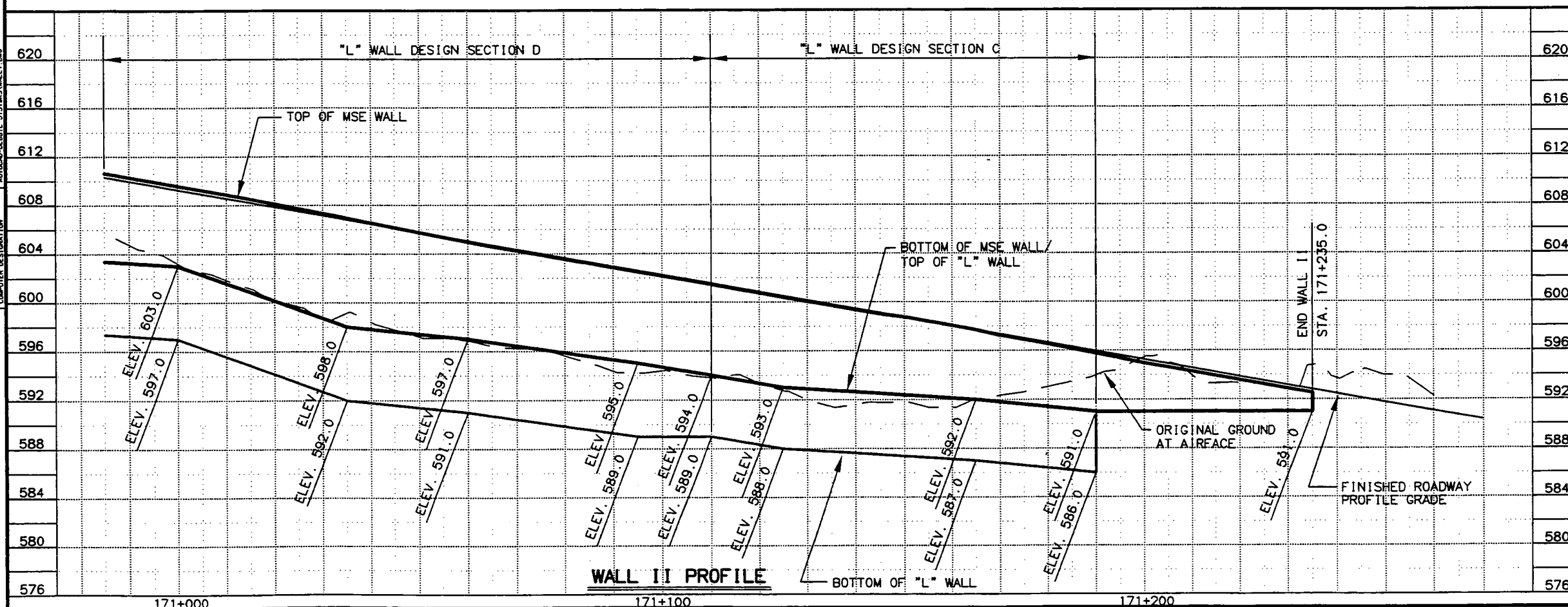
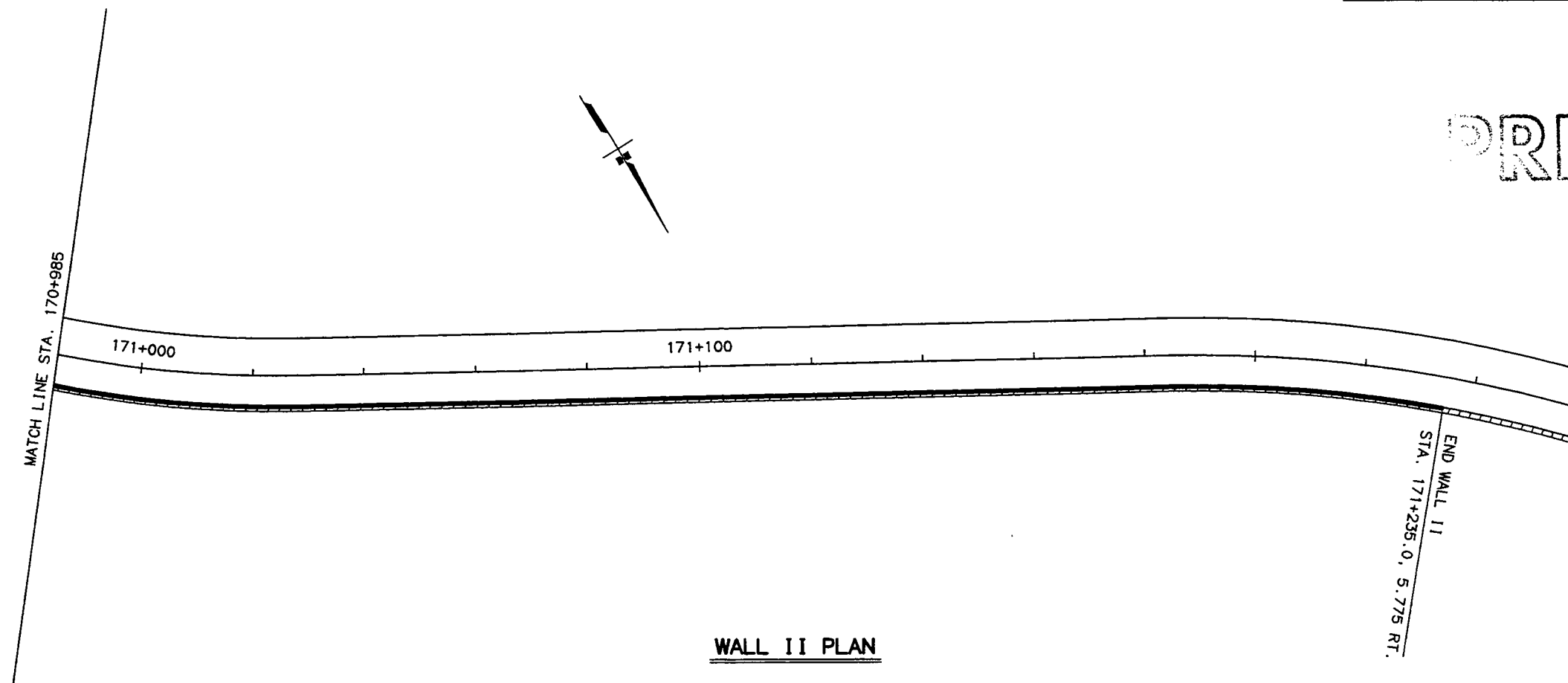
WALL II PROFILE



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
**GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
RETAINING WALLS
WALL II
PLAN AND PROFILE**

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	IM-BR-0A1-5(19)	2002	W6	

PRELIMINARY



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
**GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
RETAINING WALLS
WALL II
PLAN AND PROFILE**

SPECIFICATIONS
SCALE 1"=50'
COMPUTER DESIGNATION

DESIGNED BY
CHECKED BY
DATE 05/08/2002

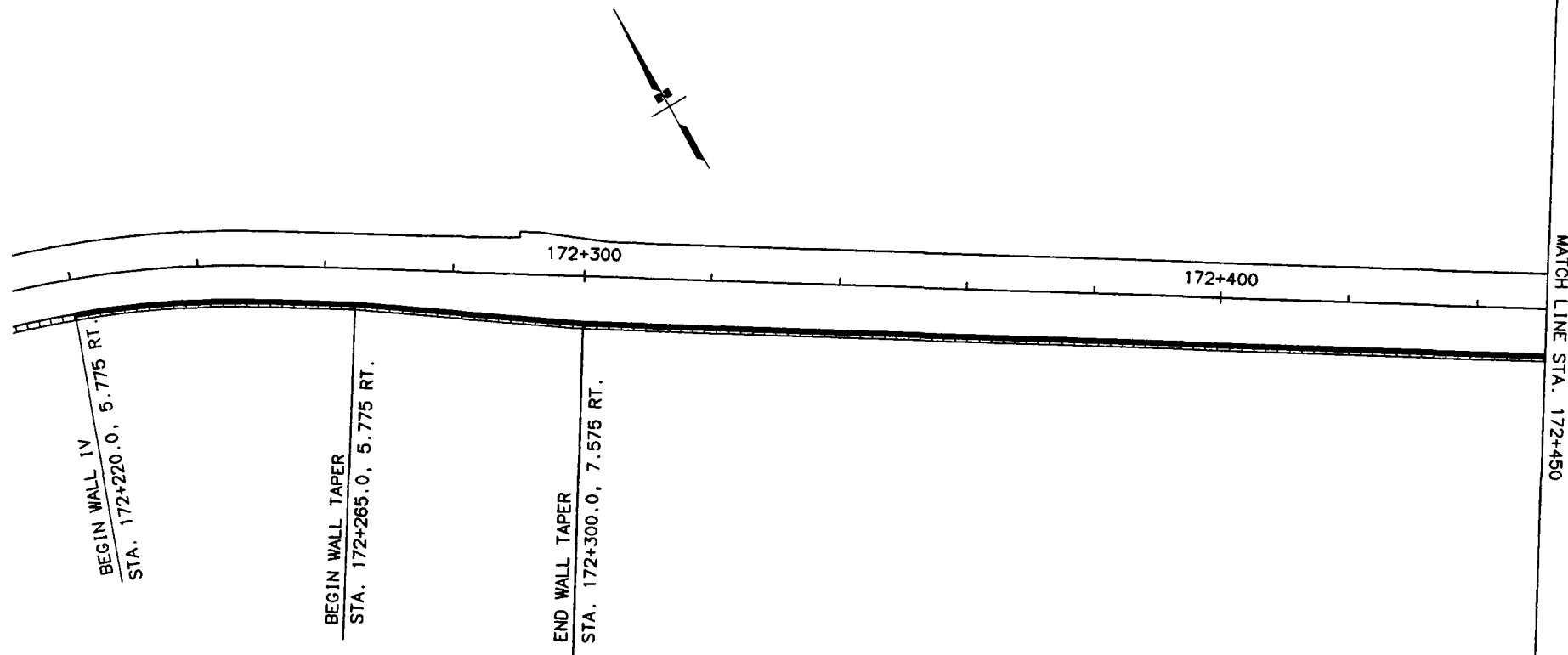
PLT SCALE 1"=3'
PLT VIEW: W6WALF

REF: COMBINE DWG. COMBINE WALL DWG.
AUTOCAD-GENERATED WALL DWG.

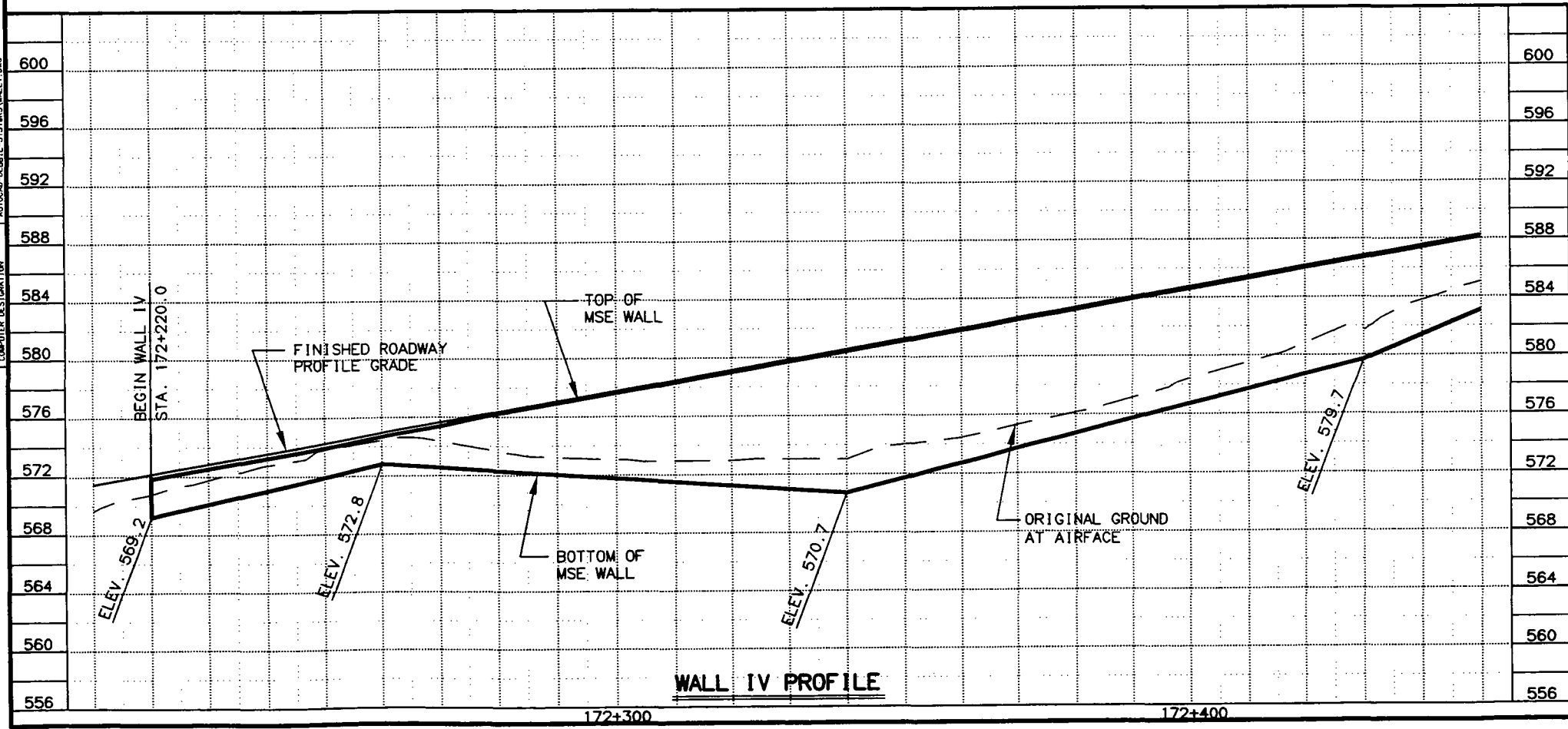
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	W8	

PRELIMINARY

DESIGNED BY: 05/08/2002
 CHECKED BY: 08/16/03
 DRAFTER BY: 08/16/03
 PLOT SCALE: 1"=5'
 PLOT VIEW: WEA
 SPECIFICATIONS: SCALE 1"=50'
 XREF: CORROUSE, INC. CORROUSE WALL DWG
 AUTOCAD-REBUILT-STATIONARY WALL DWG
 COMPUTER DESIGNATION



WALL IV PLAN



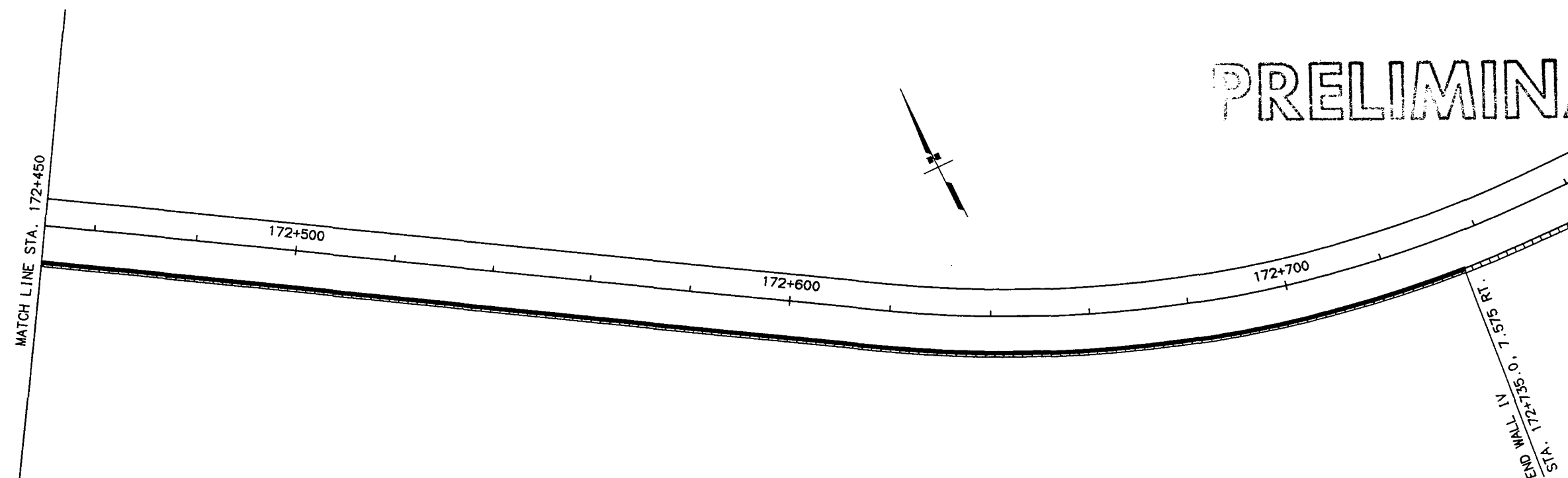
WALL IV PROFILE



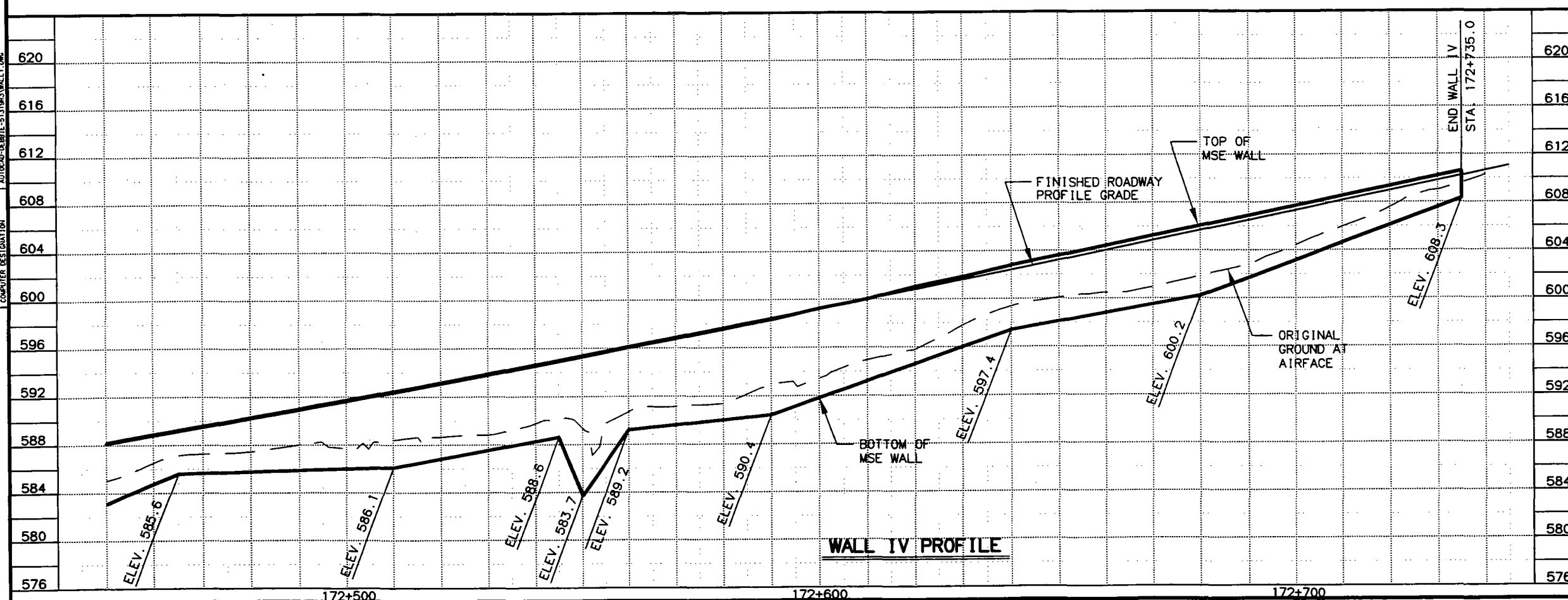
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
**GLENN HIGHWAY
 MP 100-109
 CARIBOU CREEK
 RETAINING WALLS
 WALL IV
 PLAN AND PROFILE**

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	IM-BR-0A1-5(19)	2002	W9	

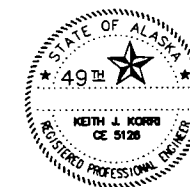
PRELIMINARY



WALL IV PLAN



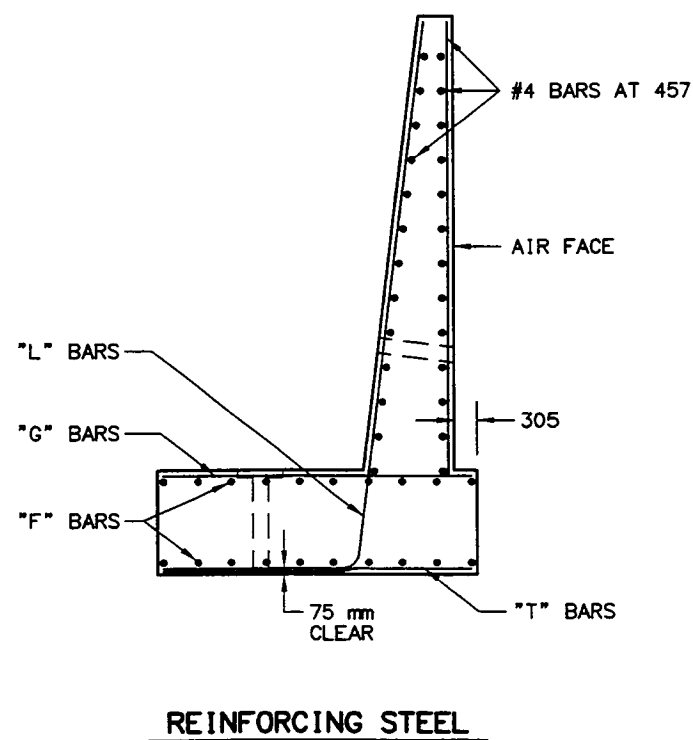
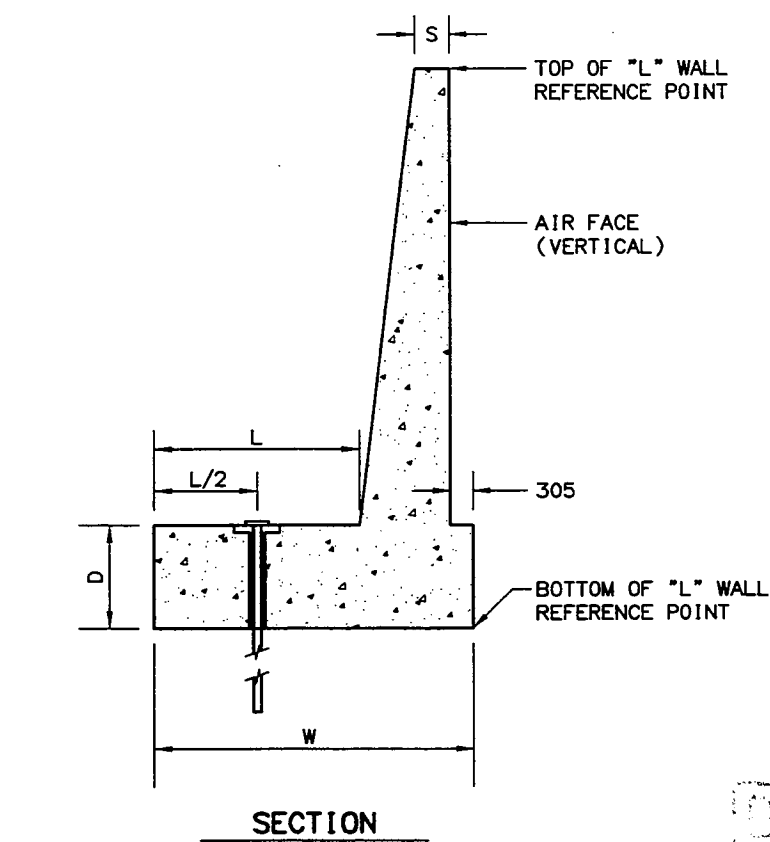
WALL IV PROFILE



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

GLENN HIGHWAY
MP 100-109
CARIBOU CREEK
RETAINING WALLS
WALL IV
PLAN AND PROFILE

DESIGNED BY	05/08/2002
CHECKED BY	12/18/04
DRAWN BY	
SCALE 1:50	HALF PLAT SCALE 1mm = 0.1 m
CONTRACT DESIGNATION	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SPECIFICATIONS	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



PRELIMINARY

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	1M-BR-0A1-5(19)	2002	—	—

GENERAL NOTES:

SPECIFICATIONS:
 DESIGN AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996, 16th EDITION, AS AMENDED BY THE LATEST INTERIM SPECIFICATIONS.
 CONSTRUCTION STATE OF ALASKA 1998 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, (METRIC) WITH SPECIAL PROVISIONS.

DESIGN UNIT STRESSES:
 REINFORCED CONCRETE ... CLASS A: $f'_c = 28 \text{ MPa} @ 28 \text{ DAYS}$
 REINFORCING STEEL $F_y = 420 \text{ MPa}$

STRUCTURAL MATERIALS:
 CONCRETE ALL CAST IN PLACE CONCRETE SHALL BE CLASS A.
 REINFORCING STEEL ALL REINFORCING STEEL SHALL BE STANDARD U.S. SIZES AND SHALL CONFORM TO ASTM A615M GRADE 420. REINFORCING STEEL IS 50 mm CLEAR UNLESS OTHERWISE NOTED.

TABLE OF REINFORCING STEEL DIMENSIONS AND DATA				
	DESIGN SECTION			
	A	B	C	D
TOP OF STEM WIDTH (S)	458	458	458	458
FOOTING WIDTH (W)	2134	2744	3354	4268
FOOTING DEPTH (D)	762	1067	1220	1372
STEM TO HEEL LENGTH (L)	1220	1830	1982	2744
"L" BARS	#9 @ 305	#10 @ 305	#11 @ 305	#11 @ 230
"F" BARS	6 #9 12 TOTAL	7 #10 14 TOTAL	8 #10 16 TOTAL	10 #10 20 TOTAL
"G" BARS	#9 @ 305	#9 @ 305	#10 @ 305	#11 @ 305
"T" BARS	#9 @ 305	#9 @ 305	#10 @ 305	#11 @ 305
CONCRETE QUANTITY (m ³ /m)	2.44	4.55	7.57	11.0

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS.
 2. REINFORCING STEEL IS STANDARD U.S. SIZE.
 3. DESIGN SECTIONS A & B TO BE USED ONLY AT DIRECTION OF ENGINEER.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND
 PUBLIC FACILITIES
**GLENN HIGHWAY
 MP 100-109
 CARIBOU CREEK
 REINFORCED CONCRETE
 "L" RETAINING WALL
 CAST-IN-PLACE**

