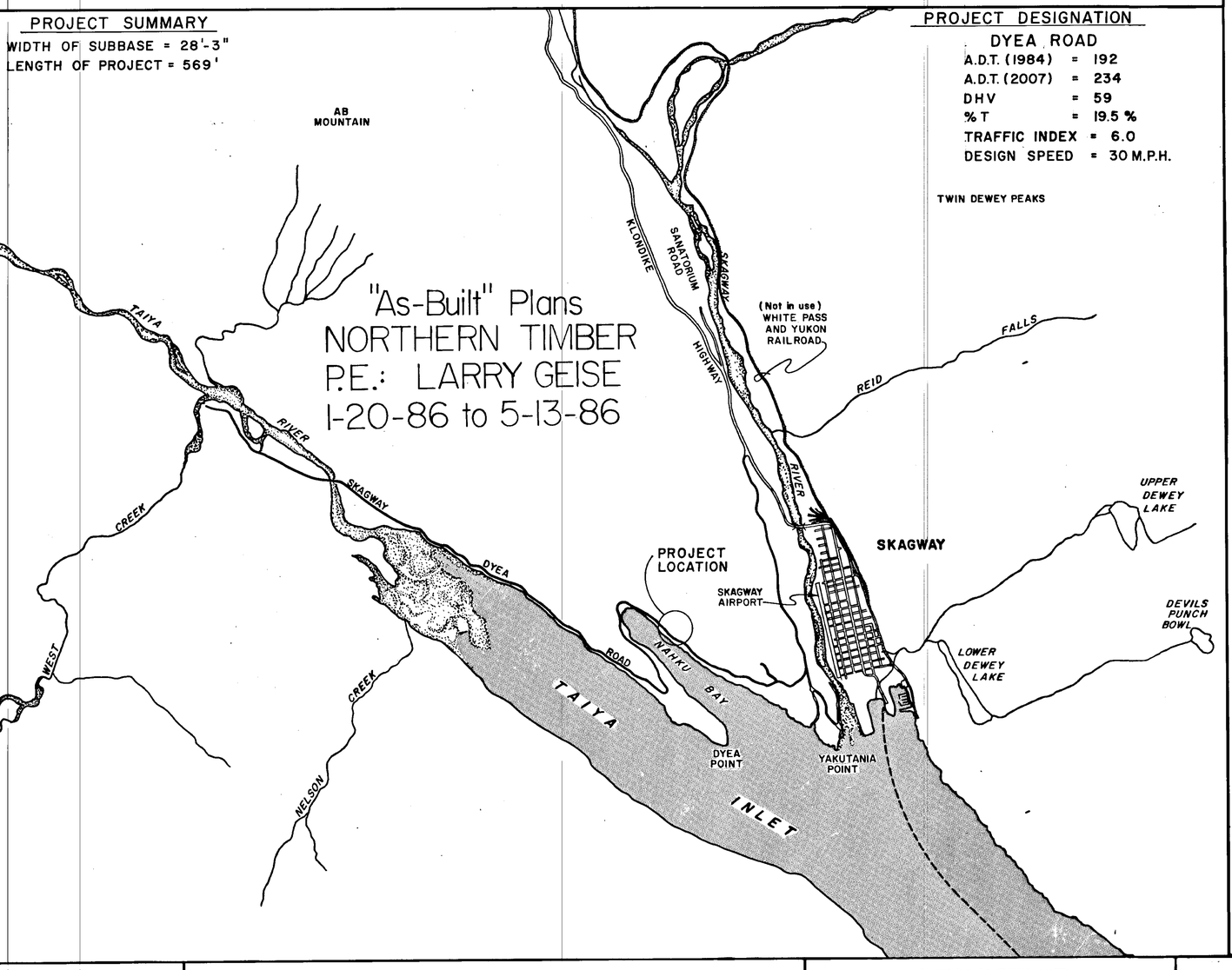
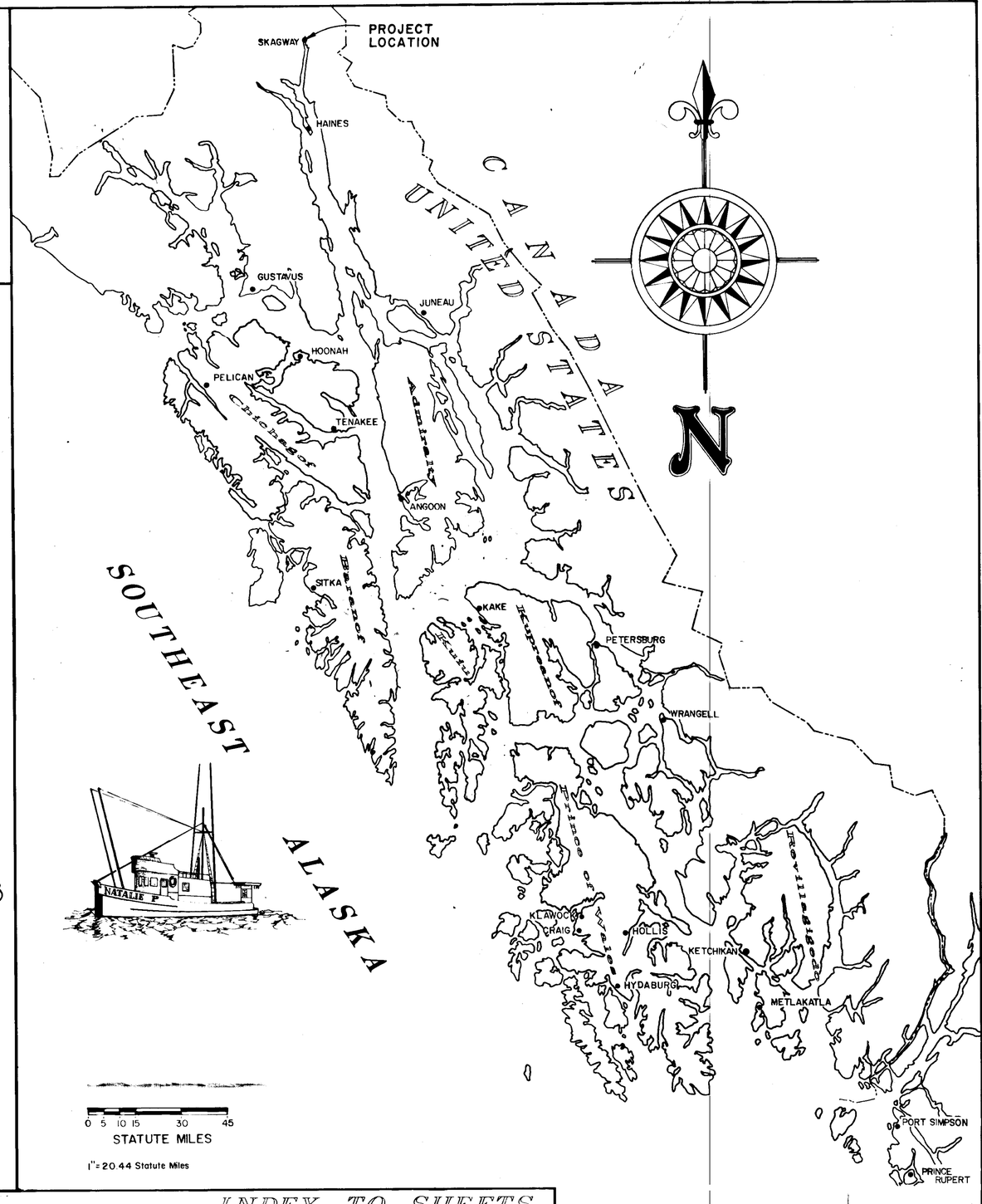
DYEA ROAD
SPOT IMPROVEMENTS
A81512
RS-0997(3)

PROJECT SUMMARY
WIDTH OF SUBBASE = 28'-3"
LENGTH OF PROJECT = 569'

PROJECT DESIGNATION
DYEA ROAD
A.D.T. (1984) = 192
A.D.T. (2007) = 234
DHV = 59
% T = 19.5 %
TRAFFIC INDEX = 6.0
DESIGN SPEED = 30 M.P.H.

"As-Built" Plans
NORTHERN TIMBER
P.E.: LARRY GEISE
1-20-86 to 5-13-86





STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & CONSTRUCTION

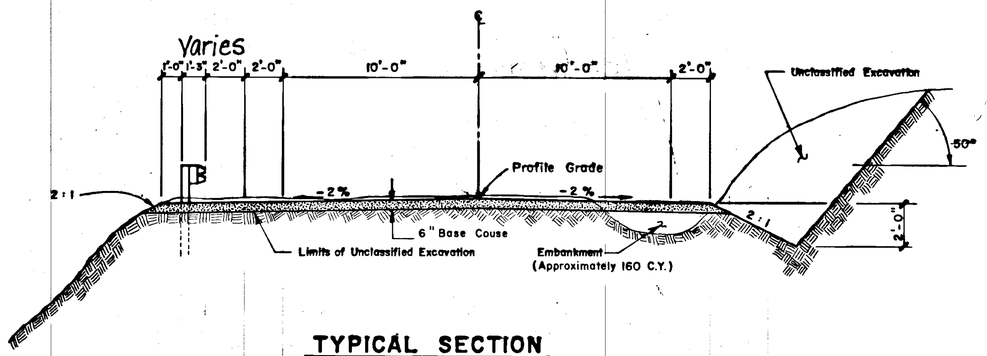
APPROVED
D.D. Dieckmeyer — 11-22-85
Director S.E. D.&C. — Date
Recommend for Approval
Wallace K.W. Illoms — 11/22/85
Design Chief — Date

SHEET 1 of 7

INDEX TO SHEETS

1	TITLE SHEET		THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
2	TYPICAL SECTION		A-1, C-01.01, C-02.00, G-04.01S,
3	ESTIMATE OF QUANTITIES		G-14.02S, S-00.00, S-05.00,
4	PLAN AND PROFILE		S-30.01, D-01.00,
5	MATERIAL SITE - MINING PLAN		D-05.10
6	MATERIAL SITE - BORING LOG		
7	MATERIAL SITE - CROSS SECTIONS		

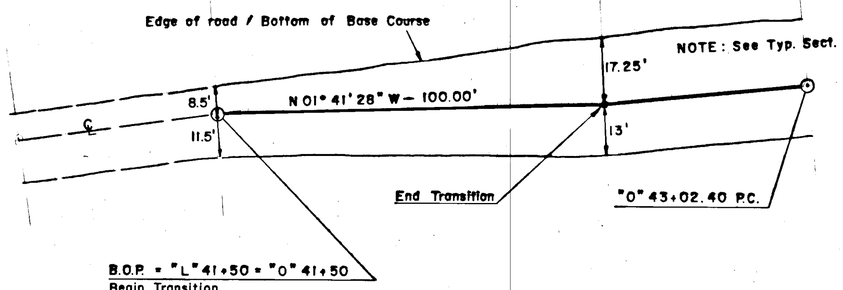
STATE	PROJECT DESIGNATION	YEAR	SHEET no.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	2	7



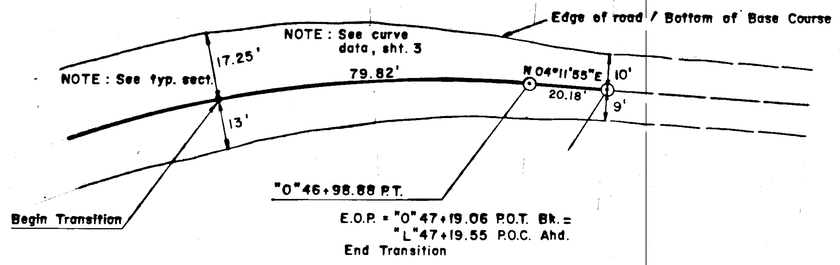
TYPICAL SECTION

1" = 40'

"0" 43+02.40 to "0" 46+19.06



B.O.P. TRANSITION



E.O.P. TRANSITION

DISPOSAL SITE TYPICAL SECTION

60 0 60 FT.

DOT/PF
LONG
1985

ATE PLANE COORDINATES
,793,367.433
,373,844.899
Brass Cap in rock.
I TO BE CONFUSED WITH
.G.S. MONUMENT "LONG".

STATE OF ALASKA
49th
Rosemary Matt
CE-6040
REGISTERED PROFESSIONAL ENGINEER

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	3	7

ESTIMATE OF BID QUANTITIES

NO.	ITEM	UNIT	QUANTITY
109(2)	DBE & WBE ADJUSTMENT	C.S.	ALL REQUIRED
110(2)	MOBILIZATION & DEMOBILIZATION	L.S.	ALL REQUIRED
111(1)	EROSION & POLLUTION CONTROL	C.S.	ALL REQUIRED
114(5)	CONSTRUCTION SURVEYING	L.S.	ALL REQUIRED
115(1)	TRAFFIC MAINTENANCE	L.S.	ALL REQUIRED
116(1)	FURNISHING & MAINTAINING FIELD OFFICE	L.S.	ALL REQUIRED
201(2B)	CLEARING & GRUBBING	L.S.	ALL REQUIRED
203(3)	UNCLASSIFIED EXCAVATION	C.Y.	49,732
203(9)	CONTROLLED BLASTING	S.Y.	6,194
203(10)	DOWELS	EA.	20
301(3)	CRUSHED AGGREGATE BASE COURSE, GRADING D-1	L.S.	ALL REQUIRED
603(1)	24-INCH CORRUGATED STEEL PIPE	L.F.	78
606(2)	GUARDRAIL	L.F.	575
606(6)	END ANCHORAGE	EA.	2
615(1)	STANDARD SIGNS	S.F.	28

SIGN SCHEDULE

NO.	STATION	OFFSET LT.	OFFSET RT.	CODE NO.	LEGEND	SIZE
1	42+00		18	R2-1	SPEED LIMIT 25	24 X 30
2	43+50	16		W5-1	ROAD NARROWS	36 X 36
3	45+19		18	W5-1	ROAD NARROWS	36 X 36
4	46+69	16		R2-1	SPEED LIMIT 25	24 X 30

GUARDRAIL SUMMARY

STA. to STA.	LT.	RT.	LIN. FT.
41+50 to 47+19	x		569'
~~40+40~~ to ~~47+27~~			687.5

PIPE CONDUIT SUMMARY

STA.	LENGTH	REMARKS
~~43+20~~ ~~45+10~~	~~44'~~ 60'	INSTALL NEW PIPE
~~47+00~~	~~34'~~	INSTALL NEW PIPE
46+00	60'	

T.C.P. SIGN SCHEDULE

NO.	SIZE	MUTCD DESIGNATION	SIGN WORDING	QNTY.
1	48" X 48"	CW20-1F	ROAD CONSTRUCTION AHEAD	2
2	42" X 36"	CW22-2	TURN OFF 2-WAY RADIO	2
3	48" X 48"	CW20-1E	ROAD CONSTRUCTION 1500'	2
4	48" X 48"	CW22-1	BLASTING ZONE 1000'	2
5	48" X 48"	CW20-3A	ROAD CLOSED 500'	2
6	42" X 36"	CW22-3	END BLASTING ZONE	2
7	60" X 24"	G20-2	END CONSTRUCTION	2
8	60" X 30"	R11-3	ROAD CLOSED 2.5 MILES AHEAD LOCAL TRAFFIC ONLY	1
9	48" X 20"	S4-1	8:30 AM TO 12:30 PM	3
10	48" X 20"	S4-1	1:00 PM TO 5:00 PM	3
11	48" X 30"	R11-2	ROAD CLOSED	4
12	12' X 5'	TYPE III BARRICADE		4

GENERAL NOTES

1. Grades and alignments shown on the plans are subject to minor revisions by the Engineer.
2. Superelevation is rotated around centerline.
3. No in water disposal of material shall take place during the periods from April 1 to June 1 and August 1 to October 31.
4. A vehicle shall be maintained on each side of the construction area that can be used for emergencies. See Special Provisions, Section 115.
5. Guardrail post holes shall be drilled.
6. The contractor shall be responsible for keeping the public advised through the local news media of his Construction activities and scheduling.
7. The Traffic Control Plan shall be used in conjunction with the Standard Drawings, the Standard and Special Provisions, the Alaska Traffic Manual, and the Manual on Uniform Traffic Control Devises.
8. The Contractor shall use the Traffic Control Plan (T.C.P.) during the construction of this project. The Contractor may submit a different T.C.P., however it will require written approval of the Engineer prior to begining any construction.
9. Wildlife shall be flushed from areas that may be affected by disposal dumping or blasting prior to such activities.
10. According to the T.C.P., the road closure is 8:30 A.M. to 12:30 P.M. and 1:00 P.M. to 5:00 P.M.
11. Embankment for guardrail at the begining transition shall have a side slope of 1:1. All other embankments shall have side slopes of 1.5:1.

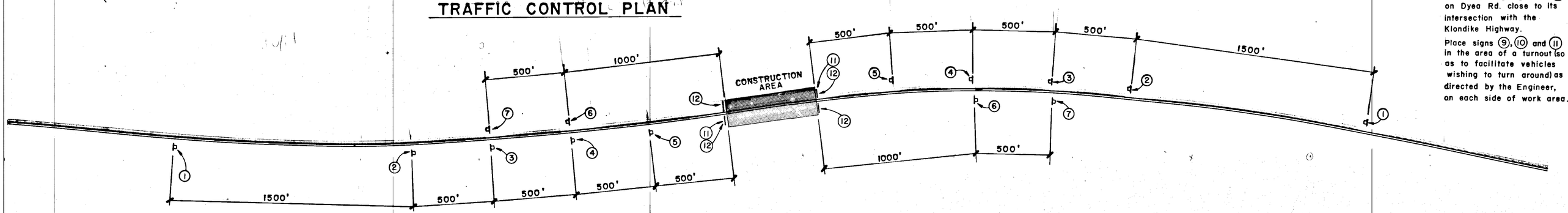
SURVEY CONTROL POINT SUMMARY TABLE

POINT	DESCRIPTION	DOT/PF COMPUTER PT. NO.	LOCAL COORDINATES NORTH	LOCAL COORDINATES EAST	ELEV.
H&T 1	HUB & TACK SET	1	47811.213	31805.499	243.795
DR-2	#5 REBAR SET	2	47379.399	31950.472	238.870
DR-3	#5 REBAR SET	3	47817.292	31769.516	214.900
DR-4	#5 REBAR SET	4	48230.476	31797.652	191.540
DR-5	#5 REBAR SET	5	48420.475	31698.310	180.340
DR-6	HUB & TACK SET	6	48647.905	31528.858	163.425
DR-7		7	48887.045	31585.808	152.495
RB-8	#5 REBAR SET	8	49347.026	31434.610	133.715
RB-9	#5 REBAR SET	9	50053.734	31386.364	118.740
LONG	DOT/PF BRASS CAP SET	10	50000.000	30000.000	26.290
HEAD	USC & GS BRASS CAP RECOVERED	13	53225.417	30846.036	35.265
KD	USC & GS BRASS CAP RECOVERED	14	48860.401	31299.836	
NAHKU	USC & GS BRASS CAP RECOVERED	15	51355.573	31384.646	38.490
RUSH	USC & GS BRASS CAP RECOVERED	16	51982.521	30587.912	35.840
DR-10	#5 REBAR SET	17	50611.716	31437.279	
DR-1	#5 REBAR SET	18	47188.587	32316.858	
WCMC-2	GLO/BLM BRASS CAP RECOVERED	19	49360.438	31272.419	
PT 21		21	47099.932	32269.183	
PT 22		22	46949.888	32386.989	
PT 23		23	46953.107	32302.756	
PT 24		24	46950.278	32286.944	
B.O.P.	P.K. NAIL SET	25	49792.629	31409.674	

STATE OF ALASKA
4911
Rosemary Matt
CE-6040
REGISTERED PROFESSIONAL ENGINEER

N

TRAFFIC CONTROL PLAN



NOTES: Place signs (8), (9) and (10) on Dyea Rd. close to its intersection with the Klondike Highway.

Place signs (9), (10) and (11) in the area of a turnout (so as to facilitate vehicles wishing to turn around) as directed by the Engineer, an each side of work area.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	4	7

"0" 41+98.01 P.C.

"0" 42+50.00 Angle Point

"0" 43+02.40 P.C.

"L" 43+48.47 P.I.

"0" 43+43.28 P.I.

"0" 43+25.85 P.T.

"0" 43+83.67 P.T.

"0" 44+16.70 P.C.

"0" 44+89.09 P.C.

"0" 44+95.80 P.I.

"L" 44+77.12 P.I.

"0" 45+91.05 P.R.C.

"0" 45+41.19 P.T.

"0" 46+36.37 P.C.

"L" 46+84.55 P.I.

"0" 46+67.74 P.T.

"0" 46+98.88 P.T.

"L" 47+19.55 P.O.C. Ahd.

E.O.P. = "0" 47+19.06 P.O.T. Bk. =

Area outside Guardrail unstable

Unstable Slope

End Guardrail Sta. 47+32

STA. "0" 40+00.00 INSTALL 24" Ø CMP CULVERT

STA. "0" 47+00.00 INSTALL 24" Ø CMP CULVERT

24" x 60" CMP

24" Ø CMP

R/W

60'

Basis of Bearing (N 14°40'08"W Grid) N 16°04'09"W 1945.87'

U.S.C. & G.S. "HEAD"

U.S.C. & G.S. "NAHKU"
ASPC ZONE 1 COORDINATES (NAD 1927)
N= 2794688.73'
E= 2375262.29'
θ= -1°24'06"
S.F. = 1.000000

B.O.P.
"L" 41+50 Bk. = "0" 41+50 Ahd. BEARS N 17°37'08"E - 453.46' from WCMC-1 Sec. 2 T 28S R 59E., (ASLS 81-43 TRACT A)
COORDINATES of "0" 41+50
N 2,793,125.642 E 2,375,249.078 ASPC ZONE 1
N 49,792.629 E 31,409.674 LOCAL

"0"
Δ = 15°10'12"
D = N 15°00'
T = 67.82'
L = 134.84'
R = 509.30'

"0"
Δ = 15°26'27"
D = 19°
T = 40.68'
L = 81.27'
R = 301.66'
e = 0.04'/ft.
T.L. IN = 50.00'
BFS = "0" 43+02
EFS = "0" 43+84
FLAT = "0" 44+15

"0"
Δ = 24°51'58"
D = 13°45'00"
T = 91.64'
L = 180.36'
R = 416.70'

"0"
Δ = 17°29'55"
D = 19°
T = 46.41'
L = 92.10'
R = 301.66'
e = 0.04'/ft.
FLAT = "0" 44+15
BFS = "0" 44+49
EFS = "0" 45+41
FLAT = "0" 45+87

"L"
Δ = 18°47'29"
D = 27°05'17"
T = 35'
L = 69.37'
R = 211.52'

"L"
Δ = 17°27'24"
D = 25°07'58"
T = 35'
L = 69.46'
R = 227.97'

"0"
Δ = 34°45'43"
D = 18°45'00"
T = 95.65'
L = 185.40'
R = 305.58'

"0"
Δ = 11°52'34"
D = 19°
T = 31.37'
L = 62.51'
R = 301.66'
e = 0.04'/ft.
FLAT = "0" 45+87
BFS = "0" 46+36
EFS = "0" 46+89
"L" 47+19, MATCH EXISTING CROSS SLOPE

"L"
Δ = 23°12'32"
D = 8°27'52"
T = 139.00'
L = 274.19'
R = 676.89'

NOTES

1. A TABLE OF SURVEY CONTROL POINTS IS LOCATED ON SHEET 3.
2. THE BEARINGS AND DISTANCES DENOTED ON THIS PLAN ARE GEODETIC (TRUE) UNLESS OTHERWISE SHOWN.

Slope Catch Limits

ELEV. 17.44
100' V.C.
"0" 42+00.00 V.P.I.
-2.58 %
Existing Ground
-1.45 %
Finished Profile Grade
ELEV. 112.45
350' V.C.
"0" 45+44.00 V.P.I.
-4.89 %

41+50 42+00 42+50 43+00 43+50 44+00 44+50 45+00 45+50 46+00 46+50 47+00

STATE OF ALASKA
49th
Rosemary Matt
CE-6040
REGISTERED PROFESSIONAL ENGINEER

SKAGWAY MATERIAL SITE
ADL NO. 10396
MINING PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	5	7

GENERAL INFORMATION

DOMINANT MATERIAL: Gray, sandy gravel - A-I-a, N.F.S., with boulders (max. size seen - 26").

SITE LOCATION: Within T-27S., R-59 E., C.R.M. unsurveyed section 36,
T-27S., R-60E., C.R.M. unsurveyed section 31, T-28S., R-59E., C.R.M. unsurveyed section 1 and T-28S., R-60E., C.R.M. unsurveyed section 6.

OWNER: State of Alaska, Division of Land and Water Management (ADL 103936)

LEASEE: Alaska Department of Transportation maintains valid sales contract for 3 year period ending June 1987.

TOTAL ACREAGE: Approximately 80.0 total acres, although material extraction is limited to 53.8 acres (according to D.N.R. contract).

LOCATION AND ECOLOGY: The Skagway material site is located on an abandoned side channel of the Skagway River, approximately one mile north of the city of Skagway. The limits of extraction are generally bounded by the Ordinary High Water Level (active channel) of the Skagway River on the west and the W.P. & Y.R.R. (Pacific and Arctic Railroad) Right of Way on the east.
The deposit consists of river deposited sand and gravels with boulders. Boulders from 16" to 26" are present throughout the site. Material passing the # 200 screen on samples tested ranged from 1 to 4 percent.

OVERBURDEN: Average depth of organic soil is approximately 8", but varies in depth from 0-12".

VEGETATION: Undisturbed areas of the pit generally contain cottonwood and alder trees to a maximum diameter of 24". Scattered willow brush is also present.

WATER TABLE: During time of investigation (10/84), depth of water varied between 3.0' and 8.5'. Seasonal fluctuation of water table depth should be expected.

GENERAL NOTES

1. Prior to beginning any work within the pit: the contractor, under the direction of the Engineer, shall survey, monument, and flag, the proposed railroad right-of-way, the pit boundary, the haul road, and buffer zone.
2. This existing earth filled buffer berm shall be reconstructed to match the buffer zone being left between the active channel and cell # 2.
3. Organic material stripped as overburden shall be placed on unvegetated areas adjacent to and on top of the buffer zone to re-establish vegetation and prevent erosion.
4. An earth filled barrier or berm shall be established adjacent to the mouth of Reid Falls Creek on the north bank to prohibit anodramous fish from entering the pit.
5. Useable firewood cleared from the pit area shall be made available to the public. Other cleared material shall be disposed of (burned) within excavation boundaries.
6. A 50' minimum buffer zone of undisturbed material paralleling the active channel shall be left in place to segregate the river from the working area and prohibit the entrance of anadromous fish into the pit during periods of high water. In areas where the natural buffer has been altered or eliminated (due to prior operations) a berm equal to the elevation of the upstream buffer zone shall be constructed paralleling and adjacent to the active channel
7. Additional soils information may be obtained from the Southeast Regional Materials Engineer.
8. The sequence of operations shall generally consist of:
   PHASE I - Material is excavated within limits of the cells to a depth no greater than that of water table.
   PHASE II - Material will be removed by dredging operation to maximum depth of 15 feet.
   RECLAMATION - Ponds created from dredging operation may be used as fish rearing ponds.
9. All final pit slopes shall be no greater than 2:1.
10. Operational permits shall be the responsibility of the contractor (such as, but not limited to crusher plant or screening plant). Asphalt plant shall not be located within material site.
11. All labor and materials required to gain ingress & egress from this material site shall become the property of the State upon completion of the project. Payment for these items are incidental to other items of work appearing in the Bid Schedule.

STATE OF ALASKA 49th
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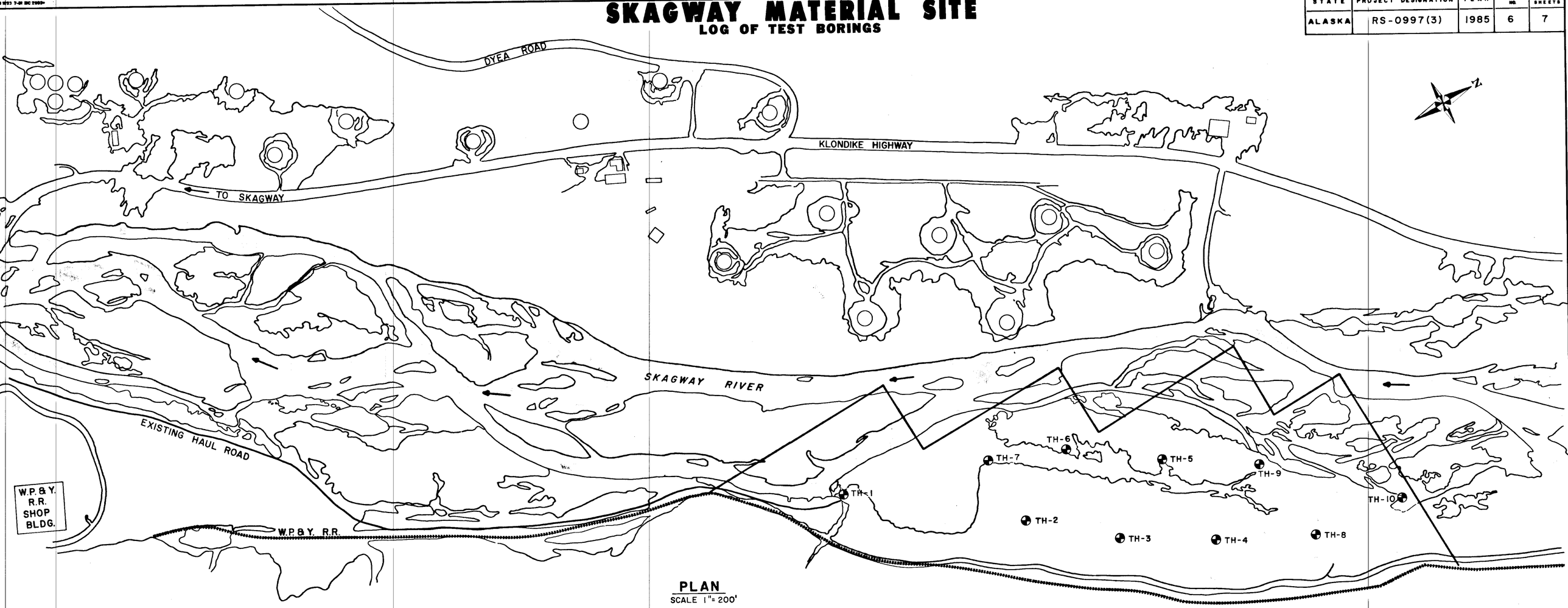
REGISTERED PROFESSIONAL ENGINEER

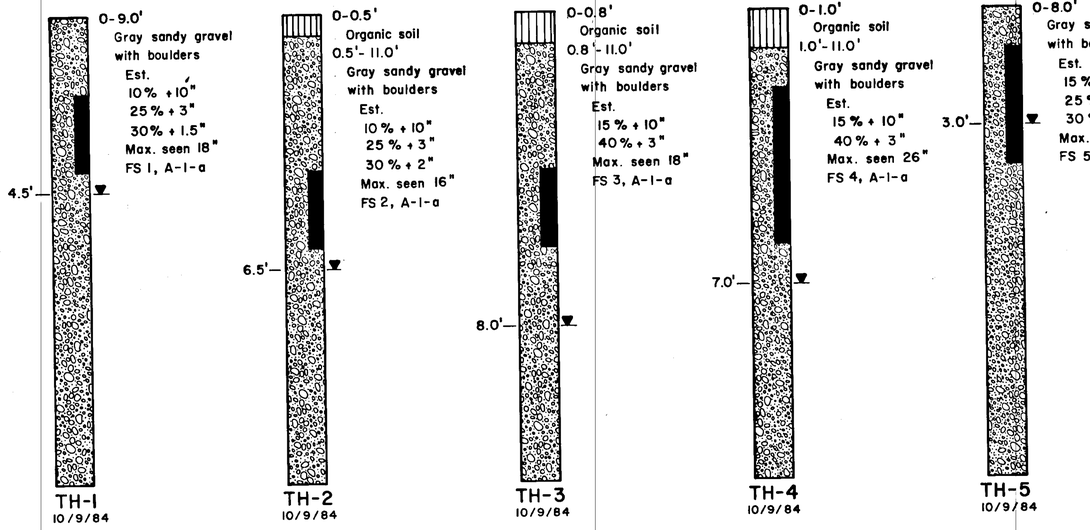
SKAGWAY MATERIAL SITE
LOG OF TEST BORINGS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	6	7



PLAN
SCALE 1"= 200'

SKAGWAY MATERIAL SITE
ADL 103936



STATE OF ALASKA
49th
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BORING LOG SYMBOLS

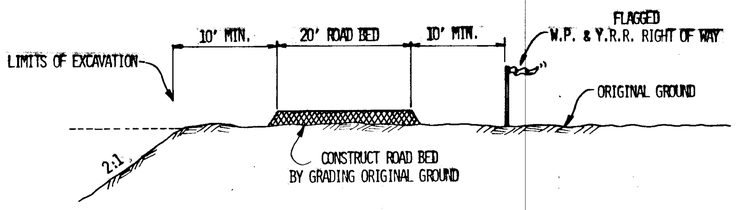
GRAVEL
SAND
SILT
CLAY
ORGANIC MATERIALS
BEDROCK

FIELD SAMPLE
STRATA CHANGE
-DEPTH IN FEE
WATER TABL

PLAN VIEW SYMBOLS

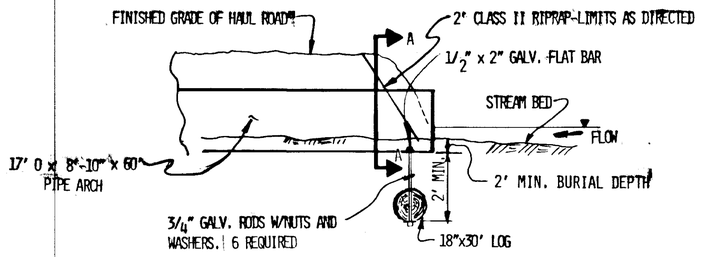
BACKHOE TEST PIT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0997(3)	1985	7	7



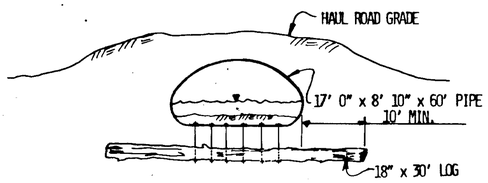
TYPICAL HAUL ROAD SECTION
WITHIN MATERIAL SITE

SCALE: HORZ: 1" = 200'
VERT.: NOT TO SCALE

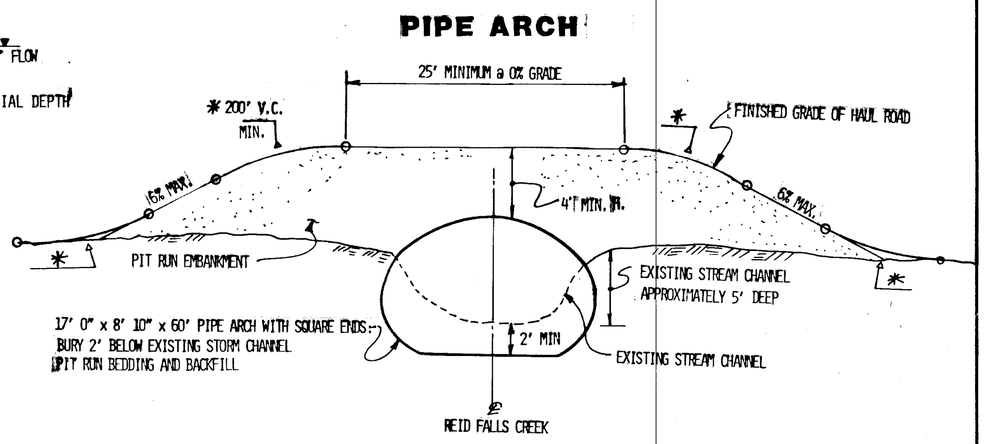


PIPE ARCH
ANCHORING DETAIL
SIDE VIEW

NOT TO SCALE



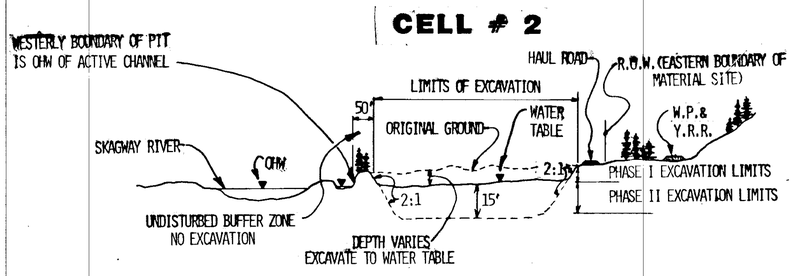
SECTION A-A



REID FALLS CREEK
HAUL ROAD CROSSING DETAIL

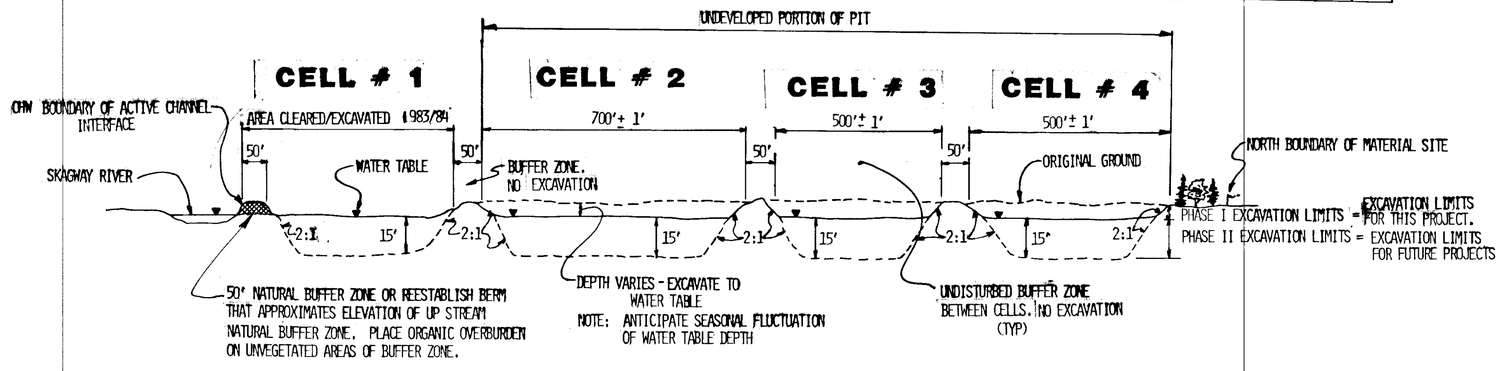
NOT TO SCALE

HYDRAULIC DATA		
DESIGN FREQUENCY YRS.	50	100
DESIGN AREA SQ. MI.	3.3	
DESIGN DISCHARGE CFS	600	660



SKAGWAY MATERIAL SITE
SECTION A-A

SCALE: HORIZ. 1"=10'
VERT. NOT TO SCALE



SKAGWAY MATERIAL SITE
SECTION B-B

SCALE: HORIZ: 1" = 200'
VERT: NOT TO SCALE