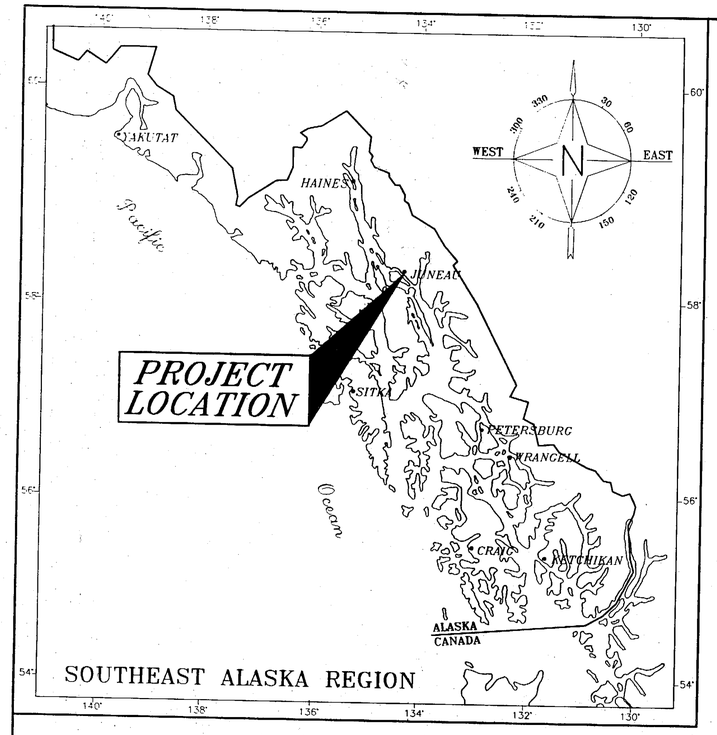


DESIGN DESIGNATION

	PHASE I	PHASE II
ADT (1996)	5000	7600
ADT (2016)	6200	10,200
DHV (12.6%)	800	1300
% T	4.4	3.4
DESIGN SPEED	32 KM/H	32 KM/H
DESIGN EAL	800,000	950,000

PROJECT SUMMARY

	PHASE I	PHASE II
LENGTH OF PROJECT	522.20 M	1001.36 M
LENGTH OF PAVING	522.20 M	1001.36 M
WIDTH OF PAVING	7.32 M TO 12.81 M	11.28 M TO 17.80 M

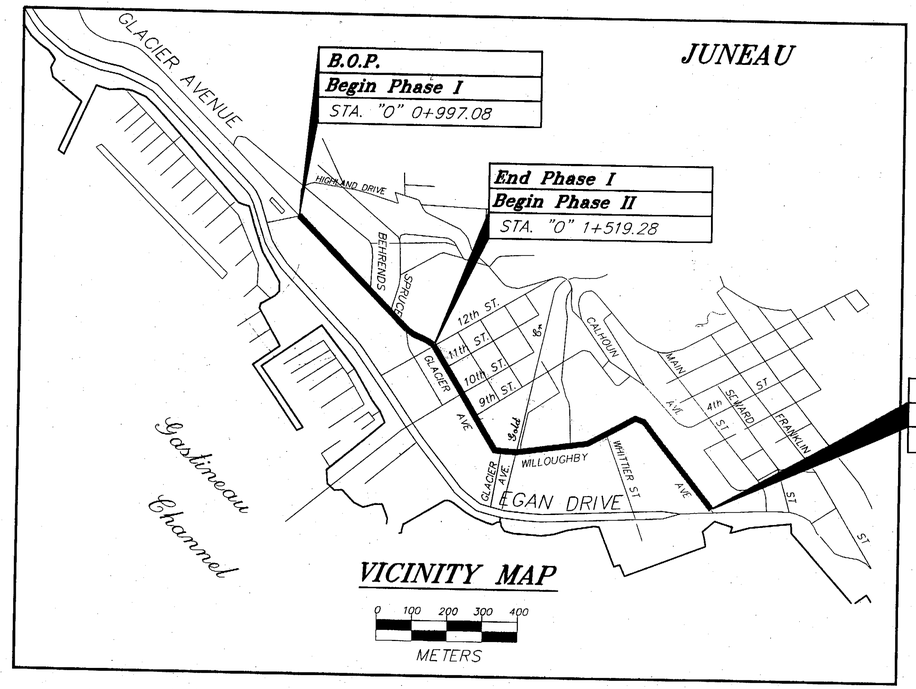
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU, ALASKA

WILLOUGHBY & GLACIER AVENUE RECONSTRUCTION PHASE I & II

STP-000S(149)
PROJECT NO. 71463



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES
	PHASE I
3-31	ROADWAY PLANS
32-40	CBJ UTILITY PLANS
	PHASE II
41-76	ROADWAY PLANS
77-97	CBJ UTILITY PLANS
48A-51A	PLAN & PROFILE

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
A-1[M], B-04.00[M], B-05.00[M], C-01.03[M], C-02.01[M], D-01.02[M], D-04.10[M] D-20.02[M], D-26.02[M], F-01.01[M], M-13.01[M], M-16.01[M], S-00.00[M] S-05.00[M], S-20.00[M], S-30.01[M], T-20.00[M], T-21.02[M], T-22.02[M]

THE FOLLOWING CBJ STANDARD DRAWINGS APPLY TO THIS PROJECT:
111A, 111B, 125A, 126, 127, 203, 204, 205, 206A, 206B, 209, 213, 214, 215, 218, 303, 305, 306, 308, 309, 403, 404, 405, 406, 407, 412, 414A, 414B, 419.

As-built PLANS

CONTRACTOR: Miller Construction Co., Ltd.

PROJECT ENGINEER: Al Culbreath

Begin Date: June 9, 1998

Ending Date: September 29, 1999

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

APPROVED _____ Date 3/20/98
Regional Preconstruction Engineer

APPROVED _____ Date 3/27/98
Director, S.E. Region

PROJECT NUMBER: 71463
DATE: JAN. 1998
SHEET 1 OF 97

ENGINEER'S SEAL
STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3/25/98

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	PHASE I	PHASE II	TOTAL
120(1)	DBE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
202(2)	REMOVAL OF PAVEMENT	SQUARE METER	6,150	11,710	17,860
202(3)	REMOVAL OF SIDEWALK	SQUARE METER	2,050	3,050	5,100
202(4)	REMOVAL OF CULVERT PIPE	METER	335	700	878.5 ~~1,035~~
202(8)	REMOVAL OF INLETS	EACH	19	37	53 ~~56~~
202(X)(9)	REMOVAL OF CURB AND GUTTER	METER	1,060	2,000	3,060
202(X)(13)	REMOVAL OF WATER PIPE	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
202(14)	REMOVAL OF SEWER MANHOLES	EACH	11	17	29 ~~28~~
202(15)	REMOVAL OF STORM MANHOLES	EACH	2	1	4 ~~3~~
202(16)	REMOVAL OF PORTLAND CONCRETE PAVEMENT	SQUARE METER		4,650	9735.08 ~~4,650~~
203(3)	UNCLASSIFIED EXCAVATION	CUBIC METER	3,500	2,000	5371.47 ~~5,500~~
204(2)	**IMPORTED BACKFILL**	**CUBIC METER**	**350**	**1,200**	6.97 ~~1,550~~
301(1)	CRUSHED AGGREGATE BASE COURSE	MEGAGRAM	860	1,200	5,548.77 ~~2,060~~
304(1)	SUBBASE, GRADING "E"	MEGAGRAM	6,500	4,800	16,697.47 ~~4,300~~
306(1)	ASPHALT TREATED BASE COURSE	MEGAGRAM	1,800	2,850	3977.06 ~~4,650~~
401(1)	ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS A	MEGAGRAM	910	1,450	2,360
401(2)	PG 58-28 ASPHALT CEMENT	MEGAGRAM	126	201	327
402(2)	STE-1 ASPHALT FOR TACK COAT	MEGAGRAM	6	5	11
501(4)	CLASS A CONCRETE	CUBIC METER	5		4.73 ~~5~~
508(1)	WATERPROOFING MEMBRANE FOR GOLD CREEK BRIDGE	LUMP SUM		ALL REQ'D.	ALL REQ'D.
512(1)	ROCKERY WALL	SQUARE METER		9.0	7.81 ~~9.0~~
~~603(17-300)~~	~~300mm CORRUGATED POLYETHYLENE PIPE~~	~~METER~~		~~24.76~~	~~24.76~~
603(17-450)	450mm CORRUGATED POLYETHYLENE PIPE	METER	608.5	1160.5	1840.22 ~~1769~~
603(23)	SADDLE TEE FOR ROOF DRAIN STUB-OUT	EACH	16	27	46 ~~43~~
603(24)	**150mm ROOF DRAIN STUB-OUT**	**METER**	**115**	**160**	269.27 ~~275~~
604(1)	STORM SEWER MANHOLE	EACH	15	19	35 ~~34~~
604(4)	ADJUST EXISTING MANHOLE	EACH	5	27	32
604(5A)	INLET, TYPE A	EACH	11	27	40 ~~38~~
604(5C)	INLET, TYPE C	EACH		3	3
604(8)	ADJUST EXISTING INLET	EACH	2		2
607(4)	RECONSTRUCTED FENCE	METER	53	10	83.2 ~~63~~
608(6)	REINFORCED CONCRETE SIDEWALK	SQUARE METER	2,020	3,400	5,460
608(7)	**COLORED CONCRETE SIDEWALK**	**SQUARE METER**	**39**	**61**	147.26 ~~100~~
609(1)	**CURB, TYPE I**	**METER**	**30**	**30**	104.10 ~~60~~
609(7)	REINFORCED CURB AND GUTTER, TYPE I	METER	1,060	2,050	3,110
614(1)	SURVEY MONUMENTS	EACH	7	14	21
614(2)	MONUMENT CASES	EACH	7	14	21
615(1)	STANDARD SIGNS	SQUARE METER	19.83	20.06	39.89
615(2)	REMOVE & RELOCATE EXISTING SIGNS	EACH	14	8	22
618(1)	SEEDING	HECTARE	0.10	0.25	0.35
620(1)	TOPSOIL	SQUARE METER	100	200	300
625(1)	PIPE HAND RAIL	METER	22.2	12	34.2
626(1-200A)	200mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER	**371.13**	**258.12**	647.51 ~~629.25~~
626(1-200B)	200mm PVC SANITARY SEWER (HP)	METER	**57.04**	**66.22**	102.77 ~~123.26~~
626(1-250A)	250mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		**86.20**	86.20
626(1-250B)	250mm PVC SANITARY SEWER CONDUIT (HP)	METER		100.44	107.11 ~~100.44~~
626(1-300A)	300mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		**16.31**	19.31 ~~16.31~~
626(1-380A)	380mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		240.76	246.26 ~~240.76~~
626(1-380B)	380mm PVC SANITARY SEWER CONDUIT (HP)	METER		67.59	62.09 ~~67.59~~
626(2-150)	150mm PVC SANITARY SEWER SERVICE CONNECTION	EACH	15	19	36 ~~34~~
626(2-200)	200mm PVC SANITARY SEWER SERVICE CONNECTION	EACH		1	1
626(3)	SANITARY SEWER MANHOLE, TYPE 1	EACH	14	18	33 ~~32~~
626(4)	SANITARY SEWER DROP MANHOLE, TYPE 1	EACH	1	1	2
626(5)	LOCATE SEWER SERVICES	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
626(6)	MANHOLE CONNECTION	EACH	1	3	3 ~~4~~
626(8)	PLUG SEWER/STORM DRAIN PIPE	EACH		3	3
626(9)	**SEWER LINE FIELD INVESTIGATION**	LUMP SUM		ALL REQ'D.	ALL REQ'D.
627(1-200)	200mm DUCTILE IRON WATER CONDUIT, CLASS 52	**CONTINGENT SUM**		**ALL REQ'D.**	**ALL REQ'D.**
627(1-400)	400mm DUCTILE IRON WATER CONDUIT, CLASS 52	METER		116.80	156.19 ~~116.80~~
		METER	21.30	934.85	966.51 ~~956.15~~

ESTIMATE OF QUANTITIES (CONT.)

ITEM NO.	ITEM	UNIT	PHASE I	PHASE II	TOTAL
627(5)	**BOLLARD**	**EACH**		6	1 ~~6~~
627(6)	FIRE HYDRANT INSTALLATION	EACH	5	8	13
627(7)	150 MM WATER METER VAULT TO A&P MARKET	LUMP SUM		ALL REQ'D	ALL REQ'D
627(8-25)	25 MM WATER SERVICE CONNECTION	EACH	13	12	24 ~~25~~
627(8-50)	50 MM WATER SERVICE CONNECTION	EACH	1	6	6 ~~7~~
627(8-150)	150mm DUCTILE IRON WATER SERVICE CONNECTION	EACH	5	19	24
627(8-200)	200mm DUCTILE IRON WATER SERVICE CONNECTION	EACH	3		3
627(9-400)	400mm BUTTERFLY VALVE	EACH	1	16	20 ~~17~~
627(10)	50 mm VALVE	EACH	**1**	6	6 ~~7~~
627(11)	150 mm & 200 mm GATE VALVE	EACH		28	25 ~~28~~
627(12)	INSTALL VALVE BOX	EACH	12	2	14
627(13)	CAP EXISTING WATER MAIN	EACH	4	4	4 ~~8~~
627(14)	GOLD CREEK BRIDGE WATER MAIN CROSSING	LUMP SUM		ALL REQ'D	ALL REQ'D
627(15)	**TAILRACE CROSSING**	**LUMP SUM**		**ALL REQ'D**	**ALL REQ'D**
630(1)	**GEOTEXTILE SEPARATION**	**SQUARE METER**	**2,500**	**5,000**	0 ~~7,500~~
630(3)	**FILTER CLOTH**	**METER**	**500**	**1,400**	18.3 ~~1,900~~
635(2)	INSULATION BOARD	PER BOARD	200	213	377.0 ~~413~~
639(1)	RESIDENCE DRIVEWAYS	EACH	11	1	13 ~~12~~
639(2)	SERVICE DRIVEWAYS	EACH	9	38	51 ~~47~~
639(3)	APPROACHES	EACH	8	11	19
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1)	EROSION & POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1A)	**EROSION & POLLUTION CONTROL ADMINISTRATION**	**LUMP SUM**	**ALL REQ'D.**	**ALL REQ'D.**	**ALL REQ'D.**
641(2)	TREATMENT OF CONTAMINATED WATER	KILOLITER		500	0 ~~500~~
641(3)	STOCKPILING OF CONTAMINATED MATERIAL	CUBIC METER		400	0 ~~400~~
641(4)	TREATMENT & DISPOSAL OF HAZARDOUS MATERIAL	CUBIC METER		400	0 ~~400~~
641(5)	**TEMPORARY INLET SEDIMENT FILTER**	**EACH**	**28**	**52**	47 ~~80~~
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
642(2)	THREE PERSON SURVEY PARTY	HOUR	20	35	55
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(3)	PERMANENT CONSTRUCTION SIGNING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(4)	CONSTRUCTION SIGN	EACH PER DAY	1,500	2,500	4,000
643(5)	TYPE II BARRICADE	EACH PER DAY	500	1,000	1,500
643(6)	TYPE III BARRICADE	EACH PER DAY	500	1,000	1,500
643(7)	TRAFFIC CONE	EACH PER DAY	6,000	12,000	18,000
643(8)	DRUM	EACH PER DAY	1,000	1,500	4174 ~~2,500~~
643(13)	TEMPORARY PAVEMENT MARKING	KILOMETER	0.25	1	1.25
643(14)	FLAGGING	MAN-HOUR	3,000	3,500	6,500
643(16)	STREET SWEEPING	HOUR	100	100	200
643(17)	WATERING	KILOLITER	200	300	500
643(23)	ROADWAY GRADING	HOUR	100	150	250
643(24)	**COORDINATION WITH AEL&P**	**LUMP SUM**		**ALL REQ'D.**	**ALL REQ'D.**
644(1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
644(2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
644(6)	ENGINEERING TRANSPORTATION	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
645(1)	**TRAINING PROGRAM FOR 1 TRAINEE/APPRENTICE**	**LABOR HOUR**	**200**	**300**	**500**
661(6)	**RELOCATION OF EXISTING CONDUIT**	**CONTINGENT SUM**		**ALL REQ'D.**	**ALL REQ'D.**
670(9)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.

BASIS OF ESTIMATE

ITEM NO.	ITEM	QUANTITY
301(1)	CRUSHED AGGREGATE BASE COURSE	2.32 mg/m3 (1.96 TON/CY)
304(1)	SUBBASE, GRADING "E"	2.23 mg/m3 (1.85 TON/CY)
306(1)	ASPHALT TREATED BASE COURSE	2.48 kg/m2 per mm (115 lbs/SY/IN DEPTH)
401(1)	ASPHALT CONCRETE PAVEMENT	2.48 kg/m2 per mm (116 lbs/SY/IN DEPTH)
401(2)	PBA ASPHALT CEMENT	6% OF 401 4% OF 306(1)
402(2)	STE-1 ASPHALT FOR TACK COAT	363 l/m2, 923 l/Mg (0.08 GAL/SY, 240 GAL/TON)

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PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)

RECORD OF REVISIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU

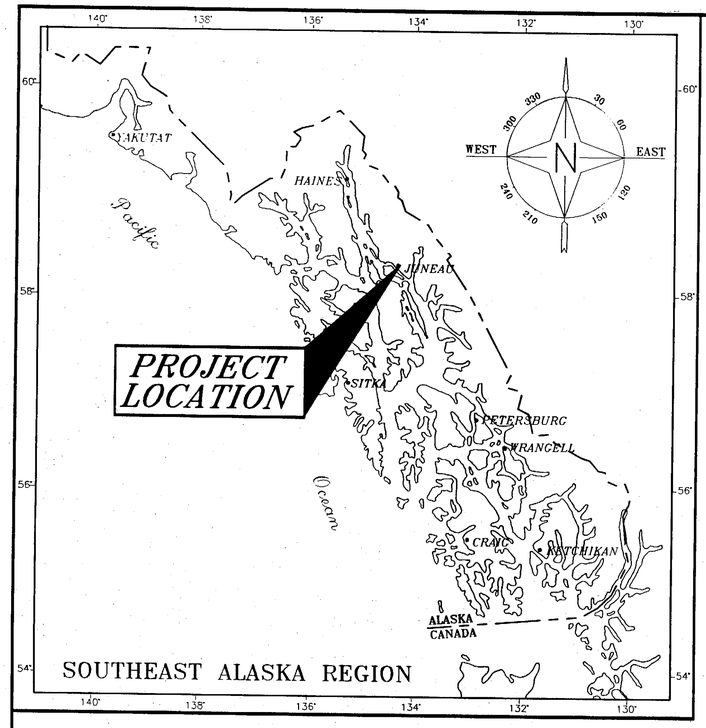
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463
ESTIMATE OF QUANTITIES

ALASKA

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A.J. STEININGER	SHEET 2 OF 97

STATE OF ALASKA
4918
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU, ALASKA

WILLOUGHBY & GLACIER AVENUE RECONSTRUCTION PHASE 1

STP-000S(149)
PROJECT NO. 71463

DESIGN DESIGNATION

STA. "0" 0+997.08 TO STA. "0" 1+519.28

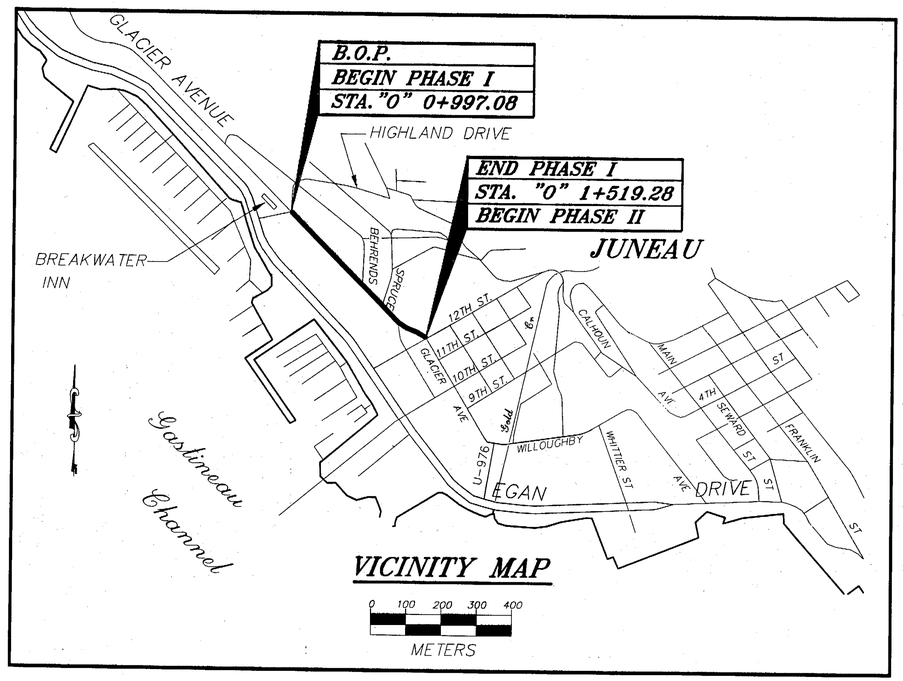
ADT 1996 = 5000
ADT 2016 = 6200
DHV 12.6% = 800
% T = 4.4
DESIGN SPEED = 32 km/H
DESIGN LANE EAL = 650,000

PROJECT SUMMARY

LENGTH OF PROJECT = 522.20 m
LENGTH OF PAVING = 522.20 m
WIDTH OF PAVING =7.32 m TO 12.81 m

CDS ROUTE 296015

BEGINING MILE = 0.17
ENDING MILE = 0.49



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
	ROADWAY PLANS
3	TITLE SHEET
4	TYPICAL SECTION
5	ESTIMATE OF QUANTITIES
6–7	SUMMARY OF QUANTITIES
8–10	PLAN & PROFILES
11–12	DRAINAGE FACILITIES
13–15	TRAFFIC CONTROL PLAN
16–17	SIGNING AND STRIPING PLANS
18	SIGN SUMMARY
19–24	APPROACH PLANS & SPECIAL DETAILS
25–27	SIDEWALK DETAILS
28–31	MISCELLANEOUS DETAILS
	CBJ UTILITY PLANS
32	WATER AND SEWER SUMMARIES
33–36	WATER AND SEWER PLANS
37	ELECTRICAL UTILITIES SUMMARIES
38–40	ELECTRICAL UTILITIES PLANS

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

APPROVED

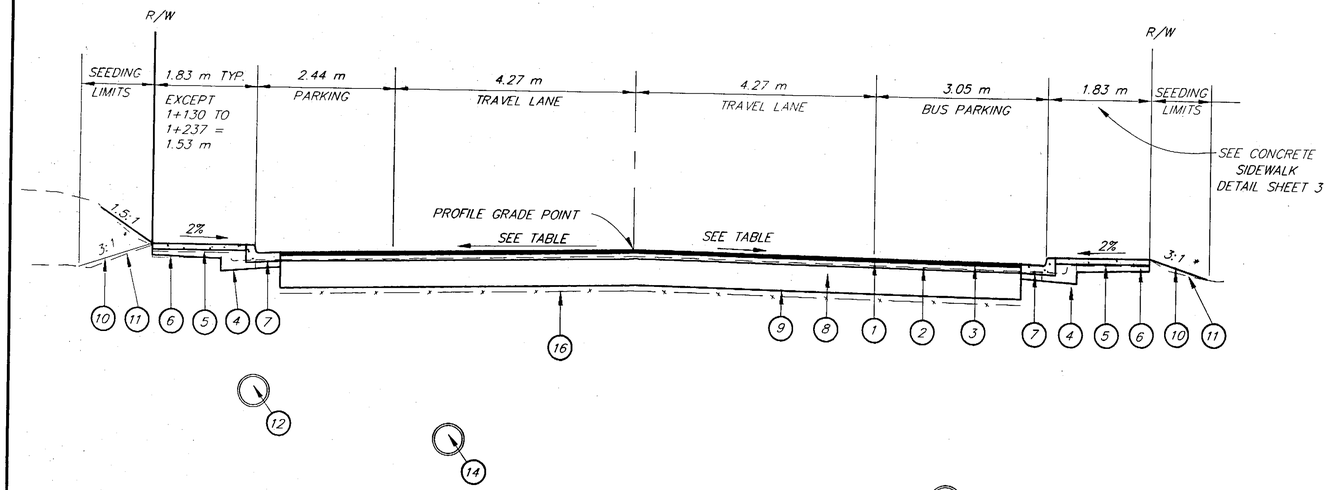
_____ Date _____
Regional Preconstruction Engineer

APPROVED

_____ Date _____
Director, S.E. Region

PROJECT NUMBER:	ENGINEER'S SEAL
71463	STATE OF ALASKA 11911 Alan J. Steininger CE-6440 REGISTERED PROFESSIONAL ENGINEER
DATE: *JAN. 1998*	
SHEET *3* OF *97*	

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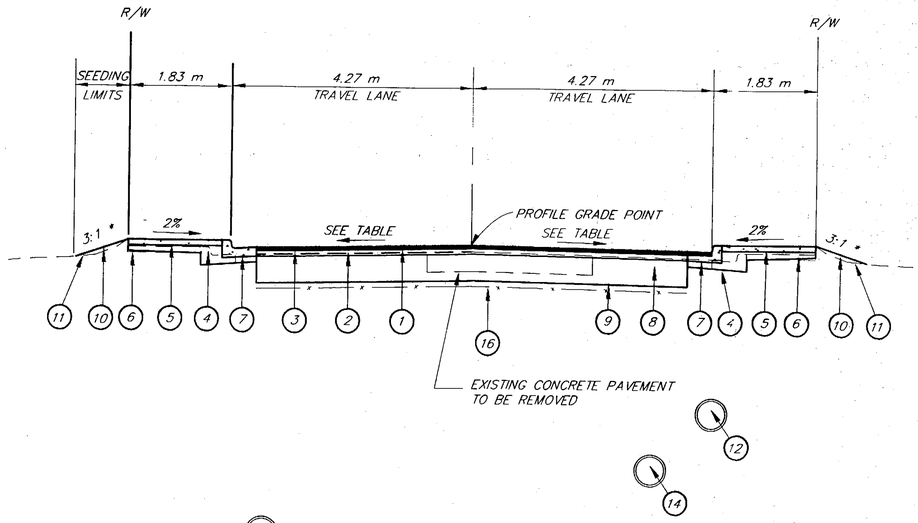


CROSS SLOPE TABLE		
Station	Lt.	Rt.
BOP	-2%	-3%
1+040	-2%	-3%
1+050	-3%	-3%
1+060	-4%	-2%
1+230	-4%	-2%
1+240	-3%	-2%
1+250	-2%	-2%
EOP	-2%	-2%

TYPICAL SECTION

HIGHLAND DRIVE STA.0+997.080 TO SPRUCE STREET STA.1+314.241

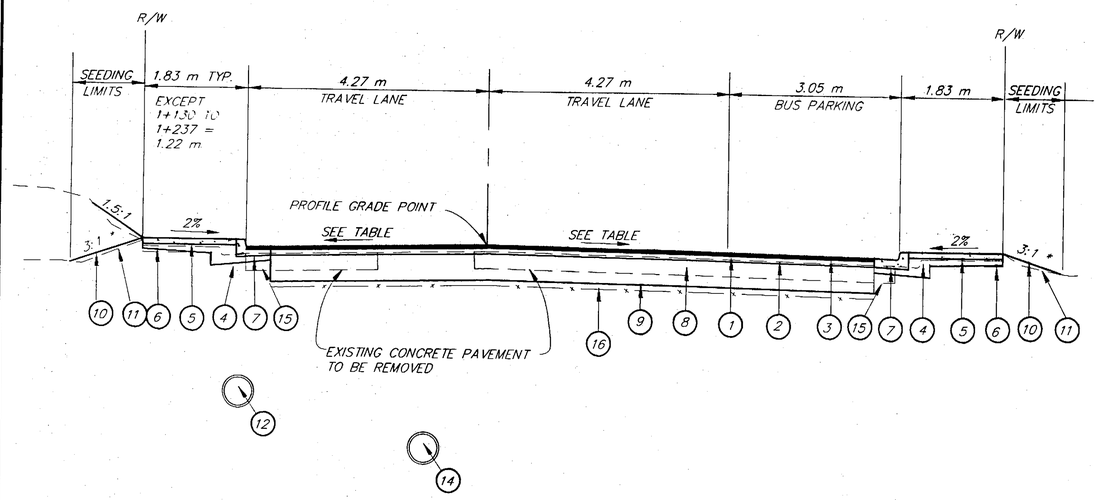
* 3:1 TYP. VARY SLOPE AS NEEDED TO MATCH EXISTING DRIVEWAY, SEE NOTE 8.



TYPICAL SECTION

STATION 1+452 TO EOP STA 1+519.279

* 3:1 TYP. VARY SLOPE AS NEEDED TO MATCH DRIVEWAYS, SEE NOTE 8.



TYPICAL SECTION

SPRUCE STREET STA. 1+314.21 TO STA. 1+440

TRANSITION TO STA. 1+452

* 3:1 TYP. VARY SLOPE AS NEEDED TO MATCH DRIVEWAY, SEE NOTE 8.

LEGEND

1. 50mm ASPHALT CONCRETE PAVEMENT
2. 100mm ASPHALT TREATED BASE
3. TACK COAT (BETWEEN EACH LAYER OF PAVEMENT)
4. REMOVE EXISTING CURB, GUTTER AND SIDEWALK
5. 100mm CONCRETE SIDEWALK - (CBJ DRAWING 111-A)
6. 100mm CRUSHED AGGREGATE BASE COURSE
7. CONCRETE CURB AND GUTTER (CBJ DRAWING 111-A)
8. 460mm SUBBASE GRADING "E" (SEE NOTE 6)
9. EXCAVATION LIMITS (SEE NOTE 5)
10. 50mm TOPSOIL OR 50mm ASPHALT WHERE APPLICABLE
11. USEABLE EXCAVATION
12. 460mm STORM DRAIN CULVERT (FOR TRENCH DETAIL, SEE SHEET 29)
13. 200mm SEWER MAIN (FOR TRENCH DETAIL, SEE CBJ DRAWING 125A)
14. 300mm WATER MAIN, EXISTING
15. VOIDS LEFT BY THE REMOVAL OF STRUCTURES, CONCRETE PAVEMENT, CURB & GUTTER, AND SIDEWALK SHALL BE BACKFILLED WITH SUBBASE, GRADING 'E'.
16. GEOTEXTILE, SEPARATION (SEE NOTE # 10)

GENERAL NOTES

1. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
2. STORM INLET LOCATIONS AND ELEVATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
3. CULVERT LENGTHS AND LOCATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
4. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND NEED TO BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
5. ALL UNUSABLE EXCAVATION SHALL BE PLACED OUTSIDE THE PROJECT LIMITS AT A LOCATION PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. EXISTING SUBBASE MATERIAL SHALL REMAIN IN PLACE IF IT MEETS GRADING 'E' FOR SUBBASE MATERIAL . EXISTING MATERIAL NOT MEETING SUBBASE, GRADING E SHALL BE REMOVED AND REPLACED.
7. USE CRUSHED AGGREGATE BASE TO MATCH EXISTING GRAVEL DRIVEWAYS OR AS THE BASE FOR THE REPAVING OF EXISTING ASPHALT OR CONCRETE PAVED DRIVEWAYS AS NEEDED. SEE DRIVEWAY DETAILS, SHEET 27.
8. CONTRACTOR SHALL MAKE EVERY EFFORT TO MATCH EXISTING LAWNS OR GARDENS.
9. REMOVAL OF STRUCTURES BELOW OF TYPICAL SECTION SHALL BE BACKFILLED WITH SUBBASE GRADING 'E'.
10. CONTRACTOR MAY ENCOUNTER LOOSE OR OPEN GRADED TYPE OF MATERIAL SUCH AS AJ-ROCKS DURING CONSTRUCTION. IN THIS AREAS, GEOTEXTILE FABRIC SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\-TYPSEC1		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

TYPICAL SECTIONS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 4 OF 97

STATE OF ALASKA — Alan J. Steininger — CE-6440 — REGISTERED PROFESSIONAL ENGINEER — 2/25/98

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	DOT-PF QUANTITY	CBJ UTILITIES	TOTAL
120(1)	DBE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.		ALL REQ'D.
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP SUM	ALL REQ'D.		ALL REQ'D.
202(2)	REMOVAL OF PAVEMENT	SQUARE METER	6,150		6,150
202(3)	REMOVAL OF SIDEWALK	SQUARE METER	2,020		2,020
202(4)	REMOVAL OF CULVERT PIPE	METER	335		335
202(8)	REMOVAL OF INLETS	EACH	19		19
202(9)	REMOVAL OF CURB AND GUTTER	METER	1,060		1,060
202(13)	REMOVAL OF WATER PIPES	LUMP SUM		ALL REQ'D.	ALL REQ'D.
202(14)	REMOVAL OF SEWER MANHOLES	EACH		11	11
202(15)	REMOVAL OF STORM MANHOLES	EACH	2		2
203(3)	UNCLASSIFIED EXCAVATION	CUBIC METER	3,500		3,500
204(2)	IMPORTED BACKFILL	CUBIC METER	200	150	350
301(1)	CRUSHED AGGREGATE BASE COURSE	MEGAGRAM	860		860
304(1)	SUBBASE, GRADING "E"	MEGAGRAM	6,500		6,500
306(1)	ASPHALT TREATED BASE COURSE	MEGAGRAM	1,800		1,800
401(1)	ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS A	MEGAGRAM	910		910
401(2)	PG 58-28 ASPHALT CEMENT	MEGAGRAM	126		126
402(2)	STE-1 ASPHALT FOR TACK COAT	MEGAGRAM	6		6
501(4)	CLASS A CONCRETE	CUBIC METER	5		5
603(17-450)	450mm CORRUGATED POLYETHYLENE PIPE	METER	608.5		608.5
603(23)	SADDLE TEE FOR ROOF DRAIN STUBOUT	EACH	16		16
603(24)	150mm ROOF DRAIN STUB-OUT	METER	115		115
604(1)	STORM SEWER MANHOLE	EACH	15		15
604(4)	ADJUST EXISTING MANHOLE	EACH	4	1	5
604(5A)	INLET, TYPE A	EACH	11		11
604(8)	ADJUST EXISTING INLET	EACH	2		2
607(4)	RECONSTRUCTED FENCE	METER	53		53
608(6)	REINFORCED CONCRETE SIDEWALK	SQUARE METER	2,020		2,020
609(1)	CURB TYPE 1	METER	30		30
609(7)	REINFORCED CURB AND GUTTER, TYPE 1	METER	1,060		1,060
614(1)	SURVEY MONUMENTS	EACH	7		7
614(2)	MONUMENT CASES	EACH	7		7
615(1)	STANDARD SIGNS	SQUARE METER	19.83		19.83
615(2)	REMOVE & RELOCATE EXISTING SIGNS	EACH	14		14
618(1)	SEEDING	HECTARE	0.1		0.1
620(1)	TOPSOIL	SQUARE METER	100		100
625(1)	PIPE HAND RAIL	METER	22.2		22.2
626(1-200A)	200mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		371.13	371.13
626(1-200B)	200mm PVC SANITARY SEWER CONDUIT (HP)	METER		57.04	57.04
626(2-150)	150mm PVC SANITARY SEWER SERVICE CONNECTION	EACH		15	15
626(3)	SANITARY SEWER MANHOLE, TYPE 1	EACH		14	14
626(4)	SANITARY SEWER DROP MANHOLE, TYPE 1	EACH		1	1
626(5)	LOCATE SEWER SERVICES	LUMP SUM		ALL REQ'D.	ALL REQ'D.
626(6)	MANHOLE CONNECTION	EACH		1	1
627(1-400)	400mm DUCTILE IRON WATER CONDUIT, CL. 52	METER		21.3	21.3
627(6)	FIRE HYDRANT INSTALLATION	EACH		5	5
627(8-25)	25mm WATER SERVICE CONNECTION	EACH		13	13
627(8-50)	50mm WATER SERVICE CONNECTION	EACH		1	1
627(8-150)	150mm DUCTILE IRON WATER SERVICE CONNECTION	EACH		5	5
627(8-200)	200mm DUCTILE IRON WATER SERVICE CONNECTION	EACH		3	3
627(9-400)	400mm BUTTERFLY VALVE	EACH		1	1
627(10)	50mm VALVE	EACH		1	1
627(12)	INSTALL VALVE BOX	EACH		12	12
627(13)	CAP EXISTING WATER MAIN	EACH		4	4
630(1)	GEOTEXTILE SEPARATION	SQUARE METER	2,500		2,500
630(3)	FILTER CLOTH	METER	300	200	500

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	DOT-PF QUANTITY	CBJ UTILITIES	TOTAL
635(2)	INSULATION BOARD	PER BOARD	100	100	200
639(1)	RESIDENCE DRIVEWAYS	EACH	11		11
639(2)	SERVICE DRIVEWAYS	EACH	9		9
639(3)	APPROACHES	EACH	8		8
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1)	EROSION & POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1A)	EROSION & POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D.		ALL REQ'D.
641(5)	TEMPORARY INLET SEDIMENT FILTER	EACH	28		28
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
642(2)	THREE PERSON SURVEY PARTY	HOUR	10	10	20
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(3)	PERMANENT CONSTRUCTION SIGNING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(4)	CONSTRUCTION SIGN	EACH PER DAY	750	750	1,500
643(5)	TYPE II BARRICADE	EACH PER DAY	250	250	500
643(6)	TYPE III BARRICADE	EACH PER DAY	250	250	500
643(7)	TRAFFIC CONE	EACH PER DAY	3,000	3,000	6,000
643(8)	DRUM	EACH PER DAY	500	500	1,000
643(13)	TEMPORARY PAVEMENT MARKING	KILOMETER	0.25		0.25
643(14)	FLAGGING	MAN-HOUR	1,500	1,500	3,000
643(16)	STREET SWEEPING	HOUR	50	50	100
643(17)	WATERING	KILOLITER	100	100	200
643(23)	ROADWAY GRADING	HOUR	50	50	100
643(24)	COORDINATION WITH AEL&P	LUMP SUM		ALL REQ'D	ALL REQ'D
644(1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.		ALL REQ'D.
644(2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D.		ALL REQ'D.
644(6)	ENGINEERING TRANSPORTATION	LUMP SUM	ALL REQ'D.		ALL REQ'D.
645(1)	TRAINING PROGRAM FOR 1 TRAINEE/APPRENTICE	LABOR HOUR	200		200
670(9)	METHYLMETHACRYLATE	LUMP SUM	ALL REQ'D.		ALL REQ'D.

BASIS OF ESTIMATE

ITEM NO.	ITEM	QUANTITY
301(1)	CRUSHED AGGREGATE BASE COURSE	2.32 mg/m3 (1.96 TON/CY)
304(1)	SUBBASE, GRADING "E"	2.23 mg/m3 (1.85 TON/CY)
306(1)	ASPHALT TREATED BASE COURSE	2.48 kg/m2 per mm (115 lbs/SY/IN DEPTH)
401(1)	ASPHALT CONCRETE PAVEMENT	2.48 kg/m2 per mm (116 lbs/SY/IN DEPTH)
401(2)	PBA ASPHALT CEMENT	6% OF 401 4% OF 306(1)
402(2)	STE-1 ASPHALT FOR TACK COAT	.363ℓ /m2, 923ℓ /Mg (0.08 GAL/SY, 240 GAL/TON)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-EST
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
ESTIMATE OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A.J. STEININGER	SHEET 5 OF 97

STATE OF ALASKA — 49th — Alan J. Steininger — CE-6440 — REGISTERED PROFESSIONAL ENGINEER — 7/15/98

CURB CUT SUMMARY ***

STATION AT MIDDLE OF CURB CUT	OFFSET** LEFT	OFFSET** RIGHT	CURB CUT TYPE	WIDTH OF DEPRESSED SIDEWALK	REMARKS
998.94		3.92	III	1.52 m	RAMP
1+002.34	6.97		III	1.52 m	RAMP
1+003.50		9.92	III	1.52 m	RAMP
1+014.59		10.69	III	1.52 m	RAMP
1+028.76	6.10		II	5.00 m *	RESIDENCE DRIVEWAY – COMBINE
1+036.90	6.10		II	3.00 m *	RESIDENCE DRIVEWAY – COMBINE
1+051.10	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+066.03	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+088.02	6.10		II	3.00 m *	RESIDENCE DRIVEWAY – COMBINE
1+094.97	6.10		II	3.00 m *	RESIDENCE DRIVEWAY – COMBINE
1+109.82		6.71	II	6.75 m	SERVICE DRIVEWAY
1+111.39	6.10		II	3.50 m	RESIDENCE DRIVEWAY
1+122.32	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+137.61		10.38	III	1.52 m	RAMP
1+141.75	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+145.41		10.61	III	1.52 m	RAMP
1+189.31	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+201.15	6.10		II	4.23 m	SERVICE DRIVEWAY
1+220.80		6.71	II	6.00 m	SERVICE DRIVEWAY
1+228.60	6.10		I	1.52 m	RAMP
1+228.68		6.71	I	1.52 m	RAMP
1+235.55	9.55		III	1.52 m	RAMP
1+247.85	9.64		III	1.52 m	RAMP
1+260 ±	X		II	3.00 m	LOCATE DRIVEWAY CUT AT OWNERS REQUEST
1+283.20	6.10		II	3.00 m	RESIDENCE DRIVEWAY
1+294.06		6.71	II	9.00 m	SERVICE DRIVEWAY
1+272	6.10		II	3.00 m	Residence Driveway
1+307.65		6.71	I	3.00 m	RAMP/DRIVEWAY
1+306.83	4.72		III	1.52 m	RAMP
1+311.25	12.67		III	1.52 m	RAMP
1+318.14	11.14		III	1.52 m	RAMP
1+340.39		7.40	IV	4.23 m	RAMP
1+351.25		7.93	IV	5.35 m	RAMP
1+353.26	3.66		II	7.50 m	SERVICE DRIVEWAY
1+403.28	3.66		I	1.52 m	RAMP
1+403.28		6.70	I	1.52 m	RAMP
1+411.33		7.31	IV	4.09	RAMP
1+421.77		8.14	IV	4.21	RAMP
1+420.87	3.66		II	6.00 m	SERVICE DRIVEWAY
1+446.82	3.66		II	6.20 m	SERVICE DRIVEWAY
1+470.36	3.66		II	8.25 m	SERVICE DRIVEWAY
1+472.93		5.93	III	1.52 m	RAMP
1+476.70		11.81	III	1.52 m	RAMP
1+481.51	3.66		I	1.52 m	RAMP
1+489.52	6.67		III	1.52 m	RAMP
1+494.78		7.44	I	1.52 m	RAMP
1+518	3.66		II	1.52m	Residence Driveway
1+502.62	8.68		III	1.52 m	RAMP
1+504.70		4.25	III	1.52 m	RAMP
1+506.72	5.20		III	1.52 m	RAMP
~~1+510.00~~	~~X~~		~~II~~	~~4.00 m~~	~~RESIDENCE DRIVEWAY~~

NOTE: RAMP CONSTRUCTION SHALL BE INCIDENTTAL TO ITEM 608, CONCRETE SIDEWALK

* DRIVEWAY WILL BE COMBINED WITH ADJACENT DRIVEWAY TO AVOID RAISING SIDEWALK BETWEEN DRIVEWAYS.

** OFFSETS ARE TO THE FRONT EDGE OF THE MIDDLE OF RAMPS OR DRIVEWAYS.

*** CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER SO THAT THE WIDTH AND LOCATION OF DRIVEWAYS MATCH THE CONDITIONS AS STATED IN THE DRIVEWAY PERMITS. LOCATIONS AND WIDTHS AS SHOWN IN THE SUMMARY MAY NOT MATCH THE DRIVEWAY PERMITS.

UTILITY SUMMARY

STATION AT ℄	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+192.73	6.80		REMOVE STORM DRAIN MANHOLE
1+242.36	6.23		REMOVE STORM DRAIN MANHOLE
1+480.24		14.58	ADJUST STORM DRAIN MANHOLE
1+488.92	2.28		ADJUST STORM DRAIN MANHOLE
1+495.92		7.23	ADJUST TELEPHONE MANHOLE, SEE SHEET 30
1+504.45		5.85	ADJUST ELECTRIC MANHOLE, SEE SHEET 30

SUMMARY DOES NOT INCLUDE SANITARY SEWER MANHOLE, SEE SHEET 32

APPROACH SUMMARY

STATION AT ℄	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+008.45		X	JUNEAU DOUGLAS HIGH SCHOOL PARKING
1+141.90		X	AUGUSTUS BROWN SWIMMING POOL ENTRANCE
1+241.69	X		BEHRENDS AVENUE
1+314.24	X		SPRUCE STREET
1+346.05		X	HARBORVIEW SCHOOL PARKING
1+415.96		X	"F" STREET
1+491.85	X	X	12TH STREET

MONUMENT & MONUMENT CASE INSTALLATION SUMMARY

STATION	OFFSET	DESCRIPTIOON
"0" 0+100.00	℄	P.O.T.
"0" 1+090.740	℄	P.C.
"0" 1+168.460	℄	P.T.
"0" 1+314.334	℄	P.I.
"0" 1+363.223	℄	P.I.
"0" 1+440.963	℄	P.C.
"0" 1+498.970	℄	P.C.

ROOF DRAIN STUBOUT SUMMARY

LOCATION STATION	REMARK	
* ~~1+005 LT.~~ DELETED	APPROX. LOCATION OF EXIST. (FIELD VERIFY)	
1+024 LT.	OWNER HAS REQUESTED LOCATION	3.7M
1+040 LT.		3.5M
1+049 LT.	TIED TO 1+053 NO SADDLE	2.3M
1+053 LT.	NO SADDLE INTO S-2	2.3M
1+068 LT.		3.0M
1+083 LT.		3.04M
1+097 LT.		3.4M
1+117 LT.		3.4M
1+127 LT.		3.0M
* ~~1+167 LT.~~	1+163 LT.	3.2M
* ~~1+151 LT.~~	1+169 LT.	3.2M
1+223 LT.		32M
1+263 LT.		3.5M
1+279 LT.		2.5M
* ~~1+295 LT.~~	1+301.5 LT.	2.8M

1+091 LT., 3.0M

1+244 LT. 1.0M

1+460 RT, S-25 to P-26, 5.4M

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BY:	DATE:	DESCRIPTION OF CHANGE:

PATH: P:\JNU\71463\DR\-SUM
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
SUMMARY OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 6 OF 97

STATE OF ALASKA — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER — 3/20/98

EXISTING INLET SUMMARY

STATION "0"	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+015.81	6.06		REMOVE
1+053.13	7.24		REMOVE
1+088.10		8.51	REMOVE
1+090.87	7.42		REMOVE
1+115.85		9.11	REMOVE
1+130.12	7.16		REMOVE
1+178.18	6.55		REMOVE
1+179.53		8.28	REMOVE
1+230.40	6.49		REMOVE
1+234.08		7.92	REMOVE
1+247.58	10.09		MOVE TOP GRATE
1+257.16	6.72		REMOVE
1+307.19	6.96		REMOVE
1+310.19	7.70		REMOVE
1+318.48	10.08		REMOVE
1+341.88		8.64	REMOVE
1+390.26	4.11		REMOVE
1+437.29	8.06		REMOVE
1+452.79	4.32		REMOVE
1+491.59	10.31		ADJUST AS NEEDED
1+504.20	9.37		REMOVE

REMOVAL OF STRUCTURES & OBSTRUCTIONS SUMMARY

STATION	OFFSET LEFT	OFFSET RIGHT	DESCRIPTION OF ITEM TO BE REMOVED
1+032.84	10.03		FENCE RESTORATION AS NEEDED (APPROX. 2 m)
1+039.09	9.16		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+080.00	9.40		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+108.90	10.35		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+134.24		10.14	WALL REPLACEMENT AS NEEDED (APPROX. 4.12 m) FOR SIDEWALK
1+138.64	9.40		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+153.77	8.78		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+168.00	8.64		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+194.51	8.64		FENCE RESTORATION AS NEEDED (APPROX. 3 m)
1+233.00	12.20		FENCE RESTORATION AS NEEDED (APPROX. 4 m)
1+264.78	9.52		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+292.64	9.42		FENCE RESTORATION AS NEEDED (APPROX. 1 m)
1+326.52	6.36		FENCE REPLACEMENT (22 m)
1+429.70		7.60	REMOVE TREE ROOTS
1+468.76		4.15	ISLAND & TREES REMOVAL (ALL) MOVE TREES TO NEW YARD APPROX STA. 1+460, OFFSET 7.6m
1+491.58		16.47	WALL & HANDRAIL REPLACEMENT (15.68 m) FOR NEW SIDEWALK

FENCE REPLACEMENT & RESTORATION SHALL BE PAID UNDER ITEM 607(4).

STORM DRAIN PIPE REMOVAL

STATION	LENGTH	DIAMETER	REMARKS
"0" 1+070 LT.	37.6m	300mm	REMOVE AND DISPOSE
"0" 1+110 LT.	39.9m	200mm	REMOVE AND DISPOSE
"0" 1+150 LT.	48.0m	300mm	REMOVE AND DISPOSE
"0" 1+153 ℄	11.7m	450mm	REMOVE AND DISPOSE *
"0" 1+088 RT.	2.1 **m	200mm	REMOVE AND DISPOSE *
"0" 1+116 RT.	2.1 **m	200mm	REMOVE AND DISPOSE *
"0" 1+117 ℄	12.3m	450mm	REMOVE AND DISPOSE *
"0" 1+177 RT.	2.9 **m	200mm	REMOVE AND DISPOSE *
"0" 1+200 LT.	52.3m	300mm	REMOVE AND DISPOSE
"0" 1+240 LT.	12.0m	300mm	REMOVE AND DISPOSE
"0" 1+245 LT.	5.9m	300mm	REMOVE AND DISPOSE
"0" 1+250 LT.	8.5m	300mm	REMOVE AND DISPOSE
"0" 1+285 LT.	53.2m	300mm	REMOVE AND DISPOSE
"0" 1+314 LT.	8.9m	300mm	REMOVE AND DISPOSE
"0" 1+395 LT.	7.8± **m	150mm	REMOVE AND DISPOSE *
"0" 1+468 ℄	29.3m	200mm	REMOVE AND DISPOSE
"0" 1+447 LT.	–	250mm	PLUG

* PIPE NEEDS TO STAY IN PLACE UNTIL PROPOSED SANITARY SEWERLINE IS INSTALLED.
** APPROXIMATE, LOCATION CONNECTION UNKNOWN.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-SUM2		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

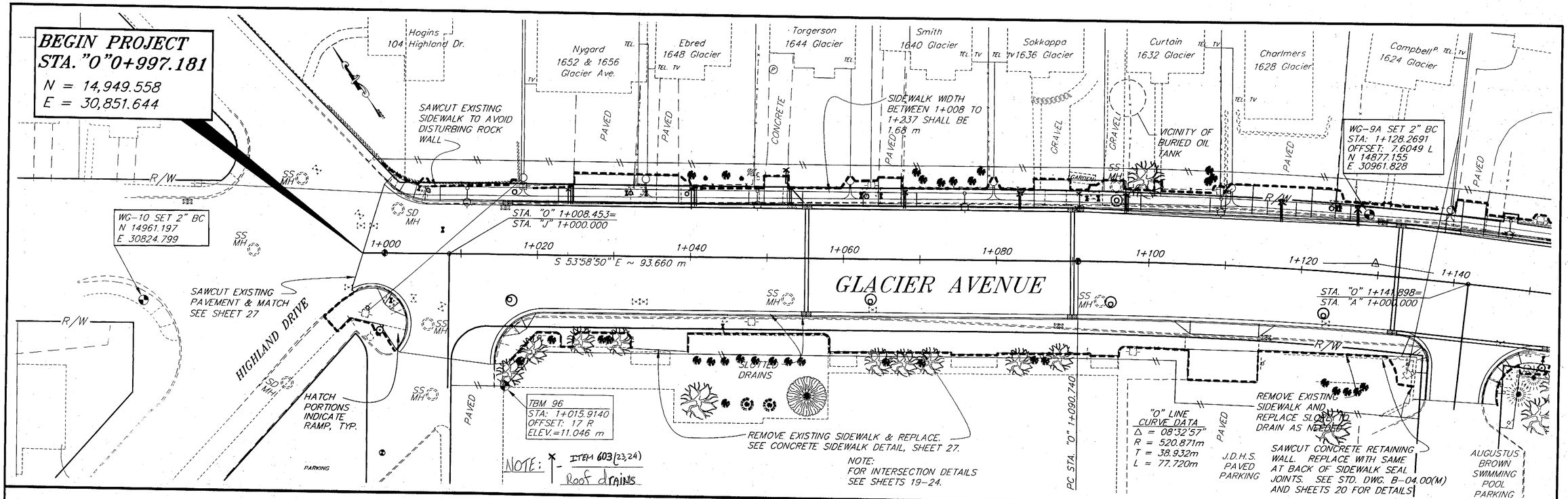
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

SUMMARY OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 7 OF 97

STATE OF ALASKA — 5491 — Marc A. Steininger CE-6440 — REGISTERED PROFESSIONAL ENGINEER — 7/15/98



BASIS OF CONTROL

HORIZONTAL CONTROL

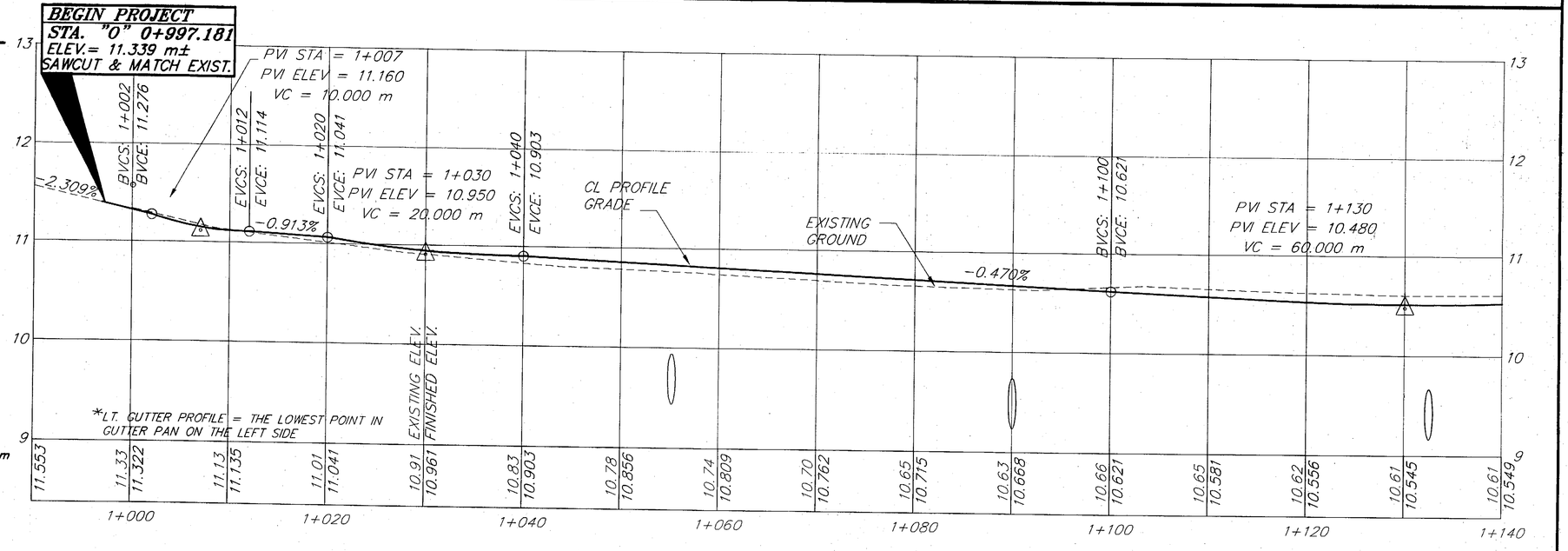
THE BASIS OF HORIZONTAL CONTROL FOR THIS PROJECT IS THE RECORD BEARING OF N 41d 23' 29"W FROM THE DOH BRASS CAP "CUT 1975" ON THE END OF THE BREAKWATER IN HARRIS HARBOR, NAD 27 ZONE 1 COORDINATES OF N 2363512.31,(720,400.066 m), E 2539204.19,(773,951.064 m) TO USACE SBC "IL-9", ON THE END OF THE BREAKWATER AT THE NORTH END OF AURORA HBR., NAD 27 COORDINATES OF N 2365823.09,(721,104.393 m),E 2337167.59,(712,370.178 m), AS DESCRIBED IN THE CONTROL SHEET FOR EGAN EXPRESSWAY CAPACITY PHOTO CONTROL PROJECT.

THE PROJECT BASIS OF BEARING IS THE BEARING OF N 58d 28'43"W FROM DOT CONTROL POINT WG-9, (PROJECT COORDINATES OF N 14,877.155, E 30,961.828) A 50mm BRASS CAP SET IN THE SIDEWALK IN FRONT OF #1624 GLACIER AVE., AND DOT CONTROL CONTROL POINT WG-10, (PROJECT COORDINATES OF N 14,961.197, E 30,824.799) A 50mm BRASS CAP SET IN THE SIDEWALK AT THE SW CORNER OF HIGHLAND AND GLACIER.

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS NOS BM 19, (STAMPED "US COAST GUARD SURVEY") SET IN THE NORTH CORNER OF THE SIDEWALK ON THE NORTH SIDE OF THE SUB PORT BUILDING 5.79 m NORTH OF THE NORTH CORNER OF THE BUILDING, WITH A PUBLISHED 1975 ELEVATION OF 24.58' (7.492 m) ABOVE MLLW. THE ELEVATION WAS TRANSFERRED WITH A LEICA Ni2000 ELECTRIC LEVEL TO TBW WG-96.

THE PROJECT BASIS OF VERTICAL CONTROL IS TBM WG-96, A 50mm ALUMINUM CAP SET IN TOP CENTER OF CONCRETE WALL AT N.W. CORNER OF HIGH SCHOOL BLDG. THE TBM IS 0.37 m TO N.W. BLDG. CORNER AND IS STAMPED "WG-96 36.24". WG-96 HAS AN ELEVATION OF 11.046 m ABOVE MLLW.



RECORD OF REVISIONS		
BY:	DATE:	DESCRIPTION OF CHANGE:

PATH: P:\JNU\71463\DR\-SETUP1 VIEWS: PLAN1, PRO1, TB1
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)

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

JUNEAU WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION ALASKA
STP-0005(149) ~ 71463

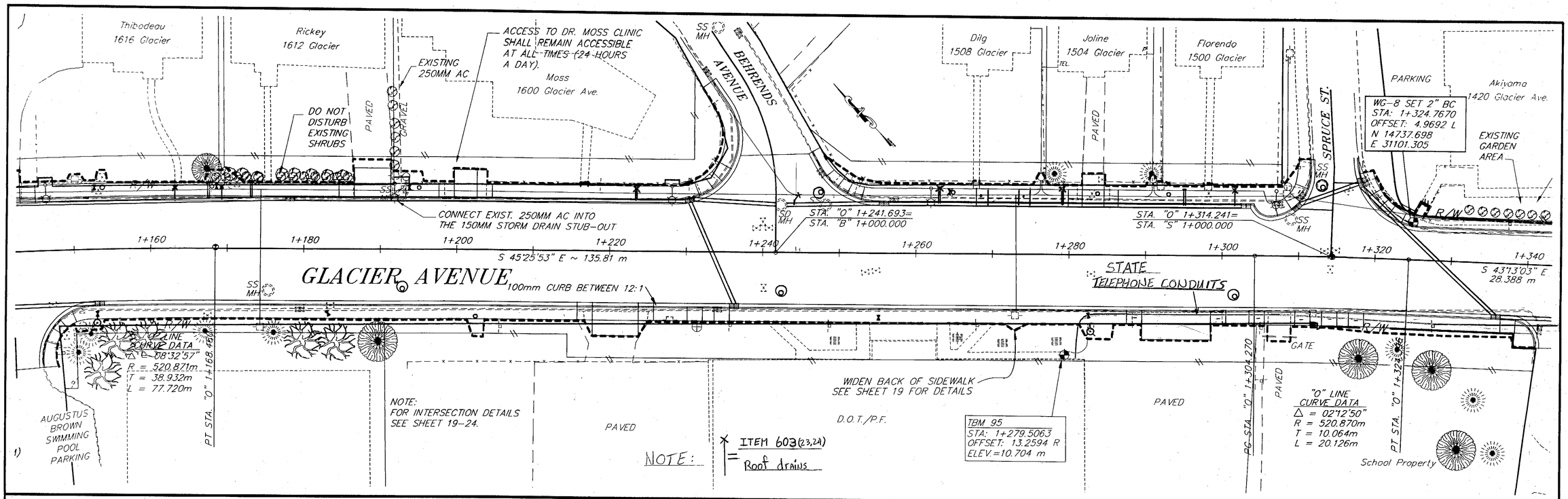
B.O.P. STA. "0" 0+997 TO STA. "0" 1+145

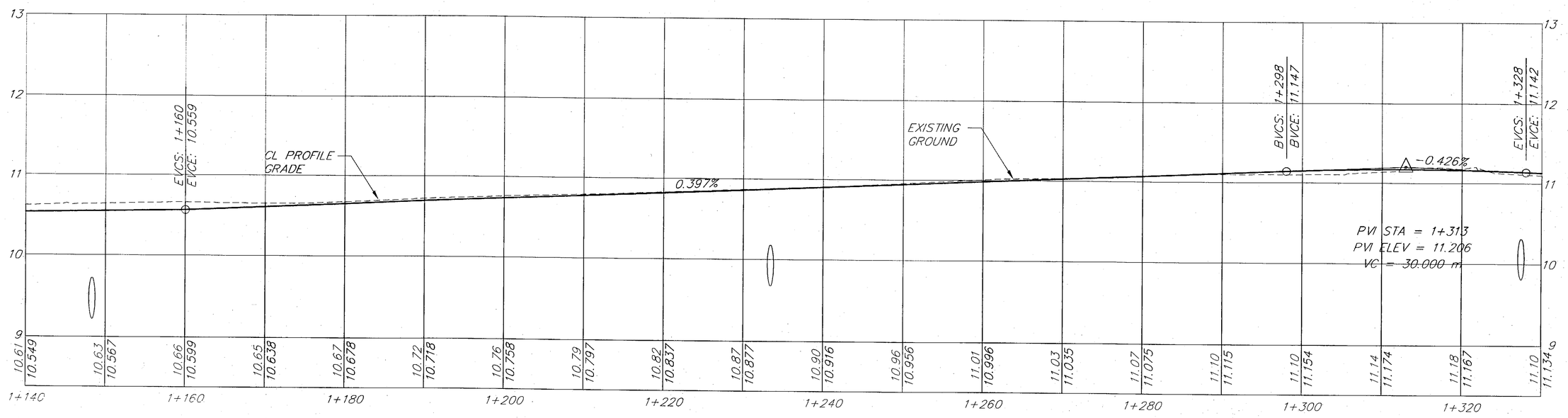
PLAN & PROFILE

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KS/KK/WH	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 8 OF 95

STATE OF ALASKA
49th
Alan J. Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-SETUP1 VIEWS: PLAN2, PRO2, TB2		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU WILLOUHBY AND GLACIER AVENUE RECONSTRUCTION ALASKA
STP-0005(149) ~ 71463

STA. "O" 1+145 TO STA. "O" 1+340
PLAN & PROFILE

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KS/KK/WH	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 9 OF 96

STATE OF ALASKA
Alan J. Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

BEGIN PHASE II
END PHASE I
STA. "0" 1+519.28
N = 14,609.811
E = 31,244.992

CONTRACTOR SHALL NOTIFY PROPERTY OWNER (AKIYAMA) A MINIMUM OF 30-DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES THAT WOULD DISTURB THE EXISTING PLANTS, GARDEN, FENCE AND WALKWAYS.

Akiyama
420 Glacier Ave

EXISTING GARDEN AREA

GRAVEL PARKING

PC STA. "0" 1+352.784

PAVED

"0" LINE CURVE DATA
Δ = 02°17'47"
R = 520.870m
T = 10.439m
L = 20.876m

PT STA. "0" 1+373.660

Ak. Property Management Corp. (Manager Huntington) 1248 Glacier Ave.

PAVED PARKING

"0" LINE CURVE DATA
Δ = 16°19'02"
R = 50.000m
T = 7.168m
L = 14.239m

PC STA. "0" 1+440.963

PT STA. "0" 1+455.203

STA. "0" 1+415.956=

STA. "0" 1+491.850=
STA "T" 1+026.523

Flood
738 W. 12th St.

SS MH

100 mm CURB BETWEEN RAMP SLOPES

1+340
S 43°13'03" E
28.388 m

1+360

1+380

1+400

1+420

1+440

S 45°30'50" E ~ 67.304 m

GLACIER AVENUE

TELEPHONE

R/W

PAVED

POLE RELOCATION
STA: 1+354.332
OFFSET: 9.391 RT.

STA. "0" 1+346.048=

Harborview School Parking

POLE RELOCATION
STA: 1+403.895
OFFSET: 9.848 RT.

NOTE:
FOR INTERSECTION DETAILS SEE SHEET 19-24.

REMOVE TREE, CUT 0.4 METER BELOW GRADE SAVE TREE

PAVED

1+460

S 61°49'50" E ~ 43.767 m

1+480

REMOVE TREE & ROOTS SEE SHEET 24.

TEL MH

ELEC MH

100 mm CURB BETWEEN RAMP SLOPES

GARDENS

SD MH

SS MH

C.B.J.
1208 Glacier

12TH STREET

1.68m WIDE CONCRETE WALKWA

1+500

1+520

1+528.431
N 33°20'37" W
4.602m

GUY LINES RELOCATION TO BE DONE BY AEL&P

"0" LINE CURVE DATA
Δ = 28°29'13"
R = 50.000m
T = 12.692m
L = 24.860m

PC STA. "0" 1+488.970

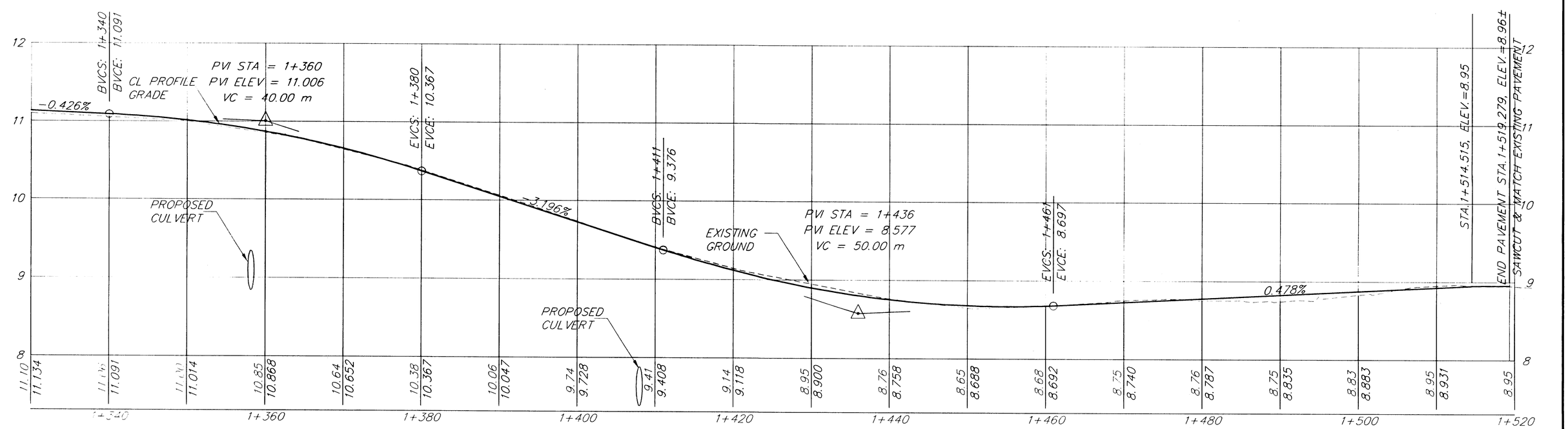
PT STA. "0" 1+523.830

PAVED

Horri Plumbing & Heating Inc.
809 W. 12th St.

SAWCUT CONCRETE RETAINING WALL. REPLACE WITH SAME AT BACK OF SIDEWALK SEAL JOINTS. SEE STD. DWG. B-04.00 AND SHEETS 31 FOR DETAILS

ITEM 603 (2)(a)1 Rock Fences



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:	P:\JNU\71463\DR\-SETUP1 VIEWS: PLAN3, PRO3, TB3
PLOT:	P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

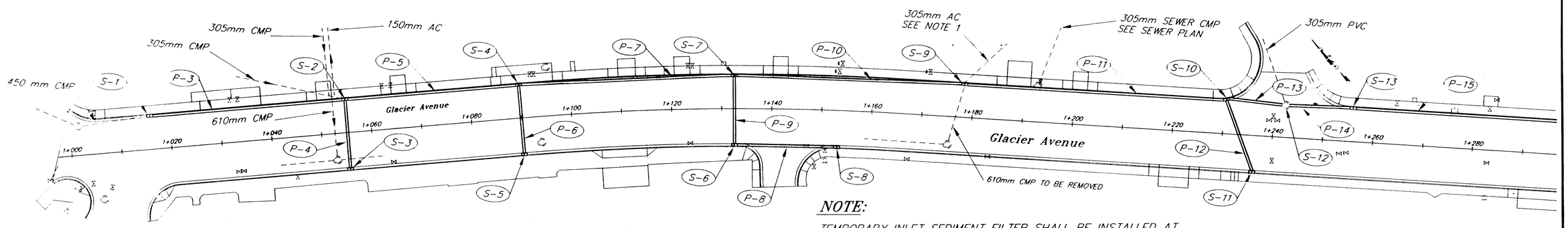
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION ALASKA
STP-0005(149) ~ 71463

STA. "0" 1+340 TO E.O.P. STA. "0" 1+519
PLAN & PROFILE

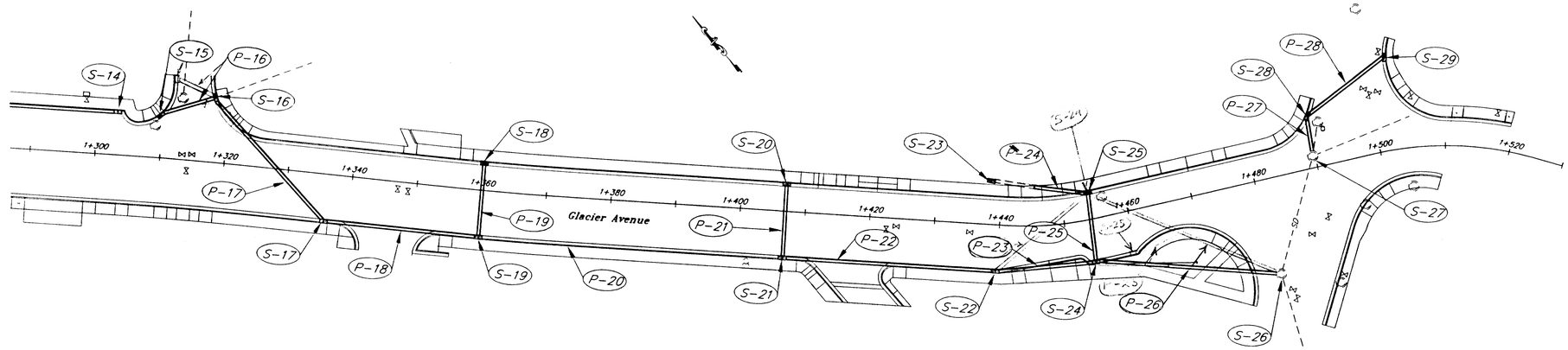
DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KS/KK/WH	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 10 OF 97

STATE OF ALASKA
Alan J. Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER



NOTE:

TEMPORARY INLET SEDIMENT FILTER SHALL BE INSTALLED AT ALL CURB INLETS PRIOR TO STARTING CONSTRUCTION.



Drainage Structure Summary

Structure No.	Structure Type	Station	Offset (m)	Grate/Lid Elev.	Struct. Invert Elev.	Remarks
S-1	M.H., Type 1	"O" 1+016.09	6.25 Lt.	10.95	8.11	
S-2	M.H., Type 1	"O" 1+055.21	6.25 Lt.	10.61	8.27	See note #6.
S-3	Inlet, Type A	"O" 1+055.21	6.86 Rt.	10.66	9.05	
S-4	M.H., Type 1	"O" 1+090.00	6.25 Lt.	10.42	8.46	
S-5	Inlet, Type A	"O" 1+090.00	6.86 Rt.	10.53	8.88	
S-6	Inlet, Type A	"O" 1+132.53	6.86 Rt.	10.41	8.84	
S-7	M.H., Type 1	"O" 1+132.53	6.25 Lt.	10.30	8.66	
S-8	Inlet, Type A	"O" 1+153.21	6.86 Rt.	10.44	8.94	
S-9	M.H., Type 1	"O" 1+178.19	6.25 Lt.	10.42	8.90	See note #7.
S-10	M.H., Type 1	"O" 1+230.49	6.43 Lt.	10.63	9.12	
S-11	Inlet, Type A	"O" 1+236.31	6.86 Rt.	10.69	9.35	
S-12	M.H., Type 1	"O" 1+242.40	6.24 Lt.	10.75	9.18	
S-13	Inlet, Type A	"O" 1+255.81	6.25 Lt.	10.85	9.25	
S-14	Inlet, Type A	"O" 1+303.09	6.25 Lt.	11.04	9.46	
S-15	M.H., Type 1	"O" ~~1+309.92~~	~~6.22 Lt.~~	11.05	9.56	* 1+321, 16.4 Lt.
S-16	M.H., Type 1	"O" 1+317.47	9.73 Rt.	11.21	9.47	
S-17	M.H., Type 1	"O" 1+336.11	6.86 Rt.	10.97	9.22	
S-18	Inlet, Type A	"O" 1+360.00	3.81 Lt.	10.79	9.45	
S-19	M.H., Type 1	"O" 1+360.00	6.86 Rt.	10.73	9.12	
S-20	Inlet, Type A	"O" 1+406.83	3.81 Lt.	9.43	7.90	
S-21	M.H., Type 1	"O" 1+406.83	6.86 Rt.	9.37	7.83	
S-22	M.H., Type 1	"O" 1+439.70	6.86 Rt.	8.62	6.90	
S-23	Existing Inlet	"O" 1+437.20	8.06 Lt.	–	–	Existing to remain.
S-24	M.H., Type 1	"O" ~~1+453.61~~	~~6.25 Rt.~~	8.56	6.77	* 1+454.44, 3.81 Lt.
S-25	Inlet, Type A	"O" 1+454.44	3.81 Lt.	8.61	7.01	* 1+460, 6.25 Rt.
S-26	Existing M.H.	"O" 1+480.83	14.72 Rt.	8.36	–	Existing to remain.
S-27	Existing M.H.	"O" 1+488.97	2.45 Lt.	8.78	–	Existing to remain.
S-28	M.H., Type 1	"O" 1+490.33	7.72 Lt.	8.83	7.49	
S-29	Inlet, Type A	"O" 1+502.45	14.13 Lt.	9.01	7.49	

Drainage Structure Summary

Pipe No.	Diameter (mm)	Type	Length (mm)	From	Pipe Invert Elev.	To	Pipe Invert Elev.	Remarks
P-3	450	CPP	39.1	S-2	8.68	S-1	8.54	
P-4	450	CPP	13.7	S-3	9.46	S-2	9.41	
P-5	450	CPP	34.8	S-4	8.87	S-2	8.71	
P-6	450	CPP	13.7	S-5	9.29	S-4	9.22	
P-7	450	CPP	43.1	S-7	9.07	S-4	8.89	
P-8	450	CPP	20.7	S-8	9.35	S-6	9.27	
P-9	450	CPP	13.7	S-6	9.25	S-7	9.08	
P-10	450	CPP	46.1	S-9	9.31	S-7	9.08	
P-11	450	CPP	52.2	S-10	9.53	S-9	9.33	
P-12	450	CPP	15.1	S-11	9.76	S-10	9.59	
P-13	450	CPP	11.9	S-12	9.59	S-10	9.55	
P-14	450	CPP	13.5	S-13	9.66	S-12	9.61	
P-15	450	CPP	47.3	S-14	9.87	S-13	9.68	
P-16	450	CPP	8.9	S-15	9.97	S-16	9.90	* [illegible]
P-17	450	CPP	25.1	S-16	9.88	S-17	9.65	
P-18	450	CPP	24.0	S-17	9.63	S-19	9.55	
P-19	450	CPP	11.3	S-18	9.86	S-19	9.70	
P-20	450	CPP	47.0	S-19	9.53	S-21	8.26	
P-21	450	CPP	11.3	S-20	8.31	S-21	8.26	
P-22	450	CPP	32.9	S-21	8.24	S-22	7.34	
P-23	450	CPP	15.6	S-22	7.31	S-24	7.20	
P-24	450	CPP	8.3	"O" 1+445.46, 5.89 Lt.	7.60	S-25	7.44	* [illegible]
P-25	450	CPP	10.79	S-25	7.42	~~S-24~~	7.35	* [illegible]
P-26	450	CPP	28.6	S-24	7.18	S-26	6.84	
P-27	450	CPP	6.1	S-28	7.68	S-27	6.70	[illegible]
P-28	450	CPP	13.7	S-29	7.90	S-28	7.70	

DRAINAGE NOTES

1. Stationing for the culvert pipes, inlets and manholes are approximate and may be adjusted to fit field conditions.
2. Invert elevations are approximate and may be adjusted to field conditions.
3. Connect pipe to existing pipe at R.O.W. boundary (back of sidewalk.)
4. Connection to exsiting pipe shall be coupling band as specified in section 603 and shall be incidental to 603.
5. Remove existing manhole at Sta. 1+248.2, 604m Lt.
6. Remove exisiting 610mm CMP. Adjust existing 100mm PVC and 150mm AC into proposed S-1B structure.
7. The 305mm A.C. pipe at existing MH/Inlet at Station "O" 1+178.18, 8.55m Lt. is to be connected into the proposed storm drain system . If pipe turns out to be a sanitary sewer pipe it shall be connected to the new sewer main. The existing outlet 610mm CMP shall be removed.
8. All inlet grates shall be "G4" as shown on standard drawing D-23.00(M).
9. All inlets shall have 400mm sumps.
10. Gutters shall slope into inlets, see CBJ Standard Drawing 309 and do not use the Gutter Slope Detail on DOT Standard Drawing D-23.00(M).
11. Reducers, Y's or T's maybe required to reduce storm sewers size if needed to go over existing structures or pipes.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-DRAINTA MPLOTF.PCP(400) OR MPLOTH.PCP(800)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

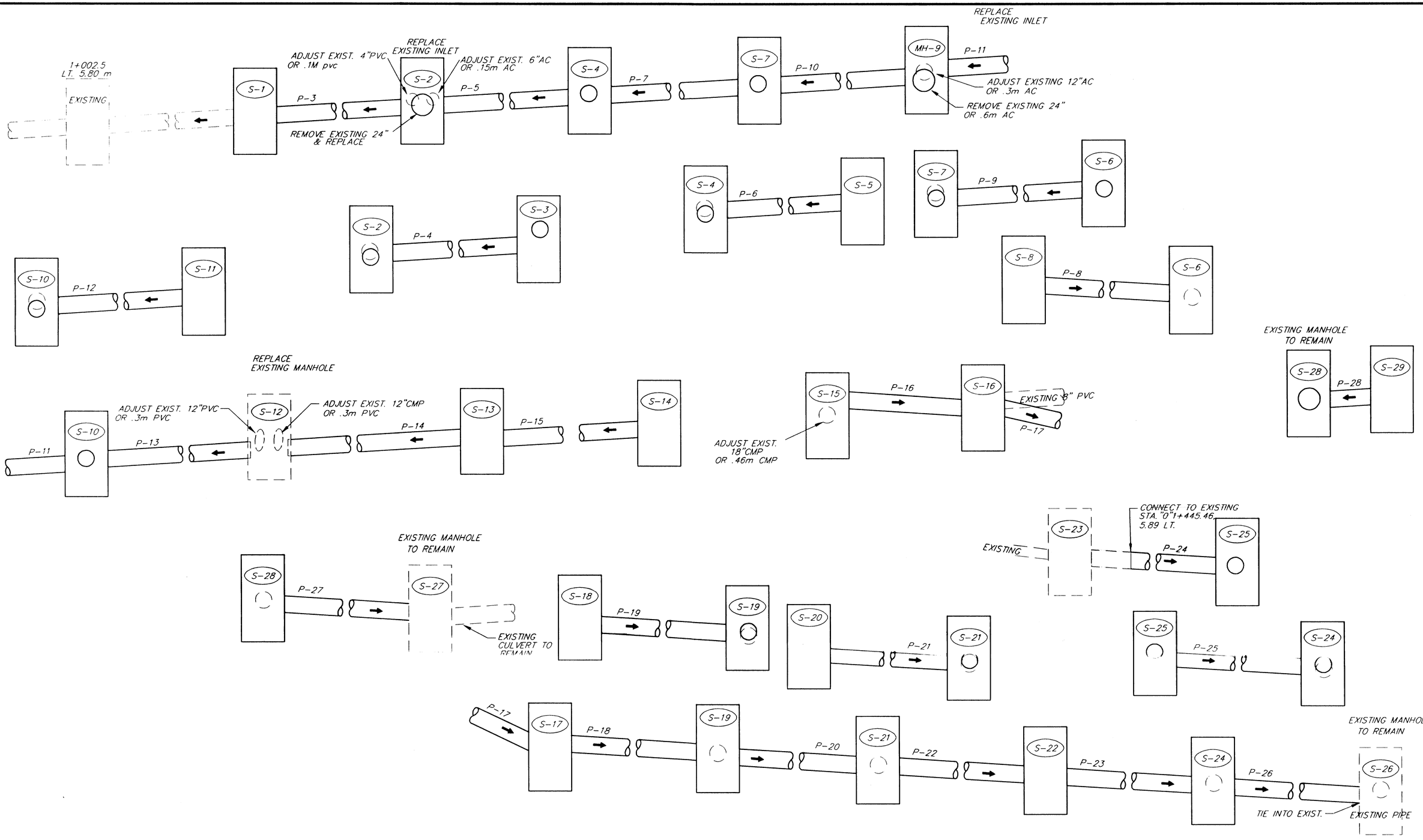
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-0005(149) ~ PROJECT NO. 71463

DRAINAGE FACILITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 11 OF 97

STATE OF ALASKA — 11998 — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\-DRAIN4		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

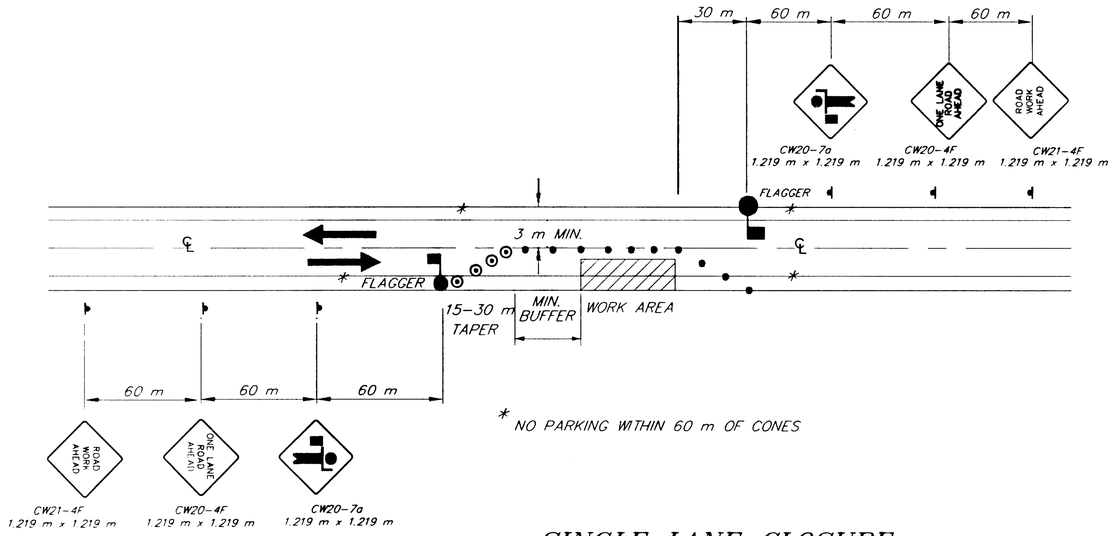
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S ~ PROJECT NO. 71463

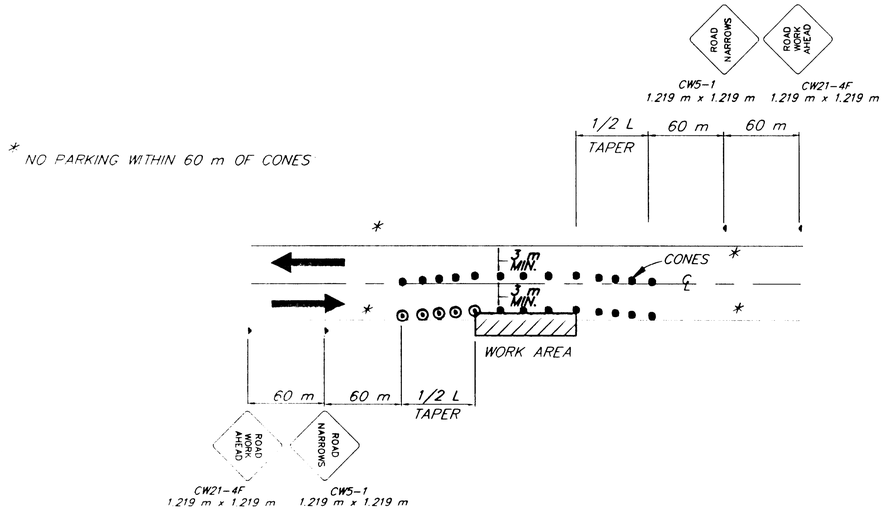
DRAINAGE DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KAY SNYDER	DATE: 1996
CHECKED BY: A. STEININGER	SHEET 12 OF 97

STATE OF ALASKA
Alan J. Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER



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

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE III BARRICADE
- ..... FLAGGING STATION

$L = W \times T$

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. SEE SECTION 108 FOR LIMITATIONS OF OPERATIONS.
2. ACCESS TO THE SCHOOL BUSES MUST BE ALLOWED AT ALL TIMES .
3. TWO LANE, TWO WAY TRAFFIC SHALL BE ALLOWED AT ALL TIMES BETWEEN HIGHLAND AND SPRUCE STREET.
4. PEDESTRIAN ACCESS SHALL BE MAINTAINED TO ALL HOMES AND BUSINESSES. THIS MAY REQUIRE THE CONSTRUCTION OF TEMPORARY FACILITIES.
5. IF A HOME IS TO BE TEMPORARILY CUT OFF FROM ACCESS OR FROM UTILITIES NOTICE MUST BE GIVEN 24 HOURS IN ADVANCE.
6. IF ACCESS OR UTILITIES ARE TO BE CUT OFF FROM A BUSINESS THE BUSINESS MUST BE GIVEN TWO WEEK ADVANCE NOTICE. THE CUT OFF OF SERVICE OR ACCESS MUST BE DONE DURING A PRE-ESTABLISHED TIME THAT THE BUSINESS HAS AGREED TO.
7. EVERY EFFORT SHALL BE MADE TO NOT CUT OFF ACCESS TO DR. MOSS & DR. AKIYAMA'S OFFICES DURING WORKING HOURS. IF ACCESS HAS TO BE ELIMINATED FOR A SHORT PERIOD OF TIME THE CONTRACTOR SHALL HAVE A PLAN FOR ALLOWING EMERGENCY ACCESS TO THE OFFICES.
8. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 3 m.
9. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
10. TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.04 OF THE SPECIFICATIONS.
11. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
12. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE LENGTH OF THE WORK AREA IS LESS THAN 30 m AND THE FLAGGER IS VISIBLE TO TRAFFIC APPROACHING FROM BOTH DIRECTIONS.
13. CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
14. RESIDENTIAL DRIVEWAYS MAY BE CLOSED DURING ACTUAL WORK ON A GIVEN DRIVEWAY, PROVIDED THAT THE CLOSURE DOES NOT EXCEED 8 HOURS AND THE AFFECTED RESIDENTS HAVE BEEN GIVEN 24 HOURS NOTICE OF THE CLOSURE. CLOSURE MAY ONLY OCCUR BETWEEN 8:00 AM AND 4:30 PM.
15. 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.
16. PEDESTRIAN SAFETY FENCING SHALL BE INSTALLED WHENEVER AN OPEN TRENCH IS ADJACENT TO PEDESTRIAN FACILITIES.
17. A PEDESTRIAN ROUTE THROUGHOUT THE LENGTH OF THE PROJECT SHALL BE MAINTAINED AT ALL TIMES. THE ROUTE SHALL BE ON EITHER THE EXISTING OR NEW SIDEWALK.
18. PEDESTRIAN FACILITIES SHALL BE MAINTAINED TO ALL HOMES AND BUSINESSES. THIS MAY REQUIRE CONSTRUCTION OF TEMPORARY PEDESTRIAN BRIDGES.
19. THE MAXIMUM LENGTH OF A ONE LANE, TWO-WAY WORK ZONE (FLAGGER SETUP) SHALL BE 300 METERS AND THE MINIMUM SEPARATION BETWEEN WORK ZONES SHALL BE 300 METERS. IF VEHICLE STOP TIME EXCEEDS FIVE MINUTES, THE CONTRACTOR SHALL SHORTEN THE WORK ZONE OR RESCHEDULE THE WORK TO A LESS BUSY HOUR.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: B:\CAD\71463\DR\-TCP1 < MPLOTF.PCP(1) OR MPLOTH.PCP(2) >		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

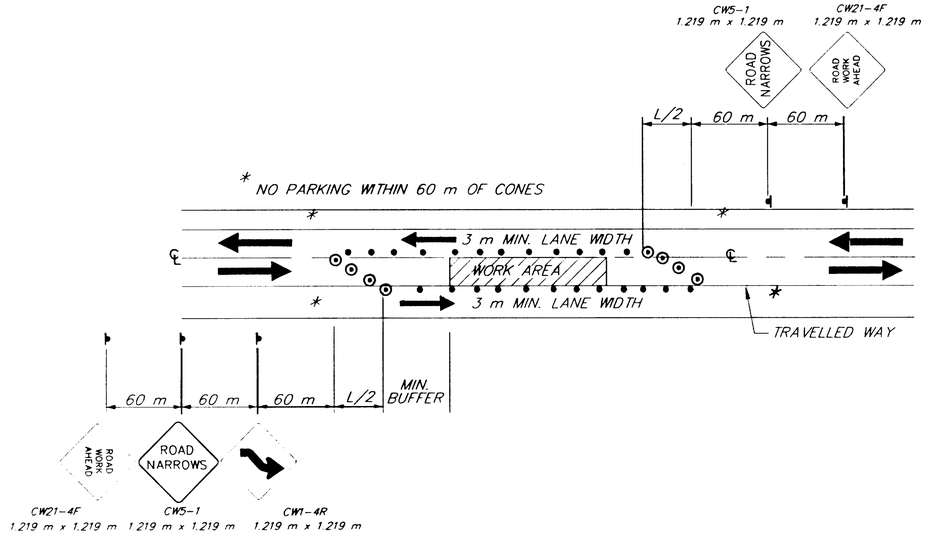
JUNEAU — *WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION* — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

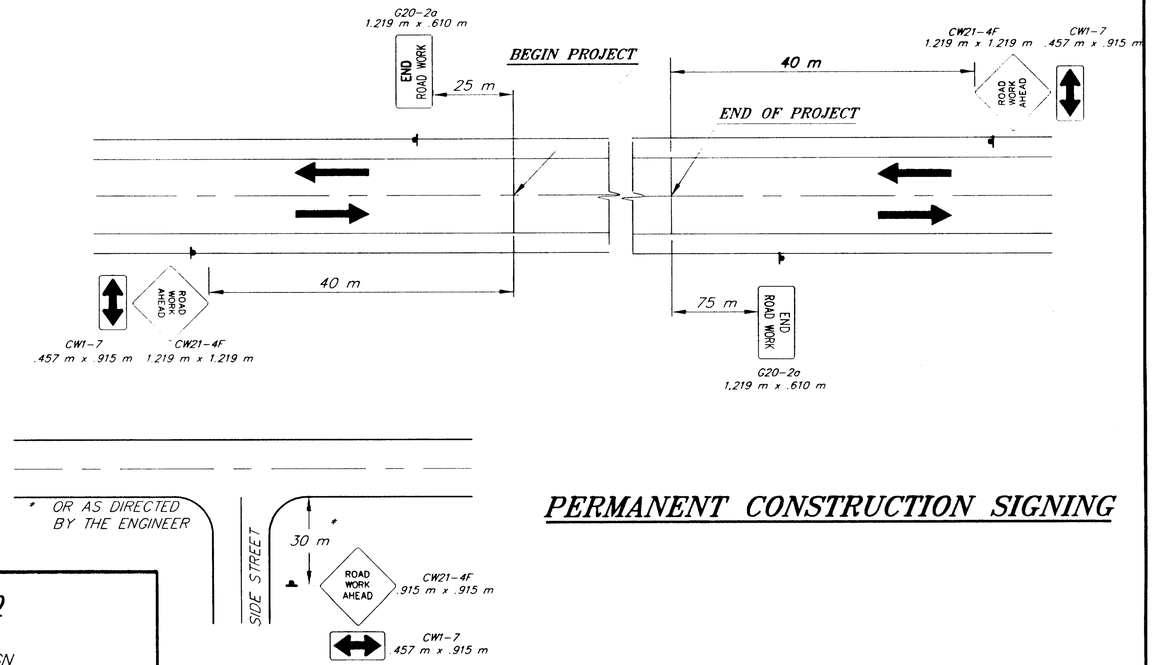
TRAFFIC CONTROL PLAN

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: B. ADAMS	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 13 OF 97

STATE OF ALASKA — 49th — Michael Lukshin CE-8737 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98



CENTER WORK ZONE TWO LANE ROAD



PERMANENT CONSTRUCTION SIGNING

LEGEND

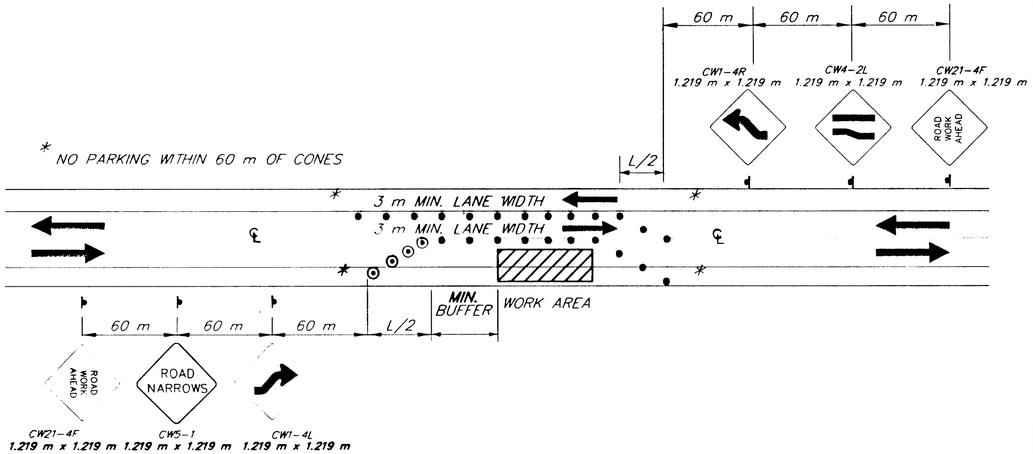
- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE III BARRICADE
- ..... FLAGGING STATION

$L = W \times T$

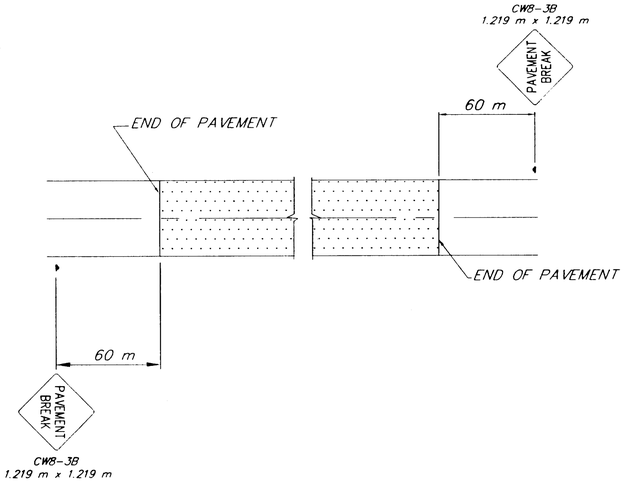
WHERE:
L= LENGTH OF TAPER
W= WIDTH OF OFFSET
T= TAPER FACTOR

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



SIDE WORK ZONE TWO LANE ROAD



SIGNING FOR UNPAVED AREA

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-TCP2 < PLOTF.PCP(1) OR PLOTH.PCP(2) >		
BY:	DATE:	DESCRIPTION OF CHANGE:

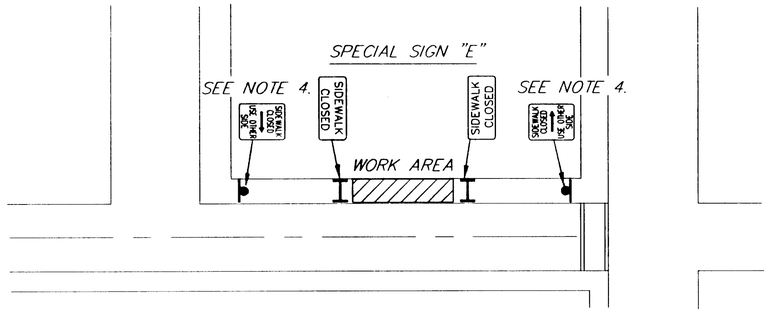
RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463
TRAFFIC CONTROL PLAN

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: B. ADAMS	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 14 OF 97

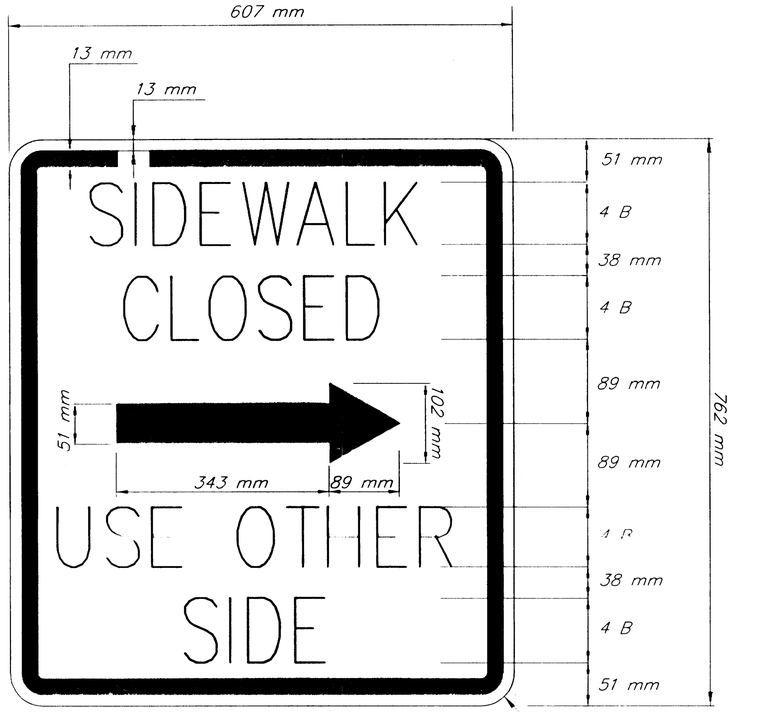
STATE OF ALASKA 49th
Michael Lukshin CE-8737
REGISTERED PROFESSIONAL ENGINEER
3.25.98



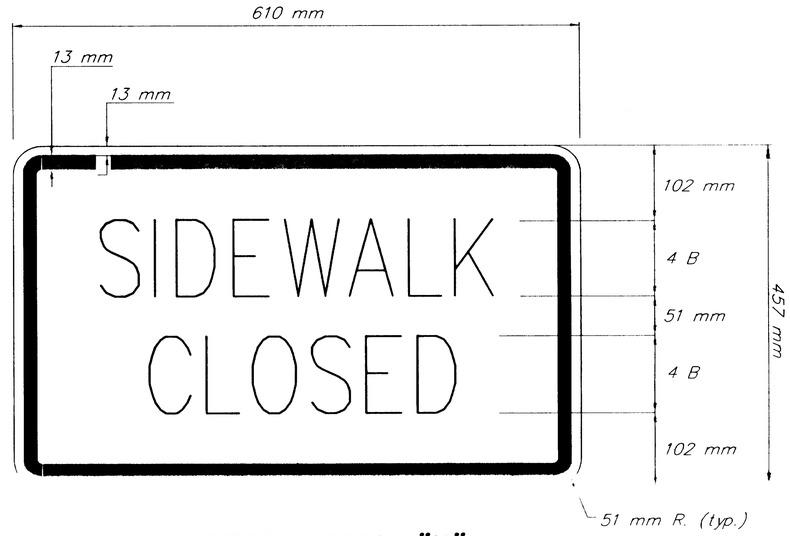
EXISTING SIDEWALK RECONSTRUCTION

SIGN NOTES:

1. SIGNS SHALL HAVE WHITE BACKGROUND WITH BLACK LEGEND. LETTERING SHALL BE AS SHOWN ON THE PLAN.
2. SPECIAL SIGN "C" IS SHOWN. SPECIAL SIGN "D" SHALL HAVE THE ARROW POINTING IN THE OPPOSITE DIRECTION.
3. SIGNS SHALL CONFORM TO THE ALASKA SIGN DESIGN SPECIFICATIONS (ASDS). LETTERING SHALL BE 102 mm HIGH AND SERIES B.
4. WHERE IT IS IMPRACTICAL TO WALK AROUND THE CLOSED PORTION OF THE SIDEWALK, SPECIAL SIGNS "C" OR "D" SHALL BE SET UP AT THE NEAREST EXISTING CROSSWALK.



SPECIAL SIGN "C" (RIGHT ARROW)
SPECIAL SIGN "D" (LEFT ARROW)



SPECIAL SIGN "E"

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DRAWINGS\PLOTTING\MPLOTTER.PCP(1) MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

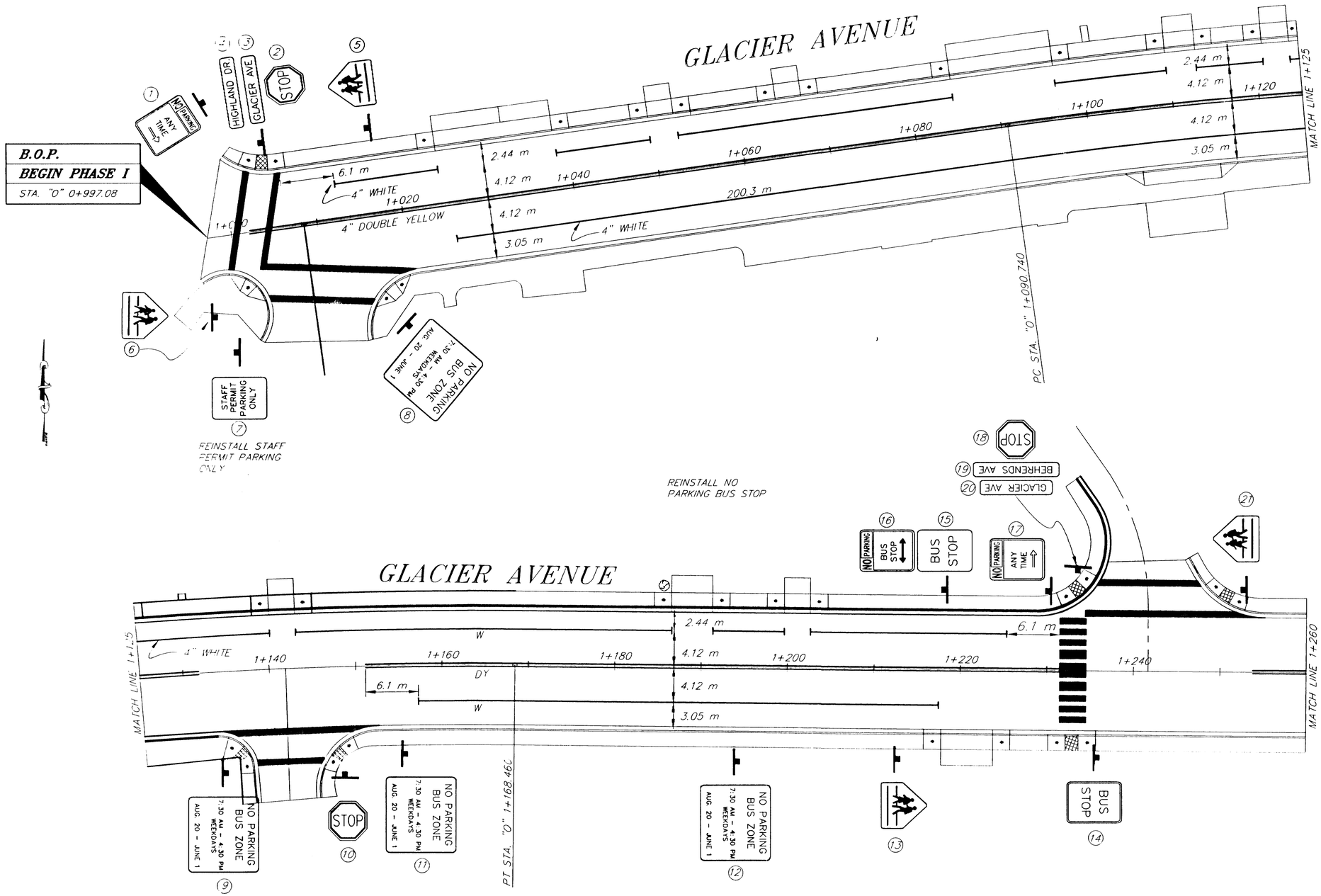
TRAFFIC CONTROL PLAN

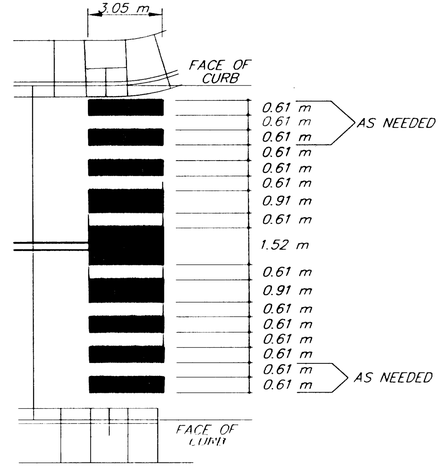
DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: B. ADAMS	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 15 OF 97

STATE OF ALASKA 49th Michael Lukshin CE-8737 REGISTERED PROFESSIONAL ENGINEER 3-25-98

STRIPING NOTES:

1. ALL STRIPING SHALL BE METHYLMETHACRYLATE
2. ALL STRIPING ON CROSS STREETS SHALL BE PAINT.





TYPICAL LADDER CROSSWALK DETAIL

(TO BE USED ONLY WHERE THROUGH TRAFFIC IS NOT STOPPED)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU1_PROJECTS\DF1-S-FE1
P:\LIB\PLOT\MPLOTF.PCP(250) MPLOTH.PCP(500)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

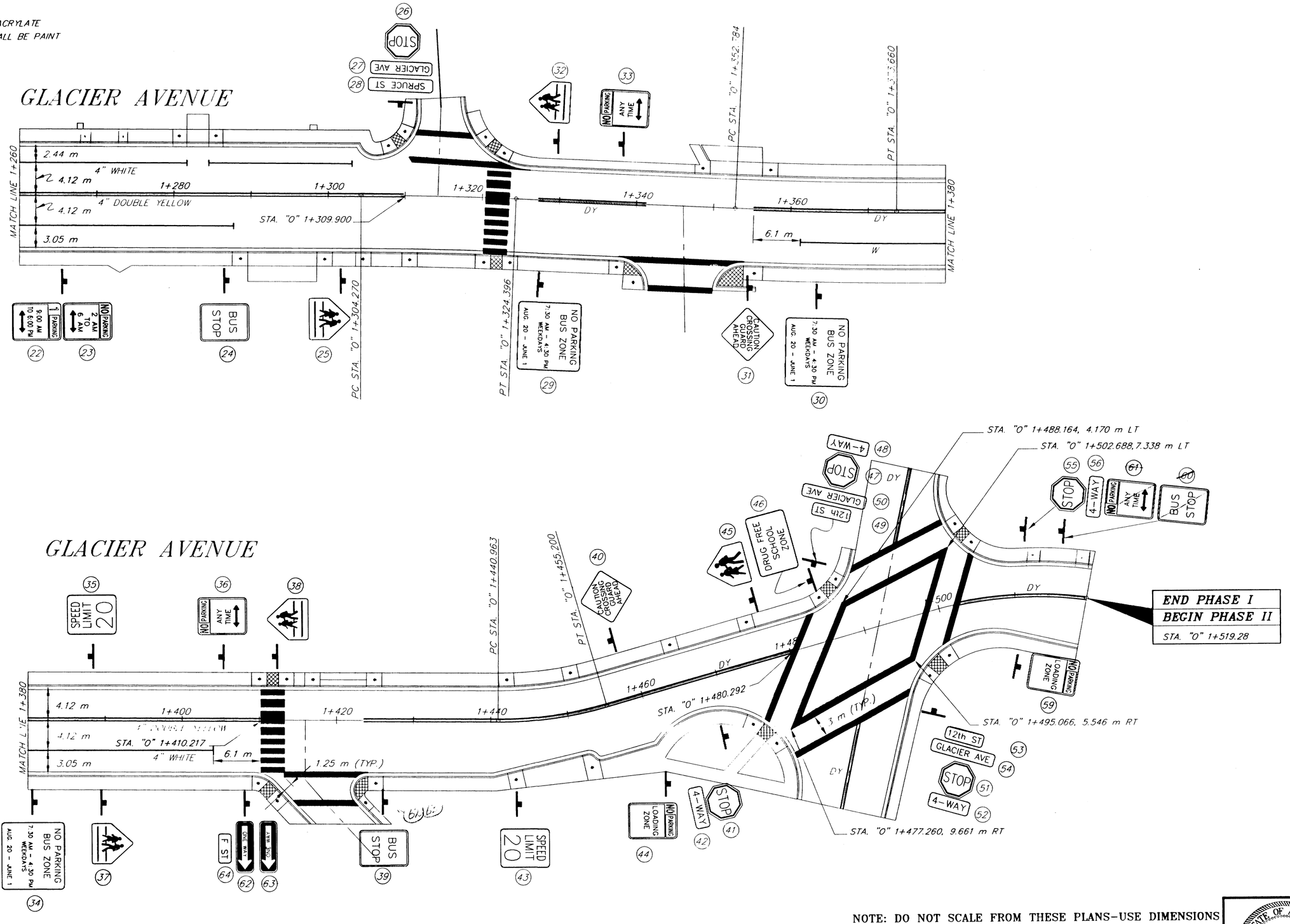
TRAFFIC SIGNING & STRIPING

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: KK/RKS	DATE: JAN. 1998
CHECKED BY: KURT SMITH	SHEET 16 OF 97

STATE OF ALASKA 49th
Michael Lukshin CE-8737
REGISTERED PROFESSIONAL ENGINEER
3-25-98

STRIPING NOTES:

1. ALL STRIPING SHALL BE METHYLMETHACRYLATE
2. ALL STRIPING ON CROSS STREETS SHALL BE PAINT



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\TRAFFIC\STRIPE2
P:\LIB\PLOT\MPLOTF.PCP(250) MPLOTH.PCP(500)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

TRAFFIC SIGNING & STRIPING

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 17 OF 97

STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER
3-25-98

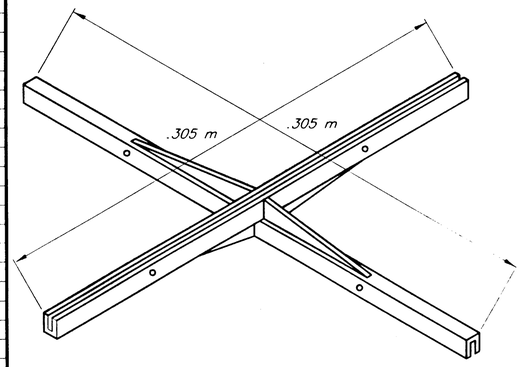
STANDARD SIGNING SCHEDULE

SIGN NO.	STATION	OFFSET LT.	OFFSET RT.	TYPE	LEGEND	SIZE INCHES	SIZE METER	AREA SQ. m	NO.OF POST	POST SIZE mm	FACING TRAFFIC	REMARKS
(1)	0+998	X		R7-101	NO PARKING ANY TIME	12" X 18"	.30 X .46	0.139	1	51	NB	
(2)	1+0062	X		R1-1	STOP	30"X30"	0.76 X 0.76	0.578	1	51	WB	
(3)	1+0062	X		D3-1	GLACIER AVE	36"X6.75"	0.91 X 0.17	0.155			NB/SB	INSTALL ABOVE STOP
(4)	1+0062	X		D3-1	HIGHLAND DR	36"X6.75"	0.91 X 0.17	0.155			WB/EB	INSTALL ABOVE STOP
(5)	1+0172	X		S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(6)	0+0958		X	S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	EB	
(7)	1+002		X		STAFF PERMIT PARKING ONLY				1		WB	REINSTALL EXISTING SIGN
(8)	1+020		X		NO PARKING\ BUS ZONE				1		EB	REINSTALL EXISTING SIGN
(9)	1+1342		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(10)	1+1498		X	R1-1	STOP	30"X30"	0.76 X 0.76	0.578	1	51	NB	
(11)	1+156		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(12)	1+197		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(13)	1+212		X	S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	EB	
(14)	1+235		X		BUS STOP			0.00	1	51	EB	REINSTALL EXISTING SIGN
(15)	1+219	X			BUS STOP			0.00	1	51	WB	REINSTALL EXISTING SIGN
(16)	1+219	X			NO PARKING BUS STOP							REINSTALL ON TOP OF 15
(17)	1+230	X		R7-101R	NO PARKING ANYTIME ➡	12"X18"	0.30 X 0.46	0.139	1	51	WB	
(18)	1+234	X		R1-1	STOP	30"X30"	0.76 X 0.76	0.578	1	51	SB	
(19)	1+234	X		D3-1	BEHRENDS AVE	36"X6.75"	0.91 X 0.17	0.155			WB/EB	INSTALL ABOVE STOP
(20)	1+234	X		D3-1	GLACIER AVE	36"X6.75"	0.91 X 0.17	0.155			NB/SB	INSTALL ABOVE STOP
(21)	1+253	X		S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(22)	1+266		X	R7-108	1 HR PARKING 9AM-6PM ⟷	12"X18"	0.30 X 0.46	0.138	1	51	EB	
(23)	1+266		X	R7-102	NO PARKING 2AM-6AM	12"X18"	0.30 X 0.46	0.138			EB	INSTALL ABOVE (22)
(24)	1+287		X		BUS STOP				1		EB	REINSTALL EXISTING SIGN
(25)	1+320		X	S2-1	SCHOOL XING (SYMBOL) ⟷	36"X36"	0.91 X 0.91	0.836	1	51	EB	
(26)	1+310	X		R1-1	STOP	30"X30"	0.76 X 0.76	0.578	1	51	SB	
(27)	1+310	X		D3-1	GLACIER AVE	36"X6.75"	0.91 X 0.17	0.155		51	NB/SB	MOUNT ON SAME POST AS 26
(28)	1+310	X		D3-1	SPRUCE ST	36"X6.75"	0.91 X 0.17	0.155			WB/EB	MOUNT ON SAME POST AS 26
(29)	1+328		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(30)	1+364		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(31)	1+355		X	SPECIAL	CAUTION CROSSING GUARD AHEAD	36"X36"	0.91 X 0.91	0.836	1	51	EB	*DESIGN AS DIAMOND SHAPED WARNING SIGN
(32)	1+329	X		S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(33)	1+337	X		R7-101RL	NO PARKING ANYTIME ⟷	12"X18"	0.30 X 0.46	0.139	1	51	WB	
(34)	1+381		X		NO PARKING BUS ZONE			0.00	1	51	EB	REINSTALL EXISTING SIGN
(35)	1+388	X		R2-1	SPEED LIMIT 20	30"X36"	0.76 X 0.91	0.697	1	51	WB	
(36)	1+4055	X		R7-101RL	NO PARKING ANYTIME ⟷	12"X18"	0.30 X 0.46	0.139	1	51	WB	
(37)	1+390		X	S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	EB	
(38)	1+412	X		S2-1	SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(39)	1+423		X		BUS STOP			0.00	1		EB	REINSTALL EXISTING SIGN
(40)	1+458	X		SPECIAL	CAUTION CROSSING GUARD AHEAD	36"X36"	0.91 X 0.91	0.836	1	51	WB	*DESIGN AS DIAMOND SHAPED WARNING SIGN
(41)	1+469		X	R1-1	STOP	30"X30"	0.76 X 0.76	0.578	1	51	EB	
(42)	1+469		X	R1-3	4-WAY	12"X6"	0.30 X 0.15	0.116			EB	INSTALL BELOW STOP
(43)	1+440		X	R2-1	SPEED LIMIT 20	30"X36"	0.76 X 0.91	0.697	1	51	SB	INSTALL ABOVE STOP
(44)	1+460		X	R7-106	NO PARKING, LOADING ZONE	12"X18"	.30 X .46	0.139	1	51	SB	
(45)	1+477	X		S1-1	ADVANCE SCHOOL XING (SYMBOL)	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(46)	1+485	X			DRUG FREE SCHOOL ZONE			0.00	1	51	WB	REINSTALL EXISTING SIGN
(47)	1+486	X		R1-1	STOP	36"X36"	0.91 X 0.91	0.836	1	51	SB	
(48)	1+486	X		R1-3	4-WAY	12"X6"	0.30 X 0.15	0.116			SB	INSTALL BELOW STOP
(49)	1+486	X		D3-1	12th ST	24"X6.75"	0.61 X 0.17	0.104			EB/WB	INSTALL ABOVE STOP
(50)	1+486	X		D3-1	GLACIER AVE	36"X6.75"	0.91 X 0.17	0.157			NB/SB	INSTALL ABOVE STOP
(51)	1+496		X	R1-1	STOP	36"X36"	0.91 X 0.91	0.836	1	51	NB	
(52)	1+496		X	R1-3	4-WAY	12"X6"	0.30 X 0.15	0.116			NB/SB	INSTALL BELOW STOP
(53)	1+496		X	D3-1	12th ST	24"X6.75"	0.61 X 0.17	0.104			EB/WB	
(54)	1+496		X	D3-1	GLACIER AVE	36"X6.75"	0.91 X 0.17	0.157			NB/SB	
(55)	1+510	X		R1-1	STOP	36"X36"	0.91 X 0.91	0.836	1	51	WB	
(56)	1+510	X		R1-3	4-WAY	12"X6"	0.30 X 0.15	0.116			NB/SB	INSTALL BELOW STOP
(59)	1+510		X	R7-106	NO PARKING LOADING ZONE	12" X 18"	0.30 X .46	0.139	1	51	EB	
(60)	1+516	X		R7-101	BUS STOP						WB	INSTALL ABOVE 60
(61)	1+516	X		R7-101	NO PARKING ANYTIME	12" X 18"	0.30 X 0.46	0.139	1		WB	
(62)	1+40926		X	R6-1R	ONE WAY ➡	36" X 12"	0.91 X 0.30	0.273	1	51	EB	
(63)	1+40926		X	R6-1L	⬅ ONE WAY	36" X 12"	0.91 X 0.30	0.273			WB	BACK TO BACK WITH #62
(64)	1+40926			D3-1	F ST	24" X 6.75"	0.61 X 0.17	0.104			EB/WB	INSTALL ABOVE 62/63
(65)	1+4010	X										
(66)	1+4280		X									

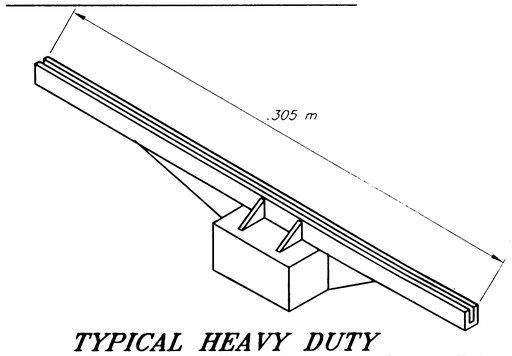
* BLACK ON YELLOW

GENERAL SIGNING NOTES

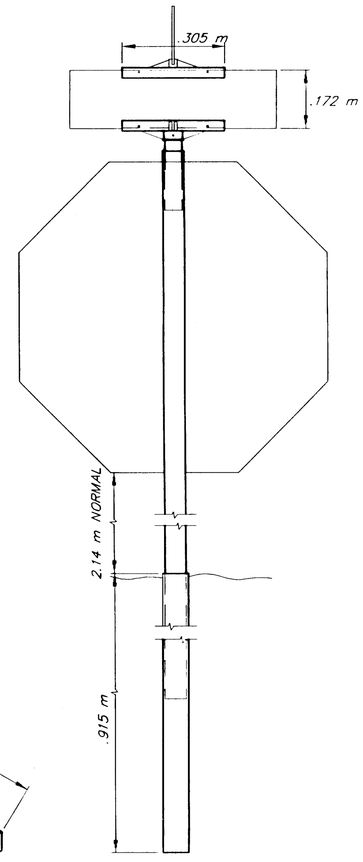
1. SIGN LOCATIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO MINOR REVISIONS.
2. ALL SIGN POSTS SHALL USE SLEEVE TYPE SOIL EMBEDMENT.
3. SEE STD. DWG. S-30.01 FOR POST SLEEVE TYPE SOIL EMBEDMENT.
4. ALL NEW SIGNS SHALL BE UNFRAMED EXCEPT AS NOTED IN THE STANDARD SIGN SCHEDULE.
5. ALL EXISTING SIGNS NOT BEING RELOCATED SHALL BE DISMANTLED BY THE CONTRACTOR AND STOCKPILED AT THE CBJ CITY SHOP 1300 WEST 9TH STREET.
6. ALL D3-1 STREET SIGNS HAVE THE LEGEND ON BOTH SIDES.
7. SIGNS SHALL BE INSTALLED USING URBAN DIMENSIONS ON STANDARD DRAWING S-05.00.
8. ALL D3-1 STREET NAME SIGNS SHALL BE THE EXTRUDED TYPE.
9. FOR PURPOSES OF ORIENTING SIGNS, GLACIER AVE. IS ASSUMED TO RUN EAST & WEST.
10. SIGNS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE SIGN PANEL IS 2.14 m ABOVE THE ROADWAY SURFACE. THE EXCEPTIONS TO THIS ARE SIGNS D9-3 AND D5-5A WHICH SHALL BE 1.52 m ABOVE THE ROADWAY SURFACE.
10. FINAL SIGN LOCATIONS SHALL BE FIELD LOCATED BY THE CBJ. CONTACT BILL ELLIS AT 586-5256 FOR LOCATIONS.
11. SEE CBJ STD. DWG. 127 FOR SIGN POST ASSEMBLY.



TYPICAL HEAVY DUTY SIGN TO SIGN CROSS BRACKET



TYPICAL HEAVY DUTY SIGN TO POST BRACKET



D3-1 TYPICAL SIGN DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: E:\JOBS\71463\DP\-SIGNSUM MPLOTF.PCP(1) OR MPLOTH.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

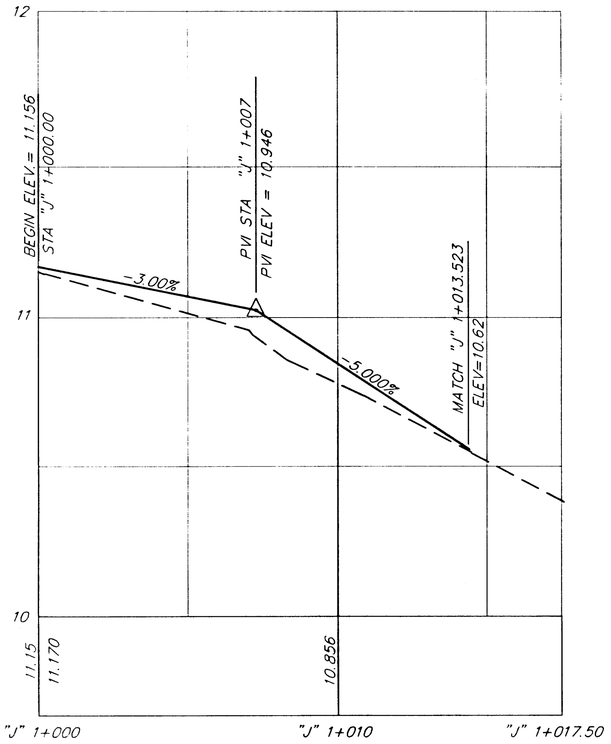
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

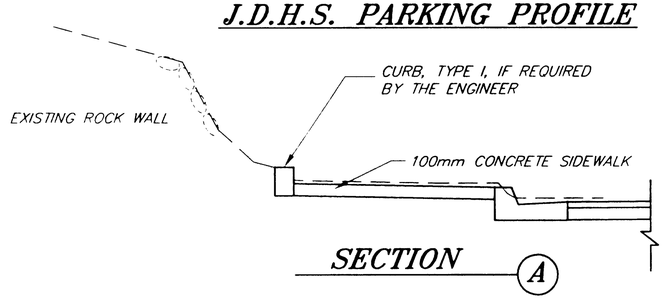
SIGN SUMMARY

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 18 OF 97

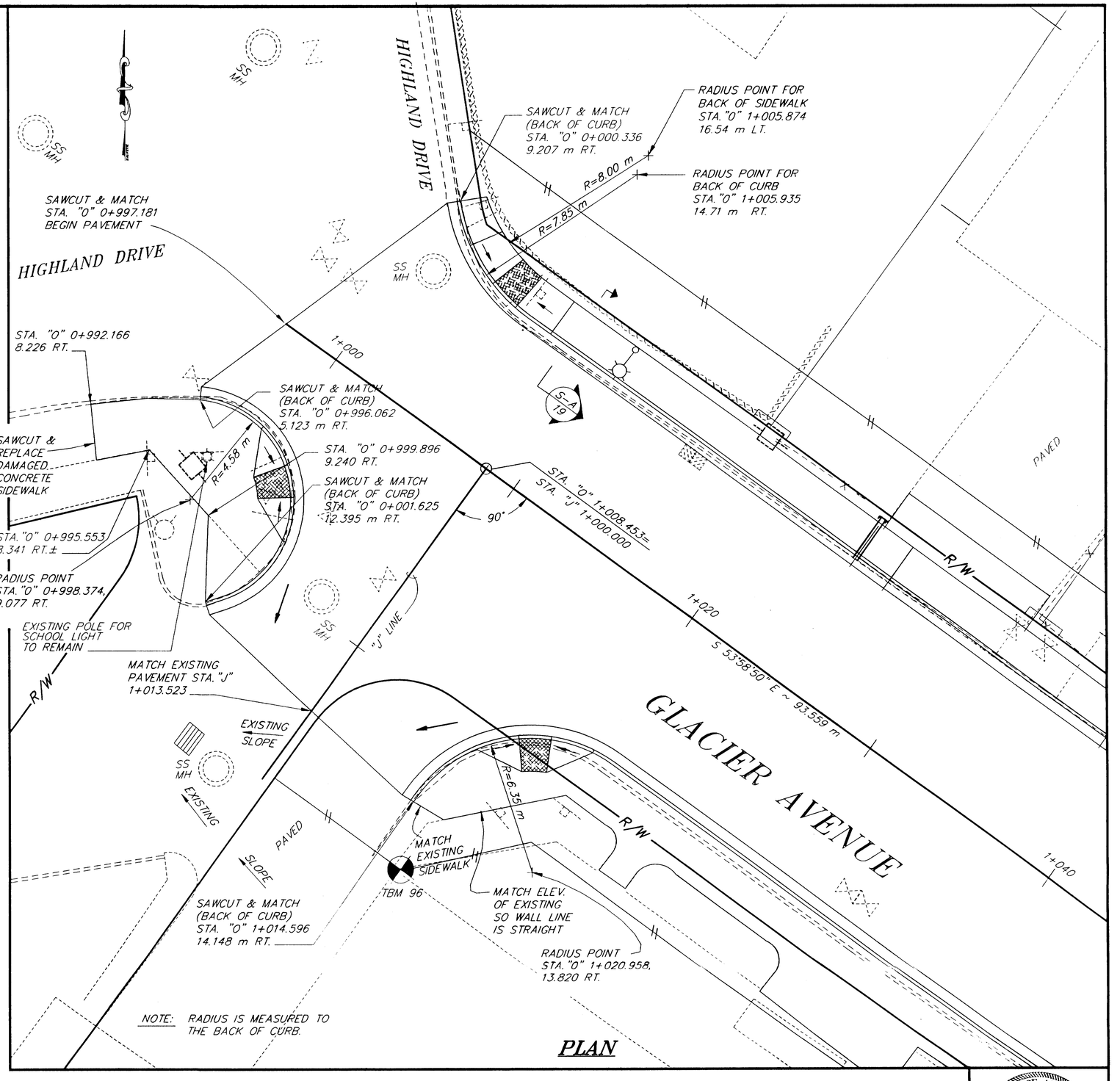
STATE OF ALASKA 49th Michael Lukshin CE-8737 REGISTERED PROFESSIONAL ENGINEER 3-25-98



J.D.H.S. PARKING PROFILE



SECTION A



NOTE: RADIUS IS MEASURED TO THE BACK OF CURB.

PLAN

NOTES:

1. RADII & STATION'S OFFSETS ARE TO THE BACK OF CURBS, UNLESS NOTED.
2. MATCH OFFSETS & ELEVATIONS MAY VARY IN THE FIELD, ADJUST AS NEEDED.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\-APP1		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — ALASKA

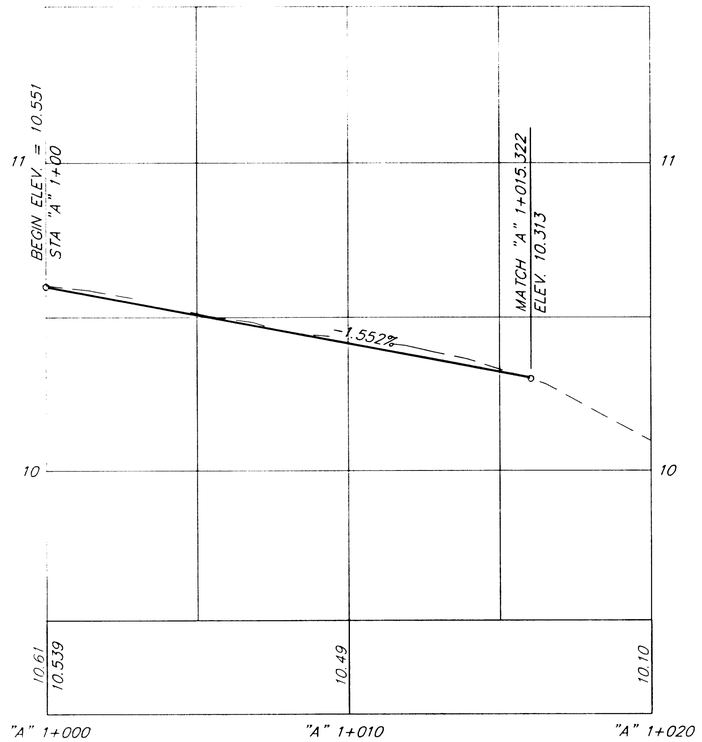
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

J.D.H.S. PARKING

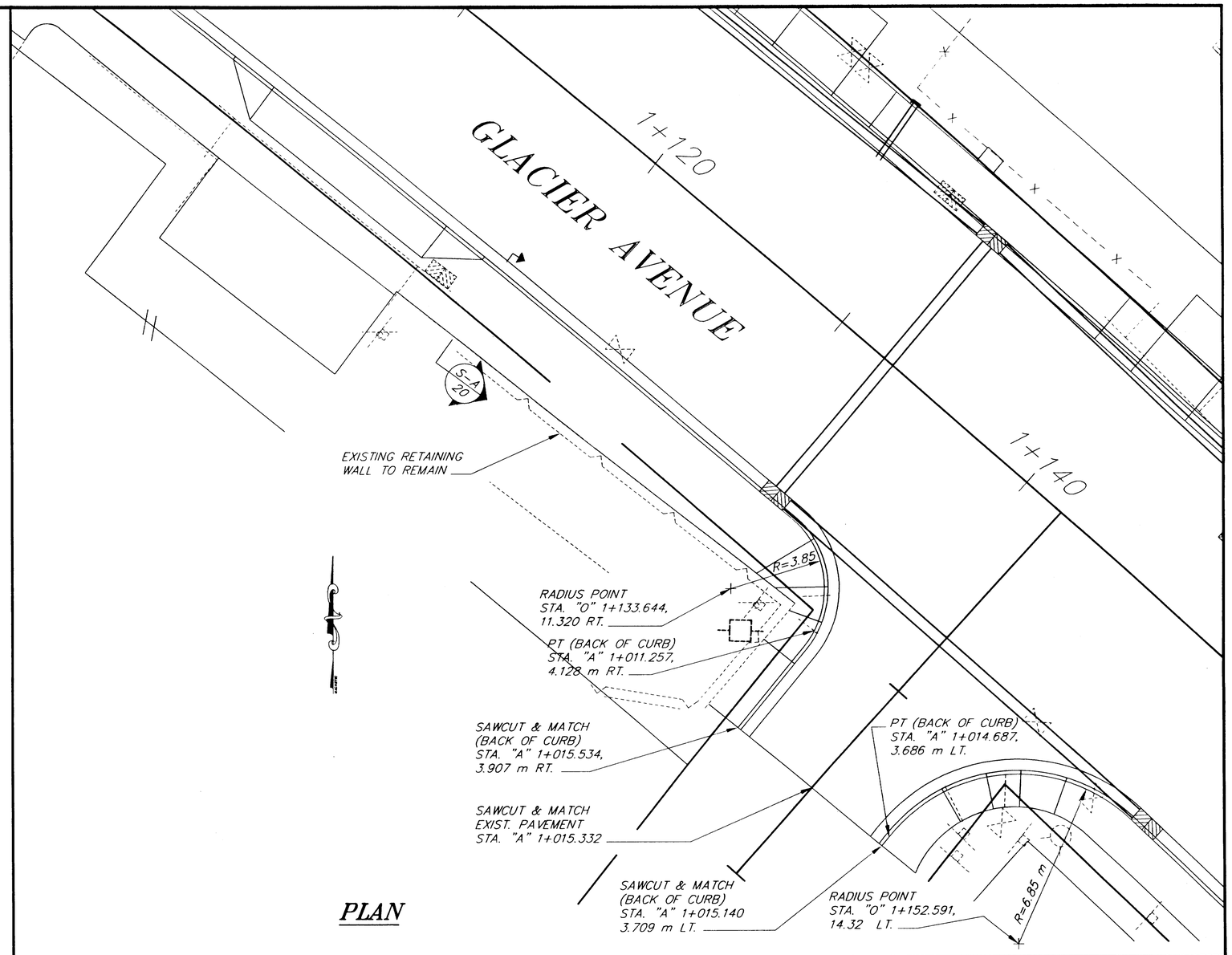
APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. SNYDER	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 19 OF 97

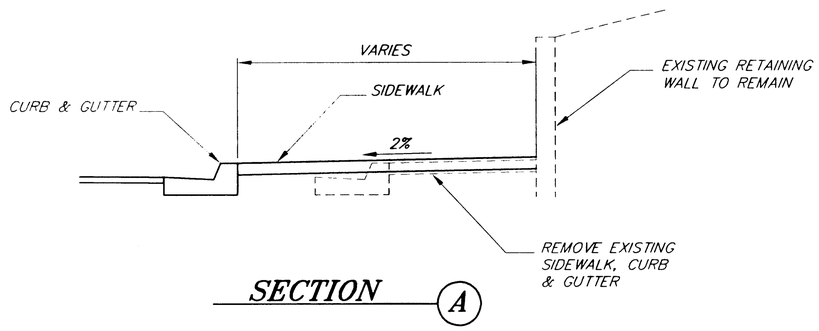
STATE OF ALASKA
ALAN JI STEININGER
CE-6440
REGISTERED PROFESSIONAL ENGINEER



AUGUSTUS BROWN POOL PARKING PROFILE



PLAN



SECTION (A)

NOTES:

1. RADII AND STATION'S OFFSETS ARE TO THE BACK OF CURBS, UNLESS NOTED.
2. OFFSETS AND ELEVATIONS MAY VARY IN THE FIELD, ADJUST AS NEEDED.
3. SIDEWALK & RAMPS ARE TYPICAL, UNLESS NOTED, SEE SIDEWALK DETAILS ON SHEET 25 & 26.
4. ALL REMOVAL, REPLACEMENT, EXCAVATION, BACKFILL AND SAWCUTTING OF CONCRETE RETAINING WALL SHALL BE INCIDENTAL TO ITEM 501 CLASS A CONCRETE.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\-APP2		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

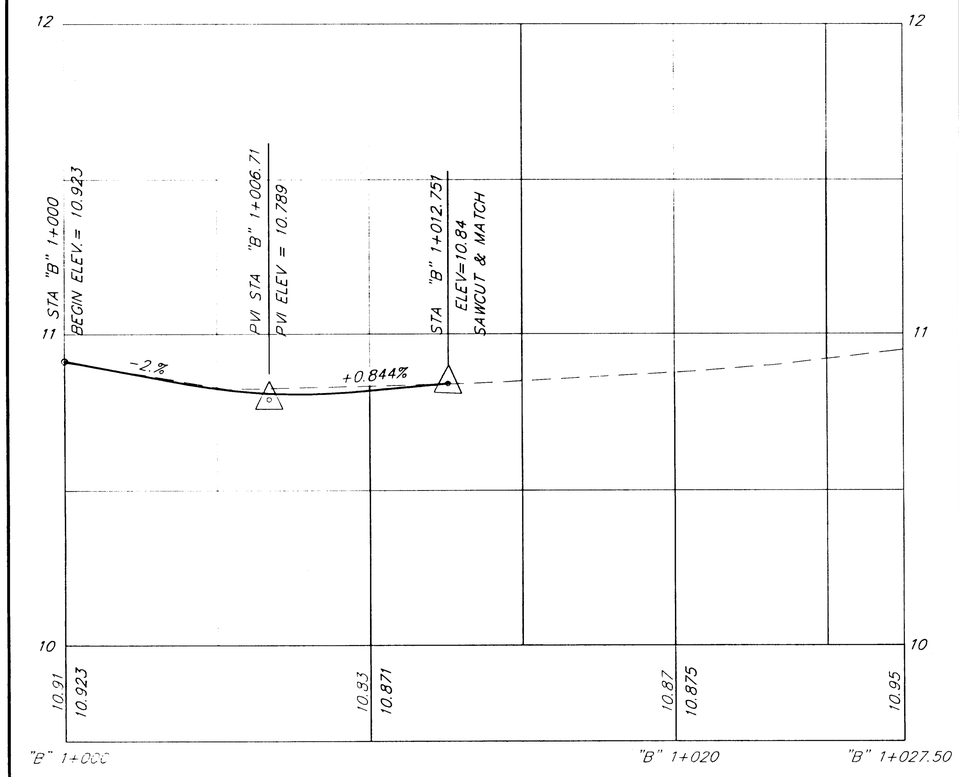
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

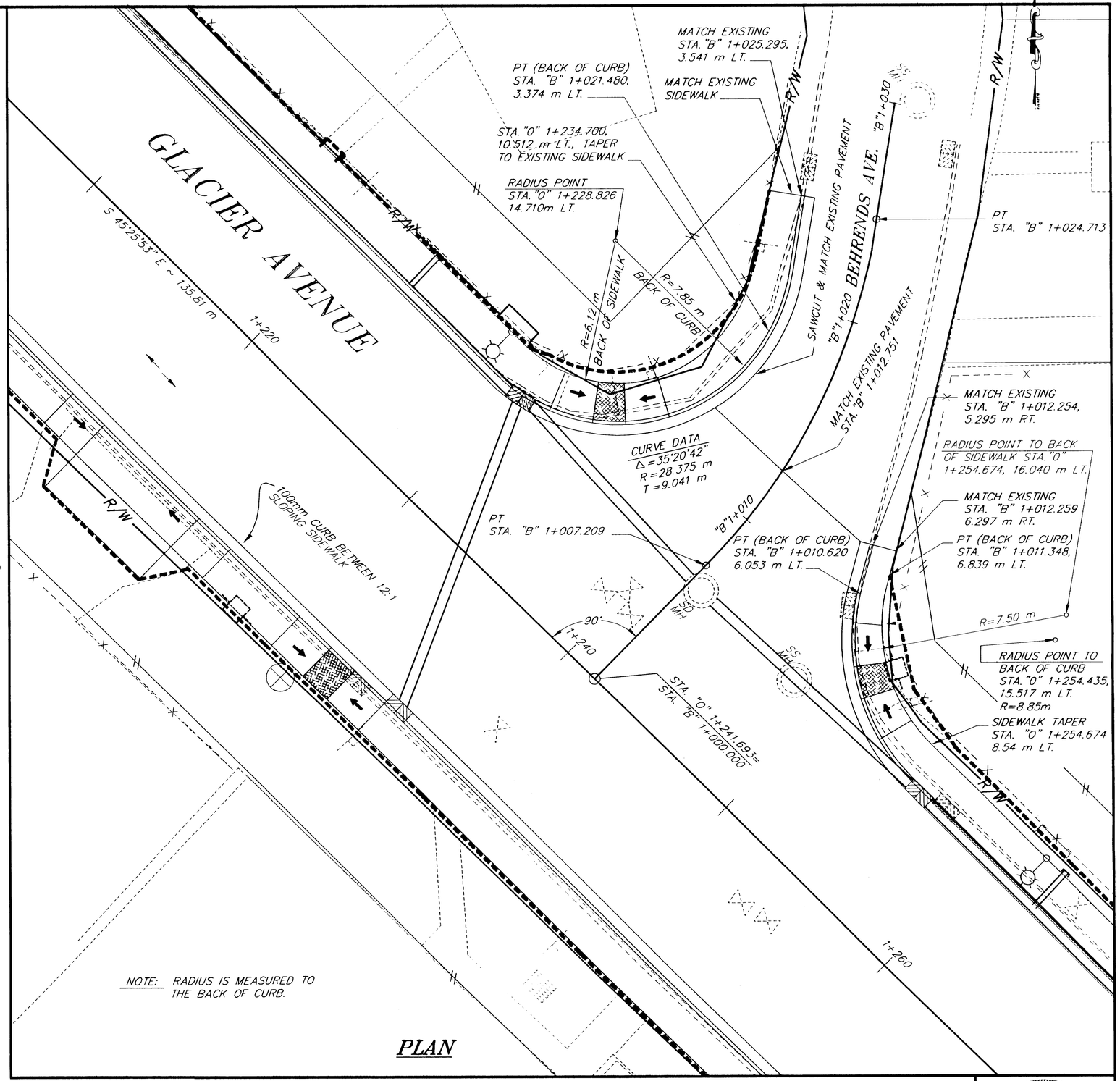
AUGUSTUS BROWN SWIMMING POOL PARKING

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KS/KK	DATE: 1996
CHECKED BY: A. STEININGER	SHEET 20 OF 97

STATE OF ALASKA — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER



BEHRENDS AVENUE PROFILE



NOTE: RADIUS IS MEASURED TO THE BACK OF CURB.

PLAN

NOTES:

1. RADII, & STATIONS OFFSETS ARE TO THE BACK OF CURBS
2. MATCH OFFSETS AND ELEVATION MAY VARY IN THE FIELD, ADJUST AS NEEDED.
3. SIDE & RAMPS ARE TYPICAL, UNLESS NOTED SEE SIDEWALK DETAILS ON SHEET 22 OF 23.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\-APP3		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

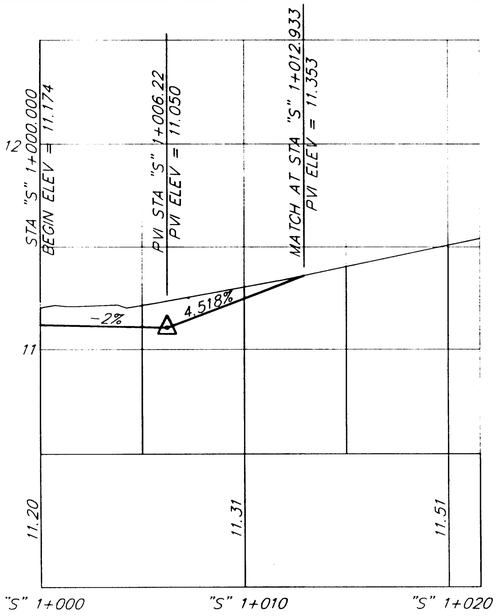
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

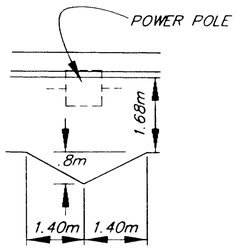
BEHRENDS AVENUE

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: KS/KK	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 21 OF 97

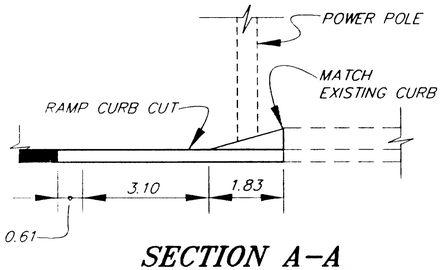
STATE OF ALASKA
1998
ALBIN J. STEININGER JR.
CE-6440
REGISTERED PROFESSIONAL ENGINEER



SPRUCE STREET PROFILE



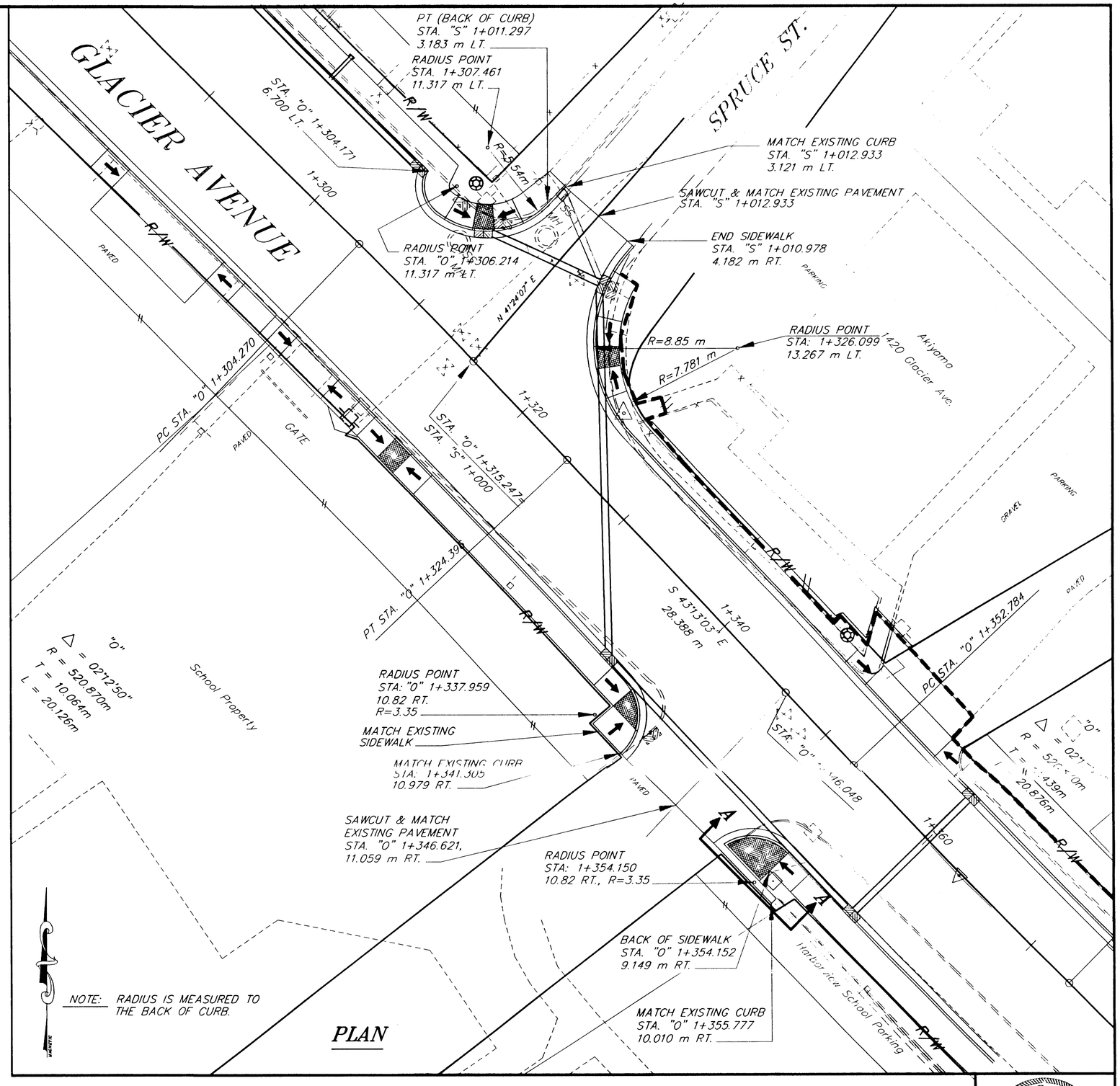
WIDEN SIDEWALK AT EXISTING POLES
STA. "0" 1+272.988, RT.



SECTION A-A

NOTES:

1. RADII, AND STATION'S OFFSETS ARE TO THE BACK OF CURBS, UNLESS NOTED.
2. MATCH OFFSETS AND ELEVATIONS MAY VARY IN THE FIELD, ADJUST AS NEEDED.
3. SIDEWALKS & RAMPS ARE TYPICAL, UNLESS NOTED, SEE SIDEWALK DETAILS ON SHEET 22 & 23.



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-APP4B		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(150) OR MPLOTH.PCP(300)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

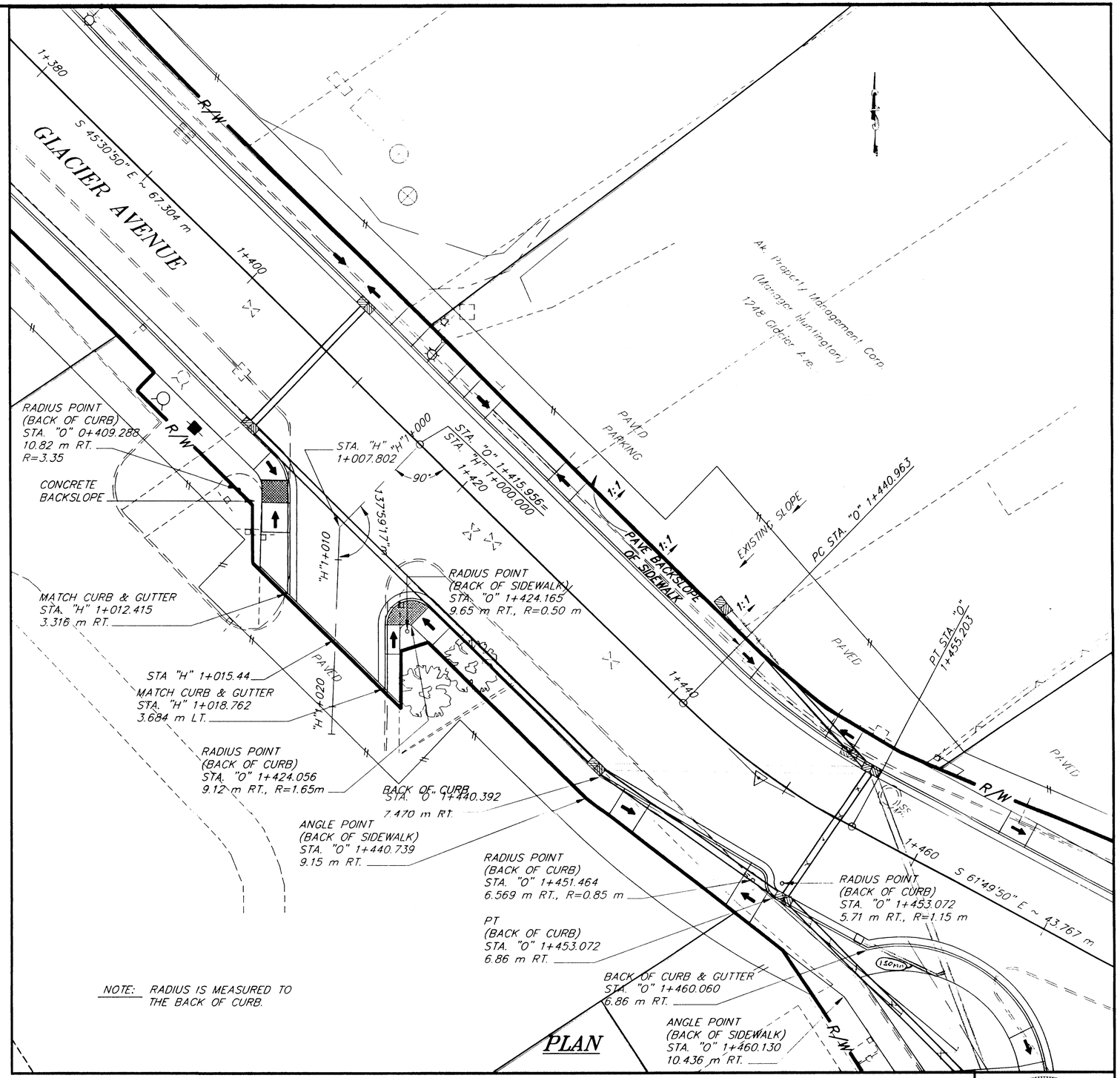
SPRUCE ST. & HARBORVIEW INTERSECTIONS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: MS/KS/KK	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 22 OF 97

STATE OF ALASKA — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER

NOTES:

1. RADII, AND STATION'S OFFSETS ARE TO THE BACK OF CURBS
2. MATCH OFFSETS AND ELEVATIONS MAY VARY IN THE FIELD, ADJUST AS NEEDED.
3. SIDEWALK & RAMPS ARE TYPICAL, UNLESS NOTED, SEE SIDEWALK DETAILS ON SHEET 22 & 23.



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\-APP5		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(150) OR MPLOTH.PCP(300)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

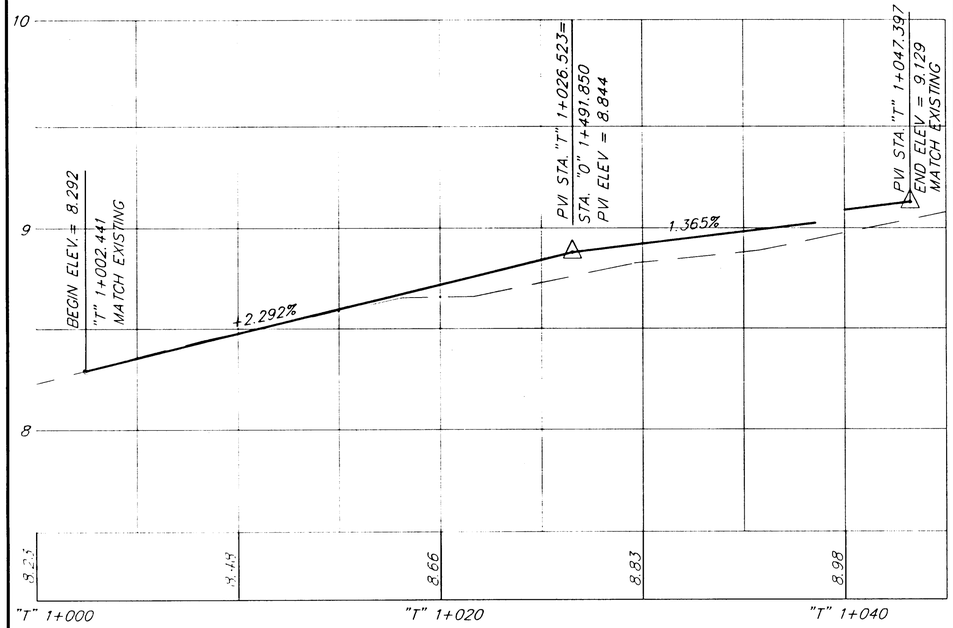
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED.. NO. STP-000S (149) ~ PROJECT NO. 71463
HARBORVIEW SCHOOL EXIT
APPROACH PLAN & PROFILE

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: M.S./K.S.	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 23 OF 97

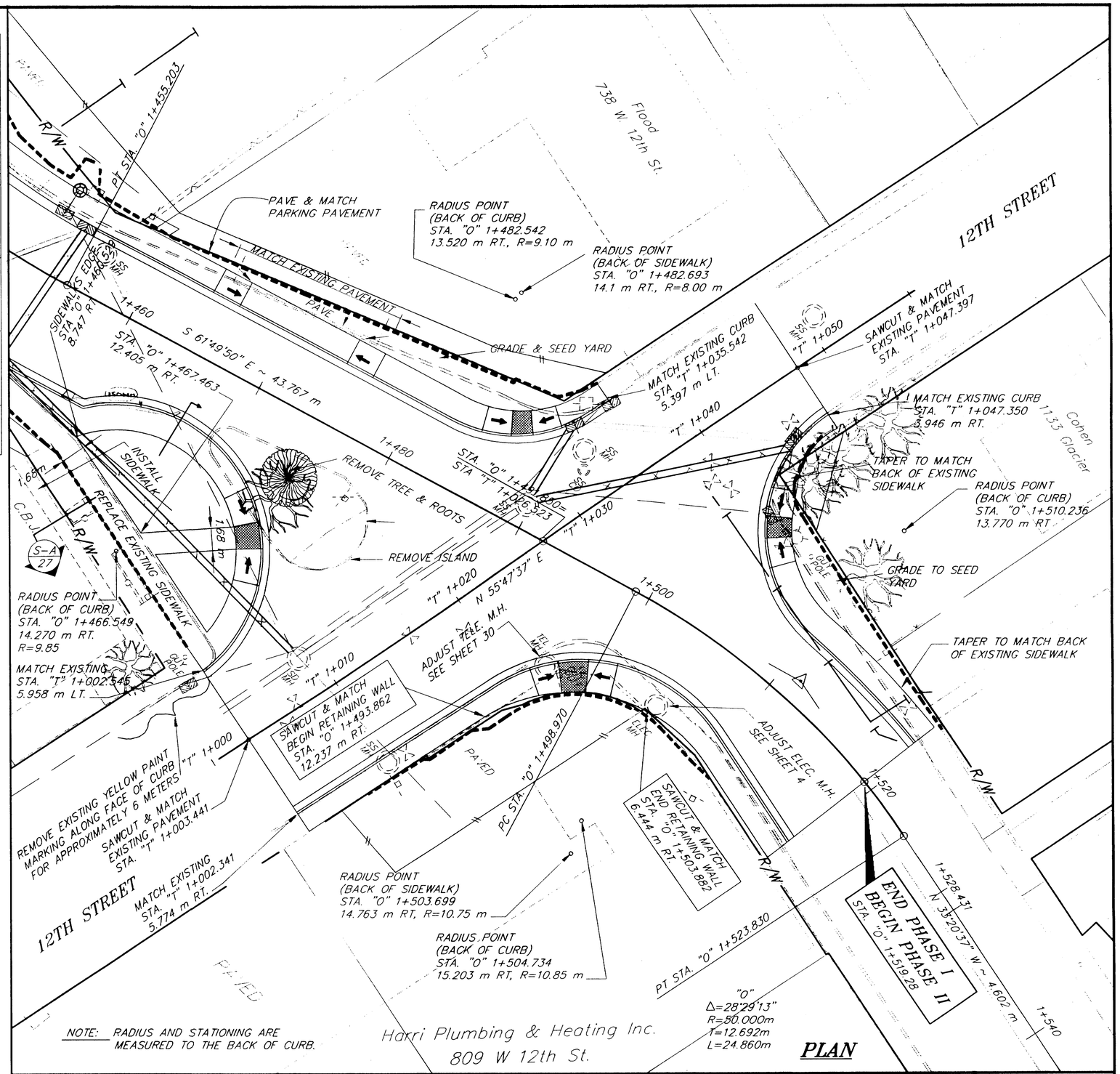
STATE OF ALASKA
DAVID SALDIVAR
CE-8307
REGISTERED PROFESSIONAL ENGINEER



PROFILE

NOTES:

1. RADII, AND STATION'S OFFSETS ARE TO THE BACK OF CURBS, UNLESS NOTED.
2. MATCH OFFSETS AND ELEVATIONS MAY VARY IN THE FIELD, ADJUST AS NEEDED.
3. SIDEWALKS & RAMPS ARE TYPICAL, UNLESS NOTED, SEE SIDEWALK DETAILS ON SHEET 25 & 26.
4. ALL REMOVAL, REPLACEMENT, EXCAVATION, BACKFILL AND SAWCUTTING OF EXISTING WALL SHALL BE INCIDENTAL TO ITEM 501(1) CLASS A CONCRETE.
5. FINISH GRADING OF YARDS SHALL BE INCIDENTAL TO ITEM 618.



NOTE: RADIUS AND STATIONING ARE MEASURED TO THE BACK OF CURB.

PLAN

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\-APP6		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(150) OR MPLOTH.PCP(300)		
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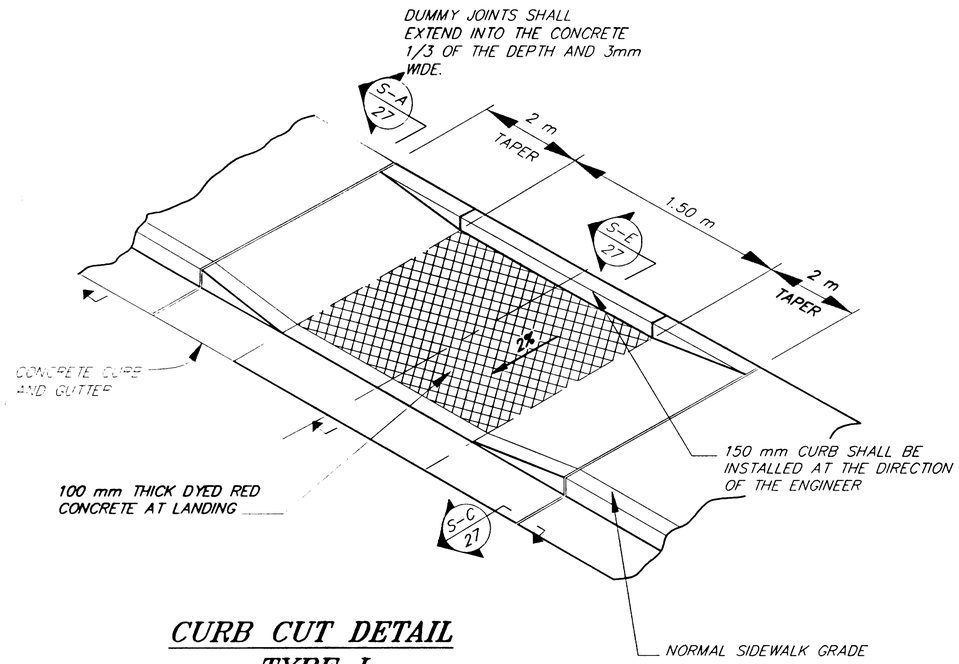
RECORD OF REVISIONS

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

JUNEAU — *WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION* — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
12TH STREET INTERSECTION
APPROACH PLAN & PROFILE

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: MS/KK/WH	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 24 OF 97

STATE OF ALASKA — 19th — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER

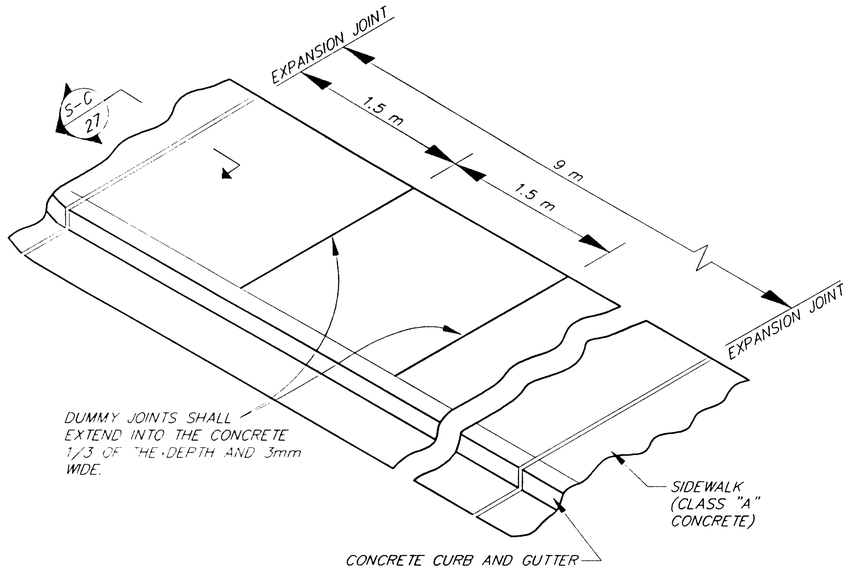


CURB CUT DETAIL TYPE I

N.T.S.

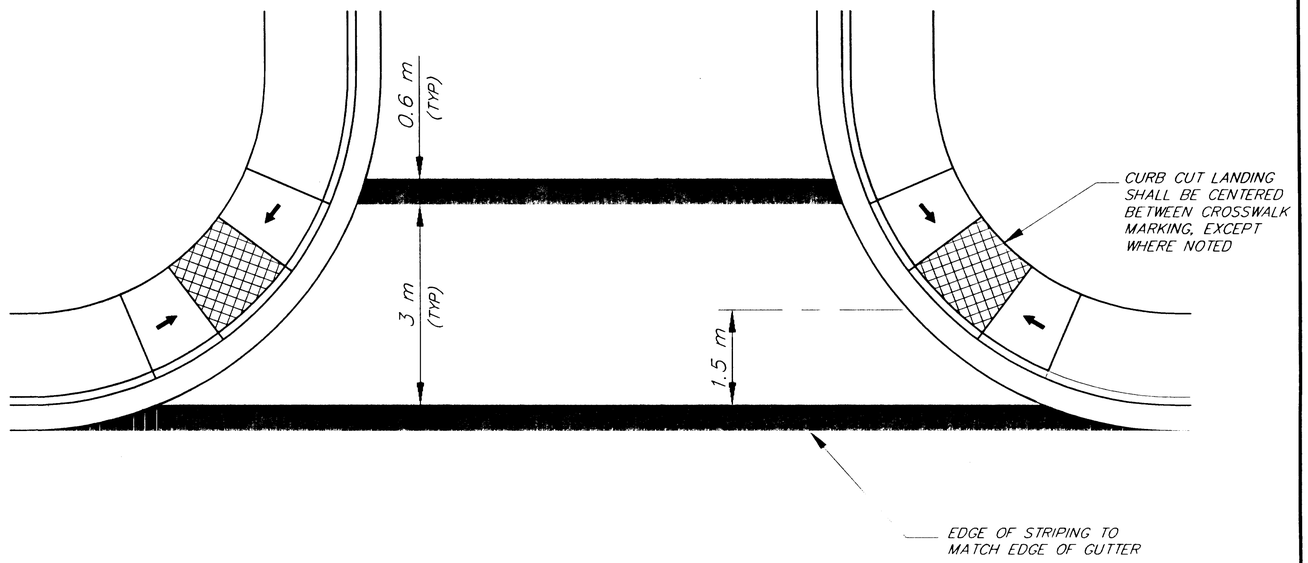
SIDEWALK, CURB AND GUTTER NOTES

1. CURB AND GUTTER EXPANSION JOINTS SHALL BE AT EACH END OF THE CURB RETURNS AND IMMEDIATELY PRECEEDING AND FOLLOWING ALL CURB CUTS. THEREAFTER, THEY SHALL BE PLACED AT 9.14 m MAXIMUM.
2. ALL CURB AND GUTTER SHALL BE CLASS "A" CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF fc = 3,000 psi.
3. CURB CUTS FOR RESIDENTIAL DRIVEWAYS AND CURB RETURNS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE SLOPE OF 12:1.
4. ALL CURB RETURNS SHALL BE WHEELCHAIR ACCESSIBLE AS SHOWN ON THE SIDEWALK DETAIL SHEETS.
5. IF EXISTING JOINT IS WITHIN 610mm OF RECONSTRUCTION AREAS, REMOVE AT JOINT INSTEAD OF SAWCUTTING. THIS DOES NOT APPLY TO NEW CONSTRUCTION.
6. INSTALL PARALLEL CURB RAMPS ONLY WHERE R.O.W. OR OTHER PHYSICAL CONSTRAINTS PRECLUDE THE INSTALLATION OF A PERPENDICULAR CURB RAMP.
7. LANDINGS SHALL BE CONTAINED WITHIN THE MARKED CROSSWALK.
8. CONCRETE SIDEWALK OR ASPHALT PATHWAY SHALL BE 1.52 m MINIMUM, OF WHICH .91 m SHALL BE FREE OF OBSTRUCTIONS.
9. SEE CURB CUT SUMMARY SHEET 6 FOR STATION/OFFSET LOCATIONS.
10. RAMP LANDINGS SHALL HAVE PIGMENT THOROUGHLY MIXED THE FULL DEPTH OF 100 mm. COLOR IN DRY STATE SHALL CLOSELY MATCH FED-STD-30152. BRICK RED. RED DYED CONCRETE SHALL BE INSTALLED AND CURED PRIOR TO OTHER INSTALLATION OF CONCRETE FOR SIDEWALKS OR CURB & GUTTER TO AVOID MIXING OF COLORS. SHIELD EXISTING CONCRETE SURFACES PRIOR TO THE INSTALLATION OF COLORED CONCRETE.
11. FOR REINFORCED CONCRETE SIDEWALK , CURB AND GUTTER TYPE 1 SEE CBJ STANDARD DRAWING 111A, BUT SIDEWALK WIDTH SHALL BE AS SHOWN ON PLANS NOT AS SHOWN ON CBJ STD. DWG. 111A.



TYPICAL SIDEWALK, CURB & GUTTER JOINT DETAIL

N.T.S.



CURB RAMP AT INTERSECTIONS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\TRESLA\-DET P:\-UB\-PLOT\MPLOTFSCP(1) OF MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

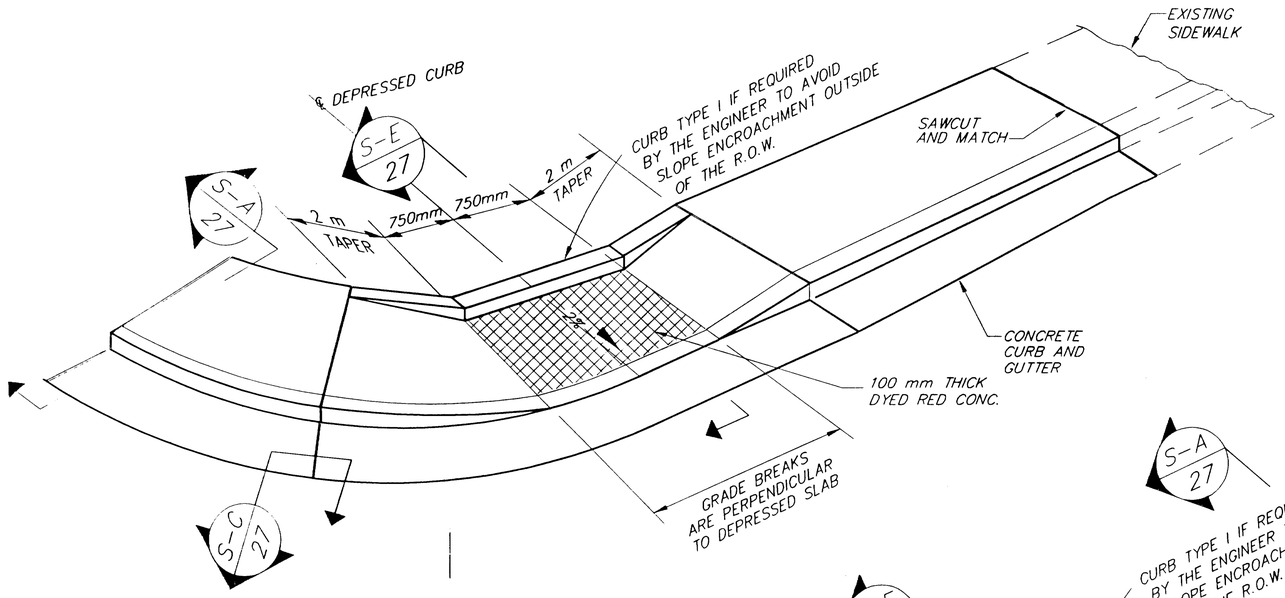
RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED NO. STP-000S (149) ~ PROJECT NO. 71463
SIDEWALK DETAILS

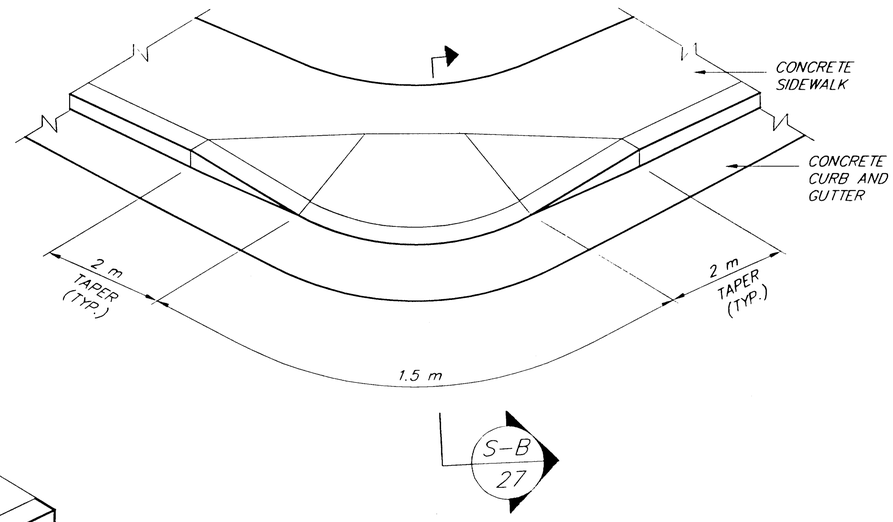
DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 25 OF 97

STATE OF ALASKA — ALAN J. STEININGER — CE-6440 — REGISTERED PROFESSIONAL ENGINEER

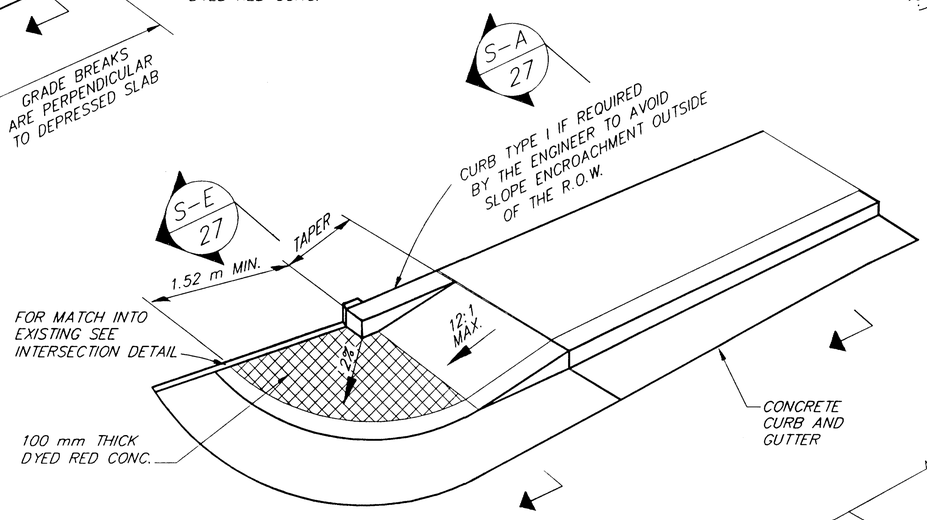


CURB CUT – TYPE III

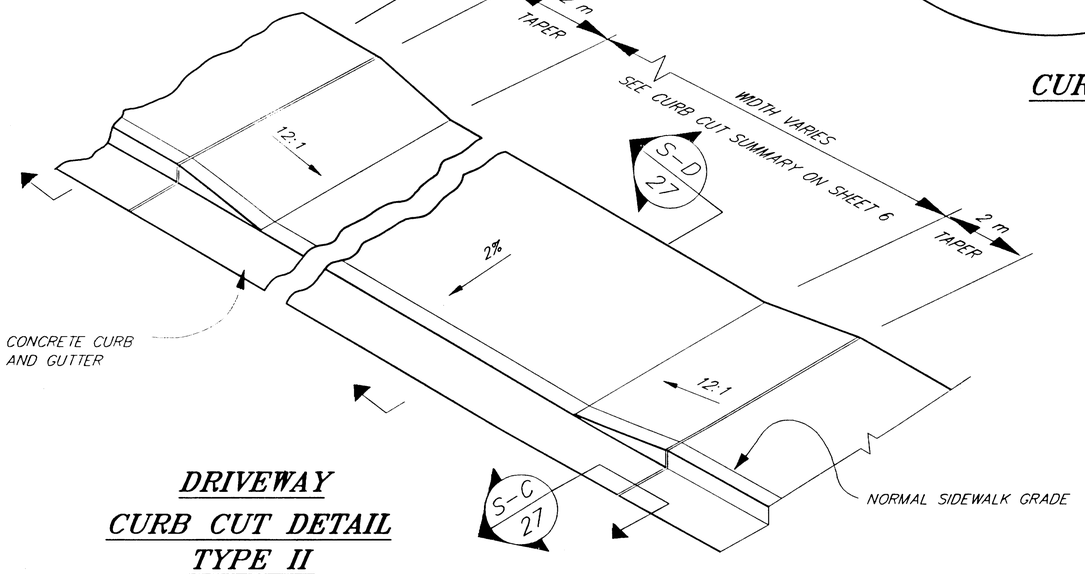
(PARALLEL CURB RAMP)



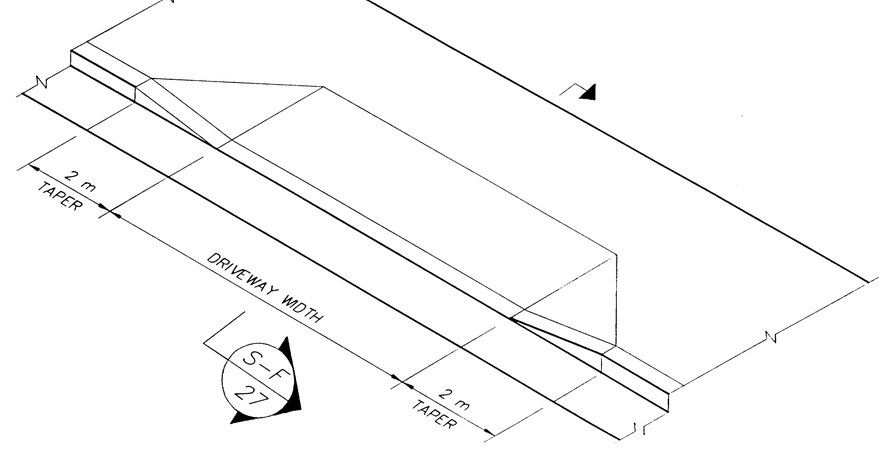
CURB CUT DETAIL TYPE V



CURB CUT DETAIL TYPE IV



DRIVEWAY CURB CUT DETAIL TYPE II



DRIVEWAY CURB CUT TYPE VI

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

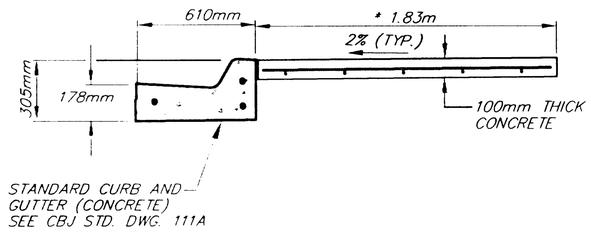
STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\71463\DGN\-4AMPDET P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
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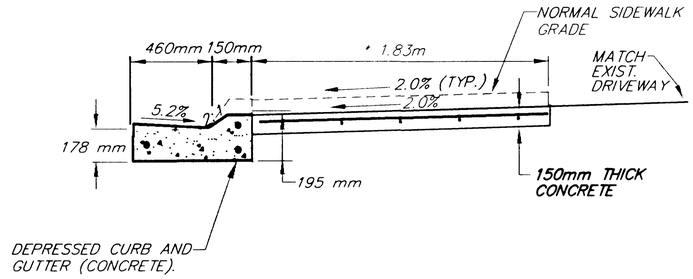
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
SIDEWALK DETAILS

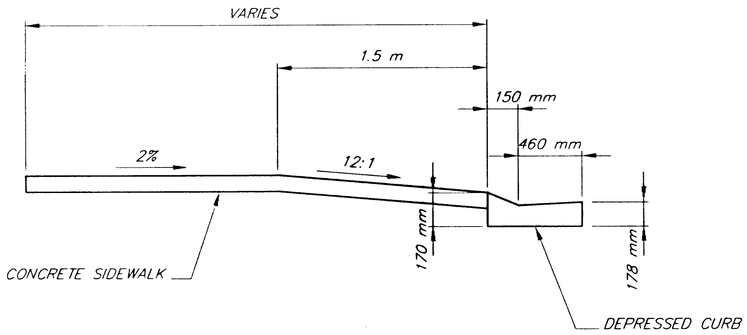
DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: 1996
CHECKED BY: A. STEININGER	SHEET 26 OF 97



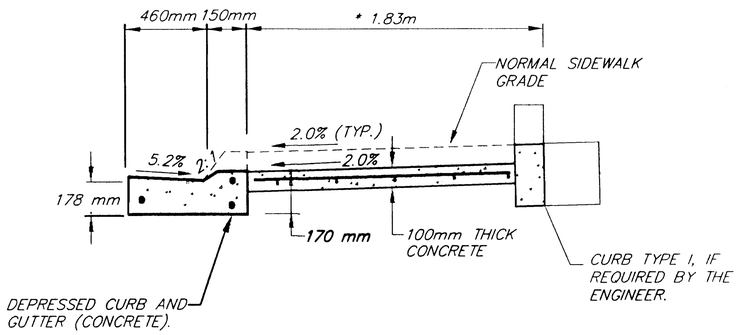
SECTION A



SECTION D

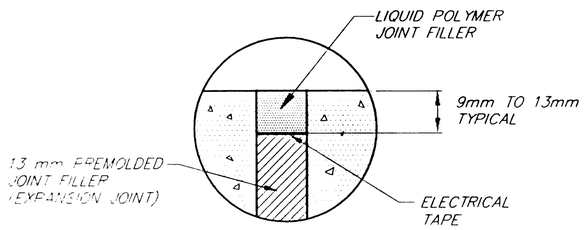


SECTION B

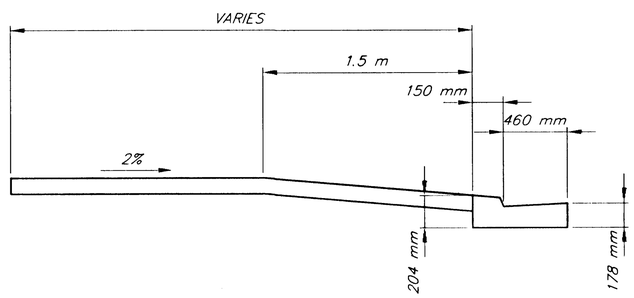


* 1.68 m IF NOTED
SIDEWALK WIDTH SHALL BE AS SHOWN ON PLANS. (SEE PLANS)

SECTION E



SECTION C



SECTION F

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNC\71463\DR\-DRAIN 1=1		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

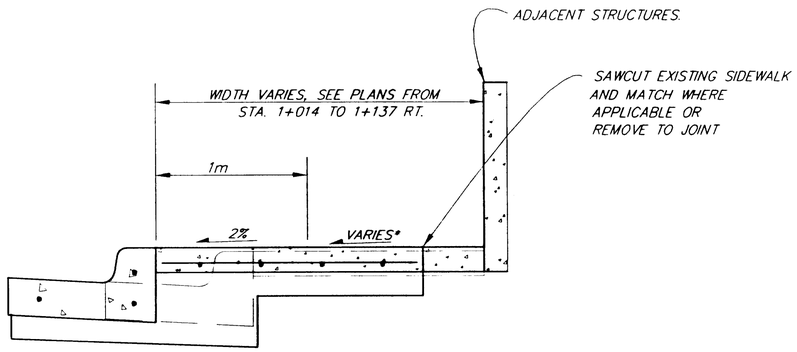
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

DRAINAGE DETAILS

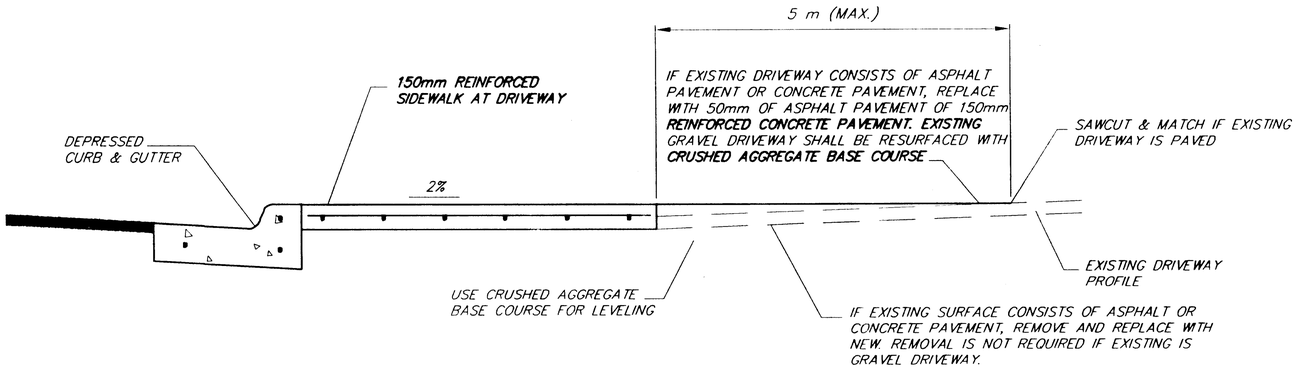
DESIGNED BY: D. SALDIVAR	PROJECT NO. 71463
DRAWN BY: B. Bennett	DATE: JAN. 1998
CHECKED BY: A.J. STEININGER	SHEET 27 OF 97

STATE OF ALASKA
49th
DAVID D. SALDIVAR
CE-8307
REGISTERED PROFESSIONAL ENGINEER

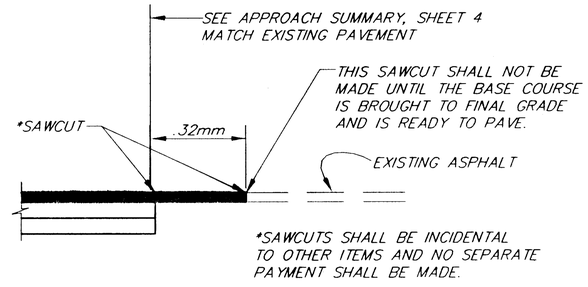


CONCRETE SIDEWALK DETAIL

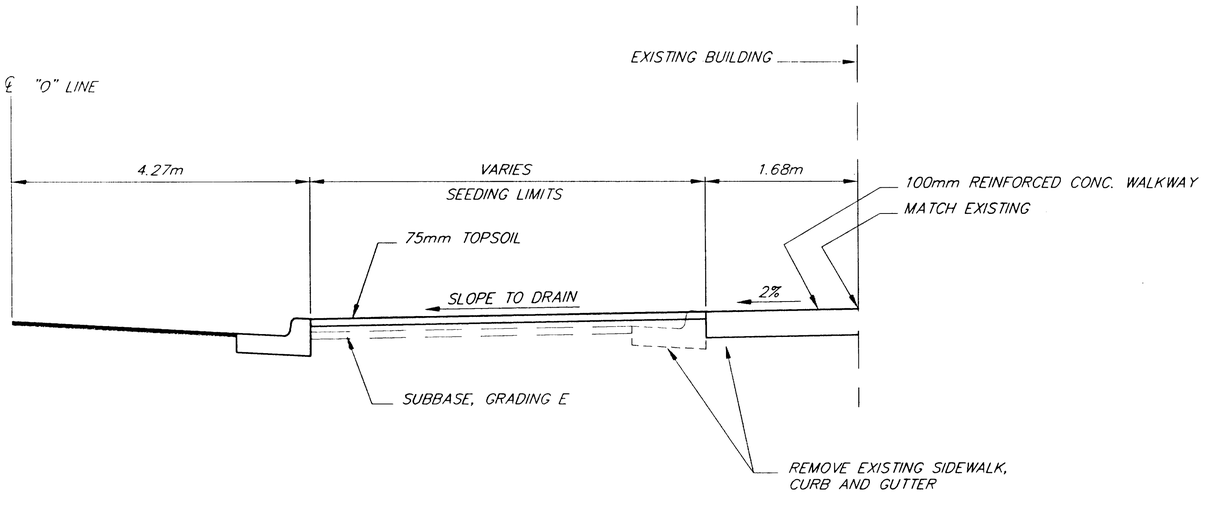
* SIDEWALK IS TYPICAL EXCEPT WHERE SLOPES VARY FOR DRAINAGE OF THE EXISTING ADJACENT STRUCTURES.



DRIVEWAY DETAIL



PAVEMENT JOINT DETAIL



SECTION (A)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\-Mdet5.dwg		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

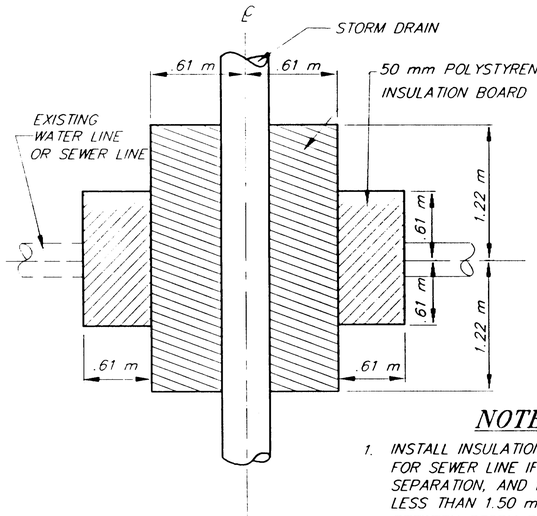
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

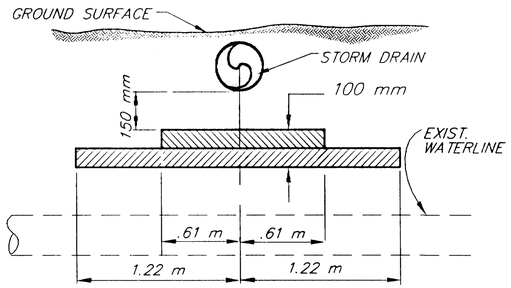
MISCELLANEOUS DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A.J. STEININGER	SHEET 28 OF 97

STATE OF ALASKA — Allen J. Steininger — CE-6440 — REGISTERED PROFESSIONAL ENGINEER



PLAN
N.T.S.

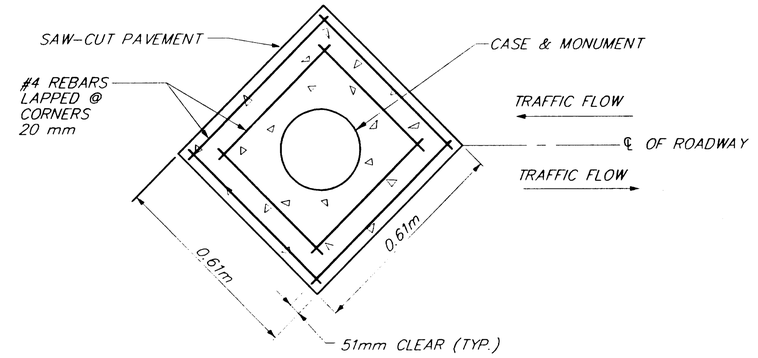


SECTION
N.T.S.

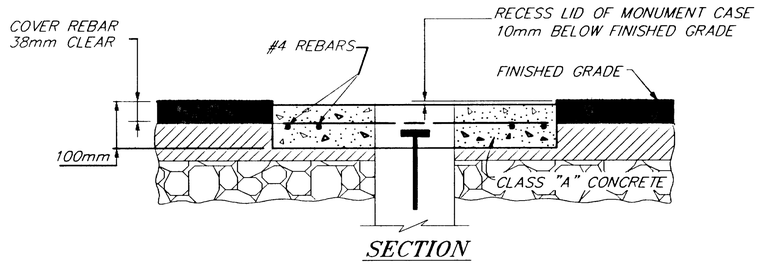
NOTES:

1. INSTALL INSULATION AS SHOWN, FOR SEWER LINE IF LESS THAN 1.15 m SEPARATION, AND FOR WATER LINE IF LESS THAN 1.50 m SEPARATION, BETWEEN STORM DRAIN AND LINE.
2. WRAP AROUND INSULATION WITH R-FACTOR EQUAL TO 100 mm RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

RIGID INSULATION

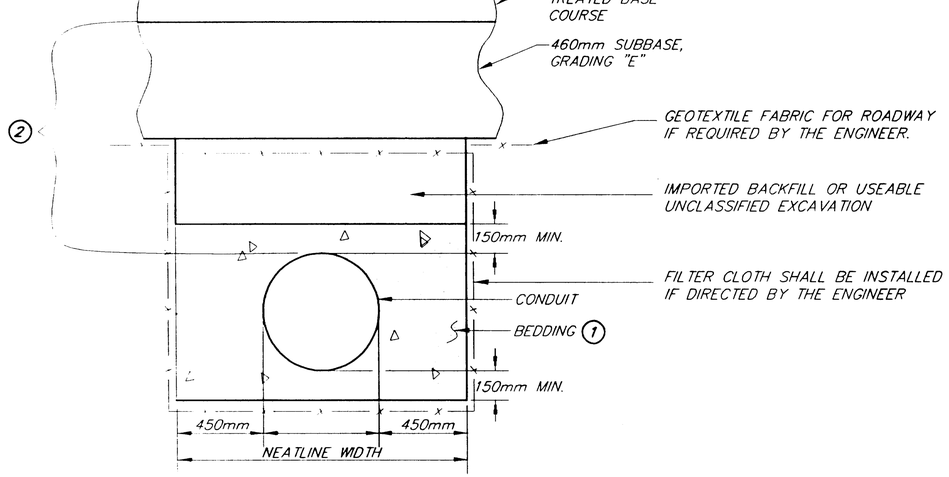


PLAN



SECTION

MONUMENT ENCASEMENT DETAIL



STORM DRAIN BEDDING/BACKFILL DETAIL

N.T.S.

(1) CONDUIT BEDDING BACKFILL SHALL BE ACCORDING TO SECTION 204.

(2) DURING CONSTRUCTION AND BEFORE INSTALLATION OF ATB, A MIN. COVER OF .6m SHALL BE MAINTAINED FOR ALL CULVERTS.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-Mdet7.dwg		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

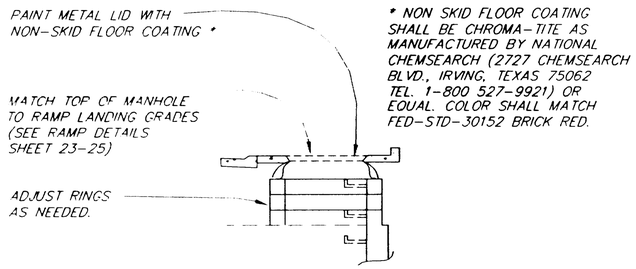
RECORD OF REVISIONS

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

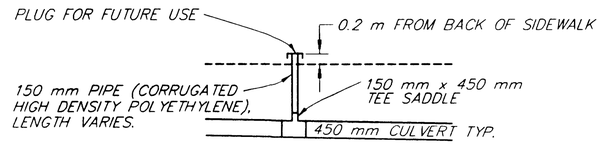
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
MISCELLANEOUS DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 29 OF 97

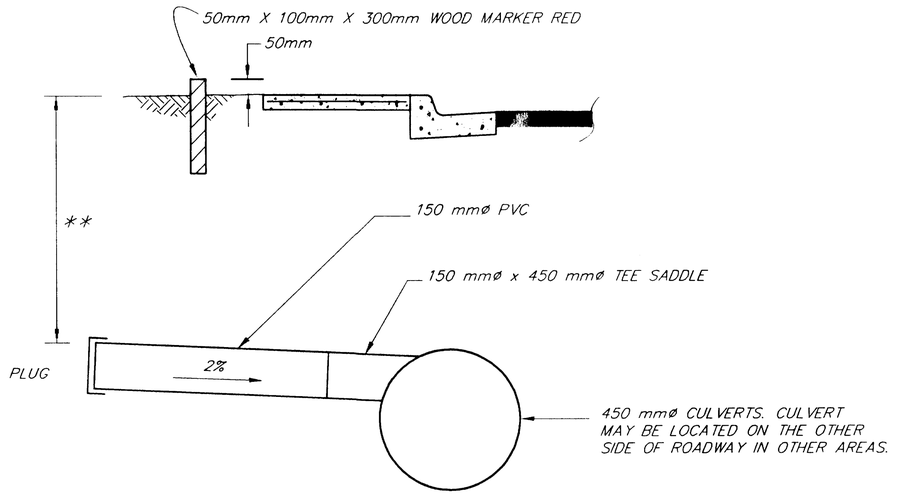
STATE OF ALASKA
Alan V. Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER



UTILITY MANHOLE ADJUSTMENT AT STA. "0" 1+504.45, 5.85 RT AND AT STA. "0" 1+495.92, 7.23 RT



ROOF DRAIN STUBOUT PLAN DETAIL



ROOF DRAIN STUBOUT PROFILE DETAIL

** STUBOUT SHALL BE INSTALLED AS DEEP AS POSSIBLE AND STILL PROVIDE A 2% GRADE.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\-Mdet6.dwg		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

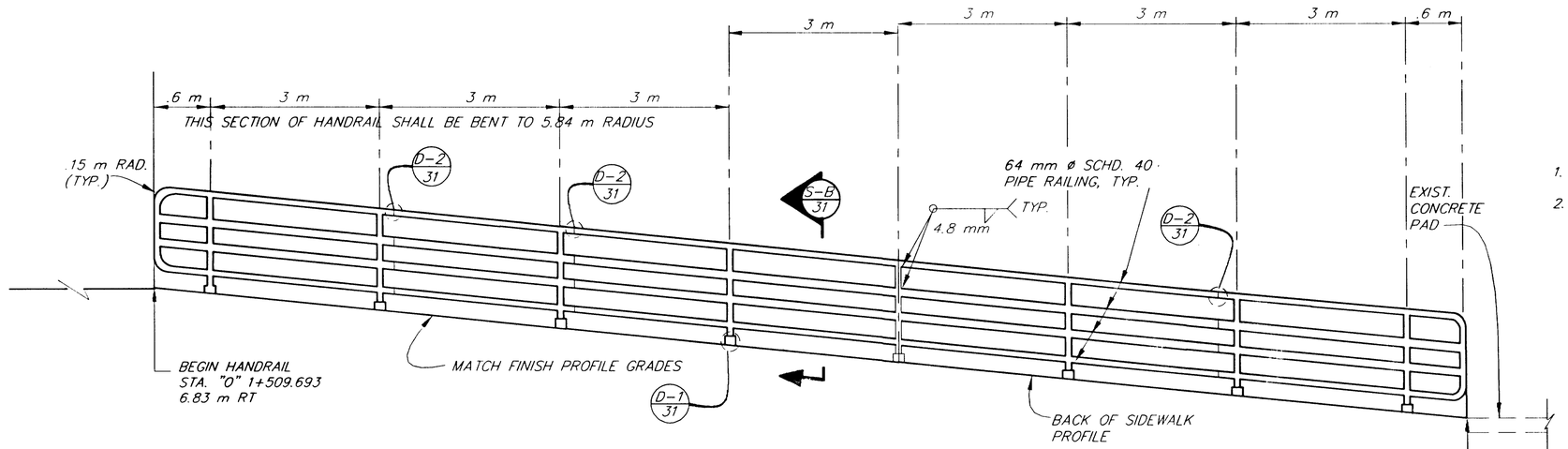
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

MISCELLANEOUS DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 30 OF 97

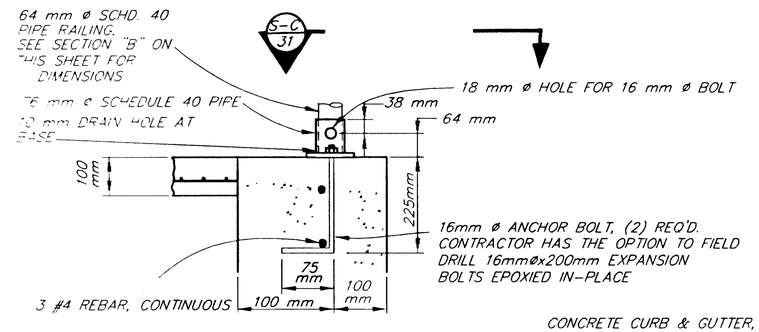
STATE OF ALASKA — Alan J. Steininger — CE-6440 — REGISTERED PROFESSIONAL ENGINEER



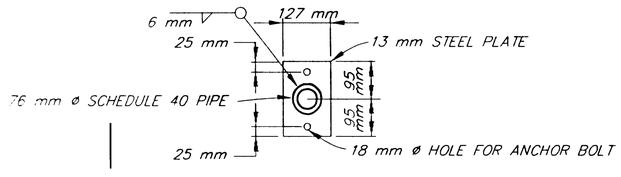
NOTE:

1. ALL METAL SHALL BE HOT DIP GALVANIZED.
2. SEE SHEET 24 FOR BEGIN AND END OF RETAINING WALL.

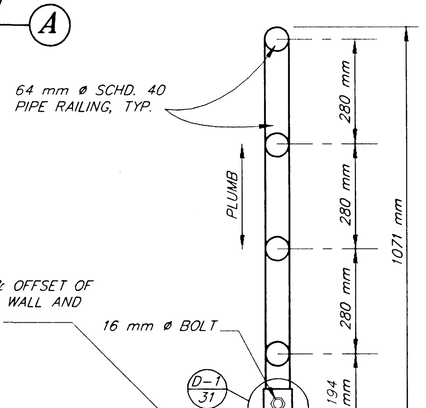
SECTION (A)

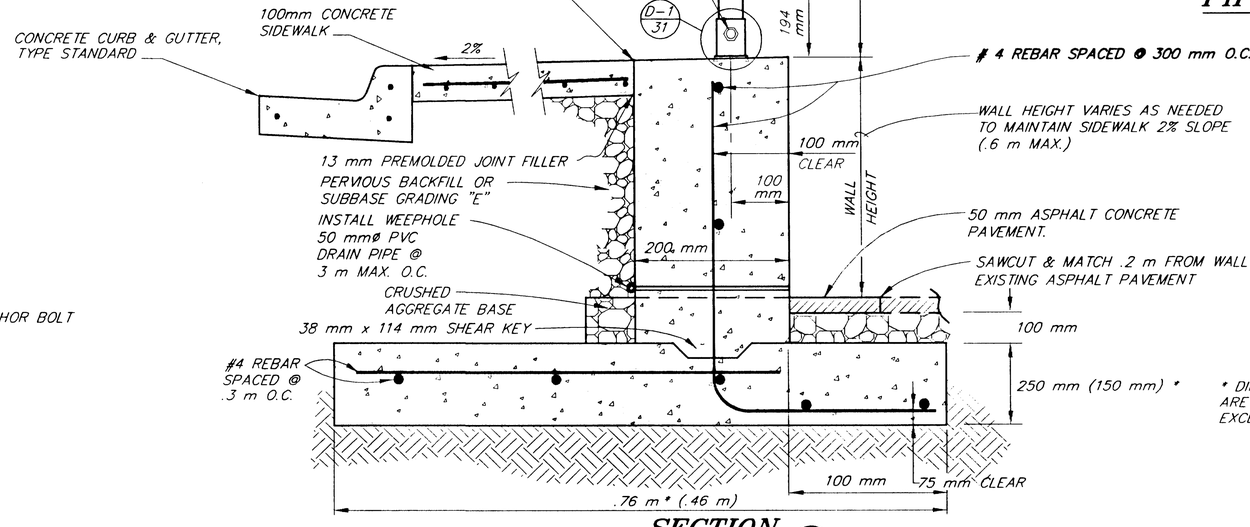


DETAIL (1)



SECTION (C)





SECTION (B)

* DIMENSIONS IN PARENTHESIS ARE FOR WALL HEIGHT NOT EXCEEDING .3 m.

PIPE JOINT DETAIL (2)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\-RAIL		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S(149) ~ PROJECT NO. 71463

RAILING DETAILS

DESIGNED BY: . SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCADD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 31 OF 97

STATE OF ALASKA 49TH R. L. STEININGER CE-6440 REGISTERED PROFESSIONAL ENGINEER

PIPE SUMMARY – SANITARY SEWER

PIPE	DIA	LENGTH (m)	TYPE	SLOPE (m/m)	REMARKS
SS-1	200 mm	11.33	PVC	0.009	
SS-2	200 mm	47.00	PVC	0.008	
SS-3	200 mm	31.39	PVC	0.007	
SS-4	300 mm	3.13*	PVC	AS REQ'D**	
SS-5	200 mm	13.03	PVC	0.030	
SS-6	200 mm	27.86	PVC	0.005	
SS-7	200 mm	69.18	PVC	0.005	
SS-8	200 mm	49.56	PVC	0.005	
SS-9	200 mm	13.83	HP	0.004	
SS-10	200 mm	59.06	PVC	0.005	
SS-11	200 mm	18.44	HP	0.004	
SS-12	200 mm	4.20	PVC	AS REQ'D**	
SS-13	200 mm	35.47	PVC	0.010	
SS-14	200 mm	24.77	HP	0.012	
SS-15	200 mm	23.05*	PVC	AS REQ'D**	

* ADDITIONAL LENGTH MAY BE REQUIRED TO CONNECT TO EXISTING PIPE.

** MINIMUM SLOPE IS 0.004 m/m.

HP = HIGH PRESSURE PVC (C900)

PIPE LENGTHS ARE MEASURE ALONG THE SLOPE FROM CENTER TO CENTER OF STRUCTURES, OR TO END OF PIPE IF NO STRUCTURE. SLOPES ARE CALCULATED TO ENDS OF PIPE.

WATER SERVICE SUMMARY

STATION AT ℄	VALVE BOX OFFSET (m) LEFT	VALVE BOX OFFSET (m) RIGHT	LENGTH (m)	SIZE (mm)	REMARKS
1+004.452	8.243		6.025	25	
1+007.608	3.442		11.376	200	
1+031.937	8.140		6.000	25	
1+034.129	8.140		6.000	25	
1+044.348		8.921	13.287	200	
1+062.732	8.140		6.000	25	
1+064.508	8.140		6.000	25	
1+092.035	8.140		6.000	25	
1+093.035	8.140		6.000	25	
1+123.833	8.140		6.000	25	
1+124.833	8.140		6.000	25	
1+152.903	8.140		6.000	25	
1+168.566	8.140		6.000	25	
1+183.395		8.524	12.343	150	
1+193.719	8.140		6.000	25	NO AS-BUILT RECORDS AVAILABLE.
1+255.213		8.530	12.200	150	
1+264.547	8.039		N/A	N/A	ADJUST EXISTING VALVE BOX TO FINISH GRADE. INCIDENTAL TO ITEM 627(12).
1+348.428	1.455		11.445	200	
1+420.623	1.559		14.500	150	
1+424.911	5.634		4.414	150	
1+435.660	5.551		5.800	50	
1+447.032	5.474		5.400	150	SERVICE STUB W/ CAP FOR FUTURE.
1+490.290		16.930	N/A	N/A	REMOVE VALVE BOX: INCIDENTAL TO ITEM 202(13).
1+517.440	5.660		4.203	25	

SANITARY SEWER SERVICE CONNECTION SUMMARY

STATION AT ℄	CLEAN OUT OFFSET (m) LEFT	CLEAN OUT OFFSET (m) RIGHT	LENGTH (m)	REMARKS
1+005.658	8.140		17.850	
1+016.956	8.140		15.650	
1+032.145	8.140		15.363	
1+039.490	8.140		16.159	
1+062.972	8.140		19.450	
1+123.342	8.140		15.850	
1+153.855	8.140		16.155	
1+167.978	8.140		15.694	
1+195.018	8.140		15.014	
1+202.751		8.750	5.029	
1+265.258	8.140		14.173	
1+283.694	8.140		14.425	
1+284.967		8.750	4.184	
1+293.012	8.140		14.390	
1+513.348	6.745		25.809	

WATER MAIN SUMMARY

STATION & OFFSET FROM	STATION & OFFSET TO	LENGTH (m)	SIZE (mm)	REMARKS
1+499.72, 8.47m LT	1+521.07, 3.25m LT	21.3	400	CONNECT TO EXISTING 200mm DI PIPE.

VALVE BOX SUMMARY

STATION "0"	OFFSET (m) LEFT	OFFSET (m) RIGHT	REMARKS
0+998.444	3.429		REMOVE AND REPLACE.
1+239.166	3.164		REMOVE AND REPLACE.
1+240.000	5.895		REMOVE AND REPLACE.
1+240.834	3.164		REMOVE AND REPLACE.
1+282.920	8.180		REMOVE VALVE BOX: INCIDENTAL TO ITEM 202(13)
1+298.220	8.180		REMOVE VALVE BOX: INCIDENTAL TO ITEM 202(13)
1+313.352	0.767		REMOVE AND REPLACE.
1+314.111	1.524		REMOVE AND REPLACE.
1+314.842	0.767		REMOVE AND REPLACE.
1+316.329	8.753		REMOVE AND REPLACE.
1+482.037		17.431	REMOVE AND REPLACE.
1+482.352		18.982	REMOVE AND REPLACE.
1+489.930		7.740	REMOVE AND REPLACE VALVE BOX ON SERVICE.
1+499.477	10.064		REMOVE AND REPLACE.
1+500.000	8.927		REMOVE AND REPLACE.
1+500.846	9.327		REMOVE VALVE BOX: INCIDENTAL TO ITEM 202(13)

EXISTING SEWER STRUCTURE SUMMARY

STATION AT ℄	OFFSET (m) LEFT	OFFSET (m) RIGHT	REMARKS
1+005.77		9.09	ADJUST SEWER MANHOLE
1+052.79		5.25	REMOVE SEWER MANHOLE
1+093.69		5.05	REMOVE SEWER MANHOLE
1+095.58	9.60		REMOVE SEWER MANHOLE
1+175.40		5.75	REMOVE SEWER MANHOLE
1+192.48	36.48		REMOVE SEWER MANHOLE
1+248.203	6.282		REMOVE SEWER MANHOLE
1+308.94	4.78		REMOVE SEWER MANHOLE
1+312.85	9.33		REMOVE SEWER MANHOLE
1+456.49	3.08		REMOVE SEWER MANHOLE
1+489.52		18.09	REMOVE SEWER MANHOLE
1+491.47	6.71		REMOVE SEWER MANHOLE
1+492.05	5.53		REMOVE SEWER CLEANOUT

FIRE HYDRANT SUMMARY

STATION "0"	OFFSET LEFT	OFFSET RIGHT	REMARKS
0+998.771		10.038	OPERATION OF NEW HYDRANT SHALL NOT
1+153.145		9.600	CONFLICT WITH EXISTING BOLLARDS.
1+282.689		10.000	
1+401.046		10.000	
1+506.110	9.250		

PLUG/CAP PIPE SUMMARY

STATION & OFFSET	REMARKS
0+997.0, 5.0m RT	M.J. CAP WATER MAIN
1+240.0, 2.5m LT	M.J. CAP WATER MAIN
1+314.1, 0.2m RT	M.J. CAP WATER MAIN
1+487.3, 10.0m RT	M.J. CAP WATER MAIN

UNIT CONVERSION TABLE

METRIC	TO	ENGLISH
1 meter (m)	=	3.281 feet (ft)
25.4 millimeter (mm)	=	1.0 inch (in)
1 litre (l)	=	0.264 gallon (gal)
	=	0.0035 cubic feet (ft)
1 megapascal (MPa)	=	145.04 pounds per square inch (psi)
6894.76 pascals (Pa)	=	1 pound per square inch (psi)

ABBREVIATIONS

AC	ASBESTOS CEMENT PIPE
ACP	OR ASPHALT PAVING
BOP	BEGINING OF PROJECT
BV	BUTTERFLY VALVE
Ⓒ	CABLE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CPP	CORRUGATED POLYETHYLENE PIPE
CU	COPPER
CV	CURB STOP VALVE
DI	DUCTILE IRON
Ⓔ	ELECTRIC
EOP	END OF PROJECT
FG	FINISHED GRADE
FH	FIRE HYDRANT
GV	GATE VALVE
HP	HIGH PRESSURE
INV	INVERT
LT	LEFT
MH	MANHOLE
NTS	NOT TO SCALE
PVC	POLYVINYL CHLORIDE PIPE
RT	RIGHT
STA	STATION
STD	STANDARD
SS	SANITARY SEWER
Ⓣ	TELEPHONE
WV	WATER VALVE

ABBREVIATIONS TO BE USED WITHOUT PERIODS

LEGEND

Description	Existing	Proposed
FIRE HYDRANT		
FIRE HYDRANT (REMOVE)		
SANITARY SEWER CLEANOUT		
SANITARY SEWER		
SANITARY SEWER (REMOVE)		
SANITARY SEWER MANHOLE		
SANITARY SEWER MANHOLE (REMOVE)		
SIGN		
WATER LINE		
WATER LINE (REMOVE)		
WATER VALVE		
WATER VALVE (REMOVE)		
WATER VALVE BOX		

NOTE: REFER TO TRENCH DETAIL 125A FOR ALL WATER AND SEWER PIPE TRENCHING.

STATUS	DATE PRINTED
DATE	REVISIONS BY

STATE OF ALASKA 49th Peter L. Hildre No.CE4005 REGISTERED PROFESSIONAL ENGINEER

Toner Nordling & ASSOCIATES, INC.

Consulting Engineers • Land Surveyors
Construction Administration

5368 COMMERCIAL BLVD. JUNEAU, ALASKA 99801
(907) 780-3533 OFFICE (907) 780-3535 FAX

DRAWN BY: STAFF | DESIGNED BY: GARY JENKINS II | CHECKED BY: PETER HILDRE | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

SANITARY SEWER AND WATER SYSTEM SUMMARY TABLES

SHEET NO. 32 of 97

10 0 10 20 30

SCALE IN METERS

MH-2 TYPE I	
STA "O" 1+016.680 5.890 RT	
FG	EL = 10.885
INV SS-1	EL = 7.202
INV 150mm PVC	EL = 7.425
INV SS-2	EL = 7.232

BEGIN PROJECT
STA "O"0+997.080
N = 14,949.558
E = 30,851.644

MH-1 EXISTING	
STA "O" 1+005.750 9.070 RT	
FG	EL = 11.004
INV SS-1	EL = 7.110

MH-3 TYPE I	
STA "O" 1+063.642 5.170 RT	
FG	EL = 10.678
INV SS-2	EL = 7.597
INV SS-150mm PVC	EL = 7.825
INV SS-3	EL = 7.627

MH-4 TYPE I	
STA "O" 1+095.078 5.100 RT	
FG	EL = 10.532
INV SS-3	EL = 7.838
INV SS-5	EL = 7.910
INV SS-6	EL = 7.868

MH-6 TYPE I	
STA "O" 1+123.230 5.550 RT	
FG	EL = 10.430
INV SS-6	EL = 8.001
INV SS-150mm PVC	EL = 8.201
INV SS-7	EL = 8.031

MH-5 TYPE I	
STA "O" 1+095.650 7.840 LT	
FG	EL = 10.528
INV SS-4	EL = 8.560
INV SS-5	EL = 8.244

MATCHLINE STA "O" 1+140

CONSTRUCTION NOTES:

① LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.

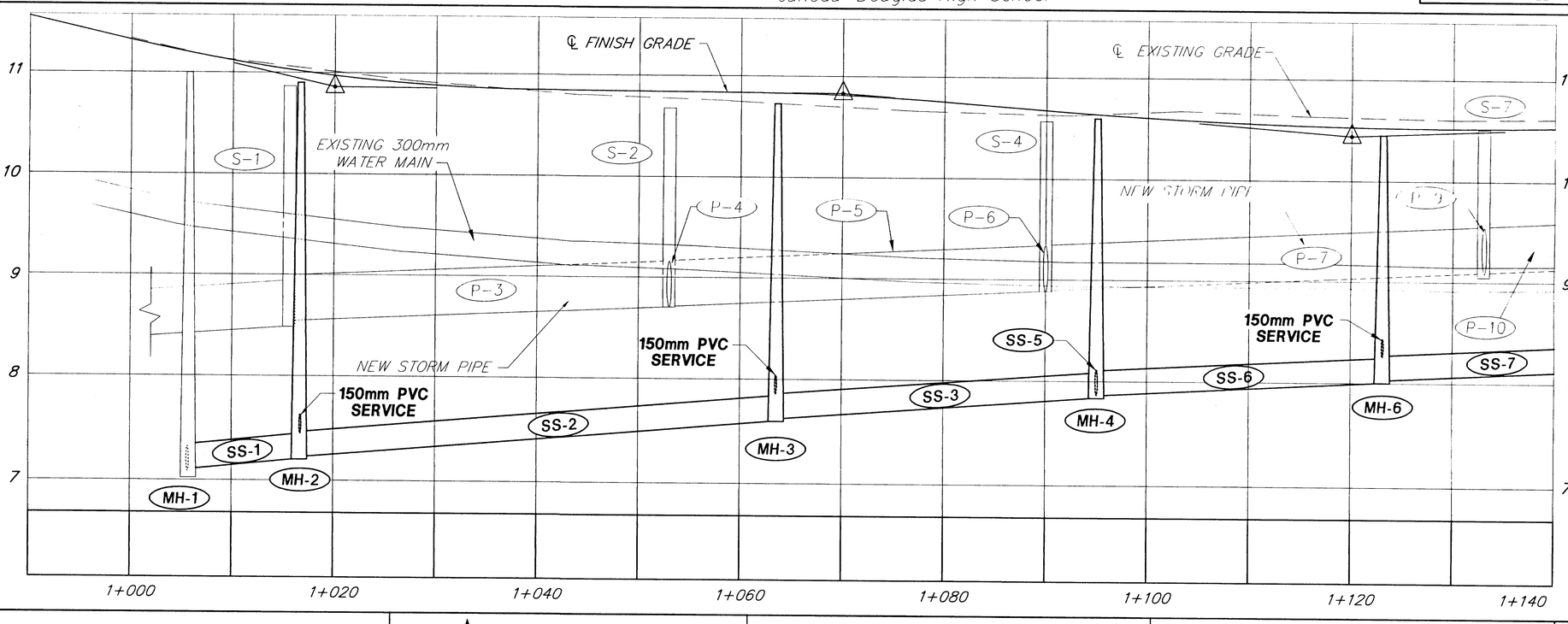
② PLUG ENDS OF ABANDONED MAINLINE PIPE AS DIRECTED BY THE ENGINEER.

③ IF FENCE MUST BE MOVED OR IS DAMAGED, SEE GENERAL NOTE 7.

④ EXCAVATE UNDER AND BEHIND ROCK WALL, SUPPORTING THE WALL AS REQUIRED TO PREVENT DAMAGE. LOCATE AND MAKE CONNECTION TO EXISTING SERVICES.

GENERAL NOTES: (FOR SHEETS 33, 34, & 35)

1. ALL NEW SEWER MAIN IS 200mm PVC, UNLESS OTHERWISE NOTED.
2. SEWER SERVICE CLEANOUTS SHALL BE LOCATED 0.5m FROM BACK OF SIDEWALK TOWARDS THE CENTERLINE.
3. WATER SERVICE CURB STOPS SHALL BE LOCATED 0.5m FROM BACK OF SIDEWALK TOWARDS THE CENTERLINE.
4. LOCATION OF WATER AND SEWER SERVICES ARE BASED UPON AS-BUILTS AND OTHER AVAILABLE INFORMATION. LOCATIONS AND DEPTHS SHOWN MAY NOT BE EXACT. CONTRACTOR SHALL FIELD LOCATE.
5. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS AND ADAPTORS TO MAKE CONNECTION TO EXISTING WATER AND SEWER PIPE.
6. INSULATION BOARD SHALL BE USED AS REQUIRED BY THE DETAIL ON SHEET 28, OR AS APPROVED BY THE ENGINEER.
7. ANY PRIVATELY OWNED ITEM DAMAGED OR REQUIRING REMOVAL FOR THE INSTALLATION OF UTILITIES SHALL BE REPLACED TO EQUAL OR BETTER CONDITION AND SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM BEING CONSTRUCTED.
8. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH CBJ STANDARDS 414A & 414B.
9. LOCATION OF SANITARY SEWER MANHOLES, PIPING, AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
10. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES AT 780-6808 OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (CO-SIGNED BY THE ENGINEER) AT LEAST 48 HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE.
11. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER AND SEWER PIPES, INCLUDING ALL SERVICES, ALONG THE STORM DRAIN ALIGNMENT, TO DETERMINE PIPE INSULATION LOCATIONS.
12. THE EXISTING SEWER SYSTEM CARRIES A COMBINED SEWER AND STORM FLOW. THE CONTRACTOR SHALL SEPARATE THE FLOWS INTO THE NEW STORM AND SEWER SYSTEMS.
13. ALL TRENCHING FOR WATER AND SEWER PIPE SHALL CONFORM TO TRENCH DETAIL 125A.



STATUS	DATE PRINTED	
DATE	REVISIONS	BY

STATE OF ALASKA 49th
Peter C. Hildre No.CE4005
REGISTERED PROFESSIONAL ENGINEER

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Consulting Engineers • Land Surveyors
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DRAWN BY: STAFF | DESIGNED BY: GARY JENKINS II | CHECKED BY: PETE HILDRE | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

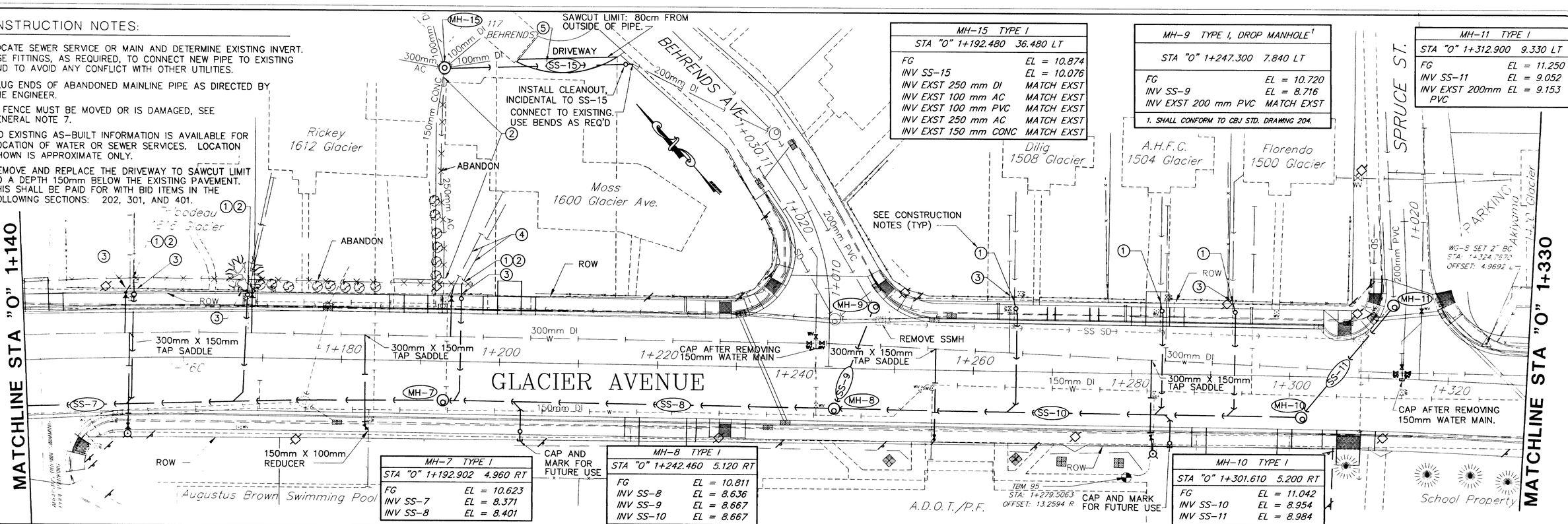
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS PLAN & PROFILE BOP TO STA "O" 1+140

SHEET NO. 33 of 97

CONSTRUCTION NOTES:

1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. PLUG ENDS OF ABANDONED MAINLINE PIPE AS DIRECTED BY THE ENGINEER.
3. IF FENCE MUST BE MOVED OR IS DAMAGED, SEE GENERAL NOTE 7.
4. NO EXISTING AS-BUILT INFORMATION IS AVAILABLE FOR LOCATION OF WATER OR SEWER SERVICES. LOCATION SHOWN IS APPROXIMATE ONLY.
5. REMOVE AND REPLACE THE DRIVEWAY TO SAWCUT LIMIT TO A DEPTH 150mm BELOW THE EXISTING PAVEMENT. THIS SHALL BE PAID FOR WITH BID ITEMS IN THE FOLLOWING SECTIONS: 202, 301, AND 401.



MH-15 TYPE I
STA "O" 1+192.480 36.480 LT

FG	EL = 10.874
INV SS-15	EL = 10.076
INV EXST 250 mm DI	MATCH EXST
INV EXST 100 mm AC	MATCH EXST
INV EXST 100 mm PVC	MATCH EXST
INV EXST 250 mm AC	MATCH EXST
INV EXST 150 mm CONC	MATCH EXST

MH-9 TYPE I, DROP MANHOLE[1]
STA "O" 1+247.300 7.840 LT

FG	EL = 10.720
INV SS-9	EL = 8.716
INV EXST 200 mm PVC	MATCH EXST

1. SHALL CONFORM TO CBJ STD. DRAWING 204.

MH-11 TYPE I
STA "O" 1+312.900 9.330 LT

FG	EL = 11.250
INV SS-11	EL = 9.052
INV EXST 200mm PVC	EL = 9.153

MH-7 TYPE I
STA "O" 1+192.902 4.960 RT

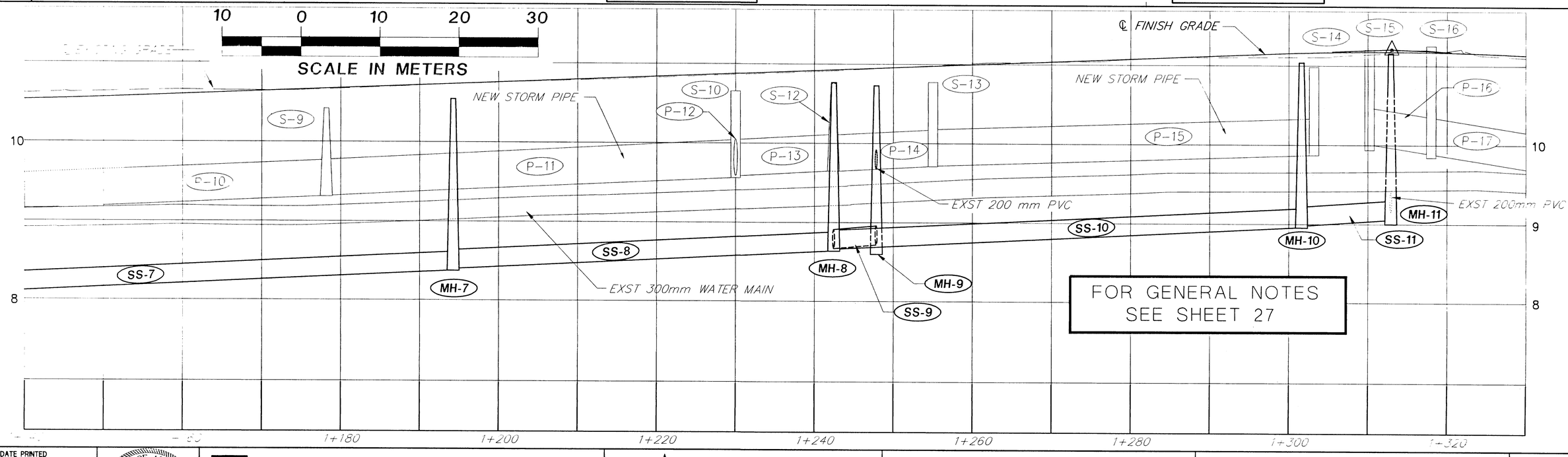
FG	EL = 10.623
INV SS-7	EL = 8.371
INV SS-8	EL = 8.401

MH-8 TYPE I
STA "O" 1+242.460 5.120 RT

FG	EL = 10.811
INV SS-8	EL = 8.636
INV SS-9	EL = 8.667
INV SS-10	EL = 8.667

MH-10 TYPE I
STA "O" 1+301.610 5.200 RT

FG	EL = 11.042
INV SS-10	EL = 8.954
INV SS-11	EL = 8.984



FOR GENERAL NOTES SEE SHEET 27

STATUS	DATE PRINTED

DATE	REVISIONS	BY

STATE OF ALASKA — 19th — Peter L Hildre No.CE4005 — REGISTERED PROFESSIONAL ENGINEER

Toner Nordling & ASSOCIATES, INC.
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Construction Administration
5368 COMMERCIAL BLVD. JUNEAU, ALASKA 99801
(907) 780-3533 OFFICE (907) 780-3535 FAX

DRAWN BY:	DESIGNED BY:	CHECKED BY:	DATE:
STAFF	GARY JENKINS II	PETE HILDRE	MARCH 1998

CITY/BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS PLAN & PROFILE
STA "O" 1+140 TO "O" 1+330

SHEET NO. 34 of 97

10 0 10 20 30

SCALE IN METERS

MATCHLINE STA "O" 1+330

MH-12 TYPE I	
STA "O" 1+456.270	2.430 LT
FG	EL = 8.620
INV SS-12	EL = 7.612
INV SS-13	EL = 7.463

MH-13 TYPE I	
STA "O" 1+491.470	6.710 LT
FG	EL = 8.810
INV SS-13	EL = 7.121
INV EXST 200 mm AC	MATCH EXST
INV SS-14	EL = 7.017

MH-14 TYPE I	
STA "O" 1+489.260	18.085 RT
FG	EL = 8.480
INV SS-14	EL = 6.742
INV EXST 200mm AC	MATCH EXST

END PHASE I
BEGIN PHASE II
STA "O"1+519.279
N = 14,609.811
E = 31,244.992

CONTINUE IN PHASE II

CEMETARY

GLACIER AVENUE

PARKING

TAKU TERRACE CONDOMINIUMS

AK Property Management Corp. (Manager Huntington) 1248 Glacier Ave.

Flood 738 W. 12th St.

Judson 1133 Glacier

Giles 1125 Glacier

Harri Plumbing & Heating Inc. 809 W 12th St.

C.B.J. 1208 Glacier

Harborview School Parking

12TH STREET

ROW

150mm PVC

300mm DI

200mm DI

150mm DI

100mm DI

300mm X 150mm TAP SADDLE

300mm X 200mm TEE

200mm X 150mm REDUCER

150mm X 100mm REDUCER

45° BEND

50mm CV

50mm CU

20mm CU

200mm AC

300mm X 400mm TEE

400mm X 150mm TEE

400mm BV

CLOSE VALVE & LEAVE IN PLACE

GUY POLE

150mm STUB WITH CAP FOR FUTURE CONNECTION TO TAKU TERRACE CONDOMINIUMS.

REMOVE C.O.

CAP 150mm WATER MAIN STUB

SEE CONSTRUCTION NOTES (TYP)

MH-12 MH-13 MH-14

SS-12 SS-13 SS-14

1+340 1+360 1+380 1+400 1+420 1+440 1+460 1+480 1+500 1+520

10 8 6

P-19 P-20 P-21 P-22 P-23 P-24 P-25 P-26

S-19 S-21 S-22 S-23 S-24 S-25 S-26

EXISTING 300mm WATER MAIN

NEW STORM PIPE

℄ EXISTING GRADE

℄ FINISH GRADE

300mm WATER MAIN

400mm WATER MAIN

EXST 200 mm PVC

EXST 250 mm AC

CONSTRUCTION NOTES:

① LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.

② PLUG ENDS OF ABANDONED MAINLINE PIPE AS DIRECTED BY THE ENGINEER.

③ IF FENCE MUST BE MOVED OR IS DAMAGED, SEE GENERAL NOTE 7.

④ EXISTING PIPE MAY BE ENCASED IN CONCRETE.

⑤ VERIFY ELEVATION AT TOP OF EXISTING WATER PIPE PRIOR TO INSTALLATION OF SEWER PIPE SS-14 IN ORDER TO VERIFY SEWER GRADE.

FOR GENERAL NOTES SEE SHEET 27

STATUS	DATE PRINTED		
DATE	REVISIONS	BY	

STATE OF ALASKA 49th REGISTERED PROFESSIONAL ENGINEER Peter L. Hildre No.CE4005

Toner Nordling & ASSOCIATES, INC.
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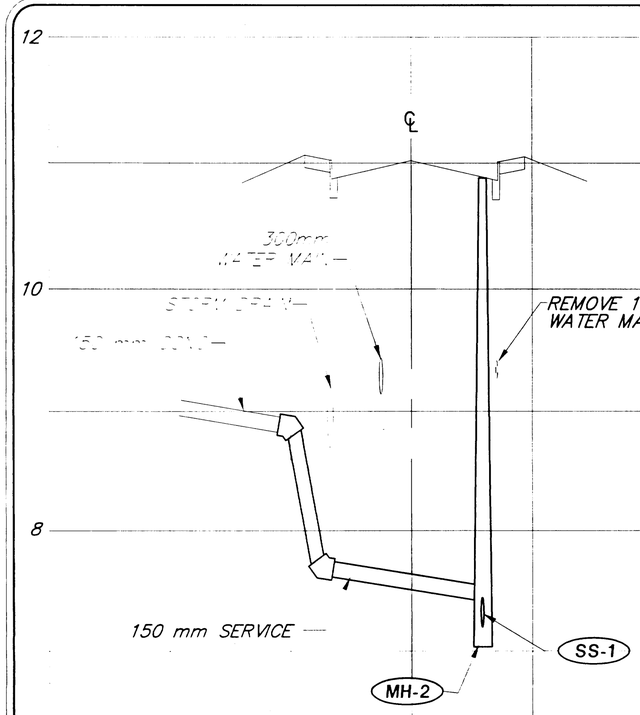
DRAWN BY: STAFF | DESIGNED BY: GARY JENKINS II | CHECKED BY: PETE HILDRE | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

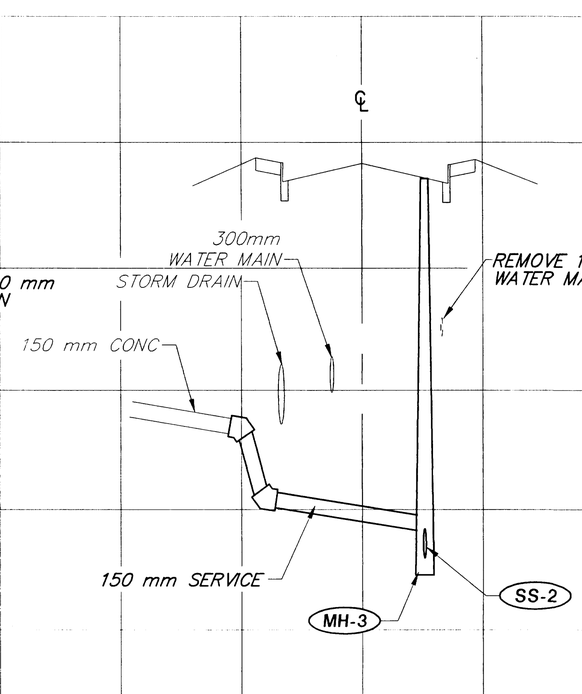
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS PLAN & PROFILE STA "O"1+330 TO STA "O"1+519.279

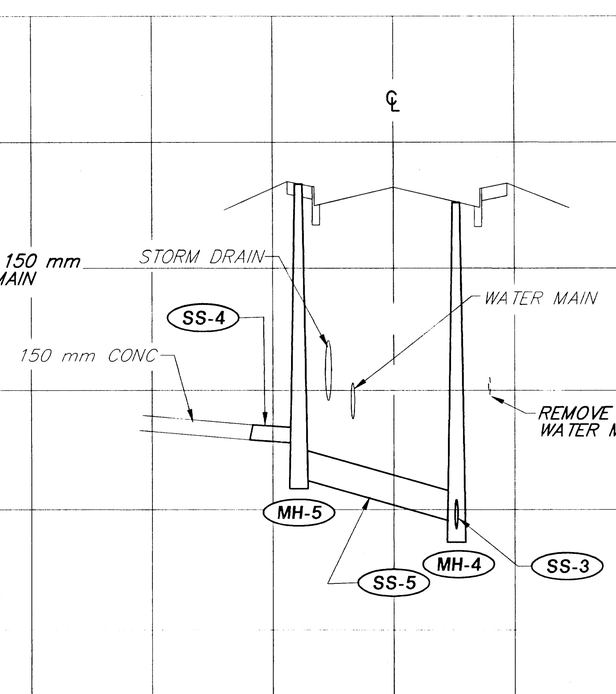
SHEET NO. 35 of 97



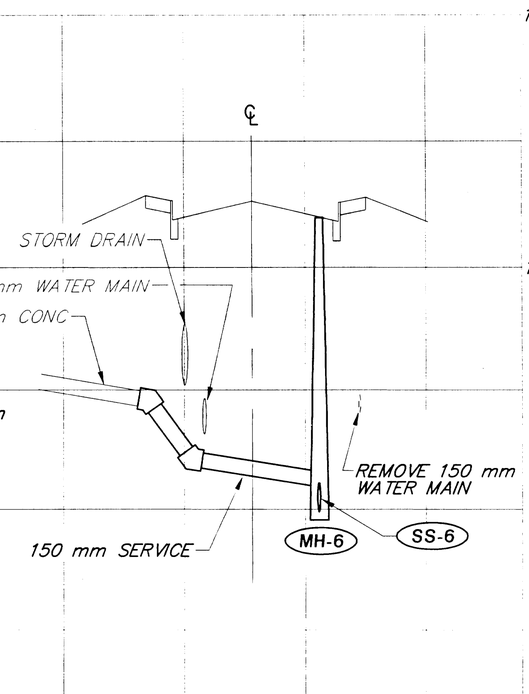
SANITARY SEWER SERVICE, STA 1+016



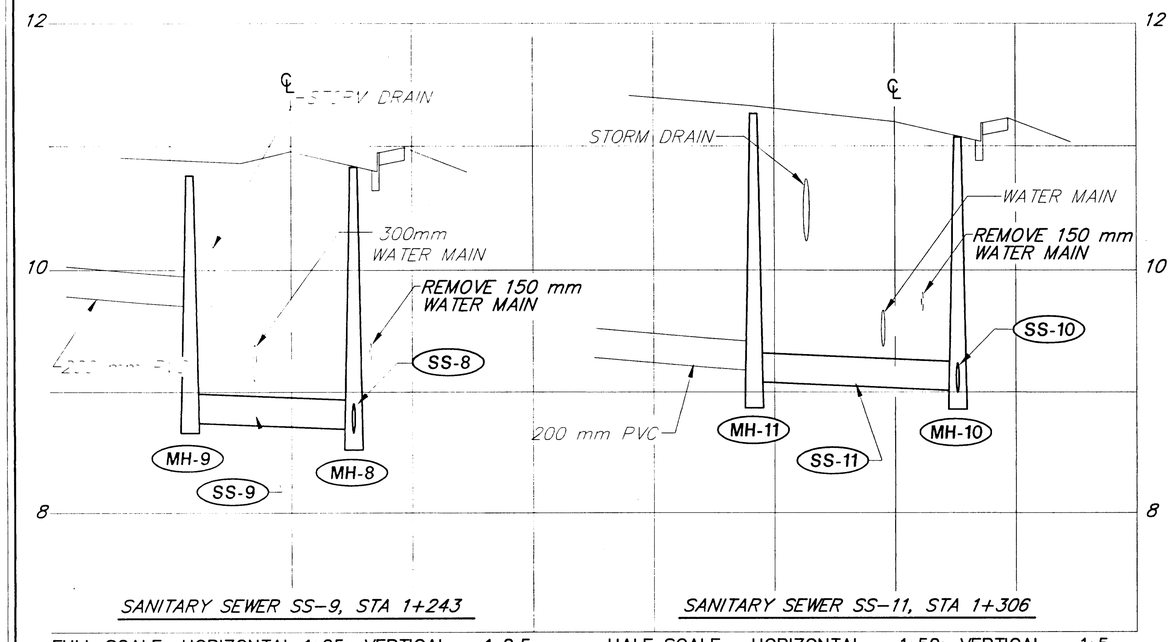
SANITARY SEWER SERVICE, STA 1+063



SANITARY SEWER SS-5, STA 1+095

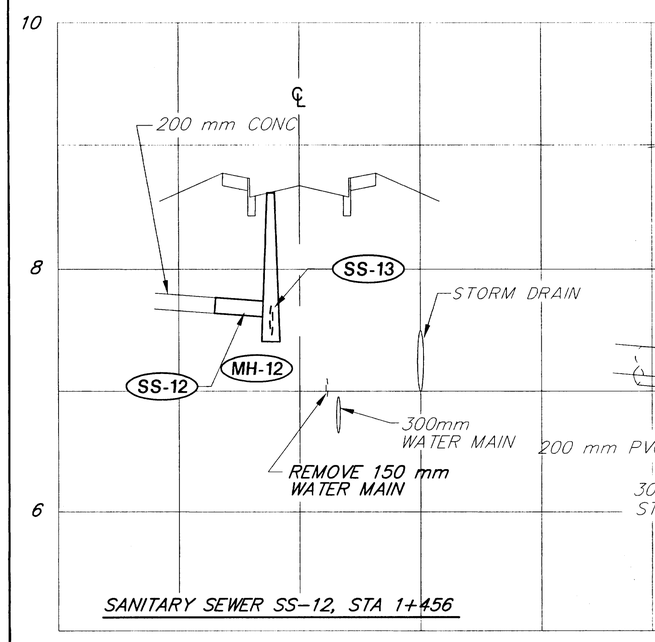


SANITARY SEWER SERVICE, STA 1+123

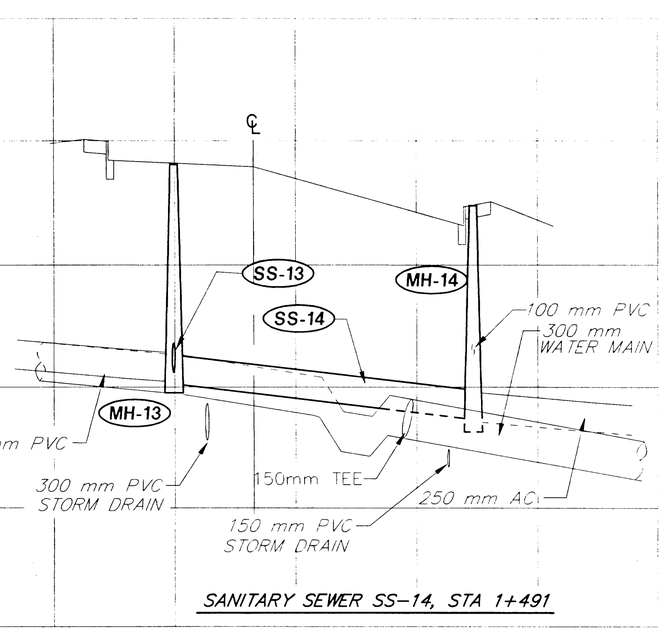


SANITARY SEWER SS-9, STA 1+243

SANITARY SEWER SS-11, STA 1+306



SANITARY SEWER SS-12, STA 1+456



SANITARY SEWER SS-14, STA 1+491

FULL SCALE: HORIZONTAL 1:25; VERTICAL – 1:2.5 HALF SCALE: HORIZONTAL – 1:50; VERTICAL – 1:5

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DATE	REVISIONS	BY

STATE OF ALASKA 49th Peter L Hildre No.CE4005 REGISTERED PROFESSIONAL ENGINEER

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DRAWN BY: STAFF	DESIGNED BY: GARY JENKINS II	CHECKED BY: PETER HILDRE	DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS CROSSING PROFILE BOP TO STA "O" 1+519.279

SHEET NO. 36 of 97

POWER CONDUIT & CONDUCTOR SUMMARY

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS
E-1	51mm (2")	P-20	1652 GLACER AVE.	SERVICE (BY UTILITY)
E-2	51mm (2")	P-21	1624 GLACIER AVE.	SERVICE (BY UTILITY)
E-3	51mm (2")	P-22	LUMINAIRES L-1 TO L-7	3 NO. 8 CABLE
E-4	51mm (2")	P-22	LUMINAIRES L-8 TO L-13	3 NO. 8 CABLE
E-5	25mm (1")	P-23	CROSSWALK FLASHER	2 NO. 10
E-6	51mm (2")	P-25	1504 GLACIER AVE.	SERVICE (BY UTILITY)

TELEPHONE CONDUIT & CONDUCTOR SUMMARY

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS
TEL-1	102mm (4")	P-1	P-2	(BY UTILITY)
TEL-2	102mm (4")	P-1	P-2	(BY UTILITY)
TEL-3	51mm (2")	PG-1	PG-2	(BY UTILITY)
TEL-4	51mm (2")	PG-2	PG-3	(BY UTILITY)
TEL-5	51mm (2")	PG-3	PG-4	(BY UTILITY)
TEL-6	51mm (2")	PG-4	PG-5	(BY UTILITY)
TEL-7	51mm (2")	PG-5	PG-6	(BY UTILITY)
TEL-8	51mm (2")	PG-6	PG-7	(BY UTILITY)
TEL-9	51mm (2")	PG-7	PG-8	(BY UTILITY)
TEL-10	51mm (2")	P-24	PG-7	(BY UTILITY)
TEL-11	51mm (2")	P-25	PG-9	(BY UTILITY)
TEL-12	51mm (2")	PG-9	PG-10	(BY UTILITY)
TEL-13	51mm (2")	P-14	PG-12	(BY UTILITY)
TEL-14	51mm (2")	P-23	PG-13	(BY UTILITY)
TEL-15	51mm (2")	P-18	PG-14	(BY UTILITY)
TEL-16	25mm (1")	PG-1	104 HIGHLAND DR.	(BY UTILITY)
TEL-17	25mm (1")	PG-2	1652 GLACIER AVE.	(BY UTILITY)
TEL-18	25mm (1")	PG-2	1648 GLACIER AVE.	(BY UTILITY)
TEL-19	25mm (1")	PG-4	1640 GLACIER AVE.	(BY UTILITY)
TEL-20	25mm (1")	PG-4	1636 GLACIER AVE.	(BY UTILITY)
TEL-21	25mm (1")	PG-5	1632 GLACIER AVE.	(BY UTILITY)
TEL-22	25mm (1")	PG-5	1628 GLACIER AVE.	(BY UTILITY)
TEL-23	25mm (1")	PG-6	1624 GLACIER AVE.	(BY UTILITY)
TEL-24	25mm (1")	PG-6	1616 GLACIER AVE.	(BY UTILITY)
TEL-25	25mm (1")	PG-7	1612 GLACIER AVE.	(BY UTILITY)
TEL-26	25mm (1")	PG-9	1508 GLACIER AVE.	(BY UTILITY)
TEL-27	25mm (1")	PG-9	1504 GLACIER AVE.	(BY UTILITY)
TEL-28	25mm (1")	PG-10	1500 GLACIER AVE.	(BY UTILITY)

TELEVISION CONDUIT & CONDUCTOR SUMMARY

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS
TV-1	76mm (3")	P-1	PG-11	TRUNK (BY UTILITY)
TV-2	51mm (2")	P-1	PG-1	DISTRIBUTION (BY UTILITY)
TV-3	76mm (3")	P-1	PG-8	FIBER (BY UTILITY)
TV-4	51mm (2")	P-1	PG-1	RETURN (BY UTILITY)
TV-5	51mm (2")	P-1	PG-8	SPARE
TV-6	51mm (2")	P-2	PG-1	DISTRIBUTION (BY UTILITY)
TV-7	51mm (2")	P-2	PG-1	RETURN (BY UTILITY)
TV-8	51mm (2")	PG-1	PG-2	DISTRIBUTION (BY UTILITY)
TV-9	51mm (2")	PG-2	PG-3	DISTRIBUTION (BY UTILITY)
TV-10	51mm (2")	PG-3	PG-4	DISTRIBUTION (BY UTILITY)
TV-11	51mm (2")	PG-4	PG-5	DISTRIBUTION (BY UTILITY)
TV-12	51mm (2")	PG-5	PG-6	DISTRIBUTION (BY UTILITY)
TV-13	51mm (2")	PG-6	PG-7	DISTRIBUTION (BY UTILITY)
TV-14	51mm (2")	PG-7	PG-8	DISTRIBUTION (BY UTILITY)
TV-15	51mm (2")	PG-8	PG-9	DISTRIBUTION (BY UTILITY)
TV-16	76mm (3")	PG-8	P-19	FIBER (BY UTILITY)
TV-17	76mm (3")	PG-8	P-19	SPARE
TV-18	51mm (2")	P-8	PG-9	DISTRIBUTION (BY UTILITY)
TV-19	51mm (2")	PG-9	PG-11	DISTRIBUTION (BY UTILITY)
TV-20	51mm (2")	PG-11	P-12	DISTRIBUTION (BY UTILITY)
TV-21	76mm (3")	PG-11	P-12	TRUNK (BY UTILITY)
TV-22	76mm (3")	PG-11	P-19	TRUNK (BY UTILITY)
TV-23	51mm (2")	PG-11	PG-13	DISTRIBUTION (BY UTILITY)
TV-24	51mm (2")	PG-12	P-14	DISTRIBUTION (BY UTILITY)
TV-25	51mm (2")	PG-12	P-19	RETURN (BY UTILITY)
TV-26	51mm (2")	PG-12	PG-14	DISTRIBUTION (BY UTILITY)
TV-27	51mm (2")	PG-14	P-18	DISTRIBUTION (BY UTILITY)
TV-28	51mm (2")	PG-14	P-19	DISTRIBUTION (BY UTILITY)
TV-29	25mm (1")	PG-1	104 HIGHLAND DR.	SERVICE (BY UTILITY)
TV-30	25mm (1")	PG-1	1652 GLACIER AVE.	SERVICE (BY UTILITY)
TV-31	25mm (1")	PG-2	1648 GLACIER AVE.	SERVICE (BY UTILITY)
TV-32	25mm (1")	PG-4	1640 GLACIER AVE.	SERVICE (BY UTILITY)
TV-33	25mm (1")	PG-4	1636 GLACIER AVE.	SERVICE (BY UTILITY)
TV-34	25mm (1")	PG-5	1632 GLACIER AVE.	SERVICE (BY UTILITY)
TV-35	25mm (1")	PG-5	1628 GLACIER AVE.	SERVICE (BY UTILITY)
TV-36	25mm (1")	PG-6	1624 GLACIER AVE.	SERVICE (BY UTILITY)
TV-37	25mm (1")	PG-6	1616 GLACIER AVE.	SERVICE (BY UTILITY)
TV-38	25mm (1")	PG-7	1612 GLACIER AVE.	SERVICE (BY UTILITY)
TV-39	25mm (1")	PG-9	1508 GLACIER AVE.	SERVICE (BY UTILITY)
TV-40	25mm (1")	PG-14	1248 GLACIER AVE.	SERVICE (BY UTILITY)
TV-41	51mm (2")	PG-1	PG-12	RETURN (BY UTILITY)

PEDESTAL GROUP SUMMARY *

NO.	TELEVISION PEDESTALS QTY.	TELEVISION PEDESTALS TYPE	TELEPHONE PEDESTALS QTY.	TELEPHONE PEDESTALS TYPE	APPROXIMATE LOCATION STATION	APPROXIMATE LOCATION OFFSET
PG-1	1 1	DISTRIBUTION RETURN	1	DISTRIBUTION	1 + 018.1	10.3 LT
PG-2	1	DISTRIBUTION	1	DISTRIBUTION	1 + 034.2	10.0 LT
PG-3	--	---	--	DISTRIBUTION	1 + 066.8	9.6 LT
PG-4	1	DISTRIBUTION	1	DISTRIBUTION	1 + 079.7	9.7 LT
PG-5	1	DISTRIBUTION	1	DISTRIBUTION	1 + 110.3	10.6 LT
PG-6	1	DISTRIBUTION	1	DISTRIBUTION	1 + 138.4	9.3 LT
PG-7	1	DISTRIBUTION	1	DISTRIBUTION	1 + 169.4	9.2 LT
PG-8	1 1	FIBER/SPARE DISTRIBUTION	1	DISTRIBUTION	1 + 193.4	9.2 LT
PG-9	1	DISTRIBUTION	1	DISTRIBUTION	1 + 275.9	9.2 LT
PG-10	--	---	--	---	1 + 290.9	9.3 LT
PG-11	1	TRUNK/DISTRIBUTION	1	DISTRIBUTION	1 + 308.3	9.7 LT
PG-12	1 1	RETURN DISTRIBUTION	1	DISTRIBUTION	1 + 348.5	7.5 LT
PG-13	--	---	--	DISTRIBUTION	1 + 410.6	7.6 LT
PG-14	1	DISTRIBUTION	1	DISTRIBUTION	1 + 458.6	6.8 FT

* NOTE: TELEPHONE & TELEVISION PEDESTALS WILL BE PROVIDED BY THE UTILITIES.

LIGHT POLE SUMMARY

POLE	STATION	OFFSET
L-1	1 + 010.780	8.440 LT
L-2	1 + 048.700	8.540 LT
L-3	1 + 078.800	8.540 LT
L-4	1 + 109.100	8.500 LT
L-5	1 + 146.520	8.550 LT
L-6	1 + 191.830	8.540 LT
L-7	1 + 228.120	8.540 LT
L-8	1 + 261.940	8.540 LT
L-9	1 + 307.000	8.530 LT
L-10	1 + 346.800	5.880 LT
L-11	1 + 380.000	5.880 LT
L-12	1 + 412.240	6.100 LT
L-13	1 + 458.438	6.100 LT

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

STATUS	DATE PRINTED	
3/98	⚠ NIC	TSM
DATE	REVISIONS	BY

STATE OF ALASKA 49th T. S. McLAUGHLIN EE 8499 REGISTERED PROFESSIONAL ENGINEER

HAIGHT & McLAUGHLIN, INC.
CONSULTING ENGINEERS
418 Harris Street, Juneau, Alaska 99801 (907) 586-9788

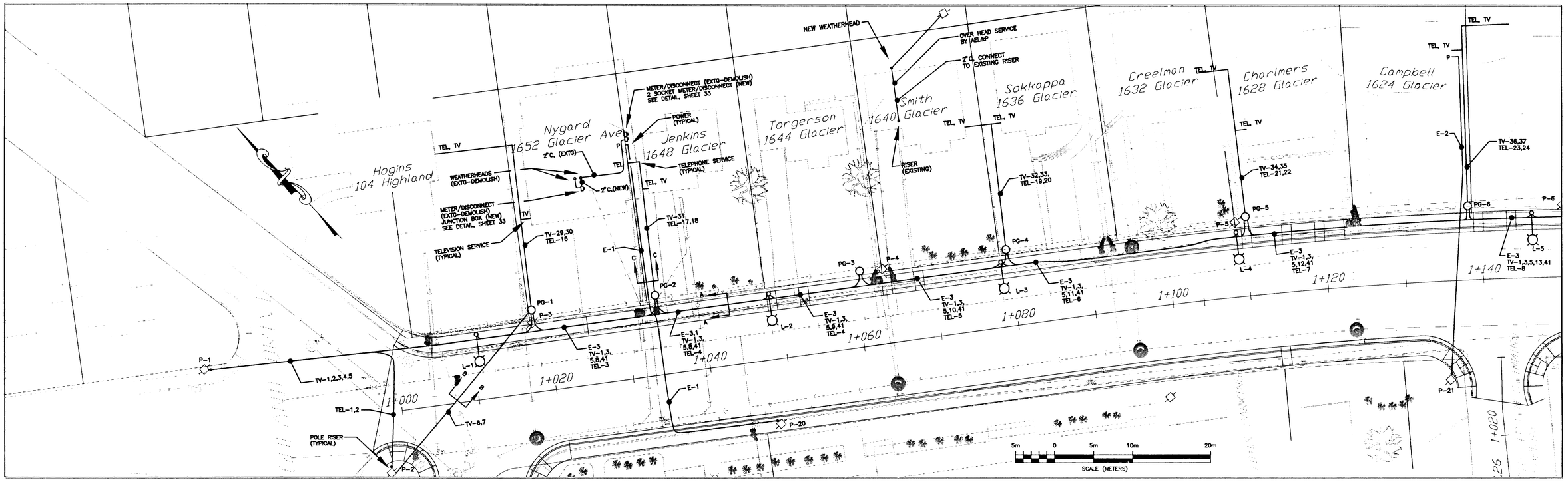
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CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

GLACIER & WILLOUGHBY AVES.
UTILITY RECONSTRUCTION
CONTRACT NO. E96-108

ELECTRICAL PLANS
CONDUIT & CONDUCTOR,
PEDESTAL GROUP & LIGHT POLE
SUMMARY TABLES

SHEET NO. 37 OF 97



LEGEND

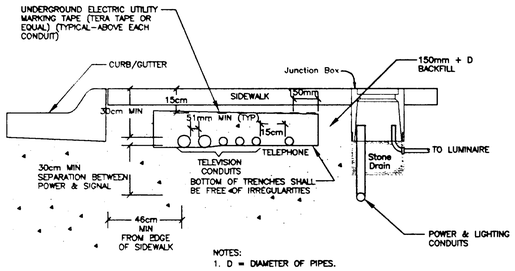
P-X — TELEPHONE OR POWER POLE WITH RISER (EXISTING, UNLESS OTHERWISE NOTED

L-X — POLE MOUNTED LUMINAIRE & JUNCTION BOX (TYPE I) (ELECTROLIER FURNISHED BY CBJ)

PG-X — PEDESTAL GROUP

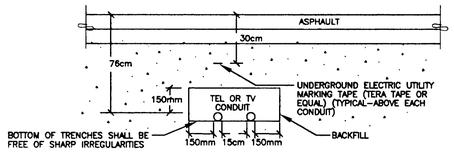
GENERAL NOTES (ALL SHEETS):

1. REFER TO STATE OF ALASKA STANDARD DRAWINGS MANUAL FOR ALL DETAILS NOT SHOWN IN PLANS.
2. RIGID NONMETALLIC CONDUIT MAY BE USED FOR ALL UNDERGROUND RUNS.
3. TELEPHONE AND TELEVISION PEDESTALS WILL BE PROVIDED BY THE UTILITIES.
4. CONDUITS MAY REQUIRE ROUTING UNDER OR OVER EXISTING OR NEW CULVERTS, STORM DRAINS, OR OTHER UNDERGROUND UTILITIES WITH ADDITIONAL "T"s AND GRAVEL DRAINS AS DIRECTED BY THE ENGINEER.



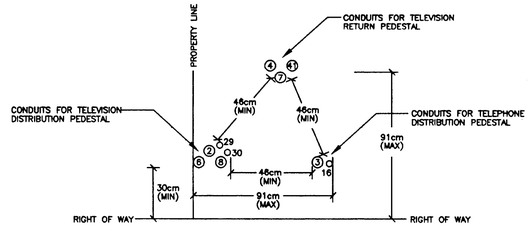
NOTES:
1. D = DIAMETER OF PIPES.
   BACKFILL SHALL BE SELECT MATERIAL B OR USABLE
2. EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. ALL OTHER TRENCHING & BACKFILL SHALL MEET CIVIL DRAWING REQUIREMENTS.
3. ALL TELE, TV, & ELEC CONDUIT TRENCHING AND BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION A–A – CONDUITS UNDER SIDEWALK (TYPICAL)



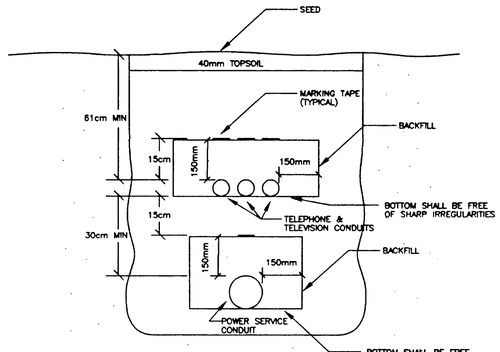
NOTE:
1. IF POWER & SIGNAL CONDUITS ARE LOCATED IN THE SAME TRENCH SEPARATE THEM BY 30cm MINIMUM.
2. BACKFILL SHALL BE SELECT MATERIAL B OR USABLE EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. ALL OTHER TRENCHING AND BACKFILL SHALL MEET CIVIL DRAWING REQUIREMENTS.
3. ALL TELE, TV, & ELEC CONDUIT TRENCHING AND BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION B–B – CONDUITS UNDER STREET (TYPICAL)



NOTES:
1. THIS DETAIL SHOWS LOCATION GUIDELINES FOR CONDUIT STUB-UPS.

PEDESTAL GROUP DETAIL



NOTE:
1. BACKFILL SHALL BE SELECT MATERIAL B OR USABLE EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. FOR REMAINING BACKFILL USE, PREVIOUS SOIL AND TOP WITH 40mm TOPSOIL TO MATCH LAWNS.

ALL TELE, TV, & ELEC CONDUIT TRENCHING & BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION C–C – SERVICE ENTRANCE CONDUITS (TYPICAL)

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

STATUS	DATE PRINTED	
3/98	⚠ NIC	TSM
DATE	REVISIONS	BY

STATE OF ALASKA — 49th — T.S. McLAUGHLIN — EE 8499 — REGISTERED PROFESSIONAL ENGINEER

HAIGHT & McLAUGHLIN, INC.
CONSULTING ENGINEERS
418 Harris Street, Juneau, Alaska 99801 (907) 586-9788

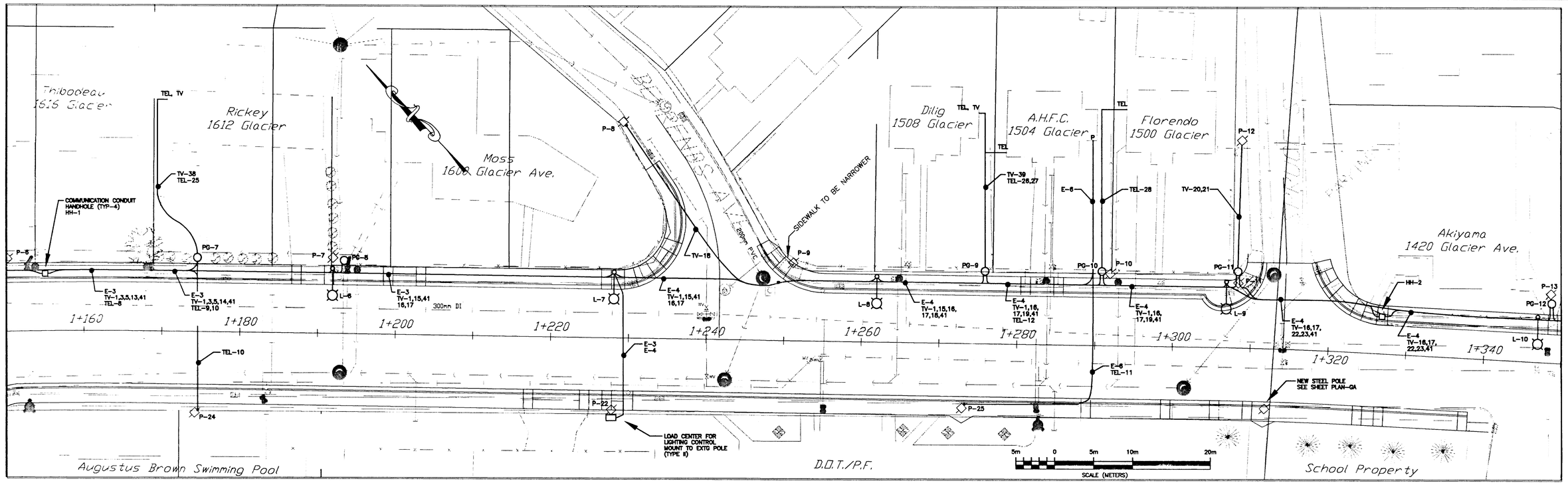
DRAWN BY: SPS	DESIGNED BY: TSM	CHECKED BY: TSM	DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

GLACIER & WILLOUGHBY AVES.
UTILITY RECONSTRUCTION
CONTRACT NO. E96-108

ELECTRICAL PLANS
BOP TO STA "0" 1+145
LEGEND &
UNDERGROUND CONDUIT DETAILS

SHEET NO. 38 OF 97

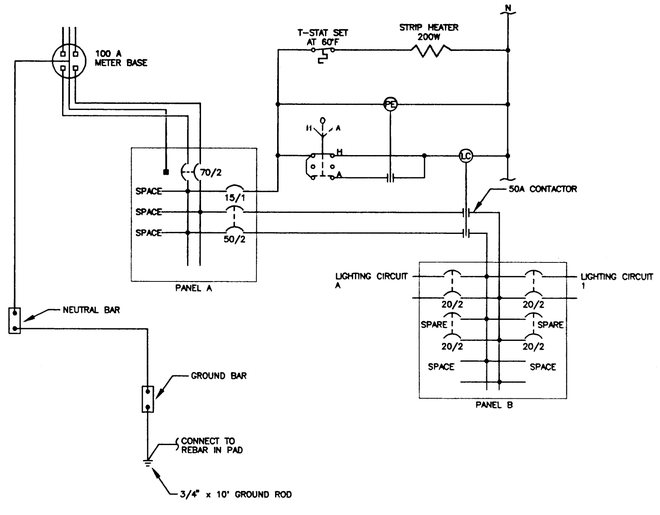


PANEL A	SIZE	VOLTS/PHASE			MAIN	LOCATION	MOUNT
	100 AMP	240/480V, 1ø			100 A		

CKT NO	DESCRIPTION	BREAKER AMP/POLE	KVA CKT	KVA AØ	KVA BØ	KVA CKT	BREAKER AMP/POLE	DESCRIPTION	CKT NO
1	SPACE		0.0	0.2		0.1	15/1	CONTROL POWER	2
3	SPACE		0.0		1.8	7.2	60/3	PANEL B	4
5	SPACE			1.9		7.2	---	---	6
TOTAL CONNECTED LOAD = 4.0 KVA / 18 AMPS				2.1	1.9				

PANEL B	SIZE	VOLTS/PHASE			MAIN	LOCATION	MOUNT
	100 AMP	240/480V, 1ø			LUGS ONLY		

CKT NO	DESCRIPTION		BREAKER AMP/POLE	KVA CKT	KVA AØ	KVA BØ	KVA CKT	BREAKER AMP/POLE	DESCRIPTION		CKT NO
1	A (HIGHLAND TO BEHRENDS)	LTG	20/2	1.0	1.9		0.9	20/2	B (BEHRENDS TO 12TH ST.)	LTG	2
3	---		---	1.0		1.9	0.9	---	---		4
5	SPARE		20/2	0.0	0.0		0.0	20/2	SPARE		6
7	---		---	0.0		0.0	0.0	---	---		8
9	SPACE			0.0	0.0		0.0		SPACE		10
11	SPACE			0.0		0.0	0.0		SPACE		12
TOTAL CONNECTED LOAD = 3.8 KVA / 16 AMPS					1.9	1.9					



LOAD CENTER SCHEMATIC DIAGRAM

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

STATUS	DATE PRINTED	
3/98	⚠ NIC	TSM
DATE	REVISIONS	BY

STATE OF ALASKA 49th T.S. McLAUGHLIN EE 8499 REGISTERED PROFESSIONAL ENGINEER

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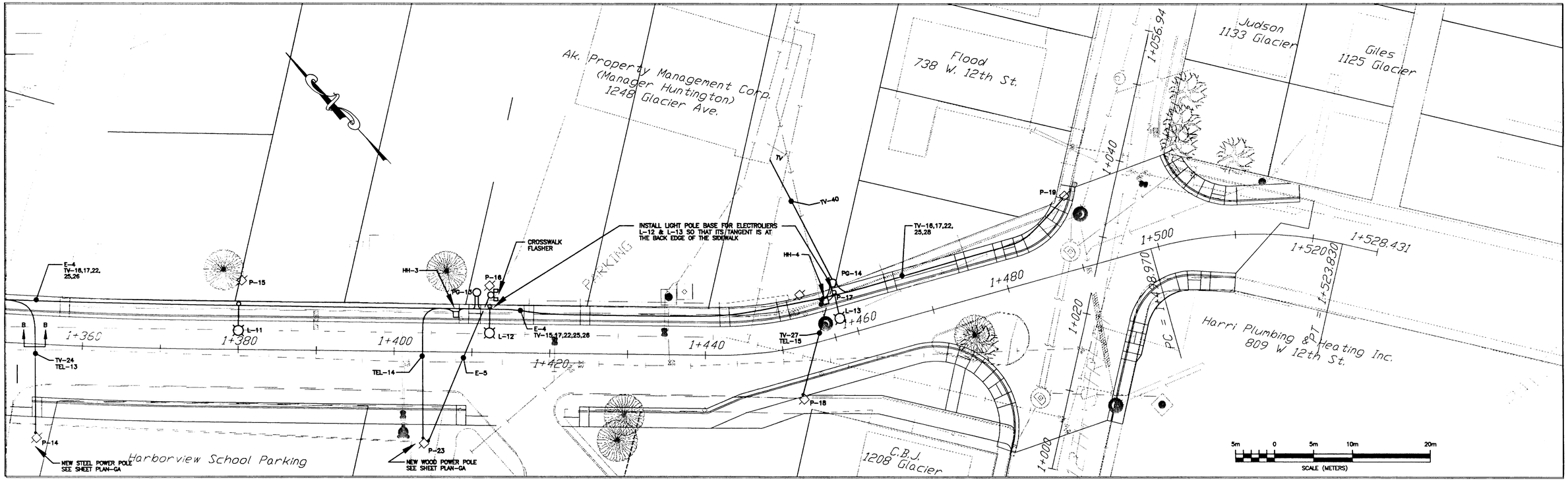
DRAWN BY: SPS | DESIGNED BY: TSM | CHECKED BY: TSM | DATE: MARCH 1998

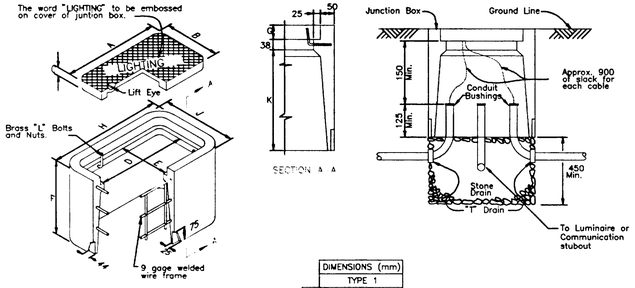
CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

GLACIER & WILLOUGHBY AVES.
UTILITY RECONSTRUCTION
CONTRACT NO. E96-108

ELECTRICAL PLANS
STA. "0" 1+145 TO STA. "0" 1+340
LOAD CENTER SCHEM DIAGRAM
& SUMMARY TABLES

SHEET NO. 39 OF 97

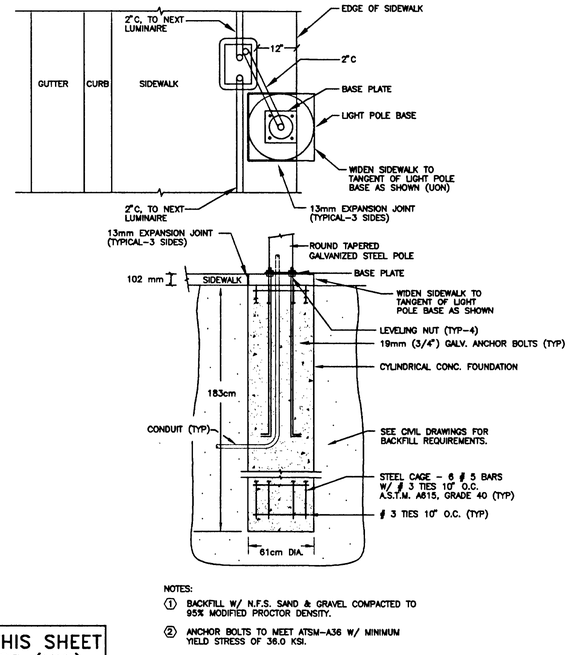




DIMENSIONS (mm)	TYPE 1
A	380
B	255
C	44
D	340
E	215
F	305
G	44
H	495
J	370
K	225

NOTES:
1. PROVIDE TYPE 1 JUCTION BOXES FOR ALL NEW POLE MOUNTED LUMINAIRES.
2. PROVIDE TYPE 1 JUCTION BOXES FOR COMMUNICTION CONDUITS AS SHOWN.

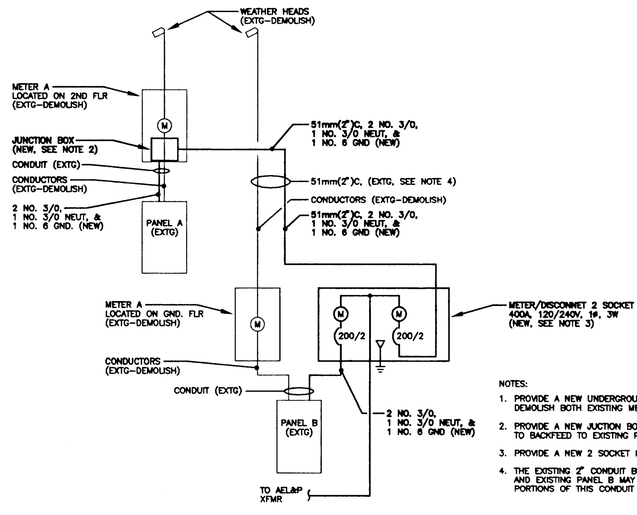
TYPE I JUNCTION BOX DETAIL



NOTES:
① BACKFILL W/ N.F.S. SAND & GRAVEL COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
② ANCHOR BOLTS TO MEET ATSM-A36 W/ MINIMUM YIELD STRESS OF 36.0 KSI.

LIGHT POLE BASE DETAIL

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)



NOTES:
1. PROVIDE A NEW UNDERGROUND SERVICE FOR 1652 GLACIER AVE. DEMOLISH BOTH EXISTING METER BASES AND WEATHERHEADS.
2. PROVIDE A NEW JUCTION BOX IN PLACE OF EXISTING METER A TO BACKFEED TO EXISTING PANEL A.
3. PROVIDE A NEW 2 SOCKET METER/DISCONNECT, AS SHOWN.
4. THE EXISTING 2" CONDUIT BETWEEN THE EXISTING WEATHERHEAD AND EXISTING PANEL B MAY BE REUSED. DEMOLISH UNUSED PORTIONS OF THIS CONDUIT AND THE WEATHERHEAD.

1652 GLACIER AVE - NEW SERVICE

STATUS	DATE PRINTED	
3/98	⚠ NIC	TSM
DATE	REVISIONS	BY

STATE OF ALASKA 49th T.S. McLAUGHLIN EE 8499 REGISTERED PROFESSIONAL ENGINEER

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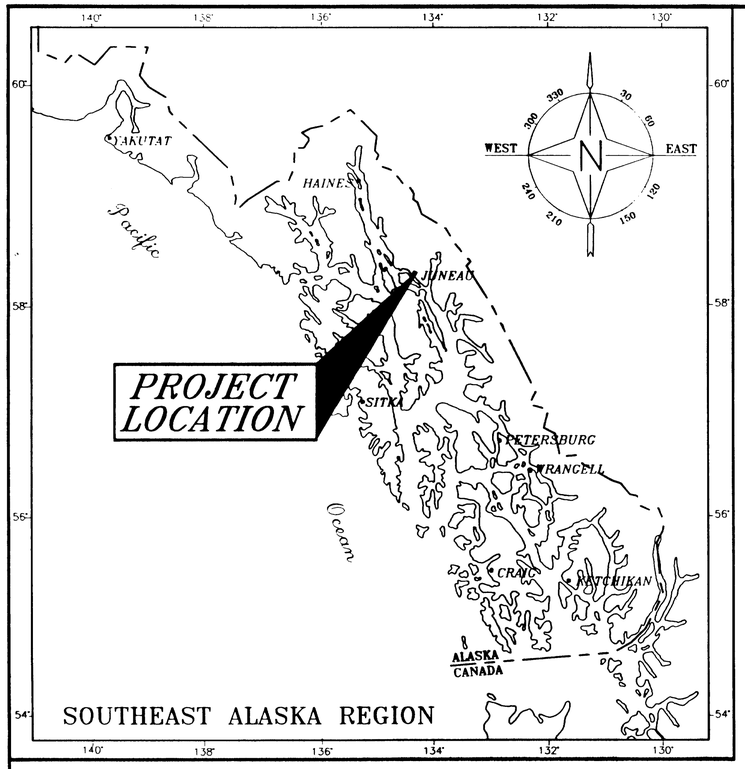
DRAWN BY: SPS | DESIGNED BY: TSM | CHECKED BY: TSM | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

GLACIER & WILLOUGHBY AVES.
UTILITY RECONSTRUCTION
CONTRACT NO. E96-108

ELECTRICAL PLANS
STA. "0" 1+340 TO EOP
LIGHT POLE BASE DETAIL
& JUNCTION BOX DETAIL

SHEET NO.
40
OF
97



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU, ALASKA

WILLOUGHBY & GLACIER AVENUE RECONSTRUCTION PHASE II

STP-000S(149)
PROJECT NO. 71463

INDEX OF SHEETS	
SHEET NO.	***DESCRIPTION***
	ROADWAY PLANS
41	TITLE SHEET
42	TYPICAL SECTION
43	ESTIMATE OF QUANTITIES
44-45	SUMMARY OF QUANTITIES
46-51	PLAN & PROFILES
52-55	DRAINAGE FACILITIES
56-58	TRAFFIC CONTROL PLAN
59-61	SIGNING AND STRIPING PLANS
62	SIGN SUMMARY
63-71	APPROACH PLANS & SPECIAL DETAILS
72-74	SIDEWALK AND RAILING DETAILS AND DRIVEWAY DETAILS
75-76	MISCELLANEOUS DETAILS
	CBJ UTILITY PLANS
77-86	WATER AND SEWER - PLANS AND DETAILS
87-97	ELECTRICAL PLANS AND DETAILS

DESIGN DESIGNATION

STA. "0" 1+519.28 TO STA. "0" 2+520.64

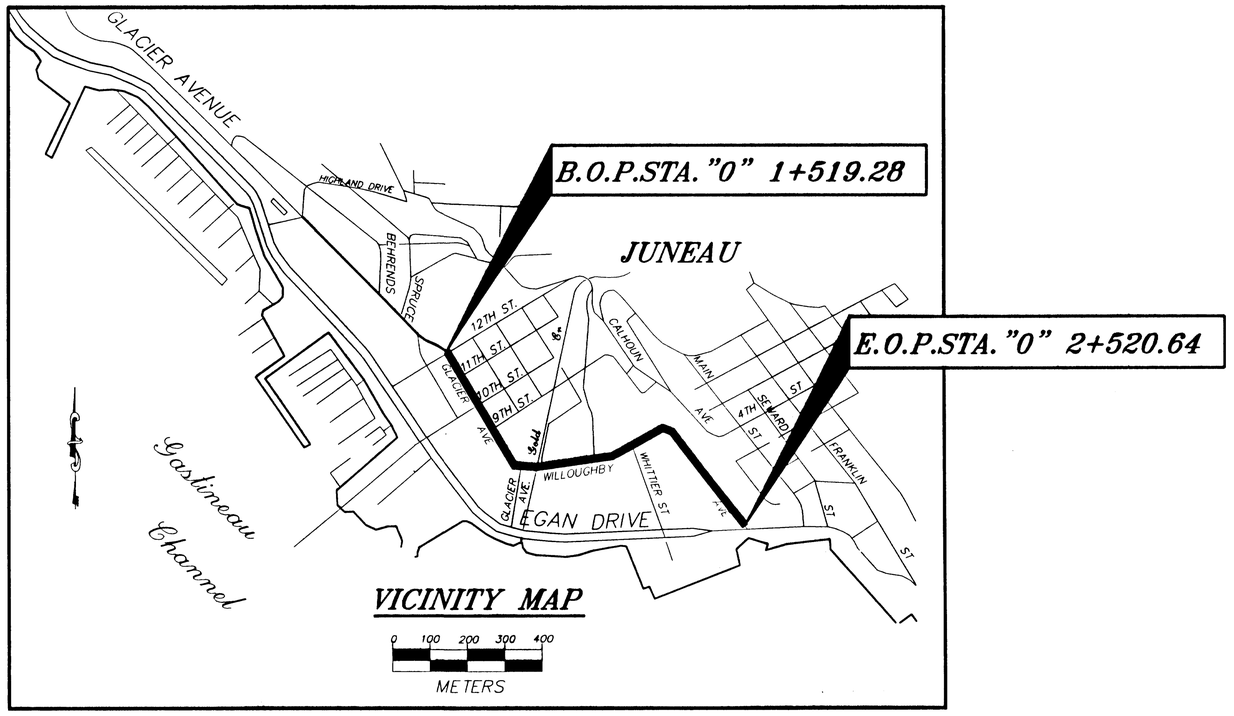
ADT 1996 = 7600
ADT 2016 = 10200
DHV 12.6% = 1300
% T = 3.4
DESIGN SPEED = 50 km/H
DESIGN LANE EAL = 950,000

PROJECT SUMMARY

LENGTH OF PROJECT = 1001.36 m
LENGTH OF PAVING = 1001.36 m
WIDTH OF PAVING =11.28 m TO 17.80 m

CDS ROUTE 296015

BEGINING MILE = 0.49
ENDING MILE = 1.15



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

APPROVED

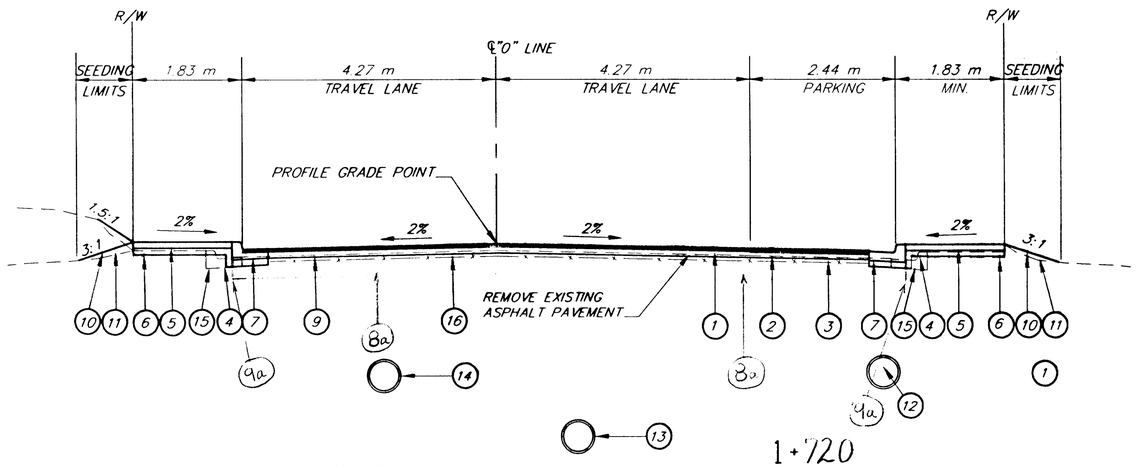
_____ Date _____
Regional Preconstruction Engineer

APPROVED

_____ Date _____
Director, S.E. Region

PROJECT NUMBER: 71463	ENGINEER'S SEAL
DATE: JAN. 1998	STATE OF ALASKA David D. Saltiver CE-8307
SHEET 41 OF 97	3/24/98

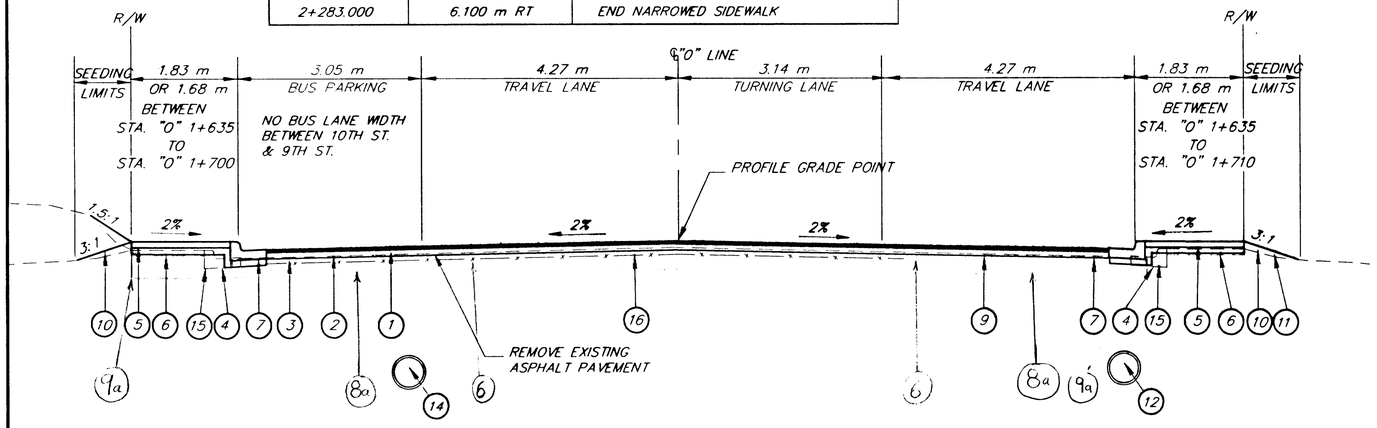
P: \JNU\71463\DR\MTBKPHS2 P: -LIB\-PLOT\MPLOTCP(1) OR MPLOTH.PCP(2)



STA."0" 1+519.279 TO STA."0" ~~1+635~~ 1+720

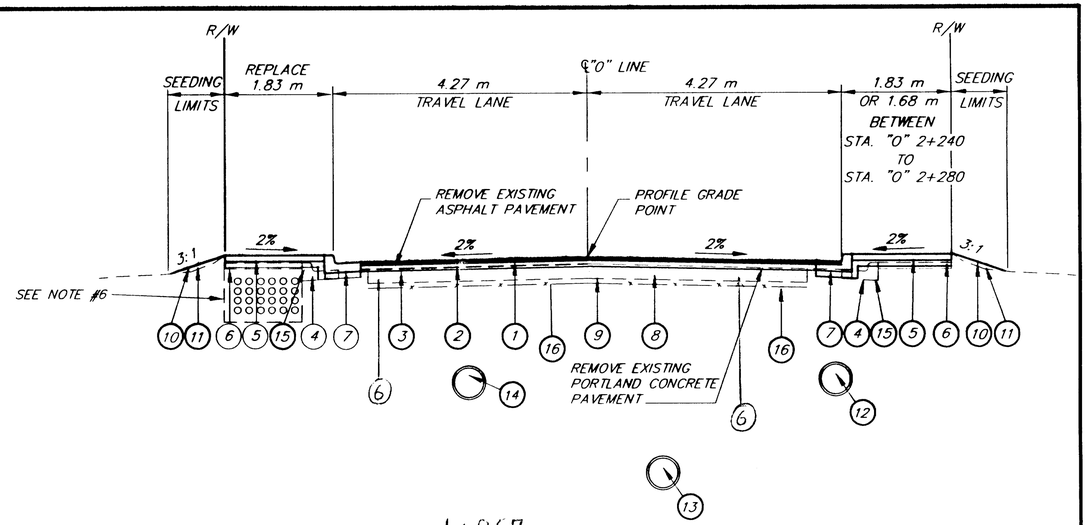
GLACIER AVENUE – 12TH STREET TO 10TH STREET

LOCATION OF NARROWED SIDEWALK		
STATION ("0" LINE)	OFFSET (BACK OF SIDEWALK)	REMARKS
1+875.087	6.100 m RT	BEGIN NARROWED SIDEWALK
1+882.965	6.000 m RT	ANGLE POINT
1+890.884	6.100 m RT	END NARROWED SIDEWALK
1+985.276	6.100 m LT	BEGIN NARROWED SIDEWALK
1+993.702	5.535 m LT	ANGLE POINT
2+006.058	6.100 m LT	END NARROWED SIDEWALK
2+256.136	6.100 m RT	BEGIN NARROWED SIDEWALK
2+270.000	5.922 m RT	ANGLE POINT
2+283.000	5.904 m RT	ANGLE POINT
2+283.000	6.100 m RT	END NARROWED SIDEWALK



1+720 STA."0" 1+635 TO STA."0" 1+830 1+854

GLACIER AVENUE – 10TH STREET TO WILLOUGHBY AVENUE



STA."0" ~~1+830~~ 1+867 TO STA."0" 2+520.645

WILLOUGHBY AVENUE–GLACIER AVENUE TO EGAN DRIVE

LEGEND

1. 50mm ASPHALT CONCRETE PAVEMENT
2. 100mm ASPHALT TREATED BASE
3. TACK COAT (BETWEEN EACH LAYER OF PAVEMENT)
4. REMOVE EXISTING CURB, GUTTER AND SIDEWALK
5. 100mm CONCRETE SIDEWALK – (CBJ DRAWING 111–A)
6. 50 MIN 100mm CRUSHED AGGREGATE BASE COURSE (D-1)
7. CONCRETE CURB AND GUTTER (CBJ DRAWING 111–A)
8. SUBBASE GRADING "E" (DEPTH VARIES)
9. EXCAVATION LIMITS (SEE NOTE 5)
10. 50mm TOPSOIL OR 50mm ASPHALT WHERE APPLICABLE
11. USEABLE UNCLASSIFIED EXCAVATION
12. 460mm STORM DRAIN CULVERT (FOR TRENCH DETAIL, SEE SHEET 5)
13. 200mm SEWER MAIN (FOR TRENCH DETAIL, SEE CBJ DRAWING 125A)
14. 300mm WATER MAIN (FOR TRENCH DETAIL, SEE CBJ DRAWING 125A)
15. VOIDS LEFT BY THE REMOVAL OF STRUCTURES, CONCRETE PAVEMENT, CURB & GUTTER AND SIDEWALK SHALL BE BACKFILLED WITH SUBBASE, GRADING 'E'
16. GEOTEXTILE, SEPARATION (SEE NOTE # 7)

(8a) SUBBASE GRADING E

(9a) EXTEND EXCAVATION LIMITS

GENERAL NOTES

1. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
2. STORM INLET LOCATIONS AND ELEVATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
3. CULVERT LENGHTS AND LOCATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR FIELD REVISIONS.
4. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND NEED TO BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
5. ALL UNUSABLE EXCAVATION SHALL BE PLACED OUTSIDE THE PROJECT LIMITS AT A LOCATION PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. THERE IS AN EXISTING UTILIDOR UNDER THE SIDEWALK BETWEEN STATION "0" 1+910 LEFT AND STATION "0" 2+210 LEFT. SEE SECTION 1.08–1.04. EXISTING UTILIDOR WILL BE REMOVED BY AEL&P. SIDEWALK AREA WILL BE TEMPORARILY PAVED. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE WALKING SURFACE.
7. CONTRACTOR MAY ENCOUNTER LOOSE OR OPEN GRADED TYPE OF MATERIAL SUCH AS AJ–ROCKS DURING CONSTRUCTION. IN THIS AREAS, GEOTEXTILE FABRIC SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.
8. CONTRACTOR MAY ENCOUNTER WOOD TRESTLES OR WOOD PILINGS ALONG WILLOUGHBY AVENUE. THESE ITEMS SHALL BE REMOVED A MINIMUM OF 600mm BELOW FINISHED GRADE. WOOD TRESTLES OR PILINGS ENCOUNTERED DURING PIPE EXCAVATION SHALL BE REMOVED A MINIMUM OF 300mm BELOW PIPE INVERT.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\MTYPSEC2		
PLOT: P:\–LIB\–PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II — ALASKA
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463
TYPICAL SECTIONS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 42 OF 97

STATE OF ALASKA — David D. Saldivar CE-8307 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	DOT-PF QUANTITY	CBJ UTILITIES	TOTAL
120(1)	DBE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D.		ALL REQ'D.
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LUMP SUM	ALL REQ'D.		ALL REQ'D.
202(2)	REMOVAL OF PAVEMENT	SQUARE METER	11710		11710
202(3)	REMOVAL OF SIDEWALK	SQUARE METER	3050		3050
202(4)	REMOVAL OF CULVERT PIPE	METER	700		700
202(8)	REMOVAL OF INLETS	EACH	37		37
202(9)	REMOVAL OF CURB AND GUTTER	METER	2000		2000
202(13)	REMOVAL OF WATER PIPE	LUMP SUM		ALL REQ'D.	ALL REQ'D.
202(14)	REMOVAL OF SEWER MANHOLES	EACH		17	17
202(15)	REMOVAL OF STORM MANHOLES	EACH	1.0		1.0
202(16)	REMOVAL OF PORTLAND CONCRETE PAVEMENT	SQUARE METER	4650		4650
203(3)	UNCLASSIFIED EXCAVATION	CUBIC METER	2000		2000
204(2)	**IMPORTED BACKFILL**	**CUBIC METER**	**600**	**600**	**1200**
301(1)	CRUSHED AGGREGATE BASE COURSE	MEGAGRAM	1200		1200
304(1)	SUBBASE, GRADING "E"	MEGAGRAM	4000	800	4800
306(1)	ASPHALT TREATED BASE COURSE	MEGAGRAM	2850		2850
401(1)	ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS A	MEGAGRAM	1450		1450
401(2)	PG 58-28 ASPHALT CEMENT	MEGAGRAM	201		201
402(2)	STE-1 ASPHALT FOR TACK COAT	MEGAGRAM	5		5
508(1)	WATERPROOFING MEMBRANE FOR GOLD CREEK BRIDGE	LUMP SUM	ALL REQ'D.		ALL REQ'D.
512(1)	ROCKERY WALL	SQ. METER	9.0		9.0
603(17-300)	300mm CORRUGATED POLYETHYLENE PIPE	METER	24.76		24.76
603(17-450)	450mm CORRUGATED POLYETHYLENE PIPE	METER	1,160.5		1,160.5
603(23)	**SADDLE TEE FOR ROOF DRAIN STUBOUT**	**EACH**	**27**		**27**
603(24)	150mm ROOF-DRAIN STUBOUT	METER	160		160
604(1)	STORM SEWER MANHOLE	EACH	19		19
604(4)	ADJUST EXISTING MANHOLE	EACH	25	**2**	27
604(5A)	INLET, TYPE A	EACH	27		27
604(5C)	INLET, TYPE C	EACH	3		3
607(4)	RECONSTRUCTED FENCE	METER	10		10
608(6)	REINFORCED CONCRETE SIDEWALK	SQUARE METER	3400		3400
608(9)	**COLORED CONCRETE SIDEWALK**	**SQUARE METER**	**61**		**61**
609(1)	**CURB, TYPE I**	**METER**	**30**		**30**
609(7)	REINFORCED CURB AND GUTTER, TYPE I	METER	2050		2050
614(1)	SURVEY MONUMENTS	EACH	14		14
614(2)	MONUMENT CASES	EACH	14		14
615(1)	STANDARD SIGNS	SQUARE METER	20.06		20.06
615(2)	**REMOVE AND RELOCATE EXISTING SIGNS**	**EACH**	**8**		**8**
618(1)	SEEDING	HECTARE	.25		.25
620(1)	TOPSOIL	SQUARE METER	200		200
625(1)	PIPE HAND RAIL	METER	12		12
626(1-200A)	200mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		258.12	258.12
626(1-200B)	200mm PVC SANITARY SEWER CONDUIT, (HP)	METER		66.22	66.22
626(1-250A)	250mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		86.20	86.20
626(1-250B)	250mm PVC SANITARY SEWER CONDUIT, (HP)	METER		100.44	100.44
626(1-300A)	300mm SANITARY SEWER CONDUIT, CLASS 50	METER		16.31	16.31
626(1-380A)	380mm PVC SANITARY SEWER CONDUIT, CLASS 50	METER		240.76	240.76
626(1-380B)	380mm PVC SANITARY SEWER CONDUIT, (HP)	METER		67.59	67.59
626(2-150)	150mm PVC SANITARY SEWER SERVICE CONNECTION	EACH		19	19
626(2-200)	200mm PVC SANITARY SEWER SERVICE CONNECTION	EACH		1	1
626(3)	SANITARY SEWER MANHOLE, TYPE 1	EACH		18	18
626(4)	**SANITARY SEWER DROP MANHOLE, TYPE 1**	**EACH**		**1**	**1**
626(5)	LOCATE SEWER SERVICES	LUMP SUM		ALL REQ'D.	ALL REQ'D.
626(6)	MANHOLE CONNECTION	EACH		3	3
626(7)	PLUG SEWER/STORM DRAIN PIPE	EACH		3	3
626(8)	PLUG SEWER SERVICES	LUMP SUM		ALL REQ'D.	ALL REQ'D.
626(9)	**SEWER LINE FIELD INVESTIGATION**	**CONTINGENT SUM**		**ALL REQ'D.**	**ALL REQ'D.**
627(1-200)	200mm DUCTILE IRON WATER CONDUIT, CLASS 52	METER		116.8	116.8
627(1-400)	400mm DUCTILE IRON WATER CONDUIT, CLASS 52	METER		934.85	934.85

ESTIMATE OF QUANTITIES (CONT.)

ITEM NO.	ITEM	UNIT	DOT-PF QUANTITY	CBJ UTILITIES	TOTAL
627(5)	**BOLLARD**	**EACH**		**6**	**6**
627(6)	FIRE HYDRANT INSTALLATION	EACH		8	8
627(7)	150 MM WATER METER VAULT TO A&P MARKET	LUMP SUM		ALL REQ'D	ALL REQ'D
627(8-25)	25 MM WATER SERVICE CONNECTION	EACH		12	12
627(8-50)	50 MM WATER SERVICE CONNECTION	EACH		6	6
627(8-150)	150mm DUCTILE IRON WATER SERVICE CONNECTION	EACH		19	19
627(9-400)	400mm BUTTERFLY VALVE	EACH		16	16
627(10)	50 mm VALVE	EACH		6	6
627(11)	150 mm & 200 mm GATE VALVE	EACH		28	28
627(12)	INSTALL VALVE BOX	EACH		2	2
627(13)	CAP EXISTING WATER MAIN	EACH		4	4
627(14)	GOLD CREEK BRIDGE WATER MAIN CROSSING	LUMP SUM		ALL REQ'D	ALL REQ'D
627(15)	**TAILRACE CROSSING**	**LUMP SUM**		**ALL REQ'D**	**ALL REQ'D**
630(1)	**GEOTEXTILE, SEPARATION**	**SQUAREMETER**	**5000**		**5000**
630(3)	**FILTER CLOTH**	**METER**	**600**	**800**	**1400**
635(2)	INSULATION BOARD	PER BOARD	63	150	213
639(1)	RESIDENCE DRIVEWAYS	EACH	1		1
639(2)	SERVICE DRIVEWAYS	EACH	38		38
639(3)	APPROACHES	EACH	11		11
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1)	EROSION & POLLUTION CONTROL	CONTINGENT SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
641(1A)	**EROSION & POLLUTION CONTROL ADMINISTRATION**	**LUMP SUM**	**ALL REQ'D.**		**ALL REQ'D.**
641(2)	TREATMENT OF CONTAMINATED WATER	KILOLITER	100	400	500
641(3)	STOCKING OF CONTAMINATED MATERIAL	CUBIC METER	100	300	400
641(4)	TREATMENT & DISPOSAL OF HAZARDOUS MATERIAL	CUBIC METER	100	300	400
641(5)	**TEMPORARY INLET SEDIMENT FILTER**	**EACH**	**52**		**52**
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
642(2)	THREE PERSON SURVEY PARTY	HOUR	20	15	35
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(3)	PERMANENT CONSTRUCTION SIGNING	LUMP SUM	ALL REQ'D.	ALL REQ'D.	ALL REQ'D.
643(4)	CONSTRUCTION SIGN	EACH PER DAY	1500	1000	2500
643(5)	TYPE II BARRICADE	EACH PER DAY	500	500	1000
643(6)	TYPE III BARRICADE	EACH PER DAY	500	500	1000
643(7)	TRAFFIC CONE	EACH PER DAY	6000	6000	12000
643(8)	DRUM	EACH PER DAY	1000	500	1500
643(13)	TEMPORARY PAVEMENT MARKING	KILOMETER	1		1
643(14)	FLAGGING	MAN-HOUR	1500	**2000**	**3500**
643(16)	STREET SWEEPING	HOUR	50	50	100
643(17)	WATERING	KILOLITER	200	100	300
643(23)	ROADWAY GRADING	HOUR	75	75	150
643(24)	**COORDINATION WITH AEL&P**	**LUMP SUM**		ALL REQ'D.	**ALL REQ'D.**
644(1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.		ALL REQ'D.
644(2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D.		ALL REQ'D.
644(6)	ENGINEERING TRANSPORTATION	LUMP SUM	ALL REQ'D.		ALL REQ'D.
645(1)	**TRAINING PROGRAM FOR 1 TRAINEE/APPRENTICE**	**LABOR HOUR**	**300**		**300**
661(6)	**RELOCATION OF EXISTING CONDUIT**	**CONTINGENT SUM**		**ALL REQ'D.**	**ALL REQ'D.**
670(9)	METHYL METHACRYLATE PAVEMENT MARKINGS	LUMP SUM	ALL REQ'D.		ALL REQ'D.

BASIS OF ESTIMATE

ITEM NO.	ITEM	QUANTITY
301(1)	CRUSHED AGGREGATE BASE COURSE	2.32 mg/m3 (1.96 TON/CY)
304(1)	SUBBASE, GRADING "E"	2.23 mg/m3 (1.85 TON/CY)
306(1)	ASPHALT TREATED BASE COURSE	2.48 kg/m2 per mm (115 lbs/SY/IN DEPTH)
401(1)	ASPHALT CONCRETE PAVEMENT	2.48 kg/m2 per mm (116 lbs/SY/IN DEPTH)
401(2)	PBA ASPHALT CEMENT	6% OF 401 4% OF 306(1)
402(2)	STE-1 ASPHALT FOR TACK COAT	363 l/m2, 923 l/Mg (0.08 GAL/SY, 240 GAL/TON)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MEST2
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
ESTIMATE OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A.J. STEININGER	SHEET 43 OF 97

STATE OF ALASKA — 9149 — David D. Saldivar CE-8107 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98

CURB CUT SUMMARY ****

"0" STATION AT MIDDLE OF CURB CUT	OFFSET** LEFT	OFFSET** RIGHT	CURB CUT TYPE	WIDTH OF DEPRESSED SIDEWALK	REMARKS
1+528.969	3.810		II	2.87 m	SERVICE DRIVEWAY
1+548.847	3.810		II	4.50 m	SERVICE DRIVEWAY
1+552.540		6.250	II	11.23 m	SERVICE DRIVEWAY
1+558.119	5.694		III	1.50 m	RAMP
1+568.680	5.419		III	1.50 m	RAMP
1+600.251	3.810		II	3.52 m	SERVICE DRIVEWAY
1+623.504		6.889	III	1.50 m	RAMP
1+631.275	4.885		V	3.00 m	RAMP
1+636.567	5.204		V	3.00 m	RAMP
1+647.744		9.185	III	1.50 m	RAMP
1+652.207	3.810		II	3.05 m	RESIDENCE DRIVEWAY
1+659.995	3.810		II	6.59 m	SERVICE DRIVEWAY
1+670.342	3.810		II	3.42 m	SERVICE DRIVEWAY
1+688.566	3.810		II	10.78 m *	SERVICE DRIVEWAY
1+696.950		6.950	I	1.50 m	RAMP
1+697.805	5.705		III	1.50 m *	RAMP
1+710.859	8.584		V	3.00 m	RAMP
1+740		6.950	II	35.70 m	SERVICE DRIVEWAY
1+767.378		6.950	II	5.31 m	SERVICE DRIVEWAY
1+778.812		6.950	II	10.22 m	SERVICE DRIVEWAY
1+793.516	7.829		IV	2.33 m	RAMP
1+799.915		6.950	II	11.68 m	SERVICE DRIVEWAY
1+802.105	7.829		IV	2.33 m	RAMP
1+823.962		11.040	II	4.89 m	SERVICE DRIVEWAY
1+830.152		15.541	III	1.50 m	RAMP
1+840.286		10.997	III	1.50 m	RAMP
1+873.211		3.810	II	6.822 m	SERVICE DRIVEWAY
1+898.526	6.181		III	1.52 m	RAMP
1+904.017		3.810	II	9.64 m *	SERVICE DRIVEWAY
1+911.186	4.858		III	1.50 m	RAMP
1+912.085		3.810	I	1.50 m *	RAMP
1+928.306	3.810		II	5.77 m	SERVICE DRIVEWAY
1+926.558		3.810	II	17.94 m *	SERVICE DRIVEWAY
1+946.495		3.810	II	9.02 m	SERVICE DRIVEWAY
1+962.297	3.810		II	15.99 m*	SERVICE DRIVEWAY
1+973.120		3.810	I	1.50 m*	RAMP
1+973.120	3.810		I	1.50 m*	RAMP
1+982.122		3.810	II	13.11 m*	SERVICE DRIVEWAY
1+983.264	3.810		II	14.77 m*	SERVICE DRIVEWAY
2+018.412		3.810	II	11.49 m	SERVICE DRIVEWAY
2+032.214	4.598		III	1.50 m	RAMP
2+039.910	4.417		III	1.50 m	RAMP
2+052.824		3.810	II	5.54 m	SERVICE DRIVEWAY
2+058	3.810		II	15.23 m	SERVICE DRIVEWAY DELETED
2+076.004		3.810	II	4.23 m	SERVICE DRIVEWAY
2+090.940		3.810	II	4.29 m	SERVICE DRIVEWAY
2+101	5.01		I		RESIDENCE DRIVEWAY
2+110	5.0		I		RESIDENCE DRIVEWAY
2+115.671		6.255	III	1.50 m	RAMP
2+134.112		5.389	V	1.50 m	RAMP, SEE SHT. 26 FOR DETAILS
2+137.023	4.440		IV	2.60 m	RAMP
2+144.635	4.440		IV	2.60 m	RAMP
2+161	4		—		SERVICE DRIVEWAY

CURB CUT SUMMARY ****

"0" STATION AT MIDDLE OF CURB CUT	OFFSET** LEFT	OFFSET** RIGHT	CURB CUT TYPE	WIDTH OF DEPRESSED SIDEWALK	REMARKS
2+218.188	4.713		V	1.50 m	RAMP, SEE SHT. 26 FOR DETAILS
2+226.473	5.112		V	1.50 m	RAMP, SEE SHT. 26 FOR DETAILS
2+245.990	3.810		II	3.00 m	SERVICE DRIVEWAY
2+276.061	3.810		II	7.33 m	SERVICE DRIVEWAY
2+276.228		3.810	II	12.94 m	SERVICE DRIVEWAY
2+291.374		3.810	II	9.10 m	SERVICE DRIVEWAY
2+326.410		3.810	II	8.53 m	SERVICE DRIVEWAY
2+328.483	5.553		II	9.28 m	SERVICE DRIVEWAY
2+349.826		3.810	II	19.90 m	SERVICE DRIVEWAY
2+394.031	6.250		I	1.50 m	RAMP
2+394.038		5.306	IV	3.07 m	RAMP
2+345		3.81			SERVICE DRIVEWAY
2+355		3.81			SERVICE DRIVEWAY
2+404.103		6.041	III	1.50 m	RAMP
2+430.008	5.639		II	8.43 m	SERVICE DRIVEWAY
2+443.365	3.810		II*	6.57 m	SERVICE DRIVEWAY
2+451.440	3.810		II*	3.63 m	SERVICE DRIVEWAY
2+471.125	3.810		II	4.85 m	SERVICE DRIVEWAY
2+482.348		3.810	II	4.27 m	SERVICE DRIVEWAY
2+498.274	3.810		II	9.75 m	SERVICE DRIVEWAY
2+520	X		III	1.50 m	RAMP
2+564		X			Ramp

UTILITY SUMMARY

"0" STATION AT ℄	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+561.833		8.199	ADJUST TELEPHONE MANHOLE ***
1+564.080		8.264	ADJUST ELECTRIC MANHOLE ***
1+569.489		5.002	ADJUST ELECTRIC MANHOLE ***
1+643.470		19.552	ADJUST VAULT LID ***
1+646.468		12.240	ADJUST TELEPHONE MANHOLE ***
1+647.443		11.046	ADJUST ELECTRIC MANHOLE ***
1+703.700		9.118	ADJUST TELEPHONE MANHOLE ***
1+705.413		8.719	ADJUST ELECTRIC MANHOLE ***
1+760.591		9.300	ADJUST TELEPHONE MANHOLE ***
1+762.316		8.986	ADJUST ELECTRIC MANHOLE ***
1+818.809		10.502	ADJUST TELEPHONE MANHOLE ***
1+992.835		6.301	ADJUST ELECTRICAL J-BOX ***
2+148.643		5.793	ADJUST TELEPHONE MANHOLE ***
2+317.188		5.410	ADJUST TELEPHONE MANHOLE ***
2+247.012		5.753	ADJUST TELEPHONE MANHOLE ***
2+355.450	7.418		ADJUST ELECTRIC MANHOLE ***
2+357.019	8.307		ADJUST TELEPHONE MANHOLE ***
2+294.102		6.141	ADJUST ELECTRICAL J-BOX ***
2+394.647		7.112	ADJUST ELECTRIC J-BOX ***
2+401.979	8.349		ADJUST ELECTRIC MANHOLE ***

SUMMARY DOES NOT INCLUDE SANITARY SEWER MANHOLE, SEE SHEET 77

APPROACH SUMMARY

"0" STATION AT ℄	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+563.079	X		ELEVENTH STREET
1+634.359	X	X	TENTH STREET
1+706.573	X		NINTH STREET
1+836.326		X	GLACIER AVE.
1+907.133	X		"D" STREET
2+036.281	X		CAPITOL AVENUE
2+124.144		X	WHITTIER STREET
2+140.525	X		WHITTIER STREET
2+222.528	X		VILLAGE STREET
2+398.950		X	WEST 3RD STREET

*** ADJUSTING MAY NOT BE REQUIRED IF SIDEWALK GRADE MATCHES. VERTICAL FACE OF CURB MAY BE REQUIRED TO BE ADJUSTED TO MATCH EXISTING LID ELEVATION OF UTILITY STRUCTURE.

**** CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER SO THAT THE WIDTH AND LOCATION OF DRIVEWAYS MATCH THE CONDITIONS AS STATED IN THE DRIVEWAY PERMITS. LOCATIONS AND WIDTHS AS SHOWN IN THE SUMMARY MAY NOT MATCH THE DRIVEWAY PERMITS.

NOTE: RAMP CONSTRUCTION SHALL BE INCIDENTAL TO ITEM 608, CONCRETE SIDEWALK

* DRIVEWAY WILL BE COMBINED WITH ADJACENT DRIVEWAY OR RAMP TO AVOID RAISING SIDEWALK BETWEEN DRIVEWAYS OR RAMP WHERE SPACE BETWEEN IS LESS THAN 5.18 m. (SEE PLANS)

** OFFSETS ARE TO THE FRONT EDGE OF THE MIDDLE OF RAMPS OR DRIVEWAYS.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\MSUM		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
SUMMARY OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 44 OF 97

STATE OF ALASKA — 49th — David D. Saldivar CE-8307 — REGISTERED PROFESSIONAL ENGINEER

REMOVAL OF EXISTING INLET SUMMARY

STATION "0"	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+558.97	6.84		–
1+567.60	7.03		–
			–
1+629.01	5.54		–
1+639.00	5.00		–
1+695.90	4.82		–
			–
1+719.90	7.38		–
1+719.90		7.38	–
1+798.42		7.81	
			–
1+809.26	31.26		–
1+812.18	7.32		–
1+896.84	4.32		–
1+921.70		4.34	–
1+933.49	4.30		–
1+947.50		4.12	–
1+961.74	4.92		–
1+971.87		4.65	–
1+981.13	9.95		–
1+992.78		4.72	–
1+992.88	3.96		–
			–
2+032.50	4.14		–
2+035.04		4.19	–
2+040.14	4.30		–
2+040.49	14.30		–
2+084.00	4.61		–
			–
2+170.32		8.77	–
2+195.50	4.58		–
			–
2+221.30	18.00		–
2+232.00		4.64	–
2+292.00	4.90		–
			–
2+321.50	4.65		–
2+340.00	6.79		–
2+380.70		5.97	–
2+393.50		5.45	–
			–
2+402.62		9.10	–
2+418.00	6.50		–
2+433.00		4.55	–
2+483.16	7.48		–

REMOVAL OF STRUCTURES & OBSTRUCTIONS SUMMARY

STATION	OFFSET LEFT	OFFSET RIGHT	DESCRIPTION OF ITEM TO BE REMOVED
1+521.735		8.734	REPLACE STEP & INSTALL RAILING
1+535.084		8.383	REMOVE SIGN POST POLES
1+542.542		8.391	REMOVE SIGN POST POLES
1+569.290	6.416		REMOVE SMALL CURB WALL AND REPLACE AT BACK OF SIDEWALK
1+779.472	8.160		REPLACE MAILBOX
1+780.227	8.160		REPLACE MAILBOX

NOTE:
FENCE REPLACEMENT & RESTORATION SHALL BE INCIDENTAL TO ITEM 607(4).

REMOVAL OF STORM SEWER MANHOLE SUMMARY

STATION	OFFSET LEFT	OFFSET RIGHT	REMARKS
1+768.52		5.85m	

MONUMENT & MONUMENT CASE INSTALLATION SUMMARY

"0" STATION	OFFSET	DESCRIPTION
"0" 1+523.83	℄	P.T.
"0" 1+722.737	℄	ANGLE POINT
"0" 1+809.814	℄	P.C.
"0" 1+851.119	℄	P.T.
"0" 1+888.166	℄	P.T.
"0" 1+938.166	℄	P.C.
"0" 2+019.314	℄	P.T.
"0" 2+042.449	℄	P.T.
"0" 2+104.666	℄	ANGLE POINT
"0" 2+202.960	℄	P.C.
"0" 2+224+482	℄	P.T.
"0" 2+334.212	℄	P.C.
"0" 2+425.165	℄	P.T.
"0" 2+500.000	℄	P.O.T.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\MSUM3		
PLOT: P:\–LIB\–PLOT\MPLOTF.PCP(1000) OR MPLOTH.PCP(2000)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

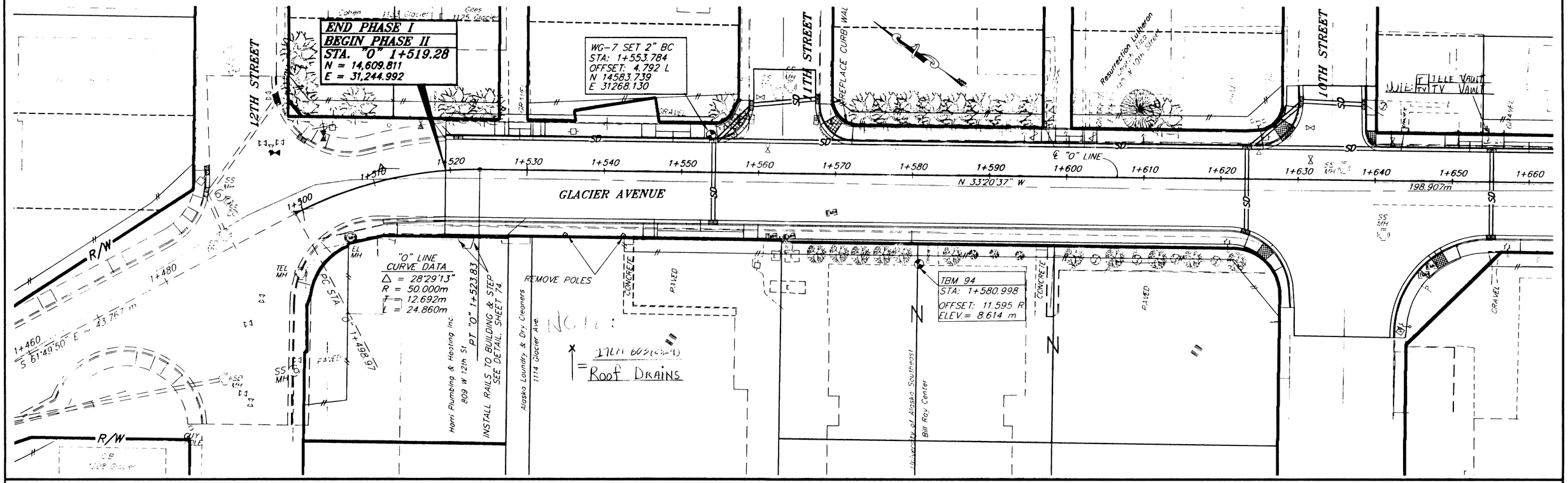
JUNEAU — ALASKA

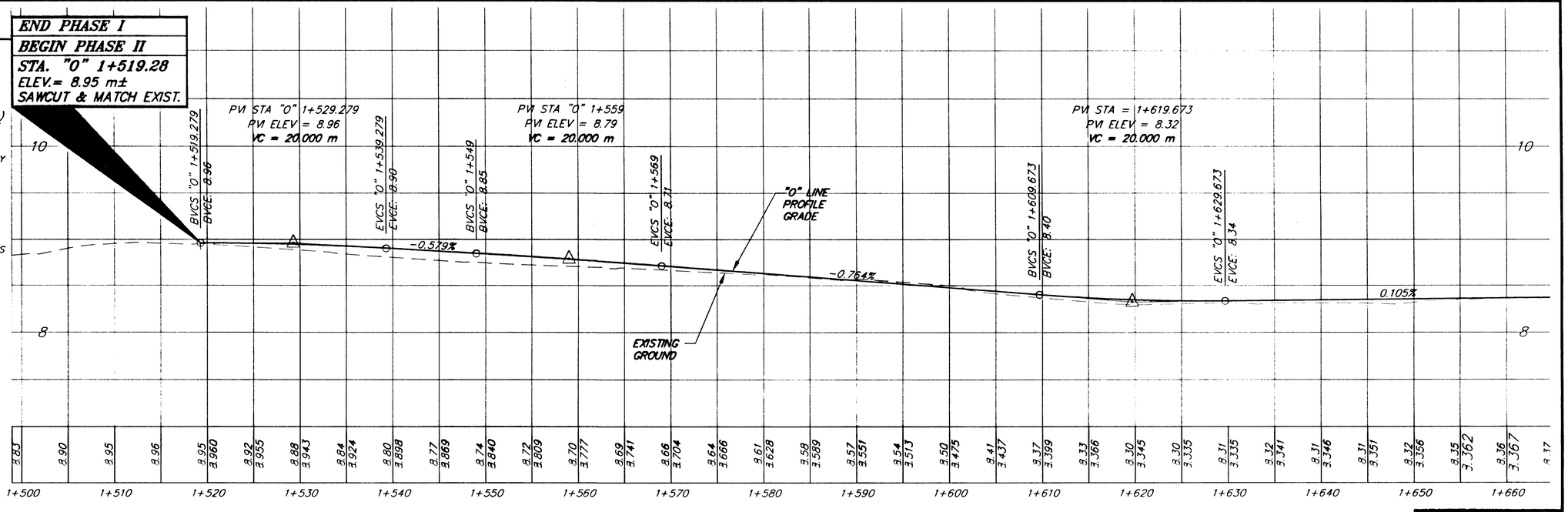
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION PHASE II
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463

SUMMARY OF QUANTITIES

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 45 OF 97

STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3-25-98





BASIS OF CONTROL

HORIZONTAL CONTROL

THE BASIS OF HORIZONTAL CONTROL FOR THIS PROJECT IS THE RECORD BEARING OF N 41d 23' 29"W FROM THE DOH BRASS CAP "CUT 1975" ON THE END OF THE BREAKWATER IN HARRIS HARBOR, NAD 27 ZONE 1 COORDINATES OF N 2363512.31,(720,400.066 m), E 2539204.19,(773,951.064 m) TO USACE SBC "TL-9", ON THE END OF THE BREAKWATER AT THE NORTH END OF AURORA HBR., NAD 27 COORDINATES OF N 2365823.09,(721,104.393 m)E 2337167.59,(712,370.178 m) AS DESCRIBED IN THE CONTROL SHEET FOR EGAN EXPRESSWAY CAPACITY PHOTO CONTROL PROJECT.

THE PROJECT BASIS OF BEARING IS THE BEARING OF N 32d41'29"W FROM DOT CONTROL POINT WG-6, (PROJECT COORDINATES OF N 14,341.950, E 31,423.304) A 75mm BRASS CAP MARKED "T&N" SET IN THE TRAFFIC ISLAND AT THE INTERSECTION OF GLACIER AVE & WILLOUGHBY AVE. AND DOT CONTROL CONTROL POINT WG-7, (PROJECT COORDINATES OF N 14,583.739, E 31,268.130) A 50mm BRASS CAP SET IN THE SIDEWALK AT THE NW CORNER OF 11th AND GLACIER.

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS NOS BM 19, (STAMPED "US COAST GUARD SURVEY") SET IN THE NORTH CORNER OF THE SIDEWALK ON THE NORTH SIDE OF THE SUB PORT BUILDING 5.79 m NORTH OF THE NORTH CORNER OF THE BUILDING, WITH A PUBLISHED 1975 ELEVATION OF 24.58' (7.492m) ABOVE MLLW. THE ELEVATION WAS TRANSFERRED WITH A LEICA NI2000 ELECTRIC LEVEL TO TBM WG-96.

THE PROJECT BASIS OF VERTICAL CONTROL IS TBM WG-94, A 50mm ALUMINUM CAP SET IN THE CONCRETE SIDEWALK AT NORTH ENTRANCE TO U.A.S. BILL RAY BUILDING. THE TBM IS AT THE BUILDING LINE AND 0.2 m TO THE EDGE OF THE SIDEWALK. WG-94 HAS AN ELEVATION OF 8.614 m ABOVE MLLW.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3-26-98

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN1, 50PROF1, TITLE1		
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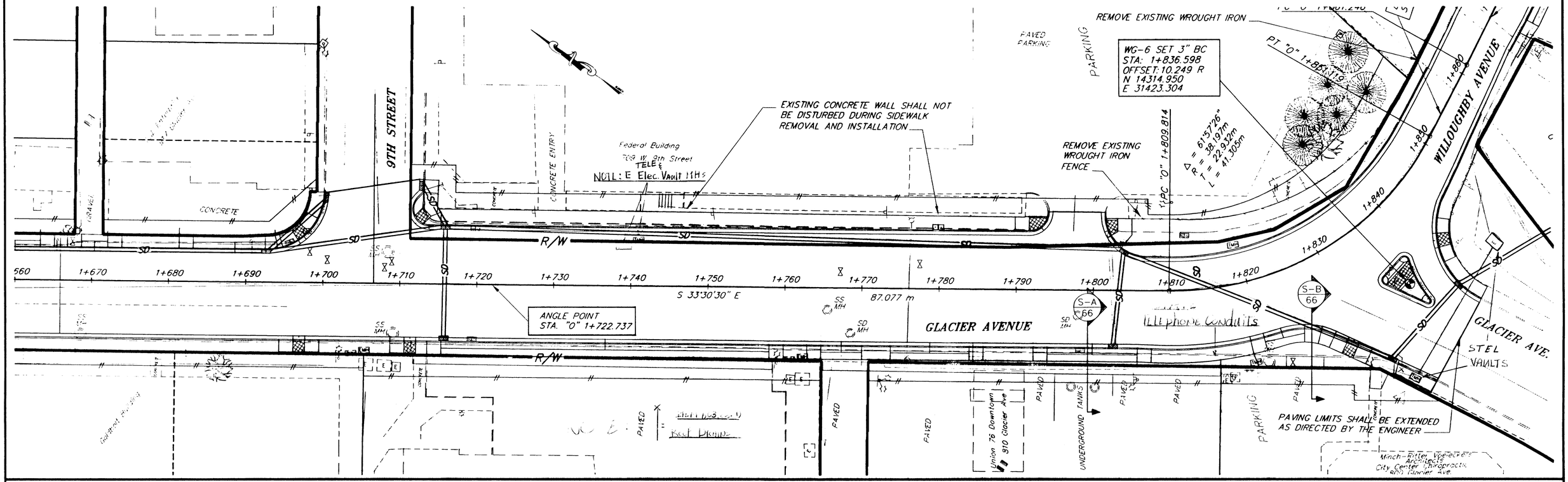
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

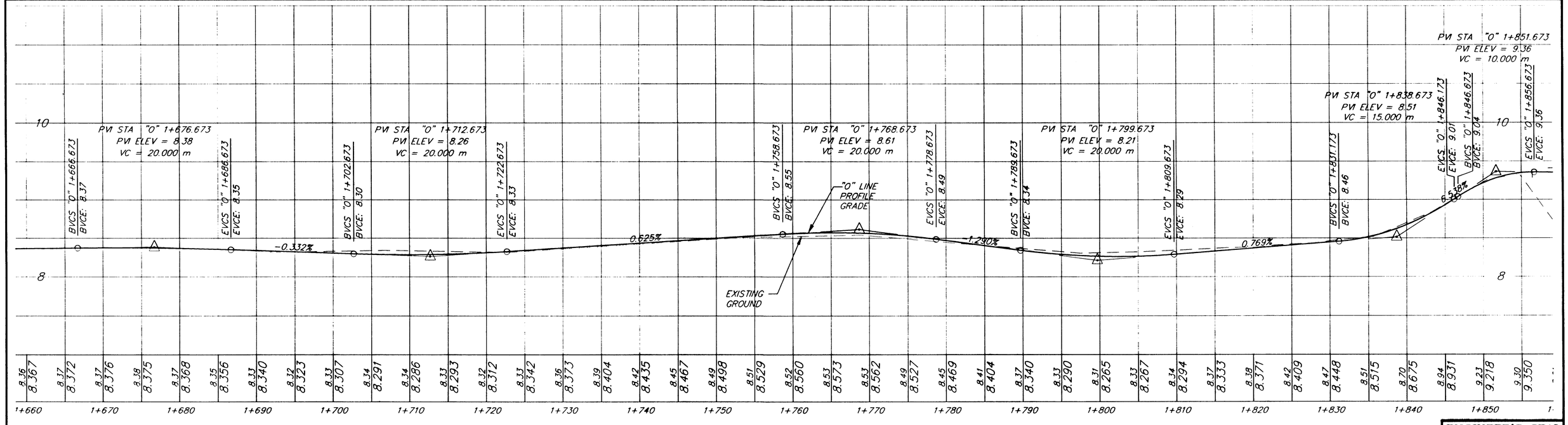
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

B.O.P. STA "0" 1+518 TO "0" 1+660

PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEETS 46 OF 97





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
Doyle D. Siddhar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3-25-98

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN2, 50PROF2, TITLE2		
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WLCAD5		
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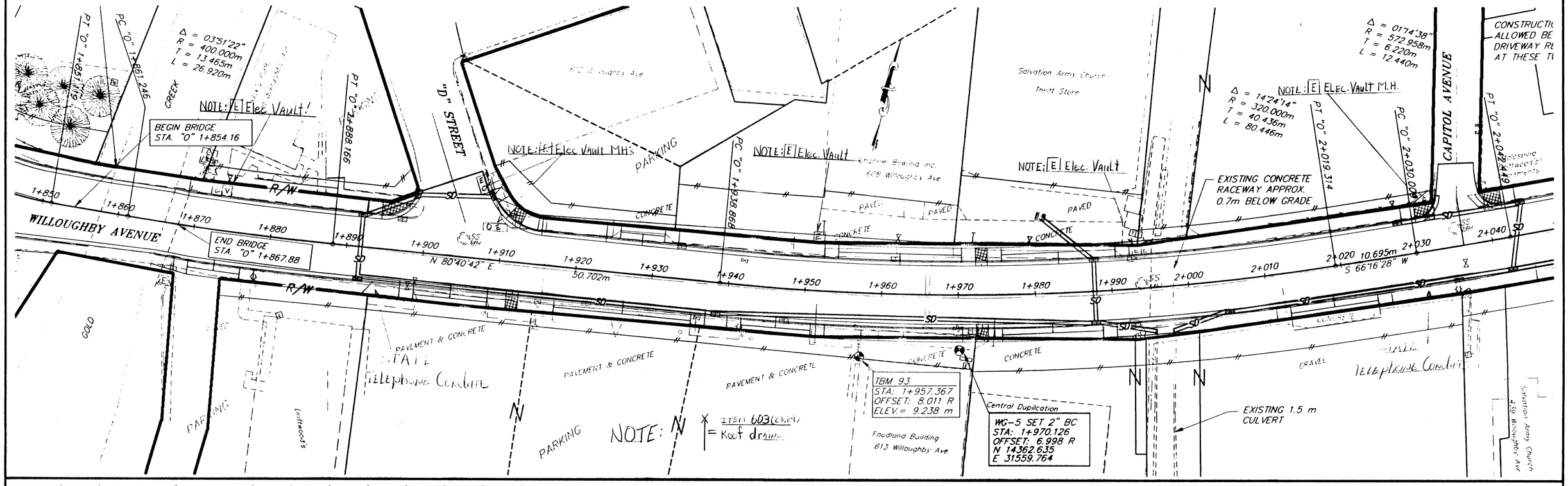
RECORD OF REVISIONS

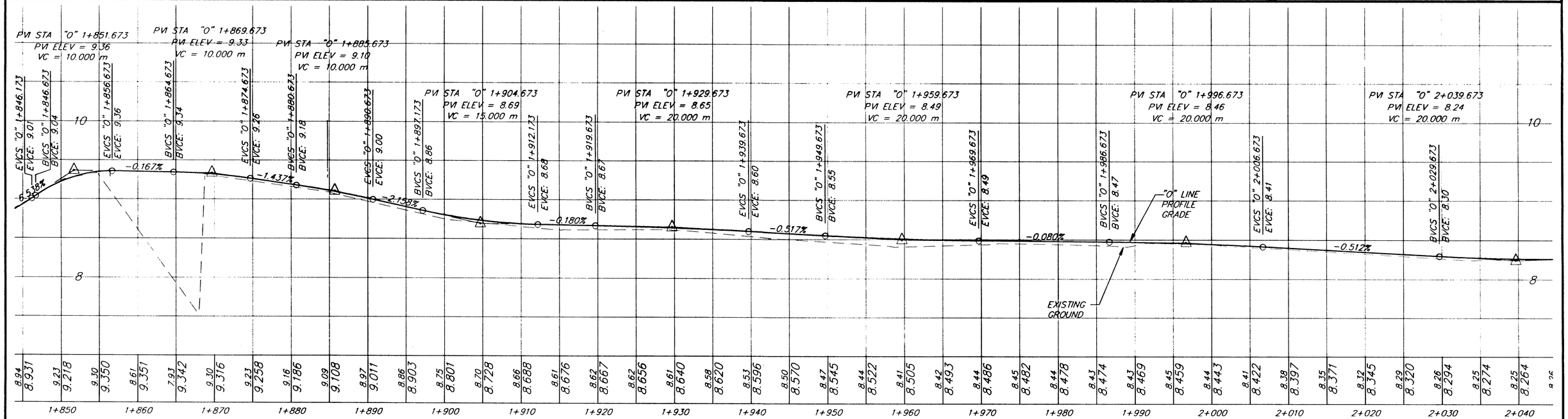
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "0" 1+660 TO STA "0" 1+850
PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEETS 47 OF 97





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
Donald D Soldwer
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3/25/98

PATH:	P: \JNU\71463\EN\WILPLAN6 VIEWS: SOPLAN3, SOPROF3, TITLE3
PLOT:	FULL (1=1) OR HALF (1=2); SCRIPT FILE: P: \JNU\71463\EN\PLOT\WLCAD5

BY:	DATE:	DESCRIPTION OF CHANGE:
		drawing info 1=250 horiz 1=25 vert imports 1=.5

RECORD OF REVISIONS

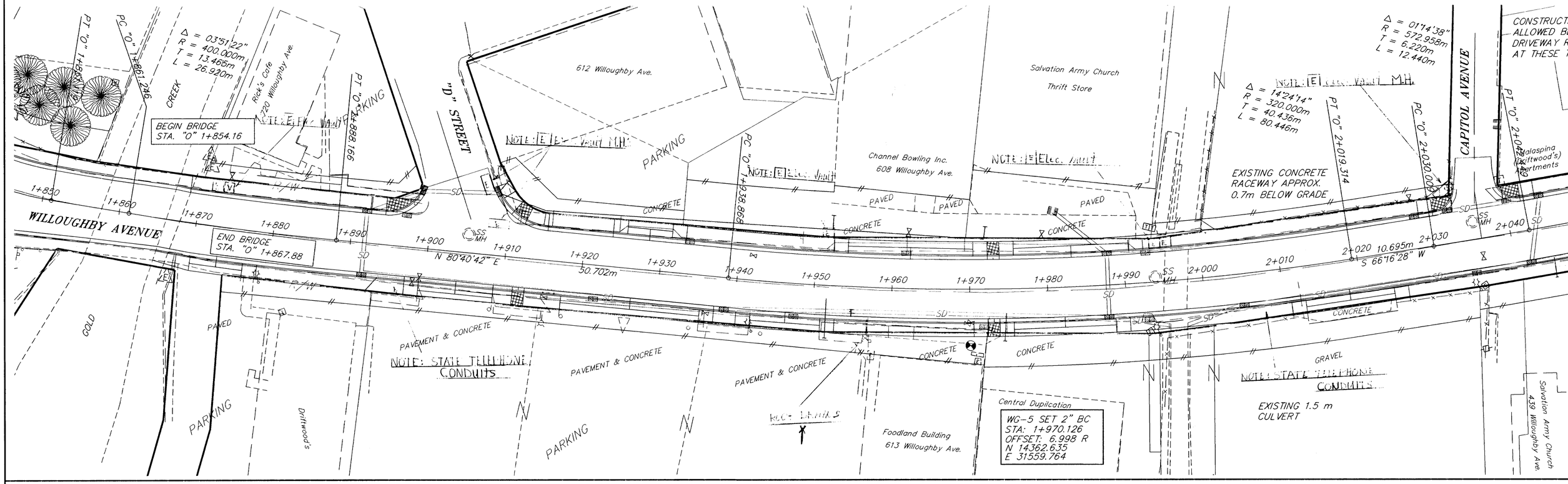
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

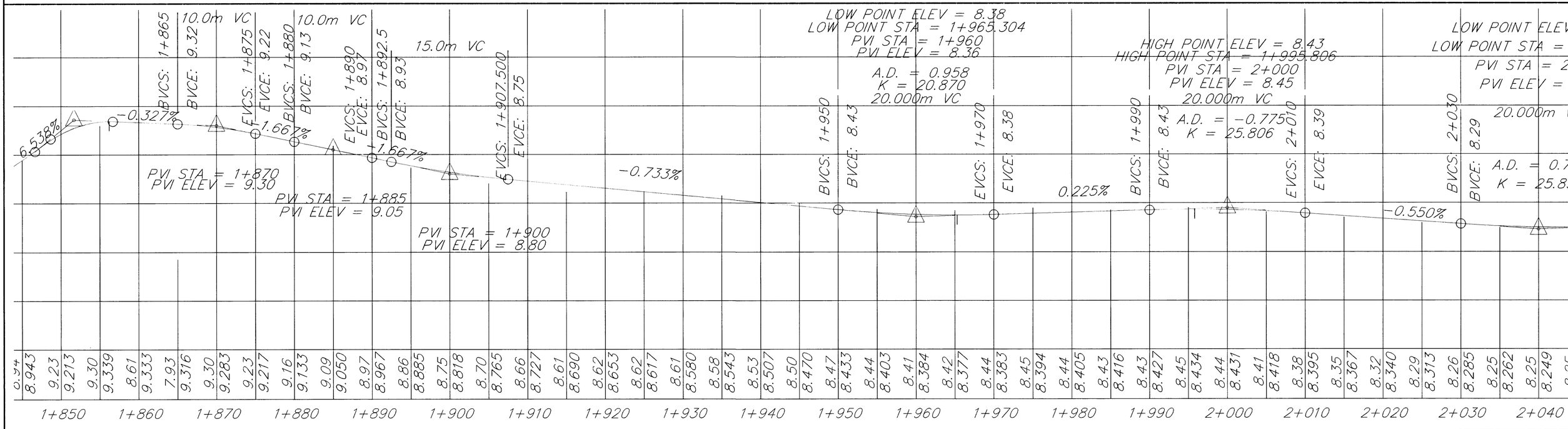
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-0005 (149) PROJECT NO. 71463

STA "0" 1+850 TO STA "0" 2+040

PLAN AND PROFILE SHEET

DESIGNED BY:	M. SHEELER
DRAWN BY:	AUTOCAD
CHECKED BY:	A. STEININGER
PROJECT NO.	71463
DATE:	APRIL 1998
SHEETS	48 OF 97





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

P: \JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN3, 50PROF3, TITLE3

drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

STA "0" 1+850 TO STA "0" 2+040

PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER
DRAWN BY: AUTOCAD
CHECKED BY: A. STEININGER

PROJECT NO. 71463
DATE: 5/25/99
SHEETS 48 OF 97
45A

STATE OF ALASKA ★ 49th ★
David D. Saldivar
CE-8307

CONSTRUCTION ACTIVITY WILL NOT BE ALLOWED BEYOND THE R.O.W. BOUNDARY. DRIVEWAY RECONSTRUCTION NOT REQUIRED AT THESE TWO LOCATIONS.

PT "0" 2+042.749

PI "0" 2+104.699

NOTE: TELEPHONE VAULT

NOTE: E Elec. Vault M.H.

WHITTIER STREET

JNU TELEPHONE CONDUIT

Juneau Visitors Apartments

GRAVEL

PAVED

R/W

2+050 2+060 2+070 2+080 2+090 2+100 2+110 2+120 2+130 2+140 2+150 2+160 2+170 2+180 2+190 2+200 2+210 2+220 2+230 2+240 2+250

SS MH

S 64°00'51" W

98.294m

N 65°01'50" E

63.217m

Fiddlehead Restaurant & Bakery 429 Willoughby Ave.

NOTE: Exist. Bldg.

PARKING

CONCRETE

Capital Visitor Center

Capital Visitors Center Council 344 Willoughby Ave.

ANGLED Parking

REMOVE EXISTING INLET

NOTE: E Elec. Vault

GRAVEL

PARKING

VILLAGE STREET

NOTE: E Elec. Vault At Willoughby Ave.

TBM 92
STA: 2+177.242
OFFSET: 9.805 R
ELEV. = 8.116 m

STEL VAULT

NOTE: Lights, Loud Center

PC "0" 2+202.960

Δ = 79°18'00"
R = 30.000m
T = 24.863m
L = 41.523m

PT "0" 2+244.482

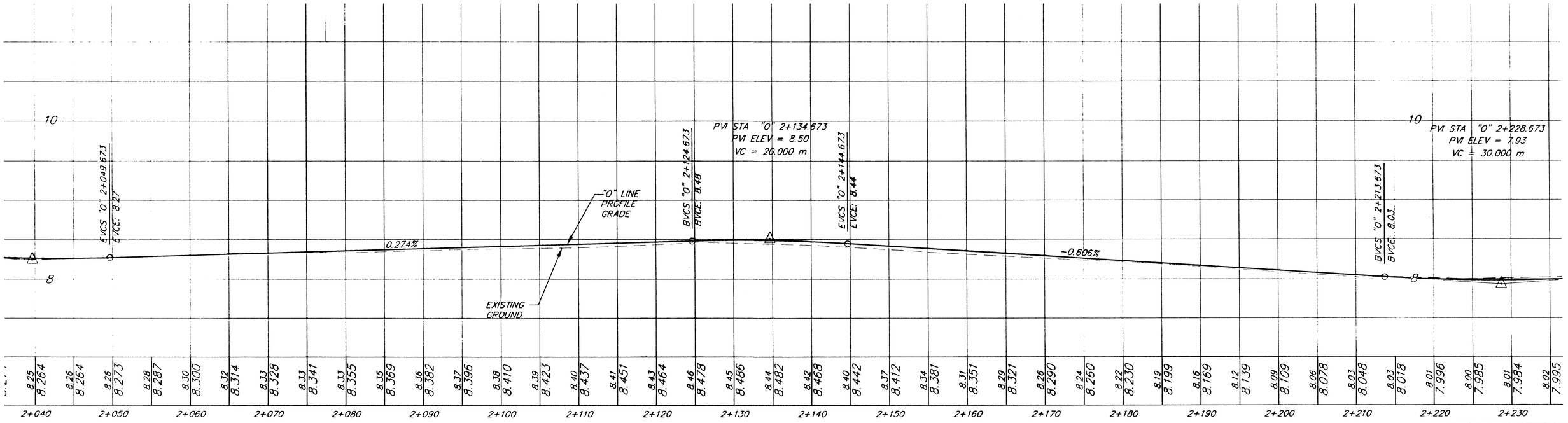
STEL VAULT

WILLOUGHBY AVENUE

STATE & TELEPHONE CONDUITS

State Offices

Item 603(23.24)
Root drain



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
Dawd D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\71463\EN\WLPLAN6 VIEWS: 50PLAN4, 50PROF4, TITLE4		
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RECORD OF REVISIONS

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

JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "0" 2+040 TO STA "0" 2+220

PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEETS 49 OF 97

CONSTRUCTION ACTIVITY WILL NOT BE ALLOWED BEYOND THE R.O.W. BOUNDARY. DRIVEWAY RECONSTRUCTION NOT REQUIRED AT THESE TWO LOCATIONS.

WHITTIER STREET

WILLOUGHBY AVENUE

VILLAGE STREET

PARKING

GRAVEL

CONCRETE

PAVED

R/W

YARD

REMOVE EXISTING INLET

NOTE: E Elec. Vault

NOTE: T Telephone Vault

NOTE: Traffic Signal Controller

NOTE: State Telephone

NOTE: T - Roof Drain

Tlingit Haida Central Council
320 Willoughby Ave.

Fiddlehead Restaurant & Bakery
429 Willoughby Ave.

State Offices

Fireweed Place
415 Willoughby Ave.

PT "0" 2+042.040

PI "0" 2+104.666

PC "0" 2+202.960

PT "0" 2+244.482

Δ = 79°15'09"
R = 30.000m
T = 24.863m
L = 41.523m

S 64°00'51" W
98.294m

N 65°01'50" E
62.217m

SS MH

SD

2+040 2+050 2+060 2+070 2+080 2+090 2+100 2+110 2+120 2+130 2+140 2+150 2+160 2+170 2+180 2+190 2+200 2+210 2+220 2+230 2+240 2+250

VINT ELEV = 8.25
VINT STA = 2+044.245
BVCS STA = 2+040
BVCE ELEV = 8.23
20.000m VC
A.D. = 0.772
K = 25.899
EVCS: 2+050
EVCE: 8.25

HIGH POINT ELEV = 8.41
HIGH POINT STA = 2+125.610
PVI STA = 2+130
PVI ELEV = 8.43
20.000m VC
A.D. = −0.792
K = 25.245
BVCS: 2+120
BVCE: 8.41
EVCS: 2+140
EVCE: 8.37

LOW POINT ELEV = 7.8
LOW POINT STA = 2+2
PVI STA = 2+2
PVI ELEV = 7.8
A.D. = 1.250
K = 24.000
30.000m VC
BVCS: 2+215
BVCE: 7.95

0.222%

−0.570%

8.25 8.249 8.25 8.246 8.26 8.252 8.28 8.263 8.30 8.274 8.32 8.286 8.32 8.297 8.33 8.308 8.33 8.319 8.34 8.330 8.36 8.341 8.37 8.352 8.38 8.363 8.39 8.374 8.40 8.386 8.42 8.397 8.43 8.408 8.46 8.414 8.45 8.410 8.44 8.397 8.42 8.373 8.40 8.345 8.37 8.316 8.33 8.287 8.31 8.259 8.28 8.230 8.26 8.202 8.23 8.173 8.21 8.145 8.18 8.117 8.15 8.088 8.12 8.059 8.09 8.031 8.06 8.002 8.03 7.974 8.02 7.946 8.01 7.922 7.99 7.909 8.01 7.907 8.02 7.915

2+040 2+050 2+060 2+070 2+080 2+090 2+100 2+110 2+120 2+130 2+140 2+150 2+160 2+170 2+180 2+190 2+200 2+210 2+220 2+230

PLAN AND PROFILE SHEET

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

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drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

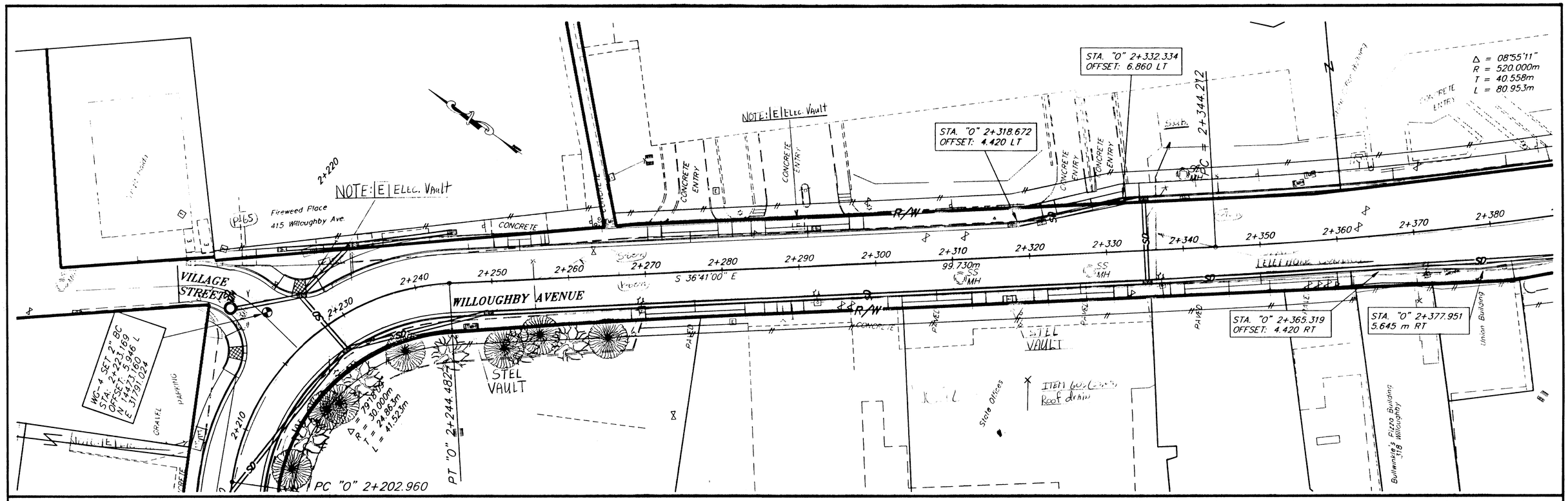
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

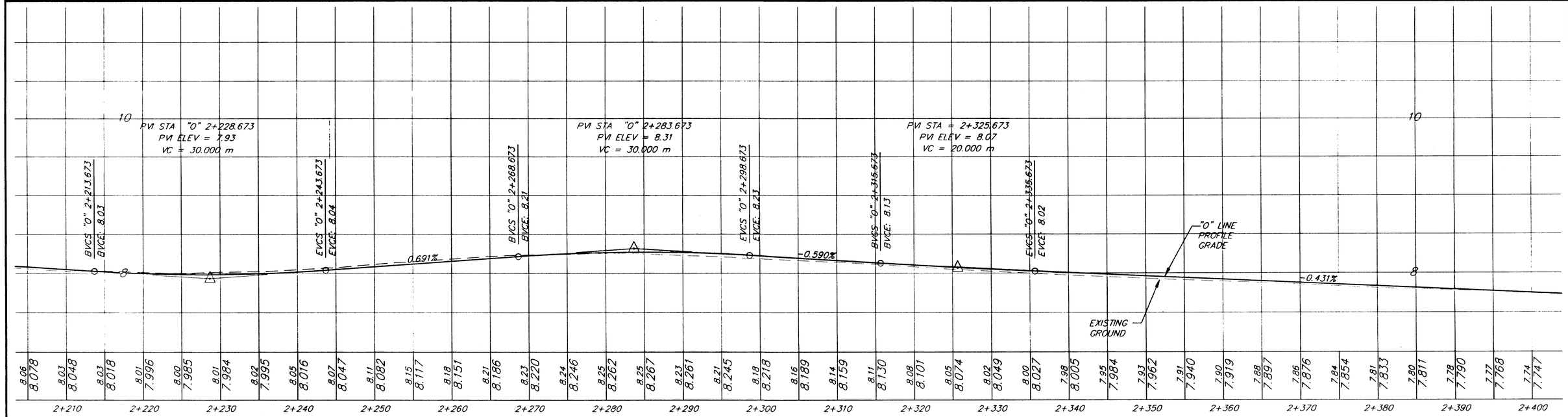
STA "0" 2+040 TO STA "0" 2+220
PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER
DRAWN BY: AUTOCAD
CHECKED BY: A. STEININGER

PROJECT NO. 71463
DATE: 5/25/99
SHEETS 49 OF 97

STATE OF ALASKA
49th
David D. Saldivar
CE-8307





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA — 4 PROFESSIONAL — David D. Soldivar CE-8307 — 3/2/98

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN5, 50PROF5, TITLE5		
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RECORD OF REVISIONS

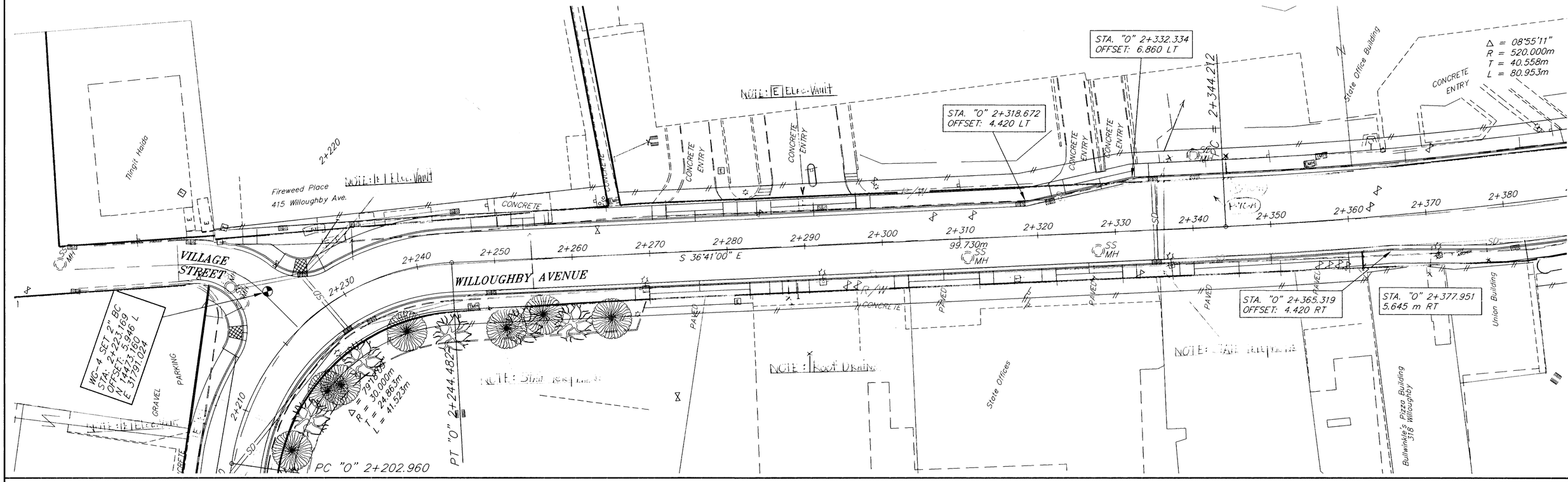
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

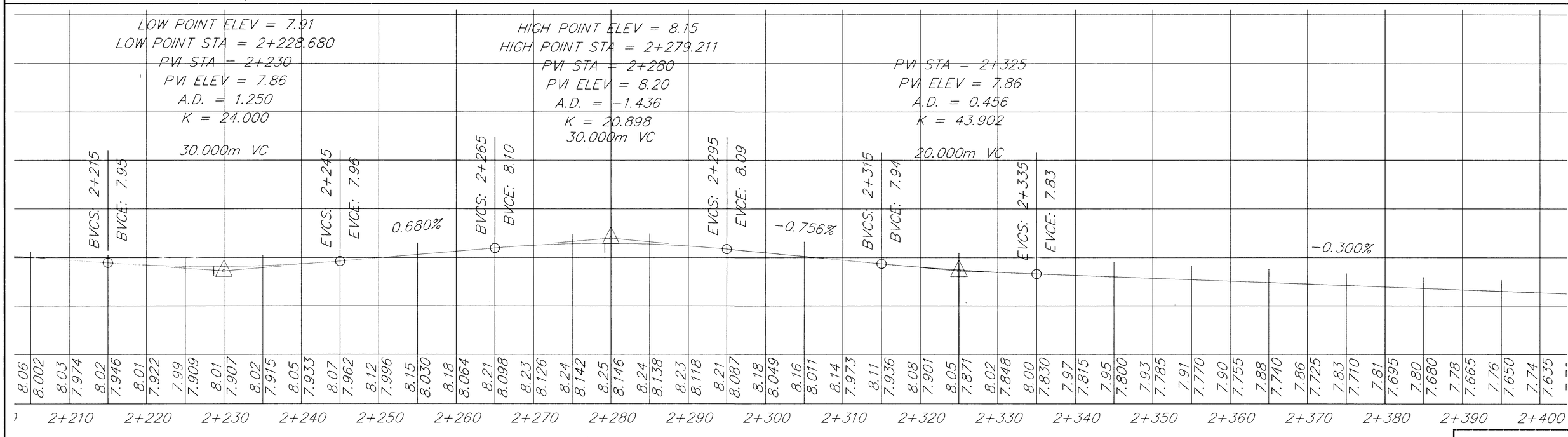
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "O" 2+220 TO STA "O" 2+380

PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEETS 50 OF 97





NOTE: SEE SHEET — PLAN AND PROFILE SHEET

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

P: \JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN5, 50PROF5, TITLE5

drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

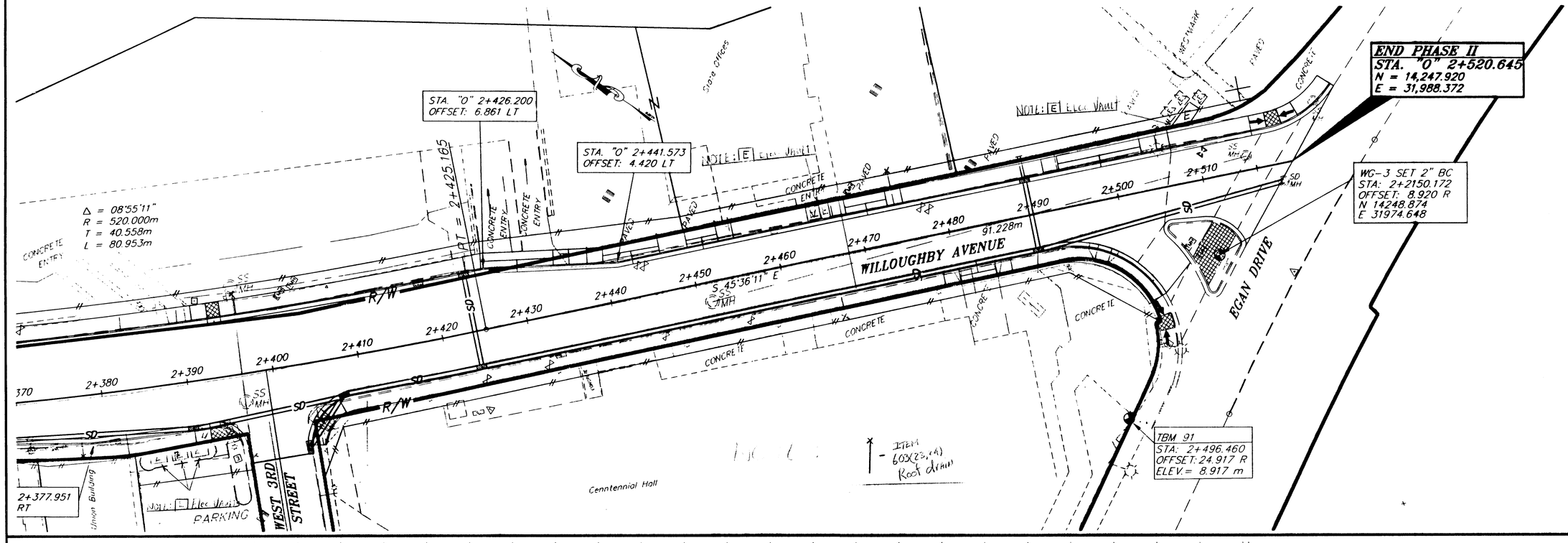
STA "0" 2+220 TO STA "0" 2+380

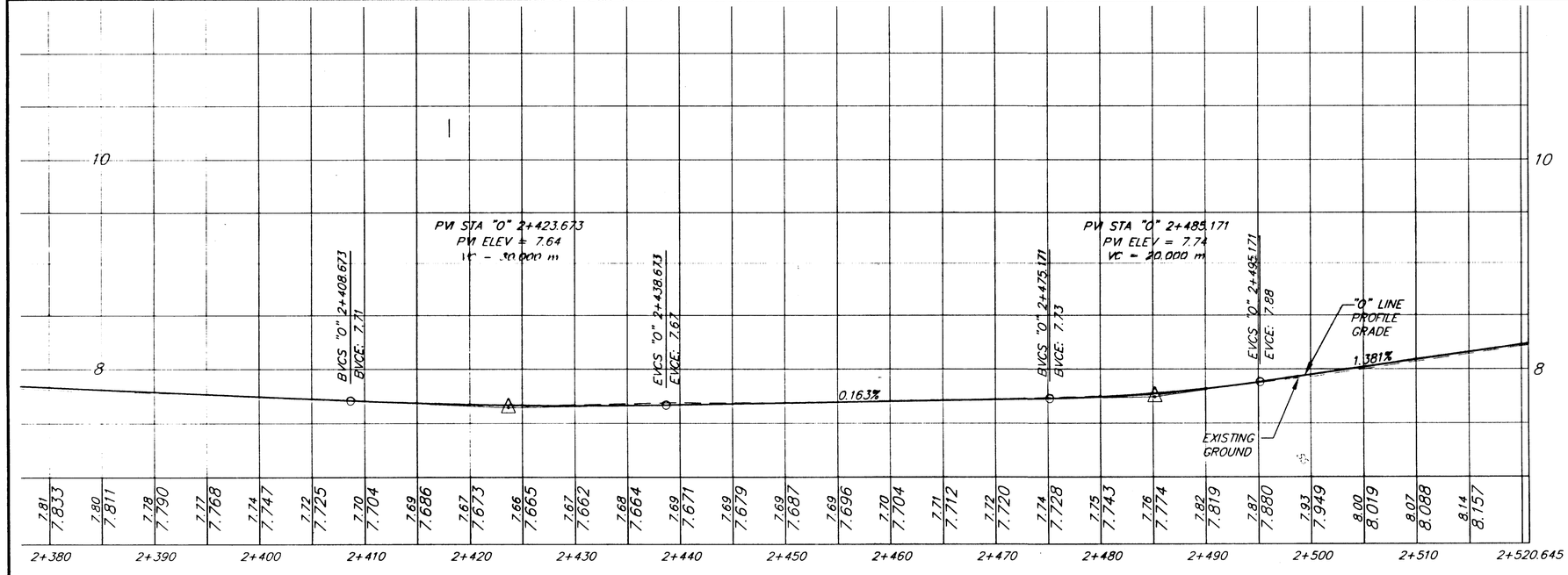
PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER
DRAWN BY: AUTOCAD
CHECKED BY: A. STEININGER

PROJECT NO. 71463
DATE: 5/25/99
SHEETS 50 OF 97

STATE OF ALASKA
49th
David D. Saldivar
CE-8307





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3/25/98

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: SOPLAN6, SOPROF6, TITLE6		
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BY:	DATE:	DESCRIPTION OF CHANGE:
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RECORD OF REVISIONS

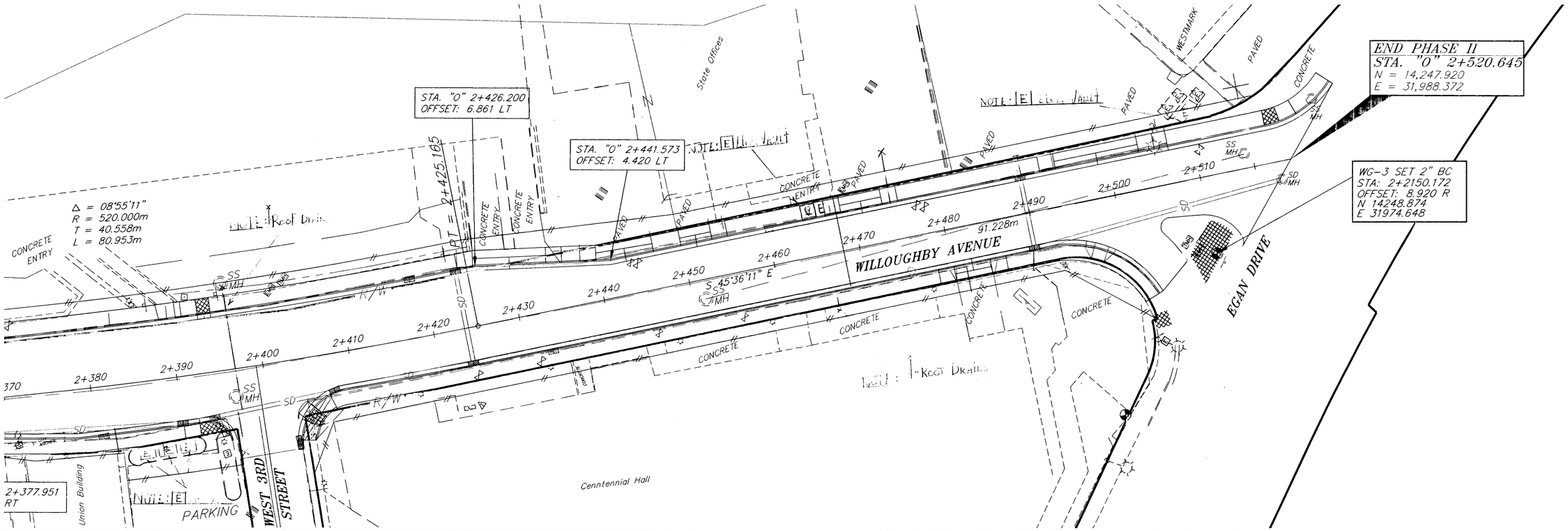
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

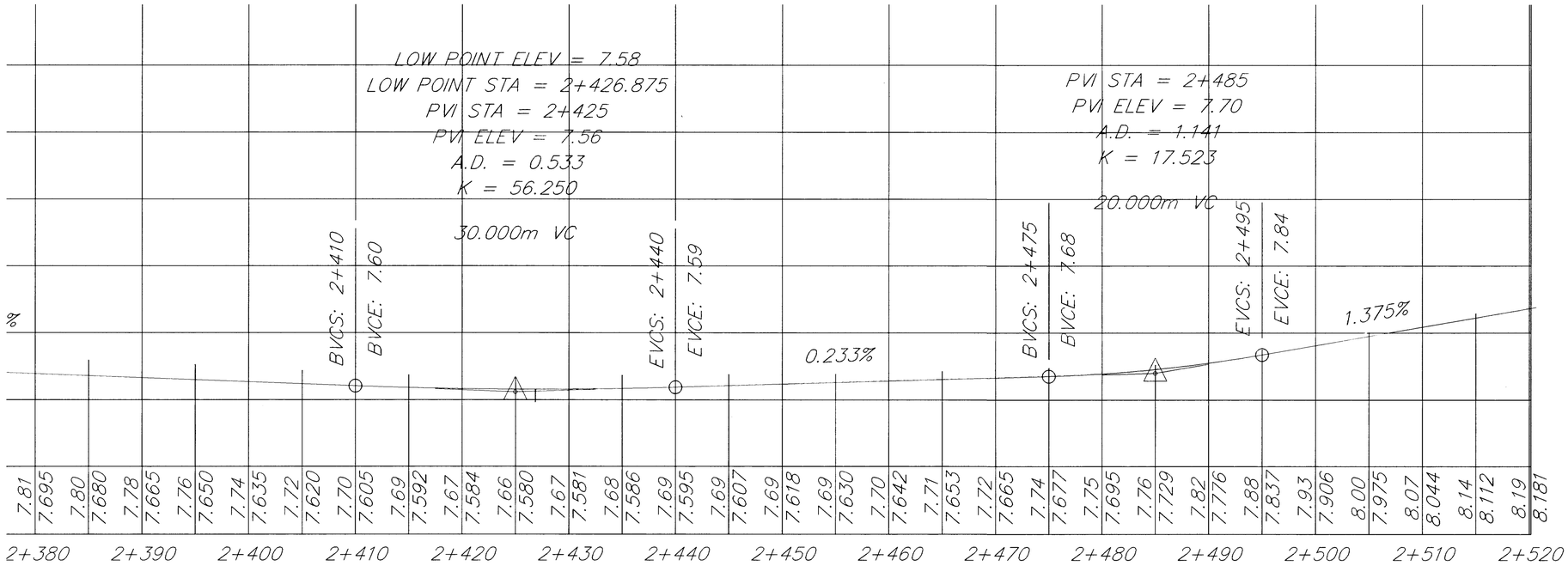
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "0" 2+380 TO STA "0" 2+516.13

PLAN AND PROFILE SHEET

DESIGNED BY:	M. SHEELER
DRAWN BY:	AUTOCAD
CHECKED BY:	A. STEININGER
PROJECT NO.	71463
DATE:	APRIL 1998
SHEETS 51 OF 97	





NOTE: ASPHALT - PLAN AND PROFILE SHEET

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

P: \JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN6, 50PROF6, TITLE6

drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

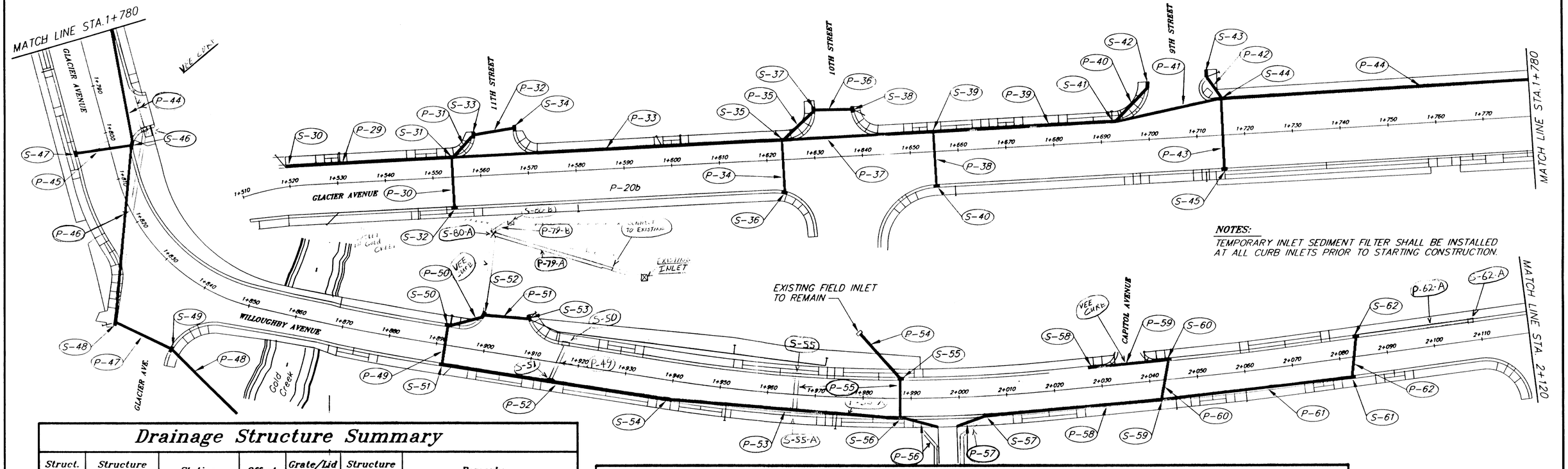
STA "0" 2+380 TO STA "0" 2+516.13

PLAN AND PROFILE SHEET

DESIGNED BY: M. SHEELER
DRAWN BY: AUTOCAD
CHECKED BY: A. STEININGER

PROJECT NO. 71463
DATE: 5/25/99
SHEETS 51 OF 97

STATE OF ALASKA ★ 49th ★ David D. Saldivar CE-8307



NOTES:
TEMPORARY INLET SEDIMENT FILTER SHALL BE INSTALLED AT ALL CURB INLETS PRIOR TO STARTING CONSTRUCTION.

Drainage Structure Summary

Struct. No.	Structure Type	Station	Offset	Grate/Lid Elev.	Structure Invert	Remarks
S-30	Inlet, Type A	"O" 1+519.00	3.81, Lt.	8.88	7.54	
S-31	M.H., Type I	"O" 1+554.16	3.81, Lt.	8.74	7.24	
S-32	Inlet, Type A	"O" 1+554.16	6.25, Rt.	8.70	7.34	
S-33	Inlet, Type A	"E" 1+008.59	3.84, Lt.	8.74	7.31	
S-34	Inlet, Type A	"E" 1+009.52	4.22, Rt.	8.77	7.39	* DELETED
S-35	M.H., Type I	"O" 1+623.36	3.81, Lt.	8.25	6.69	
S-36	Inlet, Type A	"O" 1+623.36	6.25, Rt.	8.21	6.85	
S-37	Inlet, Type A	"T" 1+009.95	3.77, Lt.	8.32	6.80	
S-38	Inlet, Type A	"T" 1+009.66	3.82, Rt.	8.31	6.89	
S-39	M.H., Type I	"O" 1+655.11	3.81, Lt.	8.28	6.52	
S-40	Inlet, Type A	"O" 1+655.11	7.31, Rt.	8.21	6.89	
S-41	M.H., Type I	"O" 1+692.61	3.81, Lt.	8.25	6.34	
S-42	Inlet, Type A	"N" 1+011.12	5.93, Lt.	8.23	6.59	
S-43	Inlet, Type A	"N" 1+012.75	5.87, Rt.	8.27	6.59	
S-44	M.H., Type I	"O" 1+715.89	6.86, Lt.	8.15	6.19	
S-45	Inlet, Type A	"O" 1+715.89	7.31, Rt.	8.14	6.79	
S-46	M.H., Type I	"O" 1+803.79	6.86, Lt.	8.12	5.71	* [illegible]
S-47	Inlet, Type A	"O" 1+802.62	7.31, Rt.	8.11	7.70	
S-48	M.H., Type I	"G" 1+016.24	7.33, Rt.	8.33	5.53	
S-49	Oil Separator	"G" 1+014.37	4.88, Lt.	8.63	5.45	See CBJ Standard Drawing 305
S-50	M.H., Type I	"O" 1+891.78	3.81, Lt.	8.89	7.22	* [illegible]
S-51	M.H., Type I	"O" 1+891.78	3.81, Rt.	8.89	7.15	* [illegible]
S-52	Inlet, Type A	"F" 1+009.84	4.43, Lt.	8.44	7.27	[illegible]
S-53	Inlet, Type A	"F" 1+006.91	4.13, Rt.	8.50	7.34	* [illegible]
S-54	Inlet, Type A	"O" 1+938.87	3.81, Rt.	8.52	6.84	
S-55	Inlet, Type A	"O" 1+987.84	3.81, Lt.	8.39	7.03	* [illegible]
S-56	Oil Separator	"O" 1+987.84	3.81, Rt.	8.39	6.44	See CBJ Standard Drawing 305
S-57	Oil Separator	"O" 2+005.00	3.81, Rt.	8.34	6.44	See CBJ Standard Drawing 305
S-58	Inlet, Type A	"O" 2+028.06	3.81, Lt.	8.22	6.95	* S-62-A, 4+109, 3.81 Lt.
S-59	M.H., Type I	"O" 2+042.16	3.81, Rt.	8.18	6.69	
S-60	Inlet, Type A	"O" 2+044.31	3.81, Lt.	8.18	6.84	* [illegible]
S-61	Inlet, Type A	"O" 2+082.14	3.81, Rt.	8.28	6.90	
S-62	Inlet, Type A	"O" 2+083.95	3.81, Lt.	8.28	6.97	
S-80-A	Inlet, Type A	E 1+25	[illegible]			[illegible] TO EXISTING IC
S-80-B	Inlet, Type A	E 1+25	[illegible]			

Pipe Summary

Pipe No.	Diameter (mm)	Type	Length (m)	From	Invert Elev.	To	Invert Elev.	Remarks
P-29	450	CPP	35.2	S-30	7.95	S-31	7.66	
P-30	450	CPP	10.1	S-32	7.75	S-31	7.66	
P-31	~~450~~ 300	CPP	6.6	S-33	7.72	S-31	7.66	
P-32	450	CPP	8.1	S-34	7.80	S-33	7.74	* DELETED
P-33	450	CPP	69.2	S-31	7.64	S-35	7.12	
P-34	450	CPP	10.1	S-36	7.26	S-35	7.12	
P-35	450	CPP	9.5	S-37	7.21	S-35	7.12	
P-36	450	CPP	7.6	S-38	7.30	S-37	7.23	
P-37	450	CPP	31.8	S-35	7.10	S-39	6.95	
P-38	450	CPP	11.1	S-40	7.30	S-39	7.00	
P-39	450	CPP	37.5	S-39	6.93	S-41	6.77	
P-40	450	CPP	10.9	S-42	7.01	S-41	6.85	
P-41	450	CPP	23.5	S-41	6.75	S-44	6.62	
P-42	450	CPP	* 6.9	S-43	7.06	S-44	6.71	* [illegible]
P-43	450	CPP	14.2	S-45	7.20	S-44	6.80	
P-44	450	CPP	* 87.9	S-44	6.60	S-46	6.14	* [illegible]
P-45	450	CPP	* 14.2	S-47	7.05	S-46	6.85	* [illegible]
P-46	450	CPP	* 37.5	S-46	6.12	S-48	5.96	* [illegible]
P-47	450	CPP	* 12.4	S-48	5.94	S-49	5.88	* [illegible]
P-48	450	CPP	* 16.4	S-49	5.86	"O"1+850, ±20m Rt.	5.78	See note 4. * [illegible]
P-49	450	CPP	* 7.6	S-50	7.63	S-51	7.58	* [illegible]
P-50	450	CPP	7.8	S-52	7.68	S-50	7.65	DELETED
P-51	450	CPP	9.6	S-53	7.75	S-52	7.70	* P-55-A, [illegible]
P-52	450	CPP	* 47.1	S-51	7.56	S-54	7.32	* 2.1M
P-53	450	CPP	* 49.0	S-54	7.30	* S-56	6.87	* [illegible]
P-54	150	DIP	9.0	"O"1+981.06, 9.8m Rt.	Match Exist.	S-55	7.45	Connect into existing field inlet [illegible]
P-55	450	CPP	* 7.6	S-55	7.43	* S-56	7.30	* S-[illegible] to S-55A
P-56	450	CPP	* 8.3	S-56	6.85	"O"1+996, 5.5m Rt.	6.75	* [illegible]
P-57	450	CPP	* 9.2	S-57	6.85	"O"1+996, 5.5m Rt.	6.75	* [illegible]
P-58	450	CPP	* 37.2	S-59	7.09	S-57	6.87	* S-61
P-59	450	CPP	16.3	S-58	7.36	S-60	7.27	* DELETED
P-60	450	CPP	* 7.9	S-60	7.25	S-59	7.11	* 0.4M
P-61	450	CPP	* 40.0	S-61	7.31	S-59	7.11	* [illegible]
P-62	450	CPP	* 7.8	S-62	7.38	S-61	7.33	* 0.6M
P-62-A	300 MM		26.4M	S-62-A	to	S-62		
P-79-A	300 MM		15.5 M	EXISTING	to	S-80-A		
P-79-B	300 MM		5.3M	S-80-B	to	S-80-A		

DRAINAGE NOTES

1. Stationing for the culvert pipes, inlets and manholes are approximate and may be adjusted to field conditions.
2. Invert elevations are approximate and may be adjusted to fit field conditions.
3. Connection to existing pipe shall be a coupling band as specified in section 603 and shall be incidental to 603.
4. Culvert invert is approximate and may be field adjusted to fit field conditions. Invert shall not be lower then the top of concrete stream banks protection for Gold Creek.
5. Reducers, Y's or T's maybe required to reduce storm sewers size if needed to go over existing structures or pipes.

CPP = Corrugated Polyethylene Pipe
DIP = Ductile Iron Pipe

PATH: P:\JNU\71463\DR\MDRAIN2 MPLOTH.PCP(400) OR MPLOTH.PCP(800)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALA
DEPARTMENT OF TRA
AND PUBLIC FA
SOUTHEAST REGION DESIGN

CIER AVENUE · PHASE II — ALASKA
PROJECT NO. 71463
CILITIES

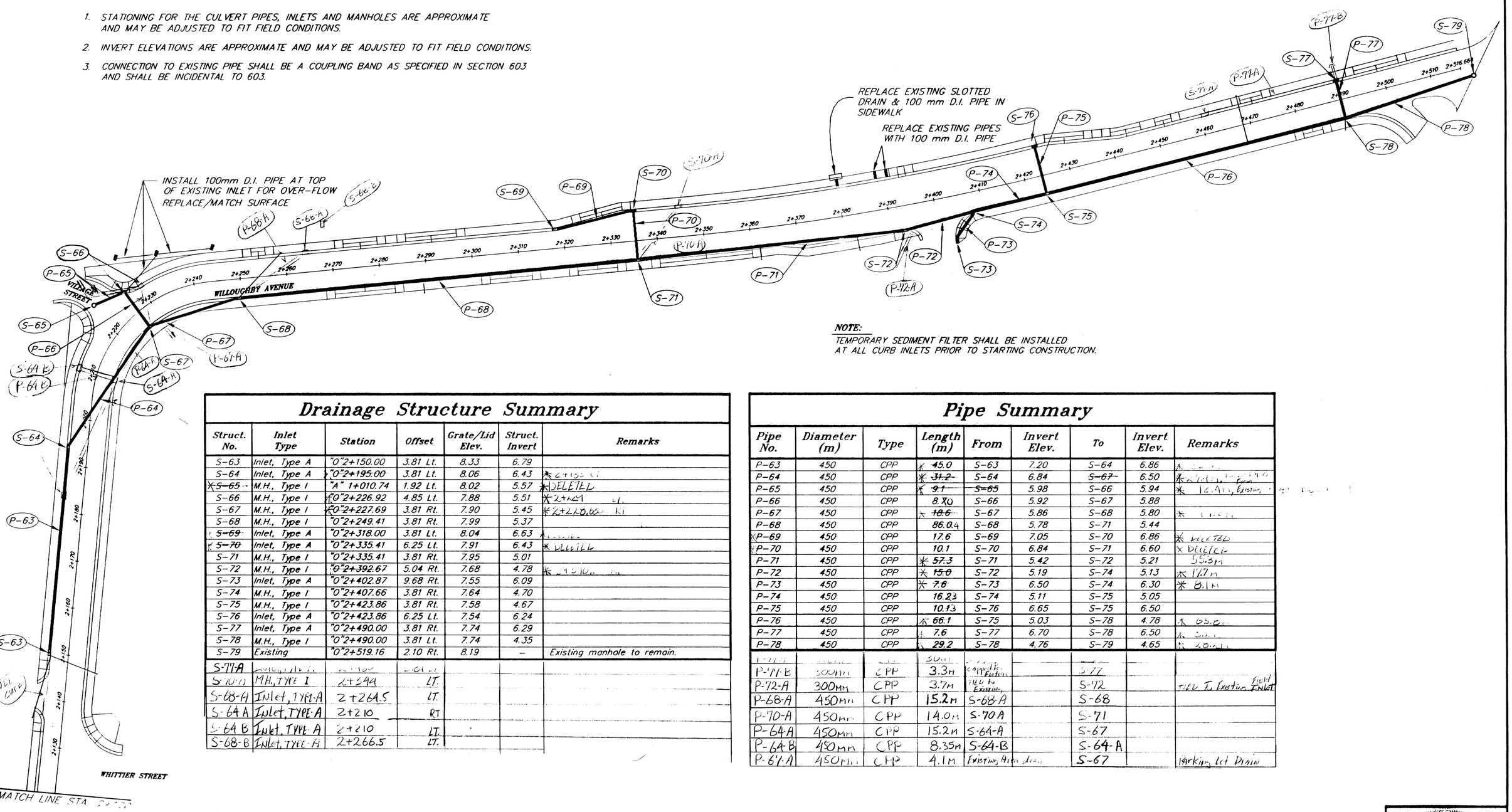
DESIGNED BY: D. SALDIVAR
DRAWN BY: AUTOCAD
CHECKED BY: A. STEININGER

PROJECT NO. 71463
DATE: JAN. 1998
SHEET 52 OF 97

STATE OF ALASKA — David D. Saldivar — CE-8307 — REGISTERED PROFESSIONAL ENGINEER — 3/25/98

DRAINAGE NOTES

1. STATIONING FOR THE CULVERT PIPES, INLETS AND MANHOLES ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
2. INVERT ELEVATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
3. CONNECTION TO EXISTING PIPE SHALL BE A COUPLING BAND AS SPECIFIED IN SECTION 603 AND SHALL BE INCIDENTAL TO 603.



NOTE:
TEMPORARY SEDIMENT FILTER SHALL BE INSTALLED AT ALL CURB INLETS PRIOR TO STARTING CONSTRUCTION.

Drainage Structure Summary

Struct. No.	Inlet Type	Station	Offset	Grade/Lid Elev.	Struct. Invert	Remarks
S-63	Inlet, Type A	"0"2+150.00	3.81 Lt.	8.33	6.79	
S-64	Inlet, Type A	"0"2+195.00	3.81 Lt.	8.06	6.43	
~~S-65~~	M.H., Type I	"A" 1+010.74	1.92 Lt.	8.02	5.57	DELETED
S-66	M.H., Type I	"0"2+226.92	4.85 Lt.	7.88	5.51	
S-67	M.H., Type I	"0"2+227.69	3.81 Rt.	7.90	5.45	
S-68	M.H., Type I	"0"2+249.41	3.81 Rt.	7.99	5.37	
~~S-69~~	Inlet, Type A	"0"2+318.00	3.81 Lt.	8.04	6.63	
~~S-70~~	Inlet, Type A	"0"2+335.41	6.25 Lt.	7.91	6.43	DELETED
S-71	M.H., Type I	"0"2+335.41	3.81 Rt.	7.95	5.01	
S-72	M.H., Type I	"0"2+392.67	5.04 Rt.	7.68	4.78	
S-73	Inlet, Type A	"0"2+402.87	9.68 Rt.	7.55	6.09	
S-74	M.H., Type I	"0"2+407.66	3.81 Rt.	7.64	4.70	
S-75	M.H., Type I	"0"2+423.86	3.81 Rt.	7.58	4.67	
S-76	Inlet, Type A	"0"2+423.86	6.25 Lt.	7.54	6.24	
S-77	Inlet, Type A	"0"2+490.00	3.81 Rt.	7.74	6.29	
S-78	M.H., Type I	"0"2+490.00	3.81 Lt.	7.74	4.35	
S-79	Existing	"0"2+519.16	2.10 Rt.	8.19	–	Existing manhole to remain.
S-77-A						
S-10-A	M.H., TYPE I	2+294	LT.			
S-68-A	Inlet, TYPE-A	2+264.5	LT.			
S-64-A	Inlet, TYPE-A	2+210	RT			
S-64-B	Inlet, TYPE-A	2+210	LT.			
S-68-B	Inlet, TYPE-A	2+266.5	LT.			

Pipe Summary

Pipe No.	Diameter (m)	Type	Length (m)	From	Invert Elev.	To	Invert Elev.	Remarks
P-63	450	CPP	45.0	S-63	7.20	S-64	6.86	
P-64	450	CPP	31.2	S-64	6.84	~~S-67~~	6.50	
P-65	450	CPP	9.1	~~S-65~~	5.98	S-66	5.94	
P-66	450	CPP	8.70	S-66	5.92	S-67	5.88	
P-67	450	CPP	18.6	S-67	5.86	S-68	5.80	
P-68	450	CPP	86.04	S-68	5.78	S-71	5.44	
~~P-69~~	450	CPP	17.6	S-69	7.05	S-70	6.86	DELETED
~~P-70~~	450	CPP	10.1	S-70	6.84	S-71	6.60	DELETED
P-71	450	CPP	57.3	S-71	5.42	S-72	5.21	55.3m
P-72	450	CPP	15.0	S-72	5.19	S-74	5.13	14.7m
P-73	450	CPP	7.8	S-73	6.50	S-74	6.30	8.1m
P-74	450	CPP	16.23	S-74	5.11	S-75	5.05	
P-75	450	CPP	10.13	S-76	6.65	S-75	6.50	
P-76	450	CPP	66.1	S-75	5.03	S-78	4.78	
P-77	450	CPP	7.6	S-77	6.70	S-78	6.50	
P-78	450	CPP	29.2	S-78	4.76	S-79	4.65	
P-77-A								
P-77-B	300mm	CPP	3.3m	CAP at Existing		S-77		
P-72-A	300mm	CPP	3.7m	Tie to Existing		S-72		Tie To Existing Inlet
P-68-A	450mm	CPP	15.2m	S-68-A		S-68		
P-70-A	450mm	CPP	14.0m	S-70 A		S-71		
P-64-A	450mm	CPP	15.2m	S-64-A		S-67		
P-64-B	450mm	CPP	8.35m	S-64-B		S-64-A		
P-67-A	450mm	CPP	4.1m	Existing Area Drain		S-67		Parking Lot Drain

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\MDRAIN3 MPLOTF.PCP(400) OR MPLOTH.PCP(800)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU

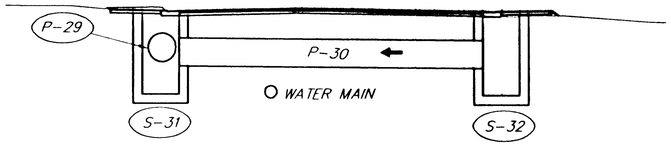
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. ~ PROJECT NO. 71463

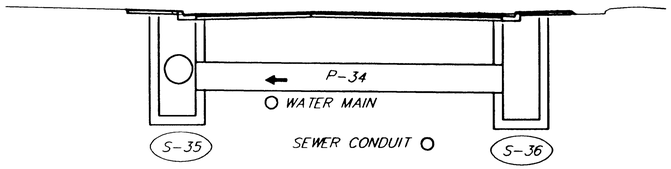
ALASKA

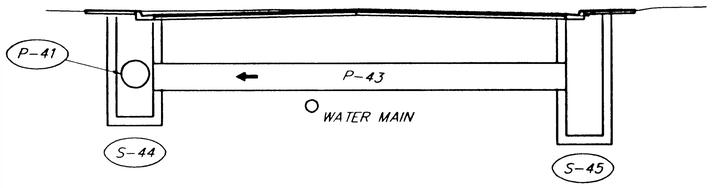
DRAINAGE FACILITIES

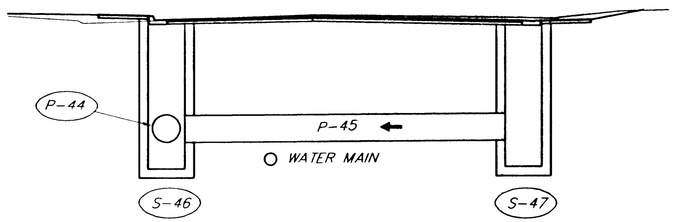
DESIGNED BY: D. SALDIVAR	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 53 OF 97

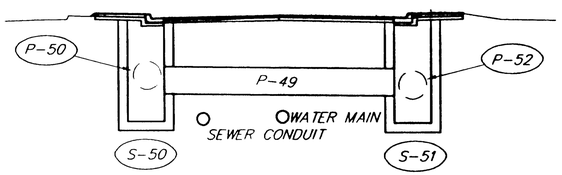
STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER

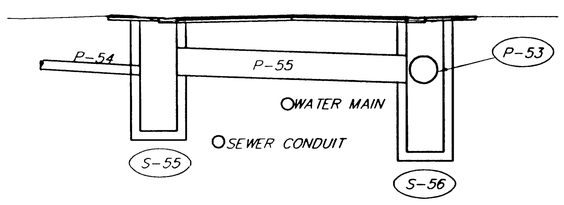


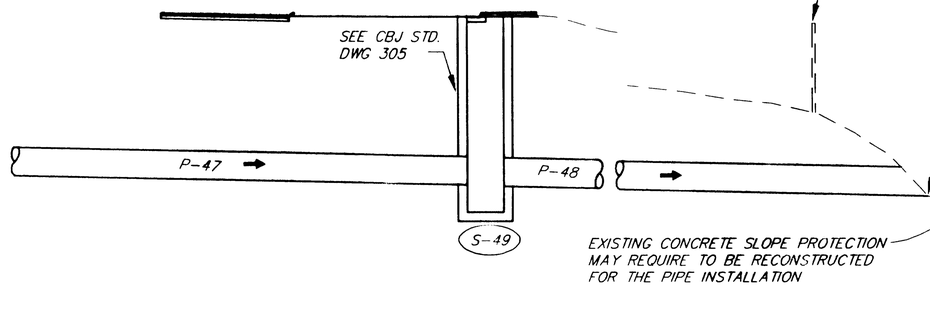


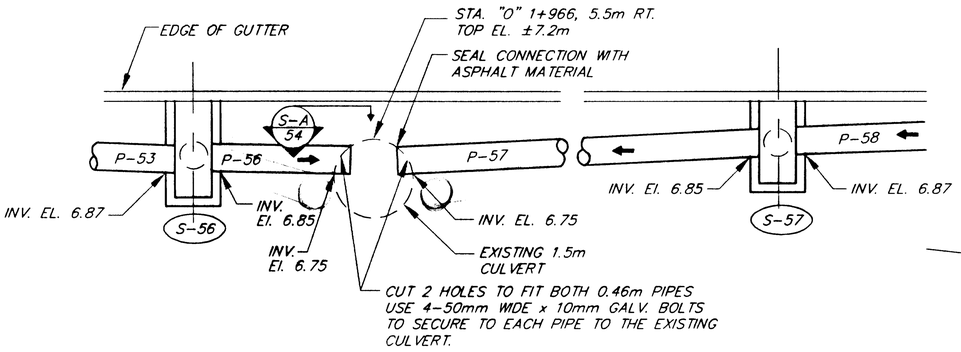


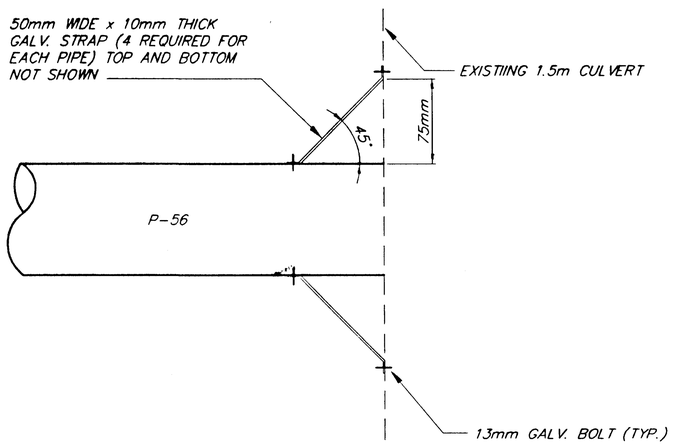




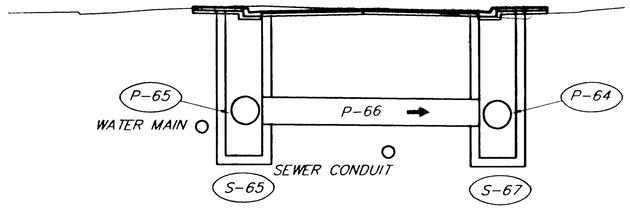


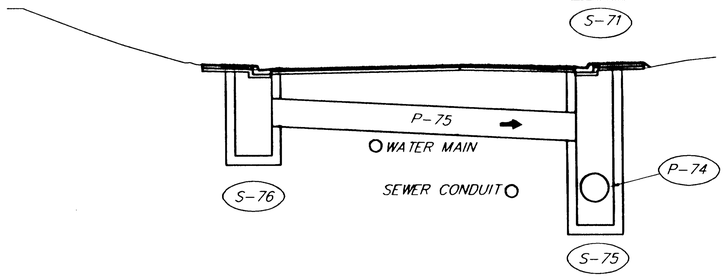


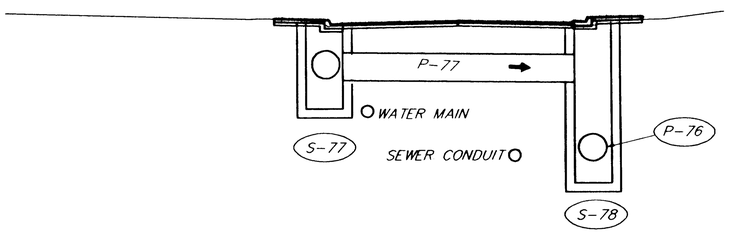




SECTION A







NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
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PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

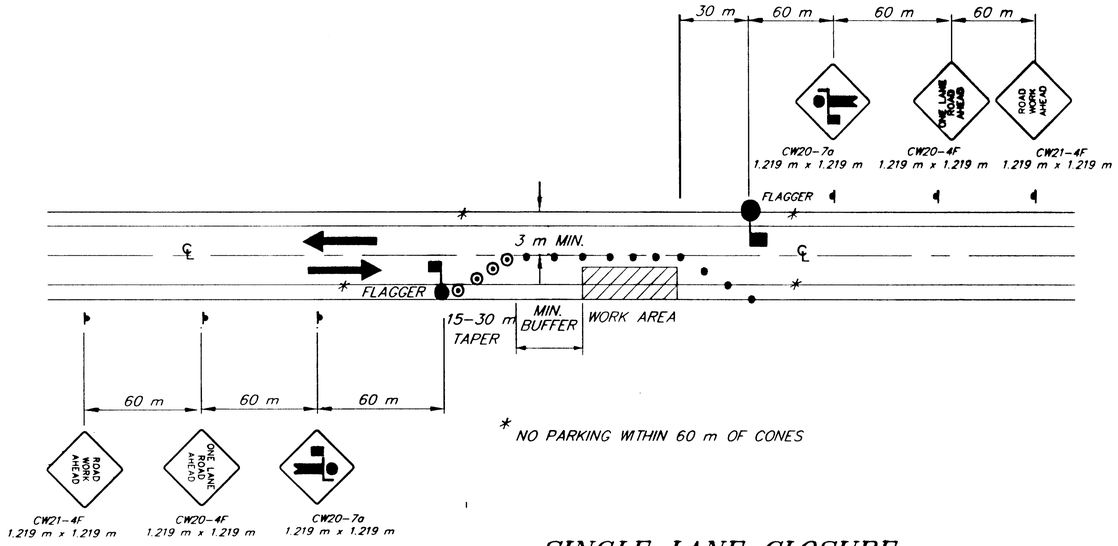
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. STP-000S ~ PROJECT NO. 71463

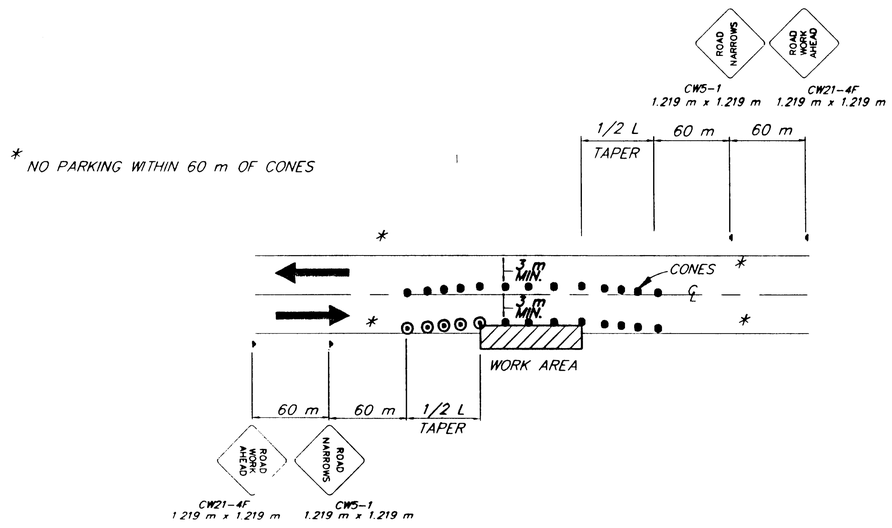
DRAINAGE DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 54 OF 97

STATE OF ALASKA — 49th — David D. Saldivar CE-8307 REGISTERED PROFESSIONAL ENGINEER



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

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE III BARRICADE
- ..... FLAGGING STATION

$L = W \times T$

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. PEDESTRIAN ACCESS SHALL BE MAINTAINED TO ALL HOMES AND BUSINESSES. THIS MAY REQUIRE CONSTRUCTION OF TEMPORARY PEDESTRIAN BRIDGES.
2. IF A HOME IS TO BE TEMPORARILY CUT OFF FROM ACCESS OR FROM UTILITIES NOTICE MUST BE GIVEN 24 HOURS IN ADVANCE.
3. IF ACCESS OR UTILITIES ARE TO BE CUT OFF FROM A BUSINESS THE BUSINESS MUST BE GIVEN TWO WEEK ADVANCE NOTICE. THE CUT OFF OF SERVICE OR ACCESS MUST BE DONE DURING A PRE-ESTABLISHED TIME THAT THE BUSINESS HAS AGREED TO.
4. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 3 m.
5. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
6. TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.04 OF THE SPECIFICATIONS.
7. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
8. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE LENGTH OF THE WORK AREA IS LESS THAN 30 m AND THE FLAGGER IS VISIBLE TO TRAFFIC APPROACHING FROM BOTH DIRECTIONS.
9. CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
10. RESIDENTIAL DRIVEWAYS MAY BE CLOSED DURING ACTUAL WORK ON A GIVEN DRIVEWAY, PROVIDED THAT THE CLOSURE DOES NOT EXCEED 8 HOURS AND THE AFFECTED RESIDENTS HAVE BEEN GIVEN 24 HOURS NOTICE OF THE CLOSURE. CLOSURE MAY ONLY OCCUR BETWEEN 8:00 AM AND 4:30 PM.
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. PEDESTRIAN SAFETY FENCING SHALL BE INSTALLED WHENEVER AN OPEN TRENCH IS ADJACENT TO PEDESTRIAN FACILITIES.
13. A PEDESTRIAN ROUTE THROUGHOUT THE LENGTH OF THE PROJECT SHALL BE MAINTAINED AT ALL TIMES. THE ROUTE SHALL BE ON EITHER THE EXISTING OR NEW SIDEWALK.
14. ONE ACCESS FOR TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES FOR BUSINESSES THAT HAVE MORE THAN ONE ACCESS ONTO THIS PROJECT.
15. ONE ACCESS SHALL BE MAINTAINED AT ALL TIMES TO THE DOWNTOWN FIRE STATION.
16. THE DOWNTOWN FIRE STATION WILL BE GIVEN 48 HOURS NOTICE PRIOR TO THE CLOSURE OF ANY OF THEIR ACCESSES TO GLACIER AVENUE.
17. NO CLOSURES OF ACCESS WILL BE ALLOWED TO THE STATE OFFICE BUILDING PARKING STRUCTURE EXCEPT BETWEEN THE HOURS OF 5:30 PM AND 6:00 AM WEEKDAYS OR ON SATURDAYS OR SUNDAYS.
18. THE CONTRACTOR SHALL BE REQUIRED TO RESTORE ACCESS AT THE END OF EVERY WORKING DAY FOR LOCATIONS WITH ONLY ONE ACCESS OFF WILLOUGHBY.
19. TWO LANE TWO WAY TRAFFIC WILL BE MAINTAINED THROUGHOUT THE PROJECT OVER THE 4TH OF JULY.
20. ALL EMERGENCY SERVICES AND TRANSIT SERVICES WILL BE NOTIFIED 24 HOURS PRIOR TO THE INSTALLATION OF ANY DETOURS.
21. NO CONSTRUCTION ACTIVITIES WILL BE ALLOWED AT THE INTERSECTIONS OF GLACIER AVENUE WITH 9TH, 10TH, 11TH, AND 12TH STREET WHEN A DETOUR IS IN PLACE ON WILLOUGHBY AVENUE.
22. TWO WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES ON GLACIER AVENUE FROM 12TH STREET TO THE GOLD STREET BRIDGE.
23. NO CONSTRUCTION ACTIVITIES WILL BE ALLOWED FROM 4:00-6:00 PM AT THE INTERSECTION OF GLACIER AVENUE AND 10TH, 11TH, STREETS, OR WILLOUGHBY AVENUE AND D STREETS.
24. THE CONTRACTOR WILL COORDINATE WITH THE TRANSIT SERVICE TO SELECT LOCATIONS AND ESTABLISH TEMPORARY BUS STOPS, WHEN ACCESS TO THE EXISTING BUS STOPS HAS BEEN CUT OFF.
25. TWO LANE TWO WAY TRAFFIC WILL BE RESTORED FROM 3:30 P.M. TO 7:00 P.M.
26. THE MAXIMUM LENGTH OF A ONE LANE, TWO-WAY WORK ZONE (FLAGGER SETUP) SHALL BE 300 METERS AND THE MINIMUM SEPARATION BETWEEN WORK ZONES SHALL BE 300 METERS. IF VEHICLE STOP TIME EXCEEDS FIVE MINUTES, THE CONTRACTOR SHALL SHORTEN THE WORK ZONE OR RESCHEDULE THE WORK TO A LESS BUSY HOUR.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MTCP1 < MPLOTF.PCP(1) OR MPLOTH.PCP(2) >		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

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

JUNEAU

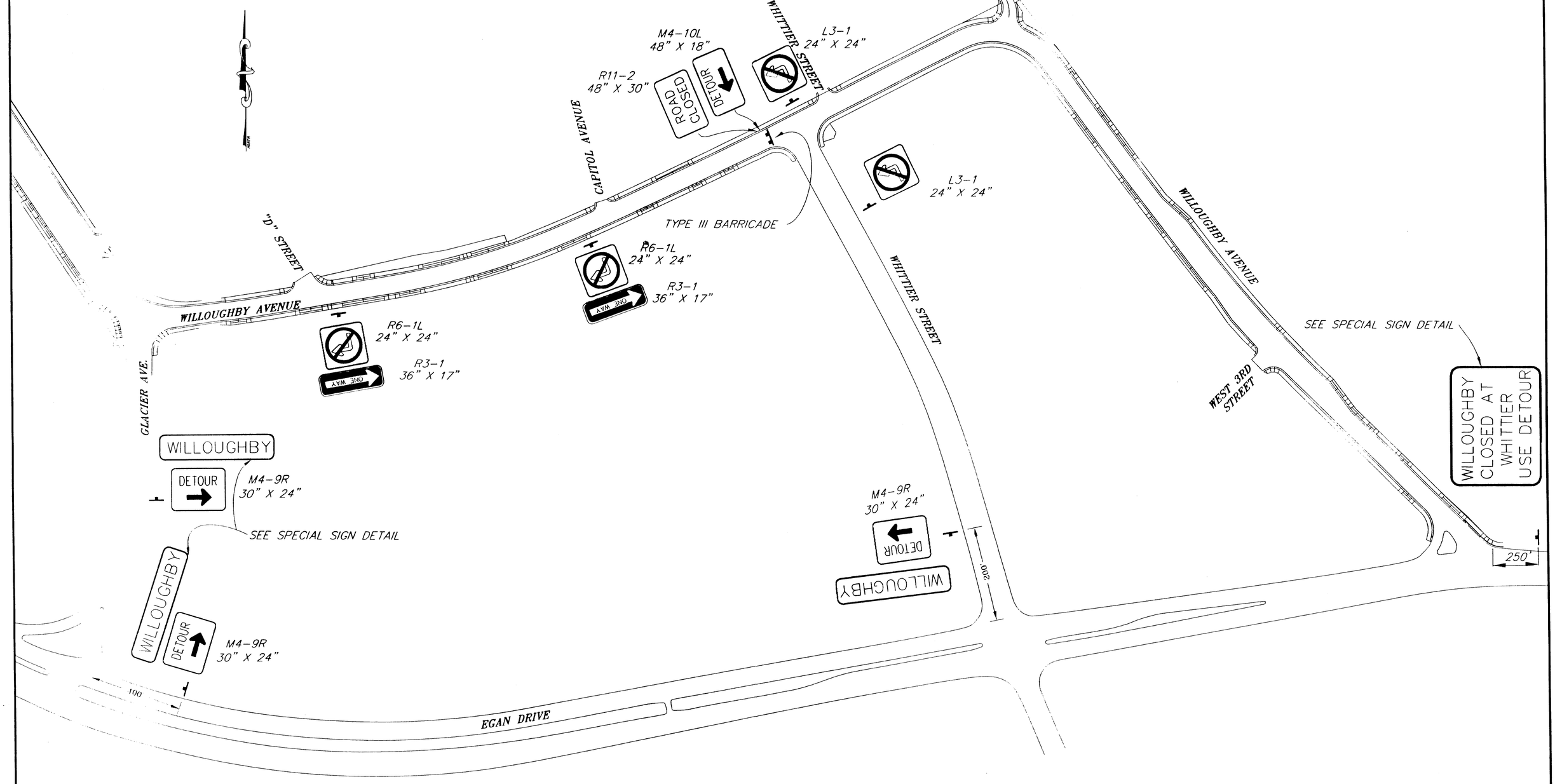
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

TRAFFIC CONTROL PLAN

ALASKA

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: B. ADAMS	DATE: 1998-99
CHECKED BY: K. SMITH	SHEET 55 OF 97

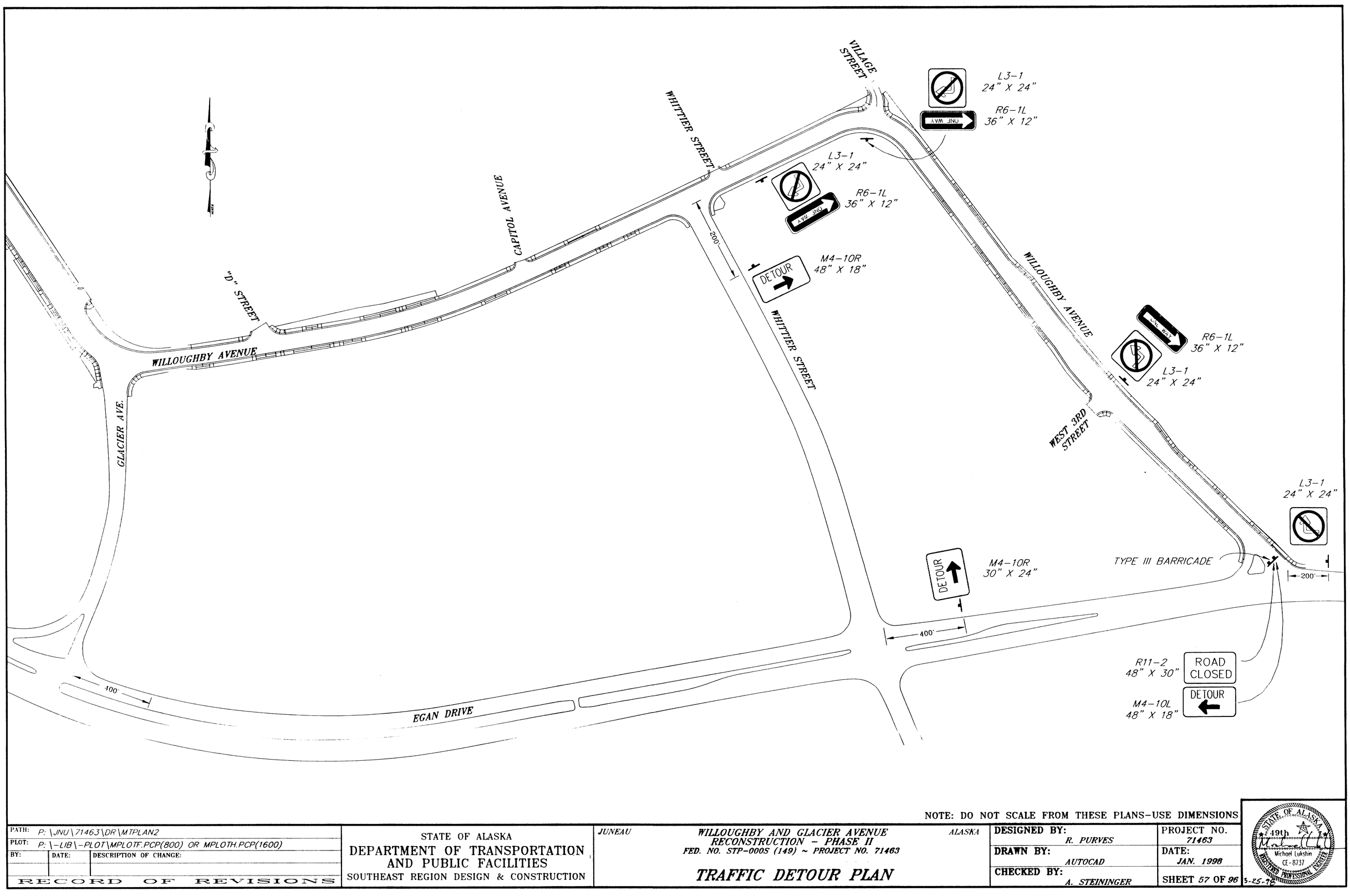
STATE OF ALASKA 49th
Michael Lukshin CE-8737
REGISTERED PROFESSIONAL ENGINEER
5-25-98



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\MTPLAN1	STATE OF ALASKA	JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II — ALASKA
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(800) OR MPLOTH.PCP(1600)	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	FED. NO. STP-000S (149) ~ PROJECT NO. 71463
BY: / DATE: / DESCRIPTION OF CHANGE:	SOUTHEAST REGION DESIGN & CONSTRUCTION	TRAFFIC DETOUR PLAN
RECORD OF REVISIONS		DESIGNED BY: R. PURVES; DRAWN BY: AUTOCAD; CHECKED BY: M. LUKSHIN; PROJECT NO. 71463; DATE: JAN. 1998; SHEET 56 OF 97

STATE OF ALASKA — 49th — Michael Lukshin CE-8737 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MTPLAN2		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(800) OR MPLOTH.PCP(1600)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

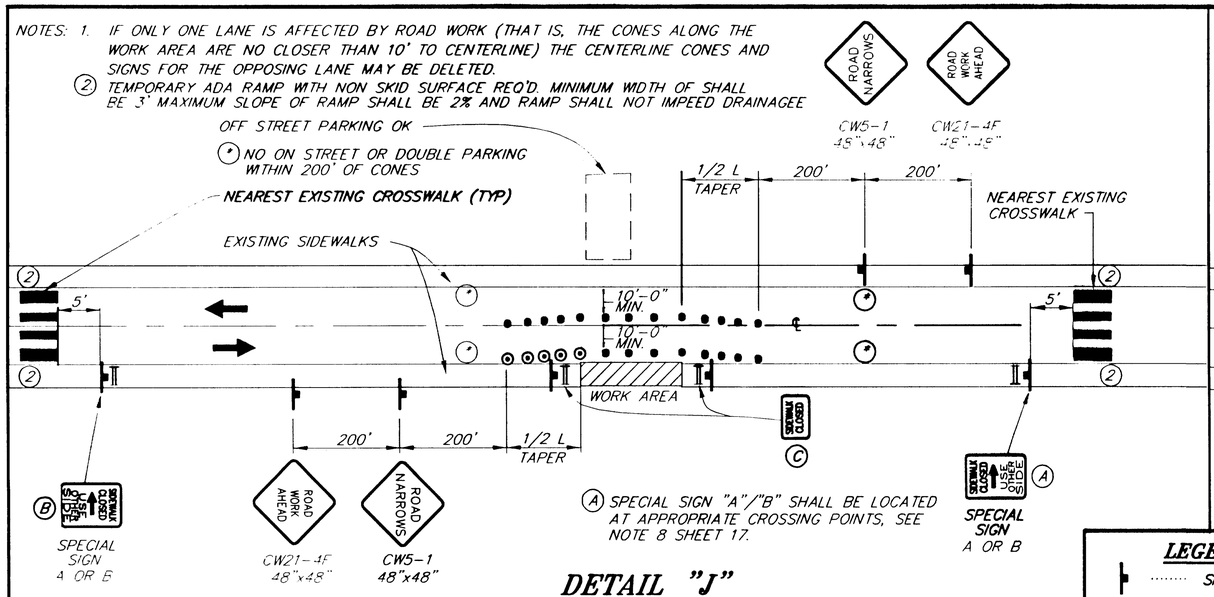
TRAFFIC DETOUR PLAN

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 57 OF 96

STATE OF ALASKA — 49th — Michael Lukshin CE-8737 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98

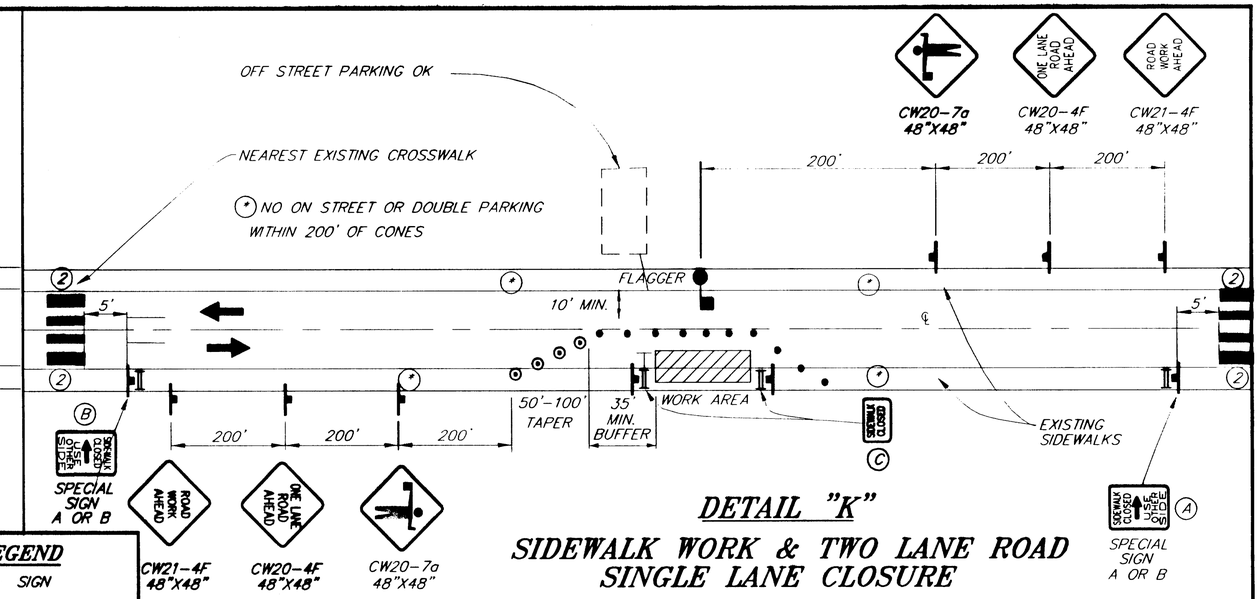
NOTES: 1. IF ONLY ONE LANE IS AFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES AND SIGNS FOR THE OPPOSING LANE MAY BE DELETED.

(2) TEMPORARY ADA RAMP WITH NON SKID SURFACE REQ'D. MINIMUM WIDTH OF SHALL BE 3' MAXIMUM SLOPE OF RAMP SHALL BE 2% AND RAMP SHALL NOT IMPEED DRAINAGEE



DETAIL "J"

SIDEWALK WORK & ROADWAY ENCROACHMENT



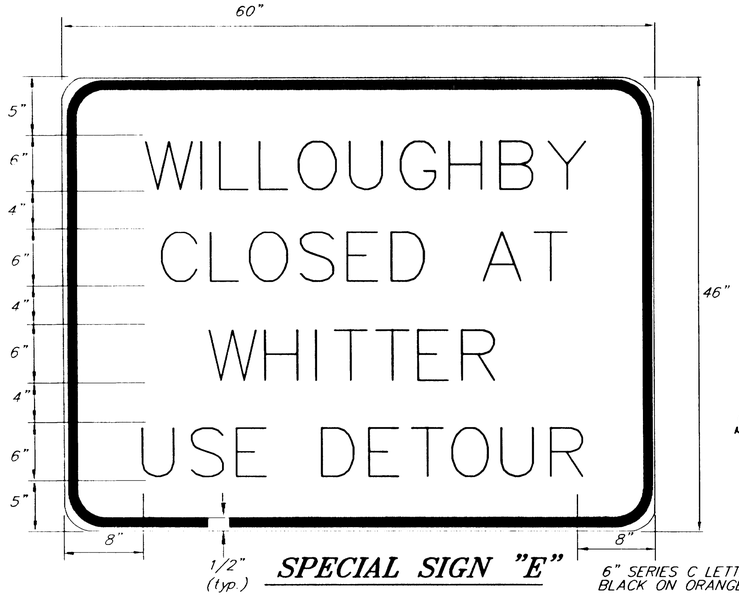
DETAIL "K"

SIDEWALK WORK & TWO LANE ROAD SINGLE LANE CLOSURE

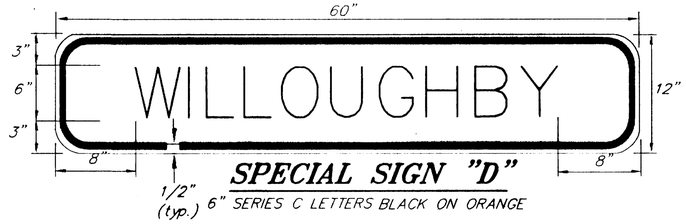
SPECIAL SIGN NOTES:

1. SIGNS SHALL HAVE WHITE BACKGROUND WITH BLACK LEGEND. LETTERING SHALL BE AS SHOWN ON THE PLAN.
2. SPECIAL SIGN "A" IS SHOWN, SPECIAL SIGN "B" SHALL HAVE THE ARROW POINTING THE OPPOSITE DIRECTION.
3. SIGNS SHALL CONFORM TO ALASKA SIGN DESIGN STANDARDS (ASDS). LETTERING SHALL BE 4" HIGH AND SERIES B.
4. TYPE "A" FLASHING WARNING LIGHTS SHALL BE USED ON BARRICADES AT SIDEWALK CLOSURES AND BYPASSES.

LEGEND
- SIGN
- CONE
- DRUM
- TYPE II BARRICADE
- FLAGGING STATION



SPECIAL SIGN "E" — 6" SERIES C LETTERS BLACK ON ORANGE



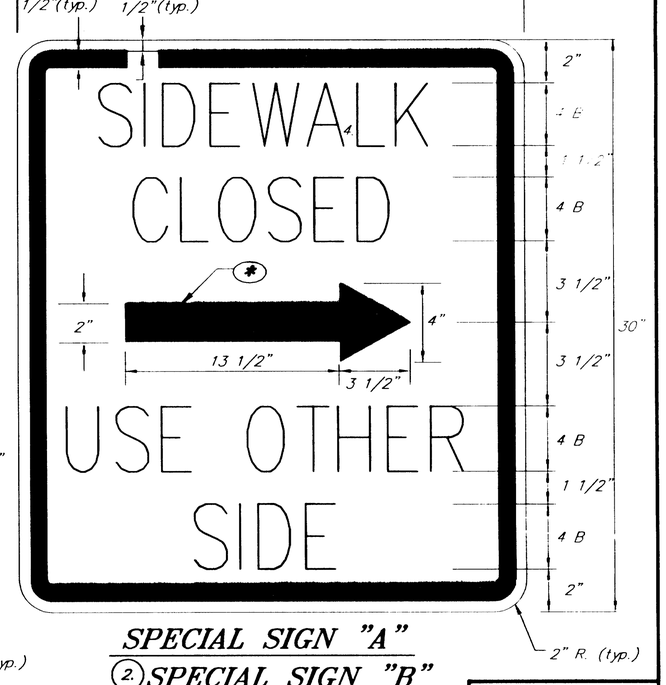
SPECIAL SIGN "D" — 6" SERIES C LETTERS BLACK ON ORANGE



SPECIAL SIGN "C"

DETAIL "L"

SPECIAL SIGNS



SPECIAL SIGN "A"

(2) SPECIAL SIGN "B"

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MTCP5		
PLOT: P:\-LIB\-PLOT\PLOTF.PCP(1000) OR PLOTH.PCP(2000)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION

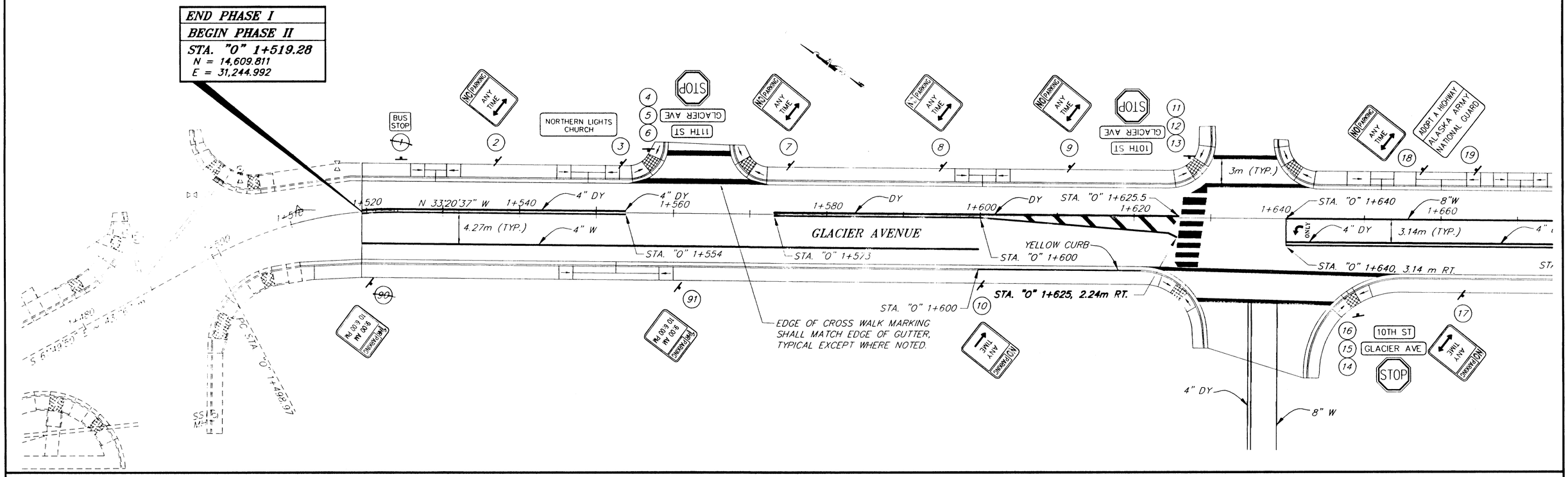
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

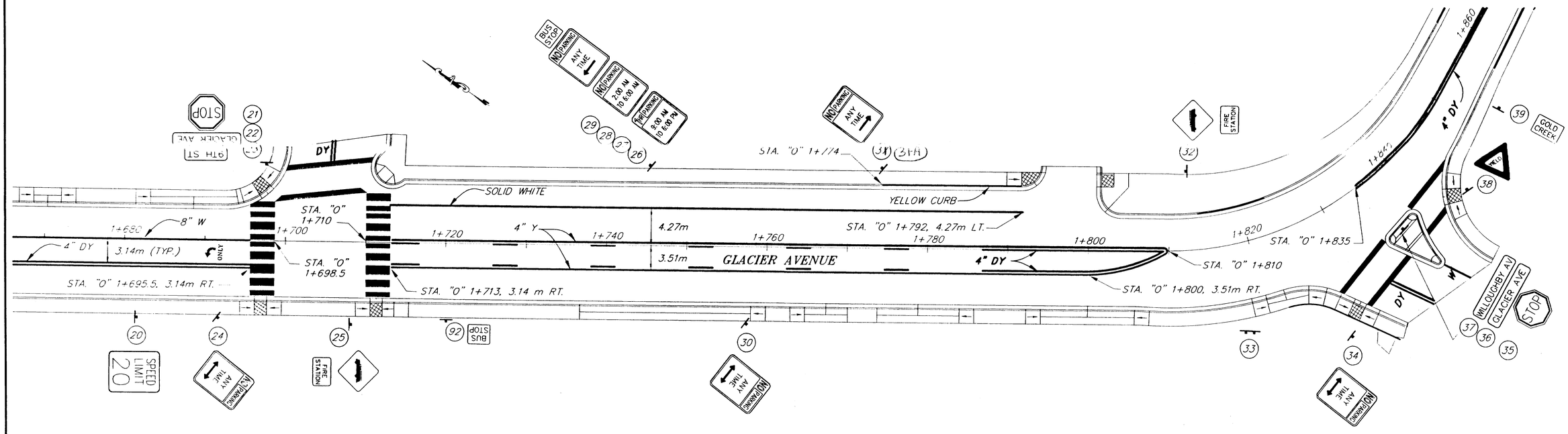
TRAFFIC CONTROL PLAN

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: K. KLEMMETSON	DATE: JAN. 1998
CHECKED BY: M. LUKSHIN	SHEET 58 OF 97

STATE OF ALASKA — 49th — Michael Lukshin — CE-8737 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98

END PHASE I
BEGIN PHASE II
STA. "0" 1+519.28
N = 14,609.811
E = 31,244.992





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

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

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\MSTRIPE VIEWS: P1, P2, TB1		
PLOT: FULL (1=1) OR HALF (1=2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
		drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

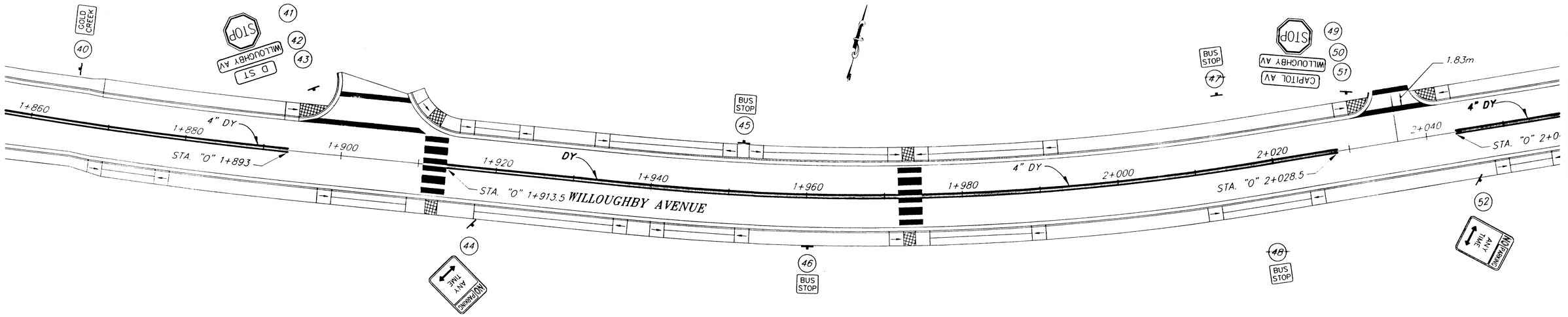
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

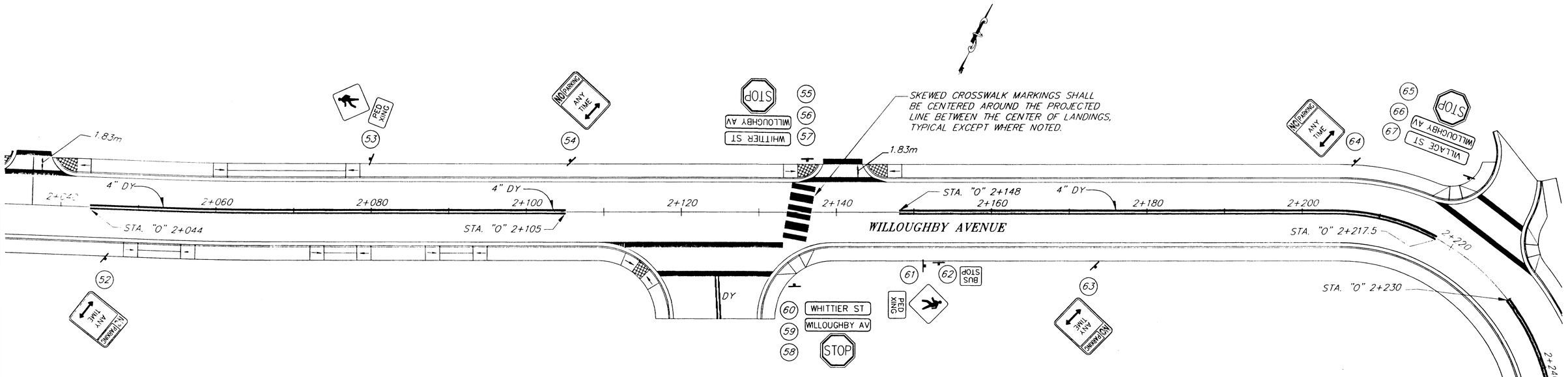
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE
RECONSTRUCTION – PHASE II
FED. NO. STP-0005 (149) PROJECT NO. 71463

SIGNING AND STRIPING PLAN

DESIGNED BY: R. PURVIS	PROJECT NO. 71463
DRAWN BY: K. SNYDER	DATE: JAN. 1998
CHECKED BY: K. SMITH	SHEETS 59 OF 97 3-25-98





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P: \JNU\71463\DR\MSTRIPE VIEWS: P3, P4, TB2		
PLOT: FULL (1=1) OR HALF (1=2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
		drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

RECORD OF REVISIONS

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

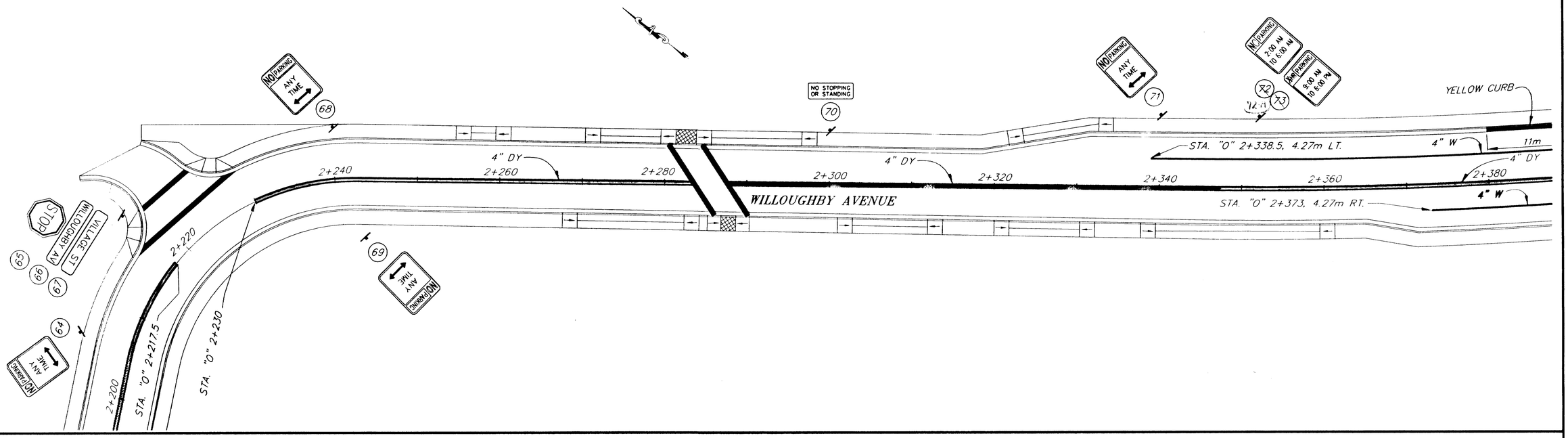
JUNEAU *ALASKA*

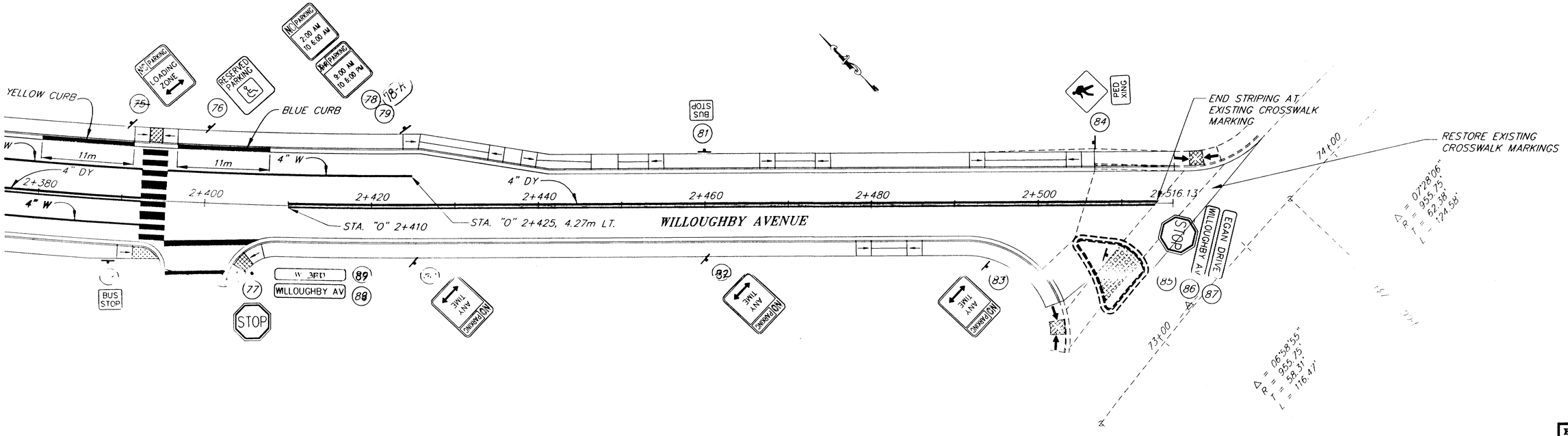
WILLOUGHBY AND GLACIER AVENUE
RECONSTRUCTION – PHASE II
FED. NO. STP-000S (149) PROJECT NO. 71463

SIGNING AND STRIPING PLAN

DESIGNED BY: *R. PURVIS*	PROJECT NO. *71463*
DRAWN BY: *K. SNYDER*	DATE: *JAN. 1998*
CHECKED BY: *K. SMITH*	SHEETS *60* OF *97*

ENGINEER'S SEAL
STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER
3-25-98





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

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

PATH: P:\JNU\71463\DR\MSTRIPE VIEWS: P5, P6, TB3		
PLOT: FULL (1=1) OR HALF (1=2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
		drawing info. 1=250 horiz. 1=25 vert. imports 1=.5

RECORD OF REVISIONS

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE
RECONSTRUCTION – PHASE II
FED. NO. STP-000S (149) PROJECT NO. 71463

SIGNING AND STRIPING PLAN

DESIGNED BY: *R. PURVIS*	PROJECT NO. *71463*
DRAWN BY: *K. SNYDER*	DATE: *JAN. 1998*
CHECKED BY: *K. SMITH*	SHEETS *61* OF *97*

325-98

STANDARD SIGNING SCHEDULE

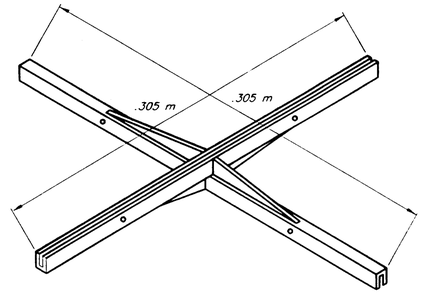
SIGN NO.	STATION	OFFSET LT.	OFFSET RT.	TYPE	LEGEND	SIZE INCHES	SIZE METER	AREA SQ. m	NO. OF POST	POST SIZE mm	FACING TRAFFIC	REMARKS
1	1+525	X			BUS STOP				1	51	NB	RELOCATE TO NEW POST
2	1+537	X		R7-101	NO PARKING ANYTIME		0.46 X 0.3	0.14	1	51	WB	
3	1+555	X			NORTHERN LIGHTS CHURCH				1	51	WB	RELOCATE TO NEW POST
4	1+558	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
5	1+558	X		D3-1	GLACIER AV		0.91 X 0.17	0.15			SB/NB	MOUNT ON TOP OF 4
6	1+558	X		D3-1	11TH ST		0.61 X 0.17	0.12			EB/WB	MOUNT ON TOP OF 4
7	1+577	X		R7-101	NO PARKING ANYTIME		0.46 X 0.3	0.14	1	51	WB	
8	1+596	X		R7-101	NO PARKING ANYTIME		0.46 X 0.3	0.14	1	51	WB	
9	1+613	X		R7-101	NO PARKING ANYTIME		0.46 X 0.3	0.14	1	51	WB	REMOVE
10	1+600		X	R7-101L	NO PARKING ANYTIME ←		0.46 X 0.3	0.14	1	51	EB	
11	1+628	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
12	1+628	X		D3-1	GLACIER AV		0.91 X 0.17	0.15			SB/NB	MOUNT ON TOP OF 11
13	1+628	X		D3-1	10TH ST						EB/WB	MOUNT ON TOP OF 11
14	1+649		X	R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
15	1+649		X	D3-1	GLACIER AV		0.91 X 0.17	0.15			SB/NB	MOUNT ON TOP OF 14
16	1+649		X	D3-1	10TH ST		0.61 X 0.17	0.12			EB/WB	MOUNT ON TOP OF 14
17	1+663		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	
18	1+657	X		R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	WB	
19	1+665	X			ADOPT A HIGHWAY				1	51	WB	RELOCATE TO A NEW POST
20	1+682		X	R2-1	SPEED LIMIT 20		0.91 X 0.76				EB	
21	1+698	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
22	1+698	X		D3-1	GLACIER AV		0.91 X 0.17	0.15	1		SB/NB	MOUNT ON TOP OF 21
23	1+698	X		D3-1	9TH ST		0.61 X 0.17	0.12			EB/WB	MOUNT ON TOP OF 21
24	1+692		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	
25	1+705		X	W11-8	FIRE STATION (SYMBOL)		0.91 X 0.91	0.83	1			BAND TO LIMINAIRE
26	1+746	X		R7-108B	1HOUR PARKING 9AM TO 6PM		0.46 X 0.3	0.14	1	51	WB	
27	1+746	X		R7-102A	NO PARKING 2AM TO 6AM		0.46 X 0.3	0.14			WB	MOUNT ON TOP OF 26
28	1+746	X		R7-101L	NO PARKING ANYTIME ←		0.46 X 0.3	0.14			WB	MOUNT ON TOP OF 26
29	1+746	X			BUS STOP						WB	MOUNT ON TOP OF 26
30	1+757		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	
31	1+774	X		R7-101R	NO PARKING ANYTIME →		0.46 X 0.3	0.14	1	51	WB	
32	1+812	X		W11-8	FIRE STATION (SYMBOL)		0.91 X 0.91	0.83	1	51	WB	
33	1+817		X		4 LINE DIRECTIONAL SIGN				1		EB	REMOVE
34	1+830		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	
35	1+835		X	R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	MOUNT IN ISLAND
36	1+835		X	D3-1	GLACIER AV		0.91 X 0.17	0.15			SB/NB	MOUNT ON TOP OF 35
37	1+835		X	D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			EB/WB	MOUNT ON TOP OF 35
38	1+842		X	R1-2	YIELD		0.91 X 0.91	0.83	1	51	NB	
39	1+854		X	I-3	GOLD CREEK		1.07 X 0.17	0.18	1	51	EB	
40	1+866	X		I-3	GOLD CREEK		1.07 X 0.17	0.18	1	51	WB	
41	1+896	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
42	1+896	X		D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 41
43	1+896	X		D3-1	D ST		0.61 X 0.17	0.12			EB/WB	MOUNT ON TOP OF 41
44	1+197		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	REMOVE
45	1+951	X			BUS STOP				1	51	WB	RELOCATE TO #47
46	1+960		X		BUS STOP				1	51	EB	RELOCATE TO #48
47	2+014	X			BUS STOP				1	51	WB	
48	2+019		X		BUS STOP				1	51	EB	
49	2+032	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
50	2+032	X		D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 49
51	2+032	X		D3-1	CAPITAL AV		0.91 X 0.17	0.15			EB/WB	MOUNT ON TOP OF 49
52	2+042		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	
53	2+080		X	W11-2	ADVANCE PEDESTRIAN							REMOVE
54	2+116	X		R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	WB	
55	2+137	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
56	2+137	X		D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 55
57	2+137	X		D3-1	WHITTIER ST		1.07 X 0.17	0.18			EB/WB	MOUNT ON TOP OF 55
58	2+135		X	R1-1	STOP		0.76 X 0.76	0.58	1	51	NB	
59	2+135		X	D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 58
60	2+135		X	D3-1	WHITTIER ST		1.07 X 0.17	0.18			EB/WB	MOUNT ON TOP OF 58
61	2+151		X	W11-2	ADVANCE PEDESTRIAN		0.91 X 0.91	0.83	1		EB	REMOVE
62	2+153		X		BUS STOP				1		EB	RELOCATE
63	2+167		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	REMOVE
64	2+206	X		R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	WB	
65	2+218	X		R1-1	STOP		0.76 X 0.76	0.58	1	51	SB	
66	2+218	X		D3-1	WILLOUGHBY AV		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 65
67	2+218	X		D3-1	VILLAGE ST		0.91 X 0.17	0.15			EB/WB	MOUNT ON TOP OF 65
68	2+240	X		R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	WB	REMOVE
69	2+244		X	R7-101RL	NO PARKING ANYTIME ↔		0.46 X 0.3	0.14	1	51	EB	REMOVE
70	2+302		X	R7S-104	NO STOPPING OR STANDING		0.46 X 0.3	0.14	1	51	WB	

STANDARD SIGNING SCHEDULE (CONT.)

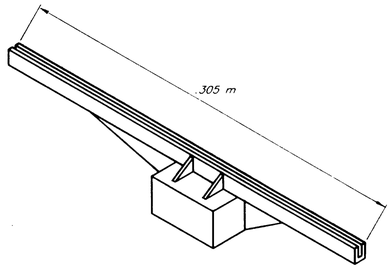
SIGN NO.	STATION	OFFSET LT.	OFFSET RT.	TYPE	LEGEND	SIZE INCHES	SIZE METER	AREA SQ. m	NO. OF POST	POST SIZE mm	FACING TRAFFIC	REMARKS
71	2+339	X		R7-101L	NO PARKING ANY TIME ←		0.46 X 0.3	0.14	1	51	WB	
72	2+352	X		R7-102A	NO PARKING 2AM TO 6AM		0.46 X 0.3	0.14	1	51	WB	MOUNT ON TOP OF 73
73	2+352	X		R7-108B	1/2 HOUR PARKING 9AM TO 6PM		0.46 X 0.3	0.14			WB	72-A
74	2+388		X		BUS STOP				1	51	EB	
75	2+390		X	R7-106	NO PARKING LOADING ZONE		0.46 X 0.3	0.14	1	51	WB	
76	2+402	X		R7-8	HANDICAPPED PARKING (SYMBOL)		0.46 X 0.3	0.14	1	51	WB	
77	2+406		X	R1-1	STOP		0.76 X 0.76	0.58	1	51	NB	
78	2+424	X		R7-102A	NO PARKING 2AM TO 6AM		0.46 X 0.3	0.14	1	51	WB	MOUNT ON TOP OF 79
79	2+424	X		R7-108B	8HOUR PARKING 9AM TO 6PM		0.46 X 0.3	0.14			WB	78-A
80	2+425		X	R7-101RL	NO PARKING ANY TIME ↔		0.46 X 0.3	0.14	1	51	EB	REMOVE
81	2+460	X			BUS STOP				1	51	WB	
82	2+460		X	R7-101RL	NO PARKING ANY TIME ↔		0.46 X 0.3	0.14	1	51	WB	
83	2+493		X	R7-101RL	NO PARKING ANY TIME ↔		C.46 X 0.3	0.14	1	51	WB	
84	2+505	X		W11-2	ADVANCE PEDESTRIAN		0.91 X 0.91	0.83	1	51	WB	REMOVE
85	2+506		X	R1-1	STOP		0.76 X 0.76	0.58	1	51	EB	
86	2+506		X	D3-1	WILLOUGHBY AVE.		1.22 X 0.17	0.21			NB/SB	MOUNT ON TOP OF 85
87	2+506		X	D3-1	EGAN DR		0.76 X 0.17	0.13			EB/WB	MOUNT ON TOP OF 85
88	2+406		X	D3-1	WILLOUGHBY AVE.		1.22 X .17	0.21			NB/SB	MOUNT ON TOP OF 77
89	2+406		X	D3-1	W. 3RD AVE.		0.76 X 0.17	0.13			EB/WB	MOUNT ON TOP OF 77
90	1+520		X	R7-108	1 HOUR PARKING		0.46 X 0.3	0.14			EB	
91	1+563		X	R7-108	1 HOUR PARKING		0.46 X 0.3	0.14			EB	
92	1+110		X		BUS STOP				1	51	SB	SIGN TO BE FURNISHED BY CBJ

GENERAL SIGNING NOTES

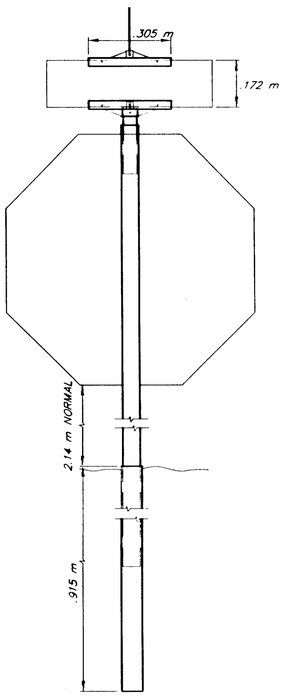
1. SIGN LOCATIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO MINOR REVISIONS.
2. ALL SIGN POSTS SHALL USE SLEEVE TYPE SOIL EMBEDMENT. THE SLEEVE SHALL BE 57mm.
3. SEE STD. DWG. S-30.01 FOR POST SLEEVE TYPE SOIL EMBEDMENT.
4. ALL NEW SIGNS SHALL BE UNFRAMED EXCEPT AS NOTED IN THE STANDARD SIGN SCHEDULE.
5. ALL EXISTING SIGNS NOT BEING RELOCATED SHALL BE DISMANTLED BY THE CONTRACTOR AND STOCKPILED AT THE CBJ CITY SHOP 1300 WEST 9TH STREET.
6. ALL D3-1 STREET SIGNS HAVE THE LEGEND ON BOTH SIDES.
7. SIGNS SHALL BE INSTALLED USING URBAN DIMENSIONS ON STD. DRAWING S-05.00.
8. ALL D3-1 STREET NAME SIGNS SHALL BE THE EXTRUDED TYPE.
9. FOR PURPOSES OF ORIENTING SIGNS, GLACIER AVE. IS ASSUMED TO RUN EAST & WEST.
10. SIGNS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE SIGN PANEL IS 2.14 m ABOVE THE ROADWAY SURFACE. THE EXCEPTIONS TO THIS ARE SIGNS D9-3 AND D5-5A WHICH SHALL BE 1.52 m ABOVE THE ROADWAY SURFACE.
11. FINAL SIGN LOCATIONS SHALL BE FIELD LOCATED BY THE CBJ. CONTACT BILL ELLIS AT 586-5256 FOR LOCATIONS.
12. REFER TO CBJ STD. 127 FOR SIGN POST ASSEMBLY.



TYPICAL HEAVY DUTY SIGN TO SIGN CROSS BRACKET



TYPICAL HEAVY DUTY SIGN TO POST BRACKET



D3-1 TYPICAL SIGN DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: A:\CAD\DRAWINGS\SIGNSUM M-LOTH.PCP(1) OR MPLOTH.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

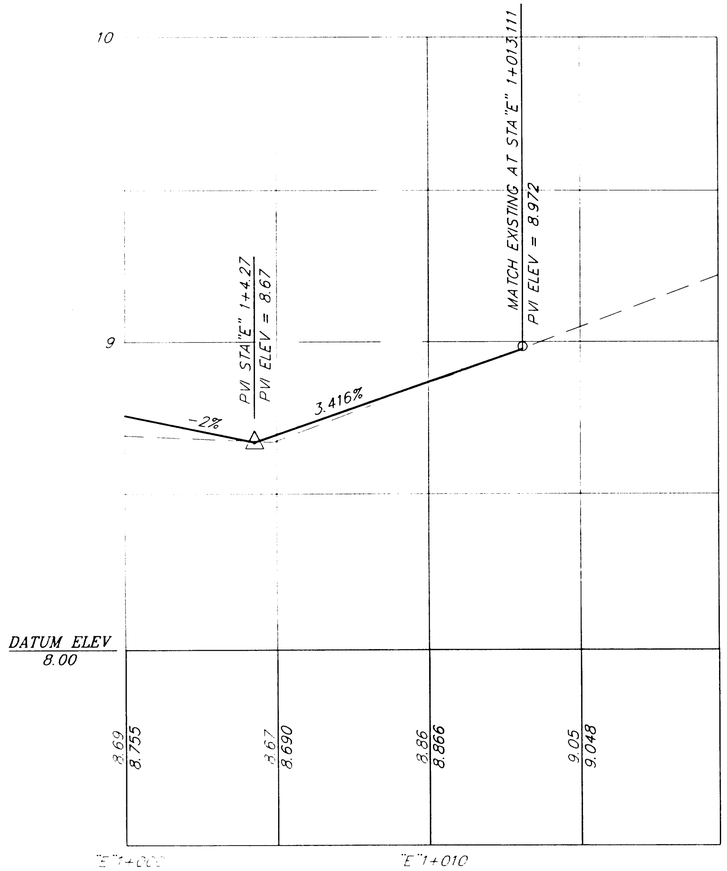
JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II — ALASKA

FED. NO. STP-000S (149) ~ PROJECT NO. 71463

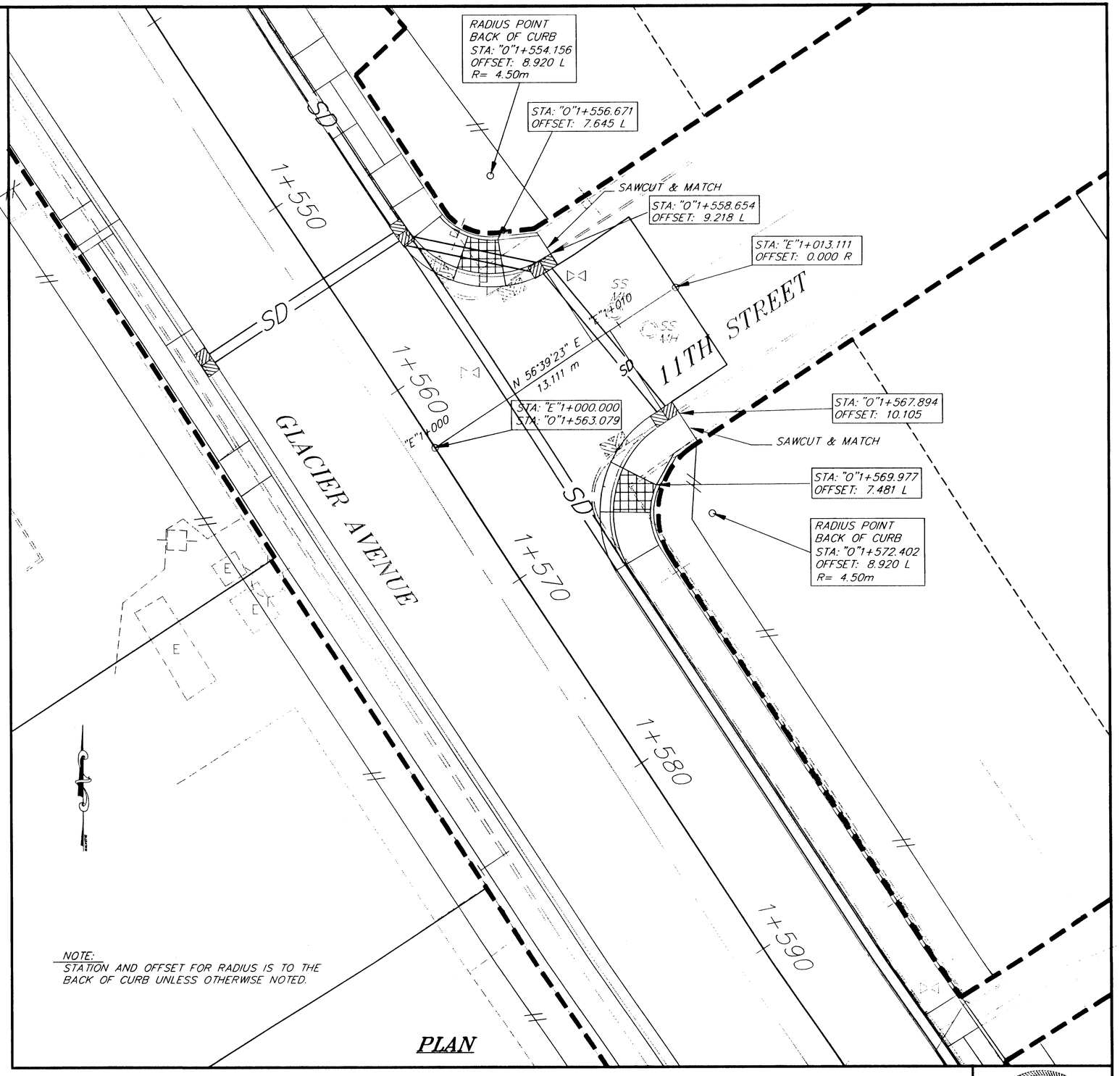
SIGN SUMMARY

DESIGNED BY: R. PURVES	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: K. SMITH	SHEET 62 OF 97

STATE OF ALASKA — 49th — Michael Lukshin CE-8737 — REGISTERED PROFESSIONAL ENGINEER — 3-25-98



11TH STREET PROFILE



PLAN

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
PATH: P:\JNU\71463\DR\M-APP7.DWG		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

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

JUNEAU — ALASKA

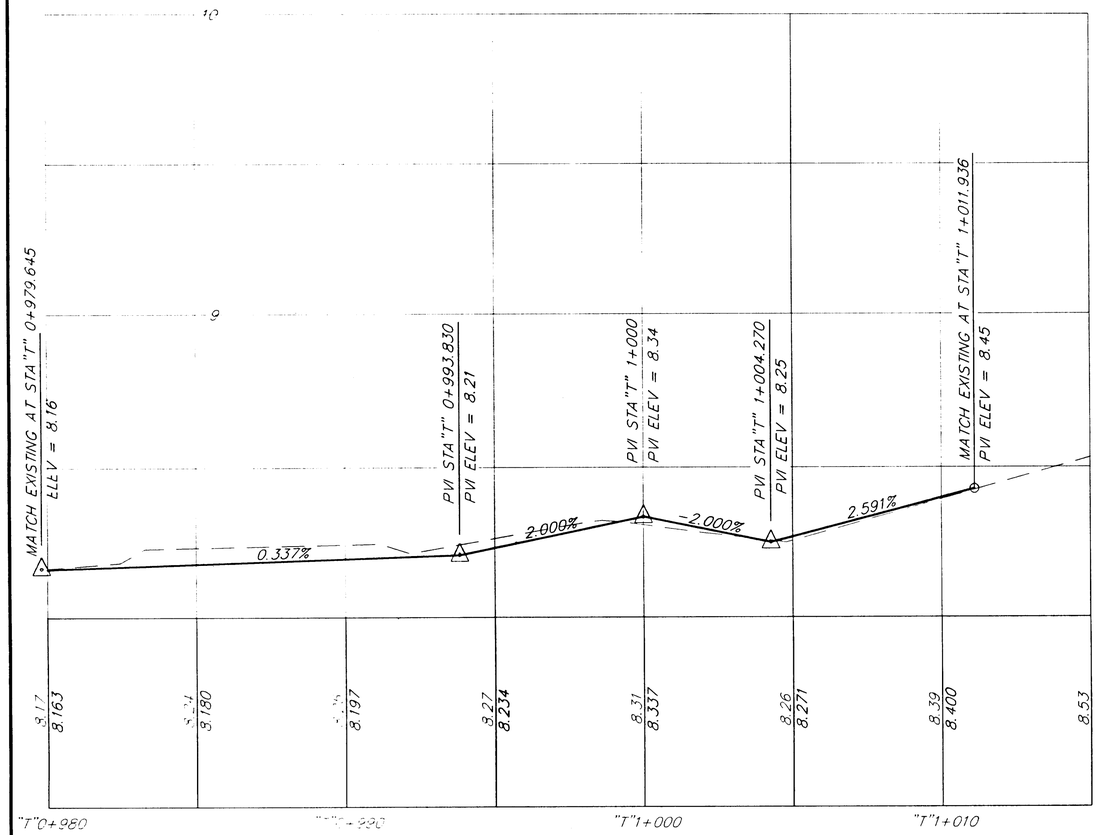
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

ELEVENTH STREET

APPROACH PLANS & SPECIAL DETAILS

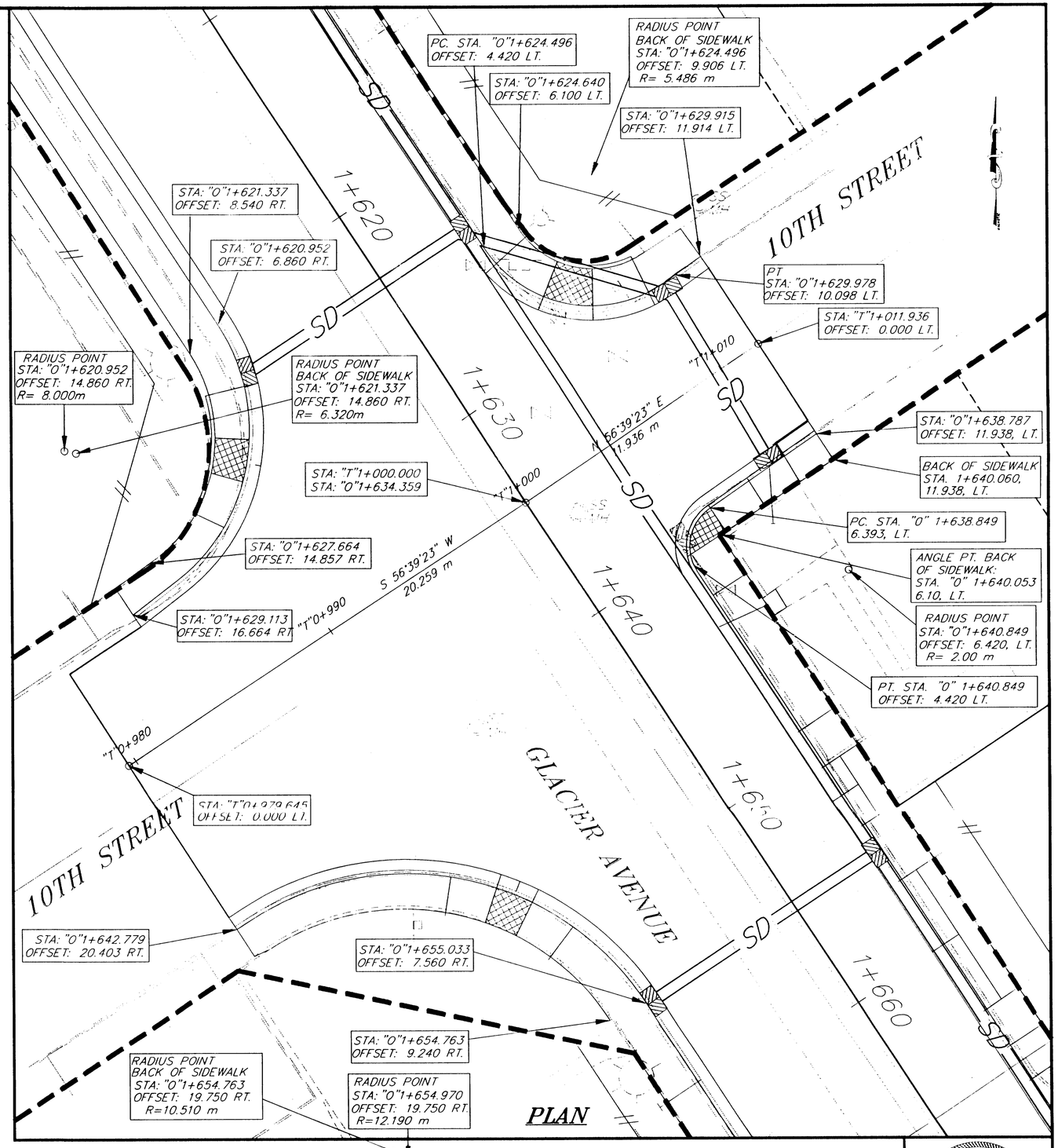
DESIGNED BY: *M. SHEELER*	PROJECT NO. *71463*
DRAWN BY: *AUTOCAD*	DATE: *APRIL 1998*
CHECKED BY: *A. STEININGER*	SHEET *63* OF *97*

STATE OF ALASKA
49TH
David D Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3/23/98



10TH STREET PROFILE

NOTE: STATION AND OFFSET IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.



PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P: \JNU\71463\DR\M-APP8.DWG		
PLOT: P: \-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

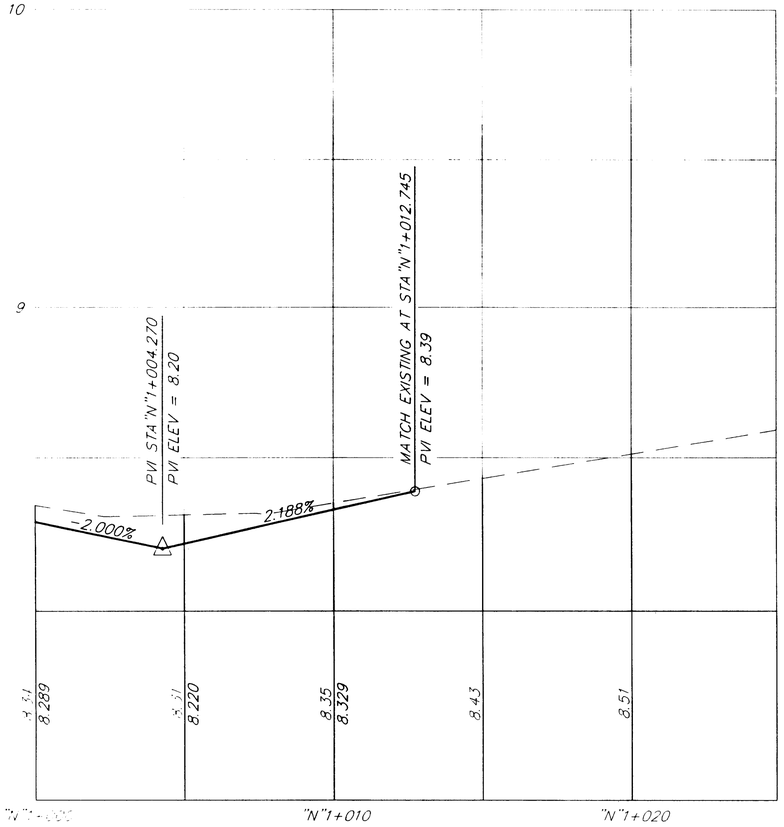
WILLOUGHBY AND GLACIER AVENUE
RECONSTRUCTION - PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

TENTH STREET

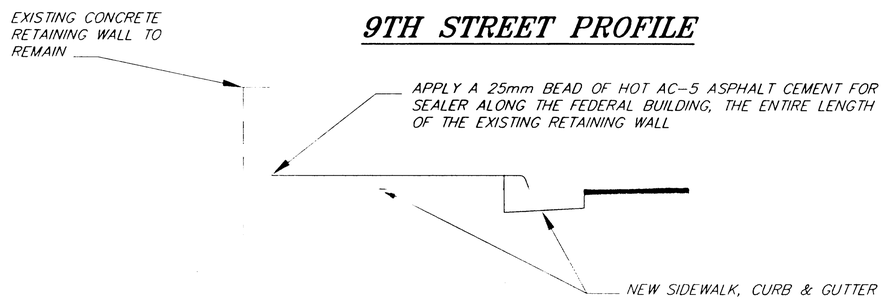
APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEET 64 OF 97

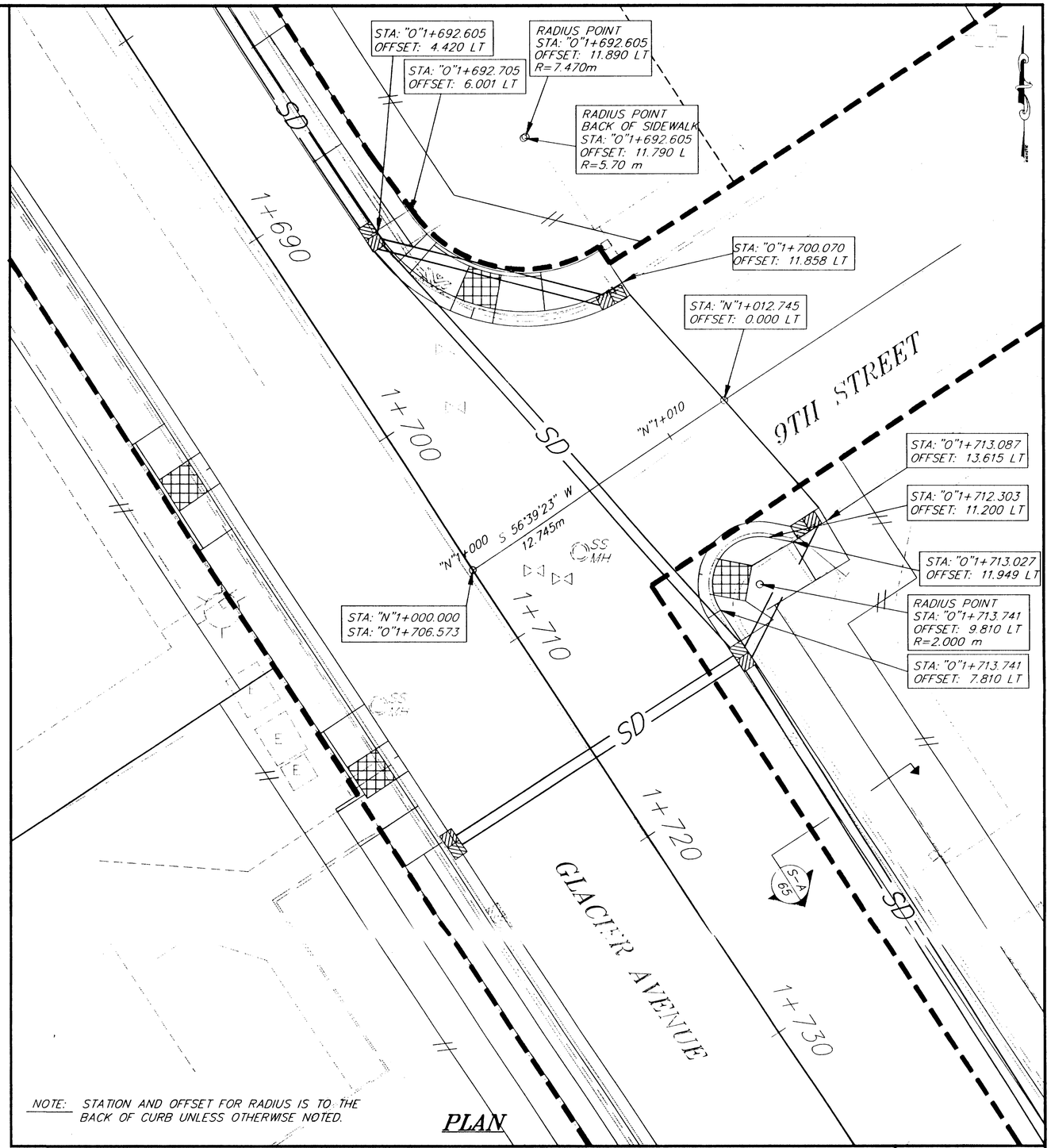
STATE OF ALASKA
David D. Soldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
4/25/98



9TH STREET PROFILE



SECTION A



NOTE: STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
PLOT: P:\JNU\71463\DR\M-APP9.DWG		
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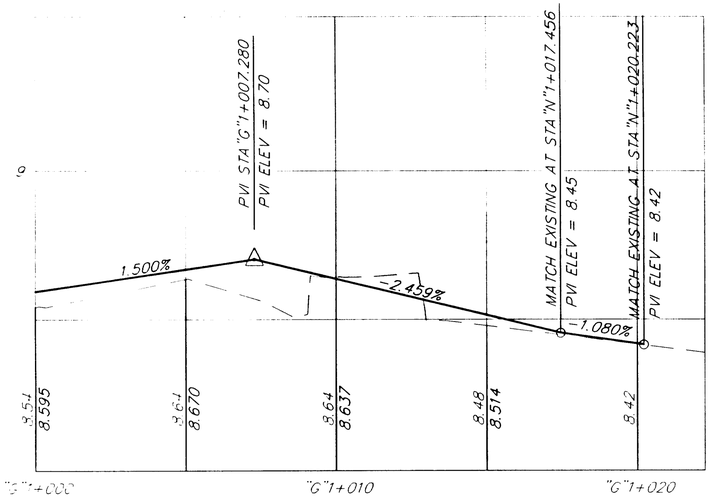
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — ALASKA

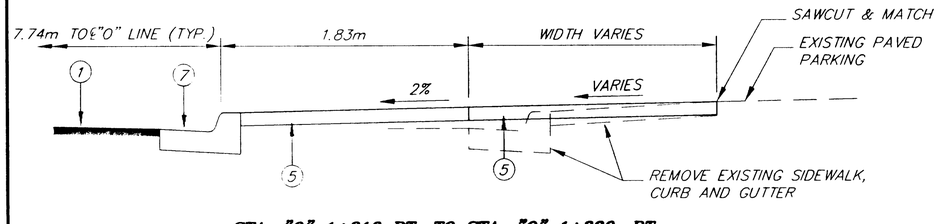
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463
9TH STREET
APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEET 65 OF 97

STATE OF ALASKA
David D Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
5/25/98

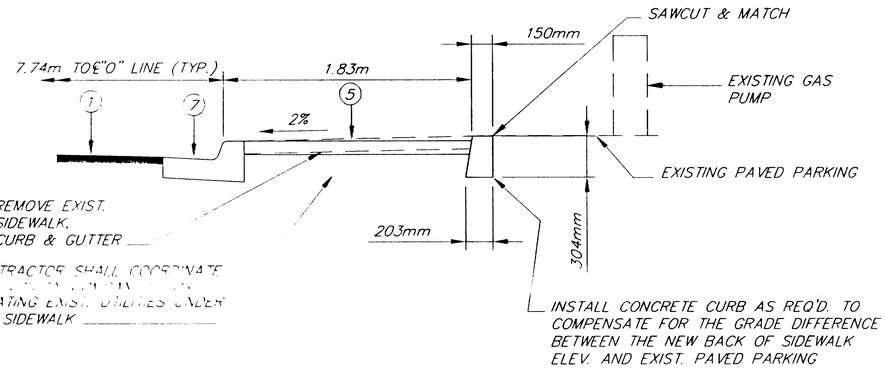


GLACIER HWY. PROFILE



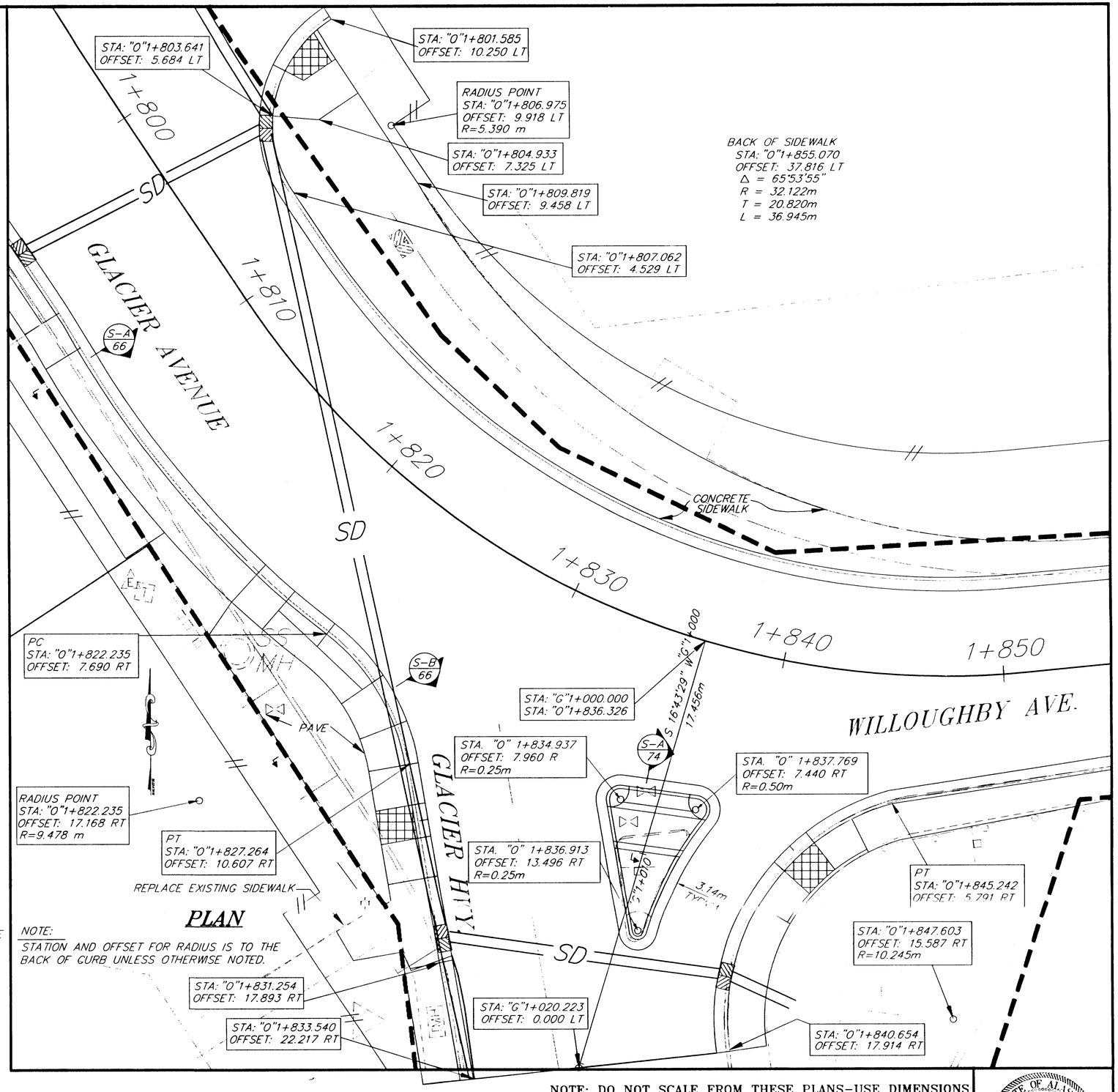
STA. "O" 1+810 RT. TO STA. "O" 1+830, RT.

SECTION (B)



STA. "O" 1+770 RT. TO STA. "O" 1+810, RT.

SECTION (A)



PLAN

NOTE:
STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

RECORD OF REVISIONS		
BY:	DATE:	DESCRIPTION OF CHANGE:

PATH: P:\JNU\71463\DR\M-APP10.DWG
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)

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

JUNEAU — ALASKA

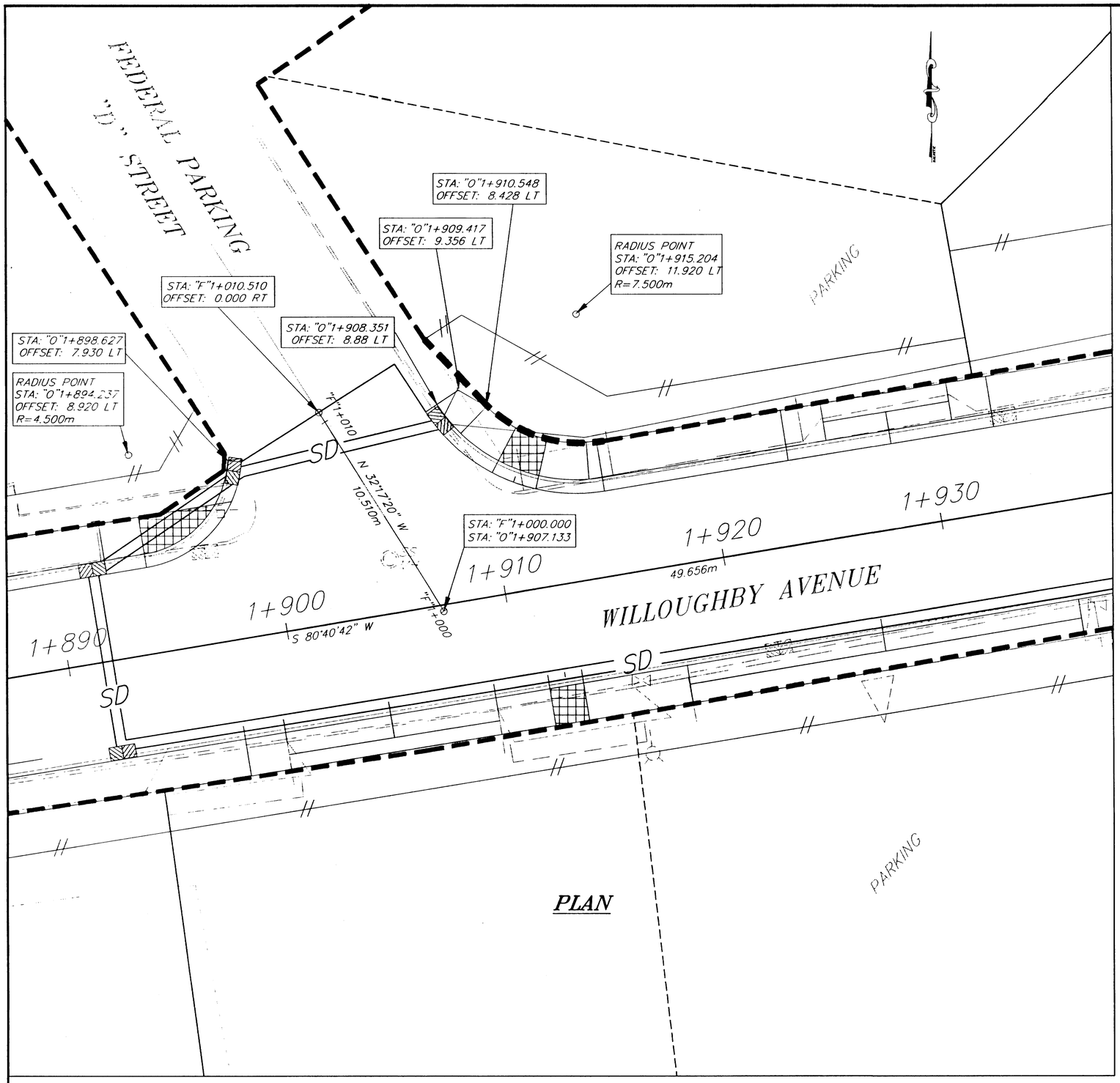
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

GLACIER HIGHWAY

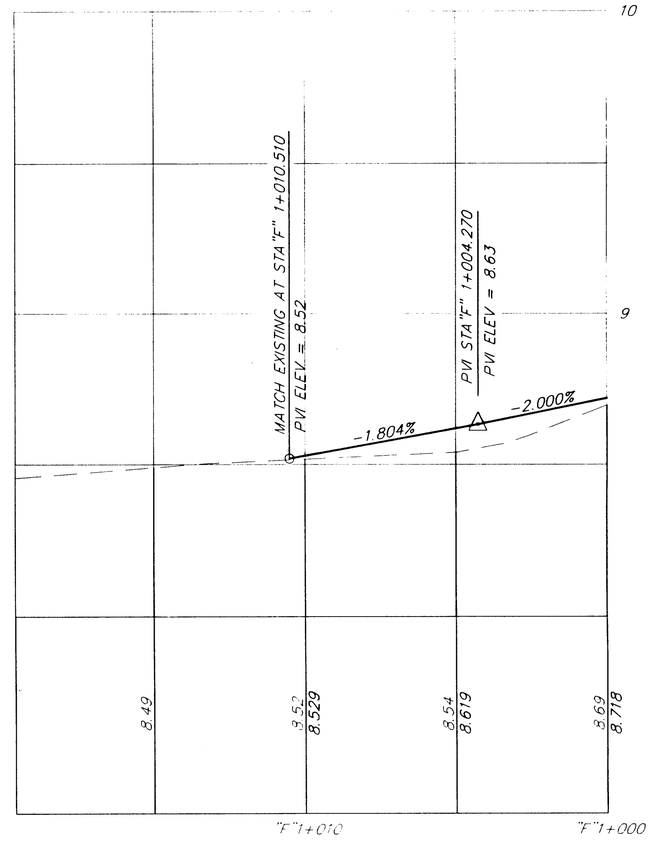
APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEET 66 OF 97

STATE OF ALASKA
David D Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3-25-98



PLAN



FEDERAL PARKING PROFILE

NOTE: STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\M-APP11.DWG	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION	JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II — ALASKA FED. NO. STP-000S (149) ~ PROJECT NO. 71463 "D" STREET APPROACH PLANS & SPECIAL DETAILS
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY: / DATE: / DESCRIPTION OF CHANGE:		
RECORD OF REVISIONS		

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEET 67 OF 97

STATE OF ALASKA — David D. Saldivar — CE-8307 — REGISTERED PROFESSIONAL ENGINEER

ALL LABOR AND MATERIALS FOR RETAINING WALL UNDER SIDEWALK SHALL BE INCIDENTAL TO ITEM 608(6)

BEGIN RETAINING WALL
STA. "O" 1+994.70
OFFSET: 5.600 LT

END RETAINING WALL
STA. "O" 2+000.70
OFFSET: 5.915 LT

END ADJUSTMENT OF BACK OF SIDEWALK
STA: "O"2+006.655
OFFSET: 6.100 LT

ADJUST BACK OF SIDEWALK TO AVIOD FENCE

STA: "O"2+036.352
OFFSET: 10 LT

STA: "O"2+033.507
OFFSET: 6.775 LT

RADIUS POINT
STA: "O"2+030.613
OFFSET: 7.270 LT
R=2.850 m

STA: "O"2+039.379
OFFSET: 6.096 LT

RADIUS POINT
STA: "O"2+042.007
OFFSET: 7.269 L
R=2.850 m

END RETAINING WALL
STA. "O" 2+000.00
OFFSET: 6.100 RT

BEGIN RETAINING WALL
STA. "O" 1+994.00
OFFSET: 6.100 RT

CAPITAL AVENUE

Valdespina (Driftwood's) Apartments

CONCRETE

GRAVEL

SD

SS MH

1+980 1+990 2+000 2+010 2+020 2+030 2+040 2+050 2+060

NOTES:

STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\M-APP12.DWG		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

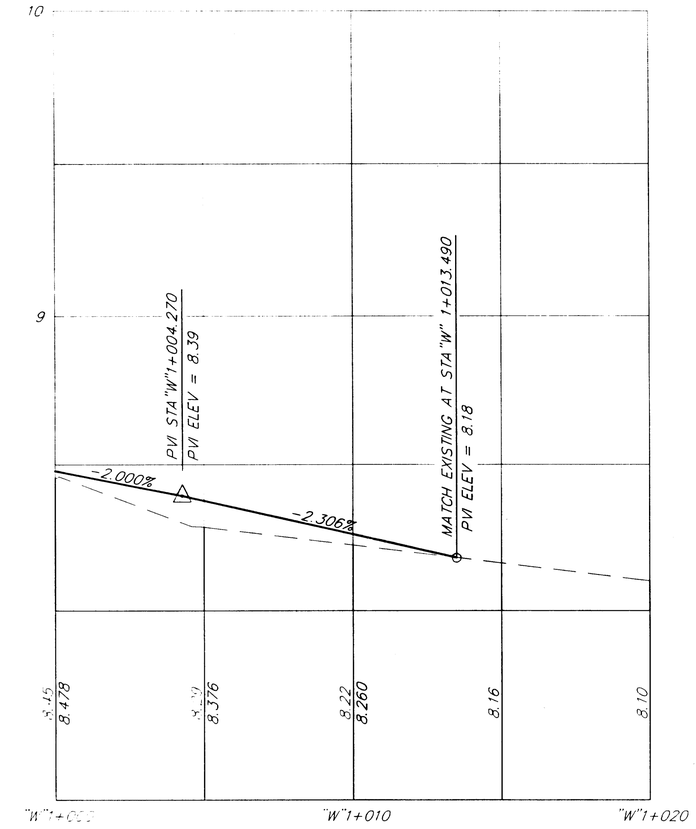
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

CAPITAL AVENUE

APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: *M. SHEELER*	**PROJECT NO.** *71463*
DRAWN BY: *AUTOCAD*	**DATE:** *APRIL 1998*
CHECKED BY: *A. STEININGER*	**SHEET** *68* **OF** *97*

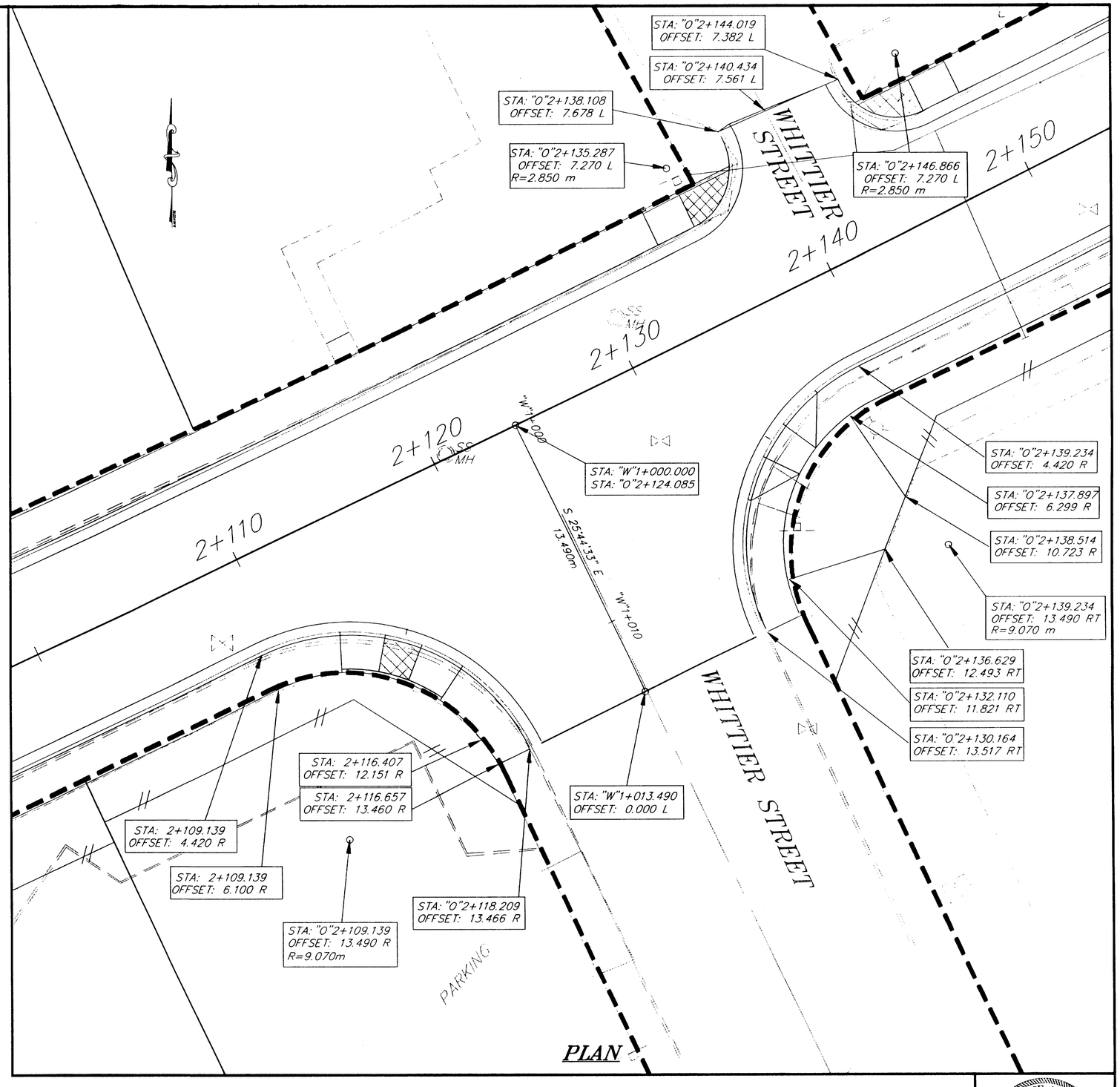
STATE OF ALASKA
David D Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER



WHITTIER STREET PROFILE

NOTE:

STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.



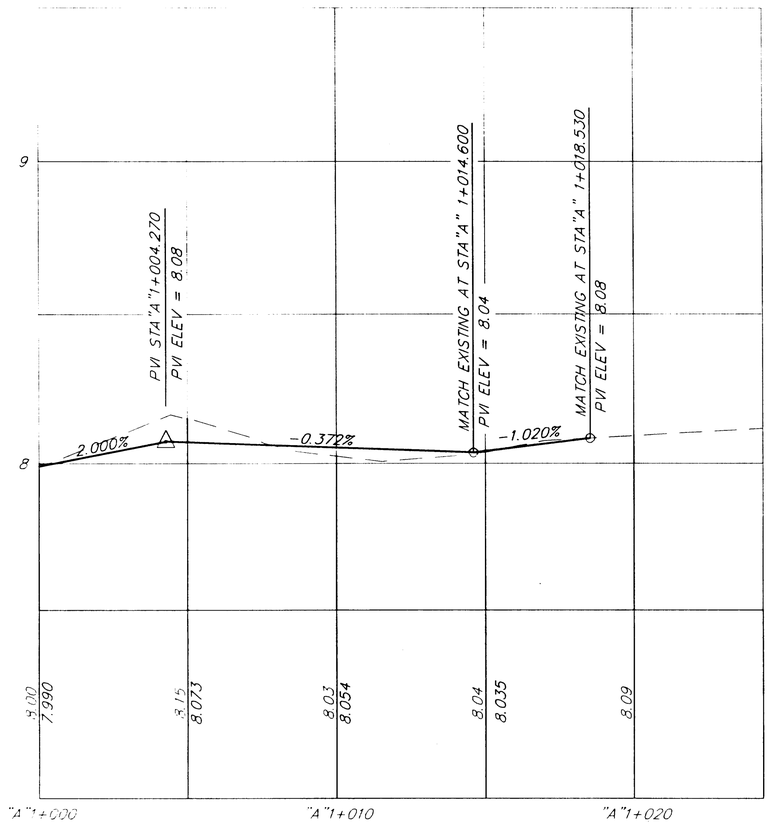
PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

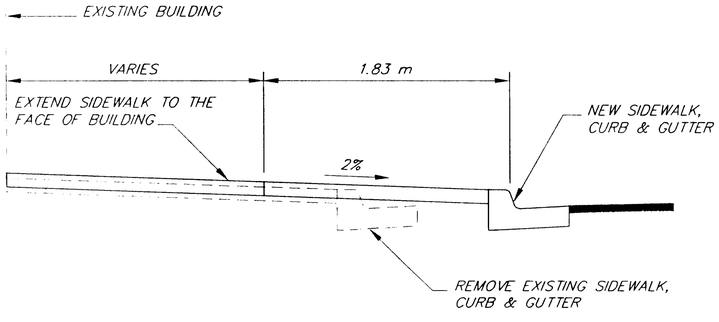
PATH: P:\JNU\71463\DR\M-APP13.DWG	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SOUTHEAST REGION DESIGN & CONSTRUCTION	JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II — ALASKA FED. NO. STP-000S (149) ~ PROJECT NO. 71463 WHITTER STREET APPROACH PLANS & SPECIAL DETAILS
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)		
BY: / DATE: / DESCRIPTION OF CHANGE:		

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 69 OF 97

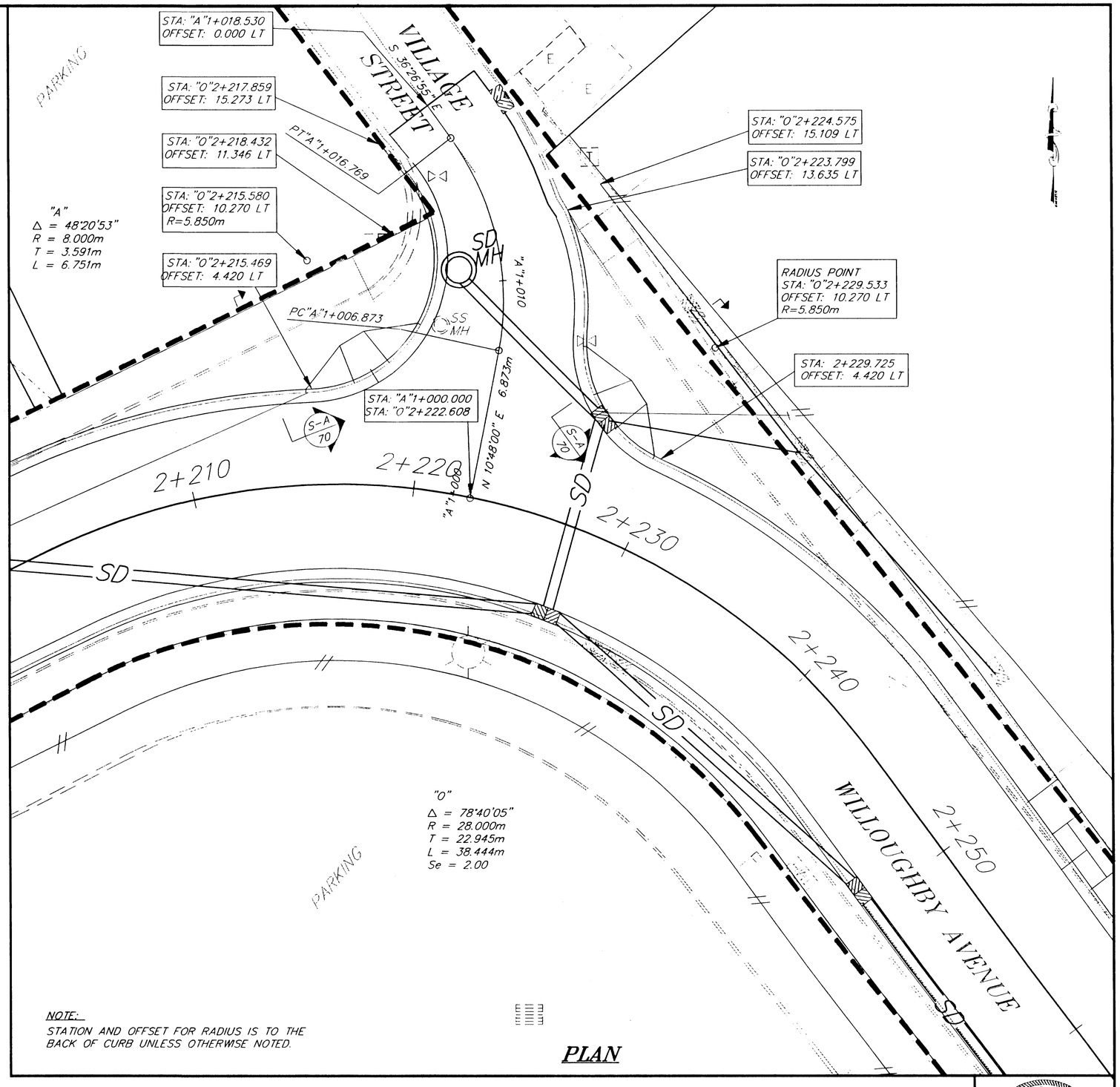
STATE OF ALASKA
David D. Saltivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER



WHITTIER AVENUE PROFILE



SECTION (A)



NOTE:
STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\M-APP14.DWG		
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BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

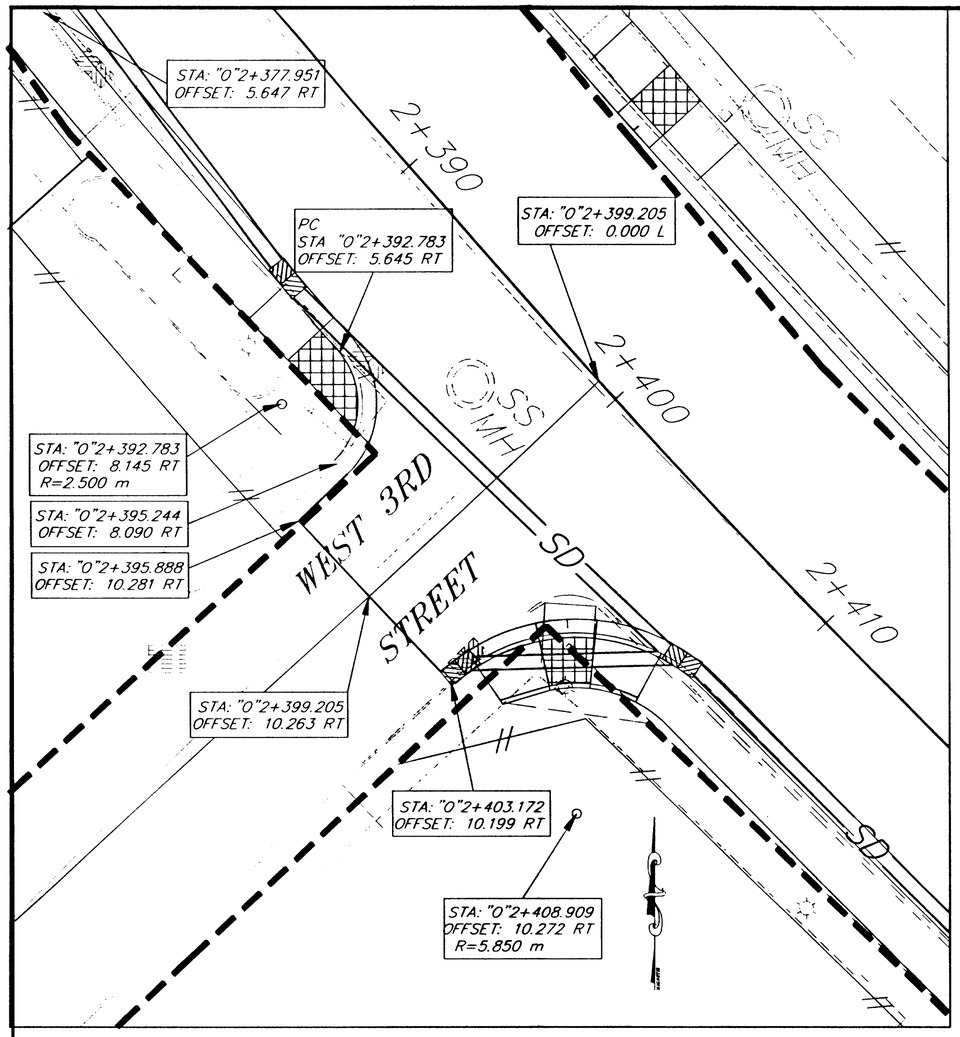
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
VILLAGE STREET
APPROACH PLANS & SPECIAL DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 70 OF 97

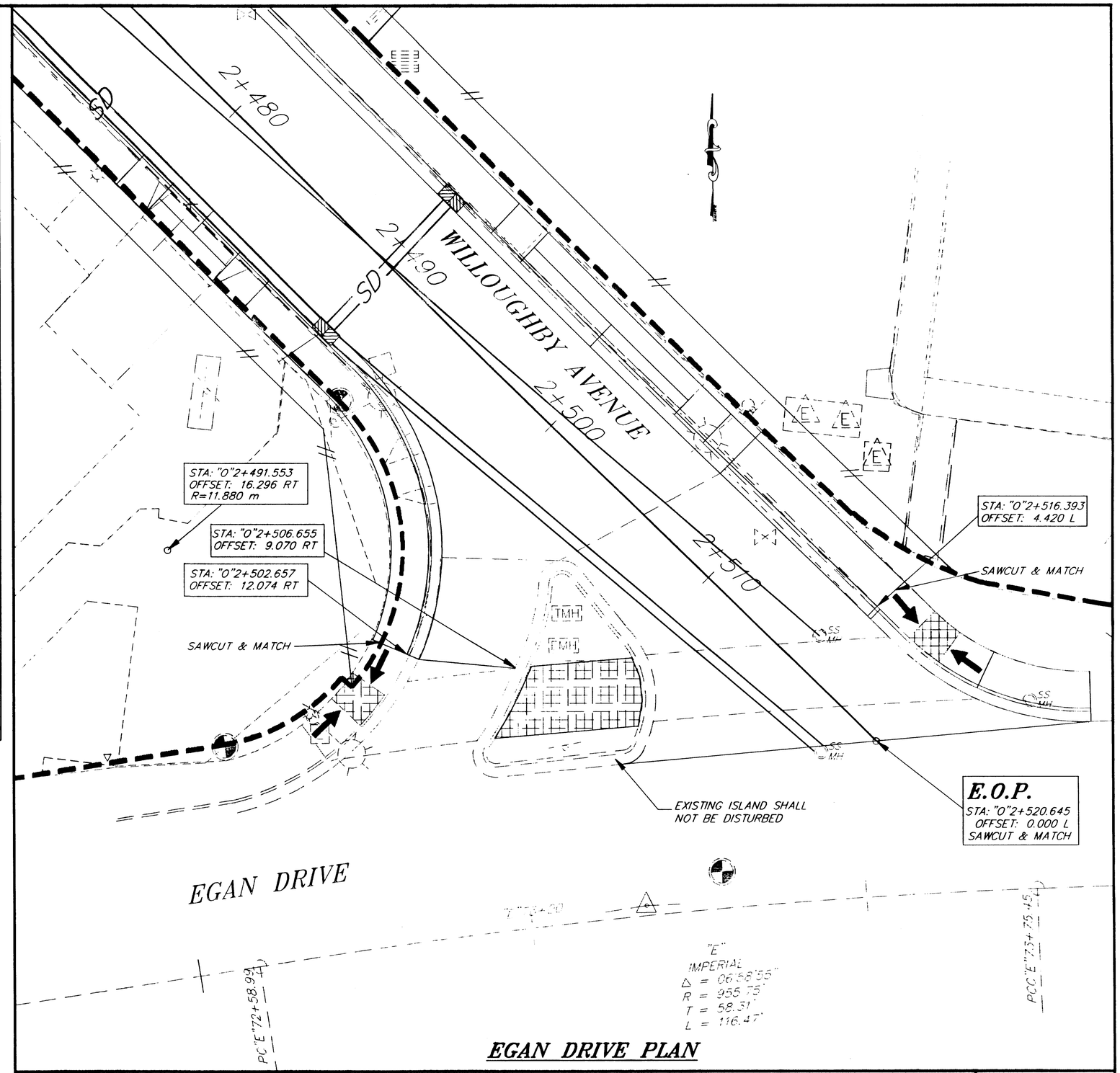
STATE OF ALASKA — 49th — David D Saldivar CE-8307 — REGISTERED PROFESSIONAL ENGINEER



WEST 3RD STREET
CENTENNIAL HALL PARKING PLAN

NOTE:

STATION AND OFFSET FOR RADIUS IS TO THE BACK OF CURB UNLESS OTHERWISE NOTED.



EGAN DRIVE PLAN

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH:	P: \JNU\71463\DR\M-APP15.DWG
PLOT:	P: \-LIB\-PLOT\MPLOTF.PCP(100) OR MPLOTH.PCP(200)

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

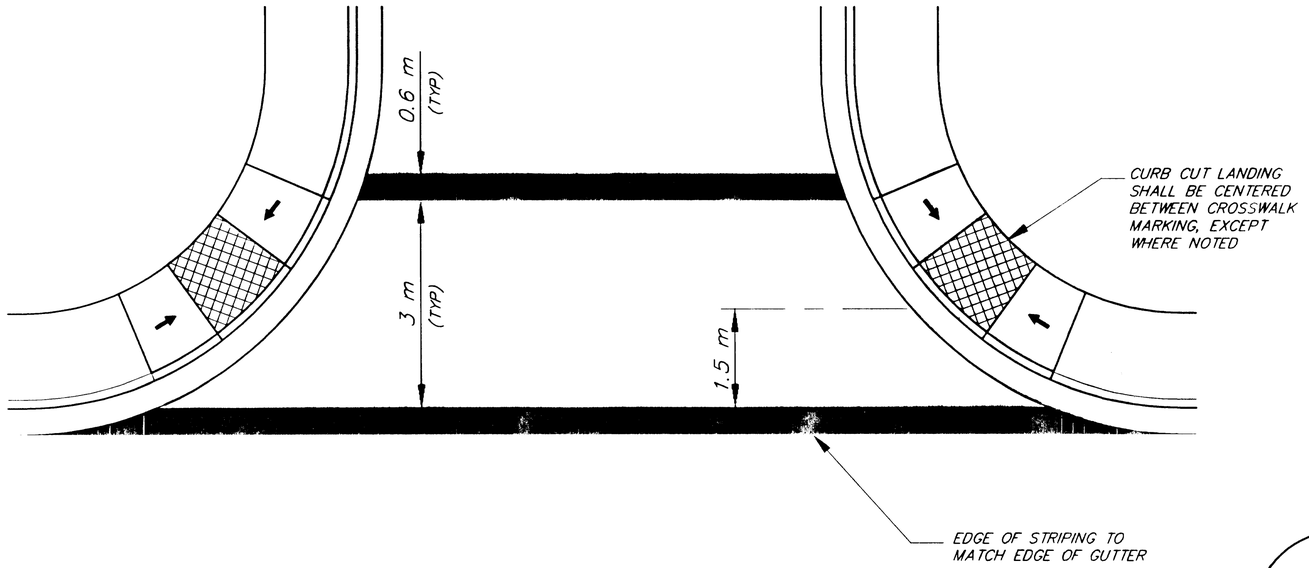
JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II
FED. NO. STP-0005 (149) ~ PROJECT NO. 71463

EGAN DRIVE INTERSECTION
APPROACH PLANS & SPECIAL DETAILS

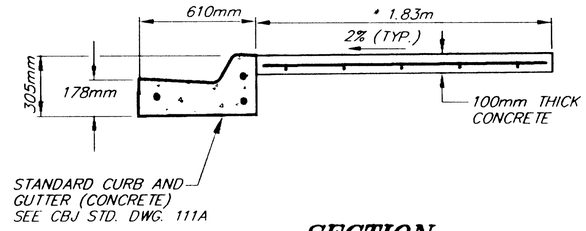
DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: APRIL 1998
CHECKED BY: A. STEININGER	SHEET 71 OF 97

STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER



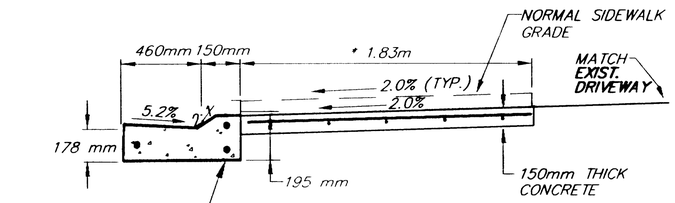
PARALLEL CURB RAMP

CORNER LOCATION



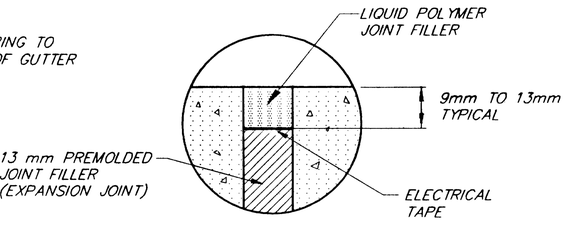
SECTION C

N.T.S.



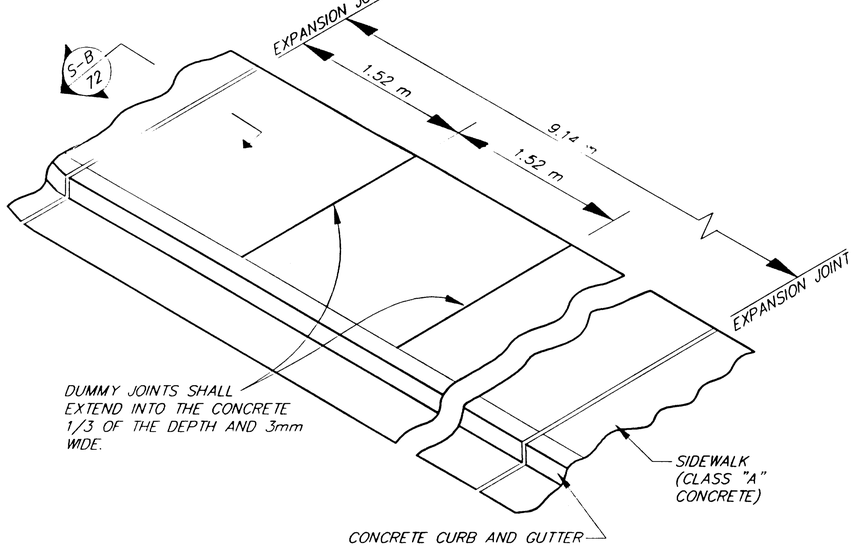
SECTION DEPRESSED CURB D

N.T.S.



SECTION B

N.T.S.

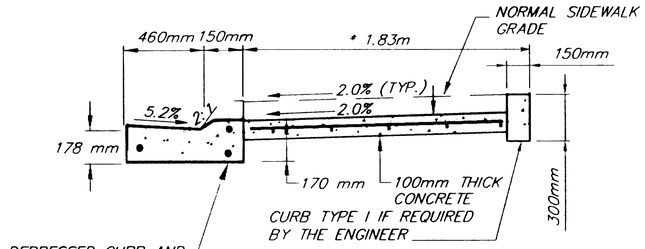


TYPICAL SIDEWALK, CURB & GUTTER JOINT DETAIL

N.T.S.

SIDEWALK, CURB AND GUTTER NOTES

1. CURB AND GUTTER EXPANSION JOINTS SHALL BE AT EACH END OF THE CURB RETURNS AND IMMEDIATELY PRECEEDING AND FOLLOWING ALL CURB CUTS. THEREAFTER, THEY SHALL BE PLACED AT 9.14 m MAXIMUM.
2. ALL CURB AND GUTTER SHALL BE CLASS "A" CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF fc = 3,000 psi.
3. CURB CUTS FOR RESIDENTIAL DRIVEWAYS AND CURB RETURNS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE SLOPE OF 12:1.
4. ALL CURB RETURNS SHALL BE WHEELCHAIR ACCESSIBLE AS SHOWN ON THE SIDEWALK DETAIL SHEETS.
5. IF EXISTING JOINT IS WITHIN 610mm OF RECONSTRUCTION AREAS, REMOVE AT JOINT INSTEAD OF SAWCUTTING. THIS DOES NOT APPLY TO NEW CONSTRUCTION.
6. LANDINGS SHALL BE CONTAINED WITHIN THE MARKED CROSSWALK.
7. SEE CURB CUT SUMMARY SHEET 44 FOR STATION/OFFSET LOCATIONS.
8. FOR REINFORCED CONCRETE SIDEWALK , CURB AND GUTTER TYPE 1 SEE CBJ STANDARD DRAWING 111A, BUT SIDEWALK WIDTH SHALL BE AS SHOWN ON PLANS NOT AS SHOWN ON CBJ STD. DWG. 111A.



SECTION DEPRESSED CURB E

N.T.S.

* 1.68 m IF NOTED SIDEWALK WIDTH SHALL BE AS SHOWN ON PLANS. (SEE PLANS)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MDET P:\-UE\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

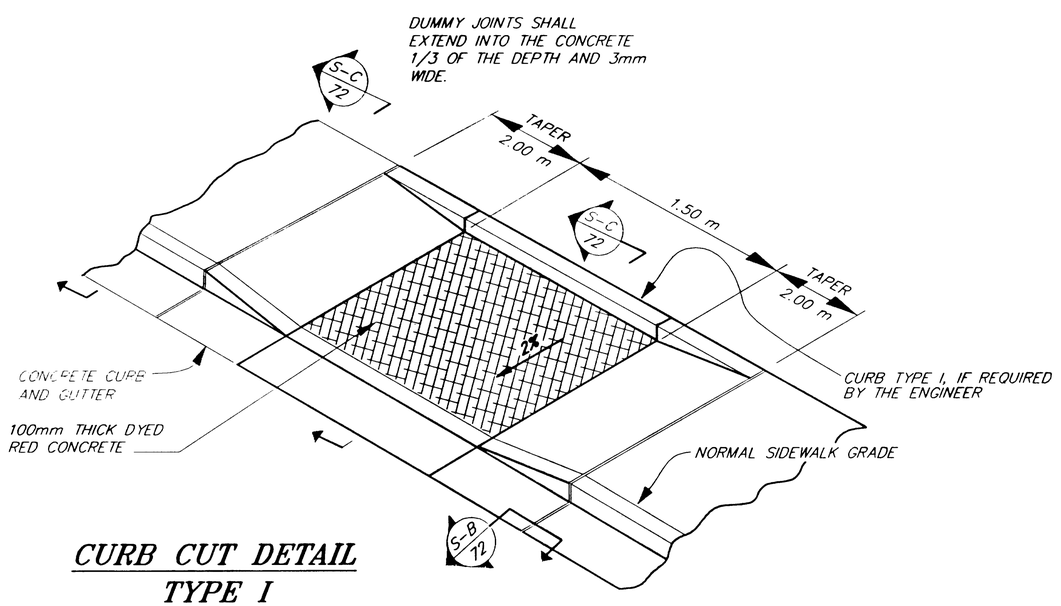
RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II — ALASKA
FED NO. STP-000S (149) ~ PROJECT NO. 71463
SIDEWALK DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 72 OF 97

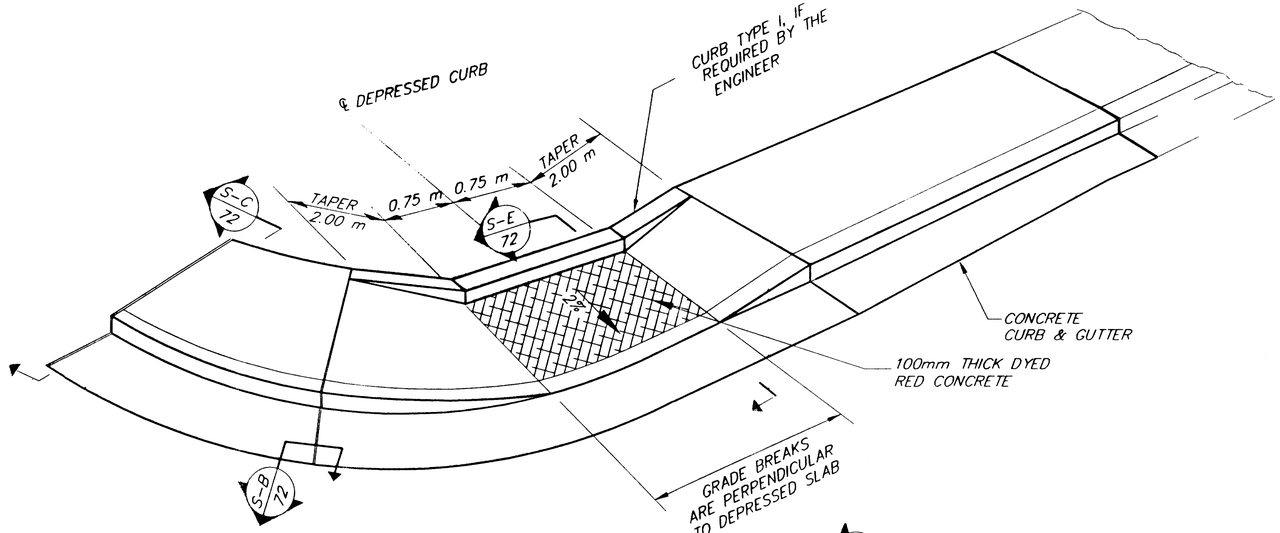
STATE OF ALASKA
Dowd D. Soldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER



CURB CUT DETAIL TYPE I

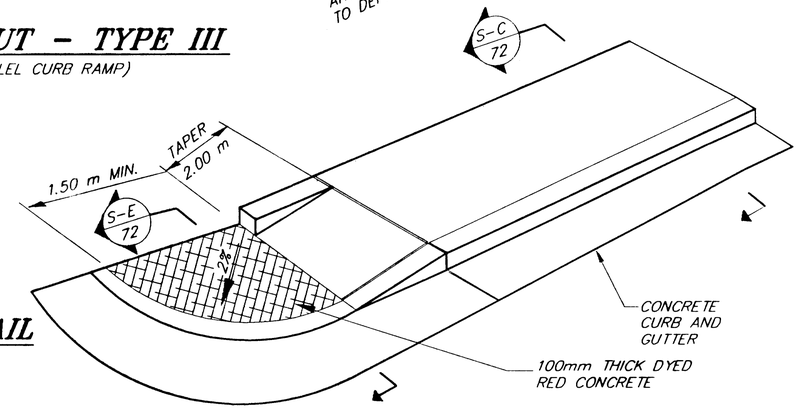
(A PERPENDICULAR CURB RAMP)

N.T.S.

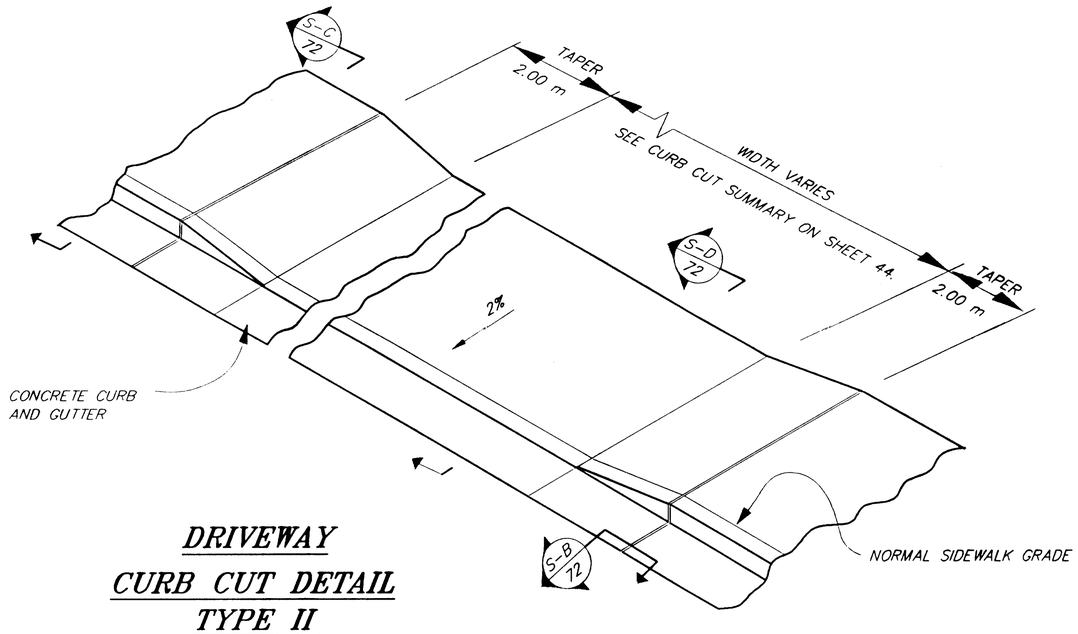


CURB CUT - TYPE III

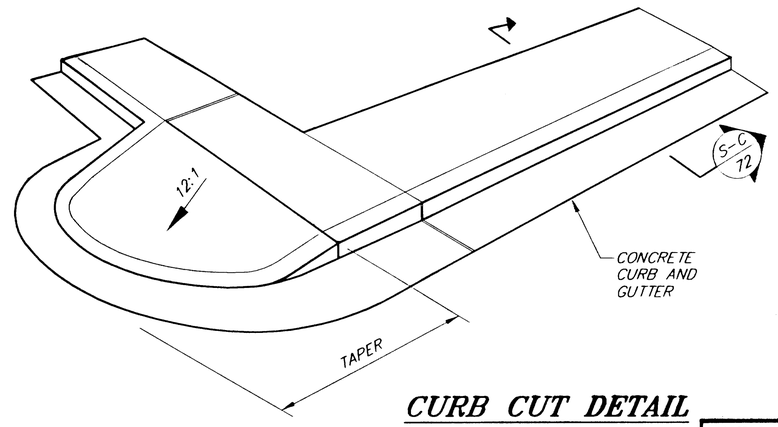
(PARALLEL CURB RAMP)



CURB CUT DETAIL TYPE IV



DRIVEWAY CURB CUT DETAIL TYPE II



CURB CUT DETAIL TYPE V

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
4/24/98

PATH: P:\JNU\71463\DR\Mdet1.dwg P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

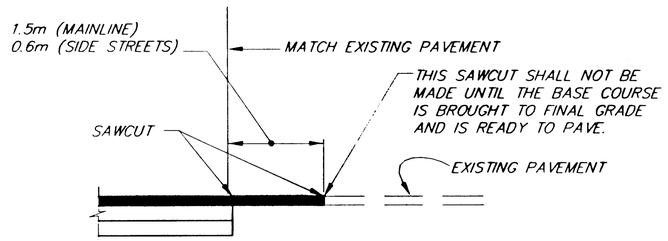
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION - PHASE II — ALASKA

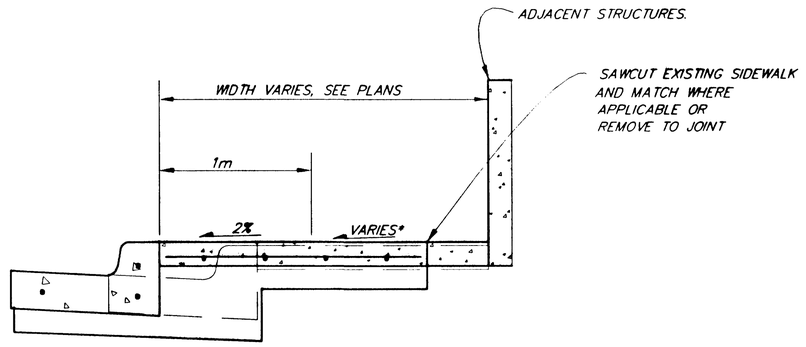
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

SIDEWALK DETAILS

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: A. STEININGER	SHEET 73 OF 97

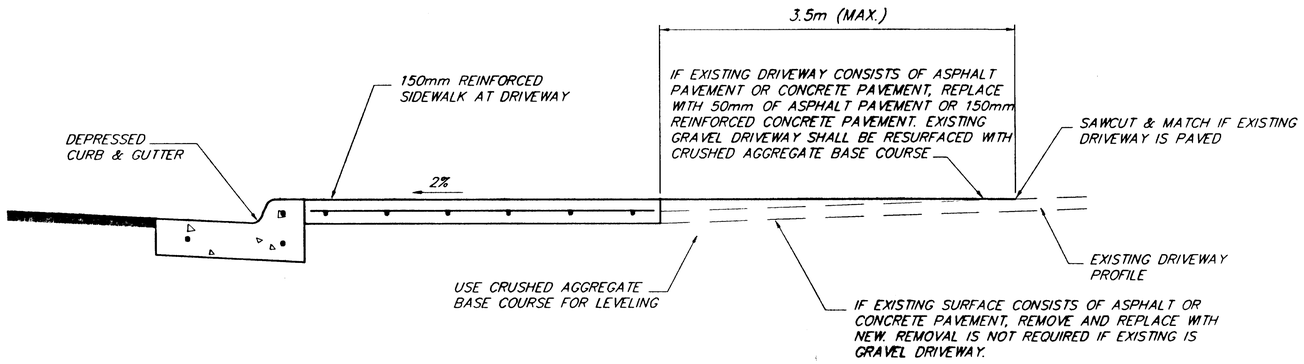


PAVEMENT JOINT DETAIL

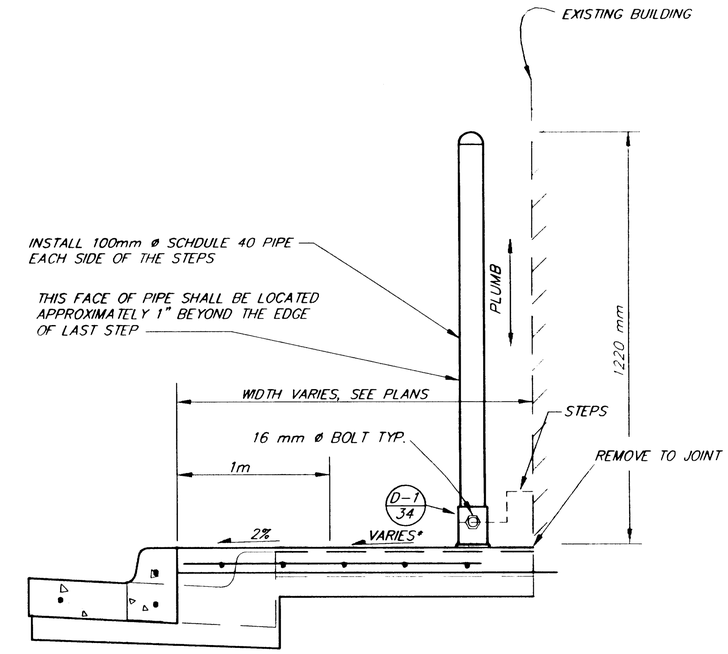


CONCRETE SIDEWALK DETAIL

* SIDEWALK IS TYPICAL EXCEPT WHERE SLOPES VARY FOR DRAINAGE OF THE EXISTING ADJACENT STRUCTURES.



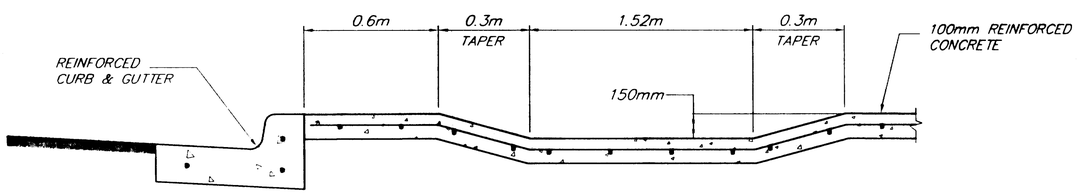
DRIVEWAY DETAIL



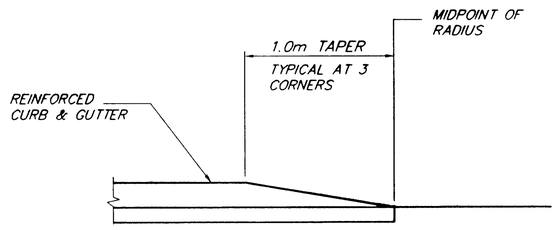
HANDRAIL DETAIL

STA. "O" 1+521.735

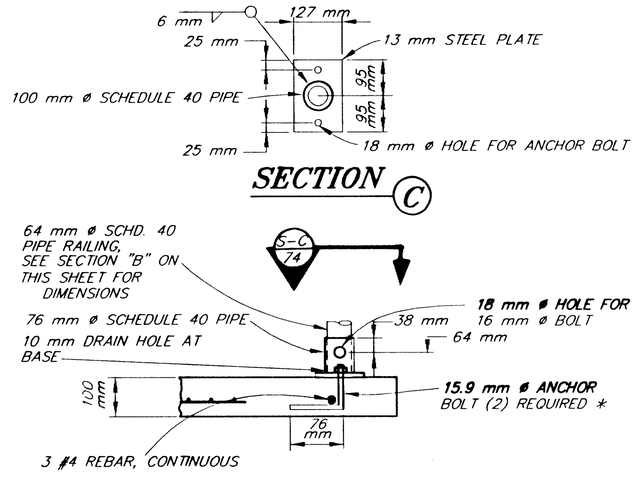
* CONTRACTOR HAS THE OPTION TO FIELD DRILL 16mm x 100mm EXPANSION BOLTS EPOXIED IN PLACE.



SECTION A



SECTION B



SECTION C

DETAIL 1

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\DR\MDET2		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(50) OR MPLOTH.PCP(100)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION – PHASE II — ALASKA
FED. NO. STP-000S (149) ~ PROJECT NO. 71463
MISCELLANEOUS DETAILS

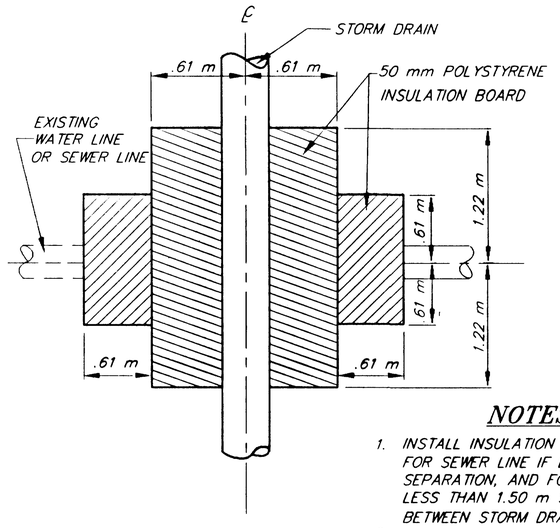
DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: D. SALDIVAR	SHEET 74 OF 97

STATE OF ALASKA — David D. Saldivar CE-8307 — REGISTERED PROFESSIONAL ENGINEER — 3/25/98

ROOF DRAIN STUBOUT SUMMARY

LOCATION STATION	REMARKS
~~1+517.97 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+517 LT., 3.0m~~
~~1+527.33 RT.~~	SEE SHEET 30 FOR DETAILS ~~SADDLE NO PIPE~~
~~1+530.86 LT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+580.31 RT.~~	SEE SHEET 30 FOR DETAILS ~~1+578 RT NO PIPE~~
~~1+597.13 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+574.3 LT., 3.0M~~
~~1+602.22 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+600 LT., 3.0M~~
~~1+659.21 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+665.91 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+665.5 LT., 3.0M~~
~~1+692.51 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+691 LT., 2.0M~~
~~1+711.54 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+715.47 LT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+784.45 RT.~~	SEE SHEET 30 FOR DETAILS ~~1+776 RT., 11.4M~~
1+830.38 RT.	SEE SHEET 30 FOR DETAILS 4.23M
~~1+892.35 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+892.29 LT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+909.73 LT.~~	SEE SHEET 30 FOR DETAILS ~~1+910 LT., 19.1M~~
~~1+951.65 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~1+952.06 LT.~~	SEE SHEET 30 FOR DETAILS ~~NO PIPE~~
~~1+972.05 RT.~~	SEE SHEET 30 FOR DETAILS 2.45M
~~1+974.45 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~2+136.03 LT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~2+144.10 LT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~2+146.61 RT.~~	SEE SHEET 30 FOR DETAILS ~~DELETED~~
~~2+233.15 LT.~~	SEE SHEET 30 FOR DETAILS ~~2+232 LT., 9.2M~~ NO SADDLE
~~2+288.87 RT.~~	SEE SHEET 30 FOR DETAILS ~~2+288 RT., 2.0M~~
~~2+361.39 RT.~~	SEE SHEET 30 FOR DETAILS ~~2+365 RT., 2.0M~~
~~3+382.35 RT.~~	SEE SHEET 30 FOR DETAILS ~~3+377.5 LT., 9.3M~~

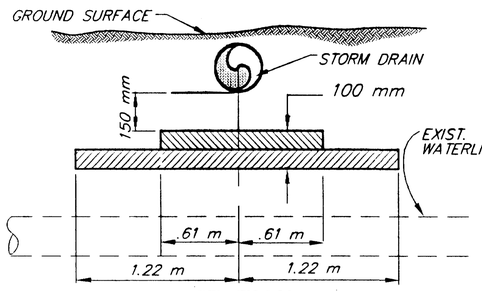
~~1+810 LT.~~ ~~2.0M~~
"D ST" 1+025 RT., 5.2M
1+958.5 RT., 3.0M
2+060.5 LT., 10.5M
2+10'16 RT., 28.0M
2+081.9 ~~LT.~~, 3.8M, No saddle, S-62
2+081.9 LT., 2.75M, No saddle, S-62
2+094 LT., 2.75M
2+100 LT., 2.75M
2+108.5 LT., 3.1M, NO SADDLE, S-62A
2+149.8 LT., 1.9M, NO SADDLE, S-63
2+194 LT., 7.5M
2+255 LT., 2.2M
2+267 LT., 6.0M, To Existing Manhole NO SADDLE
2+327 RT., 1.8M
2+337 LT., 13.0M, 200mm PVC into S-71 SEE ELEVATION MATCH LINES
2+345 LT., 2.3M, NO SADDLE, into S-70A
2+361.5 RT., 1.6M
2+395.1 LT., 14.8M
2+396.4 RT., 3.4M
2+404.8 LT., 3.5M
2+466.6 RT., 3.5M
2+474 LT., 5.5M



PLAN
N.T.S.

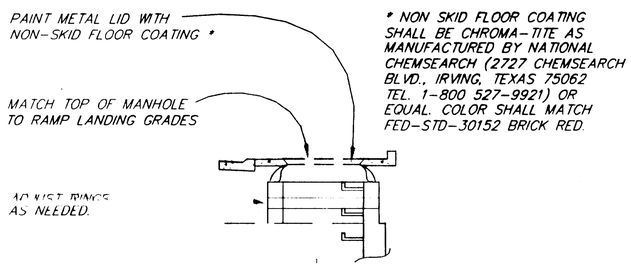
NOTES:

1. INSTALL INSULATION AS SHOWN, FOR SEWER LINE IF LESS THAN 1.15 m SEPARATION, AND FOR WATER LINE IF LESS THAN 1.50 m SEPARATION, BETWEEN STORM DRAIN AND LINE.
2. WRAP AROUND INSULATION WITH R-FACTOR EQUAL TO 100 mm RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

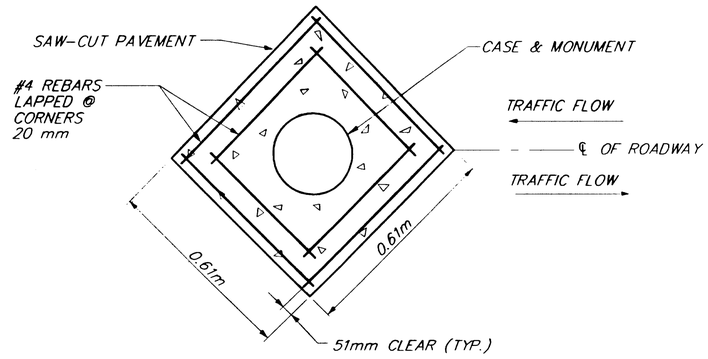


SECTION
N.T.S.

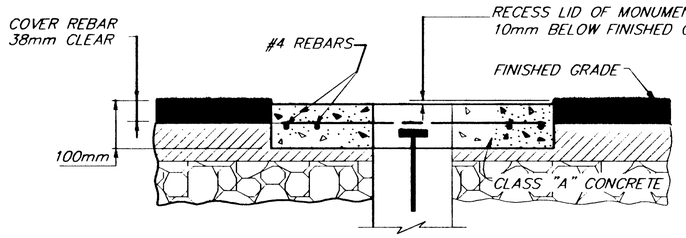
RIGID INSULATION



UTILITY MANHOLE ADJUSTMENT

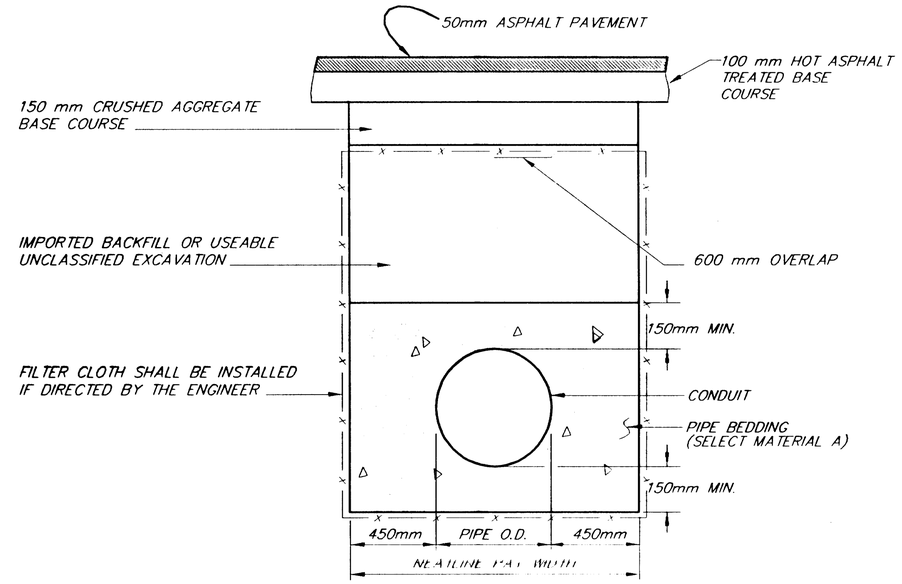


PLAN



SECTION

MONUMENT ENCASEMENT DETAIL



STORM DRAIN BEDDING/BACKFILL DETAIL

N.T.S.

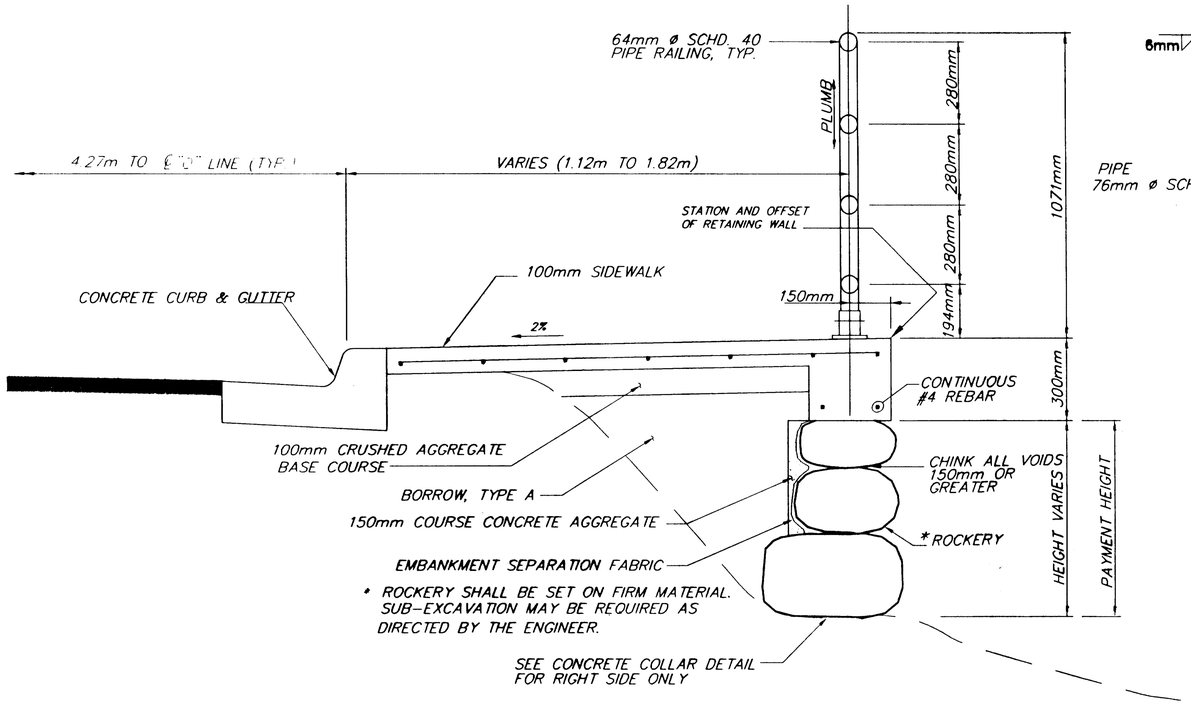
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MSUM2	STATE OF ALASKA	JUNEAU
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION PHASE II
BY: / DATE: / DESCRIPTION OF CHANGE:	SOUTHEAST REGION DESIGN & CONSTRUCTION	FED. NO. STP-000S (149) ~ PROJECT NO. 71463
RECORD OF REVISIONS		MISCELLANEOUS DETAILS

ALASKA

DESIGNED BY: M. SHEELER	PROJECT NO. 71463
DRAWN BY: AUTOCAD	DATE: JAN. 1998
CHECKED BY: D. SALDIVAR	SHEET 75 OF 97

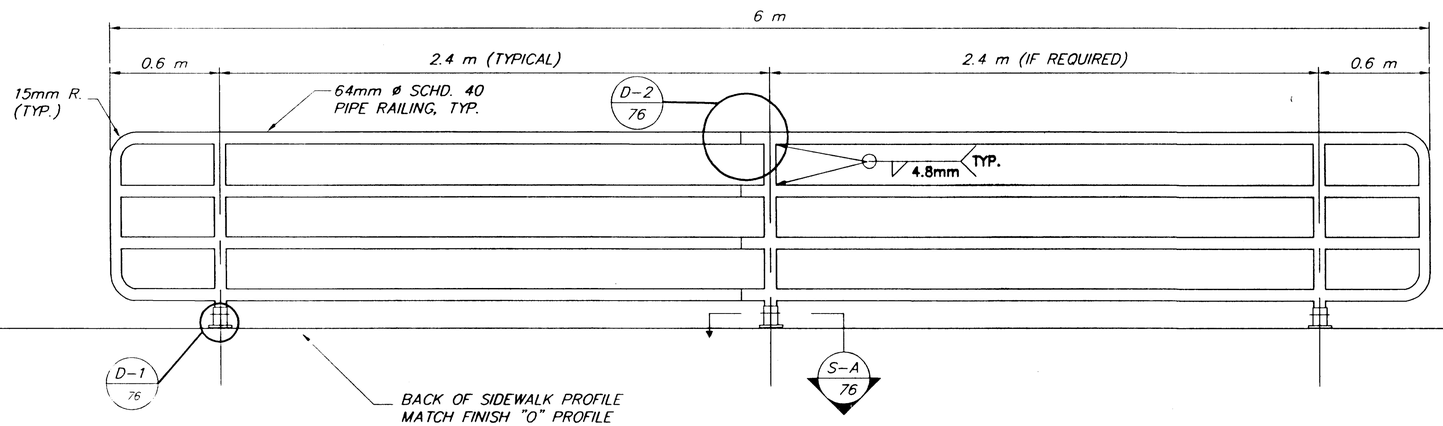
STATE OF ALASKA
David D. Saldivar
CE-8307
PROFESSIONAL ENGINEER
31/94



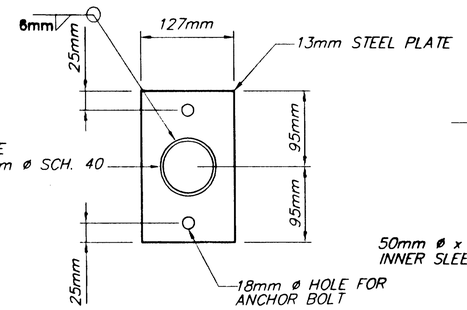
ROCKERY DETAILS

STA. "0" 1+993.70 LT. TO STA. "0" 2+000.70, LT.

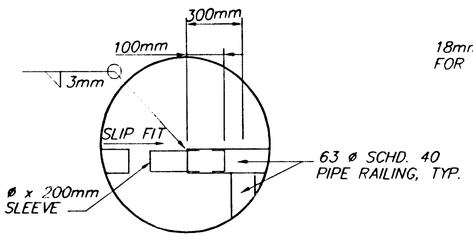
STA. "0" 1+994 RT. TO STA. "0" 2+000, RT.



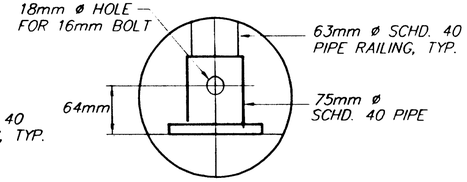
HANDRAIL DETAILS



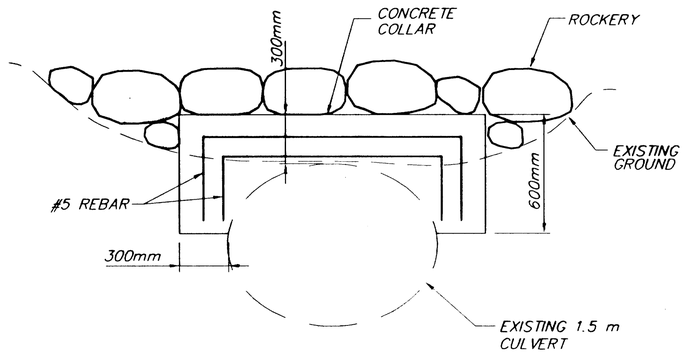
SECTION A



SECTION 2

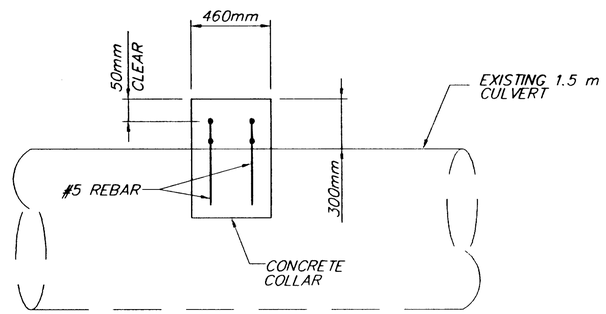


SECTION 1



CONCRETE COLLAR DETAIL

RIGHT SIDE ONLY



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\71463\DR\MDET4.dwg		
PLOT: P:\-LIB\-PLOT\MPLOTF.PCP(1) OR MPLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

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

JUNEAU — ALASKA

WILLOUGHBY AND GLACIER AVENUE
RECONSTRUCTION
FED. NO. STP-000S (149) ~ PROJECT NO. 71463

MISCELLANEOUS DETAILS

DESIGNED BY: D. SALDIVAR	PROJECT NO. 71463
DRAWN BY: B. BENNETT	DATE: JAN. 1998
CHECKED BY: D. SALDIVAR	SHEET 76 OF 97

STATE OF ALASKA
David D. Saldivar
CE-8307
REGISTERED PROFESSIONAL ENGINEER
3/23/98

WATER SERVICE SUMMARY

STATION AT ℄	VALVE BOX OFFSET (m) LEFT	RIGHT	LENGTH (m)	SIZE (mm)	REMARKS
1+529.0	5.6		5.2	50	NO AS-BUILTS. LOCATION OF SERVICE IS UNKNOWN.
1+595.7	5.6		5.2	25	
1+600.6	5.6		5.2	50	NO AS-BUILTS. LOCATION OF SERVICE IS UNKNOWN.
1+603.0	5.6		5.2	25	
1+642.6	5.6		5.2	25	
1+667.5	5.6		5.2	25	
1+821.8		11.9	11.0	25	INSTALL CURB STOP 0.5m FROM R.O.W.
1+873.5	6.4		10.7	25	
1+886.8		5.6	7.4	50	
1+936.4		2.0	5.0	150	
1+961.8	6.3		8.8	50	
1+969.4		2.5	5.0	150	
1+970.4		2.5	5.0	150	
1+979.0		.5	8.2	150	SERVICE IS TO THE LEFT.
2+027.5		.5	8.0	150	SERVICE STUB W/ CAP FOR FUTURE USE.
2+029.4		2.5	6.2	150	SERVICE STUB W/ CAP FOR FUTURE USE.
2+040.4		5.6	7.6	25	
2+050.2		2.2	6.1	150	
2+055.2		5.6	5.0	50	
2+075.2		5.6	5.0	50	
2+080.4		1.0	7.5	150	SERVICE STUB W/ CAP FOR FUTURE USE.
2+099.4		1.0	7.5	150	SERVICE STUB W/ CAP FOR FUTURE USE.
2+107.9		2.0	5.0	150	CONNECT TO EXISTING 100mm DI.
2+151.9		.5	5.2	150	CONNECT TO EXISTING 100mm DI.
2+242.6	2.0		5.4	150	
2+295.0		5.6	7.2	25	
2+306.7		0.1	7.2	150	
2+314.0	2.0		5.0	150	
2+339.3	2.5		7.0	150	CONNECT OUTSIDE OF MANHOLE
2+350.6	1.8		7.8	150	
2+356.8		5.6	8.0	25	
2+358.2		5.6	8.0	25	
2+362.8		1.0	7.0	150	
2+382.5		6.8	8.9	25	
2+444.0	2.0		5.0	150	

EXISTING MAINLINE VALVE BOX SUMMARY

STATION AT ℄	OFFSET (m) LEFT	RIGHT	REMARKS
1+560.3	9.5		REMOVE VALVE BOX
1+561.2	3.2		REMOVE VALVE BOX
1+631.6	2.5		REMOVE VALVE BOX
1+631.6	6.6		REMOVE VALVE BOX
1+698.4	4.0		REMOVE VALVE BOX ON OLD F.H. LEG
1+700.5	3.1		REMOVE VALVE BOX
1+708.0	2.0		REMOVE VALVE BOX
1+709.0	3.0		REMOVE VALVE BOX
1+767.2	2.1		REMOVE VALVE BOX
1+835.9		8.8	REMOVE VALVE BOX
1+836.3		7.3	REMOVE VALVE BOX
1+898.5		4.0	REMOVE VALVE BOX
1+899.2		3.5	REMOVE VALVE BOX
2+036.2		2.2	REMOVE VALVE BOX
2+129.5		3.5	REMOVE VALVE BOX
2+219.6	14.1		REMOVE VALVE BOX
2+232.5	6.5		REM. VALVE BOX ON ABANDONED SERVICE
2+263.2	3.3		REMOVE VALVE BOX ON 100mm LATERAL
2+284.5	4.4		REPLACE VALVE BOX
2+296.5		5.3	REM. VALVE BOX ON ABANDONED SERVICE
2+334.5		5.2	REM. VALVE BOX ON ABANDONED SERVICE
2+355.7		5.6	REM. VALVE BOX ON ABANDONED SERVICE
2+359.3		5.7	REM. VALVE BOX ON ABANDONED SERVICE
2+383.6		6.4	REM. VALVE BOX ON ABANDONED SERVICE
2+424.8		5.2	REM. VALVE BOX ON ABANDONED SERVICE
2+430.3		5.2	REM. VALVE BOX ON ABANDONED SERVICE
2+444.5	3.2		REMOVE VALVE BOX
2+445.2		5.0	REM. VALVE BOX ON ABANDONED SERVICE
2+454.2		5.0	REM. VALVE BOX ON ABANDONED SERVICE
2+474.9		5.0	REM. VALVE BOX ON ABANDONED SERVICE
2+477.3	3.3		REM. VALVE BOX ON ABANDONED SERVICE
2+478.2	3.1		REM. VALVE BOX ON ABANDONED SERVICE
2+510.4	3.1		REPLACE VALVE BOX

SANITARY SEWER SERVICE CONNECTION SUMMARY

STATION AT ℄	CLEAN OUT OFFSET (m) LEFT	RIGHT	LENGTH (m)	SIZE (m)	REMARKS
1+569.2	10.1		7.5	150	INSTALL CLEANOUT 0.5m IN FRONT OF BACK OF SIDEWALK
1+628.7	8.8		7.3	150	
1+887.6		5.6	8.4	150	
1+964.0		5.6	9.0	150	
1+968.5	5.8		3.8	150	
2+033.4	7.8		4.2	150	STUB FOR FUTURE USE. MARK W/ POST
2+034.9		5.6	9.0	150	RE-ALIGN TO CONNECT SERVICE INTO SS-18 AND NOT INTO MH-10
2+053.1		5.6	8.2	150	RE-ALIGN TO CONNECT SERVICE INTO SS-18 AND NOT INTO MH-11
2+057.4	5.8		11.0	150	PICKS UP 2 MALASPINA APT. SERVICES
2+081.1	6.4		4.0	150	STUB FOR FUTURE USE. MARK W/ POST
2+100.3	6.4		4.0	150	STUB FOR FUTURE USE. MARK W/ POST
2+130.0	6.3		4.2	150	
2+253.8	N/A	N/A	N/A	200	CONNECT EXISTING SERVICE TO NEW MAIN
2+273.3		5.6	2.5	150	
2+354.6		5.6	4.0	150	
2+370.6		6.1	5.7	150	
2+371.6	8.7		11.0	150	
2+383.0		6.8	6.1	150	
2+449.7	6.3		8.5	150	
2+514.2	6.3		4.3	150	

EXISTING SEWER STRUCTURE SUMMARY

STATION AT ℄	OFFSET (m) LEFT	RIGHT	REMARKS
1+562.5	10.2		ADJUST SEWER MANHOLE TO FINISH GRADE
1+564.0	11.0		ADJUST SEWER MANHOLE TO FINISH GRADE
1+636.0	1.6		REMOVE SEWER MANHOLE
1+641.2		6.9	REMOVE SEWER MANHOLE
1+668.6		6.9	REMOVE SEWER MANHOLE
1+708.6		6.4	REMOVE SEWER MANHOLE
1+708.5	4.2		REMOVE SEWER MANHOLE
1+905.1	2.4		REMOVE SEWER MANHOLE
1+994.2	2.3		REMOVE SEWER MANHOLE
2+037.3	2.2		REMOVE SEWER MANHOLE
2+056.1		1.5	REMOVE SEWER MANHOLE
2+119.9	0.1		REMOVE SEWER MANHOLE
2+130.2	2.4		REMOVE SEWER MANHOLE
2+220.3	7.3		REMOVE SEWER MANHOLE
2+310.9		3.0	REMOVE SEWER MANHOLE
2+327.7		3.0	REMOVE SEWER MANHOLE
2+396.4		3.2	REMOVE SEWER MANHOLE
2+451.5		2.2	REMOVE SEWER MANHOLE
2+515.7	1.6		REMOVE SEWER MANHOLE
2+524.3	5.9		ADJUST SEWER MANHOLE TO FINISH GRADE

NEW MAINLINE VALVE BOX SUMMARY

STATION AT ℄	OFFSET (m) LEFT	RIGHT	REMARKS
1+558.0	0.8		400mm BUTTERFLY VALVE
1+560.2	1.6		200mm GATE VALVE (LATERAL LINE)
1+630.2	0.6		400mm BUTTERFLY VALVE
1+631.1	0.0		200mm GATE VALVE (LATERAL LINE)
1+631.1	2.0		200mm GATE VALVE (LATERAL LINE)
1+632.5	0.6		400mm BUTTERFLY VALVE
1+702.0	1.0		400mm BUTTERFLY VALVE
1+702.5	2.0		200mm GATE VALVE (LATERAL LINE)
1+704.0	0.5		400mm BUTTERFLY VALVE
1+767.7	0.0		200mm GATE VALVE (LATERAL LINE)
1+830.2		5.8	400mm BUTTERFLY VALVE
1+832.0		7.0	200mm GATE VALVE (LATERAL LINE)
1+832.4		4.8	400mm BUTTERFLY VALVE
1+872.0		3.6	400mm BUTTERFLY VALVE
1+899.0		0.4	200mm GATE VALVE (LATERAL LINE)
1+940.0		1.0	400mm BUTTERFLY VALVE
2+035.2		1.7	400mm BUTTERFLY VALVE
2+036.0		0.5	200mm GATE VALVE (LATERAL LINE)
2+128.5		1.5	400mm BUTTERFLY VALVE
2+129.2		2.0	200mm GATE VALVE (LATERAL LINE)
2+130.2		1.5	400mm BUTTERFLY VALVE
2+223.1	8.1		400mm BUTTERFLY VALVE
2+224.8	7.7		400mm BUTTERFLY VALVE
2+333.5	1.3		400mm BUTTERFLY VALVE
2+401.8	0.1		200mm GATE VALVE (LATERAL LINE)
2+471.0	1.5		400mm BUTTERFLY VALVE
2+472.9	2.6		200mm GATE VALVE (EXISTING MAINLINE)

WATER MAIN SUMMARY

STATION & OFFSET FROM	TO	LENGTH (m)	SIZE (mm)	REMARKS
1+521.0, 1.2m LT	2+472.0, 7.0m LT	956.6	400	
1+560.2, 1.0m LT	1+560.2, 12.1m LT	11.1	200	
1+631.1, 1.0m LT	1+631.1, 11.7m LT	10.7	200	
1+631.1, 1.0m LT	1+631.1, 19.0m RT	20.0	200	
1+702.5, 1.0m LT	1+702.5, 13.6m LT	12.6	200	
1+767.7, 1.0m LT	1+767.7, 9.6m RT	10.6	200	
1+832.0, 5.5m RT	1+833.3, 21.0m RT	16.2	200	
1+899.0, 1.5m RT	1+899.0, 6.2m LT	7.7	200	
2+036.0, 1.5m RT	2+036.5, 7.2m LT	8.7	200	
2+129.2 1.5m RT	2+129.0, 11.5m RT	10.0	200	
2+401.8, 1.0m LT	2+401.8, 8.2m RT	9.2	200	

PLUG/CAP PIPE SUMMARY

STATION & OFFSET	REMARKS
1+562.6, 7.4m RT	PLUG SEWER MAIN
1+567.0, 8.2m RT	M.J. CAP WATER MAIN
1+708.0, 8.2m RT	M.J. CAP WATER MAIN
1+765.8, 8.6m RT	PLUG SEWER MAIN
2+221.0, 1.6m LT	PLUG SEWER MAIN
2+263.4, 6.4m LT	M.J. CAP WATER MAIN
2+298.4, 4.1m LT	M.J. CAP WATER MAIN

FIRE HYDRANT SUMMARY

STATION "0"	OFFSET LEFT	RIGHT	REMARKS
1+624.6	7.0		REPLACE HYDRANT AND BOLLARDS
1+711.4		9.8	
1+777.0	9.0		REMOVE HYDRANT
1+808.0	7.4		
1+915.8		7.8	REPLACE HYDRANT AND BOLLARDS
2+001.0	8.0		INSTALL 150mm GV 1.0m LEFT OF MAINLINE
2+139.3		6.9	
2+264.6	7.5		INSTALL 150mm GV 0.2m BEHIND SIDEWALK
2+363.6	9.6		INSTALL 150mm GV 0.2m BEHIND SIDEWALK

ABBREVIATIONS

AC	ASBESTOS CEMENT PIPE
ACP	OR ASPHALT PAVING
BOP	BEGINING OF PROJECT
BV	BUTTERFLY VALVE
Ⓒ	CABLE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CPP	CORRUGATED POLYETHYLENE PIPE
CU	COPPER
CV	CURB STOP VALVE
DI	DUCTILE IRON
Ⓔ	ELECTRIC
EOP	END OF PROJECT
FG	FINISHED GRADE
FH	FIRE HYDRANT
GV	GATE VALVE
HP	HIGH PRESSURE
INV	INVERT
LT	LEFT
MH	MANHOLE
NTS	NOT TO SCALE
PVC	POLYVINYL CHLORIDE PIPE
RT	RIGHT
STA	STATION
STD	STANDARD
SS	SANITARY SEWER
Ⓣ	TELEPHONE
WV	WATER VALVE

ABBREVIATIONS TO BE USED WITHOUT PERIODS

LEGEND

Description	Existing	Proposed
FIRE HYDRANT		
FIRE HYDRANT (REMOVE)		
SANITARY SEWER CLEANOUT		
SANITARY SEWER	SS	SS
SANITARY SEWER (REMOVE)	SS	
SANITARY SEWER (ABANDON)	SS	
SANITARY SEWER MANHOLE		
SANITARY SEWER MANHOLE (REMOVE)		
SIGN		
WATER LINE	W	W
WATER LINE (REMOVE)	W	
WATER LINE (ABANDON)	W	
WATER VALVE		
WATER VALVE		
WATER VALVE (REMOVE)		

NOTE: REFER TO TRENCH DETAIL 125A FOR ALL WATER AND SEWER PIPE TRENCHING.

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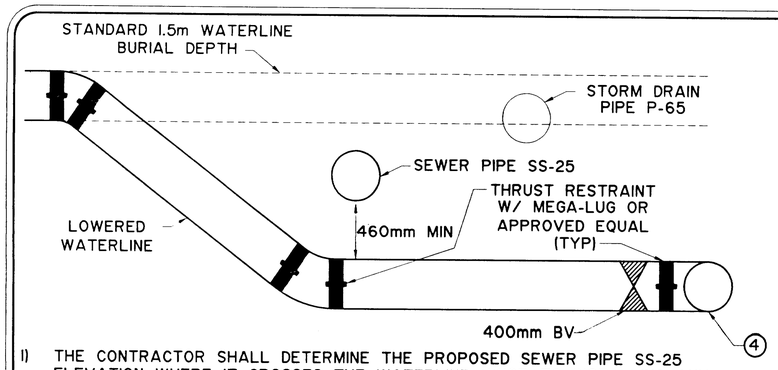
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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION STP-000S (149) PROJECT NO. 71463

SANITARY SEWER AND WATER SYSTEM SUMMARY TABLES

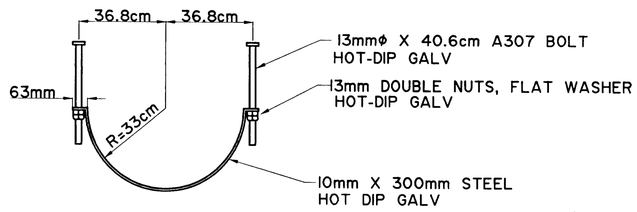
SHEET NO. 77 of 97



1) THE CONTRACTOR SHALL DETERMINE THE PROPOSED SEWER PIPE SS-25 ELEVATION WHERE IT CROSSES THE WATERLINE PRIOR TO INSTALLING ANY WATER PIPE WITHIN 60 METERS OF THE CROSSING.
2) THRUST BLOCKS AND PIPE INSULATION ARE REQUIRED (NOT SHOWN).
3) PIPE BENDS SHALL BE USED TO ACHIEVE VERTICAL ELEVATION CHANGE.
4) CHANGE ELEVATION BACK TO STANDARD DEPTH BEFORE INSTALLING SECOND BV.
5) WORK SHALL BE INCIDENTAL TO 626(1-400)

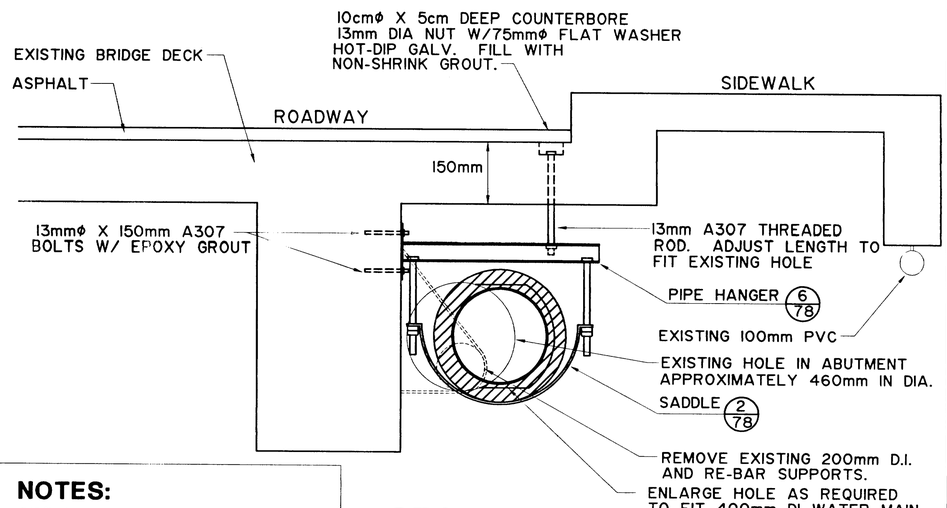
SEWER/WATER CROSSING AT 2+223, LT. 1/84

NTS



SADDLE 2

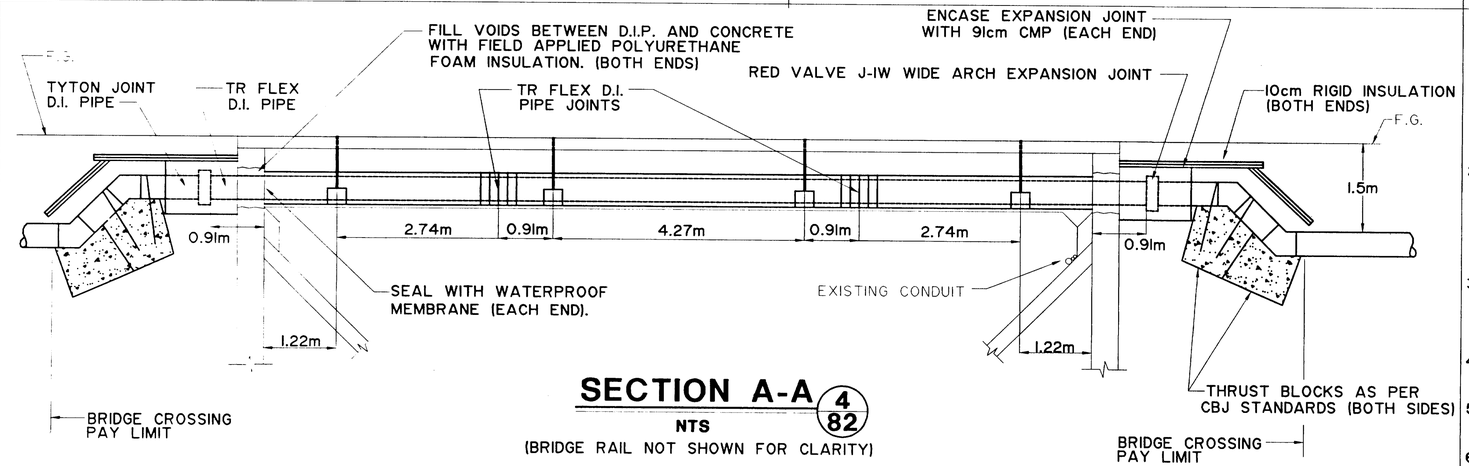
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SECTION B-B 3/82

NTS

(BRIDGE RAIL NOT SHOWN FOR CLARITY)



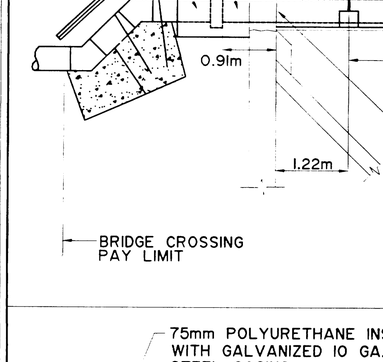
SECTION A-A 4/82

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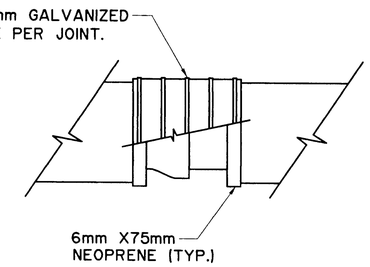
(BRIDGE RAIL NOT SHOWN FOR CLARITY)

NOTES:

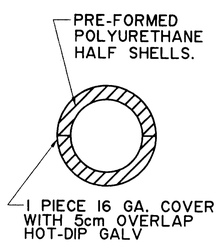
1. PIPE SUPPORT PLATES, RESTRAINED BRACKETS AND ALL BOLTS AND NUTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION. ALL FIELD WELDS SHALL BE CLEANED AND PAINTED WITH GALVACON.
2. PRE-INSULATED PIPE CASING AND INSULATED-IN-PLACE PIPE CASING SHALL BE 560mm IN DIAMETER. GALVANIZED STEEL, 10 GA., SMOOTH WALL PIPE AS REQUIRED IN THE TECHNICAL SPECIFICATIONS.
3. ALL INSULATION SHALL BE POLYURETHANE WITH A MINIMUM DENSITY OF 40kg/m^3 AND A 0.05% MAXIMUM WATER ABSORBTION.
4. MECHANICAL JOINT FITTINGS SHALL BE TR FLEX RESTRAINED JOINT.
5. LOCATE ALL REBAR PRIOR TO CONSTRUCTION.
6. POSITION HOLES IN DECK TO MISS REBAR.



TYPICAL PIPE LENGTH



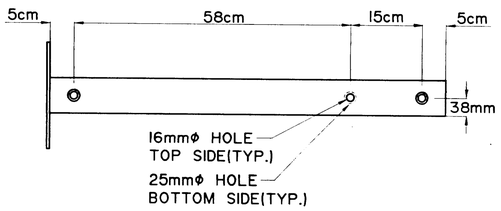
JOINT



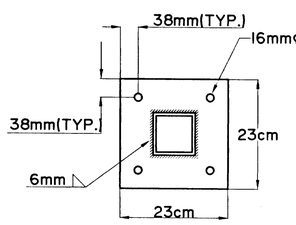
JOINT SECTION

PIPE INSULATION 5

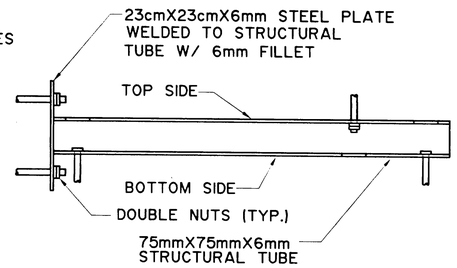
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PLAN VIEW



END VIEW



ELEVATION VIEW

PIPE HANGER 6

NTS

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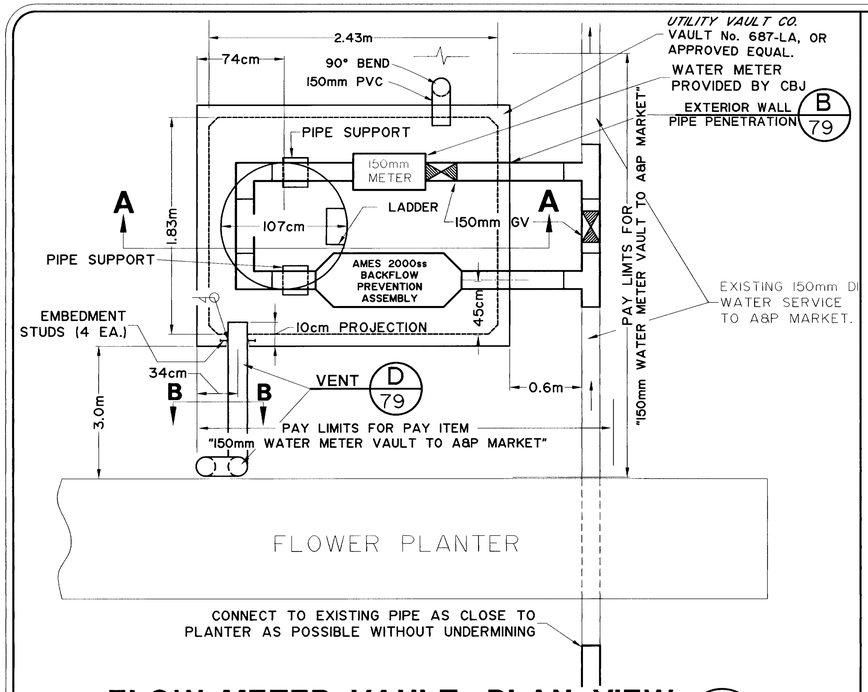
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DEPARTMENT OF ENGINEERING

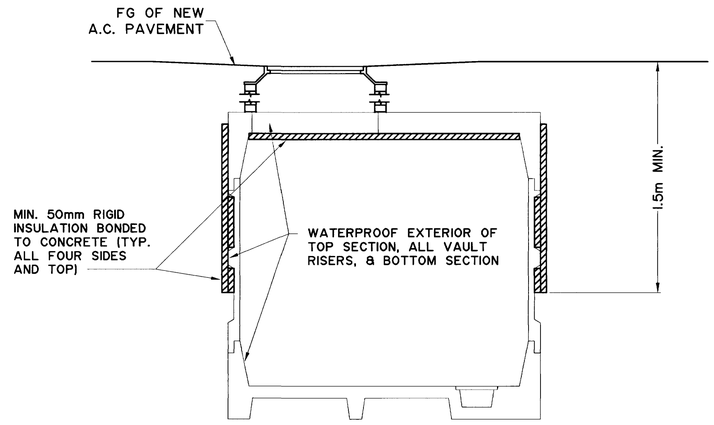
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

GOLD STREET BRIDGE CROSSING AND LOWERED WATER PIPE DETAILS

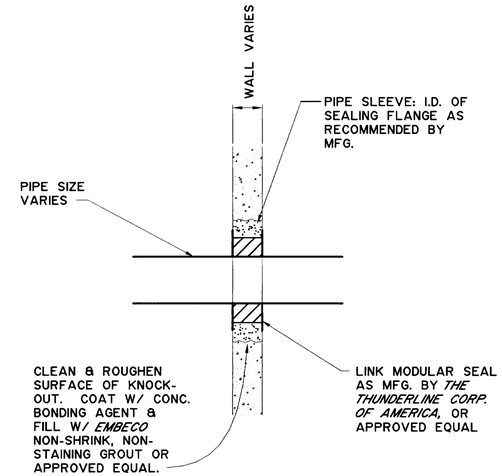
SHEET NO. 78 of 97



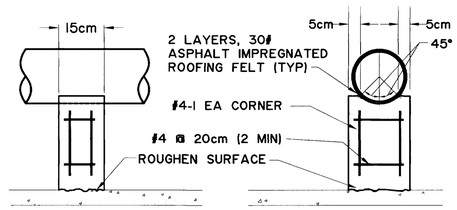
FLOW METER VAULT: PLAN VIEW (1 / 82)



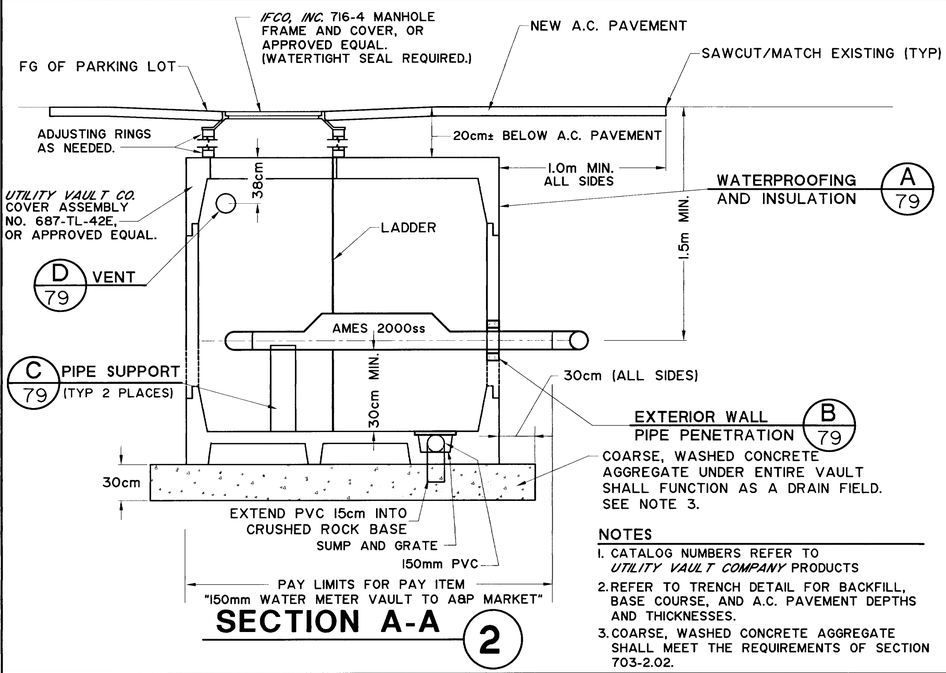
WATERPROOFING & INSULATION (A)



EXTERIOR WALL PIPE PENETRATION (B)



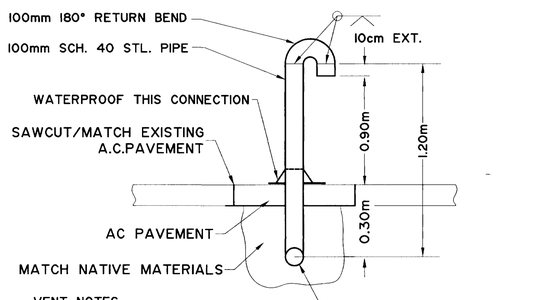
PIPE SUPPORT (C)



SECTION A-A (2)

NOTES

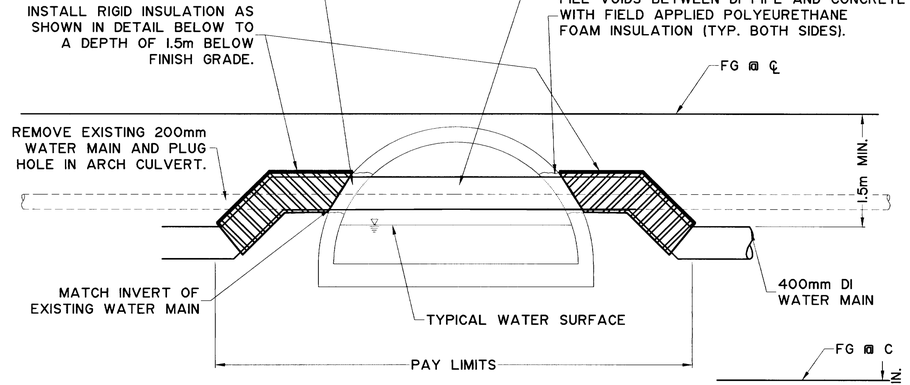
1. CATALOG NUMBERS REFER TO *UTILITY VAULT COMPANY* PRODUCTS
2. REFER TO TRENCH DETAIL FOR BACKFILL, BASE COURSE, AND A.C. PAVEMENT DEPTHS AND THICKNESSES.
3. COARSE, WASHED CONCRETE AGGREGATE SHALL MEET THE REQUIREMENTS OF SECTION 703-2.02.



VENT NOTES:

- GALVANIZE VENT AFTER FABRICATION

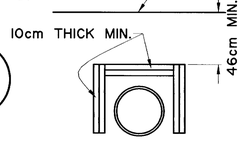
SECTION B-B: VENT (D)



TAILRACE CROSSING (D)

NOTES:

1. THE CHANGE IN VERTICAL ELEVATION SHALL BE OBTAINED USING 45° BENDS.
2. THE LENGTH OF PIPE SHOWN WITHIN THE PAY LIMITS SHALL NOT BE INCLUDED FOR PAYMENT UNDER THE 400mm WATER MAIN BID ITEM.



INSULATION BOARD DETAIL

ITEMS TO BE PROVIDED BY CBJ:

1. NEPTUNE TRU/FLO 150mm SCHLUMBERGER WATER METER.

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DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER METER VAULT & TAILRACE CROSSING DETAILS

SHEET NO. 79 of 97

10 0 10 20 30

SCALE IN METERS

SEWER PIPE SUMMARY				
PIPE	SIZE(mm)	LENGTH(m)[3]	TYPE	SLOPE(m/m)
SS-1	200	12.63	HP[4]	0.010
SS-2	200	78.37	PVC	0.018
SS-3	200	4.50	PVC	AR[2]
SS-4	200	11.28	HP[4]	0.059
SS-5	300	15.31	PVC	AR[2]
SS-6	250	27.34	PVC	0.018

END PHASE I
BEGIN PHASE II
STA. "O" 1+519.279
N = 14,609.811
E = 31,244.992

MH-1 TYPE I	
STA "O" 1+562.42 10.12 LT	
FG	EL = 8.820
INV SS-1	EL = 7.330
INV EXST 200mm	EL = 7.82 +/-

MH-2 TYPE I	
STA "O" 1+562.94 2.50 RT	
FG	EL = 8.637
INV SS-1	EL = 7.216
INV SS-2	EL = 7.186

MH-3 TYPE I	
STA "O" 1+641.14 3.14 RT	
FG	EL = 8.222
INV SS-2	EL = 5.700
INV SS-4	EL = 5.710
INV SS-5	EL = 5.670
INV SS-6	EL = 5.710

MH-4 TYPE I	
STA "O" 1+636.100 6.881 LT	
FG	EL = 8.189
INV SS-3	EL = 6.700
INV SS-4	EL = 6.300

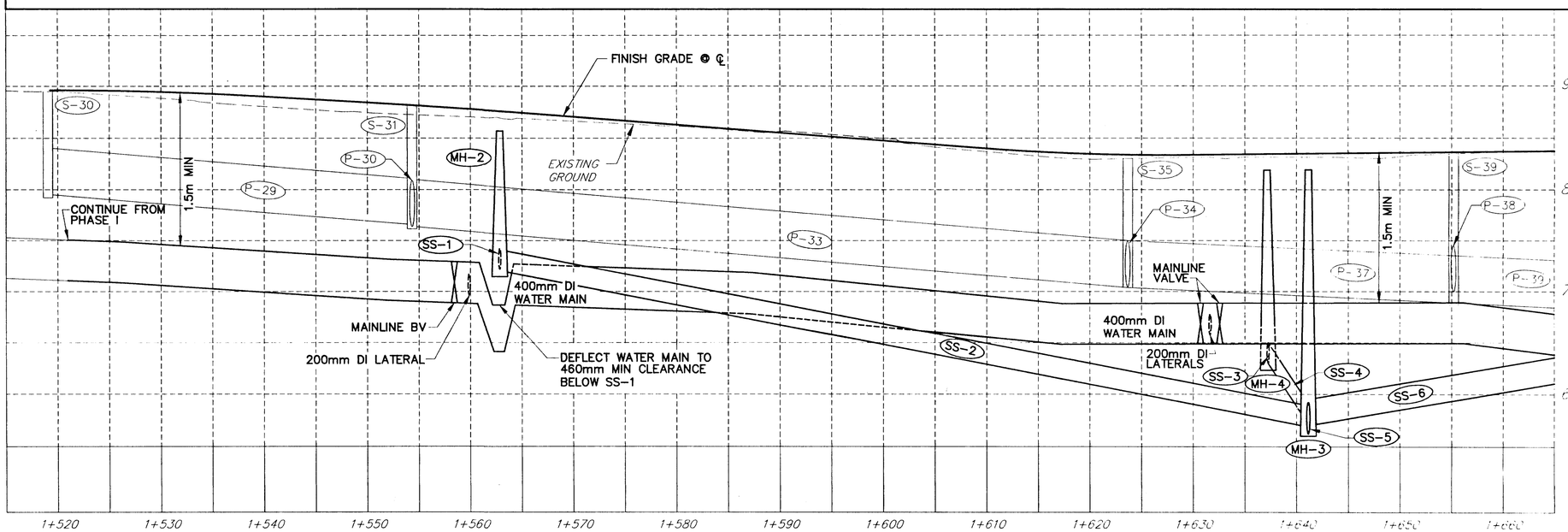
MATCHLINE STA "O" 1+665

CONSTRUCTION NOTES:

1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING AND AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR = AS REQUIRED (MIN. S=0.004). DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP = HIGH PRESSURE PVC (C900)

GENERAL NOTES: (FOR SHEETS 80 THROUGH 85)

1. SEWER SERVICE CLEANOUTS AND WATER SERVICE CURB STOPS SHALL BE LOCATED AS DESCRIBED IN THE FOLLOWING TABLE:
   STA RIGHT:
   1. B.O.P. TO E.O.P.-0.5m FROM BACK OF SIDEWALK TOWARDS CENTERLINE.
   STA LEFT:
   1. B.O.P. TO D ST.-0.5m FROM BACK OF SIDEWALK TOWARDS CENTERLINE.
   2. D ST. TO E.O.P.-0.2m BEHIND BACK OF SIDEWALK.
2. LOCATION OF WATER AND SEWER SERVICES ARE BASED UPON AS-BUILTS AND OTHER AVAILABLE INFORMATION. ACTUAL LOCATIONS AND DEPTHS MAY VARY FROM THOSE SHOWN BY UP TO 5 METERS. CONTRACTOR SHALL FIELD LOCATE AND ADJUST THE NEW SERVICES TO MATCH.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS AND ADAPTORS TO MAKE CONNECTION TO EXISTING WATER AND SEWER PIPE OF LIKE OR DISSIMILAR SIZE, MATERIAL, OR DEPTH.
4. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER AND SEWER PIPES, INCLUDING ALL SERVICES, ALONG THE STORM DRAIN ALIGNMENT, TO DETERMINE PIPE INSULATION LOCATIONS AND REQUIREMENTS.
5. INSULATION BOARD SHALL BE USED AS REQUIRED BY THE DETAIL ON SHEET 75, OR AS APPROVED BY THE ENGINEER.
6. ANY PRIVATELY OWNED ITEM DAMAGED OR REQUIRING REMOVAL FOR THE INSTALLATION OF UTILITIES SHALL BE REPLACED TO EQUAL OR BETTER CONDITION.
7. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH CBJ STANDARD 414A AND 414B.
8. THE EXISTING SEWER SYSTEM CARRIES A COMBINED SEWER AND STORM FLOW THE CONTRACTOR SHALL SEPARATE THE FLOWS INTO THE NEW STORM AND SEWER SYSTEMS.
9. ALL TRENCHING FOR WATER AND SEWER PIPE SHALL CONFORM TO TRENCH DETAIL 125A.
10. LOCATIONS OF SANITARY SEWER MANHOLES, PIPING, AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
11. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES AT 780-6808 OF PROPOSED WATER SERVICE INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (CO-SIGNED BY THE ENGINEER) AT LEAST 48 HOURS PRIOR TO SHUTDOWN OR FLUSHING OF MAINLINE WATER PIPE. (SEE APPENDIX E IN THE SPECIFICATIONS.)
12. MANY BURIED SERVICE PIPES EXIST THAT ARE INACTIVE. ALL SEWER PIPES SHALL BE ABANDONED IN PLACE EXCEPT AS SHOWN OTHERWISE ON THE PLANS. ALL GALVANIZED, CI, OR DI WATER SERVICES, 150mm OR LARGER, SHALL BE REMOVED TO THE R.O.W. ANY SERVICE 100mm OR GREATER THAT IS NOT REMOVED SHALL BE PLUGGED AT THE TRENCH WALL.



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DRAWN BY: STAFF | DESIGNED BY: GARY JENKINS II | CHECKED BY: PETER HILDRE | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

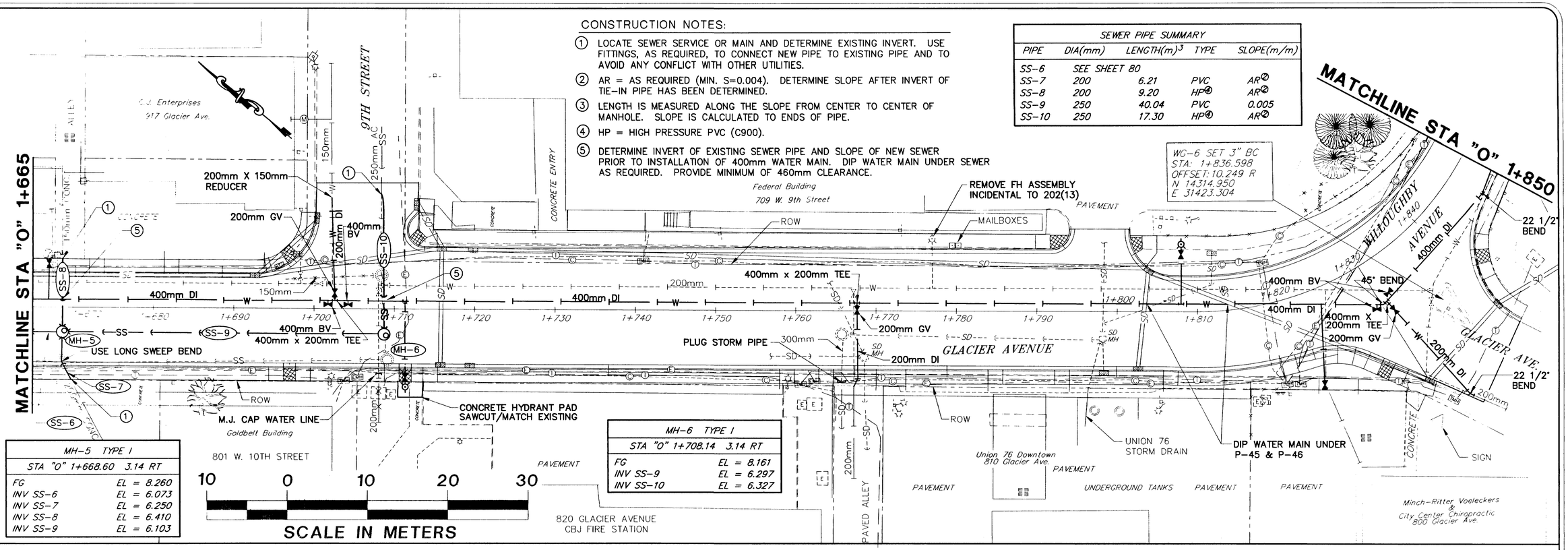
WATER & SEWER SYSTEMS
PLAN & PROFILE
STA "O" 1+519.279
TO STA "O" 1+665

SHEET NO. 80 of 97

CONSTRUCTION NOTES:

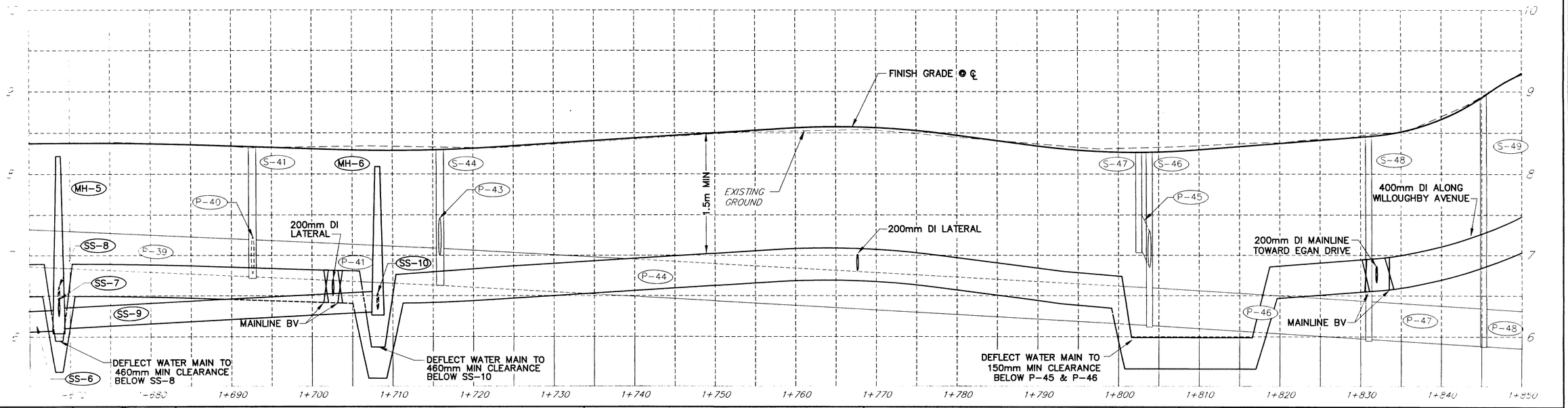
1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING PIPE AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR = AS REQUIRED (MIN. S=0.004). DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP = HIGH PRESSURE PVC (C900).
5. DETERMINE INVERT OF EXISTING SEWER PIPE AND SLOPE OF NEW SEWER PRIOR TO INSTALLATION OF 400mm WATER MAIN. DIP WATER MAIN UNDER SEWER AS REQUIRED. PROVIDE MINIMUM OF 460mm CLEARANCE.

SEWER PIPE SUMMARY				
PIPE	DIA(mm)	LENGTH(m)[3]	TYPE	SLOPE(m/m)
SS-6	SEE SHEET 80			
SS-7	200	6.21	PVC	AR[2]
SS-8	200	9.20	HP[4]	AR[2]
SS-9	250	40.04	PVC	0.005
SS-10	250	17.30	HP[4]	AR[2]



MH-5 TYPE I	
STA "O" 1+668.60 3.14 RT	
FG	EL = 8.260
INV SS-6	EL = 6.073
INV SS-7	EL = 6.250
INV SS-8	EL = 6.410
INV SS-9	EL = 6.103

MH-6 TYPE I	
STA "O" 1+708.14 3.14 RT	
FG	EL = 8.161
INV SS-9	EL = 6.297
INV SS-10	EL = 6.327



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STATE OF ALASKA — 19th — Peter L. Hildre No.CE4005 — REGISTERED PROFESSIONAL ENGINEER

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CITY/BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS PLAN & PROFILE STA "O" 1+665 TO STA "O"1+850

SHEET NO. 81 of 97

SEWER PIPE SUMMARY				
PIPE	DIA(mm)	LENGTH(m)[3]	TYPE	SLOPE(m/m)
SS-11	200	18.87	PVC	0.020
SS-12	200	5.69	PVC	AR[2]
SS-13	200	8.66	HP[4]	AR[2]
SS-14	200	88.50	PVC	0.008
SS-15	200	5.03	PVC	AR[2]
SS-16	200	6.81	HP[4]	AR[2]
SS-17	200	5.21	HP[4]	AR[2]
SS-18	SEE SHEET 83			

CONSTRUCTION NOTES:

1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING PIPE AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR=AS REQUIRED (MIN. S=0.004). DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP=HIGH PRESSURE PVC (C900).
5. DEFLECT LAST FIVE PIPE LENGTHS (27.5m) TO LINE UP WITH MANHOLE AND TO OBTAIN A MINIMUM SEPARATION BETWEEN WATER AND SEWER OF 3.5m. MAXIMUM DEFLECTION PER PIPE SECTION SHALL BE 3°.
6. AN UNKNOWN NUMBER OF ABANDONED FUEL LINES CROSS WILLOUGHBY AVENUE IN THE VICINITY OF THE OLD TANK FARM FROM THE TAILRACE TO CAPITAL AVENUE. CUT AND CAP AT TRENCH WALL.
7. REMOVE EXISTING WATER METER AND DELIVER TO CBJ UTILITIES SHOP AT SHAUNE DRIVE.

MATCHLINE STA "O" 1+850

MATCHLINE STA "O" 2+045

WILLOUGHBY AVENUE

"D" STREET

CAPITOL AVENUE

AEL&P POWER HOUSE TAILRACE

Gold Creek

Rick's Cafe 720 Willoughby Ave.

612 Willoughby Ave.

Channel Bowling Inc. 608 Willoughby Ave.

Salvation Army Church Thrift Store

Malaspina Apartments (Driftwood's)

Gold Lodge 711 Willoughby

Foodland Building 613 Willoughby Ave.

Central Dupilcation 535 Willoughby Ave.

Salvation Army Church 239 Willoughby Ave.

AEL&P (Undeveloped)

PARKING

PAVEMENT

GRAVEL

CONNECT UNDER EXISTING PLANTER

200mmX150mm REDUCER

150mm DI

200mm AC

200mm CONC

100mm CU W

SS

SD

W

ELEC PWR CONDUITS

400mm BV
22 1/2° BENDS

50mm CU

50mm CV

GOLD CREEK BRIDGE WATER MAIN CROSSING PAY LIMITS SEE DETAILS, SHEET 78

200mm GV

400mm X 200mm TEE

PLANTER

BOLLARD

"EXIT ONLY" SIGN

150mm DI

400mm BV

INSTALL WATER METER VAULT. SEE DETAILS, SHEET 79.

38mm CU

STA 1+965.5

50mm CV

150mm DI

150mm GV

200mm DI

200mm HDPE

CAP FOR FUTURE USE

150mm DI

150mm GV

EXISTING TEST WELL

CONSTRUCT EMBANKMENT PAD FOR FH

200mmX100mm REDUCER

200mm DI

150mm GV

150mm DI

CAP FOR FUTURE USE

200mm GV

400mm BV

400mmX200mm TEE

MH-7 TYPE I

STA "O" 1+886.22	2.39 LT
FG	EL = 9.023
INV SS-11	EL = 6.843

MH-8 TYPE I

STA "O" 1+905.10	2.38 LT
FG	EL = 8.665
INV SS-11	EL = 6.490
INV SS-12	EL = 6.490
INV SS-13	EL = 6.490
INV SS-14	EL = 6.460

MH-10 TYPE I

STA "O" 2+037.30	2.18 LT
FG	EL = 8.212
INV SS-17	EL = 6.911
INV SS-18	EL = 6.850

MH-9 TYPE I

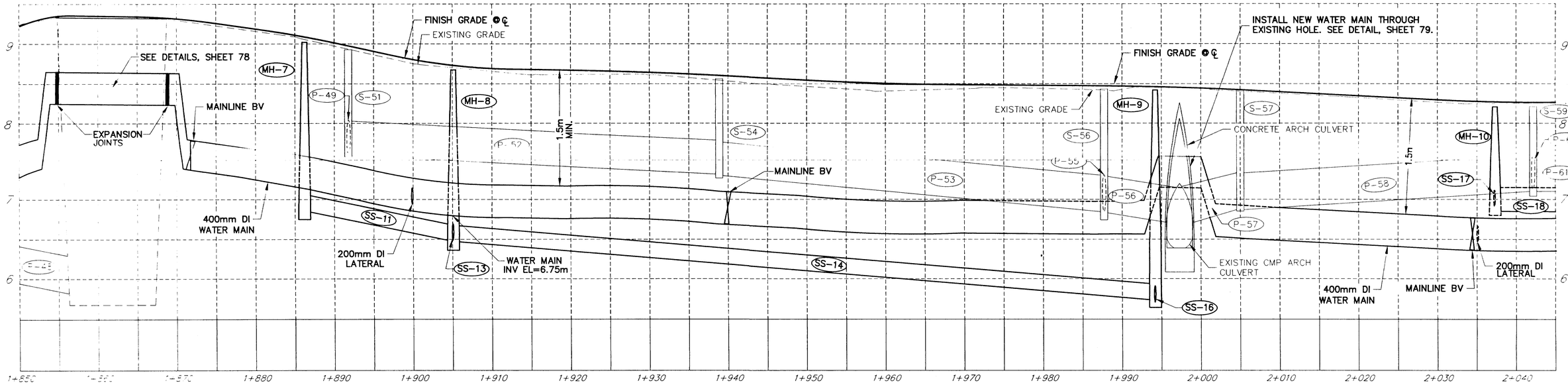
STA "O" 1+994.21	2.31 LT
FG	EL = 8.434
INV SS-14	EL = 5.738
INV SS-15	EL = 5.738
INV SS-16	EL = 5.707

TBM 93
STA : "O" 1+957.367
OFFSET: 8.011 RT
EL: 9.218m

WG-5 SET 2" BC
STA: 1+970.126
OFFSET: 6.998 R
N 14362.635
E 31559.764

10 0 10 20 30

SCALE IN METERS



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STATE OF ALASKA 49th
Peter L. Hildre
No.CE4005
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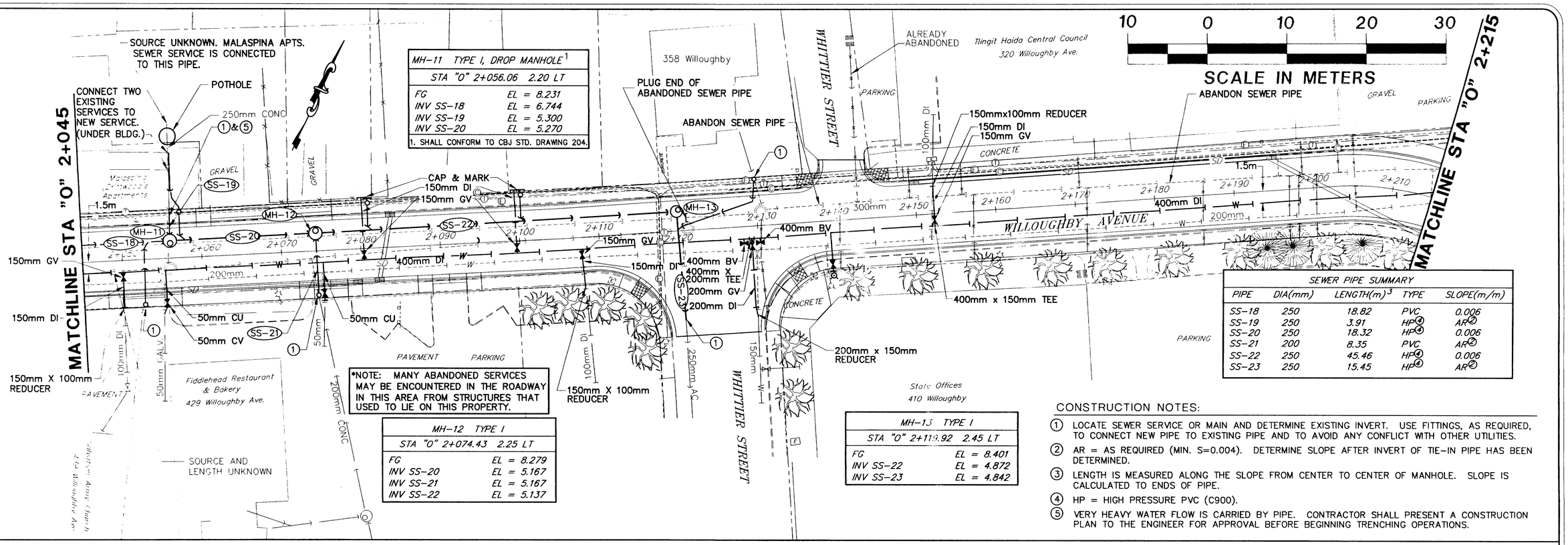
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ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

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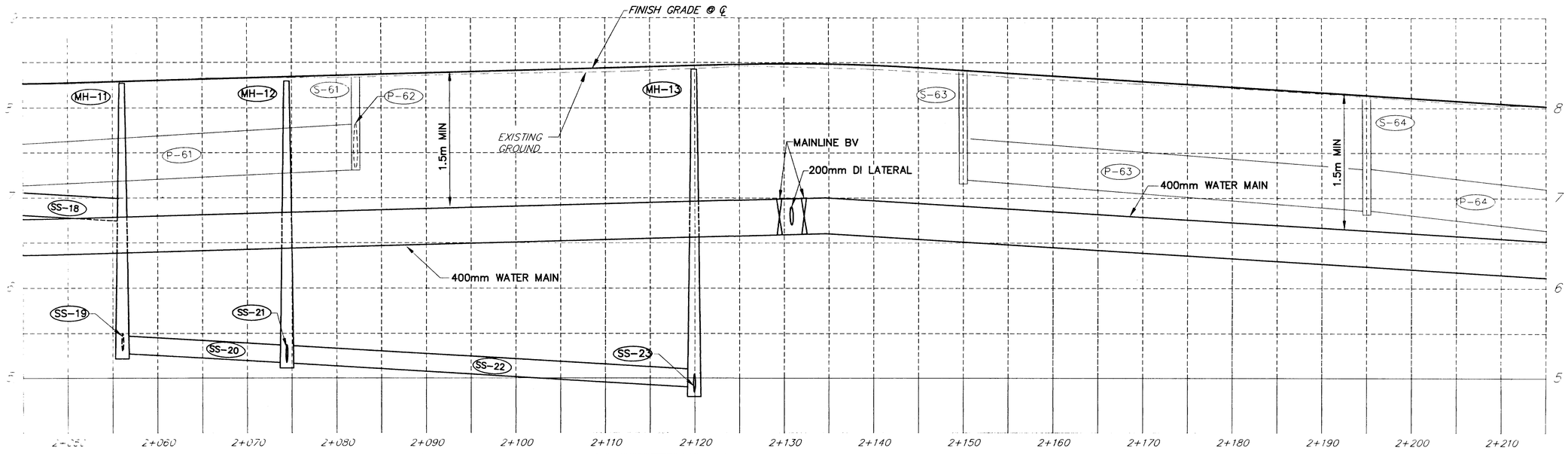
WATER & SEWER SYSTEMS PLAN & PROFILE STA "O" 1+850 TO STA "O" 2+045

SHEET NO. 82 of 97



CONSTRUCTION NOTES:

1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING PIPE AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR = AS REQUIRED (MIN. S=0.004). DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP = HIGH PRESSURE PVC (C900).
5. VERY HEAVY WATER FLOW IS CARRIED BY PIPE. CONTRACTOR SHALL PRESENT A CONSTRUCTION PLAN TO THE ENGINEER FOR APPROVAL BEFORE BEGINNING TRENCHING OPERATIONS.



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STP-000S (149)
PROJECT NO. 71463

WATER & SEWER SYSTEMS PLAN & PROFILE STA "O" 2+045 TO STA "O" 2+215

SHEET NO. 83 of 97

MH-14 TYPE I	
STA "O" 2+220.31	7.30 LT
FG	EL = 7.834
INV SS-23	EL = 5.552
INV SS-24	EL = 5.873
INV SS-25	EL = 5.467

*NOTE:
PRESSURE CHANGE IN THE WATER LINE SETS OFF THE FIRE ALARM IN THE FIREWEED PLACE. CONTRACTOR MUST NOTIFY THE BUILDING MANAGER (586-5000) PRIOR TO ANY ACTIVITY THAT MAY AFFECT THEIR ALARM SYSTEM.

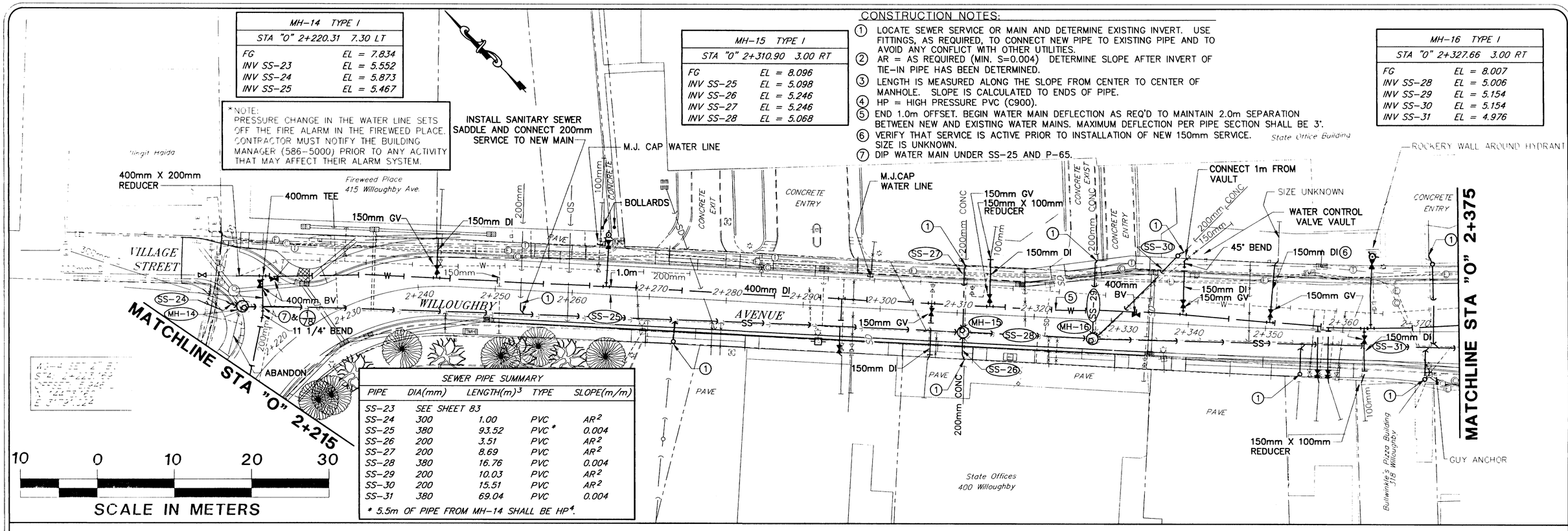
INSTALL SANITARY SEWER SADDLE AND CONNECT 200mm SERVICE TO NEW MAIN

MH-15 TYPE I	
STA "O" 2+310.90	3.00 RT
FG	EL = 8.096
INV SS-25	EL = 5.098
INV SS-26	EL = 5.246
INV SS-27	EL = 5.246
INV SS-28	EL = 5.068

CONSTRUCTION NOTES:

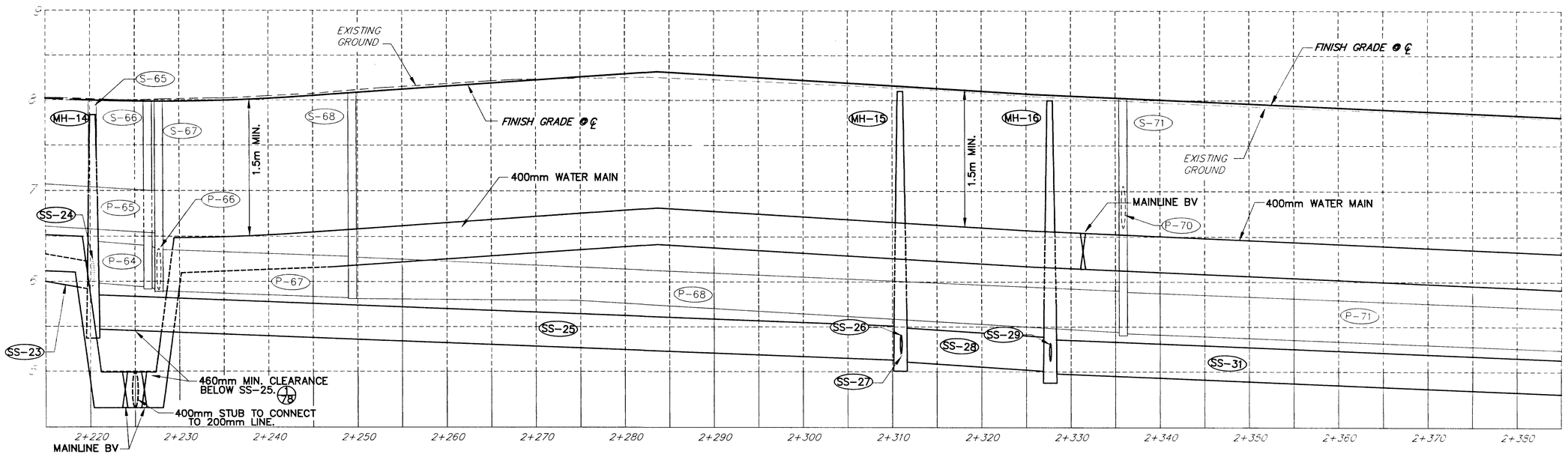
1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING PIPE AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR = AS REQUIRED (MIN. S=0.004) DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP = HIGH PRESSURE PVC (C900).
5. END 1.0m OFFSET. BEGIN WATER MAIN DEFLECTION AS REQ'D TO MAINTAIN 2.0m SEPARATION BETWEEN NEW AND EXISTING WATER MAINS. MAXIMUM DEFLECTION PER PIPE SECTION SHALL BE 3°.
6. VERIFY THAT SERVICE IS ACTIVE PRIOR TO INSTALLATION OF NEW 150mm SERVICE. SIZE IS UNKNOWN.
7. DIP WATER MAIN UNDER SS-25 AND P-65.

MH-16 TYPE I	
STA "O" 2+327.66	3.00 RT
FG	EL = 8.007
INV SS-28	EL = 5.006
INV SS-29	EL = 5.154
INV SS-30	EL = 5.154
INV SS-31	EL = 4.976



SEWER PIPE SUMMARY				
PIPE	DIA(mm)	LENGTH(m)[3]	TYPE	SLOPE(m/m)
SS-23	SEE SHEET 83			
SS-24	300	1.00	PVC	AR[2]
SS-25	380	93.52	PVC *	0.004
SS-26	200	3.51	PVC	AR[2]
SS-27	200	8.69	PVC	AR[2]
SS-28	380	16.76	PVC	0.004
SS-29	200	10.03	PVC	AR[2]
SS-30	200	15.51	PVC	AR[2]
SS-31	380	69.04	PVC	0.004

* 5.5m OF PIPE FROM MH-14 SHALL BE HP[4].



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WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
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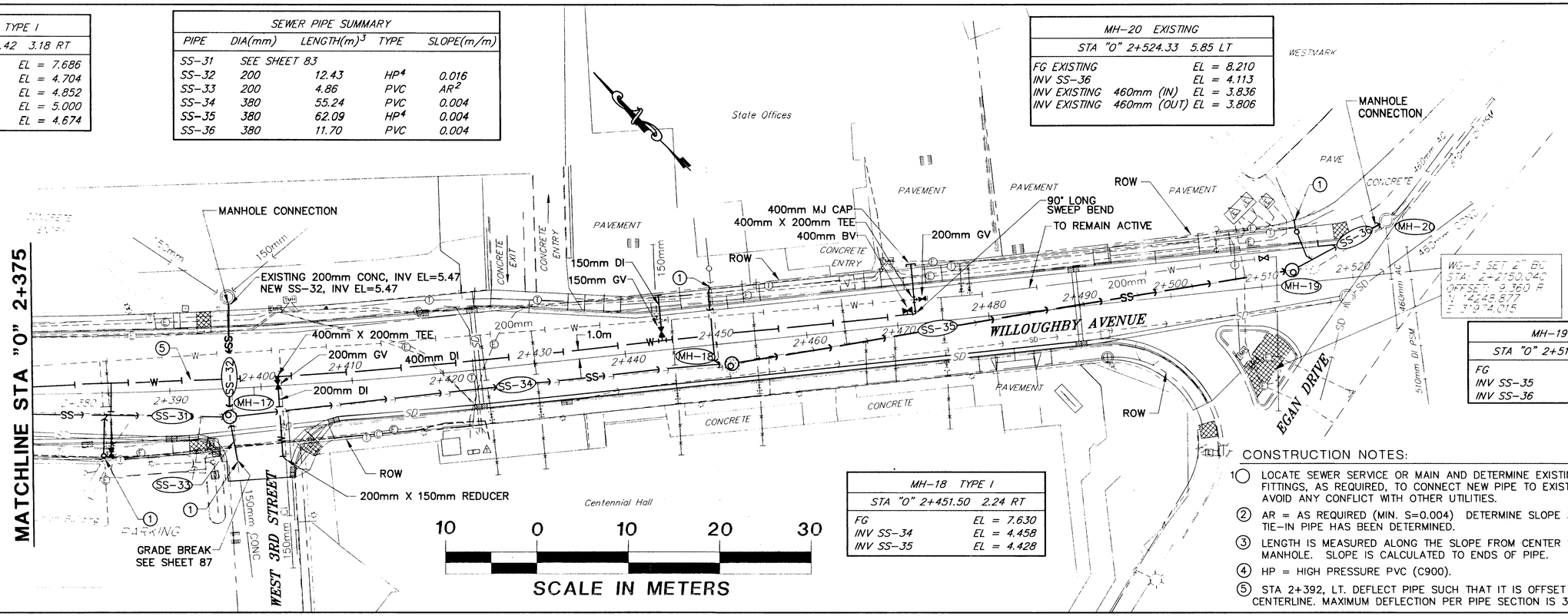
WATER & SEWER SYSTEMS PLAN & PROFILE STA "O" 2+215 TO STA "O" 2+375

SHEET NO. 84 of 97

MH-17 TYPE I	
STA "O" 2+396.42 3.18 RT	
FG	EL = 7.686
INV SS-31	EL = 4.704
INV SS-32	EL = 4.852
INV SS-33	EL = 5.000
INV SS-34	EL = 4.674

SEWER PIPE SUMMARY				
PIPE	DIA(mm)	LENGTH(m)[3]	TYPE	SLOPE(m/m)
SS-31	SEE SHEET 83			
SS-32	200	12.43	HP[4]	0.016
SS-33	200	4.86	PVC	AR[2]
SS-34	380	55.24	PVC	0.004
SS-35	380	62.09	HP[4]	0.004
SS-36	380	11.70	PVC	0.004

MH-20 EXISTING		
STA "O" 2+524.33 5.85 LT		
FG EXISTING		EL = 8.210
INV SS-36		EL = 4.113
INV EXISTING	460mm (IN)	EL = 3.836
INV EXISTING	460mm (OUT)	EL = 3.806

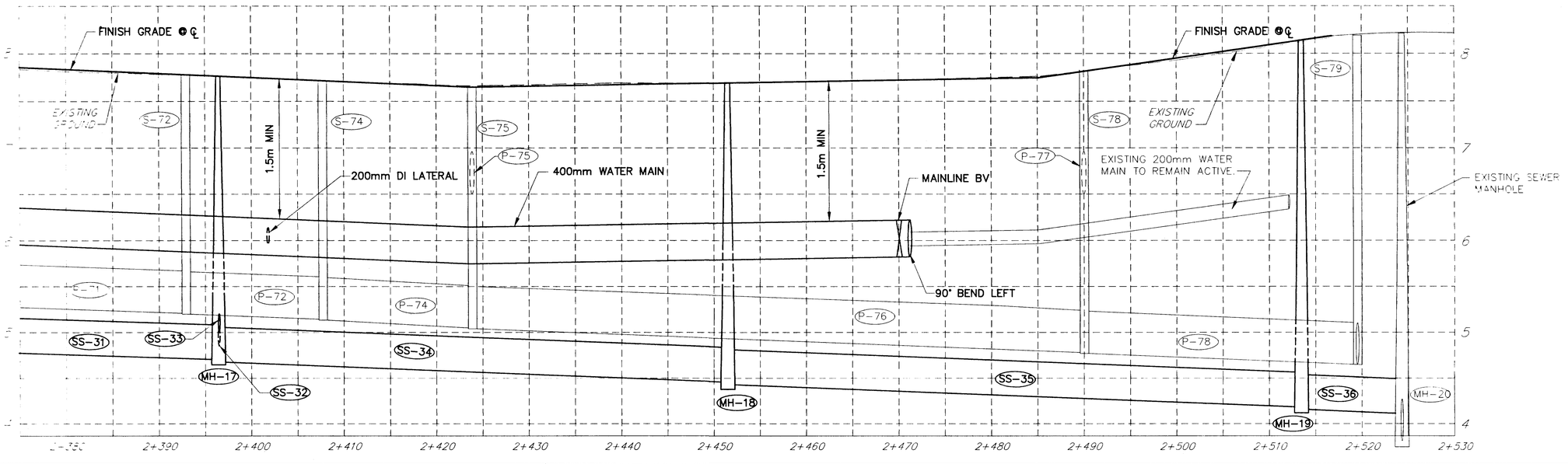


MH-18 TYPE I	
STA "O" 2+451.50 2.24 RT	
FG	EL = 7.630
INV SS-34	EL = 4.458
INV SS-35	EL = 4.428

MH-19 TYPE I	
STA "O" 2+513.47 1.50 LT	
FG	EL = 8.115
INV SS-35	EL = 4.184
INV SS-36	EL = 4.154

CONSTRUCTION NOTES:

1. LOCATE SEWER SERVICE OR MAIN AND DETERMINE EXISTING INVERT. USE FITTINGS, AS REQUIRED, TO CONNECT NEW PIPE TO EXISTING PIPE AND TO AVOID ANY CONFLICT WITH OTHER UTILITIES.
2. AR = AS REQUIRED (MIN. S=0.004) DETERMINE SLOPE AFTER INVERT OF TIE-IN PIPE HAS BEEN DETERMINED.
3. LENGTH IS MEASURED ALONG THE SLOPE FROM CENTER TO CENTER OF MANHOLE. SLOPE IS CALCULATED TO ENDS OF PIPE.
4. HP = HIGH PRESSURE PVC (C900).
5. STA 2+392, LT. DEFLECT PIPE SUCH THAT IT IS OFFSET 1.0m LEFT OF CENTERLINE. MAXIMUM DEFLECTION PER PIPE SECTION IS 3°.



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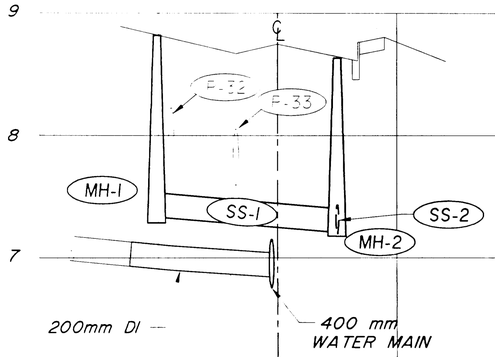
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CITY/BOROUGH OF JUNEAU
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DEPARTMENT OF ENGINEERING

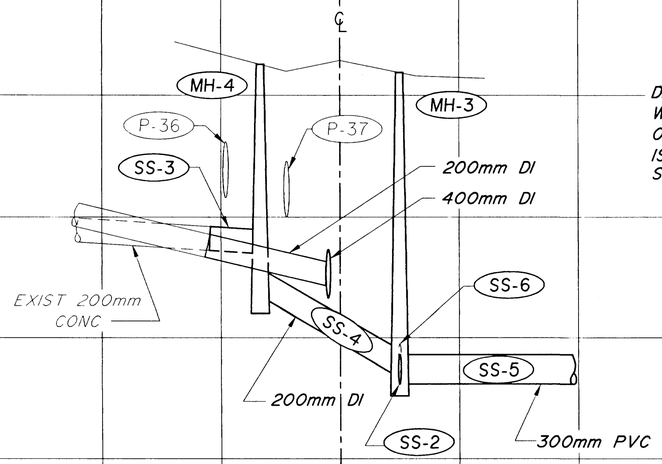
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
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PROJECT NO. 71463

WATER & SEWER SYSTEMS
PLAN & PROFILE
STA "O" 2+375 TO EOP

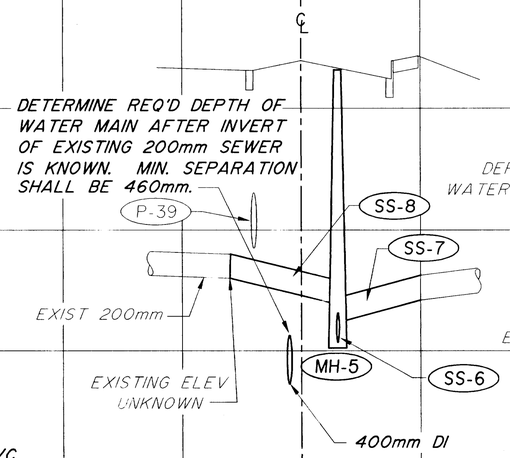
SHEET NO. 85 of 97



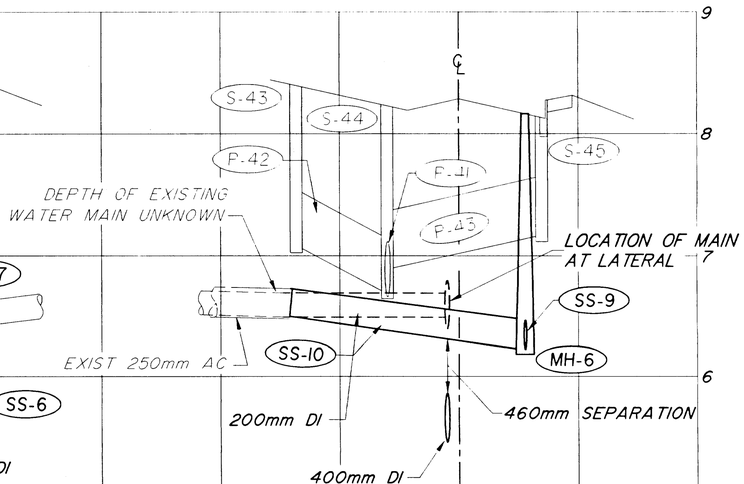
11TH STREET PROFILE



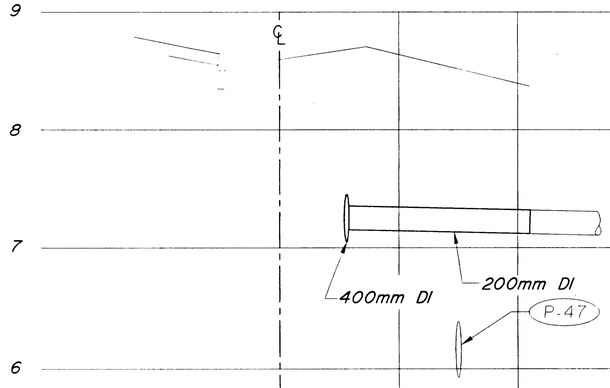
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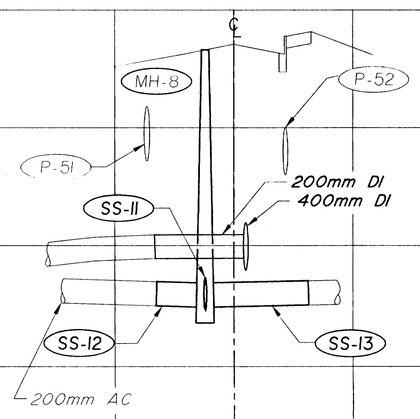
ALLEY AT STA 1+670, PROFILE



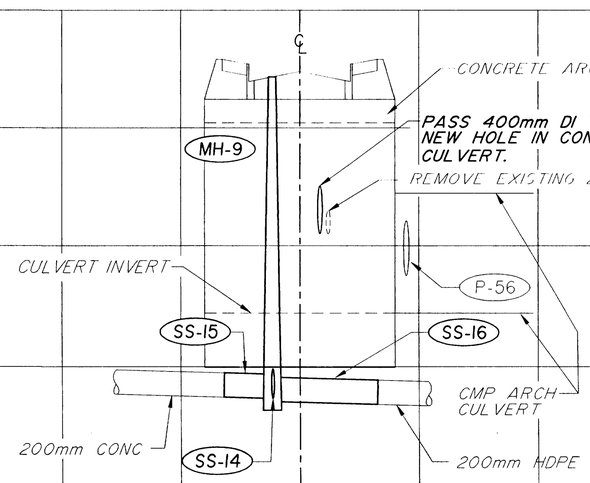
9TH STREET PROFILE



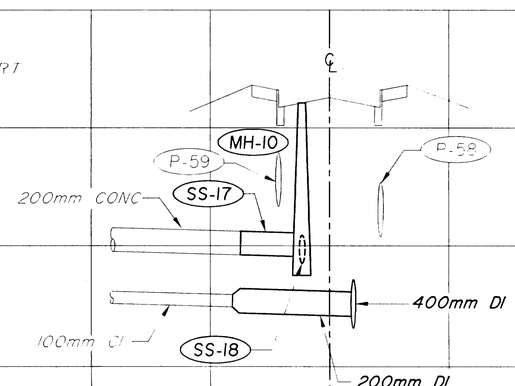
GLACIER AVENUE & WILLOUGHBY AVENUE
INTERSECTION PROFILE, 1+832



"D" STREET PROFILE



CROSS SECTION AT AEL&P TAILRACE



CAPITOL AVENUE PROFILE

NOTE: 1) ALL CONNECTIONS BETWEEN NEW AND EXISTING WATER AND SEWER PIPE ARE SHOWN SCHEMATICALLY ONLY. ACTUAL CONNECTIONS MAY REQUIRE BENDS, SPECIAL COUPLINGS, OR OTHER FITTINGS.
2) THESE PROFILES ARE INTENDED TO SHOW RELATIVE POSITION OF PIPING. LOCATIONS MAY NOT BE EXACT.

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STATE OF ALASKA · 49th · Peter L. Hildre No.CE4005 · REGISTERED PROFESSIONAL ENGINEER

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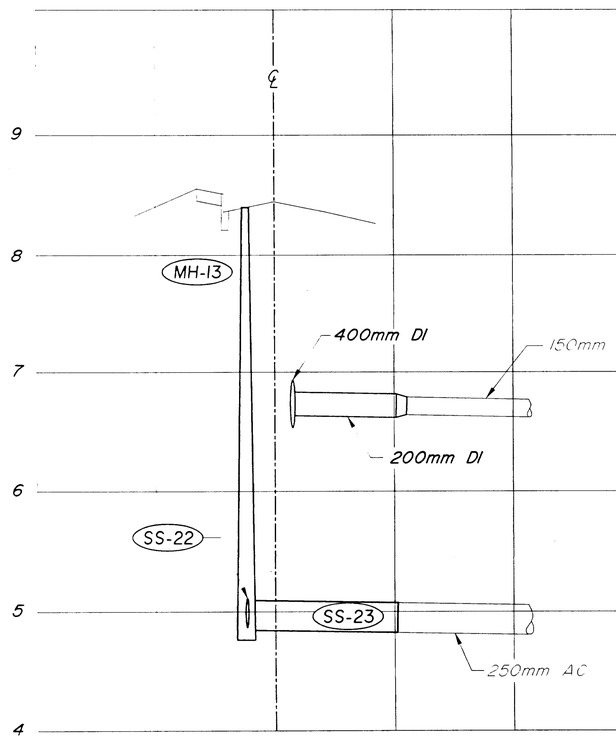
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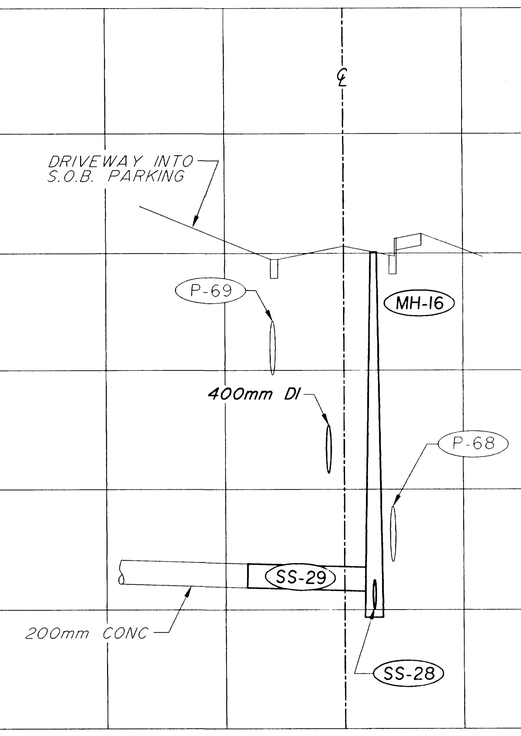
WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

SANITARY SEWER ROAD CROSSING PROFILES

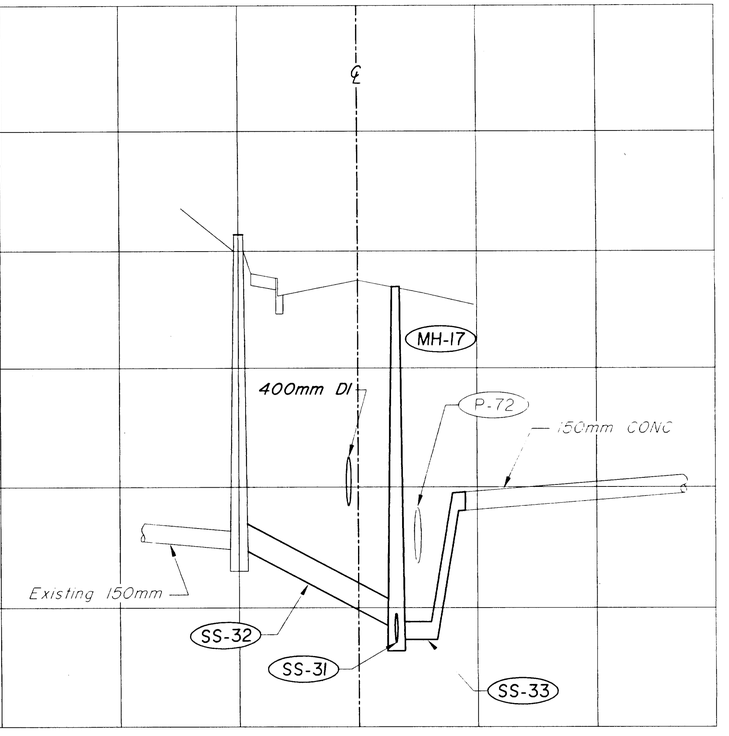
SHEET NO. 86 of 97



WHITTIER STREET PROFILE



CROSS SECTION AT STA 2+328



WEST 3RD STREET PROFILE

NOTE: 1) ALL CONNECTIONS BETWEEN NEW AND EXISTING WATER AND SEWER PIPE ARE SHOWN SCHEMATICALLY ONLY. ACTUAL CONNECTIONS MAY REQUIRE BENDS, SPECIAL COUPLINGS, OR OTHER FITTINGS.
2) THESE PROFILES ARE INTENDED TO SHOW RELATIVE POSITION OF PIPING. LOCATIONS MAY NOT BE EXACT.

STATUS	DATE PRINTED	
DATE	REVISIONS	BY

STATE OF ALASKA 49th
Peter L. Hildre No.CE4005
REGISTERED PROFESSIONAL ENGINEER

Toner Nordling & ASSOCIATES, INC.
Consulting Engineers • Land Surveyors
Construction Administration
5768 COMMERCIAL BLVD. JUNEAU, ALASKA 99801
(907) 780-3533 OFFICE (907) 780-3535 FAX

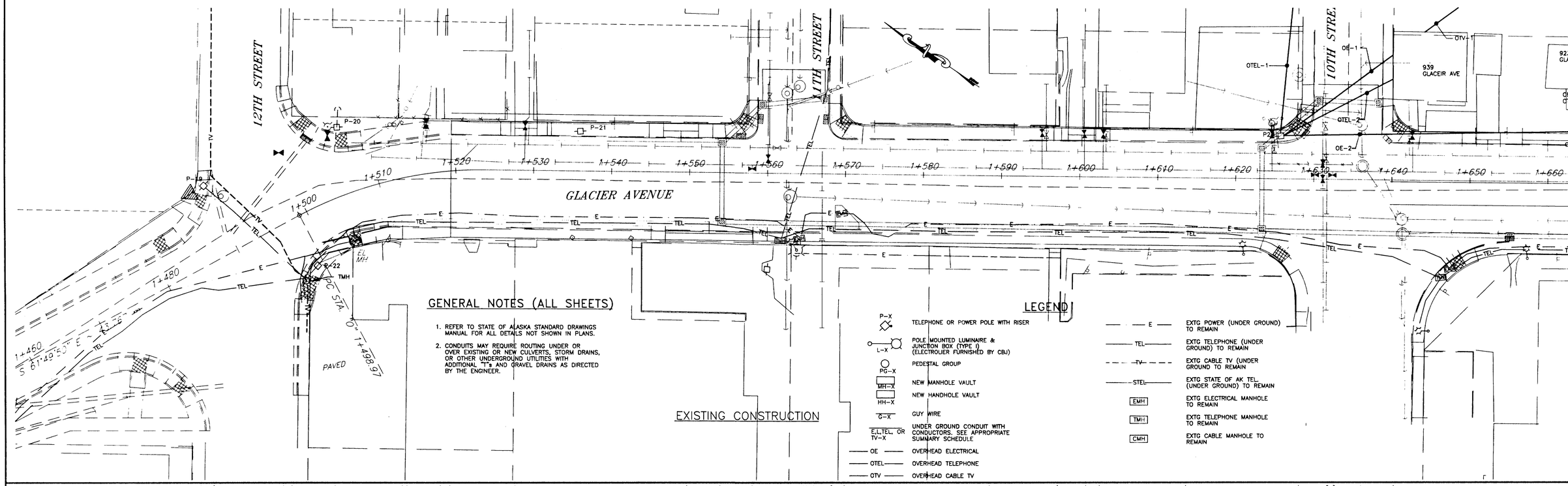
DRAWN BY: STAFF | DESIGNED BY: GARY JENKINS II | CHECKED BY: PETER HILDRE | DATE: MARCH 1998

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WILLOUGHBY AND GLACIER AVENUE RECONSTRUCTION
STP-000S (149)
PROJECT NO. 71463

SANITARY SEWER ROAD CROSSING PROFILES

SHEET NO. 87 of 97



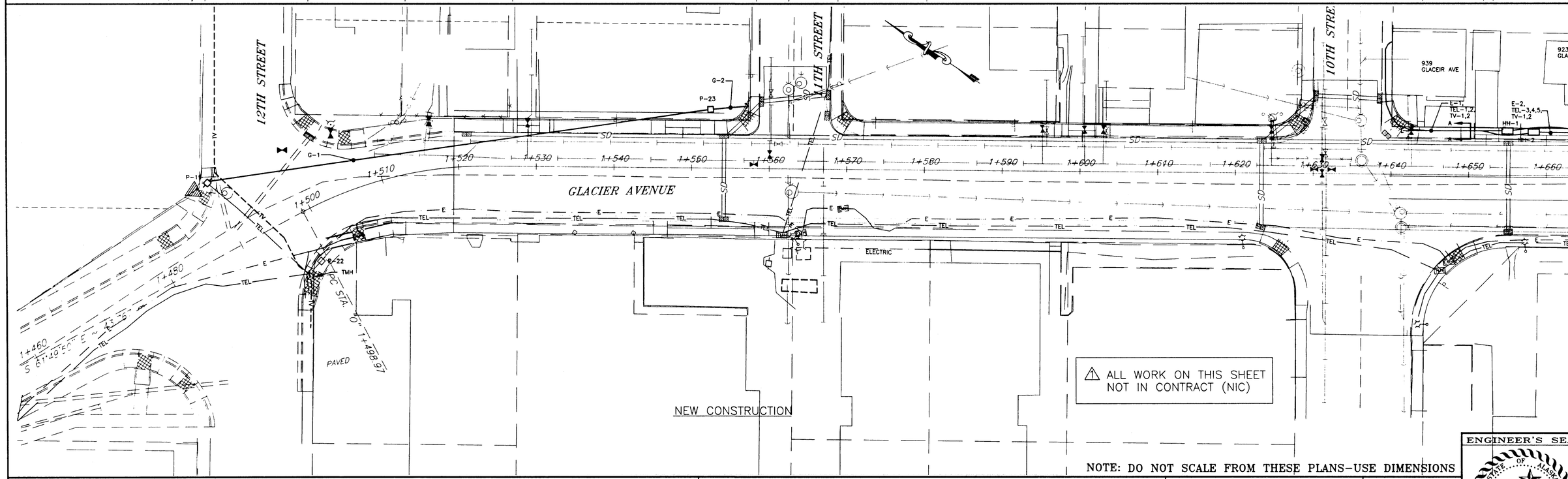
GENERAL NOTES (ALL SHEETS)

1. REFER TO STATE OF ALASKA STANDARD DRAWINGS MANUAL FOR ALL DETAILS NOT SHOWN IN PLANS.
2. CONDUITS MAY REQUIRE ROUTING UNDER OR OVER EXISTING OR NEW CULVERTS, STORM DRAINS, OR OTHER UNDERGROUND UTILITIES WITH ADDITIONAL "T"s AND GRAVEL DRAINS AS DIRECTED BY THE ENGINEER.

EXISTING CONSTRUCTION

LEGEND

P–X	TELEPHONE OR POWER POLE WITH RISER
L–X	POLE MOUNTED LUMINAIRE & JUNCTION BOX (TYPE I) (ELECTROLIER FURNISHED BY CBJ)
PG–X	PEDESTAL GROUP
MH–X	NEW MANHOLE VAULT
HH–X	NEW HANDHOLE VAULT
G–X	GUY WIRE
E,L,TEL, OR TV–X	UNDER GROUND CONDUIT WITH CONDUCTORS. SEE APPROPRIATE SUMMARY SCHEDULE
OE	OVERHEAD ELECTRICAL
OTEL	OVERHEAD TELEPHONE
OTV	OVERHEAD CABLE TV
E	EXTG POWER (UNDER GROUND) TO REMAIN
TEL	EXTG TELEPHONE (UNDER GROUND) TO REMAIN
TV	EXTG CABLE TV (UNDER GROUND TO REMAIN
STEL	EXTG STATE OF AK TEL. (UNDER GROUND) TO REMAIN
EMH	EXTG ELECTRICAL MANHOLE TO REMAIN
TMH	EXTG TELEPHONE MANHOLE TO REMAIN
CMH	EXTG CABLE MANHOLE TO REMAIN



NEW CONSTRUCTION

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SE

STATE OF ALASKA 49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN1, 50PROF1, TITLE1
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5

RECORD OF REVISIONS

BY:	DATE:	DESCRIPTION OF CHANGE:
MGM	2-98	1 NIC

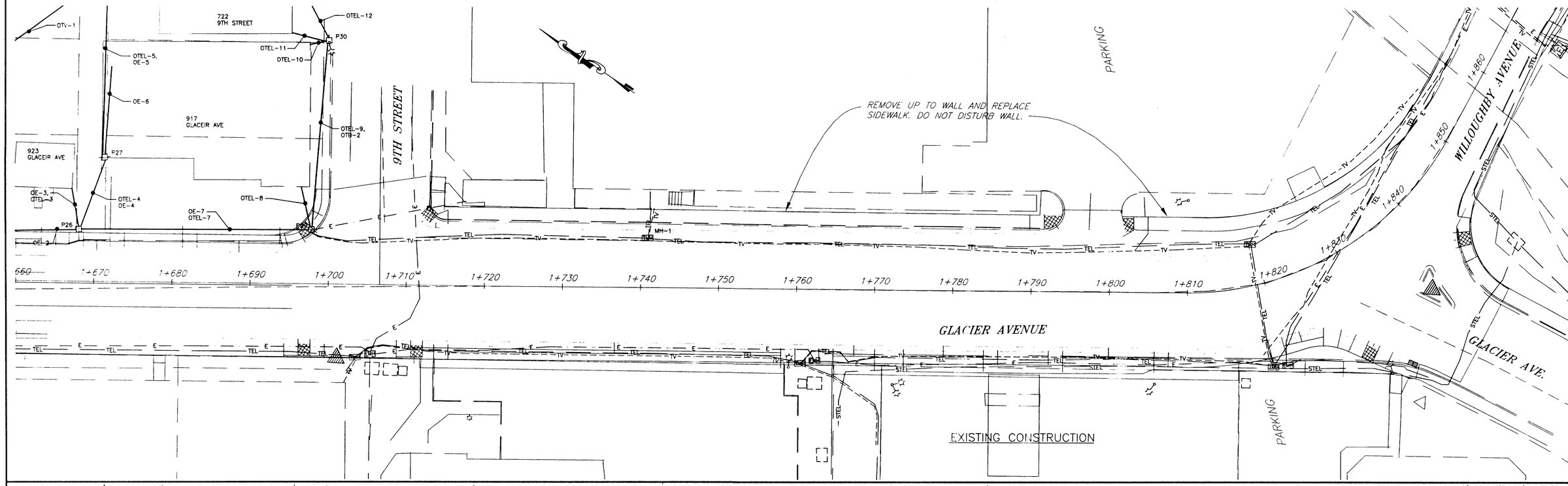
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

B.O.P. STA "0" 1+518 TO "0" 1+660

ELECTRICAL PLANS – EXISTING & NEW

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 88 OF 97



⚠1 ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN2, 50PROF2, TITLE2		
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5		
BY:	DATE:	DESCRIPTION OF CHANGE:
MGM	2-98	1 NIC

RECORD OF REVISIONS

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

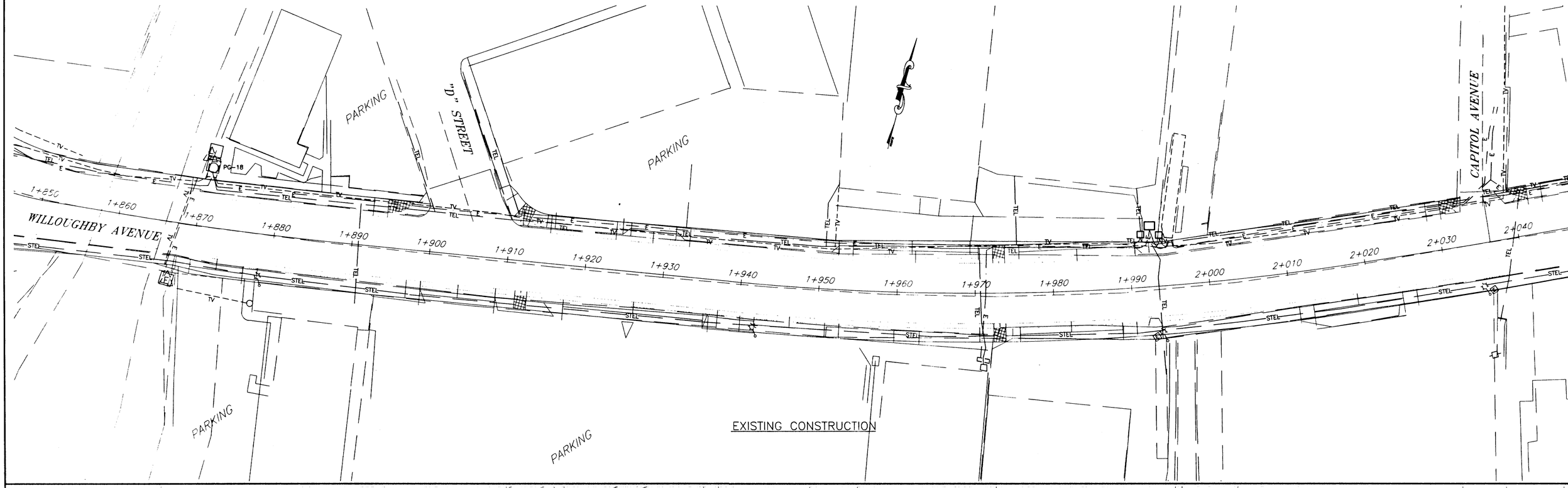
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-0005 (149) PROJECT NO. 71463

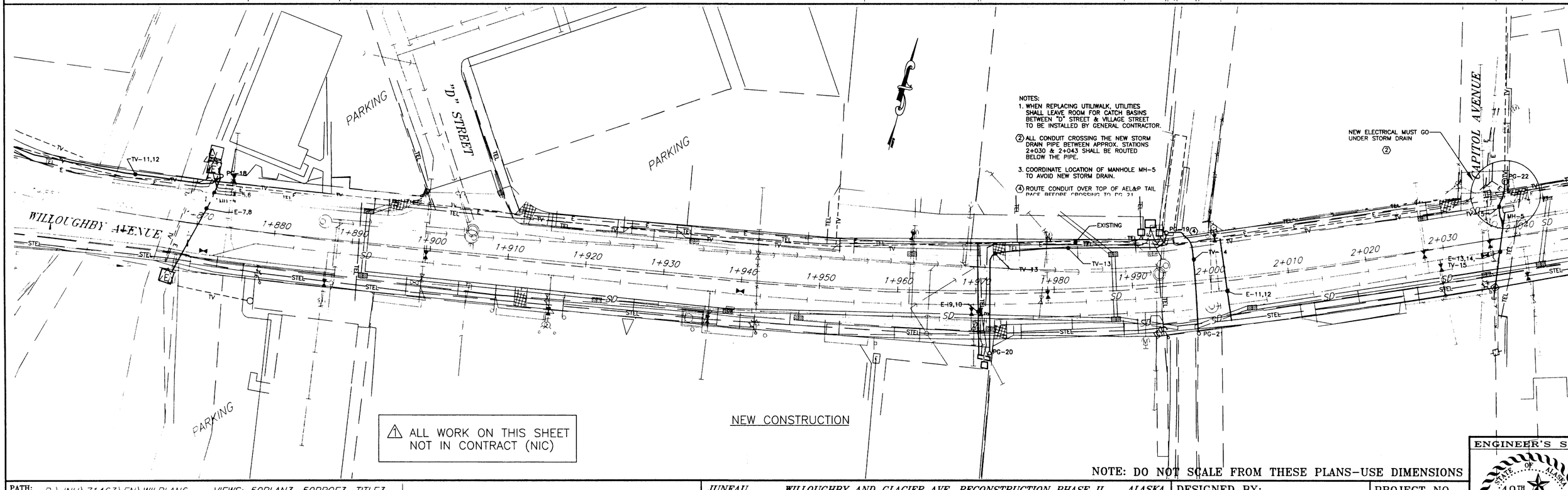
STA "0" 1+660 TO STA "0" 1+850
ELECTRICAL PLANS – EXISTING & NEW

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 89 OF 97

ENGINEER'S SE

STATE OF ALASKA 49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER





⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN3, 50PROF3, TITLE3		
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BY:	DATE:	DESCRIPTION OF CHANGE:
MGM	2-98	1 NIC

RECORD OF REVISIONS

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

JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

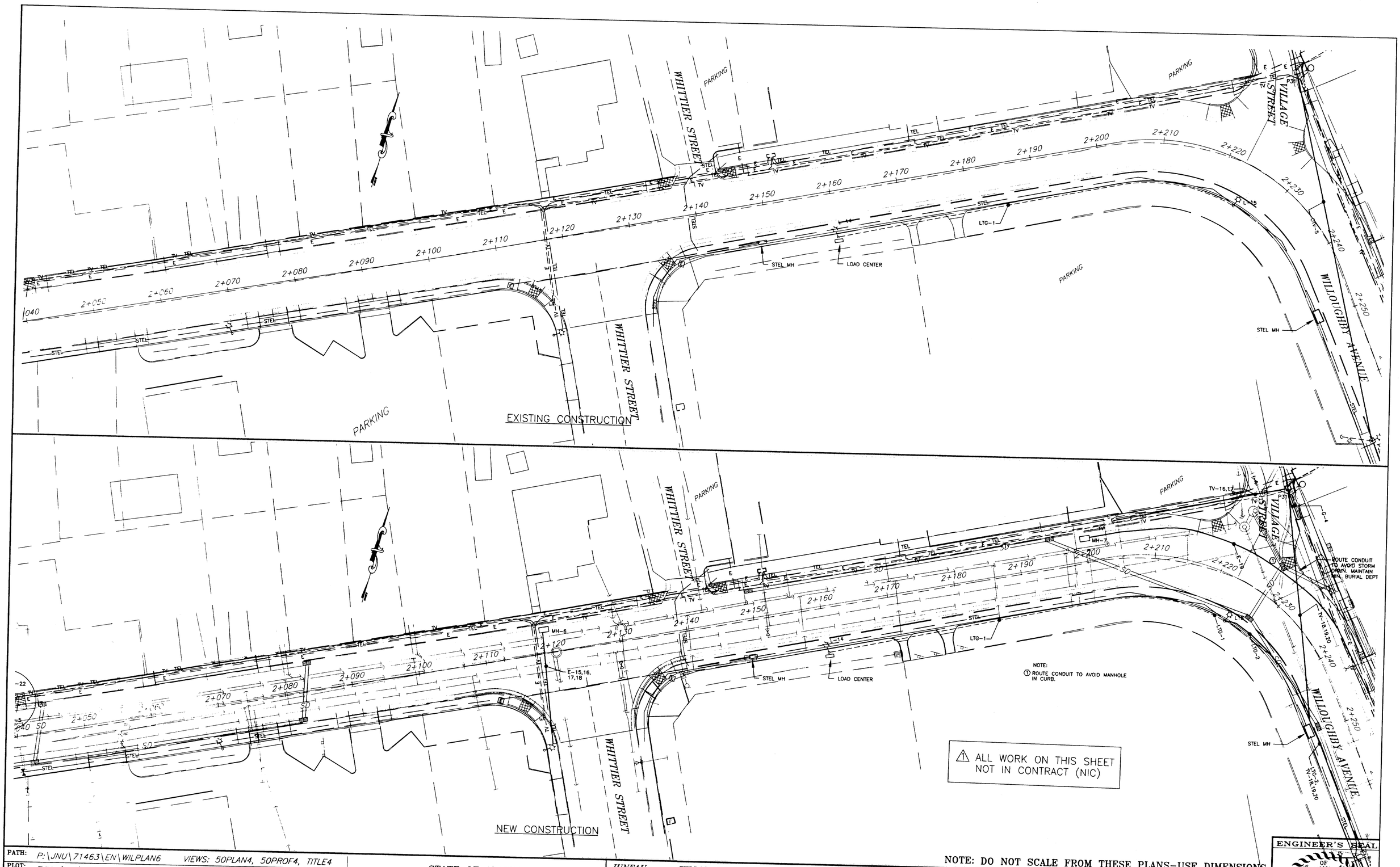
STA "0" 1+850 TO STA "0" 2+040

ELECTRICAL PLANS – EXISITING & NEW

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 90 OF 97

ENGINEER'S S

STATE OF ALASKA
49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER



PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN4, 50PROF4, TITLE4		
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5		
BY:	DATE:	DESCRIPTION OF CHANGE:
MGM	2-98	⚠ NIC

RECORD OF REVISIONS

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

JUNEAU

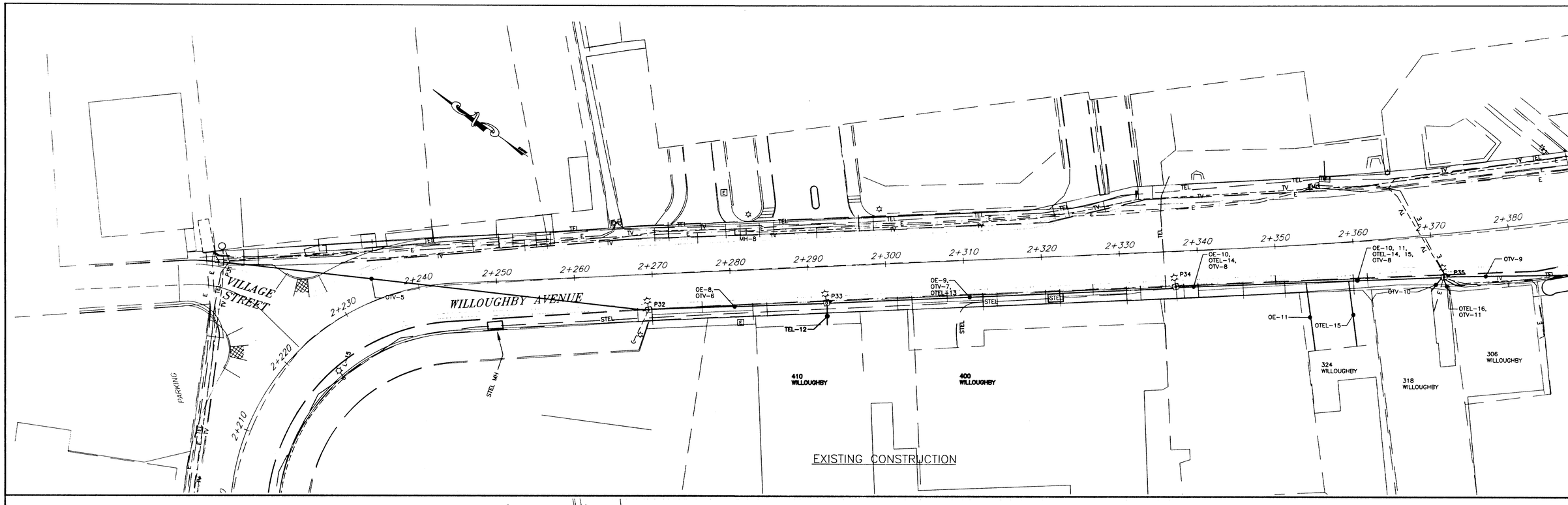
WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "0" 2+040 TO STA "0" 2+220
ELECTRICAL PLANS – EXISTING & NEW

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 91 OF 97

ENGINEER'S SEAL
STATE OF ALASKA
49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN5, 50PROF5, TITLE5		
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BY:	DATE:	DESCRIPTION OF CHANGE:
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RECORD OF REVISIONS

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

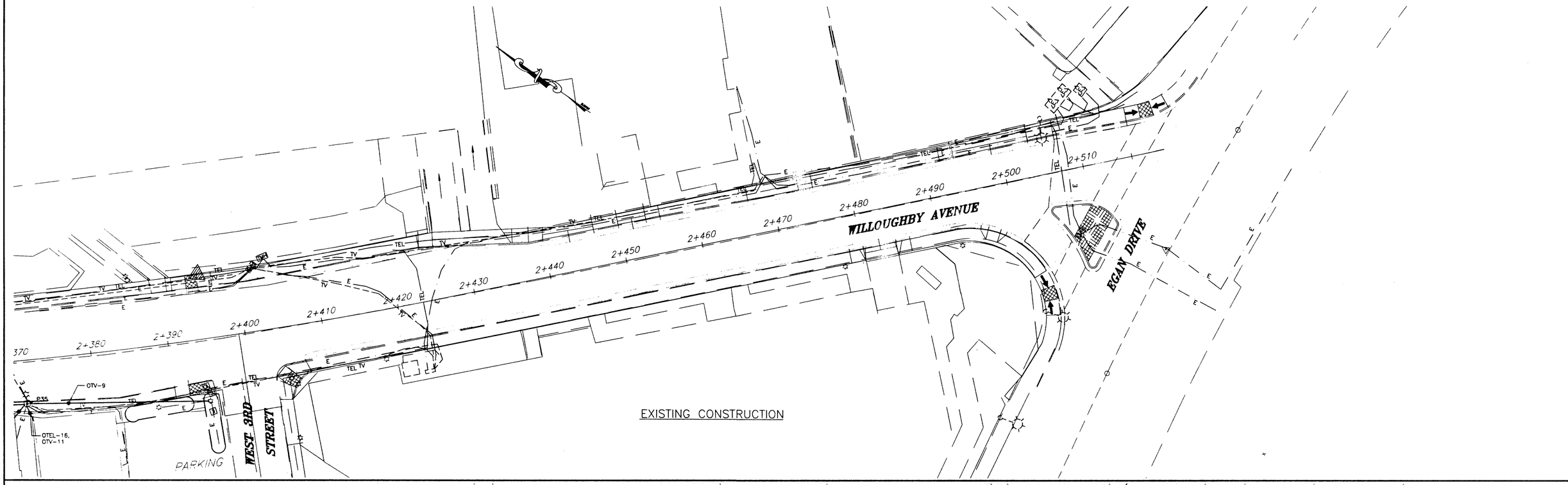
JUNEAU — WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II — ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

STA "0" 2+220 TO STA "0" 2+380

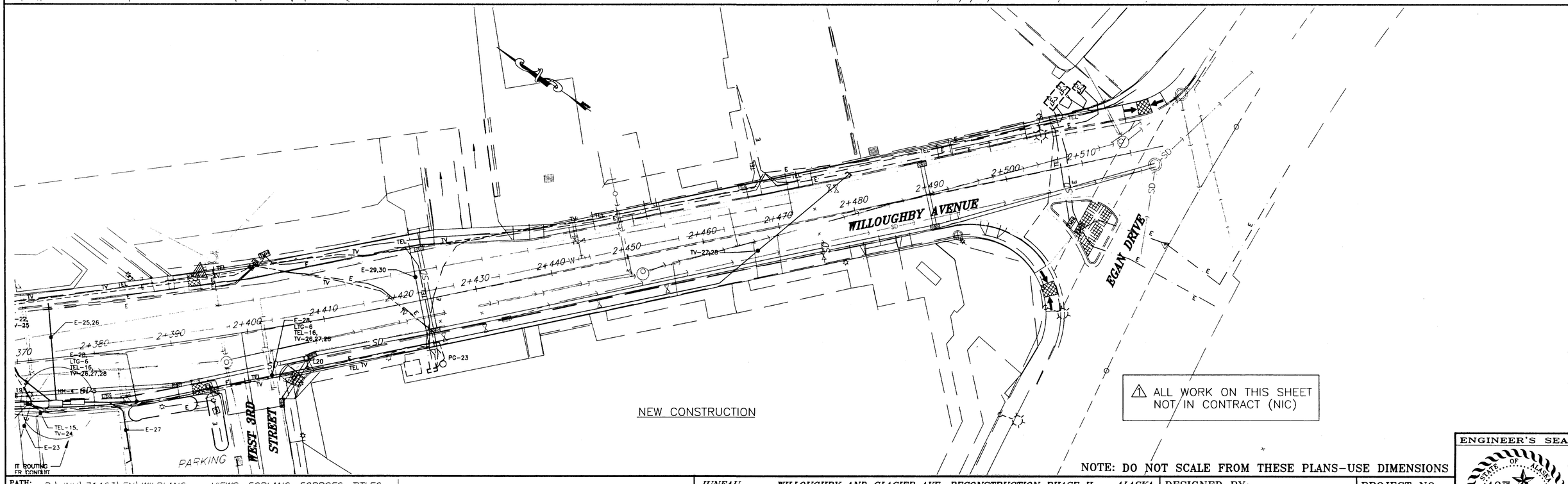
ELECTRICAL PLANS – EXISTING & NEW

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 92 OF 97

ENGINEER'S SEAL
STATE OF ALASKA 49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER



EXISTING CONSTRUCTION



NEW CONSTRUCTION

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN6, 50PROF6, TITLE6		
PLOT: FULL (1=1) OR HALF (2=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5		
BY:	DATE:	DESCRIPTION OF CHANGE:
MGM	2-98	1 NIC

RECORD OF REVISIONS

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

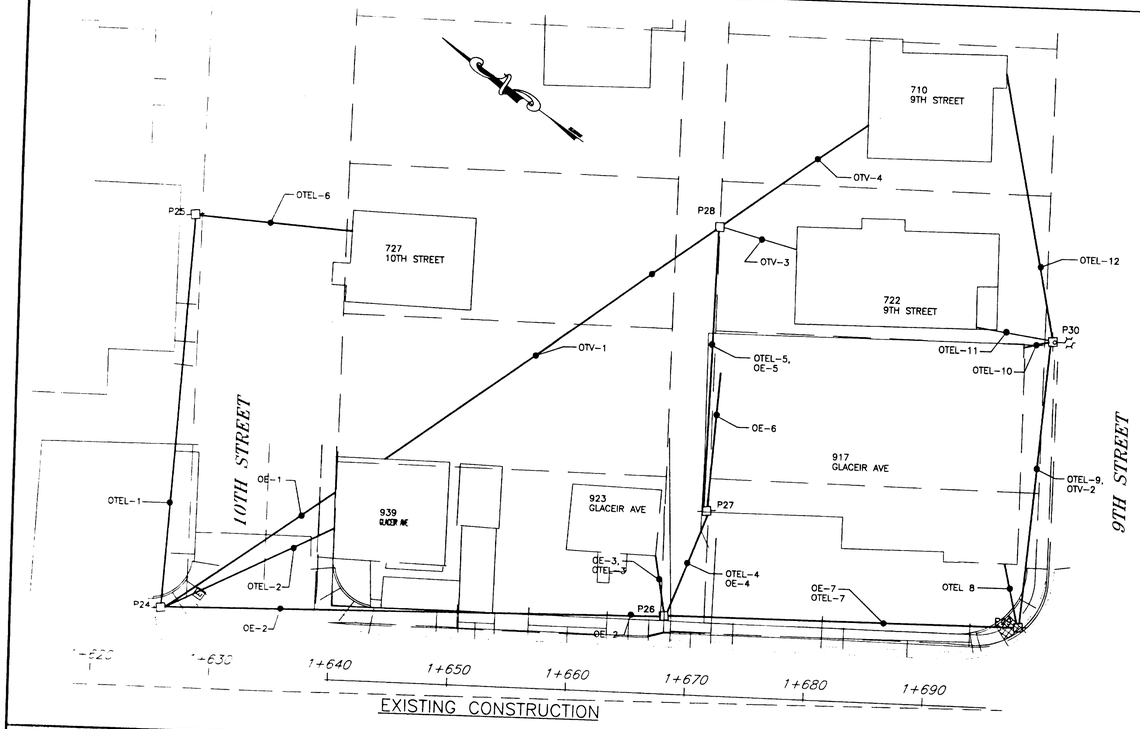
JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

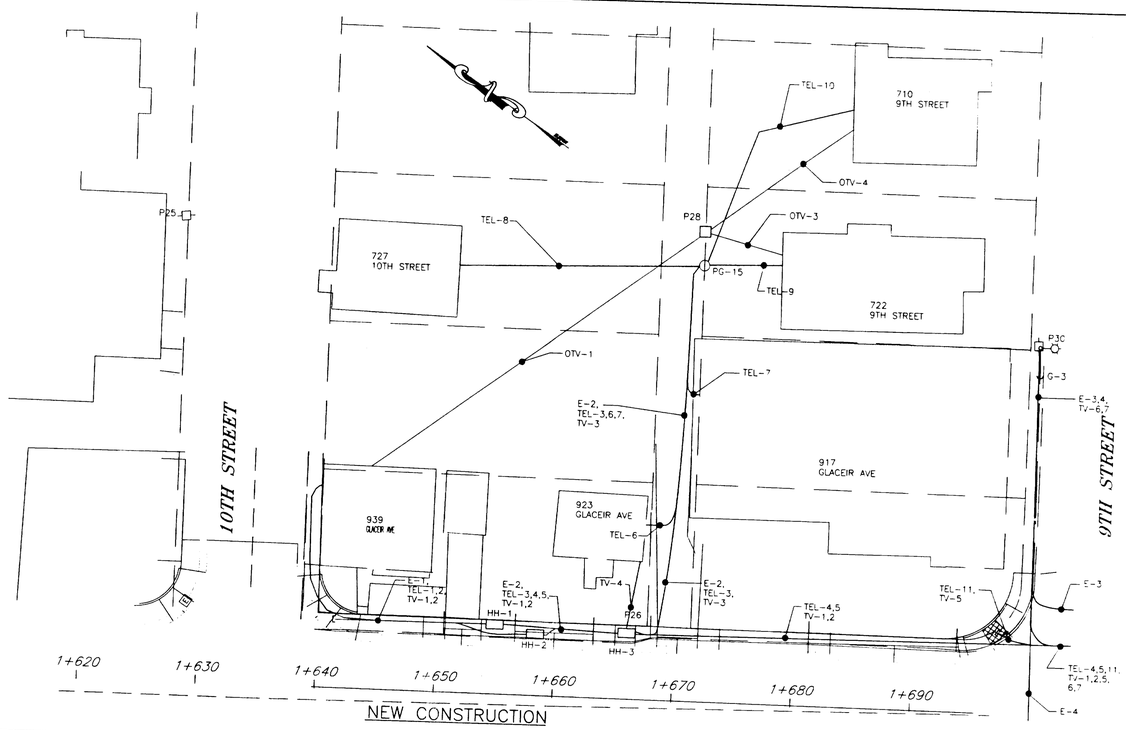
STA "0" 2+380 TO STA "0" 2+516.13
ELECTRICAL PLANS – EXISTING & NEW

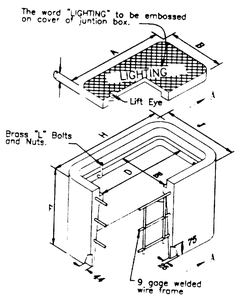
DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 93 OF 97

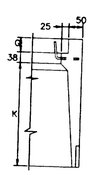
ENGINEER'S SEA

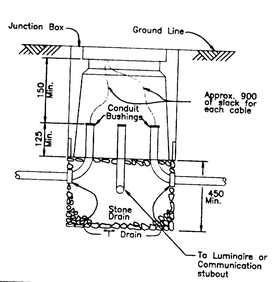
STATE OF ALASKA 49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER







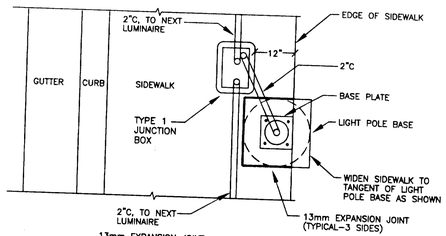


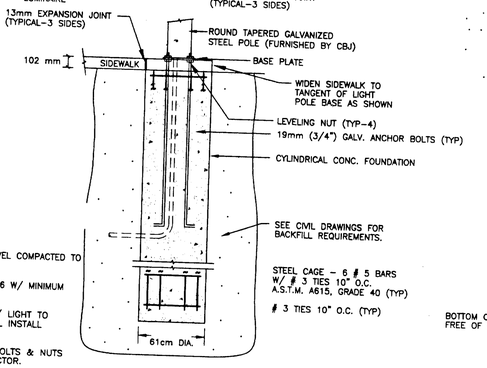


DIMENSIONS (mm)	TYPE 1
A	380
B	255
C	44
D	340
E	215
F	305
G	44
H	495
J	370
K	225

NOTES:
1. PROVIDE TYPE 1 JUCTION BOXES FOR ALL NEW POLE MOUNTED LUMINAIRES.
2. PROVIDE TYPE 1 JUCTION BOXES FOR COMMUNICTION CONDUITS AS SHOWN.

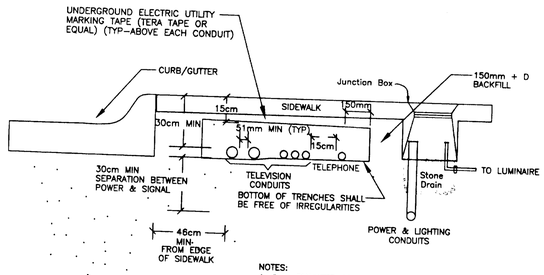
TYPE 1 JUNCTION BOX DETAIL





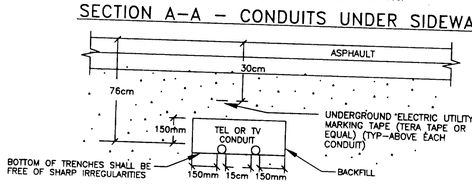
NOTES:
1. BACKFILL W/ N.F.S. SAND & GRAVEL COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
2. ANCHOR BOLTS TO MEET ATSM-A36 W/ MINIMUM YIELD STRESS OF 36.0 KSI.
3. CBJ TO FURNISH LIGHT POLE W/ LIGHT TO CONTRACTOR. CONTRACTOR SHALL INSTALL LIGHT POLE.
4. LIGHT POLE BASE W/ ANCHOR BOLTS & NUTS SHALL BE PROVIDED BY CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE ALL MATERIALS NECESSARY TO PROVIDE AN OPERATIONAL STREET LIGHTING SYSTEM AS SHOWN.

LIGHT POLE BASE DETAIL



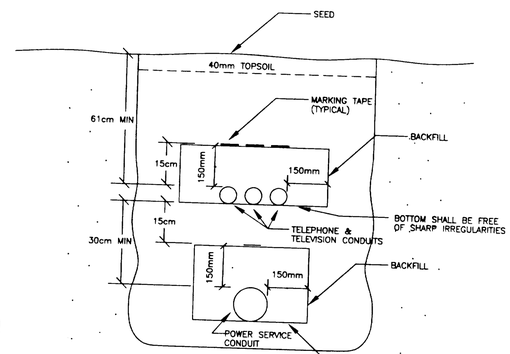
NOTES:
1. D = DIAMETER OF PIPES.
2. BACKFILL SHALL BE SELECT MATERIAL B OR USABLE EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. ALL OTHER TRENCHING & BACKFILL SHALL MEET CIVIL DRAWING REQUIREMENTS.
3. ALL TELE, TV, & ELEC CONDUIT TRENCHING AND BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION A-A - CONDUITS UNDER SIDEWALK (TYP)



NOTES:
1. IF POWER & SIGNAL CONDUITS ARE LOCATED IN THE SAME TRENCH SEPARATE THEM BY 30cm MINIMUM.
2. BACKFILL SHALL BE SELECT MATERIAL B OR USABLE EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. ALL OTHER TRENCHING AND BACKFILL SHALL MEET CIVIL DRAWING REQUIREMENTS.
3. ALL TELE, TV, & ELEC CONDUIT TRENCHING AND BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION B-B - CONDUITS UNDER STREET (TYP)



NOTE:
1. BACKFILL SHALL BE SELECT MATERIAL B OR USABLE EXCAVATION THAT MEETS SELECT MATERIAL B REQUIREMENTS. FOR REMAINING BACKFILL USE, PREVIOUS SOIL AND TOP WITH 40mm TOPSOIL TO MATCH LAWNS.

ALL TELE, TV, & ELEC CONDUIT TRENCHING & BACKFILL SHALL BE INCIDENTAL TO ITEM 660.

SECTION C-C - SERVICE ENTRANCE CONDUITS (TYPICAL)

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN6, 50PROF6, TITLE6
PLOT: FULL (1" = 20') OR HALF (1" = 40'): SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5

BY:	DATE:	DESCRIPTION OF CHANGE:
VGM	2-98	⚠ NIC

RECORD OF REVISIONS

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

JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

WEST 9TH STREET TO WEST 10TH STREET
ELECTRICAL PLANS - EXISTING & NEW

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 94 OF 97

ENGINEER'S SEAL
STATE OF ALASKA 49TH
Mark G. Morris
No. EE 9613
REGISTERED PROFESSIONAL ENGINEER

TELEPHONE CONDUIT & CONDUCTOR SUMMARY *

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS/NOTES
TEL-1	---	HH-2	939 GLACIER AVE.	DIRECT BURY CABLE (BY UTILITY)
TEL-2	102mm(4")	HH-2	STA. H643, 5.5 LT. CAP CONDUIT BELOW GRADE	BY UTILITY
TEL-3	102mm(4")	PG-15	HH-2	BY UTILITY
TEL-4	102mm(4")	MH-1	HH-2	BY UTILITY
TEL-5	102mm(4")	MH-1	HH-2	BY UTILITY
TEL-6	---	PG-15	923 GLACIER AVE.	DIRECT BURY CABLE (BY UTILITY)
TEL-7	---	PG-15	917 GLACIER AVE.	DIRECT BURY CABLE (BY UTILITY)
TEL-8	---	PG-15	727 10TH STREET	DIRECT BURY CABLE (BY UTILITY)
TEL-9	---	PG-15	722 9TH STREET	DIRECT BURY CABLE (BY UTILITY)
TEL-10	---	PG-15	710 9TH STREET	DIRECT BURY CABLE (BY UTILITY)
TEL-11	51mm(2") EXISTING	MH-1 ABANDON CONDUIT IN PLACE	RISER UP P29 REMOVAL OF RISER BY UTILITY	TO BE REMOVED BY UTILITY
TEL-12	EXISTING	P33 REMOVAL OF RISER BY UTILITY	410 WILLOUGHBY ABANDON CONDUIT IN PLACE	TO BE REMOVED BY UTILITY
TEL-13	51mm(2")	HH-5	324 WILLOUGHBY STUB CONDUIT UP 24" & CAP COOR. LOCATION W/ UTILITY	BY UTILITY
TEL-14	51mm(2")	HH-5	318 WILLOUGHBY STUB CONDUIT UP 24" & CAP COOR. LOCATION W/ UTILITY	BY UTILITY
TEL-15	51mm(2")	HH-5	306 WILLOUGHBY STUB CONDUIT UP 24" & CAP COOR. LOCATION W/ UTILITY	BY UTILITY
TEL-16	EXISTING	PG-23	REROUTE FROM P35 TO HH-5 COOR. OUTAGE W/ UTILITY.	BY UTILITY

NOTES:
1. ALL CONDUIT AND CONDUCTORS NEW UNLESS OTHERWISE NOTED. ALL NEW CONDUIT SHALL BE PROVIDED. LEAVE PULL ROPE IN ALL CONDUIT.
2. SLOPE CONDUIT TO DRAIN INTO MANHOLES & HANDHOLES.

PEDESTAL GROUP SUMMARY *

NO.	TELEVISION PEDESTALS QTY.	TELEVISION PEDESTALS STATUS	TELEPHONE PEDESTALS QTY.	TELEPHONE PEDESTALS STATUS	APPROXIMATE LOCATION STATION	APPROXIMATE LOCATION OFFSET
PG-15	--	---	1	NEW	1 + 671.5	43 LT
PG-16	1	NEW	--	---	1 + 705.5	13 RT
PG-17	1	NEW	--	---	1 + 759.5	12 RT
PG-18	1	EXISTING	--	---	1 + 872	7 LT
PG-19	1	EXISTING	1	EXISTING	1 + 993	6.5 LT
PG-20	1	NEW	1	EXISTING	1 + 972	8 RT
PG-21	1	NEW	--	---	1 + 998.5	7 RT
PG-22	--	---	1	EXISTING	2 + 039	7 LT
PG-23	1	NEW	1	EXISTING	2 + 424	8.5 RT

* NOTE: ALL PEDESTALS WILL BE PROVIDED BY THE UTILITIES.

⚠1 ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

POWER CONDUIT & CONDUCTOR SUMMARY *

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS
E-1	51mm(2")	HH-1	939 GLACIER AVE. (SEE 939 GLACIER DETAIL, SHEET 53)	SERVICE (BY UTILITY)
E-2	51mm(2")	HH-1	P28	SERVICE (BY UTILITY)
E-3	EXISTING	BUS STOP AT 9TH & GLACIER APPROX STA 1+717.5 12 LT.	REROUTE FROM P29 & EXTEND TO P30. (SEE P30 RISER DETAIL SHEET 53)	PROVIDE NEW 30A, 2 POLE FUSE DISCONNECT ON P30. PROVIDE NEW 2 NO. 10 & 1 NO. 12 GND TO BUS STOP LIGHTING
E-4	102mm(4")	P30 PROVIDE 4" GRS RISER UP POLE 12" & CAP	MH-3	BY UTILITY
E-5	102mm(4")	MH-4	POWER CABINET AT APPROX. STA 1+874, 7.5 LT	BY UTILITY
E-6	153mm(6")	MH-4	POWER CABINET AT APPROX. STA 1+874, 7.5 LT	BY UTILITY
E-7	102mm(4")	MH-4	POWER CABINET AT APPROX. STA 1+867, 7 RT	BY UTILITY
E-8	153mm(6")	MH-4	POWER CABINET AT APPROX. STA 1+867, 7 RT	BY UTILITY
E-9	102mm(4")	CAP UNDER SIDEWALK AT APPROX. 1+970.5, 5.5 LT COORD. LOCATION W/ UTILITY	POWER CABINET AT APPROX. STA 1+971, 9 RT	BY UTILITY
E-10	153mm(6")	CAP UNDER SIDEWALK AT APPROX. 1+970.5, 5.5 LT COORD. LOCATION W/ UTILITY	POWER CABINET AT APPROX. STA 1+971, 9 RT	BY UTILITY
E-11	102mm(4")	CAP UNDER SIDEWALK AT APPROX. 2+002, 5.0 LT COORD. LOCATION W/ UTILITY	CAP UNDER SIDEWALK AT APPROX. 2+002, 5.5 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-12	153mm(6")	CAP UNDER SIDEWALK AT APPROX. 2+002, 5.0 LT COORD. LOCATION W/ UTILITY	CAP UNDER SIDEWALK AT APPROX. 2+002, 5.5 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-13	102mm(4")	MH-5	CAP UNDER SIDEWALK AT APPROX. 2+035.5, 5.5 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-14	153mm(6")	MH-5	CAP UNDER SIDEWALK AT APPROX. 2+035.5, 5.5 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-15	102mm(4")	MH-6	CAP UNDER SIDEWALK AT APPROX. 2+117.5, 14 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-16	102mm(4")	MH-6	CAP UNDER SIDEWALK AT APPROX. 2+117.5, 14 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-17	153mm(6")	MH-6	CAP UNDER SIDEWALK AT APPROX. 2+117.5, 14 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-18	153mm(6")	MH-6	CAP UNDER SIDEWALK AT APPROX. 2+117.5, 14 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-19	153mm(6")	MH-7	MH-8	BY UTILITY
E-20	102mm(4")	CAP UNDER SIDEWALK AT APPROX. 2+295, 5.5 LT COORD. LOCATION W/ UTILITY	CAP UNDER SIDEWALK AT APPROX. 2+295, 5.25 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-21	153mm(6")	CAP UNDER SIDEWALK AT APPROX. 2+295, 5.5 LT COORD. LOCATION W/ UTILITY	CAP UNDER SIDEWALK AT APPROX. 2+295, 5.25 RT COORD. LOCATION W/ UTILITY	BY UTILITY
E-22	EXISTING	MH-9	RISER UP P35. REROUTE TO HH-4. COORDINATE OUTAGE WITH UTILITY	REMOVE FROM P35. RESPLICE IN HH-4.
E-23	EXISTING	REROUTE FROM P35 TO HH-4. COORDINATE OUTAGE WITH UTILITY & OWNER	318 WILLOUGHBY	REMOVE FROM P35. RESPLICE IN HH-4.
E-24	51mm(2")	HH-4	324 WILLOUGHBY (SEE 324 WILLOUGHBY POWER SERVICE DETAIL, SHEET 53)	PROVIDE NEW SERVICE. COORDINATE OUTAGE WITH OWNER AND UTILITY
E-25	102mm(4")	HH-4	CAP UNDER SIDEWALK AT APPROX. 2+373.5, 7.5 LT COORD. LOCATION W/ UTILITY	BY UTILITY
E-26	153mm(6")	HH-4	CAP UNDER SIDEWALK AT APPROX. 2+373.5, 7.5 LT COORD. LOCATION W/ UTILITY	BY UTILITY
E-27	EXISTING	REROUTE FROM P35 TO HH-4. COORDINATE OUTAGE WITH UTILITY & OWNER	306 WILLOUGHBY	BY UTILITY
E-28	EXISTING	REROUTE FROM P35 TO HH-4. COORDINATE OUTAGE WITH UTILITY	CABINET AT APPROX. STA 2+422, 9 RT.	REMOVE FROM P35 RESPLICE IN HH-4.
E-29	102mm(4")	CAP UNDER SIDEWALK AT APPROX. 2+420, 7.5 LT COORD. LOCATION W/ UTILITY	CABINET AT APPROX. STA 2+422, 9 RT.	BY UTILITY

NOTES:
1. ALL CONDUIT AND CONDUCTORS NEW UNLESS OTHERWISE NOTED. ALL NEW CONDUIT SHALL BE PROVIDED. LEAVE PULL ROPE IN ALL CONDUIT.
2. SLOPE CONDUIT TO DRAIN INTO MANHOLES & HANDHOLES.

TELEVISION CONDUIT & CONDUCTOR SUMMARY *

CONDUIT NO.	CONDUIT SIZE	ORIGIN	TERMINATION	CONDUCTORS
TV-1	51mm(2")	MH-2	STA 1+643, 5 LT CAP CONDUIT BELOW GRADE	BY UTILITY
TV-2	51mm(2")	MH-2	STA 1+643, 5 LT. CAP CONDUIT BELOW GRADE	BY UTILITY
TV-3	51mm(2")	P28	HH-3	BY UTILITY
TV-4	25mm(1")	HH-3	923 GLACIER AVE, STUB UP ON BLDG. 24" AND CAP COORD. LOC W/ CONT. OFF.	BY UTILITY
TV-5	51mm(2") EXISTING	MH-1 ABANDON CONDUIT IN PLACE	RISER UP P29 REMOVAL OF RISER BY UTILITY	TO BE REMOVED BY UTILITY
TV-6	102mm(4")	MH-2	P30 PROVIDE 4" PVC RISER UP TO TV EQUIP. & CAP	BY UTILITY
TV-7	102mm(4")	MH-2	P30 PROVIDE 4" PVC RISER UP TO TV EQUIP. & CAP	BY UTILITY
TV-8	51mm(2")	MH-2	PG-16	BY UTILITY
TV-9	51mm(2")	MH-2	PG-17	BY UTILITY
TV-10	51mm(2")	MH-2	PG-17	BY UTILITY
TV-11	51mm(2")	MH-2	PG-18	BY UTILITY
TV-12	51mm(2")	MH-2	PG-18	BY UTILITY
TV-13	51mm(2")	PG-19	PG-20	BY UTILITY
TV-14	51mm(2")	PG-19	PG-21	BY UTILITY
TV-15	51mm(2")	PG-22	CAP IN VACANT LOT AT APPROX. 2+035, 8 RT. COORD. LOCATION W/ CONTRACTING OFFICER	BY UTILITY
TV-16	51mm(2")	P31	CAP UNDER SIDEWALK AT APPROX. 2+203.5, 5.5 LT COORD. LOCATION W/ CONTRACTING OFFICER	BY UTILITY
TV-17	51mm(2")	P31	CAP UNDER SIDEWALK AT APPROX. 2+203.5, 5.5 LT COORD. LOCATION W/ CONTRACTING OFFICER	BY UTILITY
TV-18	51mm(2")	P31	HH-6	BY UTILITY
TV-19	51mm(2")	P31	HH-6	BY UTILITY
TV-20	51mm(2")	P31	HH-6	BY UTILITY
TV-21	51mm(2")	HH-6	CAP AT SIDEWALK EDGE AT APPROX. 2+303.5, 6 RT COORD. LOCATION W/ UTILITY	BY UTILITY
TV-22	51mm(2")	HH-6	CAP AT SIDEWALK EDGE AT APPROX. 2+353, 6 RT COORD. LOCATION W/ UTILITY	BY UTILITY
TV-23	51mm(2")	HH-6	318 WILLOUGHBY STUB UP 24" & CAP. COORD. LOCATION W/ UTILITY	BY UTILITY
TV-24	51mm(2")	HH-6	306 WILLOUGHBY STUB UP 24" & CAP COORD LOCATION W/ UTILITY	BY UTILITY
TV-25	EXISTING	NE SIDE OF WILLOUGHBY	RISER UP P35. REROUTE TO HH-4. COORD. LOCATION W/ UTILITY	BY UTILITY
TV-26	51mm(2")	HH-6	PG-23	BY UTILITY
TV-27	51mm(2")	HH-6	CAP CONDUIT UNDER SIDEWALK AT APPROX 2+480, 5 LT. COORD. LOCATION W/ OFFCR.	BY UTILITY
TV-28	51mm(2")	HH-6	CAP CONDUIT UNDER SIDEWALK AT APPROX 2+480, 5 LT. COORD. LOCATION W/ OFFCR.	BY UTILITY

NOTES:
1. ALL CONDUIT AND CONDUCTORS NEW UNLESS OTHERWISE NOTED. ALL NEW CONDUIT SHALL BE PROVIDED. LEAVE PULL ROPE IN ALL CONDUIT.
2. SLOPE CONDUIT TO DRAIN INTO MANHOLES & HANDHOLES.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA 49TH
Mark G. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER

RECORD OF REVISIONS			
BY:	DATE:	DESCRIPTION OF CHANGE:	
MGM	2-98	⚠ NIC	

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: 50PLAN1, 50PROF1, TITLE1
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5

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

JUNEAU WILLOUGHBY AND GLACIER AVE. RECONSTRUCTION PHASE II ALASKA
FED. NO. STP-000S (149) PROJECT NO. 71463

B.O.P. STA "0" 1+518 TO "0" 1+660
PLAN AND PROFILE SHEET

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 95 OF 97

UTILITY POLE SUMMARY

NO.	STATUS	APPROXIMATE LOCATION	
		STATION	OFFSET
P19	TO REMAIN	1 + 489.5	9 LT
P20	TO BE REMOVED BY UTILITY	1 + 507	10 LT
P21	TO BE REMOVED BY UTILITY	1 + 536	5 LT
P22	TO BE REMOVED BY UTILITY	1 + 498	6.5 RT
P23	NEW GUY POLE PROVIDED BY UTILITY	1 + 551	7 LT
P24	TO BE REMOVED BY UTILITY	1 + 626	5.5 LT
P25	TO REMAIN	1 + 627.5	36.5 LT
P26	TO BE REMOVED BY UTILITY	1 + 668	7 LT
P27	TO BE REMOVED BY UTILITY	1+ 671.5	16 LT
P28	TO BE REPLACED BY UTILITY	1+ 671.5	43.5 LT
P29	TO BE REMOVED BY UTILITY	1 + 698	7 LT
P30	TO REMAIN	1 + 700	31 LT
P31	TO REMAIN	2 + 223.5	15 LT
P32	TO BE REMOVED BY UTILITY	2 + 269	5 RT
P33	TO BE REMOVED BY UTILITY	2 + 292	5 RT
P34	TO BE REMOVED BY UTILITY	2 + 337	5 RT
P35	TO BE REMOVED BY UTILITY	2 + 371.5	6 RT

HANDHOLE VAULT SUMMARY

NO.	APPROXIMATE LOCATION		SYSTEM SERVED	STATUS
	STATION	OFFSET		
HH-1	1 + 655	5.5 LT	POWER	NEW
HH-2	1 + 658	5 LT	TELEPHONE	NEW
MH-3	1 + 666.5	6 LT	CABLE TV	NEW
HH-4	2 + 373.5	5.0 RT	POWER	NEW
HH-5	2 + 376	5.4 RT	TELEPHONE	NEW
HH-6	2 + 367.5	5.6 RT	CABLE TV	NEW

NOTE: ALL NEW HANDHOLES SHALL BE 76cm (2.5') WIDE x 152cm (5') LONG x 122cm (4') DEEP. SEE HANDHOLE DETAIL THIS SHEET. COORDINATE ALL LOCATIONS WITH CONTRACTING OFFICER.

MANHOLE VAULT SUMMARY

NO.	APPROXIMATE LOCATION		SYSTEM SERVED	STATUS
	STATION	OFFSET		
MH-1	1 + 741	6 LT	TELEPHONE	EXISTING
MH-2	1 + 743	5 LT	CABLE TV	NEW
MH-3	1 + 705.5	8.5 RT	POWER	EXISITNG
MH-4	1 + 874	3 LT	POWER	NEW
MH-5	2 + 039	3.5 LT	POWER	NEW
MH-6	2 + 119.5	3.5 LT	POWER	NEW
MH-7	2 + 200	3.25 LT	POWER	NEW
MH-8	2 + 280	5.5 LT	POWER	EXISTING
MH-9	2 + 356	7.5 LT	POWER	EXISTING

NOTES:
1. ALL NEW HANDHOLES SHALL BE 1.22m (4') WIDE x 2.44m (8') LONG x 2.13 (7') DEEP. SEE MANHOLE DETAIL THIS SHEET. OVERALL DEPTH WITH COVER & COLLAR SHALL BE APPROX 2.6m (8.5'). COORDINATE ALL LOCATIONS WITH CONTRACTING OFFICER.
2. ALL CONDUIT ENTERING MH-5 SHALL BE ROUTED BELOW NEW STORM DRAIN PIPE ADJACENT MANHOLE.

LIGHT POLE SUMMARY

POLE	STATION	OFFSET	STATUS
L-14	2 + 160	7 RT	EXISTING
L-15	2 + 224	7 RT	EXISTING
L-16	2+ 269	6 RT	NEW *
L-17	2 + 292	6 RT	NEW *
L-18	2+ 337	6 RT	NEW *
L-19	2+ 371	6.75 RT	NEW *
L-20	2+ 407	5.9 RT	NEW *

* NOTE: LIGHT POLE & LUMINAIRE TO BE FURNISHED BY CBJ. INSTALL AS SHOWN ON DRAWINGS. PROVIDE POLE BASE AS SHOWN.

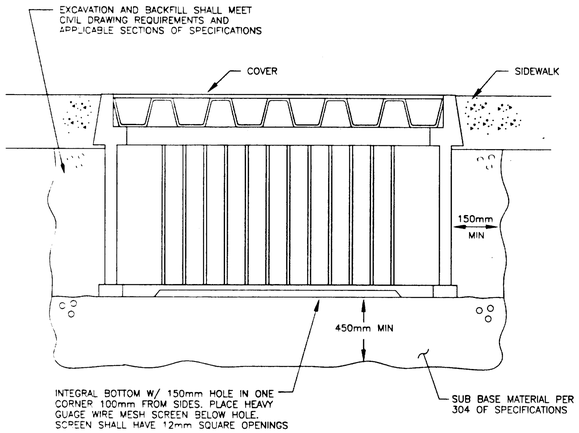
UTILITY GUY WIRE SUMMARY

NO.	ORIGIN	TERMINATION	STATUS
G-1	P19	P23	NEW
G-2	P23	ANCHOR AT APPROX. STA 1 + 557.5, 8 LT	NEW
G-3	P30	ANCHOR AT APPROX. STA 1 + 699.5, 25 LT	NEW
G-4	P31	ANCHOR AT APPROX. STA 2 + 225, 13 LT	NEW

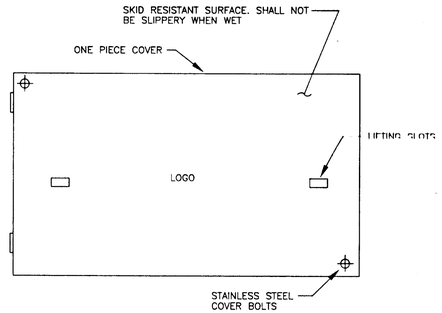
NOTE: ONLY NEW GUY WIRES ARE SHOWN.

LIGHTING CONDUIT & CONDUCTOR SUMMARY

CONDUIT		ORIGIN	TERMINATION	CONDUCTORS
NO.	SIZE			
LTG-1	EXISTING	L-14	L-15	EXISTING
LTG-2	51mm (2")	L-15	L-16	3 NO. 8 CABLE, CONNECT TO EXTG CIRCUIT IN L-15
LTG-3	51mm (2")	L-16	L-17	3 NO. 8
LTG-4	51mm (2")	L-17	L-18	3 NO. 8
LTG-5	51mm (2")	L-18	L-19	3 NO. 8
LTG-6	51mm (2")	L-19	L-20	3 NO. 8



SIDE VIEW

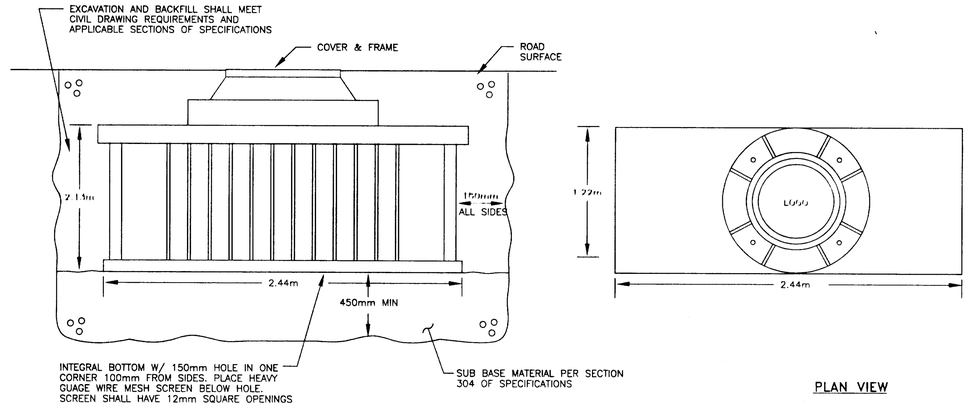


PLAN VIEW

HANDHOLE (HH) VAULT DETAIL

NO SCALE

NOTES:
1. HANDHOLE VAULT DIMENSIONS SHALL BE 76cm WIDE x 152cm LONG x 122cm DEEP. NOMINAL.
2. HH VAULT AND COVER SHALL BE MADE FROM POLYMER CONCRETE AND FIBER REINFORCED POLYESTER MEETING REQUIREMENTS OF ASTM D3753.
3. HH VAULT SHALL HAVE CORRUGATED SIDES AND COVER.
4. 230mm WIDE STAINLESS STEEL RACKS SHALL BE PLACED ON ALL SIDES.
5. COVER SHALL BE WATER TIGHT AND EMBOSSED WITH APPROPRIATE LOGO "ELECTRICAL", "TELEPHONE", OR "TELEVISION".
6. HANDHOLE VAULT SHALL HAVE AN ADJUST TO GRADE OPTION ALLOWING VERTICAL ADJUSTMENTS INCLUDING TILTING TO 100mm AFTER INSTALLATION.
7. HANDHOLE VAULT SHALL BE A CDR_A103060-48. OR APPROVED EQUAL.



SIDE VIEW

PLAN VIEW

MANHOLE (MH) VAULT DETAIL

NO SCALE

NOTES:
1. MH VAULT AND COVER SHALL BE MADE FROM POLYMER CONCRETE AND FIBER REINFORCED POLYESTER MEETING REQUIREMENTS OF ASTM D3753.
2. MH VAULT SHALL HAVE CORRUGATED WALLS.
3. MH VAULT SHALL BE SUITABLE FOR AASHTO H-20 APPLICATIONS
4. MANHOLE VAULT SHALL HAVE AN ADJUST TO GRADE OPTION ALLOWING VERTICAL ADJUSTMENTS INCLUDING TILTING TO 100mm AFTER INSTALLATION.
5. 300mm WIDE STAINLESS STEEL RACKS SHALL BE PLACED ON ALL SIDES.
6. PROVIDE A PULLING EYE ON EACH END OF VAULT.
7. COVER AND FRAME SHALL BE WATER TIGHT OF DUCTILE IRON AND CONFORM TO REQUIREMENTS OF AASHTO M103.
8. MANHOLE VAULT SHALL BE CDR_A054896-84 OR APPROVED EQUAL.
9. COVER SHALL HAVE "ELECTRICAL", "TELEPHONE", OR "TELEVISION" AS APPROPRIATE CAST IN CENTER OF TOP.

⚠ ALL WORK ON THIS SHEET NOT IN CONTRACT (NIC)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49TH
Mark S. Morris
No. EE 8613
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\71463\EN\WILPLAN6 VIEWS: SOPLAN1, SOPROF1, TITLE1			
PLOT: FULL (1=1) OR HALF (1=2); SCRIPT FILE: P:\JNU\71463\EN\PLOT\WILCAD5			
BY:	DATE:	DESCRIPTION OF CHANGE:	
MGM	2-98	⚠ NIC	

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FED. NO. STP-000S (149) PROJECT NO. 71463

B.O.P. STA "O" 1+518 TO "O" 1+660

ELECTRICAL SUMMARY TABLES AND DETAILS

DESIGNED BY: M. MORRIS	PROJECT NO. 71463
DRAWN BY: J. COUNTZ	DATE: 1998-99
CHECKED BY: M. MORRIS	SHEETS 96 OF 97