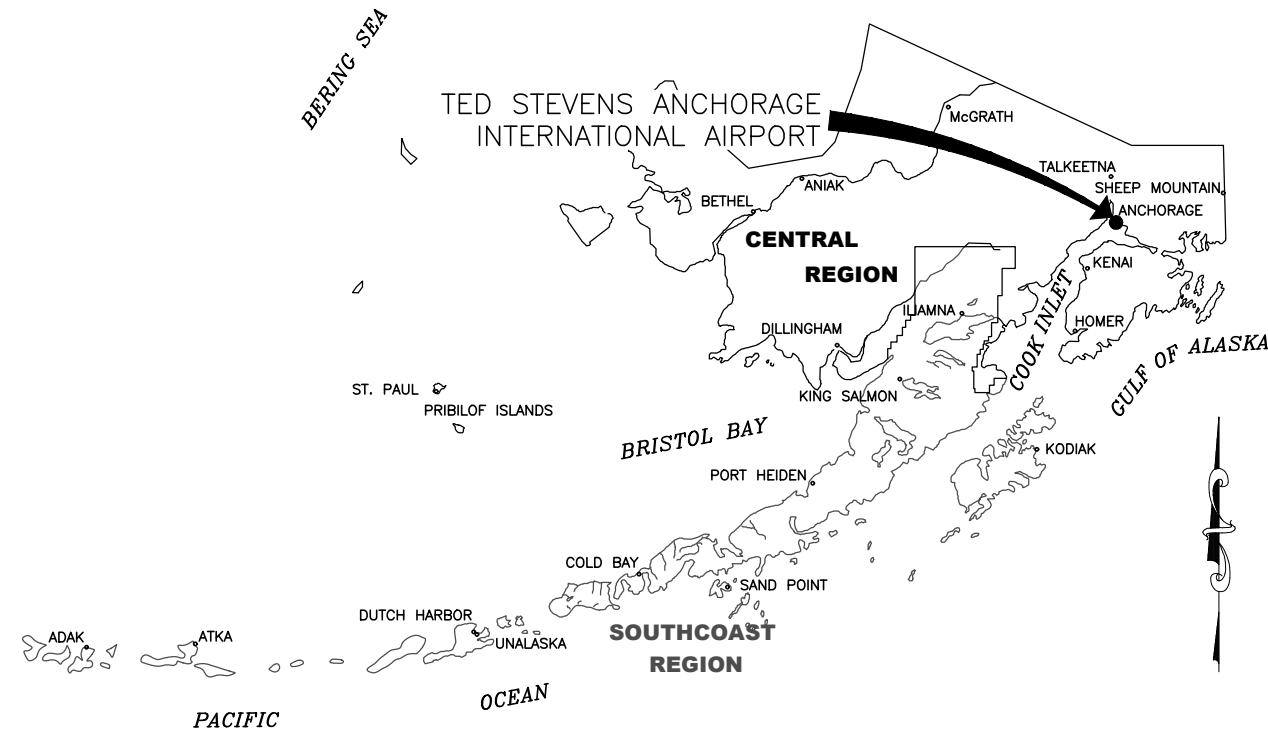
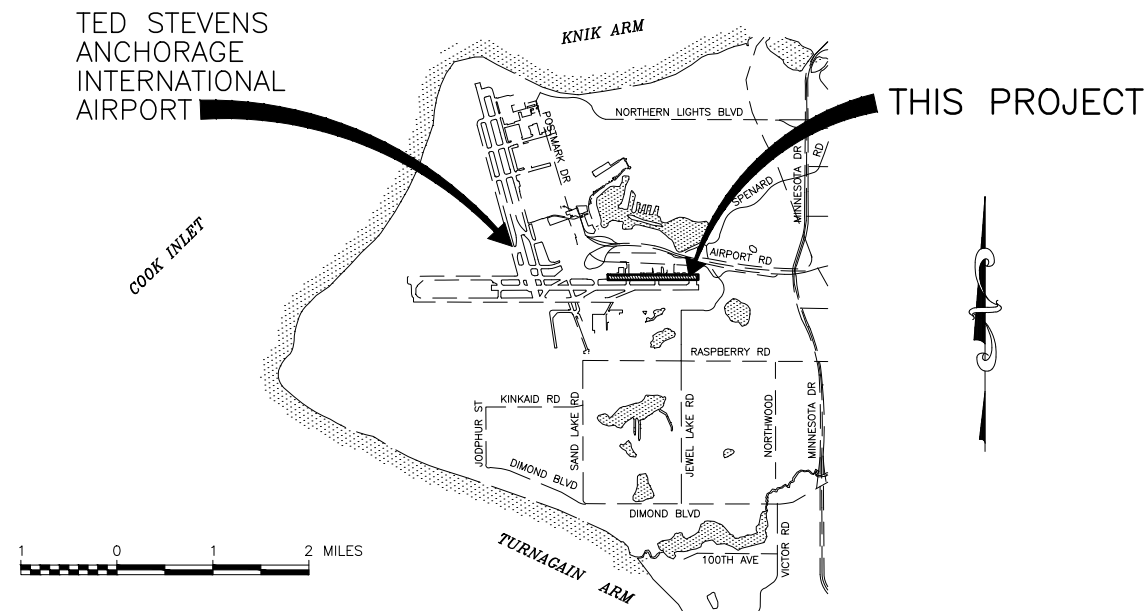


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ALASKA CENTRAL REGION LOCATION MAP

NOT TO SCALE



VICINITY MAP

T 12 N, R 4 W SEC. 3, 4, 5, & 6
T 13 N, R 4 W, SEC. 20, 21, 27, 28, 29, 31, 32, 33, 34, & 35
SEWARD MERIDIAN
U.S.G.S. ANCHORAGE (A-8), ALASKA

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

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STATE OF ALASKA
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AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
COVER

DATE:
SEPTEMBER 2025

SHEET:
1 of 57

CONSTRUCTION PLANS TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIRPORT IMPROVEMENT PROGRAM No. 3-02-0016-XXX-2026

PSE REVIEW SEPTEMBER 2025

APPROVED	DATE
LUKE BOWLAND, P.E.	REGIONAL PRECONSTRUCTION ENGINEER

APPROVED	DATE
JENNIFER PEPIN, P.E.	ENGINEERING & ENVIRONMENTAL MANAGER

APPROVED	DATE
JENNIFER LOMBARDO, P.E.	PROJECT MANAGER

CONCUR	DATE
JOEL G. ST. AUBIN, P.E.	REGIONAL CONSTRUCTION ENGINEER

Date Reviset:
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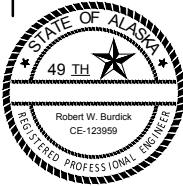
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SHEET TITLE	SHEET No.
COVER	1
INDEX, APPENDIX & ABBREVIATIONS	2
LEGEND	3
ESTIMATED QUANTITIES	4
SUMMARY TABLES	5 – 7
PROJECT LAYOUT PLAN	8
DEMOLITION PLAN – BOP TO STA 107+50	9
DEMOLITION PLAN – STA 107+50 TO STA 115+00	10
DEMOLITION PLAN – STA 115+00 TO STA 122+00	11
DEMOLITION PLAN – STA 122+00 TO STA 129+50	12
DEMOLITION PLAN – STA 129+50 TO STA 138+00	13
DEMOLITION PLAN – STA 138+00 TO STA 146+00	14
DEMOLITION PLAN – STA 146+00 TO EOP	15
TYPICAL SECTIONS	16 – 18
APPROACH SITE PLAN – RAVN	19
APPROACH SITE PLAN – DELTA 1 TO DELTA 3	20
APPROACH SITE PLAN – ALASKA AIR 1 TO NORTHERN AIR CARGO 1	21
APPROACH SITE PLAN – NORTHERN AIR CARGO 2 TO AERO ANCHORAGE	22
APPROACH SITE PLAN – ALASKA AIR 2 TO NORTHERN AIR CARGO 3	23
APPROACH SITE PLAN – TRANSNORTHERN TO EOP	24
PLAN & PROFILE – BOP TO STA 107+50	25
PLAN & PROFILE – STA 107+50 TO STA 115+00	26
PLAN & PROFILE – STA 115+00 TO STA 122+00	27
PLAN & PROFILE – STA 122+00 TO STA 129+50	28
PLAN & PROFILE – STA 129+50 TO STA 138+00	29
PLAN & PROFILE – STA 138+00 TO STA 146+00	30
PLAN & PROFILE – STA 146+00 TO EOP	31
GRADING PLAN – DITCH 1 & DITCH 2	32
GRADING PLAN – DITCH 3	33
GRADING PLAN – DITCH 4 & 5	34
GRADING PLAN – DITCH 6	35
GRADING PLAN – DITCH 7 &8	36
GRADING PLAN – EAST TUG ROAD REALIGNMENT	37
STORM DRAIN KEY MAP	38
STORM DRAIN PLAN & PROFILE – STA 200+00 TO STA 208+00	39
STORM DRAIN PLAN & PROFILE – STA 208+00 TO STA 215+00	40
STORM DRAIN PLAN & PROFILE – STA 215+00 TO STA 220+00	41
STORM DRAIN PLAN & PROFILE – STA 220+00 TO STA 230+00	42
STORM DRAIN PLAN & PROFILE – STA 230+00 TO STA 236+00	43
STORM DRAIN PLAN & PROFILE – STA 236+00 TO STA 241+50	44
STORM DRAIN PLAN & PROFILE – STA 241+50 TO STA 247+00	45
STORM DRAIN PLAN & PROFILE – STA 247+00 TO STA 255+00	46
STORM DRAIN DETAILS	47 – 51
MARKING PLAN – BOP TO STA 110+00	52
MARKING PLAN – STA 110+00 TO STA 118+00	53
MARKING PLAN – STA 118+00 TO STA 127+00	54
MARKING PLAN – STA 127+00 TO STA 135+00	55
MARKING PLAN – STA 135+00 TO EOP	56
MARKING DETAILS	57
ELECTRICAL DEMOLITION PLAN	E1
ELECTRICAL PLAN	E2
ELECTRICAL DETAILS	E3 – E4

SHEET TITLE	SHEET No.
SURVEY CONTROL	AB1
CONSTRUCTION SAFETY AND PHASING PLAN	AC1 – AC10
ALASKA STANDARD PLANS	
SHEET TITLE	SHEET No.
CULVERT PIPE AND ARCH INSTALLATION DETAILS	D–01.02
PIPE AND ARCH TABLES	D–04.22
STORM DRAIN MANHOLE FRAME AND GRATE DETAILS	D–22.01
INLET FRAMES AND GRATES	D–24.00
48” STORM DRAIN MANHOLE (PRECAST CONCRETE) TYPE I MANHOLE	D–35.10

ABBREVIATIONS			
AC	ASBESTOS CONCRETE	LTS	LIGHTS
AIP	AIRPORT IMPROVEMENT PROGRAM	LS	LUMP SUM
ANC	ANCHORAGE INTERNATIONAL AIRPORT	MAX	MAXIMUM
AFM	AIRPORT FIELD MAINTENANCE	ME	MATCH EXISTING
AFSC	ANCHORAGE FUELING AND SERVICE COMPANY	MH	MANHOLE
APPROX	APPROXIMATE	MIN	MINIMUM
ATB	ASPHALT TREATED BASE	NEC	NATIONAL ELECTRICAL CODE
ATC	AIR TRAFFIC CONTROL	NT	NORTH TERMINAL
BC	BARE COPPER	NTP	NOTICE TO PROCEED
BMPS	BEST MANAGEMENT PRACTICES	NTS	NOT TO SCALE
BOP	BEGINNING OF PROJECT	OC	ON CENTER
CL/CL	CENTERLINE	OFA	OBJECT FREE AREA
C	CONDUIT	OSHA	OCCUPATIONAL SAFETY AND HEALTH
CABC	CRUSHED AGGREGATE BASE COURSE		ADMINISTRATION
CCR	CONSTANT CURRENT REGULATOR	PC	POINT OF CURVATURE
CIPP	CURED IN PLACE PIPE	PCC	PORTLAND CEMENT CONCRETE
CLSM	CONTROLLED LOW STRENGTH MATERIAL	PFAS	PER– AND POLYFLUOROALKYL SUBSTANCES
CN	CONCRETE	PI	POINT OF INTERSECTION
CMP	CORRUGATED METAL PIPE	PM	PAVEMENT MARKING
CP	CONCRETE PIPE	PS&E	PLANS, SPECIFICATIONS, AND ESTIMATE
CPEP	CORRUGATED POLYETHYLENE PIPE	PT	POINT OF TANGENCY
CPM	CRITICAL PATH METHOD	PU	PER UNIT
CS	CONTINGENT SUM	R	RADIUS, RON
D, DIA, Ø	DIAMETER	RAP	RECYCLED ASPHALT PAVEMENT
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	RMC	RIGID METALLIC CONDUIT (GALVANIZED STEEL)
EA	EACH	RON	REMAIN OVER NIGHT
EMH	ELECTRICAL MANHOLE	RP	RADIUS POINT
EMS	EMERGENCY SHUT OFF	RPU	REMOTE PROCESSING UNIT
EOC	EDGE OF CONCRETE	RT	RIGHT
EOL	END OF LOOP	RD	ROAD
EOP	END OF PROJECT / EDGE OF PAVEMENT	REHAB	REHABILITATION
EOR	EDGE OF RAP	REQ'D	REQUIRED
ESCP	EROSION AND SEDIMENT CONTROL PLAN	RSA	RUNWAY SAFETY AREA
FAA	FEDERAL AVIATION ADMINISTRATION	RW	RUNWAY
F&I	FURNISH AND INSTALL	SDMH	STORM DRAIN MANHOLE
FI	FIELD INLET	SD	STORM DRAIN
FT	FEET	SF	SQUARE FEET
GPV	GROUND POWER VAULT	SY	SQUARE YARD
GRD	GROUND	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
HDPE	HIGH DENSITY POLYETHYLENE	STA	STATION
HH	HANDHOLE	T&B	TOP AND BOTTOM
HMA	HOT MIX ASPHALT	THD	THRESHOLD
HPV	HIGH POINT VENT	TL	TAXILANE
INT	INTERSECTION	TLOFA	TAXILANE OBJECT FREE AREA
KVA	KILO VOLT–AMP	TOFA	TAXIWAY OBJECT FREE AREA
kW	KILO–WATT	TP	TEST POINT
LB/LBS	POUNDS	TSA	TAXIWAY SAFETY AREA
LF	LINEAR FOOT	TW	TAXIWAY
LPD	LOW POINT DRAIN	TYP	TYPICAL
LT	LEFT	UON	UNLESS OTHERWISE NOTED
		W	WATTS
		WWF	WELDED WIRE FABRIC



PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562–3252 #AECL882–AK					
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TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3–02–0016–XXX–2026 INDEX, APPENDIX & ABBREVIATIONS	DATE: SEPTEMBER 2025 SHEET: 2 of 57
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LEGEND

DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED
AOA FENCE (WIRE STRAND)			LIGHT POLE		
AIRPORT PROPERTY BOUNDARY			PAINT STRIPE		
BOLLARD / REMOVABLE BOLLARD			PAVEMENT/SHOULDER (EDGE)		
BUILDING			PIPE NUMBER		
CENTERLINE (ROADWAY)			POINT NUMBER		
COMMUNICATION LINE (UNDERGROUND)			RADIUS REFERENCE LINE		
CONCRETE			ROADWAYS (EDGE, GRAVEL)		
COMMUNICATION MANHOLE			RUNWAY SAFETY AREA		
COMMUNICATION PEDESTAL			SANITARY SEWER LINE (UNDERGROUND)		
CONTOURS			SERIES LIGHTING CIRCUIT, TICK MARKS INDICATE NUMBER OF 5KV SERIES CONDUCTORS (1 SHOWN) IN DIRECT BURY CONDUIT. INCLUDE GROUND CONDUCTOR (NOT SHOWN). TICK MARKS NOT SHOWN ON SHORT SEGMENTS OR IN CONGESTED AREAS FOR CLARITY.		
CULVERT WITH END SECTIONS			SERIES LIGHTING CIRCUIT, TICK MARKS INDICATE NUMBER OF 5KV SERIES CONDUCTORS (2 SHOWN) IN HDPE CONCRETE ENCASED CONDUIT. INCLUDE GROUND CONDUCTOR (NOT SHOWN). TICK MARKS NOT SHOWN ON SHORT SEGMENTS OR IN CONGESTED AREAS FOR CLARITY.		
CURB AND GUTTER			SANITARY SEWER MANHOLE		
DETAIL CALLOUT			SAWCUT LIMITS		
DITCH/SWALE			SIGN POST/MARKER		
ELECTRICAL LINE (UNDERGROUND)			SLOPE WITH GRADE		
ELECTRICAL LINE (ABANDONED UNDERGROUND)			STORM DRAIN LINE		
ELECTRICAL MANHOLE			STORM DRAIN CATCH BASIN		
ELECTRICAL PEDESTAL			STORM DRAIN CLEANOUT		
FENCE (CHAIN LINK)			STORM DRAIN MANHOLE		
FIBER OPTIC PEDESTAL			STORM DRAIN TOP FIELD INLET		
FIRE HYDRANT			TAXIWAY FLUSH CENTERLINE LIGHT		
FILL LIMIT			TAXIWAY EDGE LIGHT		
FUEL LINE (UNDERGROUND)			TAXIWAY EDGE LIGHT, SCHEDULED FOR DEMOLITION		
FUEL VALVE			TAXIWAY OBJECT FREE AREA		
FUEL TANK/VAULT			TAXIWAY SAFETY AREA		
FUEL HYDRANT			TELEPHONE MANHOLE		
FUEL MANHOLE			TELEPHONE (UNDERGROUND)		
FUEL PEDESTAL			TELEPHONE PEDESTAL		
FUEL EMERGENCY SHUT OFF			TELEPHONE MANHOLE		
GAS LINE			UTILITY POLE		
GAS MARKER			WATER LINE (UNDERGROUND)		
GAS VALVE			WATER VALVE		
GRAVEL EDGE/EDGE OF RAP					
GRADE BREAK					
HANDHOLE					
HEAD BOLT OUTLET					
HAUL ROUTE					
IDENTIFICATION BUBBLE					
JUNCTION BOX TYPE 1					
LEASE LOT BOUNDARY					



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TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3-02-0016-XXX-2026 LEGEND	DATE: SEPTEMBER 2025 SHEET: 3 OF 57
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ESTIMATED QUANTITIES																	
No. ITEM UNIT AIP NON AIP TOTAL						No. ITEM UNIT AIP NON AIP TOTAL						No. ITEM UNIT AIP NON AIP TOTAL					
D701.010.0015	CS PIPE, 15–INCH	L.F.	18	–	18	G700.040.0000	TRAFFIC CONTROL FOR AIRPORTS	C.S.	ALL REQ'D	–	ALL REQ'D	P620.010.0000	RUNWAY AND TAXIWAY PAINTING	S.F.	21,631	14,320	35,951
D701.010.0024	CS PIPE, 24–INCH	L.F.	10	–	10	G705.010.0000	WATERING FOR DUST CONTROL	M–GAL	580	–	580	P620.050.0000	PAINTED MARKING REMOVAL	S.F.	430	–	430
D701.020.0018	CPE PIPE, 18–INCH	L.F.	11	–	11	L108.010.1006	UNDERGROUND CABLE #6 AWG, COPPER, 5KV FAA TYPE B, L–824	L.F.	308	–	308	P641.010.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQ'D	–	ALL REQ'D
D701.020.0024	CPE PIPE, 24–INCH	L.F.	39	–	39	L108.030.0006	#6 BARE COPPER GROUND CONDUCTOR	L.F.	260	–	260	P641.050.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL BY DIRECTIVE	C.S.	ALL REQ'D	–	ALL REQ'D
D701.020.0030	CPE PIPE, 30–INCH	L.F.	42	–	42	L110.080.1002	HDPE CONDUIT, 2–INCH	L.F.	200	–	200	P641.060.0000	WITHHOLDING	C.S.	ALL REQ'D	–	ALL REQ'D
D701.020.0036	CPE PIPE, 36–INCH	L.F.	11	–	11	L115.010.0000	ELECTRICAL MANHOLE	EACH	1	–	1	P641.070.0000	SWPPP MANAGER	L.S.	ALL REQ'D	–	ALL REQ'D
D701.020.0048	CPE PIPE, 48–INCH	L.F.	70	–	70	L125.040.0000	TAXIWAY EDGE LIGHT, L–861T	EACH	5	–	5	P641.110.0000	SWPPPTRACK	C.S.	ALL REQ'D	–	ALL REQ'D
D701.340.0000	PP PIPE, 18–INCH	L.F.	736	–	736	L125.070.0000	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	8	–	8	P670.010.0000	HAZARD MARKER BARRIER, PLASTIC	EACH	61	–	61
D701.340.0000	PP PIPE, 30–INCH	L.F.	860	–	860	L125.500.0000	MISCELLANEOUS AIRPORT ELECTRICAL WORK	C.S.	ALL REQ'D	–	ALL REQ'D	P681.010.0000	GEOTEXTILE, SEPARATION	S.Y.	1,320	–	1,320
D701.340.0000	PP PIPE, 48–INCH	L.F.	1,562	–	1,562	P151.040.0000	CLEARING & GRUBBING	L.S.	ALL REQ'D	–	ALL REQ'D	T901.020.0000	SEEDING	LB.	125	–	125
D703.010.0036	CIPP LINER, 36–INCH	L.F.	356	–	356	P152.010.0000	UNCLASSIFIED EXCAVATION	C.Y.	5,400	–	5,400	T905.010.0020	TOPSOILING, CLASS B	S.Y.	1,390	–	1,390
D703.010.0042	CIPP LINER, 42–INCH	L.F.	250	–	250	P154.020.0000	SUBBASE COURSE	TON	2,300	–	2,300	ESTIMATING FACTORS					
D703.010.0048	CIPP LINER, 48–INCH	L.F.	802	–	802	P160.010.0000	EXCAVATION OF PAVEMENT, AC	S.Y.	12,236	–	12,236						
D751.010.0048	MANHOLE, TYPE I, 48–INCH	EACH	1	–	1	P161.020.0000	RECYCLED ASPHALT PAVEMENT	C.Y.	3,370	–	3,370	No. ITEM FACTOR					
D751.010.0072	MANHOLE, TYPE II, 72–INCH	EACH	3	–	3	P162.010.0000	PAVEMENT COLD PLANING	S.Y.	15,105	9,886	24,991	P154.020.0000	SUBBASE COURSE	2.00 TON/CY			
D751.010.0096	MANHOLE, TYPE III, 96–INCH	EACH	26	–	26	P165.010.0000	REMOVAL OF STRUCTURES	L.S.	ALL REQ'D	–	ALL REQ'D	P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	2.05 TON/CY			
D751.100.0000	ADJUST MANHOLE	EACH	2	–	2	P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	TON	5,300	–	5,300	P401.010.0065	HOT MIX ASPHALT TYPE V, CLASS S	2.05 TON/CY			
D751.150.0000	REPAIR MANHOLE, REMOVE AND REPLACE LADDER RUNGS	EACH	3	–	3	P401.010.0065	HOT MIX ASPHALT TYPE V, CLASS S	TON	2,700	1,600	4,300	P401.040.5834	ASPHALT BINDER, PG 58–34E	5.5% OF P401.010.00XX			
D751.150.0000	REPAIR MANHOLE, REPAIR PIPE CONNECTIONS	EACH	1	–	1	P401.040.5834	ASPHALT BINDER, PG 58–34E	TON	440	90	530	P603.010.0010	TACK COAT, STE–1	0.8416 LB/SY			
G100.010.0000	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQ'D	–	ALL REQ'D	P401.080.0000	HOT MIX ASPHALT PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D	T901.020.0000	SEEDING	5 LB/1000 SF			
G135.010.0000	CONSTRUCTION SURVEYING BY THE CONTRACTOR	L.S.	ALL REQ'D	–	ALL REQ'D	P401.090.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION 4111 AVIATION AVE., ANCHORAGE ALASKA 99502 PHONE (907) 269-0590					
G135.020.0000	EXTRA THREE PERSON SURVEY PARTY	HOURL	40	–	40	P401.110.0000	LONGITUDINAL JOINT DENSITY PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D						
G135.050.0000	CONTRACTOR FURNISHED ENGINEERING TOOLS	C.S.	ALL REQ'D	–	ALL REQ'D	P401.120.0000	ASPHALT BINDER QUALITY PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D	TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3–02–0016–XXX–2026 ESTIMATED QUANTITIES					
G135.060.0000	CONTRACTOR FURNISHED COMPUTATIONS	L.S.	ALL REQ'D	–	ALL REQ'D	P603.010.0010	TACK COAT, STE–1	TON	13	4	17						
G150.020.0075	EQUIPMENT RENTAL, DOZER 75–HP MINIMUM	C.S.	ALL REQ'D	–	ALL REQ'D	BY DATE REVISION						DATE: SEPTEMBER 2025					
G150.030.0000	EQUIPMENT RENTAL, VAC–TRUCK	C.S.	ALL REQ'D	–	ALL REQ'D												
G300.010.0000	CPM SCHEDULING	L.S.	ALL REQ'D	–	ALL REQ'D	SHEET: 4 OF 57											
G301.010.0000	PULL PLANNING	L.S.	ALL REQ'D	–	ALL REQ'D												

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NOTES:

1. SEE SHEETS 9–15 FOR DEMO INFORMATION.
2. STATION AND OFFSET VALUES ARE MEASURED FROM CENTER OF MANHOLE.
3. SEE SHEET 6 FOR STORM DRAIN SUMMARY TABLE.
4. SEE SHEET 7 FOR CIPP STORM DRAIN SUMMARY TABLE.



PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562–3252
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PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3–02–0016–XXX–2026
SUMMARY TABLES

DATE:
SEPTEMBER 2025

SHEET:
5 of 57

STORM DRAIN STRUCTURE SUMMARY

SHEET	STRUCTURE ID	DEMO ID	ROAD ALIGNMENT		PIPE ALIGNMENT		D751.010.0048	D751.010.0072	D751.010.0096	D751.100.0000	D751.150.0000		EXISTING TOP OF CASTING	PROPOSED TOP OF CASTING	CASTING TYPE (LID)	EXISTING LID DIMENSIONS (IN)	REMARKS
			STATION	OFFSET (FT)	STATION	OFFSET (FT)	MANHOLE, TYPE I, 48–INCH	MANHOLE, TYPE II, 72–INCH	MANHOLE, TYPE III, 96–INCH	ADJUST MANHOLE	REPAIR MANHOLE						
											INSTALL LADDER RUNGS	REPAIR PIPE CONNECTIONS					
39	DS94		N:323587.47	E:332241.4	200+50.00	CL							91.24	91.24	FIELD INLET	27.0	EXISTING STRUCTURE TO REMAIN
	KS95		98+97.2	46.0 RT	204+06.10	CL			X				87.64	87.64	FIELD INLET	27.0	
	KS96	4 / 5	101+47.4	43.0 RT	206+56.51	CL				X	X		83.71	83.71	FIELD INLET	27.0	INSTALL LADDER RUNG IN REDUCING SLAB
40	KS97	4	103+78.4	45.1 RT	208+87.51	CL					X		79.43	79.43	FIELD INLET	27.0	INSTALL LADDER RUNG IN REDUCING SLAB
	KS98		106+07.9	42.8 RT	211+17.02	CL			X				77.77	77.77	FIELD INLET	27.0	
	KS99	5	107+24.2	37.5 RT	212+33.47	CL				X			77.84	77.84	FIELD INLET	27.0	
	S1		109+49.5	40.5 RT	214+58.81	CL			X				76.68	FIELD INLET			
41	S2		110+48.2	42.9 RT	215+57.47	CL			X				76.98	FIELD INLET			
	KS214	4	113+01.3	36.4 RT	218+10.70	CL					X		77.03	77.03	FIELD INLET	26.0	INSTALL LADDER RUNG IN REDUCING SLAB
	KS215	4	115+20.6	40.8 RT	220+29.98	CL						X	78.18	78.18	FIELD INLET	26.0	
	S3		117+49.3	41.7 RT	222+58.76	CL			X				77.95	FIELD INLET			
42	S4		118+48.8	43.5 RT	223+58.27	CL			X				76.72	FIELD INLET			
	S5		118+77.1	44.2 RT	223+86.60	CL			X				77.93	FIELD INLET			
	S6		120+81.5	42.0 RT	225+91.00	CL			X				78.02	FIELD INLET			
	S7		121+12.8	41.7 RT	226+22.25	CL			X				77.55	FIELD INLET			
	S8		121+48.2	41.6 RT	226+57.68	CL			X				76.99	FIELD INLET			
	S9		123+30.4	41.0 RT	228+39.89	CL			X				76.64	FIELD INLET			
	S10		124+40.2	40.6 RT	229+49.64	CL			X				77.77	FIELD INLET			
43	S11		126+29.3	42.4 RT	231+38.74	CL			X				78.32	FIELD INLET			
	S12		126+77.0	42.3 RT	231+86.52	CL			X				77.64	FIELD INLET			
	S13		126+77.2	21.2 LT	231+86.74	63.5 LT	X						78.25	FIELD INLET			
	S14		127+50.7	42.2 RT	232+60.14	CL			X				78.53	FIELD INLET			
	S15		129+16.0	39.2 RT	234+25.49	CL			X				78.70	FIELD INLET			
	S16		129+58.6	38.8 RT	234+68.13	CL			X				77.20	FIELD INLET			
	S17		129+90.6	38.4 RT	235+00.14	CL			X				78.24	FIELD INLET			
44	S18		131+54.9	43.6 RT	236+64.50	CL			X				78.18	FIELD INLET			
	S19		132+58.9	43.8 RT	237+68.47	CL			X				76.61	FIELD INLET			
	S20		132+96.0	43.9 RT	238+05.60	CL			X				76.94	FIELD INLET			
	S21		134+88.1	44.4 RT	239+97.67	CL			X				77.04	FIELD INLET			
	S22		135+72.4	44.3 RT	240+81.97	CL			X				78.25	FIELD INLET			
45	S23		137+28.3	42.8 RT	242+37.93	CL			X				77.11	FIELD INLET			
	S24		138+18.3	40.9 RT	243+27.92	CL			X				77.58	FIELD INLET			
	S25		138+72.2	39.8 RT	243+81.83	CL			X				76.89	FIELD INLET			
	S26		140+75.2	41.7 RT	245+84.80	CL		X					77.11	FIELD INLET			
	S27		141+41.6	42.3 RT	246+51.22	CL		X					75.80	FIELD INLET			
46	S28		142+35.6	43.3 RT	247+45.23	CL		X					76.80	FIELD INLET			
TOTAL							1	3	26	2	3	1					

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Designed By: RB

Drawn By: SS

Checked By: SB

STORM DRAIN PIPE SUMMARY

SHEET	PIPE ID	SIZE (INCH)	PIPE TYPE	LENGTH (FT)	CS PIPE 15-INCH	CS PIPE 24-INCH	CPE PIPE 18-INCH	CPE PIPE 24-INCH	CPE PIPE 30-INCH	CPE PIPE 36-INCH	CPE PIPE 48-INCH	PP PIPE 18-INCH	PP PIPE 30-INCH	PP PIPE 48-INCH	INLET				OUTLET				SLOPE %	END SECTIONS
					D701.010.0015	D701.010.0024	D701.020.0018	D701.020.0024	D701.020.0030	D701.020.0036	D701.020.0048	D701.340.0000			STRUCTURE	STATION	OFFSET (FT)	ELEVATION (FT)	STRUCTURE	STATION	OFFSET (FT)	ELEVATION (FT)		
40 / 41	P1	48	PP	98.66										98.66	S1	214+58.81	CL	69.40	S2	215+57.47	CL	69.38	0.02%	
41	P2	48	CPE	14.00							14.00				S2	215+57.47	CL	69.38	NOTE 1	215+71.47	CL	69.38	0.00%	
	P3	18	CPE	11.00			11.00								NOTE 1	215+63.23	9.4' LT	70.91	S2	215+57.47	CL	70.64	2.45%	
	P4	48	PP	219.30									219.30		KS214	218+10.70	CL	69.24	KS215	220+29.98	CL	68.96	0.13%	
	P5	18	PP	63.06								63.06			END SECTION	222+58.65	63.1' LT	77.62	S3	222+58.76	CL	71.50	9.70%	1
42	P6	48	PP	99.52										99.52	S4	223+58.27	CL	69.09	S3	222+58.76	CL	69.03	0.06%	
	P7	24	CS	10.00		10.00									NOTE 1	223+58.45	10.0' RT	70.46	S4	223+58.27	CL	70.44	0.20%	
	P8	48	PP	28.33										28.33	S5	223+86.60	CL	69.10	S4	223+58.27	CL	69.09	0.04%	
	P9	18	PP	62.37								62.37			END SECTION	223+85.31	62.4' LT	76.71	S5	223+86.60	CL	71.56	8.26%	1
	P10	48	CPE	9.00							9.00				S5	223+86.60	CL	69.11	NOTE 1	223+95.60	CL	69.11	0.00%	
	P11	48	CPE	23.00							23.00				NOTE 1	225+68.00	CL	69.18	S6	225+91.00	CL	69.17	0.04%	
	P12	18	PP	60.06								60.06			END SECTION	225+91.75	60.1' LT	76.13	S6	225+91.00	CL	71.62	7.51%	1
	P13	48	PP	31.20										31.20	S6	225+91.00	CL	69.17	S7	226+22.25	CL	69.16	0.03%	
	P14	15	CS	9.00	9.00										NOTE 1	226+20.20	7.8' LT	70.99	S7	226+22.25	CL	70.98	0.11%	
	P15	15	CS	9.00	9.00										NOTE 1	226+24.38	7.9' LT	71.27	S7	226+22.25	CL	71.26	0.11%	
	P16	48	PP	35.44										35.44	S7	226+22.25	CL	69.16	S8	226+57.68	CL	69.15	0.03%	
	P17	24	CPE	11.00				11.00							NOTE 1	226+57.66	11.0' RT	69.82	S8	226+57.68	CL	69.81	0.09%	
	P18	48	PP	182.21										182.21	S8	226+57.68	CL	69.15	S9	228+39.89	CL	69.10	0.03%	
	P19	18	PP	58.67								58.67			END SECTION	228+40.19	58.7' LT	75.91	S9	228+39.89	CL	71.56	7.41%	1
	P20	48	PP	109.75										109.75	S9	228+39.89	CL	69.10	S10	229+49.64	CL	69.07	0.03%	
	P21	24	CPE	9.00				9.00							NOTE 1	229+49.83	9.0' RT	69.73	S10	229+49.64	CL	69.73	0.00%	
	P22	48	CPE	24.00							24.00				S10	229+49.64	CL	69.07	NOTE 1	229+73.64	CL	69.06	0.04%	
43	P23	48	PP	47.77										47.77	S12	231+86.52	CL	69.03	S11	231+38.74	CL	68.90	0.27%	
	P24	18	PP	63.49								63.49			S13	231+86.74	63.5' LT	76.12	S12	231+86.52	CL	71.49	7.29%	
	P25	48	PP	73.63										73.63	S14	232+60.14	CL	69.25	S12	231+86.52	CL	69.03	0.30%	
	P26	48	PP	42.64										42.64	S15	234+25.49	CL	69.22	S16	234+68.13	CL	69.17	0.12%	
	P27	18	PP	58.58								58.58			END SECTION	234+68.88	58.6' LT	74.93	S16	234+68.13	CL	71.63	5.63%	1
	P28	48	PP	32.01										32.01	S16	234+68.13	CL	69.17	S17	235+00.14	CL	69.13	0.12%	
44	P29	48	PP	103.97										103.97	S18	236+64.50	CL	69.02	S19	237+68.47	CL	68.95	0.07%	
	P30	18	PP	64.94								64.94			END SECTION	237+68.46	64.9' LT	75.94	S19	237+68.47	CL	71.49	6.85%	1
	P31	48	PP	37.13										37.13	S19	237+68.47	CL	68.95	S20	238+05.60	CL	68.93	0.05%	
	P32	24	CPE	9.00				9.00							NOTE 1	238+05.60	9.0' RT	69.86	S20	238+05.60	CL	69.85	0.11%	
	P33	48	PP	192.07										192.07	S20	238+05.60	CL	68.93	S21	239+97.67	CL	68.80	0.07%	
	P34	36	CPE	11.00							11.00				S21	239+97.67	CL	69.66	NOTE 1	239+97.70	11.0' LT	69.64	0.18%	
	P35	48	PP	84.30										84.30	S22	240+81.97	CL	68.95	S21	239+97.67	CL	68.80	0.18%	
	P36	30	CPE	18.00					18.00						NOTE 1	240+81.90	18.0' RT	68.75	S22	240+81.97	CL	68.74	0.06%	
45	P37	48	PP	89.99										89.99	S24	243+27.92	CL	69.75	S23	242+37.93	CL	69.53	0.24%	
	P38	18	PP	59.07								59.07			END SECTION	243+29.22	59.1' LT	74.85	S24	243+27.92	CL	72.27	4.37%	1
	P39	48	PP	53.90										53.90	S25	243+81.83	CL	69.87	S24	243+27.92	CL	69.75	0.22%	
	P40	24	CPE	10.00				10.00							NOTE 1	243+81.54	10.0' RT	69.98	S25	243+81.83	CL	69.98	0.00%	
	P41	30	CPE	24.00					24.00						NOTE 1	244+05.83	CL	69.92	S25	243+81.83	CL	69.87	0.21%	
	P42	30	PP	66.42											S27	246+51.22	CL	70.20	S26	245+84.80	CL	69.95	0.38%	
	P43	18	PP	63.09								63.09			END SECTION	246+50.72	63.1' LT	73.05	S27	246+51.22	CL	71.20	2.93%	1
	P44	30	PP	94.01									94.01		S28	247+45.23	CL	70.62	S27	246+51.22	CL	70.30	0.34%	
46	P45	30	PP	699.57									699.57		END SECTION	254+44.80	CL	70.85	S28	247+45.23	CL	70.62	0.03%	1
	P46	18	PP	62.51								62.51			END SECTION	254+63.59	62.3' RT	72.66	END SECTION	254+58.96	CL	71.23	2.30%	2
	P47	18	PP	60.54								60.54			END SECTION	255+00.29	59.8' LT	72.70	END SECTION	254+90.97	CL	72.19	0.84%	2
	P48	18	PP	59.65								59.65			END SECTION	255+05.21	58.9' LT	72.88	END SECTION	254+96.03	CL	72.34	0.91%	2
SUBTOTAL					18.0	10.0	11.0	39.0	42.0	11.0	70.0	736.0	860.0	1561.8										
ROUND					18	10	11	39	42	11	70	736	860	1,562										

NOTES:

1. EXTEND AS REQUIRED TO CONNECT TO EXISTING PIPE.
2. SEE SHEETS 9–15 FOR DEMO INFORMATION.
3. PIPE LENGTH, INVERT, AND SLOPE ARE MEASURED FROM CENTER OF MANHOLE.
4. KS214 & KS215 INVERT ELEVATIONS ARE FROM AS–BUILT INFORMATION, CONTRACTOR TO VERIFY INVERTS PRIOR TO ORDERING MATERIALS.
5. SEE SHEET 5 FOR STORM DRAIN STRUCTURE SUMMARY TABLE.
6. SEE SHEET 7 FOR CIPP STORM DRAIN SUMMARY TABLE.



PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562–3252
#AECL882–AK

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3–02–0016–XXX–2026
SUMMARY TABLES

DATE:
SEPTEMBER 2025
SHEET:
6 of 57

Date Reviset:
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Designed By: RB
Drawn By: SS
Checked By: SB

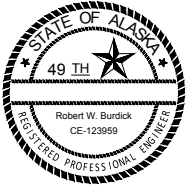
CIPP STORM DRAIN PIPE SUMMARY														
SHEET	PIPE ID	SIZE (INCH)	EXISTING PIPE TYPE	PROPOSED PIPE TYPE	LENGTH (FT)	CIPP LINER 36-INCH	CIPP LINER 42-INCH	CIPP LINER 48-INCH	INLET STRUCTURE	OUTLET STRUCTURE	INLET ELEVATION (FT)	OUTLET ELEVATION (FT)	SLOPE %	REMARKS
						D703.010.0036	D703.010.0042	D703.010.0048						
39	CP-1	36	CONCRETE	CIPP	356.10	356.10			DS94	KS95	76.09	72.44	1.03%	SEE NOTE 4
	CP-2	42	CPEP	CIPP	250.37		250.37		KS95	KS96	72.09	71.49	0.24%	
39 / 40	CP-3	48	CMP	CIPP	231.00			231.00	KS96	KS97	71.49	70.41	0.47%	
	CP-4	48	CMP	CIPP	229.50			229.50	KS97	KS98	70.41	69.84	0.25%	
40	CP-5	48	CMP	CIPP	116.40			116.40	KS98	KS99	69.94	69.75	0.16%	
	CP-6	48	CPEP	CIPP	225.40			225.40	KS99	S1	69.70	69.40	0.13%	
41	CP-7	48	CPEP	CIPP	253.20			253.20	S2	KS214	69.38	69.24	0.06%	
	CP-8	48	CPEP	CIPP	228.78			228.78	KS215	S3	69.11	69.03	0.03%	
SUBTOTAL						356.1	250.4	802.3						
ROUND						356	250	802						

P165.010.0000						
REMOVAL OF STRUCTURES						
SHEET	DEMO WORK ITEM ID	BEGIN		END		REMARKS
		STATION	OFFSET (FT)	STATION	OFFSET (FT)	
9	3	98+97.21	45.95 RT			REMOVE MANHOLE
	6	105+02.55	CL	105+29.79	CL	REMOVE CURB AND GUTTER (56 LF)
	9	105+03.08	CL	105+29.00	CL	REMOVE CONCRETE (9 SY)
	2	105+04.70	1.00 RT	105+27.56	1.00 LT	REMOVE BOLLARDS (10 EACH)
	2	105+06.05	27.42 LT	105+05.97	40.26 LT	REMOVE BOLLARDS (4 EACH)
	7	105+15.97	1.00 LT	105+16.00	1.00 RT	REMOVE POST (2 EACH)
	2	105+25.49	27.29 RT	105+24.7	55.46 RT	REMOVE BOLLARD (TYP OF 8)
	8	105+29.00	CL			REMOVE SIGN
10	10	109+49.86	41.01 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	110+53.24	34.17 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	110+62.01	42.57 RT	—	—	REMOVE STORM DRAIN END SECTION
	11	113+01.31	36.37 RT	115+20.55	40.84 RT	REMOVE STORM DRAIN PIPE (48" DIA. 219 LF)
11	10	117+49.08	27.53 RT	117+49.46	21.39 LT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	117+49.08	27.53 RT	117+49.46	21.39 LT	REMOVE STORM DRAIN PIPE (18" DIA. 50 LF)
	11	117+49.32	41.67 RT	117+62.69	41.72 RT	REMOVE STORM DRAIN PIPE (48" DIA. 14 LF)
	10	117+62.69	41.72 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	118+48.78	53.49 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	118+76.31	25.14 RT	118+77.26	18.2 LT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	118+76.31	25.14 RT	118+77.26	18.2 LT	REMOVE STORM DRAIN PIPE (18" DIA. 44 LF)
	10	118+85.71	44.08 RT	120+58.66	42.25 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	10	120+81.64	18.05 LT	120+82.24	22.2 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	120+81.64	18.05 LT	120+82.24	22.2 RT	REMOVE STORM DRAIN PIPE (18" DIA. 41 LF)
	10	121+10.61	36.88 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	121+14.84	36.94 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	121+48.22	51.66 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	123+30.53	17.69 LT	123+30.63	22.6 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	123+30.53	17.69 LT	123+30.63	22.6 RT	REMOVE STORM DRAIN PIPE (18" DIA. 41 LF)
	12	123+94.23	15.04 RT	123+94.23	31.53 RT	REMOVE ABANDONED STORM DRAIN PIPE (18" DIA 17 LF)
12	10	123+94.23	31.53 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	124+40.25	48.04 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	124+62.89	40.84 RT	126+29.31	42.4 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	10	126+76.43	19.29 RT	126+77.15	21.2 LT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	126+76.43	19.29 RT	126+77.15	21.2 LT	REMOVE STORM DRAIN PIPE (18" DIA. 41 LF)
	10	127+50.66	42.21 RT	129+16.24	39.4 RT	REMOVE STORM DRAIN END SECTION (2 EA)

P165.010.0000						
REMOVAL OF STRUCTURES (CONT.)						
SHEET	DEMO WORK ITEM ID	BEGIN		END		REMARKS
		STATION	OFFSET (FT)	STATION	OFFSET (FT)	
13	10	129+58.72	19.81 LT	129+59.28	22.1 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	129+58.72	19.81 LT	129+59.28	22.1 RT	REMOVE STORM DRAIN PIPE (18" DIA. 42 LF)
	10	129+90.41	38.44 RT	131+54.91	43.6 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	10	132+57.63	24.23 RT	132+59.00	21.2 LT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	132+57.63	24.23 RT	132+59.00	21.2 LT	REMOVE STORM DRAIN PIPE (18" DIA. 46 LF)
	10	132+96.10	52.72 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	134+88.09	34.20 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	135+43.89	47.78 RT	—	—	REMOVE STORM DRAIN END SECTION
	11	135+43.89	47.78 RT	135+72.34	57.9 RT	REMOVE STORM DRAIN PIPE (30" DIA. 31 LF)
	10	135+49.61	44.50 RT	137+28.38	42.7 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	3	137+28.38	42.70 RT			REMOVE STORM DRAIN MANHOLE
14	11	135+72.63	17.65 RT	135+72.84	27.68 RT	REMOVE STORM DRAIN PIPE (18" DIA. 20 LF)
	10	135+72.84	27.68 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	138+18.41	18.17 LT	138+18.97	22.2 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	138+18.41	18.17 LT	138+18.97	22.2 RT	REMOVE STORM DRAIN PIPE (18" DIA. 40 LF)
	10	138+72.11	49.30 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	138+95.30	40.02 RT	140+75.16	41.7 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	10	141+41.70	20.77 LT	141+41.73	29.8 RT	REMOVE STORM DRAIN END SECTION (2 EA)
	11	141+41.70	20.77 LT	141+41.73	29.8 RT	REMOVE STORM DRAIN PIPE (18" DIA. 51 LF)
	11	141+69.55	33.07 RT	—	—	REMOVE STORM DRAIN END SECTION
	12	141+69.55	33.07 RT	141+69.59	14.8 RT	REMOVE ABANDONED STORM DRAIN PIPE (18" DIA. 19 LF)
15	10	142+35.58	43.25 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	149+35.15	45.03 RT	—	—	REMOVE STORM DRAIN END SECTION
	10	149+50.68	49.21 RT	149+63.71	103.5 RT	REMOVE STORM DRAIN END SECTION

NOTES:

- EXISTING THAW PIPE EXIST IN THE CROWN OF PIPES CP-3 THROUGH CP-8. CONTRACTOR SHALL REMOVE PIPE PRIOR TO INSTALLING CIPP LINING. SEE SPECIFICATIONS.
- SEE SHEETS 9-15 FOR DEMO INFORMATION.
- PIPE LENGTH, INVERT, AND SLOPE ARE MEASURED FROM CENTER OF MANHOLE.
- INVERT ELEVATIONS ARE FROM AS-BUILT INFORMATION, CONTRACTOR TO VERIFY INVERTS PRIOR TO ORDERING MATERIALS.
- SEE SHEET 5 FOR STORM DRAIN STRUCTURE SUMMARY TABLE.
- SEE SHEET 6 FOR STORM DRAIN SUMMARY TABLE.



PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

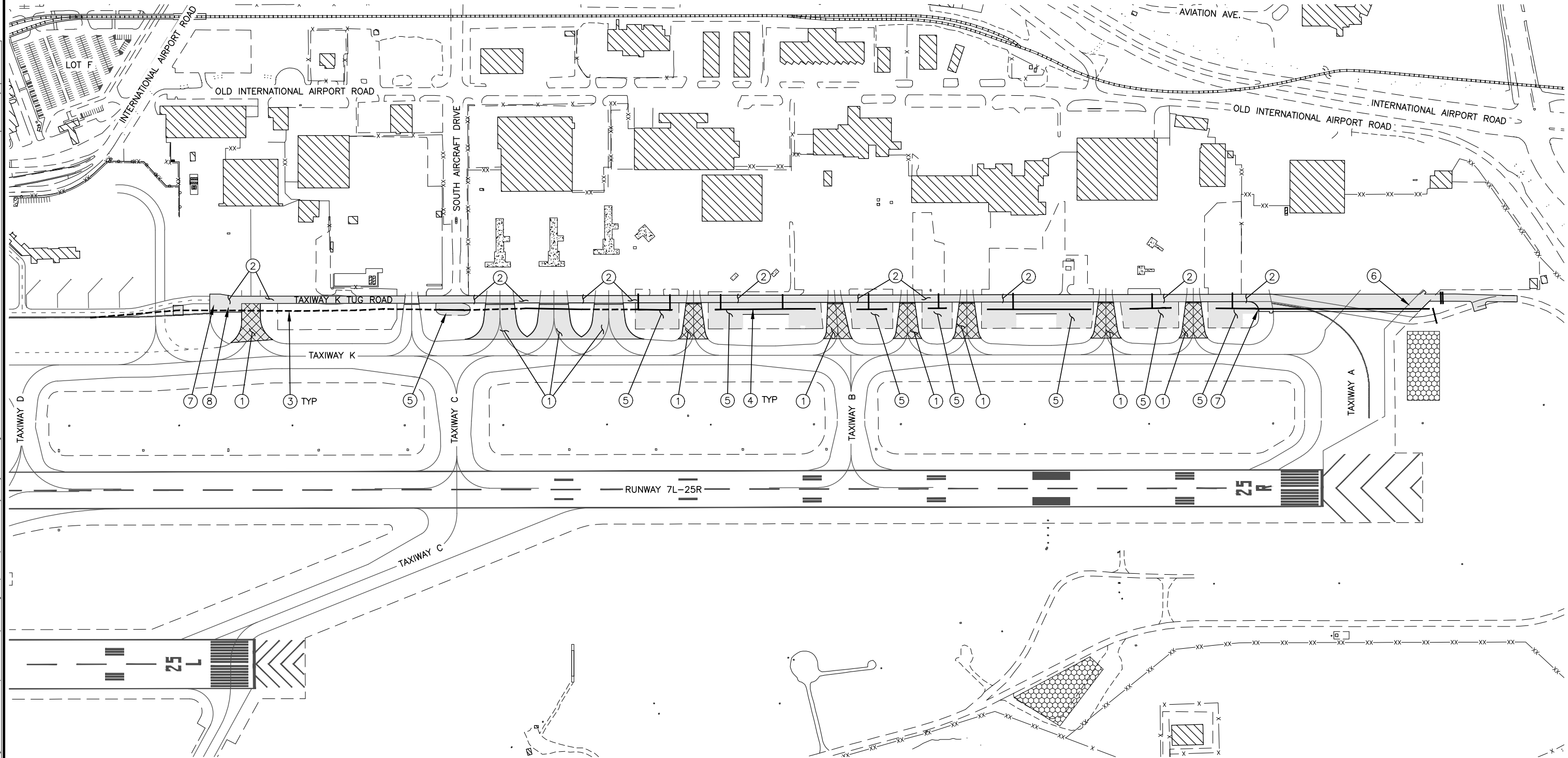
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
SUMMARY TABLES

DATE:
SEPTEMBER 2025
SHEET:
7 of 57

9/16/2025 1:05 PM
8
Date Revised: 9/16/2025 1:05 PM
Layout Name: 8
File Path and Name: J:\JobsData\30207\49 Anc Tw K Tug Road Reconstruction\00 Cadd 2019\01 Working Set\01 Civil\00992-ANC-Project Layout Plan.dwg
Designed By: RB
Drawn By: SS
Checked By: SB



PROJECT LAYOUT PLAN

1
8

SCOPE OF THE PROJECT INCLUDES, BUT IS NOT LIMITED TO CONSTRUCTION OF THE FOLLOWING:

- 1 COLD PLANE & OVERLAY TAXIWAY APPROACHES (AIP & NON AIP)
- 2 RECONSTRUCT TAXIWAY K TUG ROAD (AIP)
- 3 REHABILITATE STORM DRAIN (AIP)
- 4 INSTALL NEW STORM DRAIN PIPES AND STRUCTURES (AIP)
- 5 FILL & GRADE EXISTING DITCHES (AIP)
- 6 REMOVE EDGE LIGHT BASES (AIP)
- 7 REPLACE EDGE LIGHTS (AIP)
- 8 REPLACE ELECTRICAL MANHOLE (AIP)

GENERAL NOTES:

1. SEE SHEET AC1 FOR HAUL ROUTE AND DISPOSAL AREA INFORMATION.
2. SHARE ACCESS WITH CONTRACTORS WORKING ON OTHER AIRPORT CONSTRUCTION PROJECTS AS DIRECTED BY THE ENGINEER.
3. PROJECT COORDINATE SYSTEM AND STATIONING SHOWN IN THESE PLANS SHALL BE MAINTAINED THROUGHOUT THE PROJECT AND UTILIZED IN THE PROJECT AS-BUILTS.

LEGEND

- PROJECT LIMITS
- NON AIP AREA
- STAGING AREA
- NEW STORM DRAIN PIPE & STRUCTURES
- CIPP STORM DRAIN LINING



PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, INC.
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

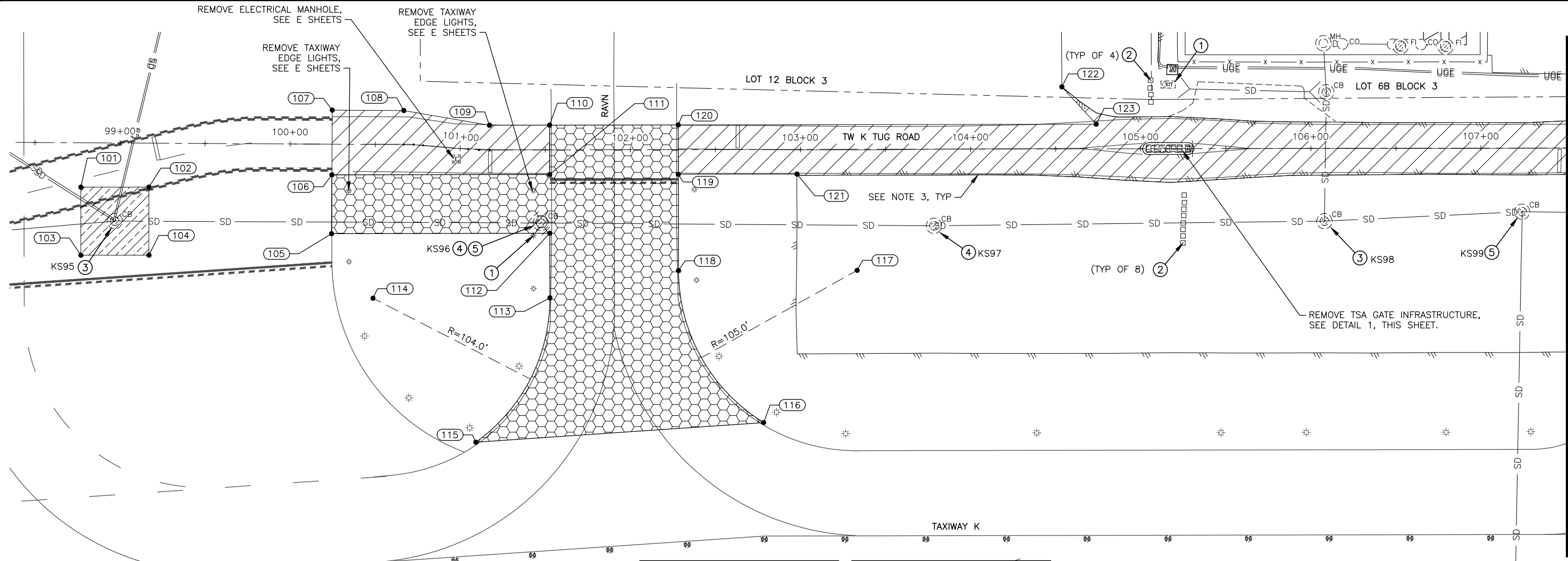
BY	DATE	REVISION

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CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PROJECT LAYOUT PLAN

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SHEET:
8 OF 57

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Date Revised: 9
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Designed By: RB
Drawn By: SS
Checked By: SB

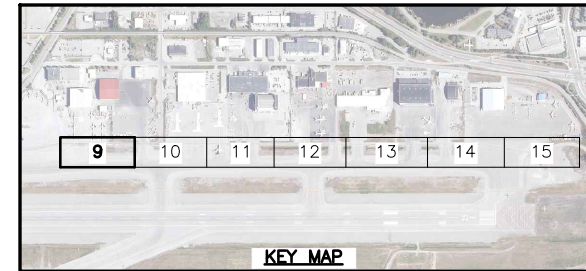


LEGEND

- TUG ROAD EXCAVATION (2" HMA, 6" CABC, 2" SUBGRADE)
- PAVEMENT COLD PLANE (3" HMA)
- EXCAVATION FOR STORM DRAIN (3" HMA, 4" RAP, SUBGRADE AS NECESSARY)

NOTES:

- SEE TYPICAL SECTIONS, SHEETS 16-17.
- UNDERGROUND UTILITIES IN THESE DRAWINGS ARE SHOWN IN GENERAL LOCATIONS ONLY. OTHER UTILITIES MAY EXIST THROUGHOUT THE PROJECT AREA. DEPTHS OF MOST ARE UNKNOWN. LOCATE UTILITIES IN THE VICINITY PRIOR TO EXCAVATION AND DEMOLITION WORK.
- REMOVE ALL TUG ROAD PAVEMENT BEYOND 14.5' OF EACH SIDE OF THE CENTERLINE UNLESS ADJACENT TO AN EXISTING APPROACH, APRON, OR SHOWN OTHERWISE.
- ALL JOINTS WITH EXISTING PAVEMENTS SHALL BE SAW CUT AND PROTECTED FROM DAMAGE.
- SEE SHEETS 6-5 FOR WORK ITEM TABLES.
- PROTECT IN PLACE EXISTING STORM DRAIN & CULVERTS UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.

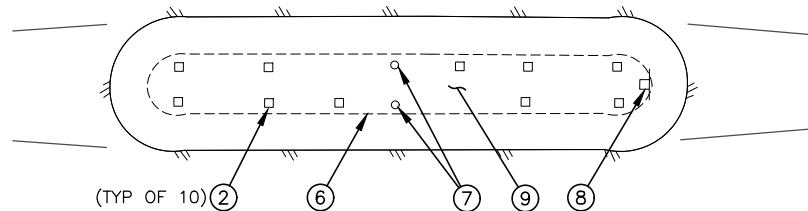


DEMO PLAN POINTS		
POINT #	STATION	OFFSET
101	98+77.10	26.07 RT
102	99+17.10	25.84 RT
103	98+77.32	66.07 RT
104	99+17.32	65.84 RT
105	100+24.58	52.61 RT
106	100+24.59	18.00 RT
107	100+24.59	20.00 LT
108	100+66.64	20.00 LT
109	101+17.27	14.50 LT
110	101+52.58	14.50 LT
111	101+52.58	14.50 RT
112	101+52.58	49.00 RT
113	101+52.58	86.95 RT
114	100+49.13	90.38 RT
115	101+13.37	171.77 RT
116	102+78.06	160.50 RT
117	103+33.17	71.13 RT
118	102+28.17	71.13 RT
119	102+28.17	14.50 RT
120	102+28.17	14.50 LT

DEMO PLAN POINTS		
POINT #	STATION	OFFSET
121	102+97.97	14.50 RT
122	104+53.73	36.45 LT
123	104+73.88	14.50 LT

DEMOLITION WORK THIS SHEET:

- PROTECT IN PLACE
- REMOVE BOLLARD
- REMOVE MANHOLE
- REPAIR MANHOLE
- ADJUST MANHOLE
- REMOVE CURB & GUTTER
- REMOVE POST
- REMOVE SIGN
- REMOVE CONCRETE



1
9

TSA GATE DEMOLITION DETAIL

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
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TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - BOP TO STA 107+50

DATE:
SEPTEMBER 2025
SHEET:
9 OF 57

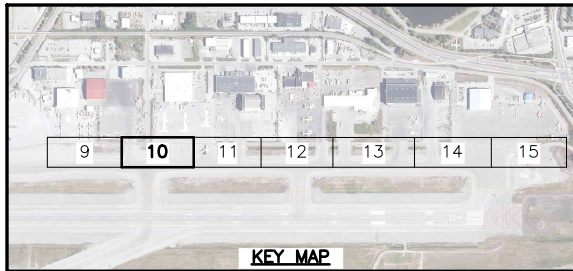
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Designed By: RB
Drawn By: SS
Checked By: SB

DEMOLITION WORK THIS SHEET:

- ④ REPAIR MANHOLE
⑩ REMOVE END SECTION
⑪ REMOVE STORM DRAIN PIPE

NOTES:

1. SEE TYPICAL SECTIONS, SHEETS 16-17.
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3. REMOVE ALL TUG ROAD PAVEMENT BEYOND 14.5' OF EACH SIDE OF THE CENTERLINE UNLESS ADJACENT TO AN EXISTING APPROACH, APRON, OR SHOWN OTHERWISE.
4. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATIVE METHOD APPROVED BY THE ENGINEER.
5. ALL JOINTS WITH EXISTING PAVEMENTS SHALL BE SAW CUT AND PROTECTED FROM DAMAGE.
6. ALL GROUND DISTURBANCE WORK WITHIN 10 FT OF THE FUEL LINE WILL REQUIRE A STANDBY WATCH. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. SEE SHEETS 6-5 FOR WORK ITEM TABLES.
8. PROTECT IN PLACE EXISTING STORM DRAIN & CULVERTS UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.



30' 15' 0 30' 60'



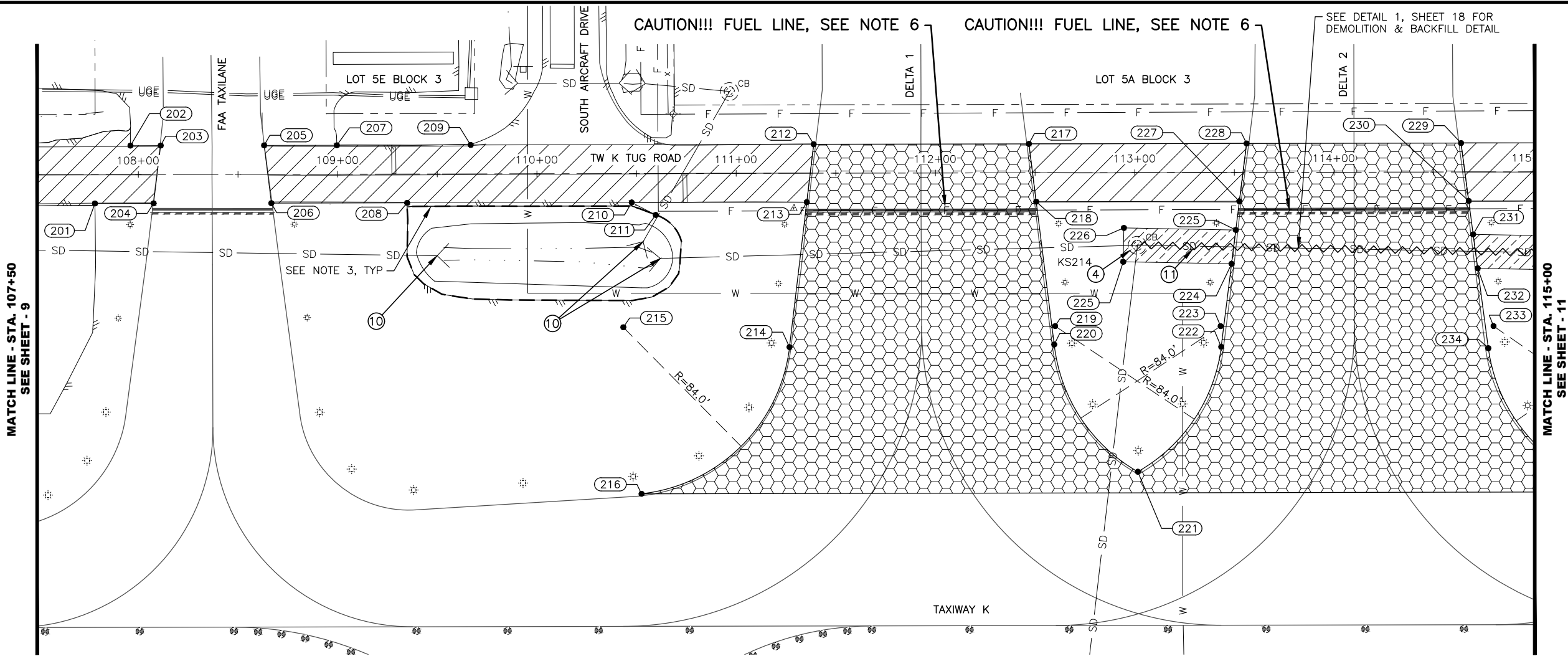
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3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 107+50 TO STA 115+00

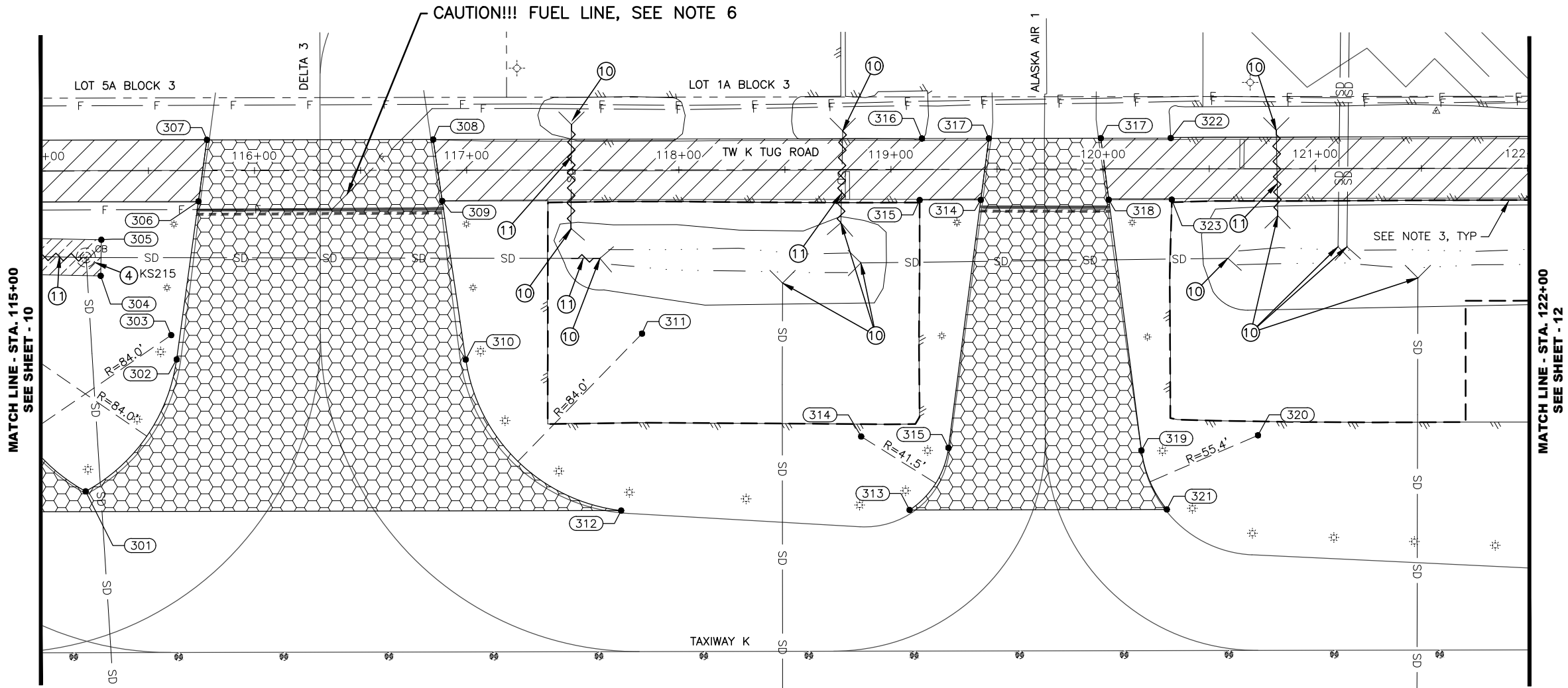
DATE:
SEPTEMBER 2025
SHEET:
10 OF 57



LEGEND

- ▨ TUG ROAD EXCAVATION
(2" HMA, 6" CABG, 2" SUBGRADE)
▨ PAVEMENT COLD PLANE (3" HMA)
▨ EXCAVATION FOR STORM DRAIN
(3" HMA, 4" RAP, SUBGRADE AS NECESSARY)
--- GRUBBING LIMITS
~ STORM DRAIN PIPE REMOVAL

9/16/2025 6:13 AM
11
Date Revised: 9/16/2025 6:13 AM
Layout Name: 11
File Path and Name: J:\JobsData\30207\49 ANC TW K Tug Road Reconstruction\00 CAD\2019\01 Working_Set\01 Civil\00992-ANC-Demolition Plan.dwg
Designed By: RB
Drawn By: SS
Checked By: SB



DEMOLITION WORK THIS SHEET:

- ④ REPAIR MANHOLE
- ⑩ REMOVE END SECTION
- ⑪ REMOVE STORM DRAIN PIPE

NOTES:

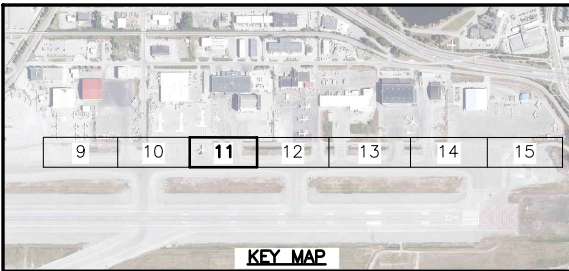
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- PROTECT IN PLACE EXISTING STORM DRAIN & CULVERTS UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.

DEMO PLAN POINTS		
POINT #	STATION	OFFSET
301	115+20.08	151.10 RT
302	115+63.09	88.98 RT
303	115+60.55	77.49 RT
304	115+27.37	49.48 RT
305	115+27.72	32.48 RT
306	115+73.52	14.50 RT
307	115+77.58	14.50 LT
308	116+84.18	14.50 LT
309	116+88.42	14.50 RT
310	116+99.34	89.35 RT
311	117+82.46	77.22 RT
312	117+72.48	160.62 RT
313	119+08.44	160.62 RT
314	119+42.27	14.50 RT
314	118+85.68	125.92 RT

DEMO PLAN POINTS		
POINT #	STATION	OFFSET
315	119+13.46	14.50 RT
315	119+26.82	131.36 RT
316	119+14.59	14.50 LT
317	119+98.89	14.50 LT
317	119+46.10	14.50 LT
318	120+02.61	14.50 RT
319	120+17.76	132.77 RT
320	120+72.71	125.73 RT
321	120+29.68	160.62 RT
322	120+31.88	14.50 LT
323	120+32.31	14.50 RT

LEGEND

- TUG ROAD EXCAVATION (2" HMA, 6" CABC, 2" SUBGRADE)
- PAVEMENT COLD PLANE (3" HMA)
- EXCAVATION FOR STORM DRAIN (3" HMA, 4" RAP, SUBGRADE AS NECESSARY)
- GRUBBING LIMITS
- STORM DRAIN PIPE REMOVAL



PLANS DEVELOPED BY:
CRW ENGINEERING GROUP
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

BY DATE REVISION

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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 115+00 TO STA 122+00

DATE:
SEPTEMBER 2025
SHEET:
11 OF 57

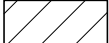
DEMOLITION WORK THIS SHEET:

- (10) REMOVE END SECTION
(11) REMOVE STORM DRAIN PIPE
(12) REMOVE ABANDONED STORM DRAIN PIPE

NOTES:

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7. PROTECT IN PLACE EXISTING STORM DRAIN & CULVERTS UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.

LEGEND

-  TUG ROAD EXCAVATION
(2" HMA, 6" CABC, 2" SUBGRADE)
-  PAVEMENT COLD PLANE (3" HMA)
-  GRUBBING LIMITS
-  STORM DRAIN PIPE REMOVAL

DEMO PLAN POINTS

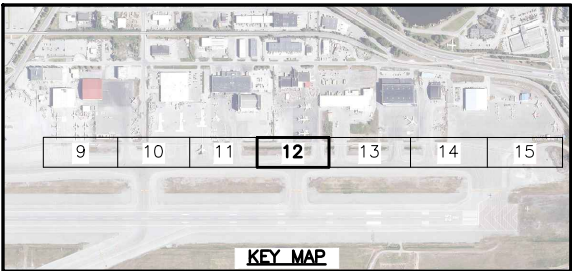
POINT #	STATION	OFFSET
401	124+02.51	14.50 LT
402	124+83.08	14.50 RT
403	125+13.38	14.50 LT
404	125+12.08	14.50 RT
405	125+07.00	128.41 RT
406	124+51.86	125.95 RT
407	124+94.81	160.62 RT
408	126+10.15	160.62 RT
409	126+53.27	125.52 RT
410	125+98.92	137.24 RT

DEMO PLAN POINTS

POINT #	STATION	OFFSET
411	125+72.44	14.50 RT
412	125+66.18	14.50 LT
413	126+03.22	14.50 LT
414	126+03.11	14.50 RT
415	127+66.64	14.50 LT
416	127+72.92	14.50 RT
417	128+06.79	14.50 LT
418	128+03.02	14.50 RT
419	127+87.60	134.22 RT
420	127+32.60	125.64 RT

DEMO PLAN POINTS

POINT #	STATION	OFFSET
421	127+75.69	160.62 RT
422	128+90.04	160.62 RT
422	128+78.11	132.70 RT
423	129+33.07	125.72 RT
424	128+63.10	14.50 RT
425	128+59.42	14.50 LT
426	128+93.26	14.50 LT
427	129+05.02	14.50 RT



30' 15' 0 30' 60'



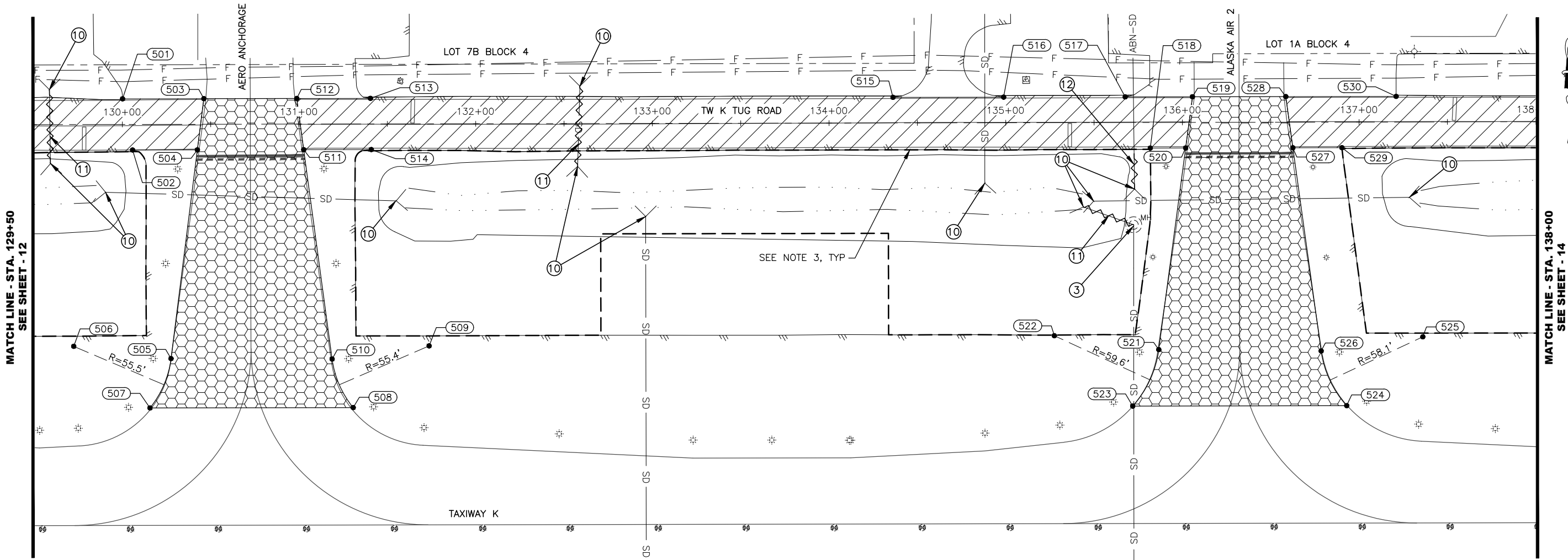
PLANS DEVELOPED BY:
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3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
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TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 122+00 TO STA 129+50

DATE:
SEPTEMBER 2025
SHEET:
12 OF 57



DEMOLITION WORK THIS SHEET:

- ③ REMOVE MANHOLE
- ⑩ REMOVE END SECTION
- ⑪ REMOVE STORM DRAIN PIPE
- ⑫ REMOVE ABANDONED STORM DRAIN PIPE

NOTES:

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LEGEND

- TUG ROAD EXCAVATION (2" HMA, 6" CABC, 2" SUBGRADE)
- PAVEMENT COLD PLANE (3" HMA)
- GRUBBING LIMITS
- STORM DRAIN PIPE REMOVAL

DEMO PLAN POINTS

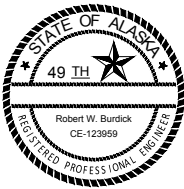
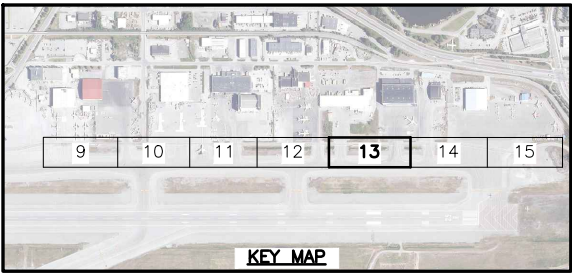
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501	130+00.11	14.50 LT
502	130+05.75	14.50 RT
503	130+46.14	14.50 LT
504	130+42.43	14.50 RT
505	130+27.29	132.69 RT
506	129+72.24	125.63 RT
507	130+15.32	160.62 RT
508	131+30.32	160.62 RT
509	131+73.38	125.76 RT
510	131+18.47	133.11 RT

DEMO PLAN POINTS

POINT #	STATION	OFFSET
511	131+02.59	14.50 RT
512	130+98.71	14.50 LT
513	131+40.46	14.50 LT
514	131+40.86	14.50 RT
515	134+36.19	14.50 LT
516	134+98.82	14.50 LT
517	135+67.63	14.50 LT
518	135+81.77	14.50 RT
519	136+05.71	14.50 LT
520	136+01.79	14.50 RT

DEMO PLAN POINTS

POINT #	STATION	OFFSET
521	135+86.34	128.67 RT
522	135+27.28	120.68 RT
523	135+71.53	160.62 RT
524	136+92.66	160.62 RT
525	137+35.82	121.72 RT
526	136+78.26	129.61 RT
527	136+62.49	14.50 RT
528	136+58.51	14.50 LT
529	136+90.25	14.50 RT
530	137+20.96	14.50 LT



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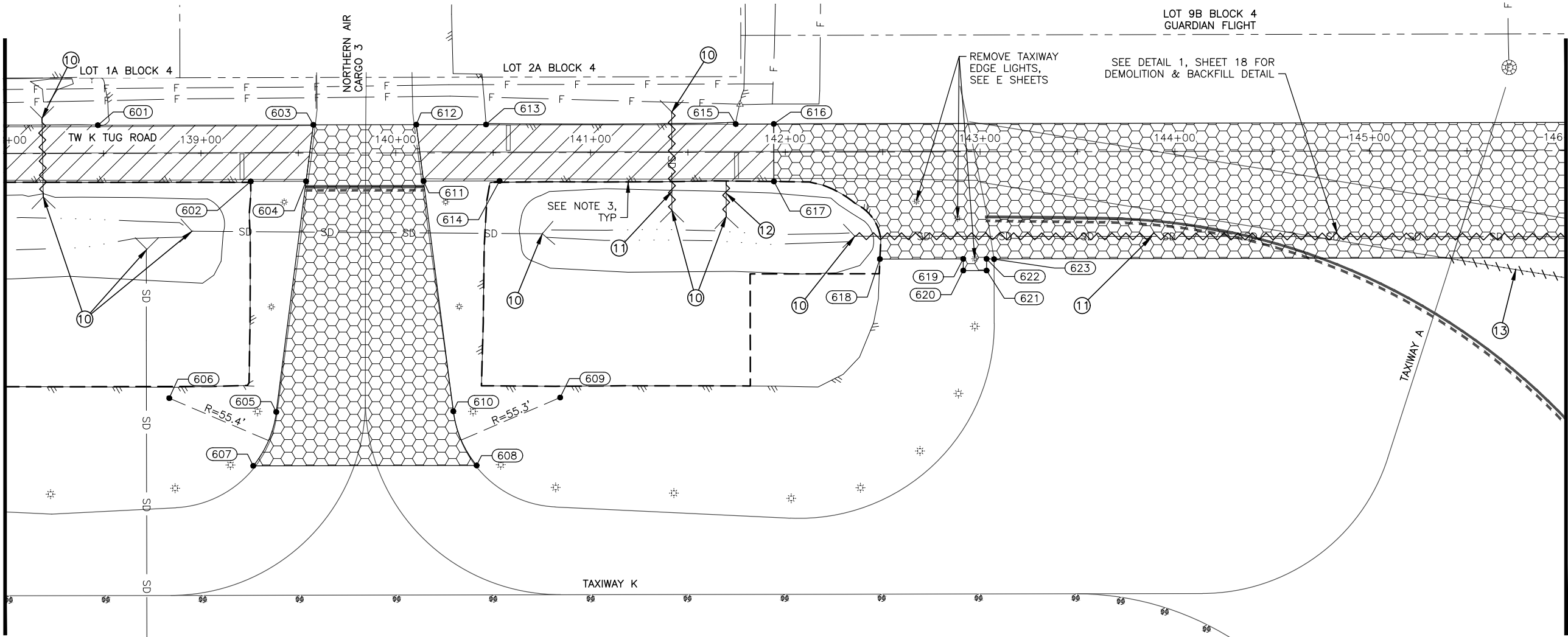
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TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 129+50 TO STA 138+00

DATE:
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SHEET:
13 OF 57

9/16/2025 6:13 AM
14
Date Revised: 9/16/2025 6:13 AM
Layout Name: 14
File Path and Name: J:\JobsData\30207\49 ANC TW K Tug Road Reconstruction\00 CAD 2019\01 Working Set\01 Civil\00992-ANC-Demolition Plan.dwg
Designed By: RB
Drawn By: SS
Checked By: SB

MATCH LINE - STA. 138+00
SEE SHEET - 13



MATCH LINE - STA. 146+00
SEE SHEET - 15

DEMOLITION WORK THIS SHEET:

- ⑩ REMOVE END SECTION
- ⑪ REMOVE STORM DRAIN PIPE
- ⑫ REMOVE ABANDONED STORM DRAIN PIPE
- ⑬ PAVEMENT MARKING REMOVAL

NOTES:

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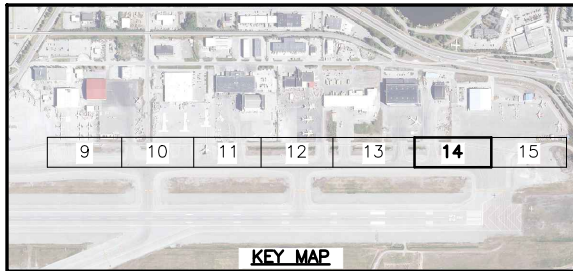
DEMO PLAN POINTS		
POINT #	STATION	OFFSET
601	138+47.07	14.50 LT
602	139+25.50	14.50 RT
603	139+57.72	14.50 LT
604	139+53.92	14.50 RT
605	139+38.40	132.95 RT
606	138+83.47	125.75 RT
607	139+26.52	160.62 RT
608	140+41.18	160.62 RT
609	140+84.15	125.82 RT
610	140+29.30	132.80 RT

DEMO PLAN POINTS		
POINT #	STATION	OFFSET
611	140+14.23	14.50 RT
612	140+10.54	14.50 LT
613	140+46.37	14.50 LT
614	140+53.25	14.50 RT
615	141+74.58	14.50 LT
616	141+94.11	14.50 LT
617	141+94.11	15.03 RT
618	142+48.43	55.00 RT
619	142+91.21	55.00 RT
620	142+91.21	61.00 RT

DEMO PLAN POINTS		
POINT #	STATION	OFFSET
621	143+03.21	61.00 RT
622	143+03.21	55.00 RT
623	143+07.07	55.15 RT

LEGEND

- TUG ROAD EXCAVATION (2" HMA, 6" CABG, 2" SUBGRADE)
- PAVEMENT COLD PLANE (3" HMA)
- GRUBBING LIMITS
- STORM DRAIN PIPE REMOVAL
- PAVEMENT MARKING REMOVAL



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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 138+00 TO STA 146+00

DATE: SEPTEMBER 2025
SHEET: 14 OF 57

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Date Revised:
Layout Name:
File Path and Name: J:\JobsData\30207\49 ANC TW K Tug Road Reconstruction\00 CAD 2019\01 Working Set\01 Civil\00992-ANC-Demolition Plan.dwg

Designed By: RB
Drawn By: SS
Checked By: SB

SEE DETAIL 1, SHEET 18 FOR
DEMOLITION & BACKFILL DETAIL

LOT 10B BLOCK 4
TRANSNORTHERN AVIATION

REMOVE TAXIWAY
EDGE LIGHTS,
SEE E SHEETS

REMOVE TAXIWAY
EDGE LIGHT,
SEE E SHEETS

MATCH LINE - STA. 146+00
SEE SHEET - 14

TAXIWAY A

147+00 148+00 149+00 150+00 151+00 152+00 153+00

TW K TUG ROAD

EAST TUG ROAD

DEMOLITION WORK THIS SHEET:

- (10) REMOVE END SECTION
(11) REMOVE PIPE
(13) PAVEMENT MARKING REMOVAL

NOTES:

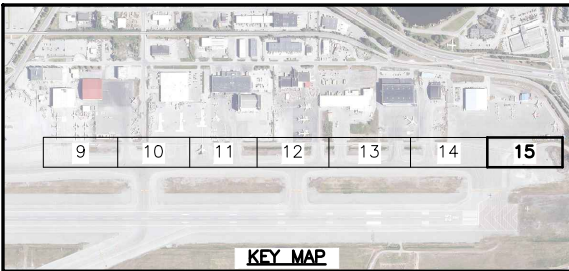
1. SEE TYPICAL SECTIONS, SHEETS 16-17.
2. UNDERGROUND UTILITIES IN THESE DRAWINGS ARE SHOWN IN GENERAL LOCATIONS ONLY. OTHER UTILITIES MAY EXIST THROUGHOUT THE PROJECT AREA. DEPTHS OF MOST ARE UNKNOWN. LOCATE UTILITIES IN THE VICINITY PRIOR TO EXCAVATION AND DEMOLITION WORK.
3. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATIVE METHOD APPROVED BY THE ENGINEER.
4. ALL JOINTS WITH EXISTING PAVEMENTS SHALL BE SAW CUT AND PROTECTED FROM DAMAGE.
5. SEE SHEETS 6-5 FOR WORK ITEM TABLES.
6. PROTECT IN PLACE EXISTING STORM DRAIN & CULVERTS UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER.

DEMO PLAN POINTS

POINT #	STATION	OFFSET
701	148+22.42	55.00 RT
702	148+44.74	32.50 RT
703	148+91.07	14.50 LT
704	148+97.89	14.50 LT
705	149+13.33	29.76 LT
706	149+21.76	21.22 LT
707	149+14.96	14.50 LT
708	149+63.42	14.50 LT
709	149+34.35	14.50 RT
710	148+93.88	55.00 RT
711	149+48.03	68.12 RT
712	149+61.62	64.76 RT
713	149+54.02	93.03 RT
714	149+67.44	88.94 RT
715	151+05.66	18.16 RT
716	151+12.57	40.35 RT
717	152+88.27	12.18 LT
718	152+88.27	12.18 RT

LEGEND

- TUG ROAD EXCAVATION
(SUBGRADE) AS NECESSARY
- TUG ROAD EXCAVATION
(2.5" HMA, SUBGRADE AS NECESSARY)
- PAVEMENT COLD PLANE (3" HMA)
- EXCAVATION FOR STORM DRAIN
(2" HMA, SUBGRADE AS NECESSARY)
- GRUBBING LIMITS
- STORM DRAIN PIPE REMOVAL
- PAVEMENT MARKING REMOVAL



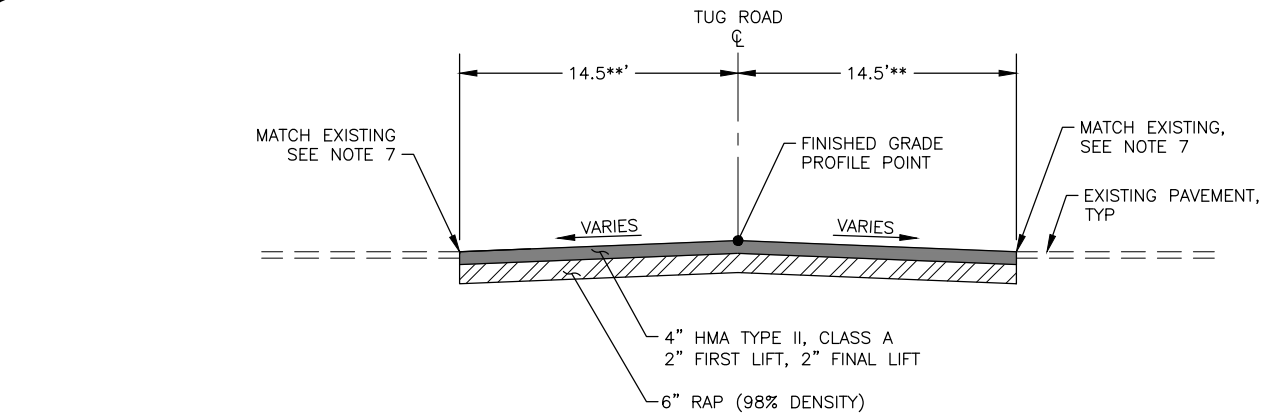
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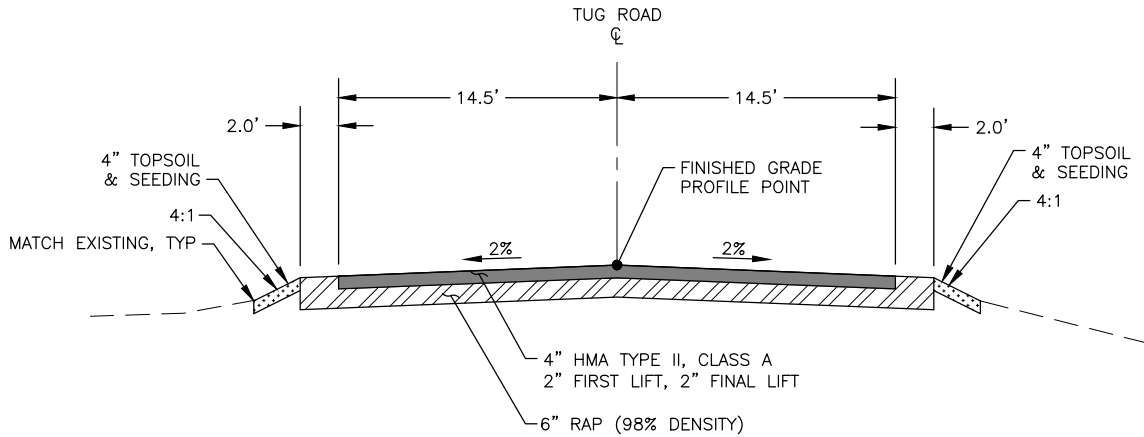
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
DEMOLITION PLAN - STA 146+00 TO EOP

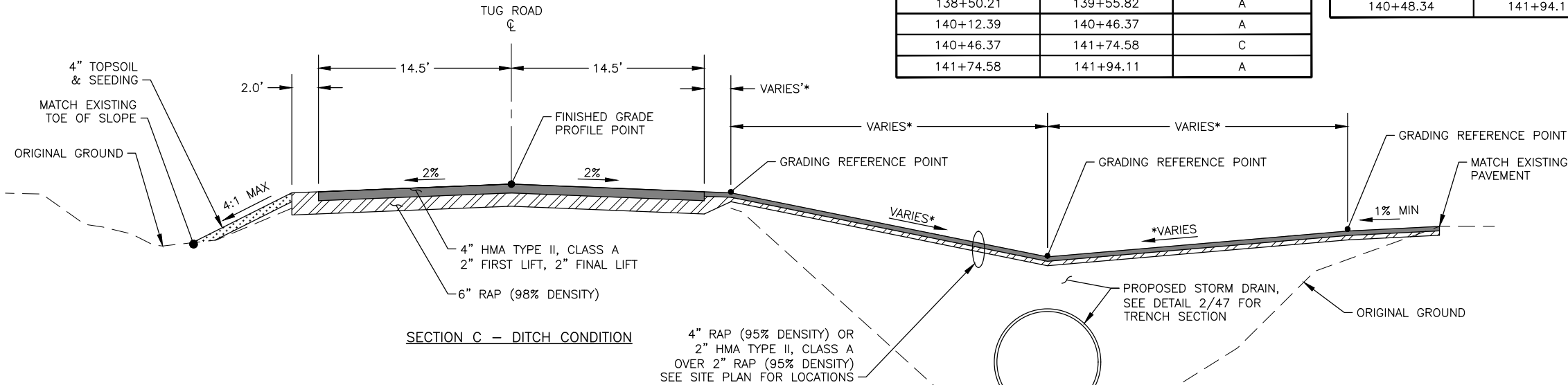
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15 OF 57



SECTION A – ADJACENT TO EXISTING APRONS OR APPROACHES



SECTION B – FILL CONDITION



SECTION C – DITCH CONDITION

4" RAP (95% DENSITY) OR
2" HMA TYPE II, CLASS A
OVER 2" RAP (95% DENSITY)
SEE SITE PLAN FOR LOCATIONS

TYPICAL SECTION SUMMARY – LEFT		
FROM STA.	TO STA.	SECTION
BOP	101+52.58	A
102+28.17	104+73.88	A
104+73.88	105+17.97	B
105+17.97	107+96.06	C
107+96.06	108+09.44	A
108+64.93	108+99.62	A
108+99.62	109+66.78	B
109+66.78	111+37.18	A
112+48.73	113+54.33	A
114+65.68	115+75.55	A
116+86.30	117+49.69	C
117+49.69	117+98.82	A
117+98.82	118+56.27	A
118+56.27	119+14.59	C
119+14.59	120+31.88	A
120+31.88	124+02.51	C
124+02.51	126+03.22	A
126+03.22	127+66.64	C
127+66.64	128+04.91	A
128+61.26	128+93.26	A
128+93.26	130+00.06	C
130+00.06	130+44.29	A
131+00.65	131+36.49	A
131+36.49	134+36.19	C
134+36.19	134+98.82	A
134+98.82	135+67.63	B
135+67.63	136+03.75	A
136+60.50	137+20.96	A
137+20.96	138+50.21	C
138+50.21	139+55.82	A
140+12.39	140+46.37	A
140+46.37	141+74.58	C
141+74.58	141+94.11	A

TYPICAL SECTION SUMMARY – RIGHT		
FROM STA.	TO STA.	SECTION
BOP	101+52.58	A
102+28.17	102+97.97	A
102+97.97	107+78.17	B
107+78.17	108+09.44	A
108+64.93	109+34.85	A
109+34.85	110+47.53	C
110+47.53	111+37.18	A
112+48.73	113+54.33	B
114+65.68	115+75.55	B
116+86.30	117+38.23	A
117+38.23	119+13.46	C
119+13.46	119+44.19	A
120+00.75	120+32.31	A
120+32.31	124+83.29	C
124+83.29	125+12.73	A
125+69.31	126+03.11	A
126+03.11	127+72.92	C
127+72.92	128+04.91	A
128+61.26	129+05.02	A
129+05.02	130+05.75	C
130+05.75	130+44.29	A
131+00.65	131+35.56	A
131+35.56	135+81.77	C
135+81.77	136+03.75	A
136+60.50	136+90.25	A
136+90.25	137+10.32	B
137+10.32	139+25.50	C
139+25.50	139+55.82	A
140+12.39	140+48.34	A
140+48.34	141+94.11	C

- TYPICAL SECTION SUMMARY NOTES:**
1. TYPICAL SECTION RANGES ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
 2. TRANSITION FROM 2% CROWNED CROSS SLOPE TO MATCH EXISTING OVER 25- FEET.
 3. SEE SHEET 17 FOR TUG ROAD SECTIONS BEYOND STA. 141+94.11

- NOTES:**
1. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATIVE METHOD APPROVED BY THE ENGINEER.
 2. APPLY JOINT ADHESIVE ON ALL COLD JOINTS.
 3. STE-1 TACK COAT REQUIRED ON ALL MILLED SURFACES, BETWEEN ALL PAVEMENT LIFTS, AND ON ALL TRANSVERSE JOINTS. APPLY TACK COAT BETWEEN ALL PCC SURFACES AND NEW ASPHALT.
 4. DENSITY CALLOUTS IN THE TYPICAL SECTIONS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.
 5. EXCAVATIONS SHALL BE MAINTAINED TO BE WELL DRAINED AT ALL TIMES. DO NOT ALLOW SURFACE WATER TO COLLECT AND SATURATE THE SUBGRADE (SEE SPECIFICATION SUBSECTION P-152-3.2). SURFACE RUNOFF COLLECTED IN EXCAVATIONS SHALL BE REMOVED IMMEDIATELY BY PUMPING OR OTHER ACCEPTABLE MANNER.
 6. SCARIFY AND COMPACT SUBGRADE BELOW THE STRUCTURAL SECTION TO A DEPTH OF 6" @ 95% DENSITY.
 7. IN PREPARATION FOR AND IMMEDIATELY PRIOR TO PAVING, CONTRACTOR SHALL SAW CUT AND REMOVE AN ADDITIONAL 12" FROM EXISTING PAVEMENT EDGE. THE ENGINEER MAY REQUIRE MORE THAN 12" ADDITIONAL CUT IF THE EXISTING PAVEMENT HAS BEEN LIFTED IN THE REMOVAL PROCESS.

1
16

TUG ROAD RECONSTRUCTION

SCALE: NTS

- * DIMENSIONS/SLOPE VARY, SEE SITE PLAN AND GRADING SHEETS.
** WIDTH VARIES FROM STA. 100+24.59 TO STA. 101+52.58 SEE SHEET 25

LEGEND:

- HMA TYPE II, CLASS A
RAP
TOPSOIL & SEEDING



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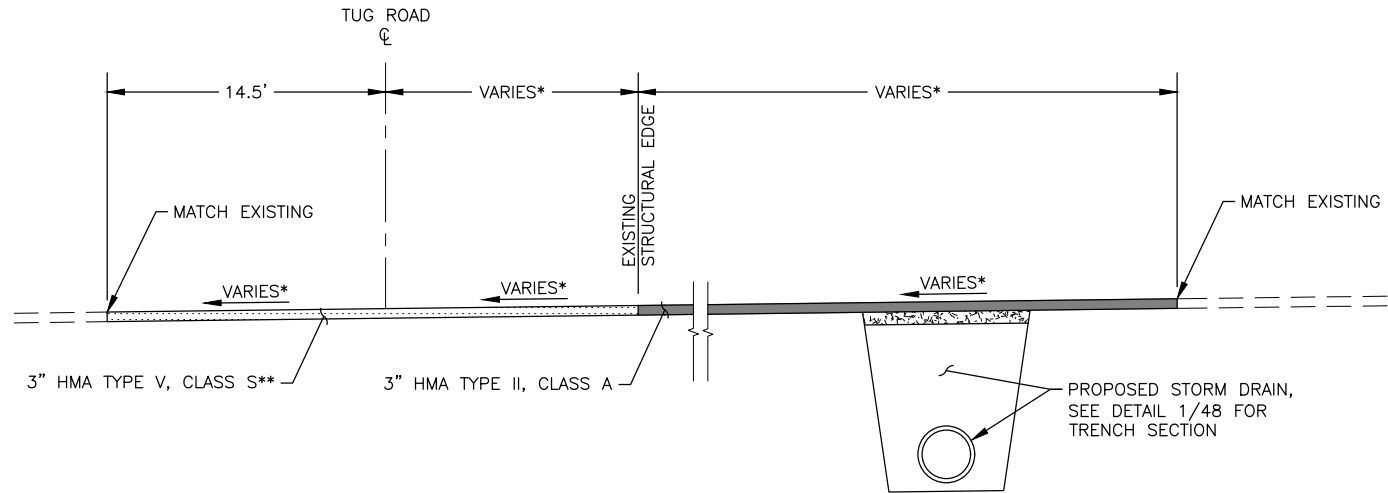
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
TYPICAL SECTIONS

DATE:
SEPTEMBER 2025
SHEET:
16 OF 57

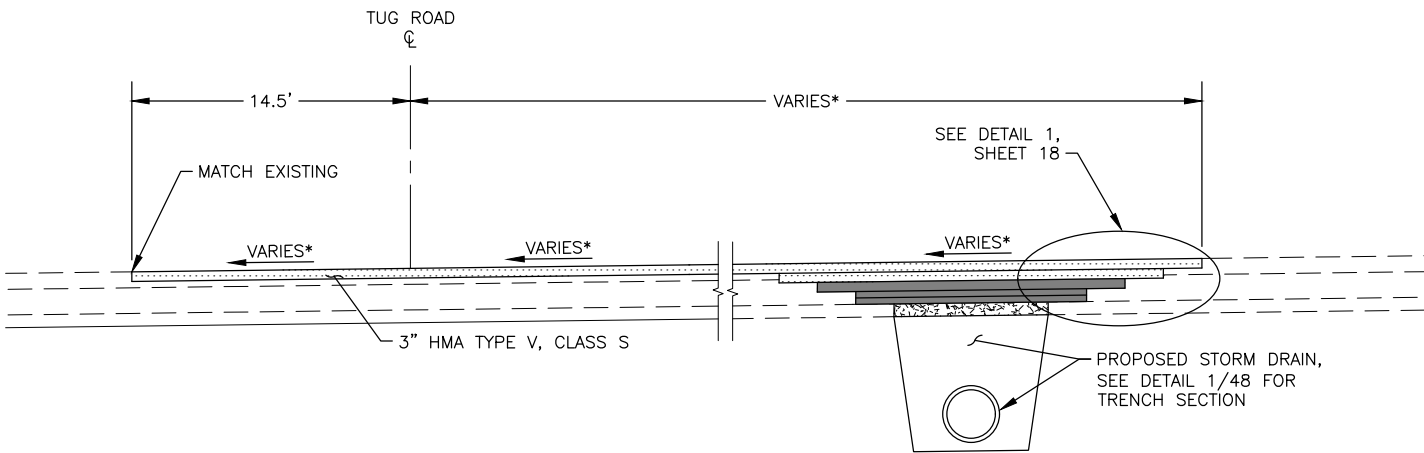
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Drawn By: SS
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17

TUG ROAD OVERLAY IN SHOULDER PAVEMENT

STA 141+94.11 TO STA 143+07.07
STA 148+76.78 TO STA 149+48.77
** INSTALL 3" HMA TYPE II, CLASS A FROM STA 148+76.78 TO STA 149+48.77



2
17

TUG ROAD OVERLAY IN STRUCTURAL PAVEMENT

STA 143+07.07 TO STA 148+76.78

LEGEND:

	HMA TYPE II, CLASS A		CABC
	HMA TYPE V, CLASS S		SUBBASE
	RAP		TOPSOIL & SEEDING

* DIMENSIONS/SLOPE VARY, SEE SITE PLAN AND GRADING SHEETS.

NOTES:

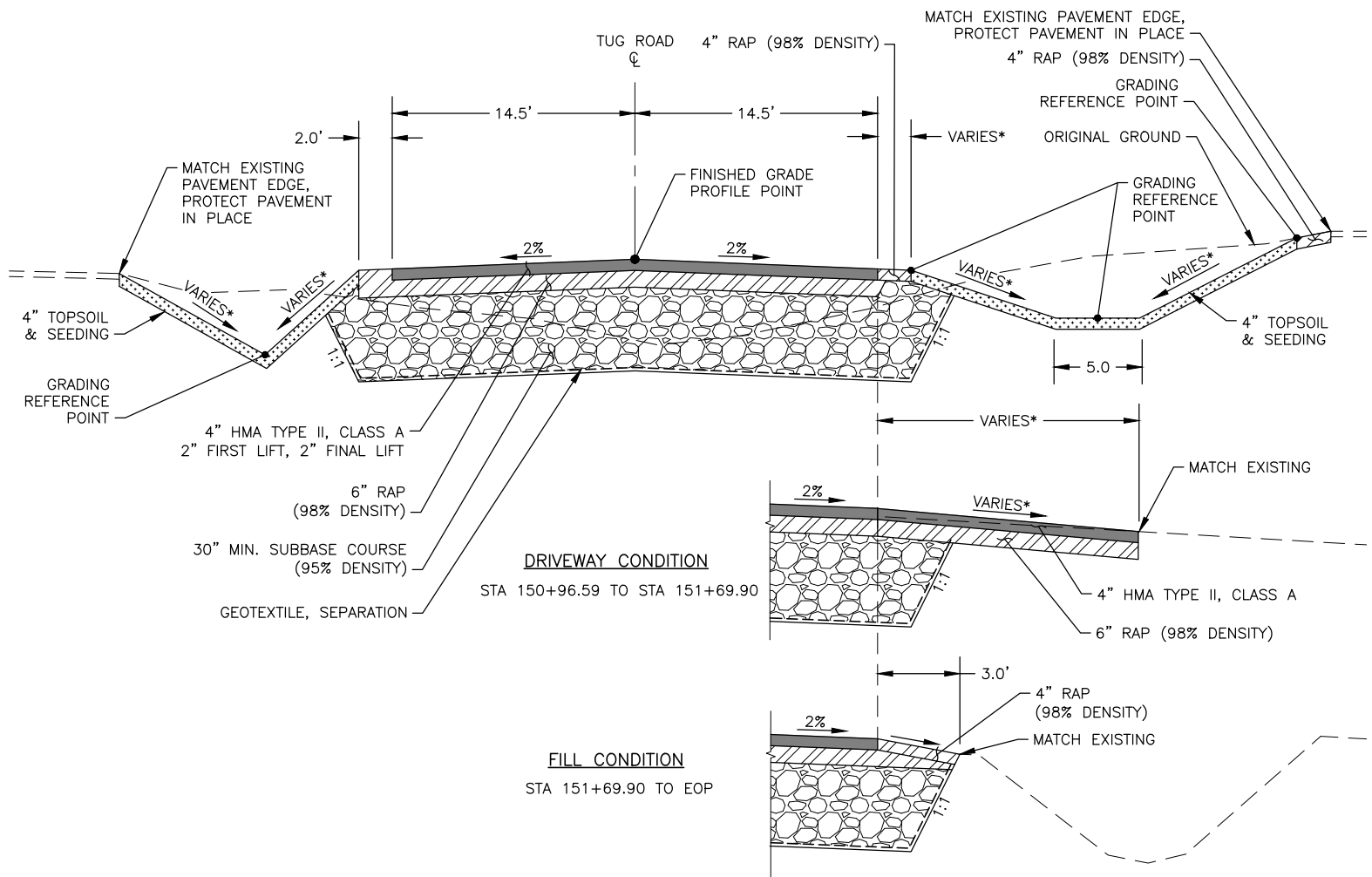
- ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATIVE METHOD APPROVED BY THE ENGINEER.
- APPLY JOINT ADHESIVE ON ALL COLD JOINTS.
- STE-1 TACK COAT REQUIRED ON ALL MILLED SURFACES, BETWEEN ALL PAVEMENT LIFTS, AND ON ALL TRANSVERSE JOINTS.
- DENSITY CALLOUTS IN THE TYPICAL SECTIONS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.
- EXCAVATIONS SHALL BE MAINTAINED TO BE WELL DRAINED AT ALL TIMES. DO NOT ALLOW SURFACE WATER TO COLLECT AND SATURATE THE SUBGRADE (SEE SPECIFICATION SUBSECTION P-152-3.2). SURFACE RUNOFF COLLECTED IN EXCAVATIONS SHALL BE REMOVED IMMEDIATELY BY PUMPING OR OTHER ACCEPTABLE MANNER.



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3
17



TUG ROAD RECONSTRUCTION

STA 149+48.77 TO EOP

4
17

APPROACH OVERLAY

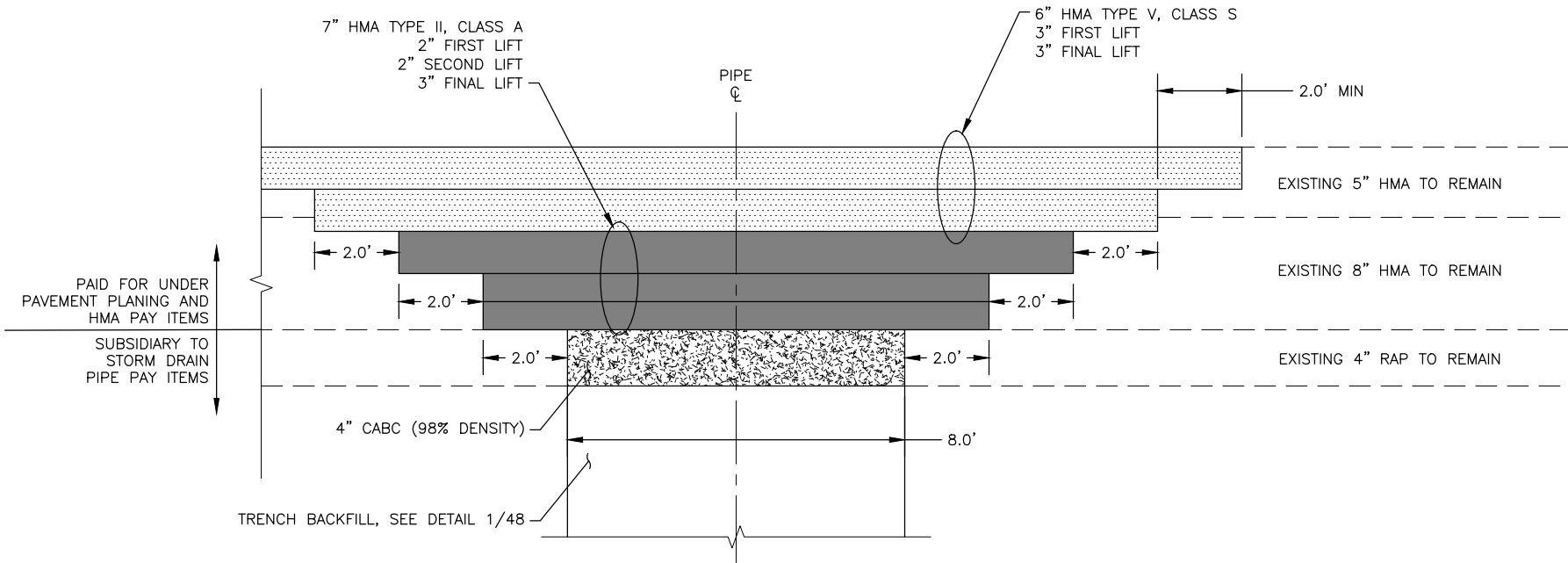
SEE SITE PLAN FOR LOCATIONS

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AIP No. 3-02-0016-XXX-2026
TYPICAL SECTIONS

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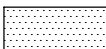
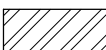
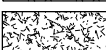


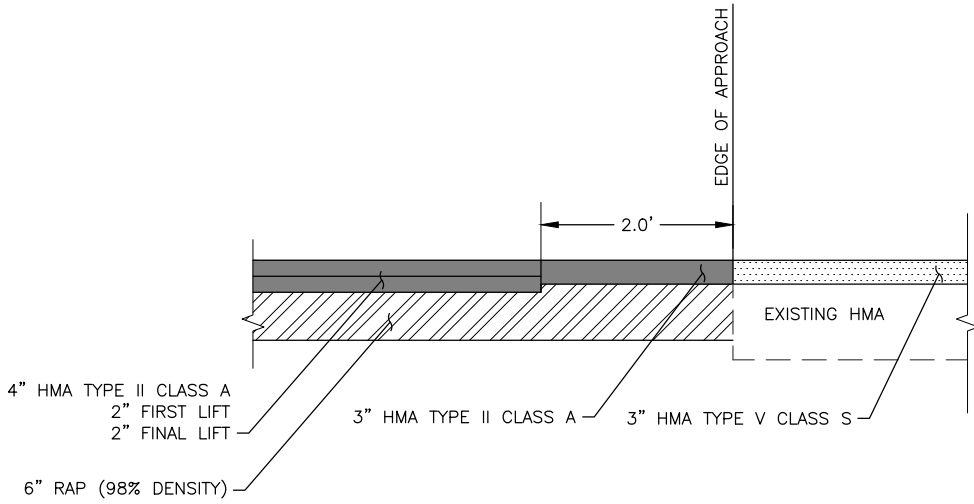
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18

STORM DRAIN IN EXISTING ASPHALT DEMOLITION & BACKFILL DETAIL

LEGEND:

-  HMA TYPE II, CLASS A
-  HMA TYPE V, CLASS S
-  RAP
-  SUBBASE
-  CABC



2

18

HMA TRANSITION DETAIL

* DIMENSIONS/SLOPE VARY, SEE SITE PLAN AND GRADING SHEETS.

NOTES:

1. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATIVE METHOD APPROVED BY THE ENGINEER.
2. APPLY JOINT ADHESIVE ON ALL COLD JOINTS.
3. STE-1 TACK COAT REQUIRED ON ALL MILLED SURFACES, BETWEEN ALL PAVEMENT LIFTS, AND ON ALL TRANSVERSE JOINTS.
4. DENSITY CALLOUTS IN THE TYPICAL SECTIONS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.
5. EXCAVATIONS SHALL BE MAINTAINED TO BE WELL DRAINED AT ALL TIMES. DO NOT ALLOW SURFACE WATER TO COLLECT AND SATURATE THE SUBGRADE (SEE SPECIFICATION SUBSECTION P-152-3.2). SURFACE RUNOFF COLLECTED IN EXCAVATIONS SHALL BE REMOVED IMMEDIATELY BY PUMPING OR OTHER ACCEPTABLE MANNER.



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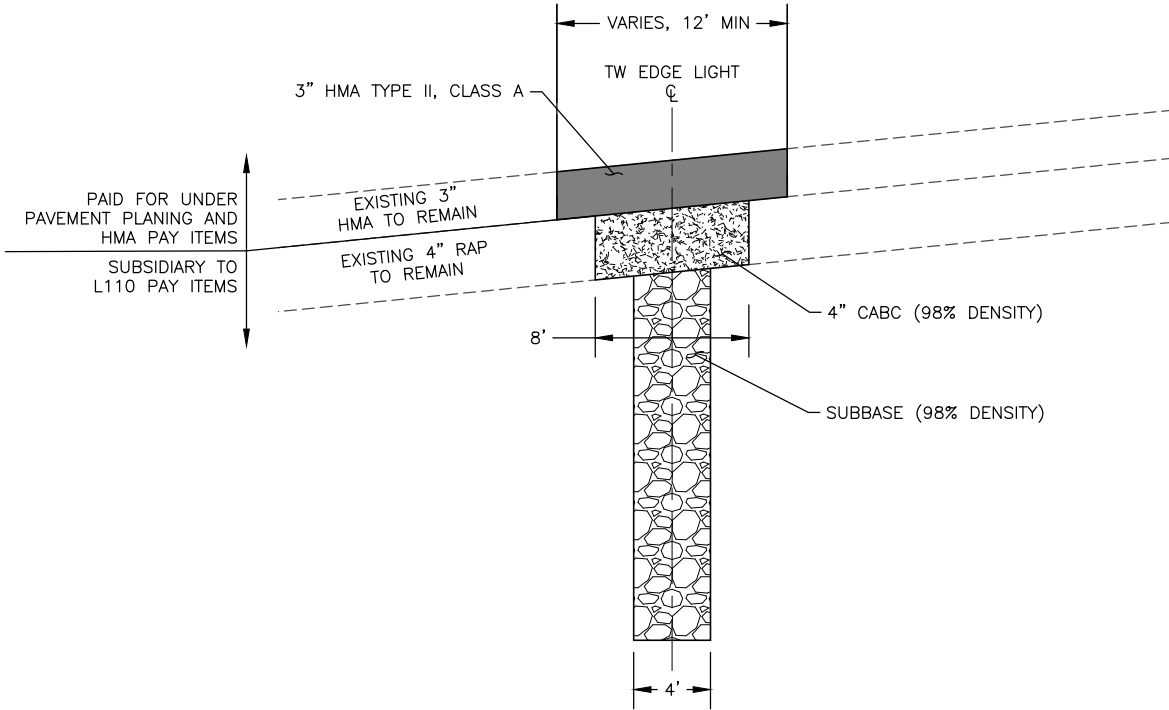
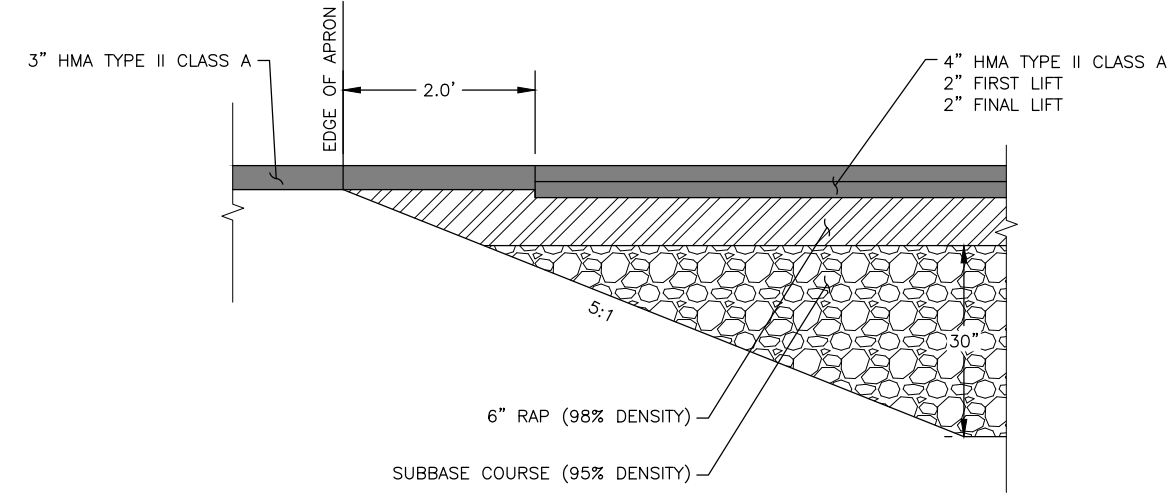
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18

ELEVATED TAXIWAY EDGE LIGHT DEMOLITION BACKFILL DETAIL

SCALE: NTS



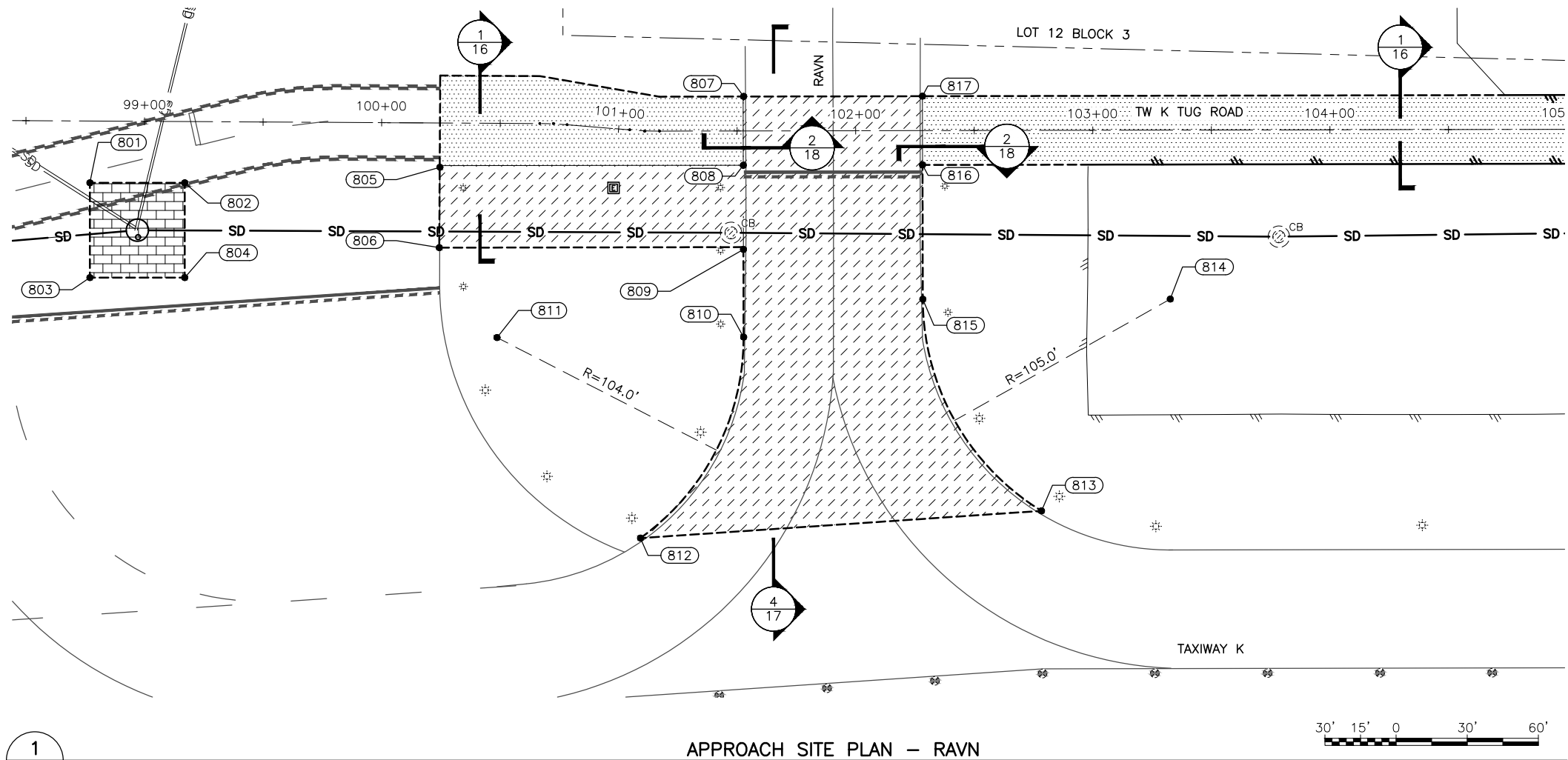
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TYPICAL SECTIONS

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SITE PLAN POINTS		
POINT #	STATION	OFFSET
801	98+77.10	26.07 RT
802	99+17.10	25.84 RT
803	98+77.32	66.07 RT
804	99+17.32	65.84 RT
805	100+24.66	18.69 RT
806	100+24.58	52.61 RT
807	101+52.79	14.56 LT
808	101+52.58	14.50 RT
809	101+52.58	50.00 RT
810	101+52.58	86.95 RT

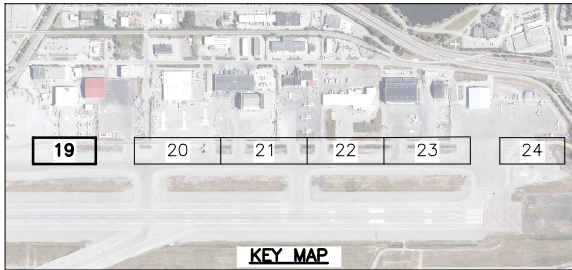
SITE PLAN POINTS		
POINT #	STATION	OFFSET
811	100+49.13	90.38 RT
812	101+13.37	171.77 RT
813	102+78.06	160.50 RT
814	103+32.52	71.28 RT
815	102+28.17	71.13 RT
816	102+28.17	14.50 RT
817	102+28.17	14.50 LT

LEGEND

- TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
- APPROACH OVERLAY:
3" HMA TYPE V, CLASS S
- SD TRENCH SECTION:
5" HMA TYPE V, CLASS S
5" HMA TYPE II, CLASS A
4" CABG
TRENCH BACKFILL
- SAW CUT LIMITS (SEE NOTE 8)

NOTES:

- SEE SHEETS 9-15 FOR DEMOLITION PLAN.
- SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25-31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 32-37 FOR GRADING PLAN.
- SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
- SAW CUT LIMITS ARE INTENDED TO EXTEND 1-FOOT BEYOND EXISTING PAVEMENT JOINTS. ADJUST LIMITS AS NECESSARY WITH THE APPROVAL OF THE ENGINEER.



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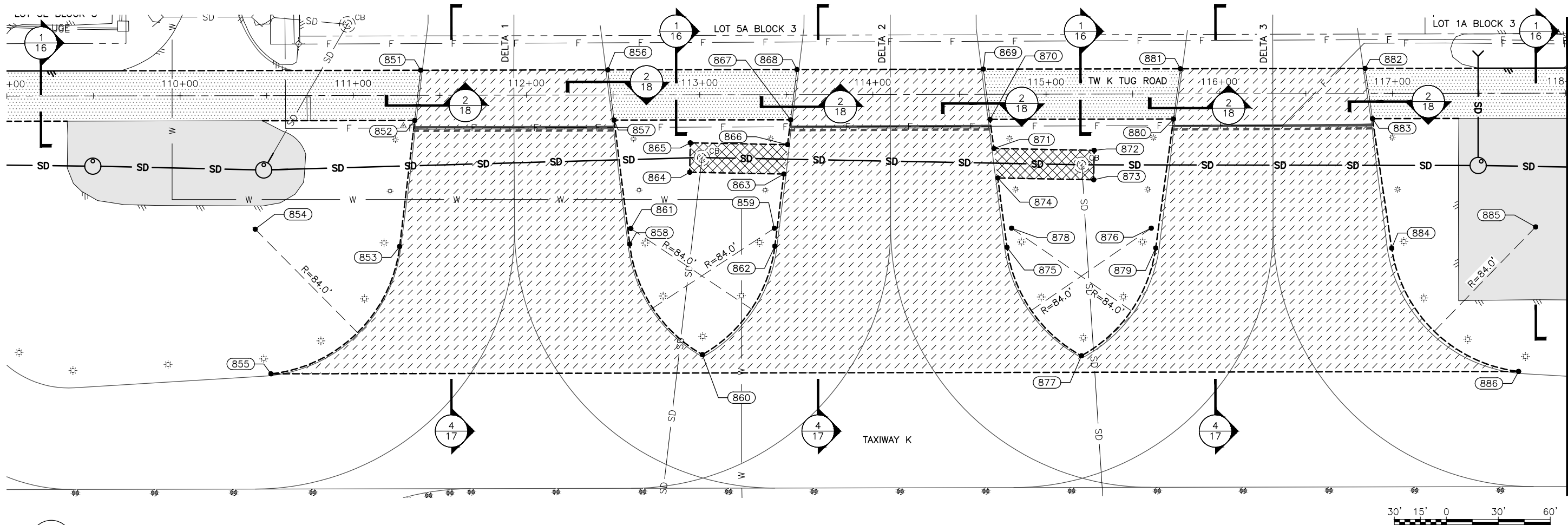
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PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
APPROACH SITE PLAN - RAVN

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20
APPROACH SITE PLAN – DELTA 1 TO DELTA 3

SITE PLAN POINTS		
POINT #	STATION	OFFSET
851	111+38.94	14.50 LT
852	111+35.42	14.50 RT
853	111+26.61	87.21 RT
854	110+43.22	77.11 RT
855	110+52.18	160.63 RT
856	112+46.92	14.50 LT
857	112+50.53	14.50 RT
858	112+59.44	86.13 RT
859	113+42.93	77.12 RT
860	113+01.25	150.03 RT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
861	112+60.09	77.12 RT
862	113+43.24	87.48 RT
863	113+48.52	45.83 RT
864	112+94.14	44.72 RT
865	112+94.49	27.72 RT
866	113+50.67	28.87 RT
867	113+52.49	14.50 RT
868	113+56.17	14.50 LT
869	114+63.78	14.50 LT
870	114+67.58	14.50 RT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
871	114+69.78	31.30 RT
872	115+27.72	32.48 RT
873	115+27.37	49.48 RT
874	114+72.01	48.35 RT
875	114+77.26	88.40 RT
876	115+60.55	77.49 RT
877	115+20.08	151.10 RT
878	114+79.90	77.34 RT
879	115+63.09	88.98 RT
880	115+73.52	14.50 RT

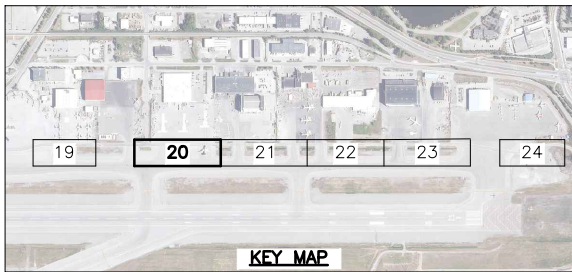
SITE PLAN POINTS		
POINT #	STATION	OFFSET
881	115+77.58	14.50 LT
882	116+84.18	14.50 LT
883	116+88.42	14.50 RT
884	116+99.34	89.35 RT
885	117+82.46	77.22 RT
886	117+72.48	160.62 RT

LEGEND

- TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
- APPROACH OVERLAY:
3" HMA TYPE V, CLASS S
- DITCH REHABILITATION:
2" HMA TYPE II, CLASS A
2" RAP
SUBBASE AS NECESSARY
- SD TRENCH SECTION:
3" HMA TYPE II, CLASS A
4" CABG
TRENCH BACKFILL
- SAW CUT LIMITS (SEE NOTE 8)

NOTES:

- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 32–37 FOR GRADING PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
- SAW CUT LIMITS ARE INTENDED TO EXTEND 1–FOOT BEYOND EXISTING PAVEMENT JOINTS. ADJUST LIMITS AS NECESSARY WITH THE APPROVAL OF THE ENGINEER.



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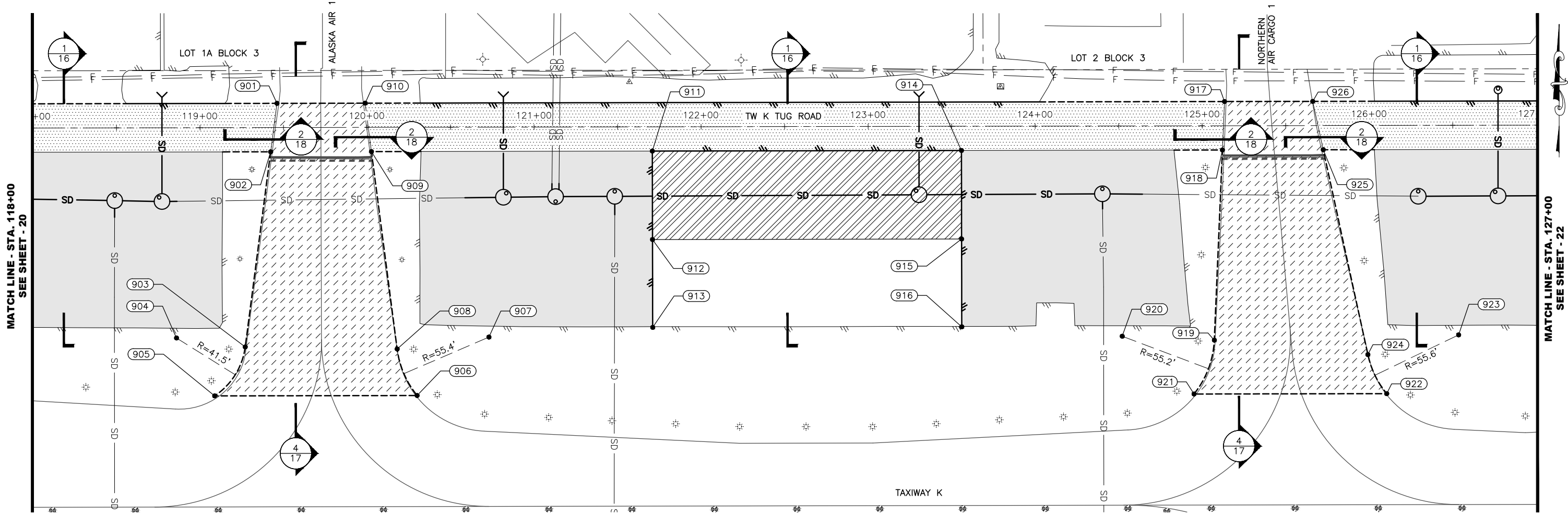
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TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
APPROACH SITE PLAN – DELTA 1 TO DELTA 3

DATE:
SEPTEMBER 2025
SHEET:
20 OF 57

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Date Revised: 9/16/2025 6:19 AM
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Designed By: RB
Drawn By: SS
Checked By: SB



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21

APPROACH SITE PLAN – ALASKA AIR 1 TO NORTHERN AIR CARGO 1

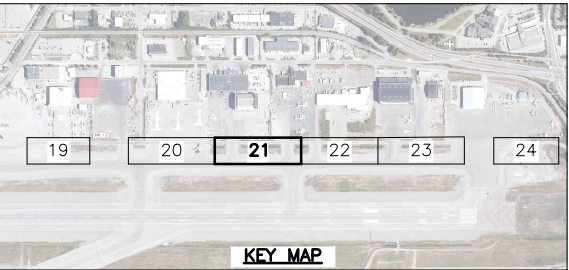
SITE PLAN POINTS		
POINT #	STATION	OFFSET
901	119+46.10	14.50 LT
902	119+42.27	14.50 RT
903	119+26.82	131.36 RT
904	118+85.68	125.92 RT
905	119+08.44	160.62 RT
906	120+29.68	160.62 RT
907	120+72.71	125.73 RT
908	120+17.76	132.77 RT
909	120+02.61	14.50 RT
910	119+98.89	14.50 LT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
911	121+70.78	14.50 RT
912	121+70.78	67.50 RT
913	121+70.78	120.12 RT
914	123+55.83	14.50 RT
915	123+55.83	67.50 RT
916	123+55.83	120.12 RT
917	125+13.38	14.50 LT
918	125+12.08	14.50 RT
919	125+07.00	128.41 RT
920	124+51.86	125.95 RT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
921	124+94.81	160.62 RT
922	126+10.15	160.62 RT
923	126+53.27	125.52 RT
924	125+98.92	137.24 RT
925	125+72.44	14.50 RT
926	125+66.18	14.50 LT

- LEGEND**
- TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
 - APPROACH OVERLAY:
3" HMA TYPE V, CLASS S
 - DITCH REHABILITATION:
2" HMA TYPE II, CLASS A
2" RAP
SUBBASE AS NECESSARY
 - DITCH REHABILITATION:
4" RAP
SUBBASE AS NECESSARY
 - SAW CUT LIMITS (SEE NOTE 8)

- NOTES:**
- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
 - SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
 - SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
 - SEE SHEETS 32–37 FOR GRADING PLAN.
 - SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
 - SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.
 - SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
 - SAW CUT LIMITS ARE INTENDED TO EXTEND 1-FOOT BEYOND EXISTING PAVEMENT JOINTS. ADJUST LIMITS AS NECESSARY WITH THE APPROVAL OF THE ENGINEER.



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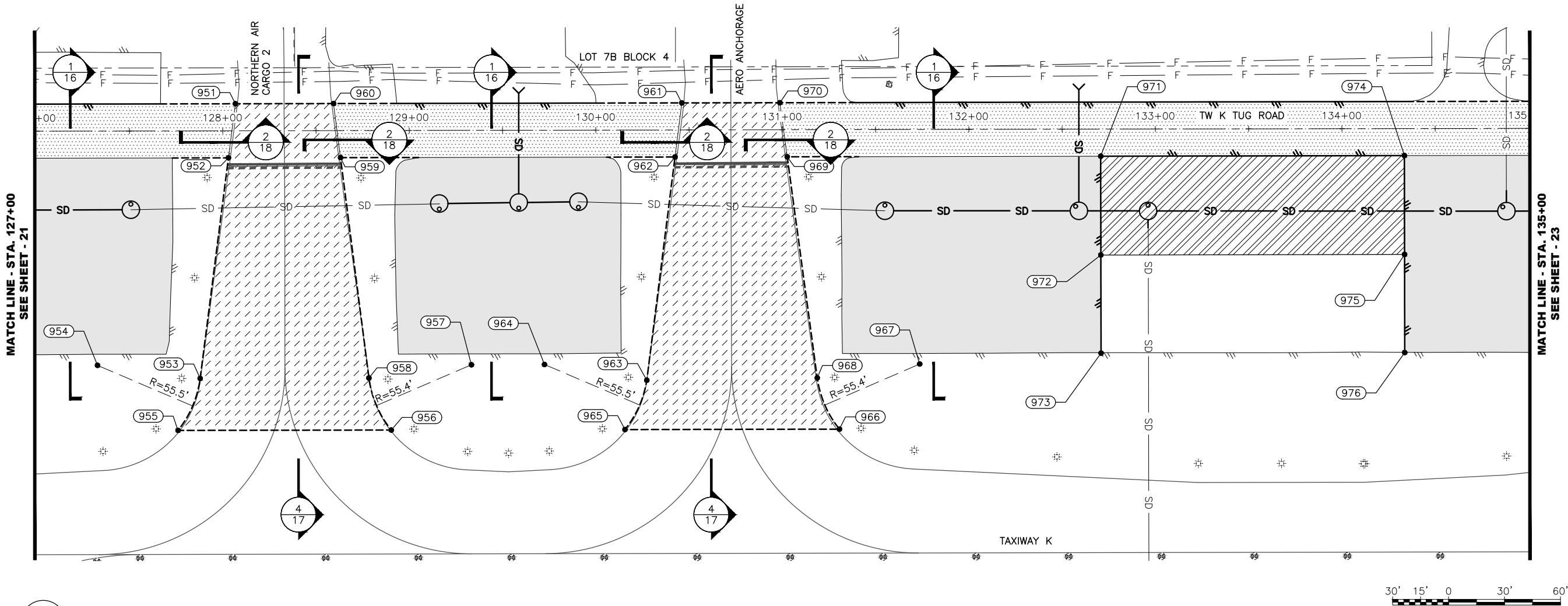
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
APPROACH SITE PLAN – ALASKA AIR 1 TO
NORTHERN AIR CARGO 1

DATE:
SEPTEMBER 2025
SHEET:
21 OF 57

9/16/2025 6:19 AM
22
Date Revised:
Layout Name:
File Path and Name: J:\JobsData\3020749 ANC TW K Tug Road Reconstruction\00 CAD 2019\01 Working Set\01 Civil\00992-ANC-Approach Site Plan.dwg

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Drawn By: SS
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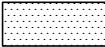
APPROACH SITE PLAN – NORTHERN AIR CARGO 2 TO AERO ANCHORAGE

SITE PLAN POINTS		
POINT #	STATION	OFFSET
951	128+06.79	14.50 LT
952	128+03.02	14.50 RT
953	127+87.64	132.80 RT
954	127+32.60	125.64 RT
955	127+75.69	160.62 RT
956	128+90.04	160.62 RT
957	129+33.07	125.72 RT
958	128+78.11	132.70 RT
959	128+63.10	14.50 RT
960	128+59.42	14.50 LT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
961	130+46.14	14.50 LT
962	130+42.43	14.50 RT
963	130+27.08	134.22 RT
964	129+72.24	125.63 RT
965	130+15.32	160.62 RT
966	131+30.32	160.62 RT
967	131+73.38	125.76 RT
968	131+18.47	133.11 RT
969	131+02.59	14.50 RT
970	130+98.71	14.50 LT

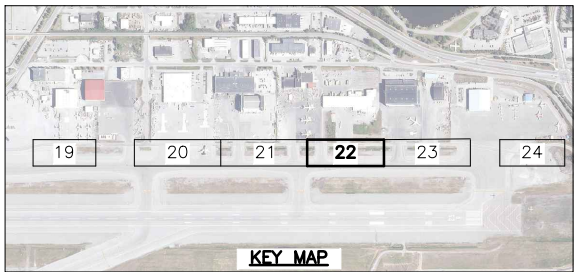
SITE PLAN POINTS		
POINT #	STATION	OFFSET
971	132+70.64	14.50 RT
972	132+70.64	67.50 RT
973	132+70.64	120.12 RT
974	134+33.46	14.50 RT
975	134+33.46	67.50 RT
976	134+33.46	120.12 RT

LEGEND

-  TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
-  APPROACH OVERLAY:
3" HMA TYPE V, CLASS S
-  DITCH REHABILITATION:
2" HMA TYPE II, CLASS A
2" RAP
SUBBASE AS NECESSARY
-  DITCH REHABILITATION:
4" RAP
SUBBASE AS NECESSARY
-  SAW CUT LIMITS (SEE NOTE 8)

NOTES:

- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 32–37 FOR GRADING PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
- SAW CUT LIMITS ARE INTENDED TO EXTEND 1–FOOT BEYOND EXISTING PAVEMENT JOINTS. ADJUST LIMITS AS NECESSARY WITH THE APPROVAL OF THE ENGINEER.



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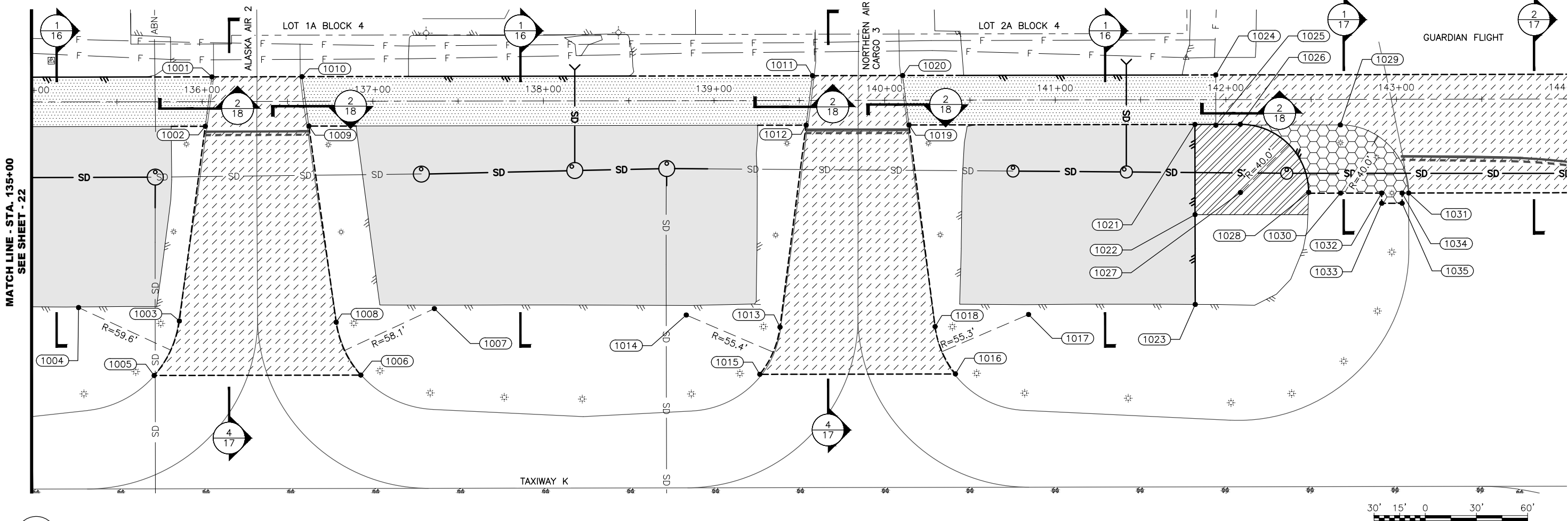
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TO AERO ANCHORAGE

DATE:
SEPTEMBER 2025
SHEET:
22 OF 57

9/16/2025 6:19 AM
23
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Layout Name: 23
File Path and Name: J:\JobsData\3020749 ANC TW K Tug Road Reconstruction\00 CAD\2019\01 Working Set\01 Civil\00992-ANC-Approach Site Plan.dwg



1
23

APPROACH SITE PLAN – ALASKA AIR 2 TO NORTHERN AIR CARGO 3



SITE PLAN POINTS		
POINT #	STATION	OFFSET
1001	136+05.71	14.50 LT
1002	136+01.79	14.50 RT
1003	135+86.34	128.67 RT
1004	135+27.28	120.68 RT
1005	135+71.53	160.62 RT
1006	136+92.66	160.62 RT
1007	137+35.82	121.72 RT
1008	136+78.26	129.61 RT
1009	136+62.49	14.50 RT
1010	136+58.51	14.50 LT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
1011	139+57.72	14.50 LT
1012	139+53.92	14.50 RT
1013	139+38.40	132.95 RT
1014	138+83.47	125.75 RT
1015	139+26.52	160.62 RT
1016	140+41.18	160.62 RT
1017	140+84.15	125.82 RT
1018	140+29.30	132.80 RT
1019	140+14.23	14.50 RT
1020	140+10.54	14.50 LT

SITE PLAN POINTS		
POINT #	STATION	OFFSET
1021	141+81.82	14.50 RT
1022	141+81.81	67.44 RT
1023	141+81.82	120.12 RT
1024	141+94.11	14.50 LT
1025	141+94.11	15.03 RT
1026	142+08.43	14.50 RT
1027	142+08.43	54.50 RT
1028	142+48.43	54.50 RT
1029	142+67.07	15.00 RT
1030	142+67.07	55.00 RT

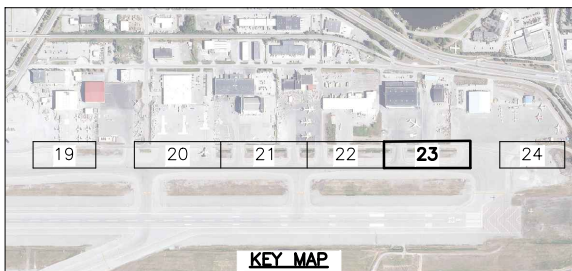
SITE PLAN POINTS		
POINT #	STATION	OFFSET
1031	143+07.07	55.00 RT
1032	142+91.21	55.00 RT
1033	142+91.21	61.00 RT
1034	143+03.21	55.00 RT
1035	143+03.21	61.00 RT

LEGEND

- TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
- APPROACH / APRON OVERLAY:
3" HMA TYPE V, CLASS S
- DITCH REHABILITATION:
2" HMA TYPE II, CLASS A
2" RAP
SUBBASE AS NECESSARY
- DITCH REHABILITATION:
4" RAP
SUBBASE AS NECESSARY
- APRON SHOULDER REHABILITATION:
3" HMA TYPE II, CLASS A
- SAW CUT LIMITS (SEE NOTE 8)

NOTES:

- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 32–37 FOR GRADING PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
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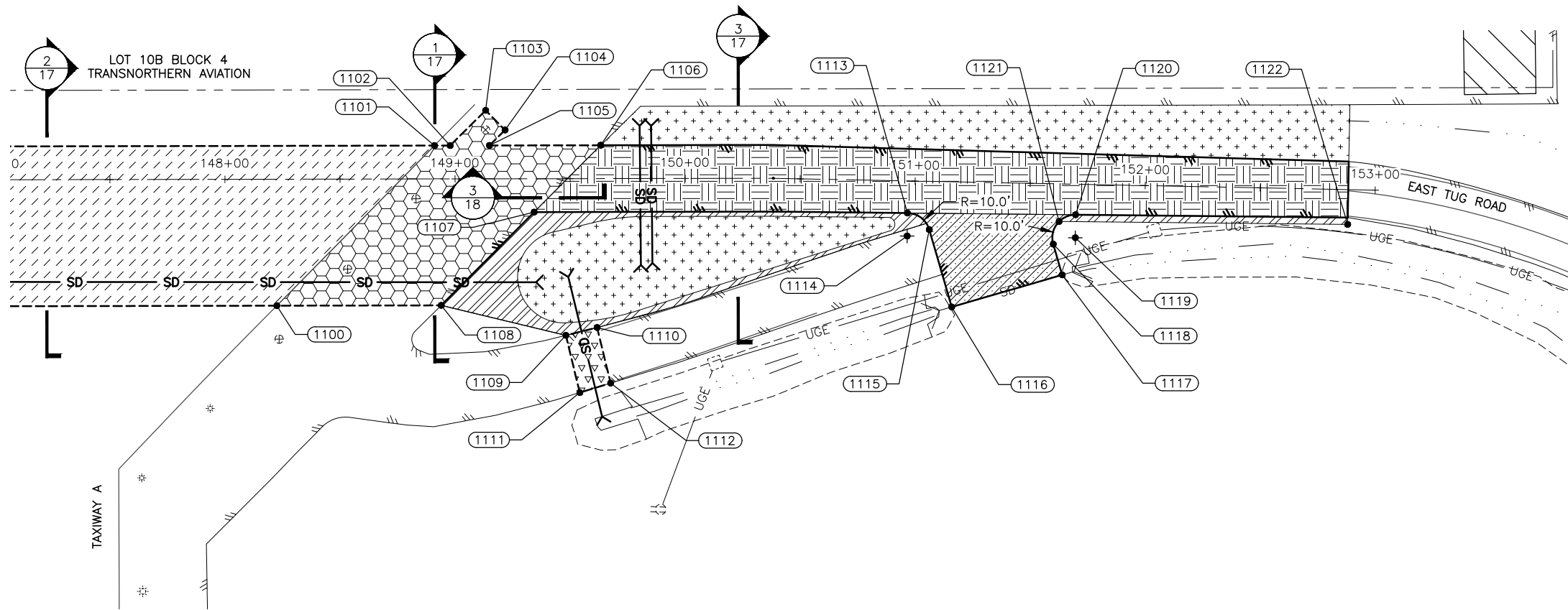
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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3–02–0016–XXX–2026
APPROACH SITE PLAN – ALASKA AIR 2 TO
NORTHERN AIR CARGO 3

DATE:
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SHEET:
23 of 57

Designed By: RB
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24

APPROACH SITE PLAN – TRANSNORTHERN TO EOP

SITE PLAN POINTS		
POINT #	STATION	OFFSET
1100	148+22.42	55.00 RT
1101	148+91.07	14.50 LT
1102	148+97.89	14.50 LT
1103	149+13.33	29.76 LT
1104	149+21.76	21.22 LT
1105	149+14.96	14.50 LT
1106	149+63.33	14.50 LT
1107	149+34.35	14.50 RT
1108	148+93.88	55.00 RT
1109	149+48.03	68.12 RT
1110	149+61.62	64.76 RT
1111	149+54.02	93.03 RT

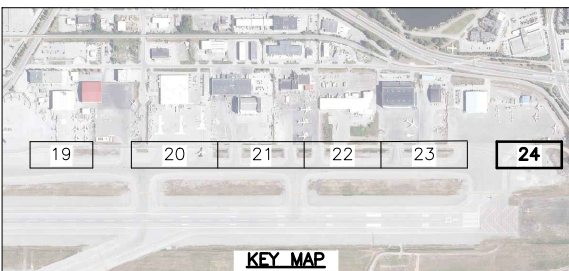
SITE PLAN POINTS		
POINT #	STATION	OFFSET
1112	149+67.44	88.94 RT
1113	150+96.89	13.96 RT
1114	150+96.99	23.96 RT
1115	151+06.53	20.98 RT
1116	151+16.95	54.41 RT
1117	151+64.69	39.54 RT
1118	151+60.55	26.25 RT
1119	151+70.09	23.28 RT
1120	151+70.00	13.28 RT
1121	151+62.89	16.34 RT
1122	152+88.30	15.18 RT

LEGEND

- APPROACH / APRON OVERLAY:
3" HMA TYPE V, CLASS S
- APRON REHABILITATION:
3" HMA TYPE II, CLASS A
- TUG ROAD SHOULDER:
4" RAP
SUBBASE AS NECESSARY
- TUG ROAD RECONSTRUCTION:
4" HMA TYPE II, CLASS A
6" RAP
30" SUBBASE COURSE
- TUG ROAD DITCH:
4" TOPSOIL & SEEDING
- MAINTENANCE DRIVEWAY:
4" HMA TYPE II, CLASS A
6" RAP
- SD TRENCH SECTION:
2" HMA TYPE II, CLASS A
6" RAP
TRENCH BACKFILL
- SAW CUT LIMITS (SEE NOTE 8)

NOTES:

- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 32–37 FOR GRADING PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
APPROACH SITE PLAN – TRANSNORTHERN TO EOP

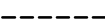
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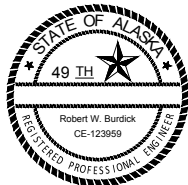
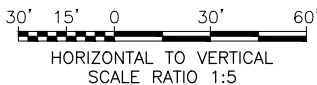
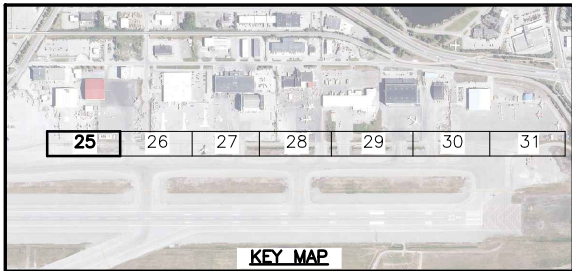
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 HMA TYPE II, CLASS A

 HMA TYPE V, CLASS S

 SAW CUT LIMITS

- NOTES:**
1. SEE SHEETS 9-15 FOR DEMOLITION PLAN.
 2. SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
 3. SEE SHEETS 19-24 FOR SITE PLAN.
 4. SEE SHEETS 32-37 FOR GRADING PLAN.
 5. SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
 6. SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
 7. SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.



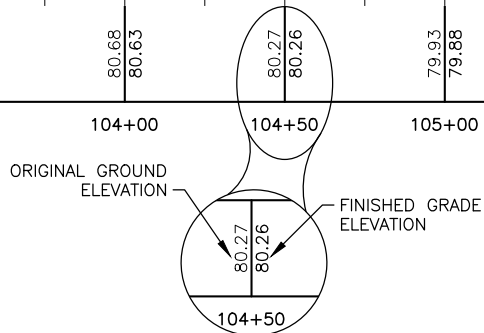
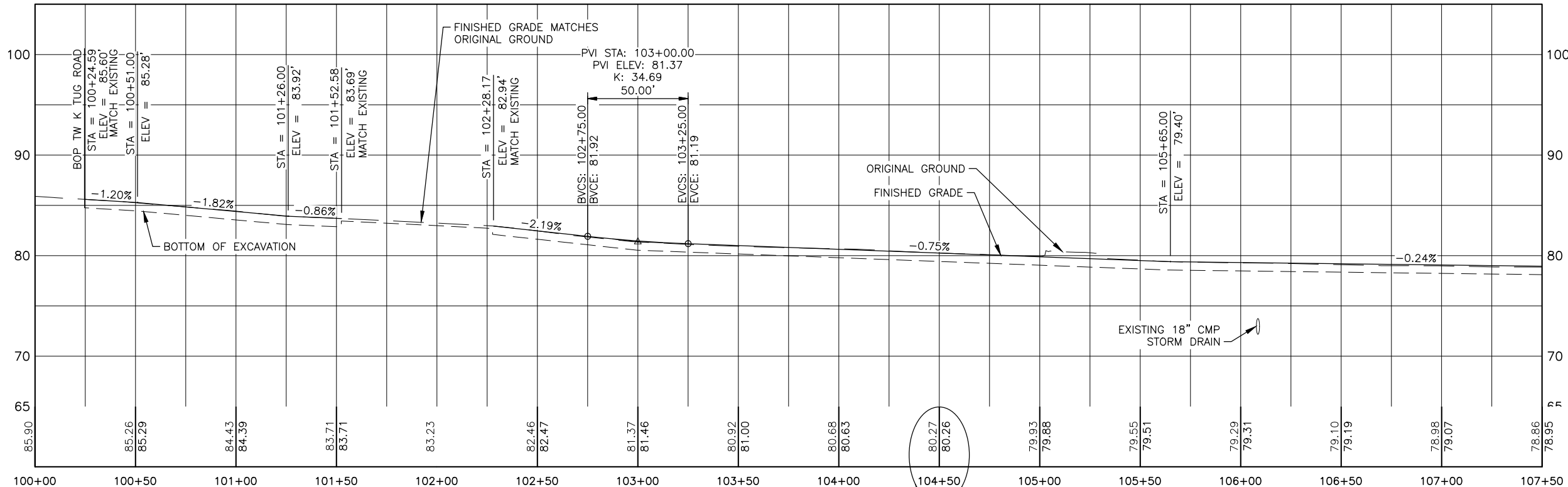
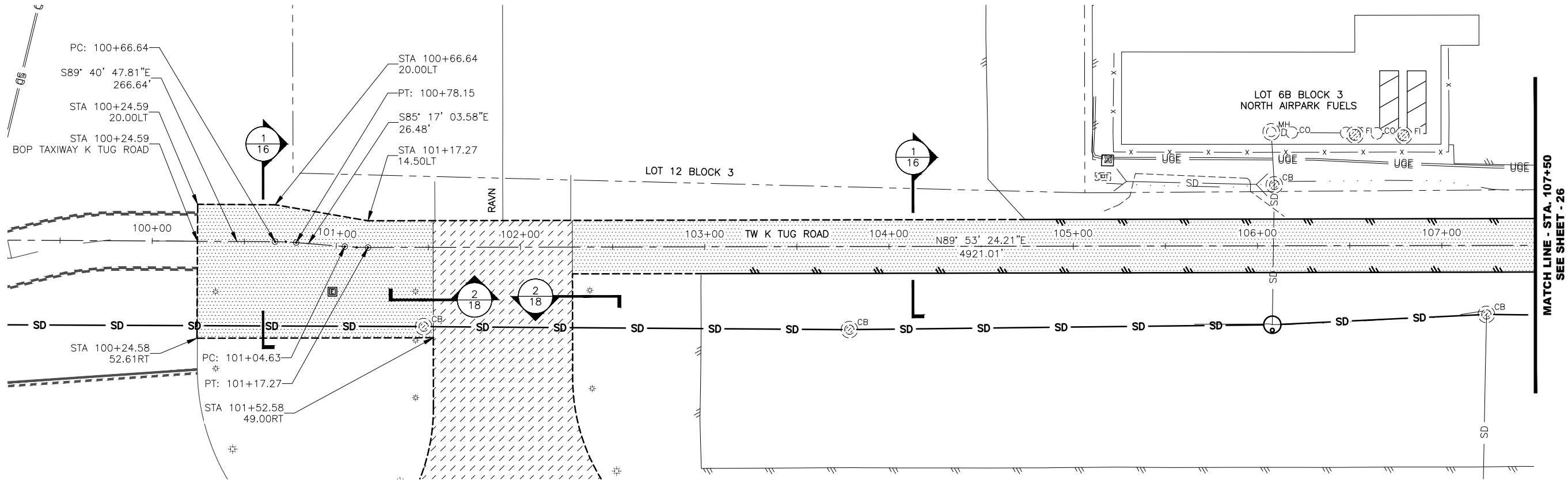
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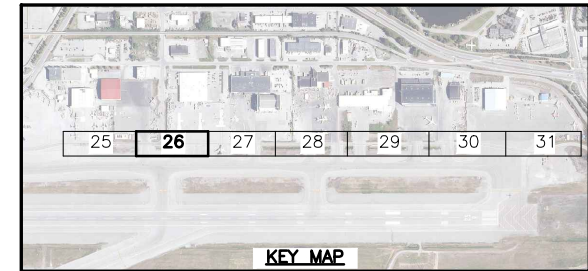
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - BOP TO STA 107+50

DATE:
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25 OF 57





KEY MAP

30' 15' 0 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 107+50 TO STA 115+00

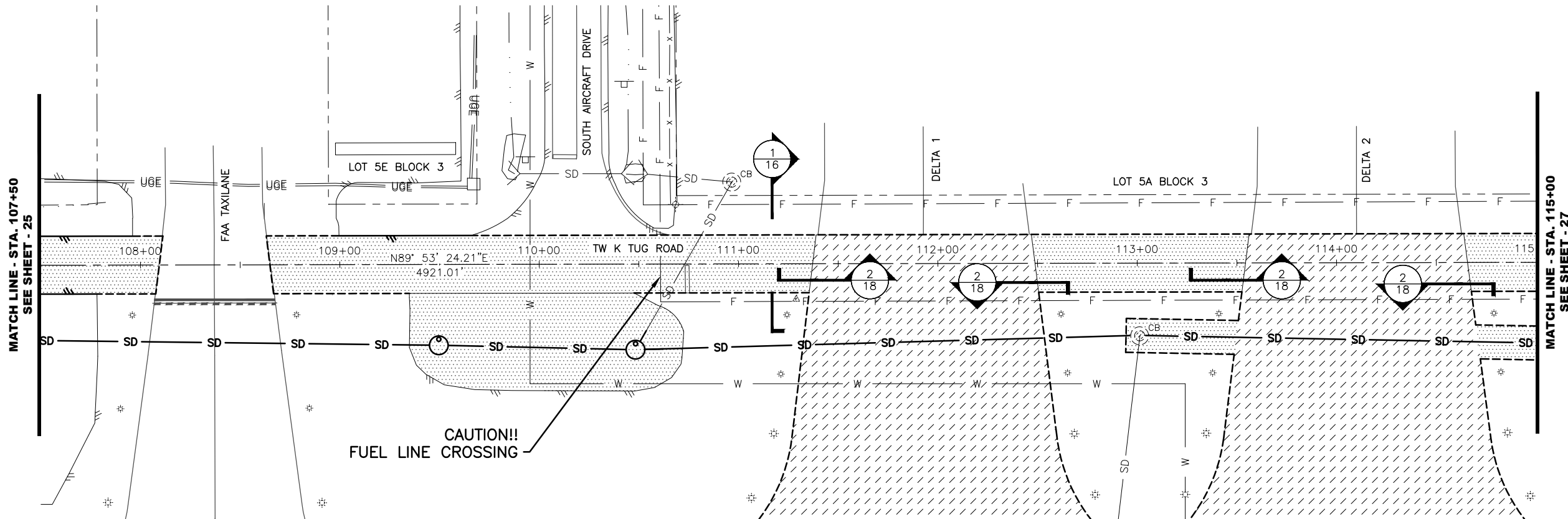
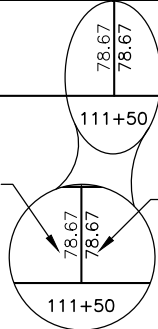
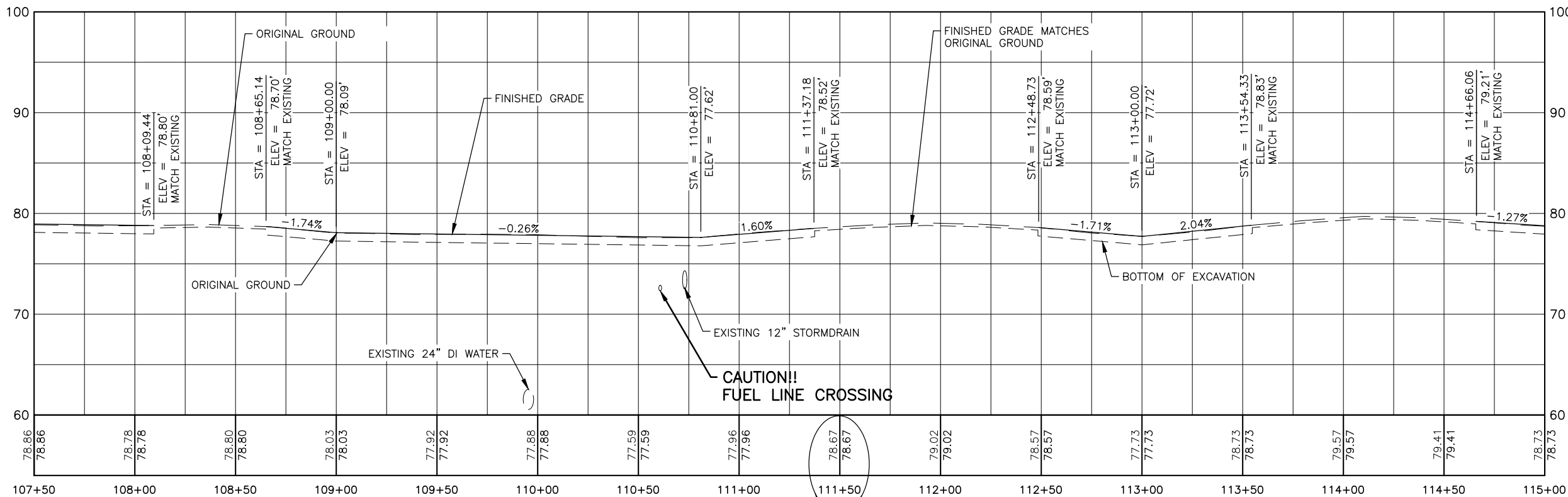
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SEPTEMBER 2025
SHEET:
26 OF 57

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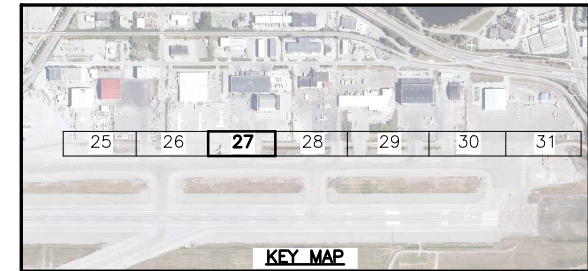
- HMA TYPE II, CLASS A
 HMA TYPE V, CLASS S
--- SAW CUT LIMITS

NOTES:

- SEE SHEETS 9-15 FOR DEMOLITION PLAN.
- SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
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- SEE SHEETS 32-37 FOR GRADING PLAN.
- SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.



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KEY MAP

30' 15' 0 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



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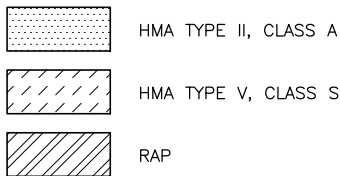
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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 115+00 TO STA 122+00

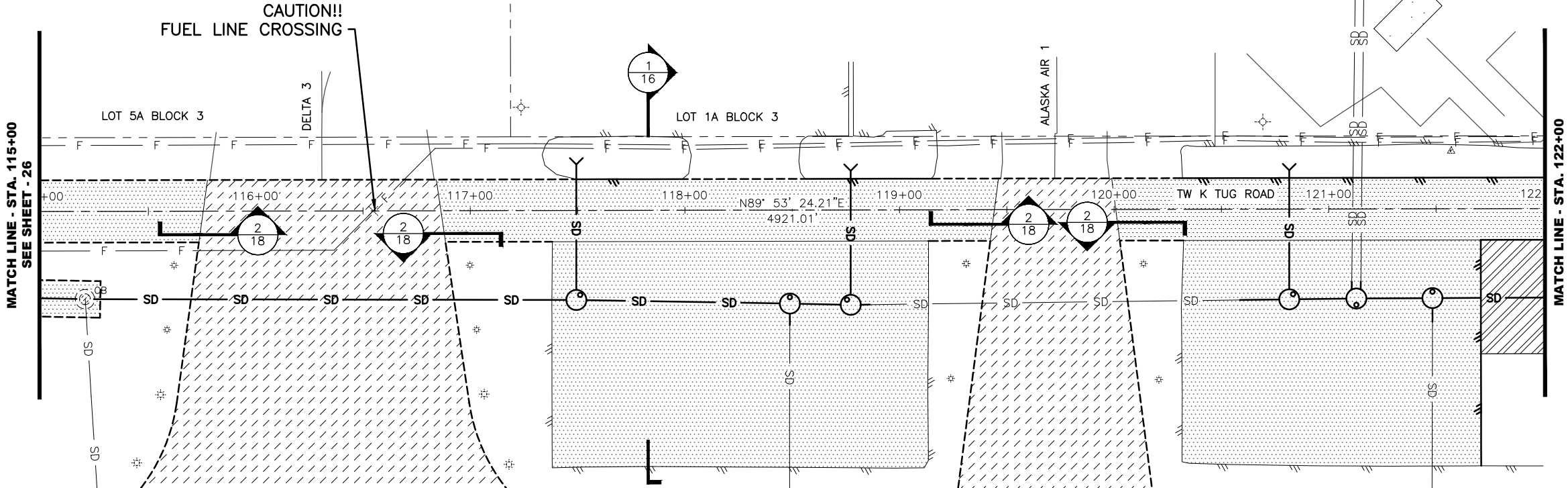
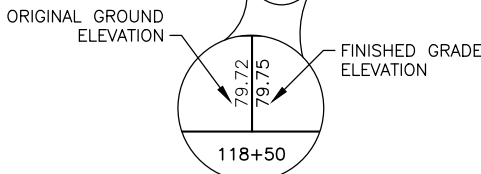
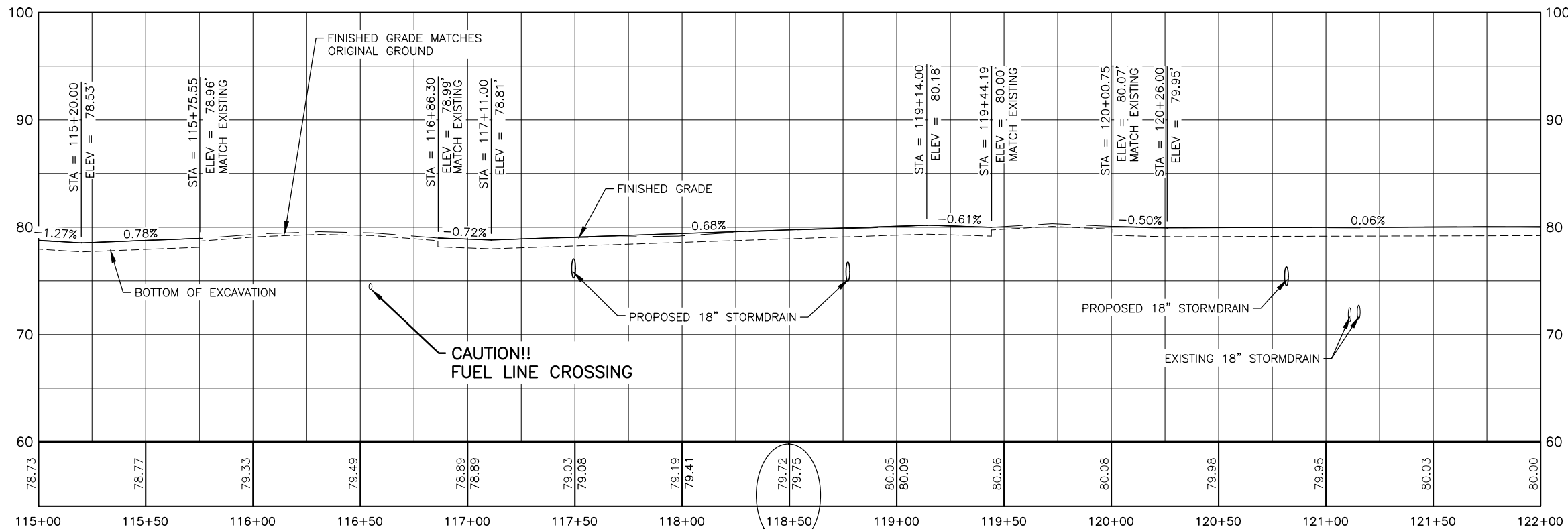
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SEPTEMBER 2025
SHEET:
27 OF 57

LEGEND



NOTES:

1. SEE SHEETS 9-15 FOR DEMOLITION PLAN.
2. SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
3. SEE SHEETS 19-24 FOR SITE PLAN.
4. SEE SHEETS 32-37 FOR GRADING PLAN.
5. SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
6. SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
7. SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.



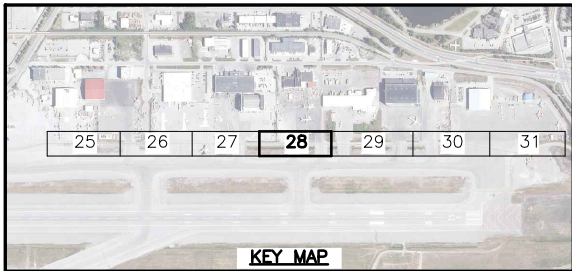
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Drawn By: SS
Checked By: SB

LEGEND

- HMA TYPE II, CLASS A
- HMA TYPE V, CLASS S
- RAP
- SAW CUT LIMITS

NOTES:

- SEE SHEETS 9-15 FOR DEMOLITION PLAN.
- SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
- SEE SHEETS 19-24 FOR SITE PLAN.
- SEE SHEETS 32-37 FOR GRADING PLAN.
- SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.



30' 15' 0 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



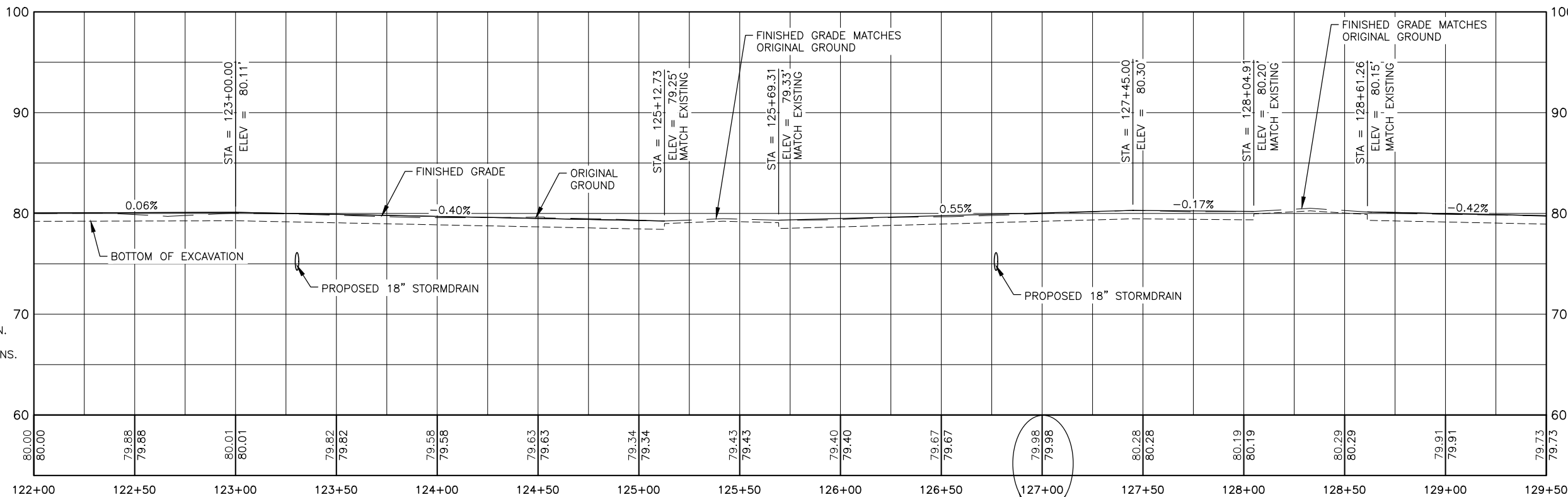
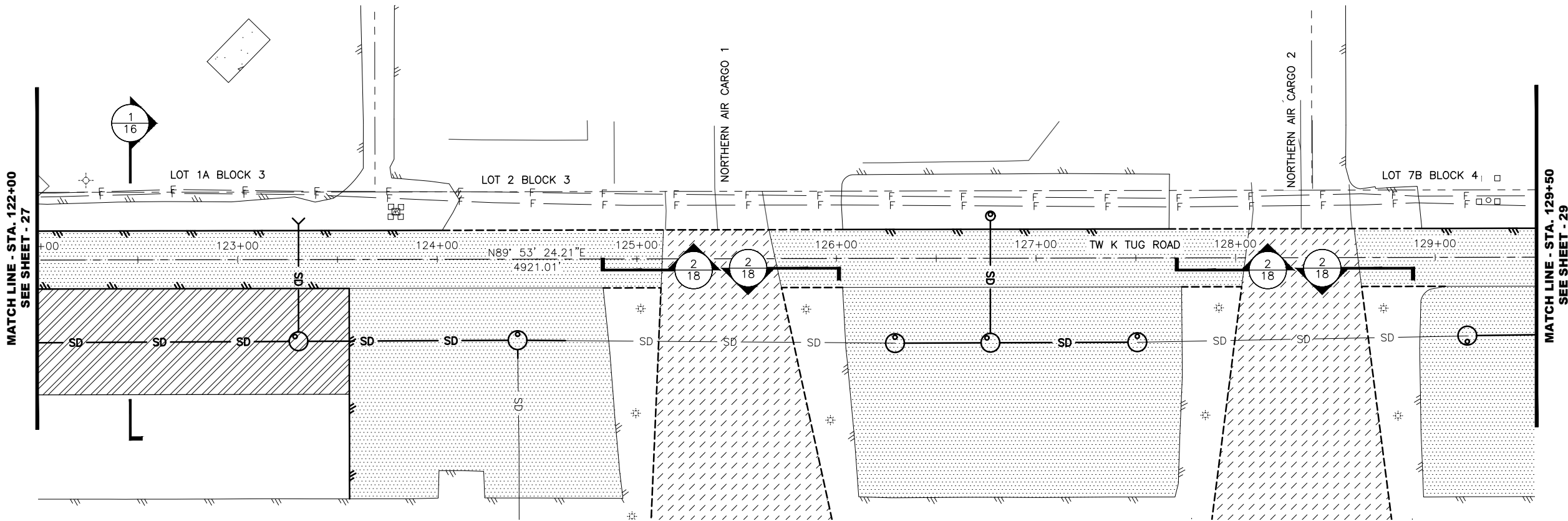
PLANS DEVELOPED BY:
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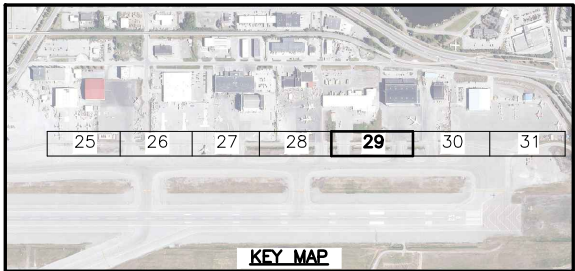
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PHONE (907) 269-0590

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ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 122+00 TO STA 129+50

DATE:
SEPTEMBER 2025
SHEET:
28 OF 57





30' 15' 0' 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



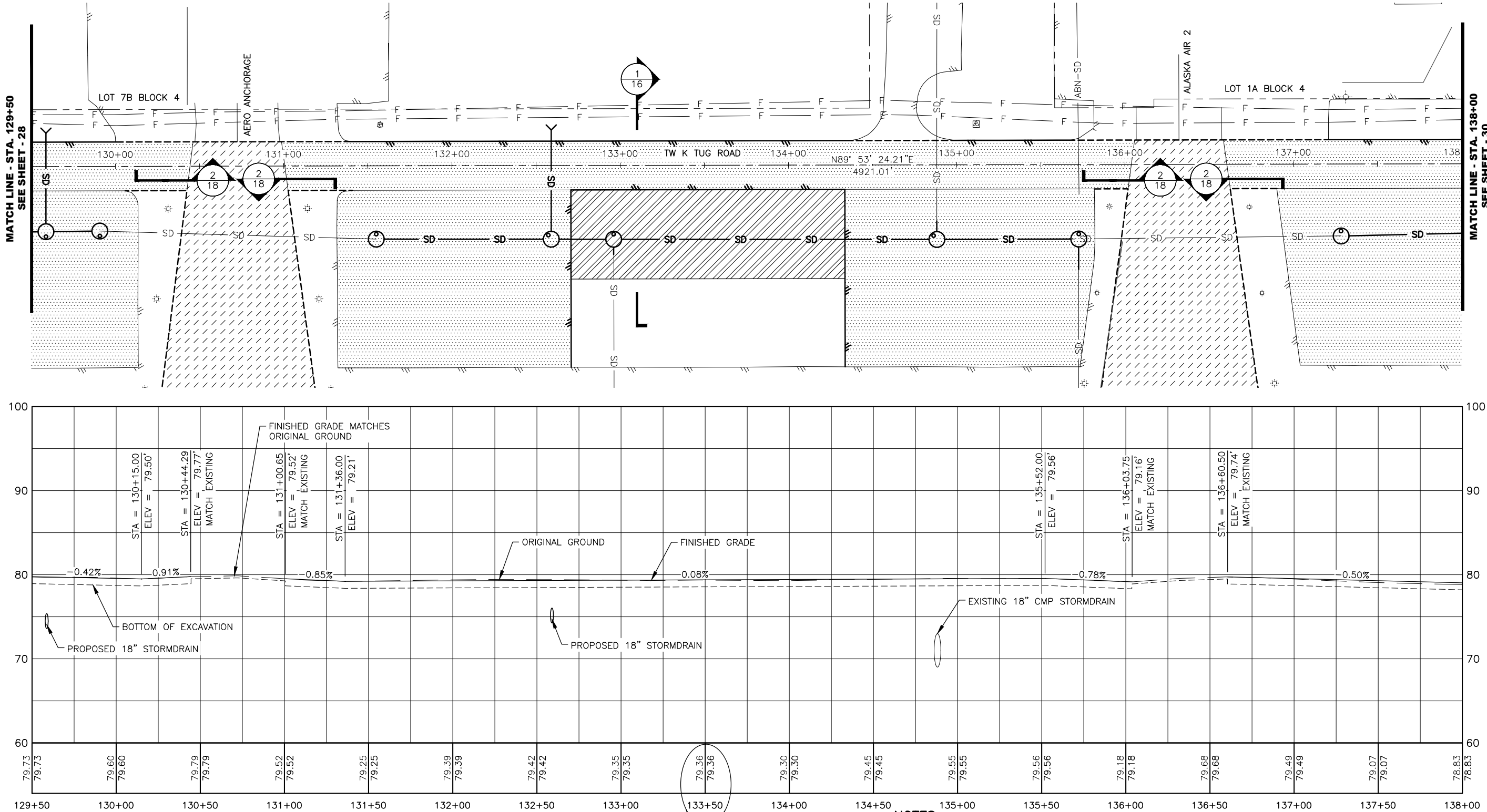
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 129+50 TO STA 138+00

DATE:
SEPTEMBER 2025
SHEET:
29 OF 57

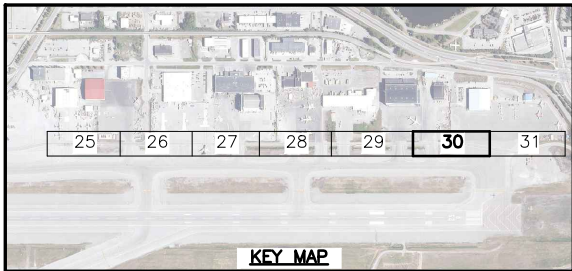


NOTES:

1. SEE SHEETS 9-15 FOR DEMOLITION PLAN.
2. SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
3. SEE SHEETS 19-24 FOR SITE PLAN.
4. SEE SHEETS 32-37 FOR GRADING PLAN.
5. SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
6. SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
7. SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.

LEGEND

- HMA TYPE II, CLASS A
- HMA TYPE V, CLASS S
- RAP
- SAW CUT LIMITS



30' 15' 0' 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



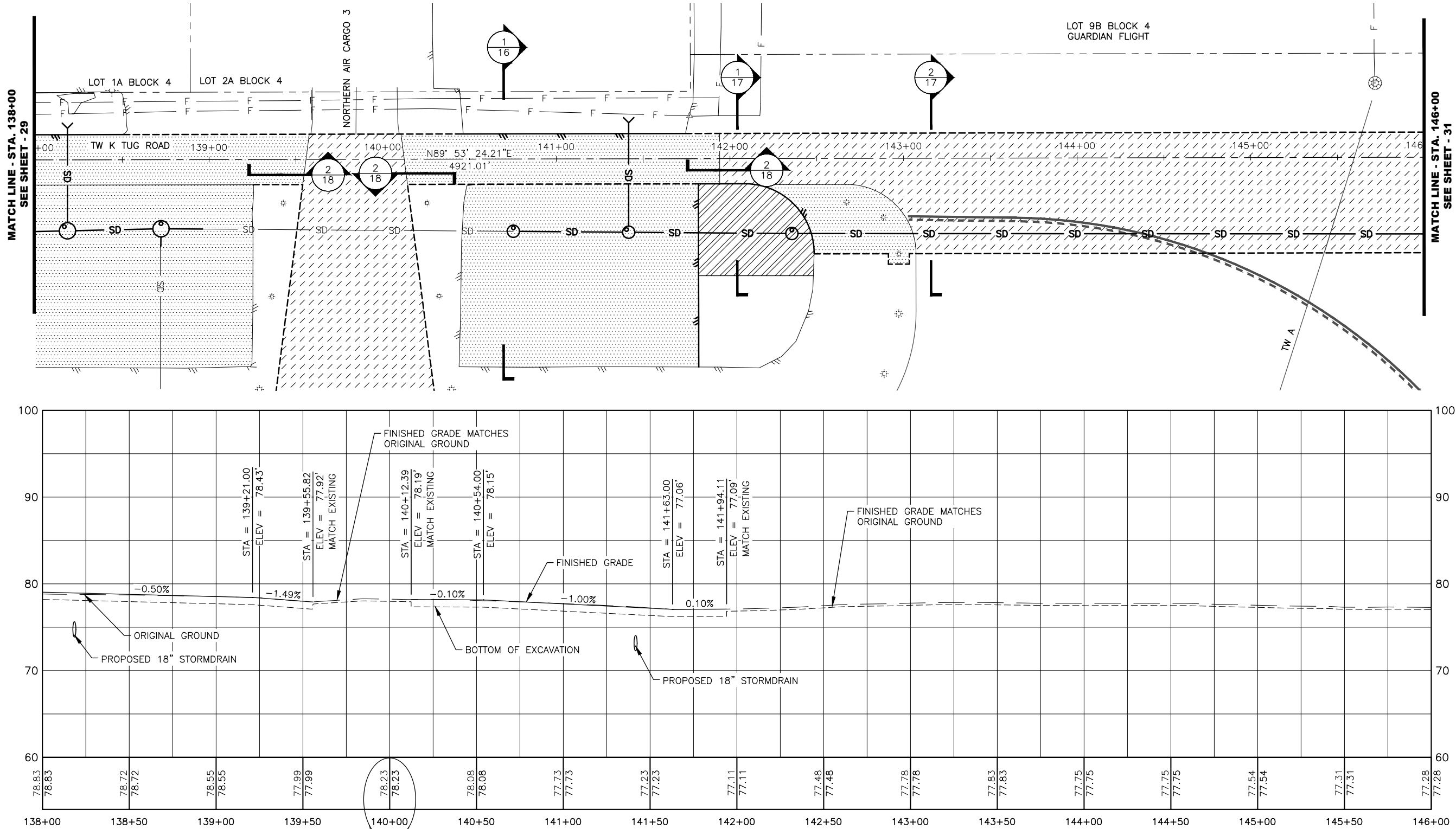
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 138+00 TO STA 146+00

DATE:
SEPTEMBER 2025
SHEET:
30 OF 57



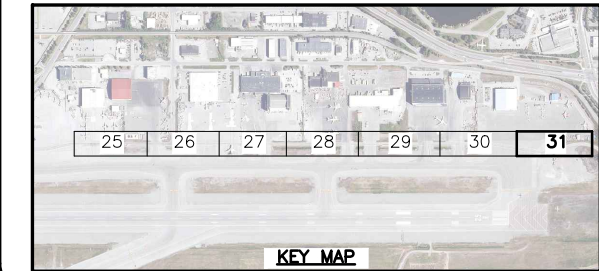
NOTES:

1. SEE SHEETS 9-15 FOR DEMOLITION PLAN.
2. SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
3. SEE SHEETS 19-24 FOR SITE PLAN.
4. SEE SHEETS 32-37 FOR GRADING PLAN.
5. SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
6. SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
7. SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.

LEGEND

- | | |
|--|----------------------|
| | HMA TYPE II, CLASS A |
| | HMA TYPE V, CLASS S |
| | RAP |
| | SAW CUT LIMITS |

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Drawn By: SS
Checked By: SB



30' 15' 0 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:5



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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
PLAN & PROFILE - STA 146+00 TO EOP

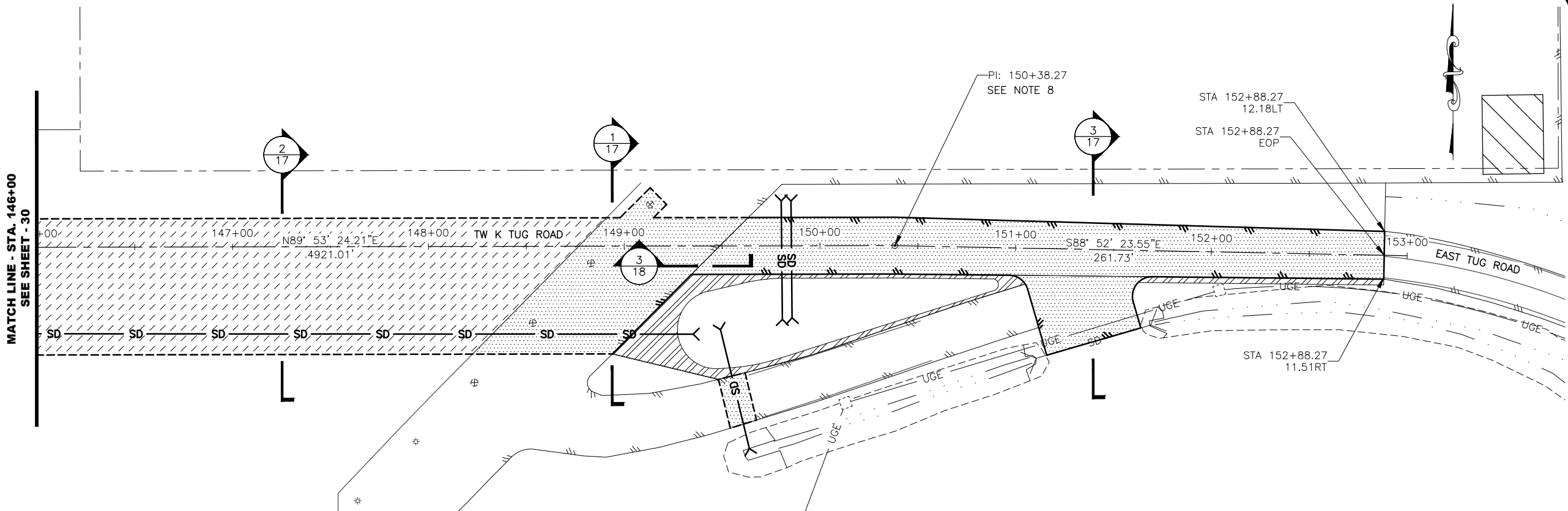
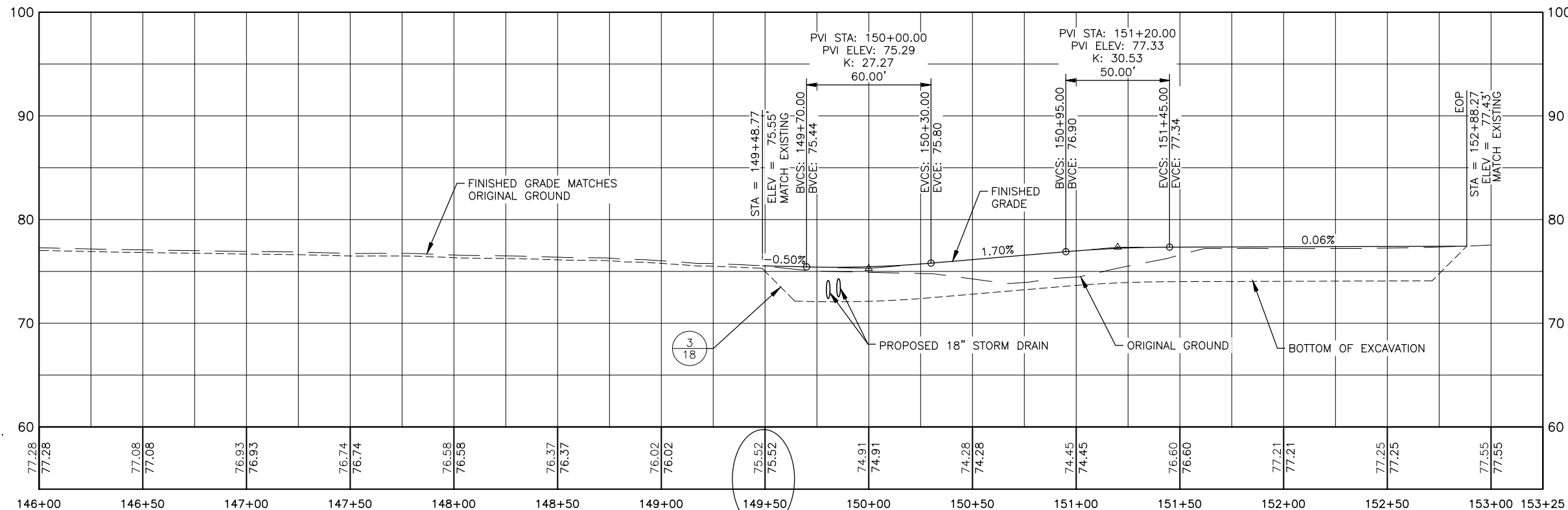
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LEGEND

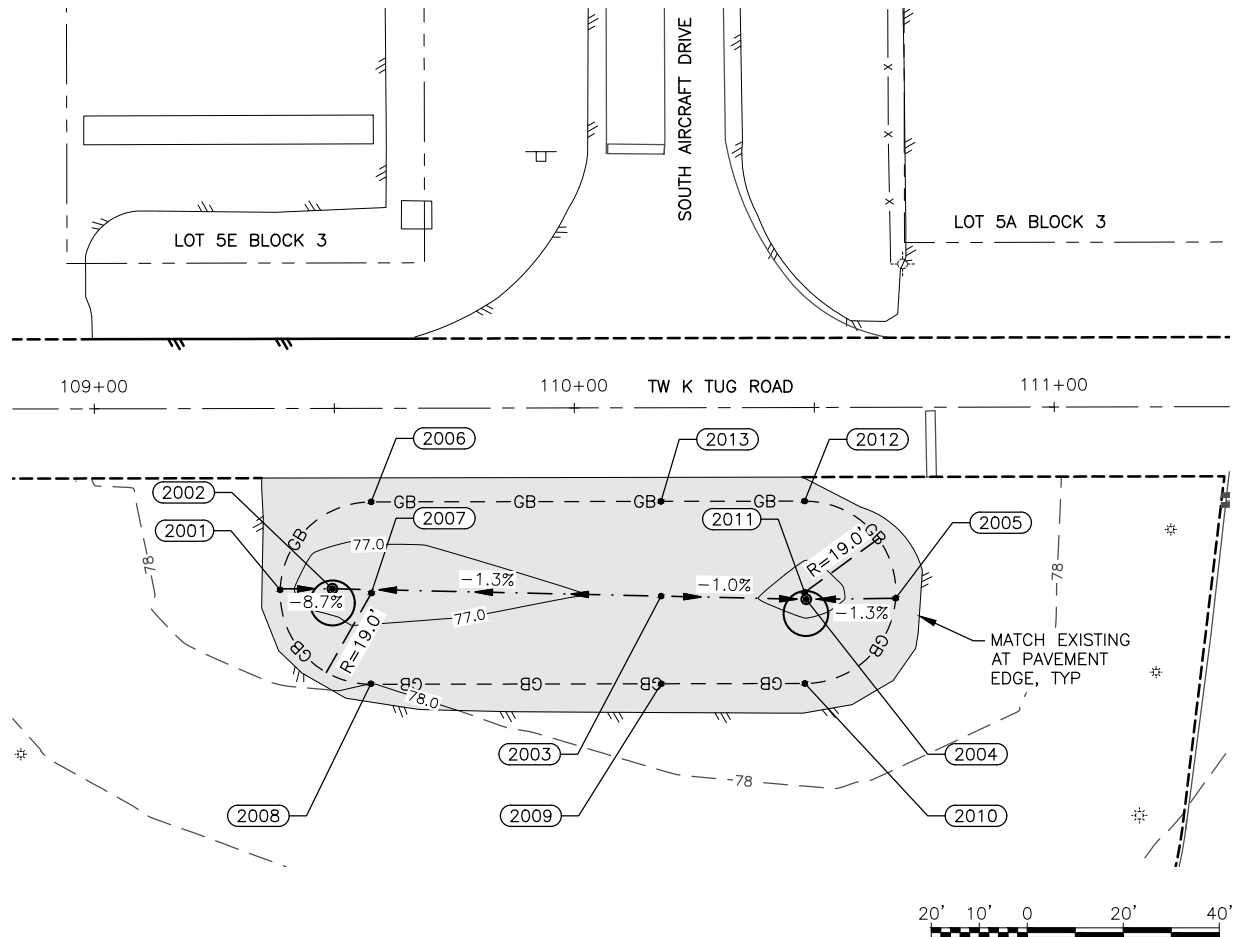
- HMA TYPE II, CLASS A
- HMA TYPE V, CLASS S
- RAP
- SAW CUT LIMITS

NOTES:

- SEE SHEETS 9-15 FOR DEMOLITION PLAN.
- SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
- SEE SHEETS 19-24 FOR SITE PLAN.
- SEE SHEETS 32-37 FOR GRADING PLAN.
- SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.
- SEE E SHEETS FOR ELECTRICAL IMPROVEMENTS.
- BEGIN TRANSITION TO EXISTING PAVEMENT WIDTH.

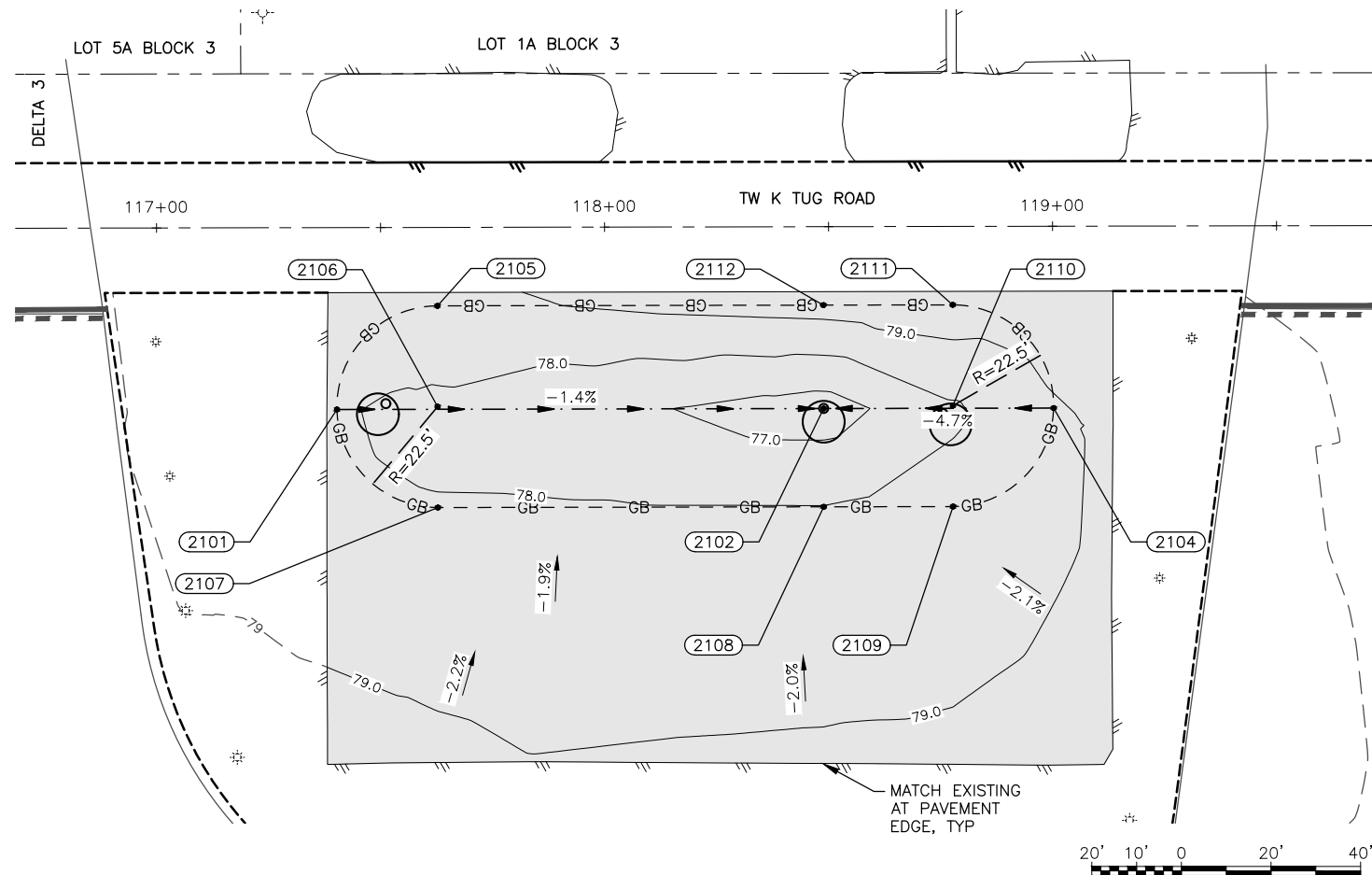


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Drawn By: SS
Checked By: SB



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32

GRADING PLAN - DITCH 1



2
32

GRADING PLAN - DITCH 2

LEGEND

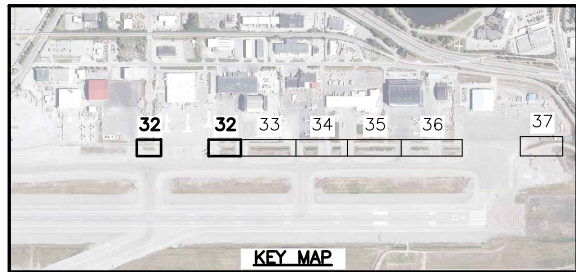
LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

- ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
- UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
- SEE SHEETS 9-15 FOR DEMOLITION PLAN.
- SEE SHEETS 16-18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25-31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 19-24 FOR SITE PLAN.
- SEE SHEETS 38-46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52-54 FOR PAVEMENT MARKING PLAN.

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2001	109+38.64	37.78 RT	77.26	BEGIN SWALE
2002	109+49.54	37.57 RT	76.31	SWALE LOW POINT
2003	110+18.01	39.24 RT	77.20	SWALE HIGH POINT
2004	110+48.22	39.98 RT	76.90	SWALE LOW POINT
2005	110+66.89	39.79 RT	77.13	END SWALE
2006	109+57.65	19.50 RT	77.55	GRADE BREAK, PC
2007	109+57.65	38.50 RT	N/A	RADIUS POINT, R=19.0'
2008	109+57.51	57.39 RT	78.00	GRADE BREAK, PT
2009	110+18.01	57.50 RT	77.48	GRADE BREAK
2010	110+47.93	57.50 RT	77.35	GRADE BREAK, PC
2011	110+47.93	38.50 RT	N/A	RADIUS POINT, R=19.0'
2012	110+47.93	19.50 RT	77.15	GRADE BREAK, PT
2013	110+18.01	19.50 RT	77.39	GRADE BREAK

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2101	117+40.19	40.58 RT	78.08	BEGIN SWALE
2102	118+48.82	40.58 RT	76.52	SWALE LOW POINT
2104	119+00.17	40.58 RT	78.91	END SWALE
2105	117+62.68	17.50 RT	78.81	GRADE BREAK, PC
2106	117+62.68	40.00 RT	N/A	RADIUS POINT, R=22.5'
2107	117+62.68	62.50 RT	78.05	GRADE BREAK, PT
2108	118+48.82	62.50 RT	78.02	GRADE BREAK
2109	118+77.68	62.50 RT	78.30	GRADE BREAK, PC
2110	118+77.68	40.00 RT	N/A	RADIUS POINT, R=22.5'
2111	118+77.68	17.50 RT	79.59	GRADE BREAK, PT
2112	118+48.82	17.50 RT	79.39	GRADE BREAK



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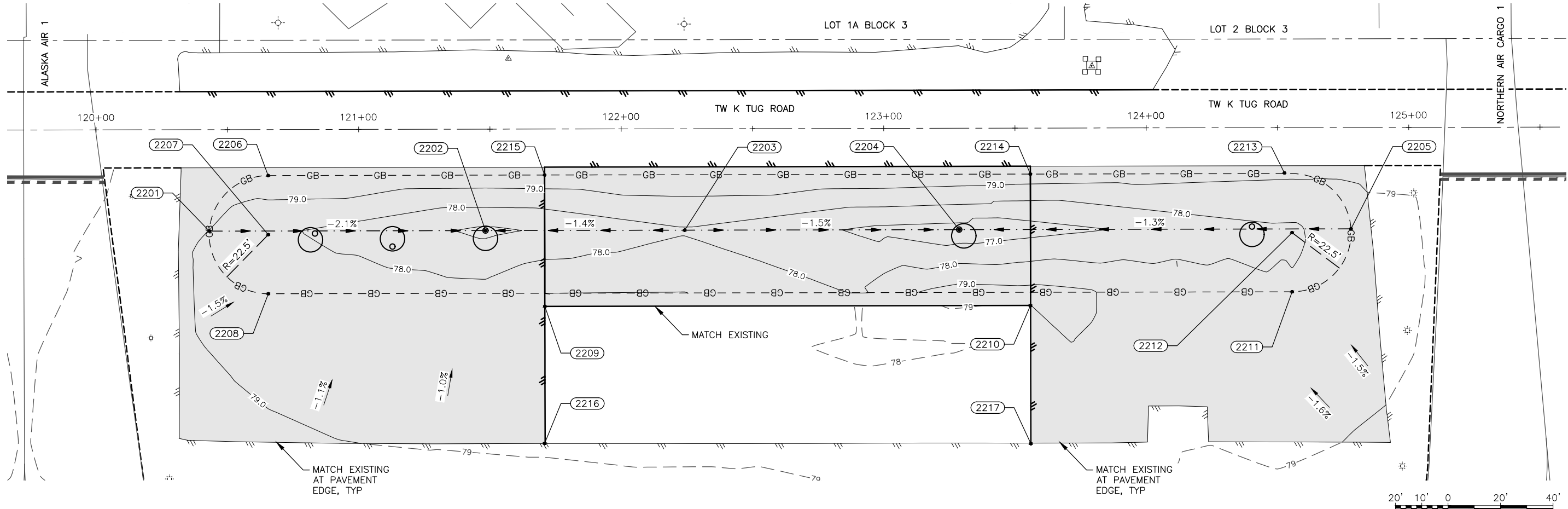
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PHONE (907) 269-0590

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ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN - DITCH 1 & 2

DATE:
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SHEET:
32 OF 57

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Checked By: SB



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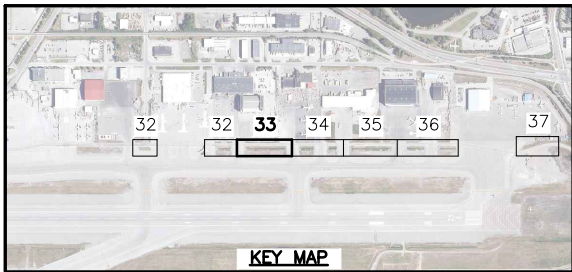
GRADING PLAN – DITCH 3

LEGEND

LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

- ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
- UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 19–24 FOR SITE PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.



GRADING POINTS

POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2201	120+43.01	38.61 RT	78.99	BEGIN SWALE
2202	121+48.21	38.61 RT	76.80	SWALE LOW POINT
2203	122+24.10	38.60 RT	77.90	SWALE HIGH POINT
2204	123+28.67	38.59 RT	76.33	SWALE LOW POINT
2205	124+77.93	38.58 RT	78.59	END SWALE
2206	120+65.47	17.50 RT	79.62	GRADE BREAK, PC
2207	120+65.47	40.00 RT	N/A	RADIUS POINT, R=22.5'
2208	120+65.47	62.50 RT	78.45	GRADE BREAK, PT
2209	121+70.78	67.50 RT	78.87	EOP, MATCH EXISTING
2210	123+55.75	67.57 RT	78.98	EOP, MATCH EXISTING
2211	124+55.47	62.50 RT	78.09	GRADE BREAK, PC
2212	124+55.47	40.00 RT	N/A	RADIUS POINT, R=22.5'
2213	124+52.61	17.25 RT	79.14	GRADE BREAK, PT
2214	123+55.83	17.50 RT	79.53	EOP, GRADE BREAK
2215	121+70.78	17.50 RT	79.68	EOP, GRADE BREAK
2216	121+70.59	119.66 RT	78.88	EOP, MATCH EXISTING
2217	123+55.83	120.12 RT	78.55	EOP, MATCH EXISTING



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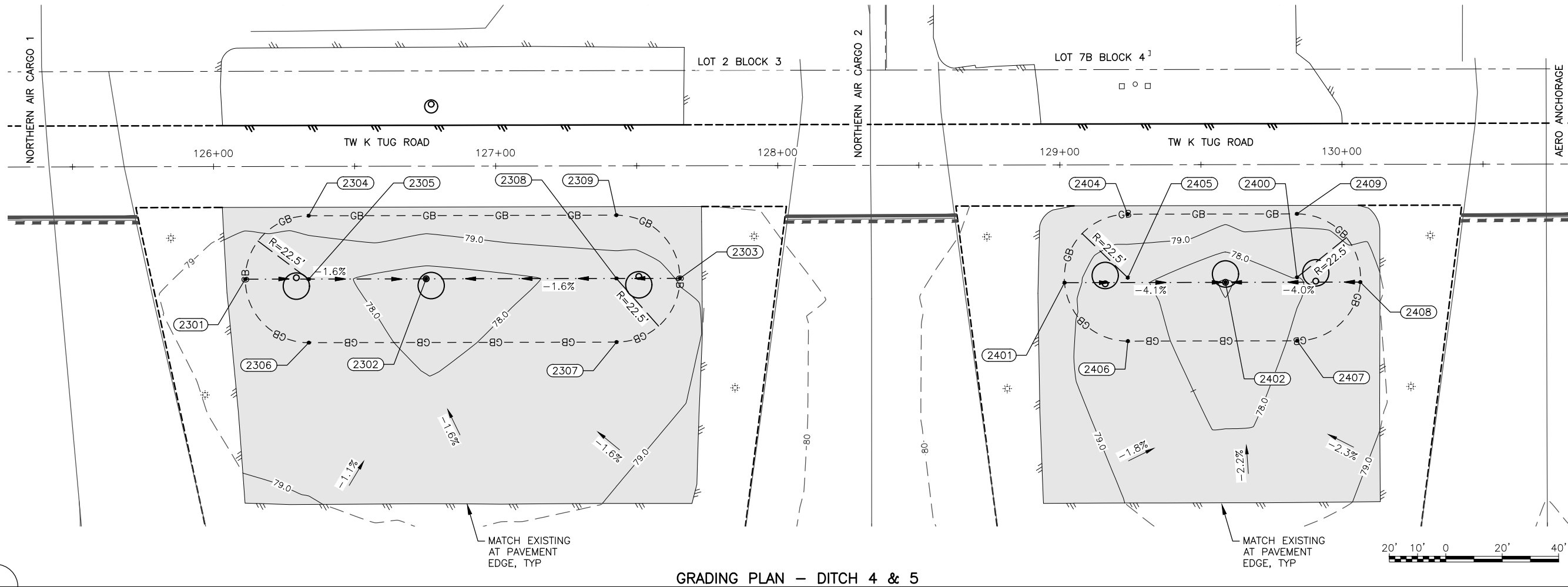
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN – DITCH 3

DATE:
SEPTEMBER 2025
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33 OF 57

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34

GRADING PLAN – DITCH 4 & 5

LEGEND

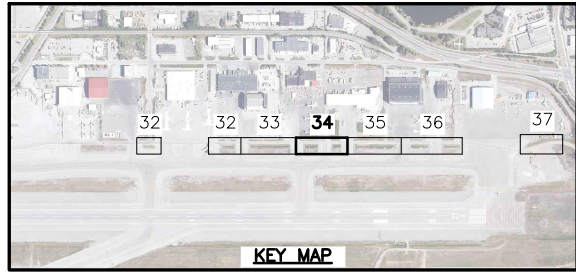
LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

1. ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
2. UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
3. SEE SHEETS 9–15 FOR DEMOLITION PLAN.
4. SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
5. SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
6. SEE SHEETS 19–24 FOR SITE PLAN.
7. SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
8. SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2301	126+11.15	39.94 RT	78.60	BEGIN SWALE
2302	126+75.29	39.94 RT	77.59	SWALE LOW POINT
2303	127+65.25	39.94 RT	79.06	END SWALE
2304	126+33.65	17.50 RT	79.34	GRADE BREAK, PC
2305	126+33.65	40.00 RT	N/A	RADIUS POINT, R=22.5'
2306	126+33.65	62.50 RT	78.47	GRADE BREAK, PT
2307	127+42.75	62.50 RT	78.49	GRADE BREAK, PC
2308	127+42.75	39.94 RT	N/A	RADIUS POINT, R=22.5'
2309	127+42.75	17.50 RT	79.94	GRADE BREAK, PT

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2400	129+83.99	40.00 RT	78.01	BEGIN SWALE
2401	129+01.57	41.73 RT	79.26	SWALE LOW POINT
2402	129+58.61	41.73 RT	76.89	END SWALE
2404	129+23.99	17.50 RT	79.53	GRADE BREAK, PC
2405	129+23.99	40.00 RT	N/A	RADIUS POINT, R=22.5'
2406	129+23.99	62.50 RT	78.53	GRADE BREAK, PT
2407	129+83.99	62.50 RT	78.12	GRADE BREAK, PC
2408	130+06.43	41.73 RT	N/A	RADIUS POINT, R=22.5'
2409	129+83.99	17.50 RT	79.28	GRADE BREAK, PT



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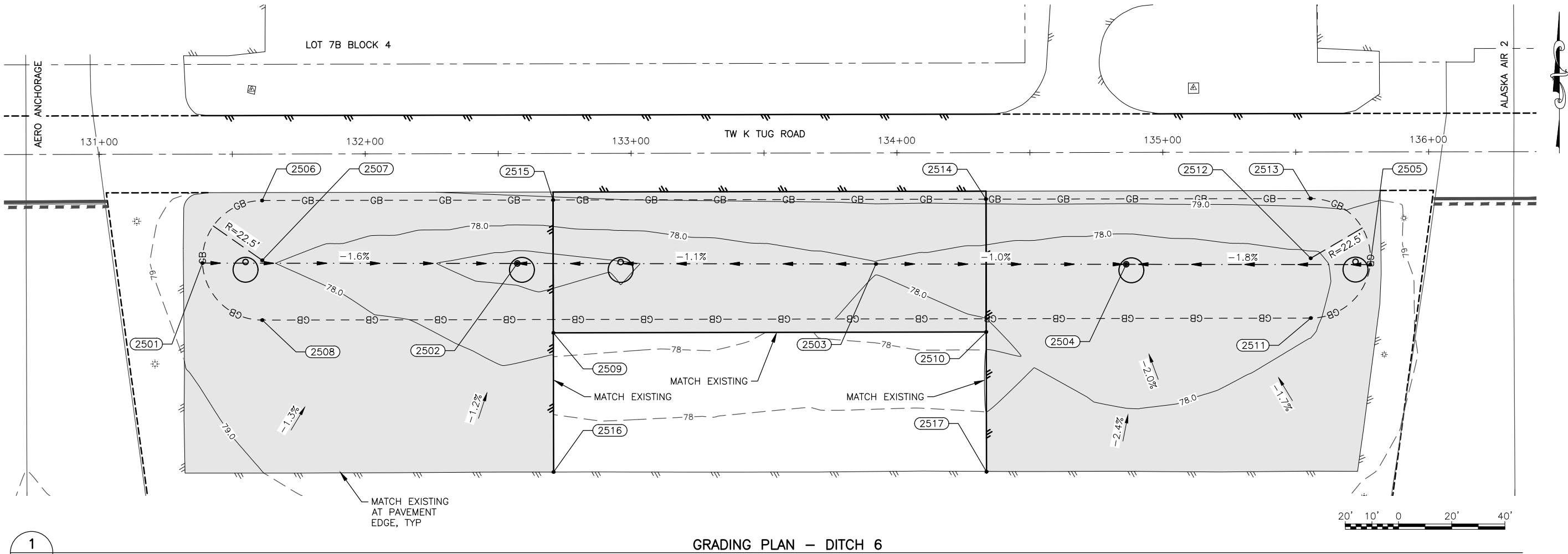
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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN – DITCH 4 & 5

DATE:
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SHEET:
34 OF 57

9/13/2025 2:51 PM
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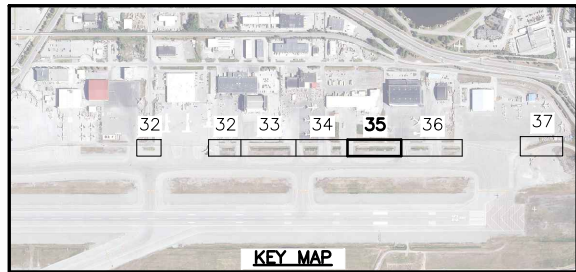
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35
GRADING PLAN – DITCH 6

LEGEND

LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

- ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
- UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 19–24 FOR SITE PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.



GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2501	131+38.72	41.00 RT	78.45	BEGIN SWALE
2502	132+57.13	41.39 RT	76.50	SWALE LOW POINT
2503	133+92.04	41.82 RT	77.96	SWALE HIGH POINT
2504	134+86.17	42.12 RT	77.00	SWALE LOW POINT
2505	135+77.94	42.42 RT	78.70	END SWALE
2506	131+61.20	17.50 RT	78.89	GRADE BREAK, PC
2507	131+61.20	40.00 RT	N/A	RADIUS POINT, R=22.5'
2508	131+61.20	62.50 RT	78.30	GRADE BREAK, PT
2509	132+70.64	67.50 RT	78.23	EOP, MATCH EXISTING
2510	134+33.46	67.50 RT	78.21	EOP, MATCH EXISTING
2511	135+55.58	62.50 RT	77.90	GRADE BREAK, PC
2512	135+55.58	40.00 RT	N/A	RADIUS POINT, R=22.5'
2513	135+55.58	17.50 RT	79.18	GRADE BREAK, PT
2514	134+33.46	17.50 RT	79.11	EOP, GRADE BREAK
2515	132+70.64	17.50 RT	78.98	EOP, GRADE BREAK
2516	132+70.64	119.89 RT	78.47	EOP, MATCH EXISTING
2517	134+33.46	120.12 RT	78.57	EOP, MATCH EXISTING



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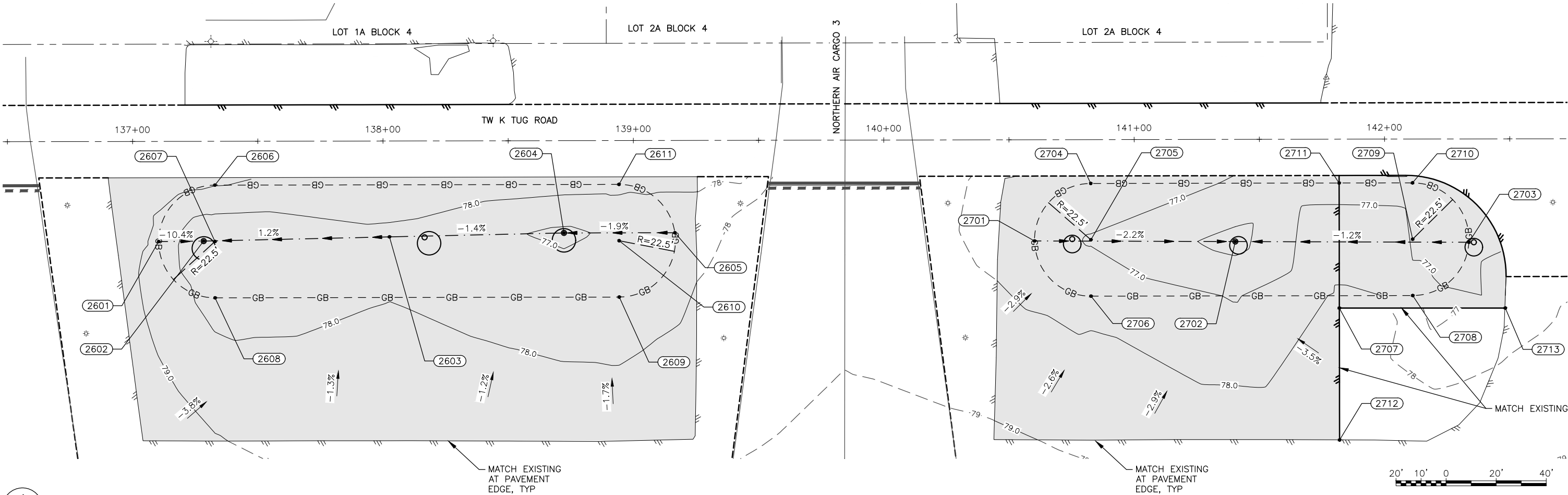
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN – DITCH 6

DATE:
SEPTEMBER 2025
SHEET:
35 OF 57

Date Revised: 9/13/2025 2:51 PM
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Designed By: RB
Drawn By: SS
Checked By: SB



GRADING PLAN – EAST TUG ROAD REALIGNMENT

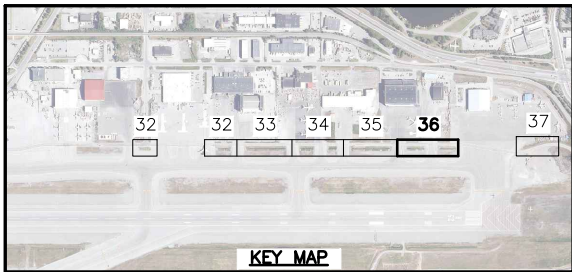
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36

LEGEND

LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

- ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
- UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 19–24 FOR SITE PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.



PLANS DEVELOPED BY:
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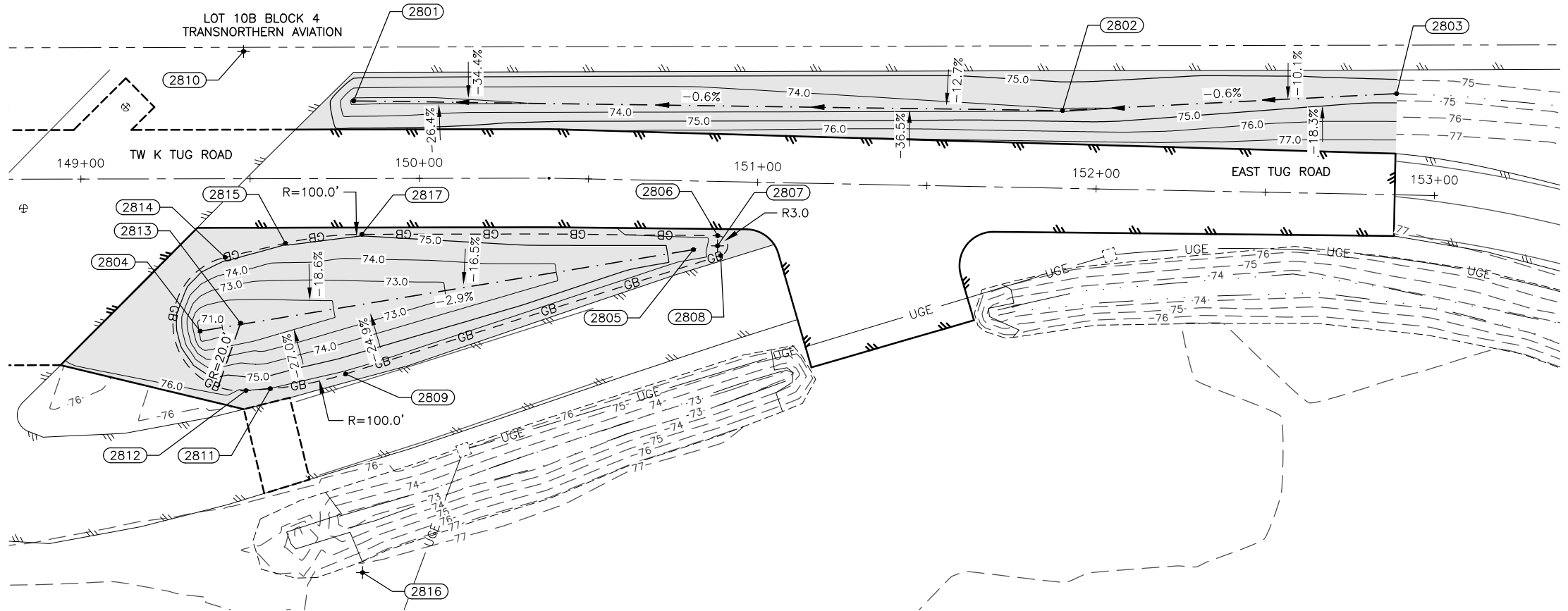
TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN - DITCH 7 & 8

DATE:
SEPTEMBER 2025
SHEET:
36 OF 57

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2601	137+10.32	40.00 RT	78.87	BEGIN SWALE
2602	137+28.27	39.83 RT	77.00	SWALE LOW POINT
2603	138+02.50	38.29 RT	77.74	SWALE HIGH POINT
2604	138+72.20	36.85 RT	76.80	SWALE LOW POINT
2605	139+16.51	36.85 RT	77.64	END SWALE
2606	137+32.82	17.50 RT	79.03	GRADE BREAK, PC
2607	137+32.82	40.00 RT	N/A	RADIUS POINT, R=22.5'
2608	137+32.82	62.50 RT	77.66	GRADE BREAK, PT
2609	138+94.23	62.50 RT	77.55	GRADE BREAK, PC
2610	138+94.23	40.00 RT	N/A	RADIUS POINT, R=22.5'
2611	138+94.23	17.50 RT	78.22	GRADE BREAK, PT

GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2701	140+60.14	40.41 RT	77.41	BEGIN SWALE
2702	141+40.33	40.81 RT	75.68	SWALE LOW POINT
2703	142+33.60	41.27 RT	76.75	END SWALE
2704	140+82.63	17.50 RT	77.51	GRADE BREAK, PC
2705	140+82.63	40.00 RT	N/A	RADIUS POINT, R=22.5'
2706	140+82.63	62.50 RT	77.73	GRADE BREAK, PT
2707	141+81.82	67.44 RT	78.30	EOP, MATCH EXISTING
2708	142+11.14	62.50 RT	77.14	GRADE BREAK, PC
2709	142+11.14	40.00 RT	N/A	RADIUS POINT, R=22.5'
2710	142+11.14	17.50 RT	76.71	GRADE BREAK, PT
2711	141+81.82	17.50 RT	76.71	EOP, GRADE BREAK
2712	141+81.82	120.12 RT	78.64	EOP, MATCH EXISTING
2713	142+48.12	67.57 RT	77.56	MATCH EXISTING

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37
Date Revised: RB
Layout Name: SS
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Checked By: SB



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37

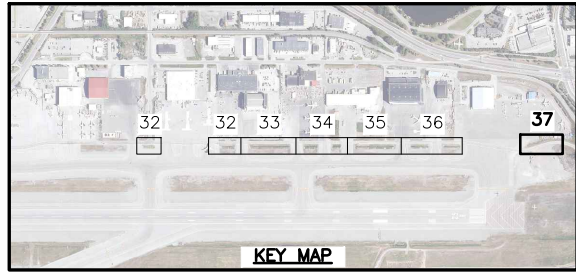
GRADING PLAN – EAST TUG ROAD REALIGNMENT

LEGEND

LIMITS OF GRADING, SEE SITE PLAN SHEETS FOR SURFACE TYPE

NOTES:

- ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE.
- UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.
- SEE SHEETS 9–15 FOR DEMOLITION PLAN.
- SEE SHEETS 16–18 FOR TYPICAL SECTIONS.
- SEE SHEETS 25–31 FOR TUG ROAD PLAN & PROFILE.
- SEE SHEETS 19–24 FOR SITE PLAN.
- SEE SHEETS 38–46 FOR STORM DRAIN IMPROVEMENTS.
- SEE SHEETS 52–54 FOR PAVEMENT MARKING PLAN.



PLANS DEVELOPED BY:
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GRADING POINTS

POINT #	STATION	OFFSET	ELEVATION (FT)	DESCRIPTION
2801	149+80.64	22.95 LT	72.70	BEGIN DITCH
2802	151+89.64	22.95 LT	73.92	DITCH ANGLE POINT
2803	152+88.27	29.91 LT	74.50	END DITCH, MATCH EXISTING
2804	149+35.15	45.03 RT	70.80	BEGIN DITCH
2805	150+81.41	20.28 RT	75.23	END DITCH
2806	150+88.49	16.03 RT	76.47	GRADE BREAK, PC
2807	150+88.52	19.03 RT	N/A	RADIUS POINT, R=3.0'
2808	150+89.48	21.88 RT	76.90	GRADE BREAK, PT
2809	149+78.09	57.79 RT	76.23	GRADE BREAK, PC
2810	149+48.14	37.62 LT	N/A	RADIUS POINT, R=100.0'
2811	149+55.86	62.08 RT	76.02	GRADE BREAK, PT
2812	149+48.64	62.64 RT	76.03	GRADE BREAK, PC
2813	149+47.09	42.70 RT	71.16	RADIUS POINT, R=20.0'
2814	149+42.58	23.22 RT	75.27	GRADE BREAK, PT
2815	149+60.41	19.08 RT	75.11	GRADE BREAK, PC
2816	149+82.99	116.50 RT	N/A	RADIUS POINT, R=100.0'
2817	149+82.99	16.50 RT	75.08	GRADE BREAK, PT

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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
GRADING PLAN – EAST TUG ROAD REALIGNMENT

DATE:
SEPTEMBER 2025
SHEET:
37 OF 57

Date Revised: 9/13/2025 2:56 PM

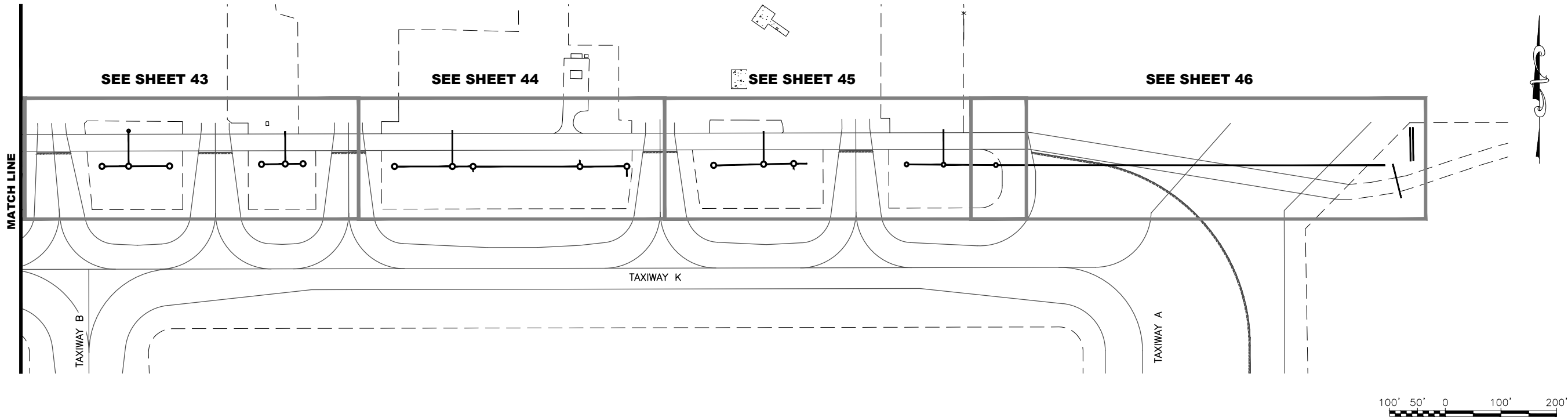
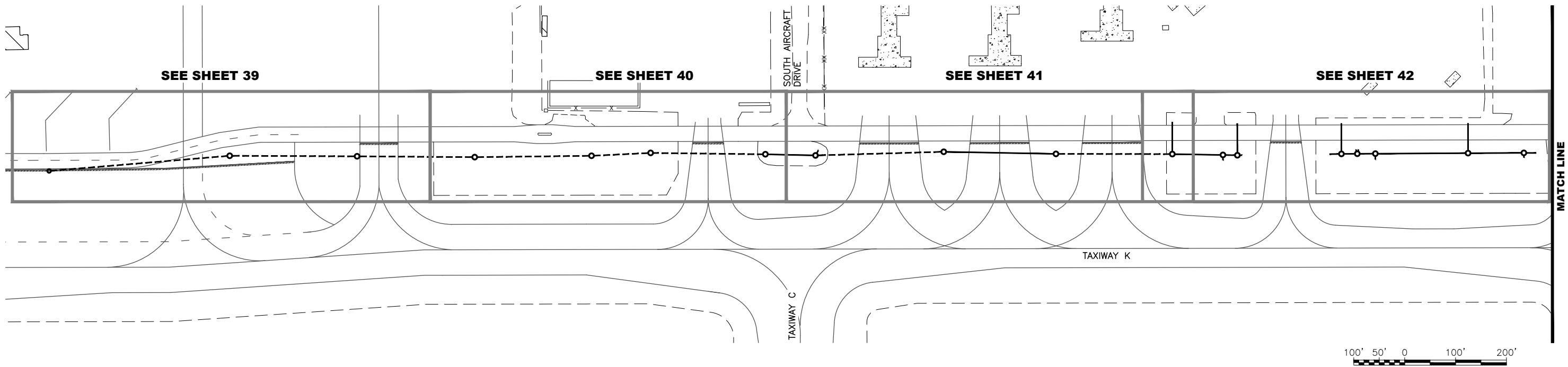
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Designed By: RB

Drawn By: SS

Checked By: SB



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38

STORM DRAIN KEY MAP

LEGEND

- NEW STORM DRAIN PIPE & STRUCTURES
- CIPP STORM DRAIN LINING



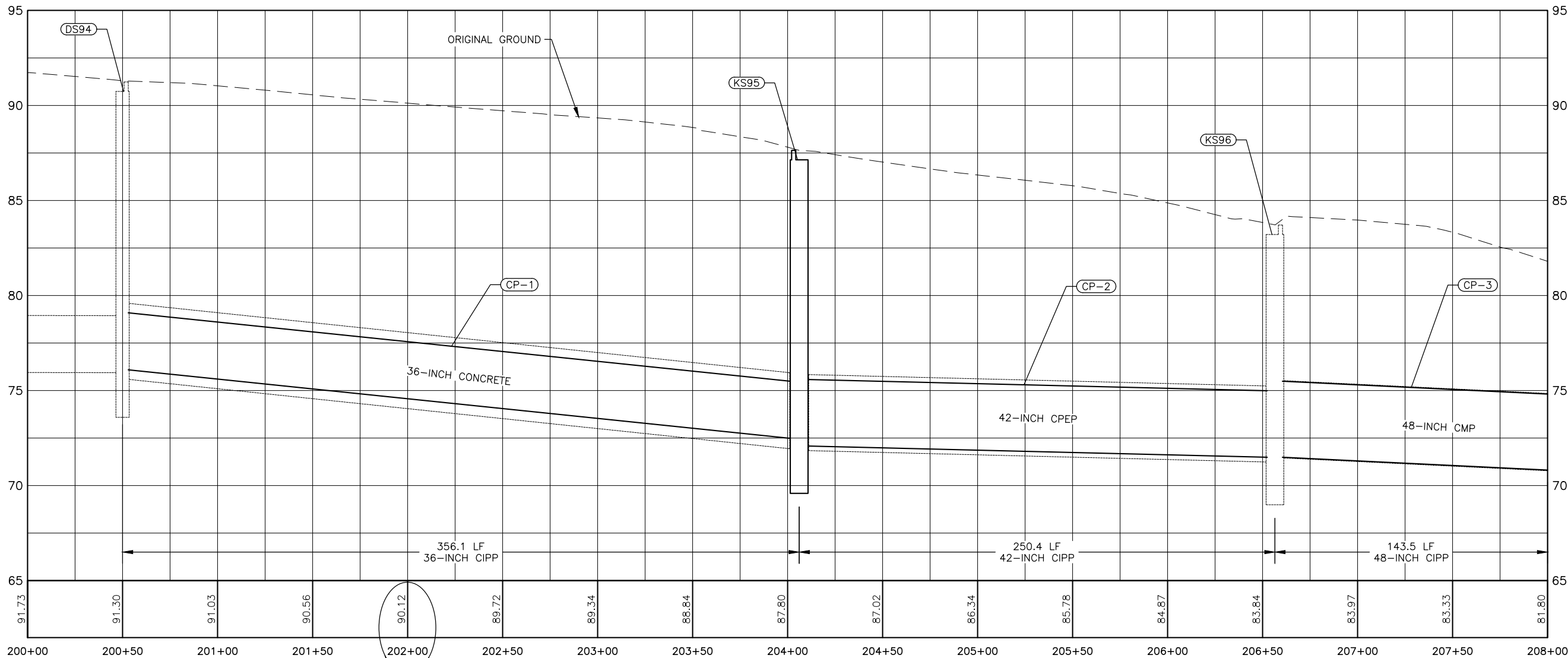
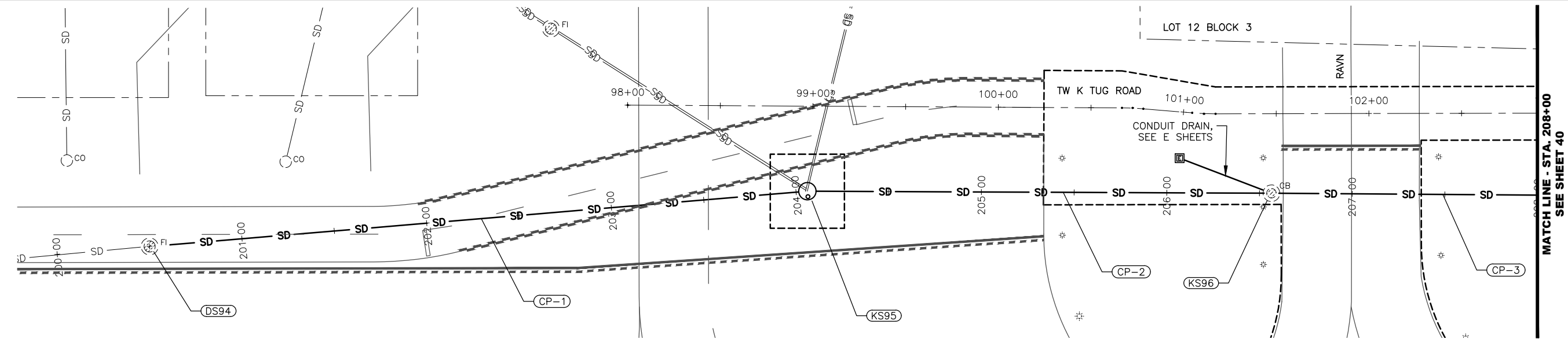
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN KEY MAP

DATE:
SEPTEMBER 2025
SHEET:
38 OF 57

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39
Date Revised: 9/13/2025 3:09 PM
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Designed By: RB
Drawn By: SS
Checked By: SB



ORIGINAL GROUND
ELEVATION

30' 15' 0 30' 60'
HORIZONTAL TO VERTICAL
SCALE RATIO 1:10

NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.

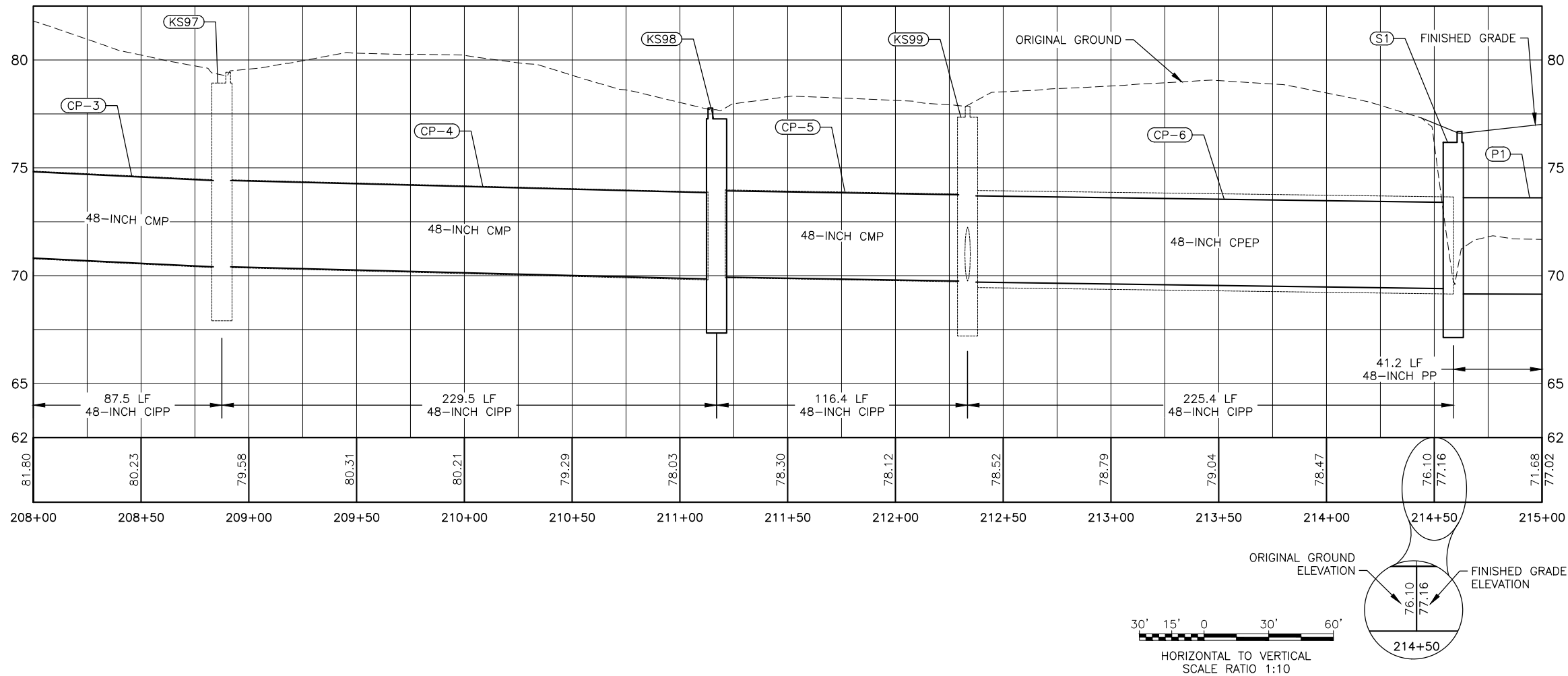
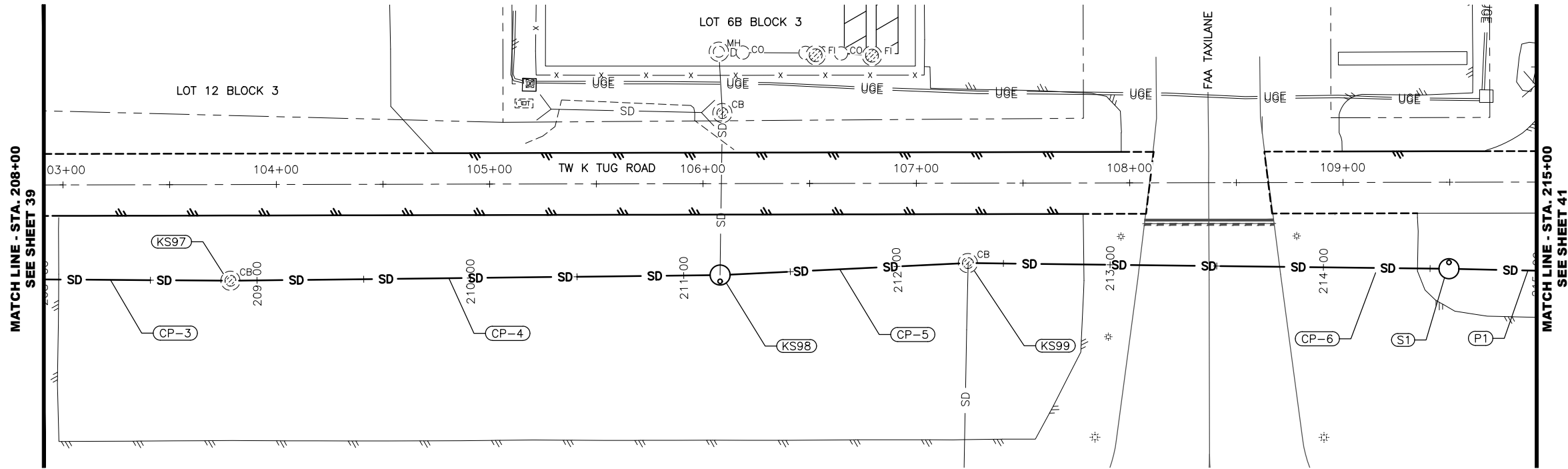
PLANS DEVELOPED BY:
STEPHL ENGINEERING, LLC
3900 ARCTIC BLVD. SUITE 204
ANCHORAGE, ALASKA 99503
(907) 562-1468
#AECL1308-AK

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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN PLAN & PROFILE - STA 200+00 TO
STA 208+00

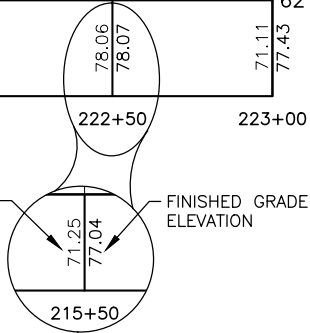
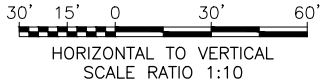
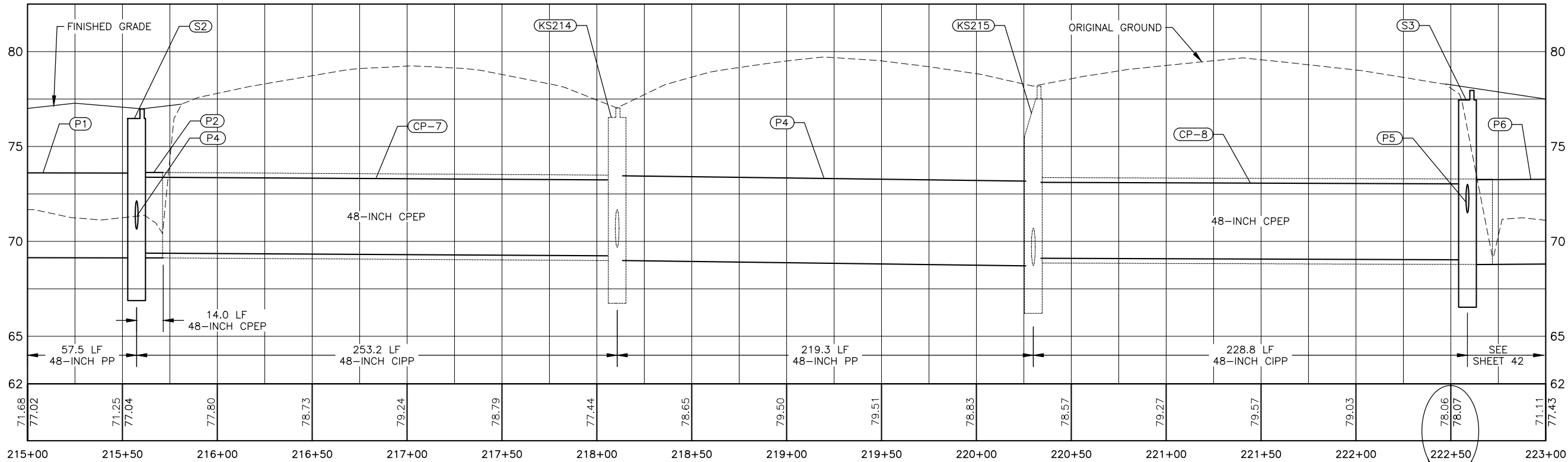
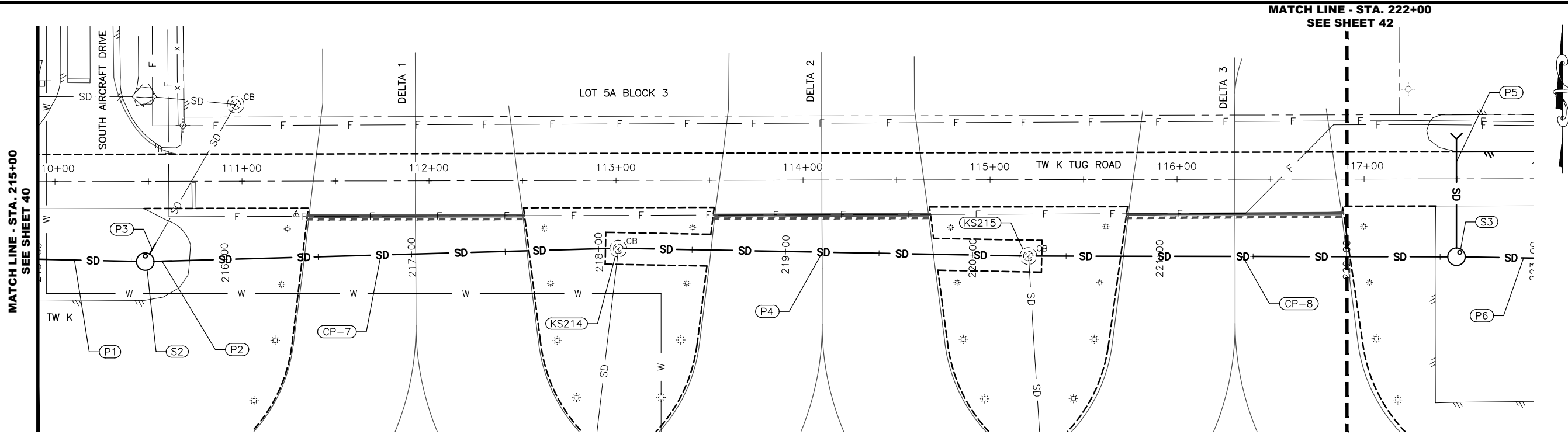
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SEPTEMBER 2025
SHEET:
39 OF 57



NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.

PLANS DEVELOPED BY: STEPHL ENGINEERING, LLC 3900 ARCTIC BLVD. SUITE 204 ANCHORAGE, ALASKA 99503 (907) 562-1468 #AECL1308-AK			
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STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION 4111 AVIATION AVE., ANCHORAGE ALASKA 99502 PHONE (907) 269-0590		TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3-02-0016-XXX-2026 STORM DRAIN PLAN & PROFILE - STA 208+00 TO STA 215+00	
DATE: SEPTEMBER 2025		SHEET: 40 OF 57	



NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.

PLANS DEVELOPED BY:
STEPHL ENGINEERING, LLC
3900 ARCTIC BLVD. SUITE 204
ANCHORAGE, ALASKA 99503
(907) 562-1468
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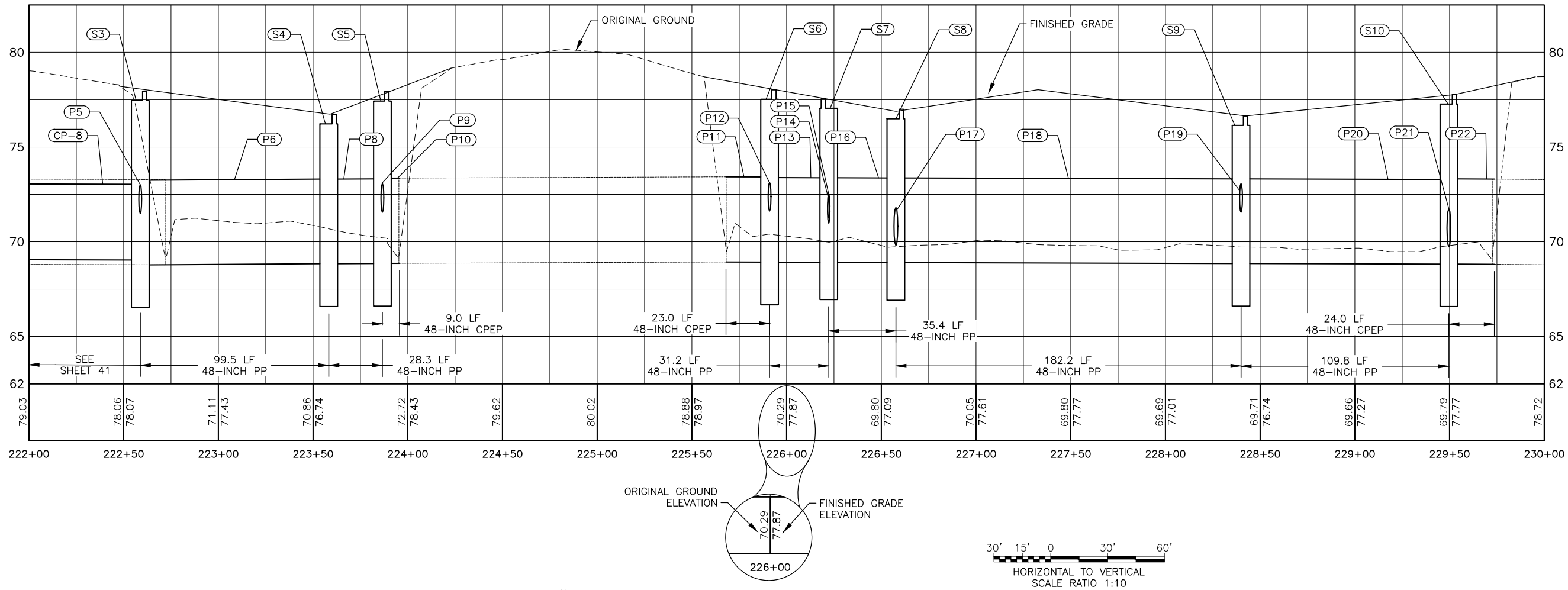
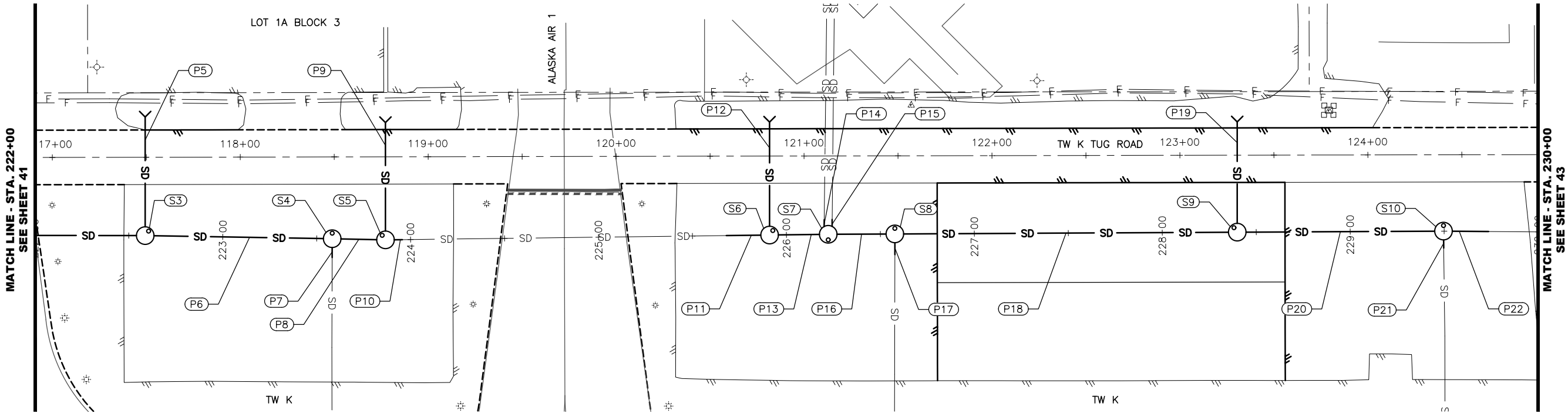
STATE OF ALASKA
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN PLAN & PROFILE - STA 215+00 TO
STA 220+00

DATE:
SEPTEMBER 2025

SHEET:

41 OF 57



NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.



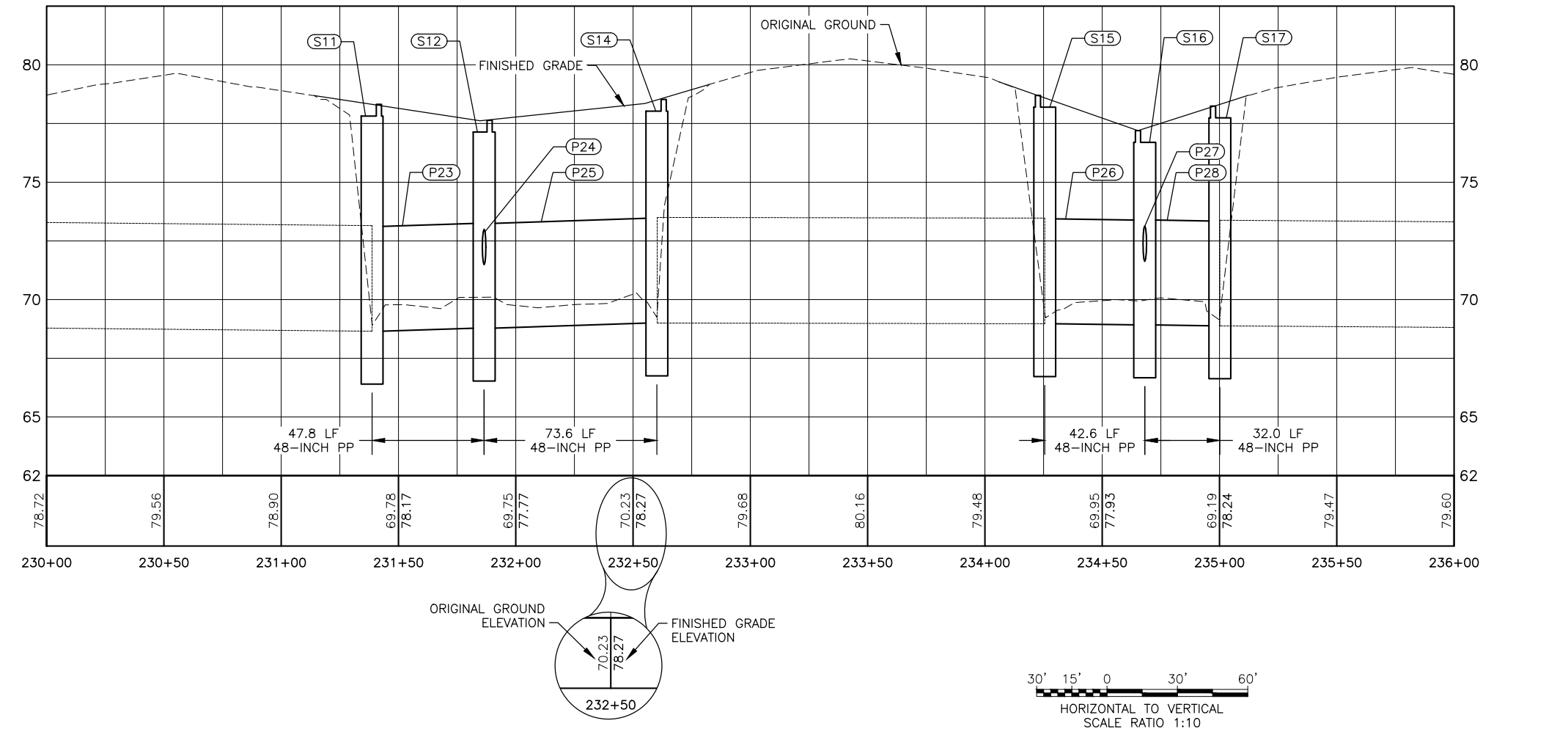
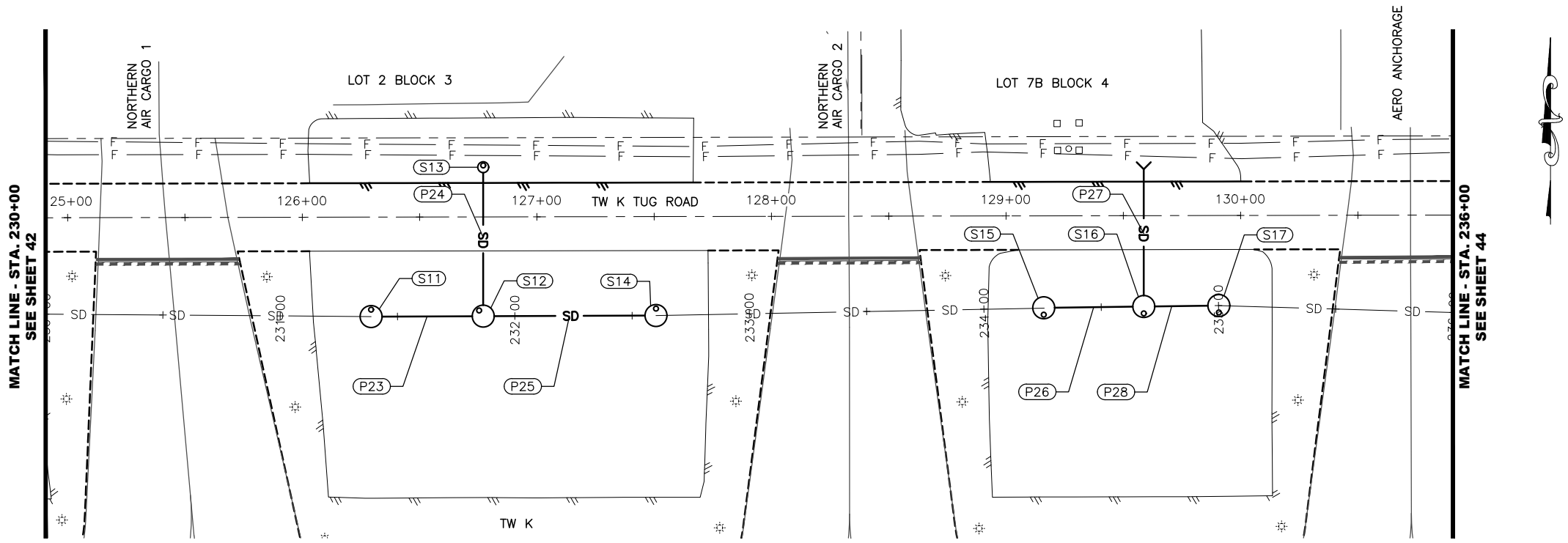
PLANS DEVELOPED BY:
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AIP No. 3-02-0016-XXX-2026
STORM DRAIN PLAN & PROFILE - STA 220+00 TO STA 230+00

DATE:
SEPTEMBER 2025
SHEET:
42 OF 57



NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.

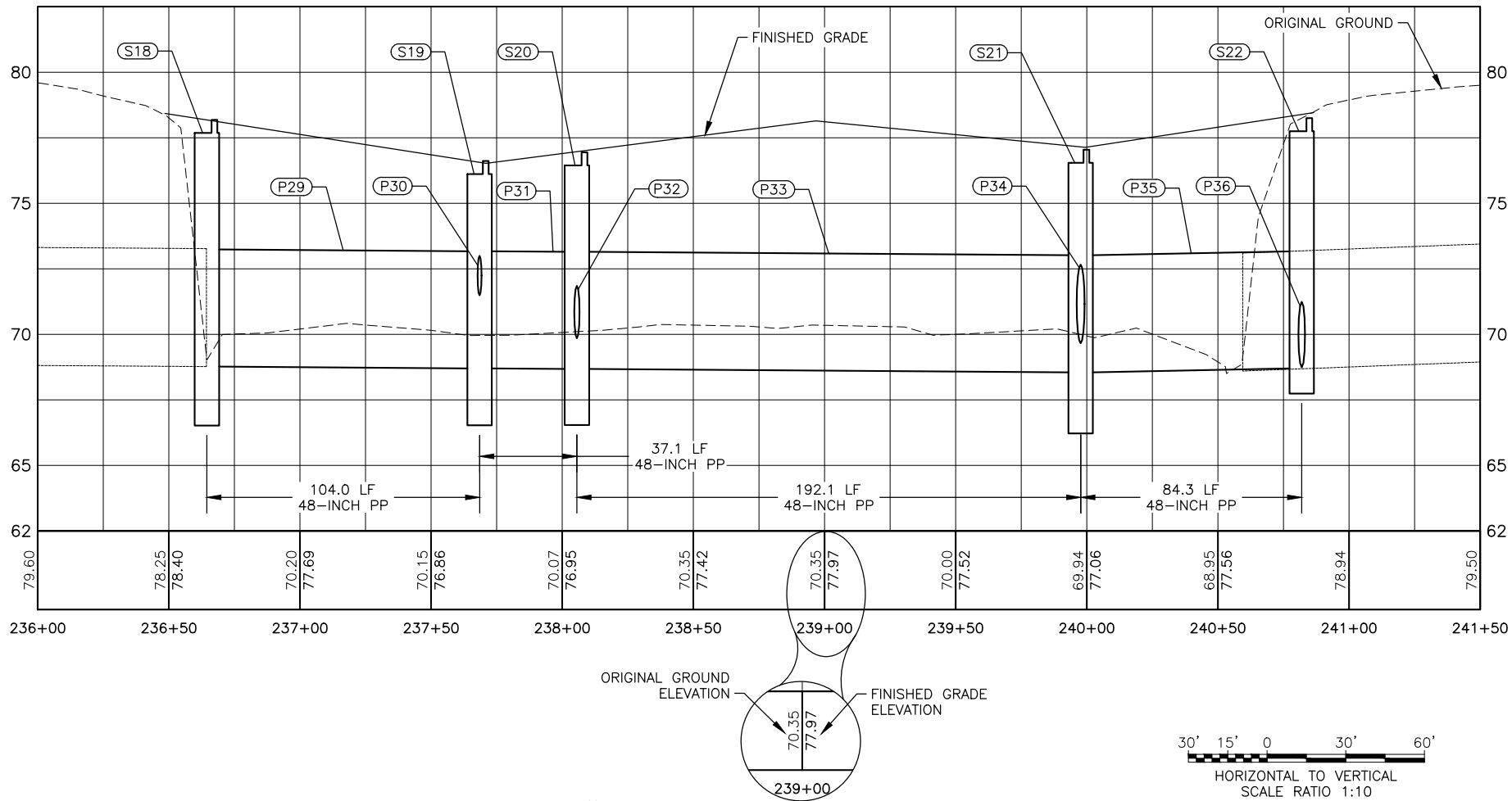
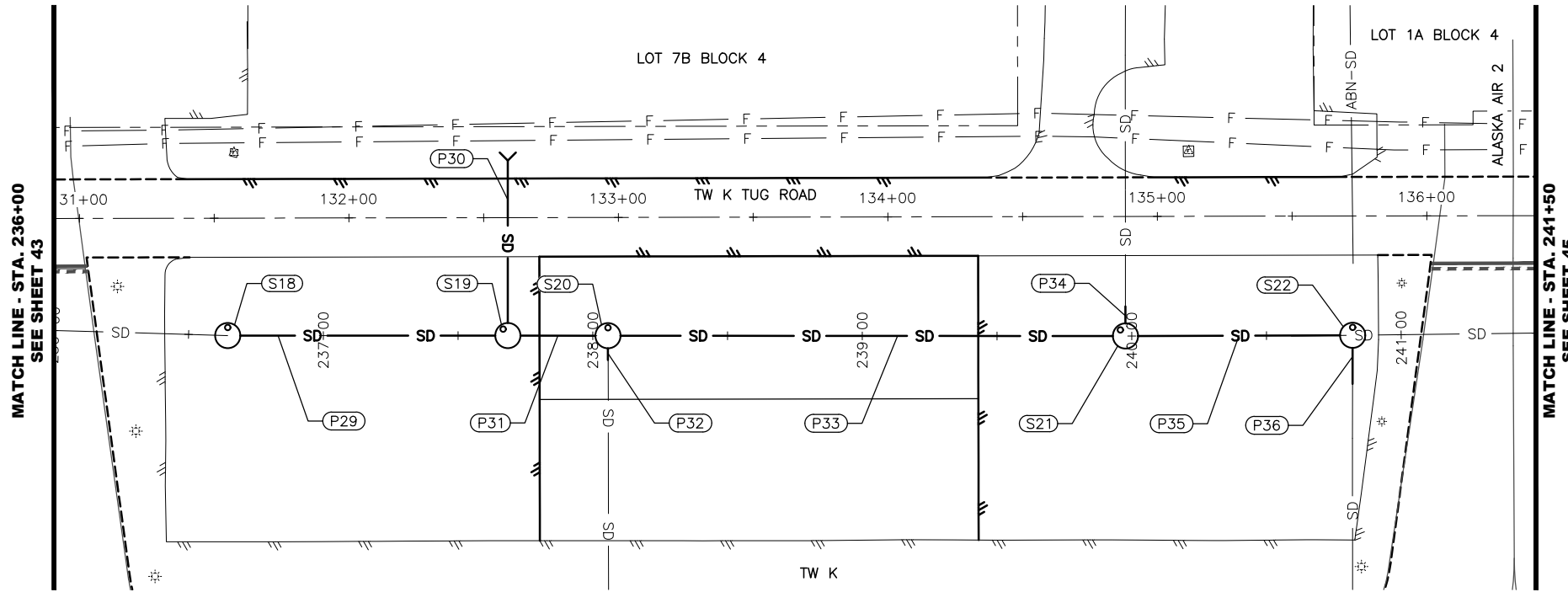


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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN PLAN & PROFILE - STA 230+00 TO STA 236+00

DATE: SEPTEMBER 2025
SHEET: 43 OF 57



NOTES:

- SEE SHEETS 6-5 FOR STORM DRAIN PIPE AND STRUCTURE SUMMARY TABLES.
- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.



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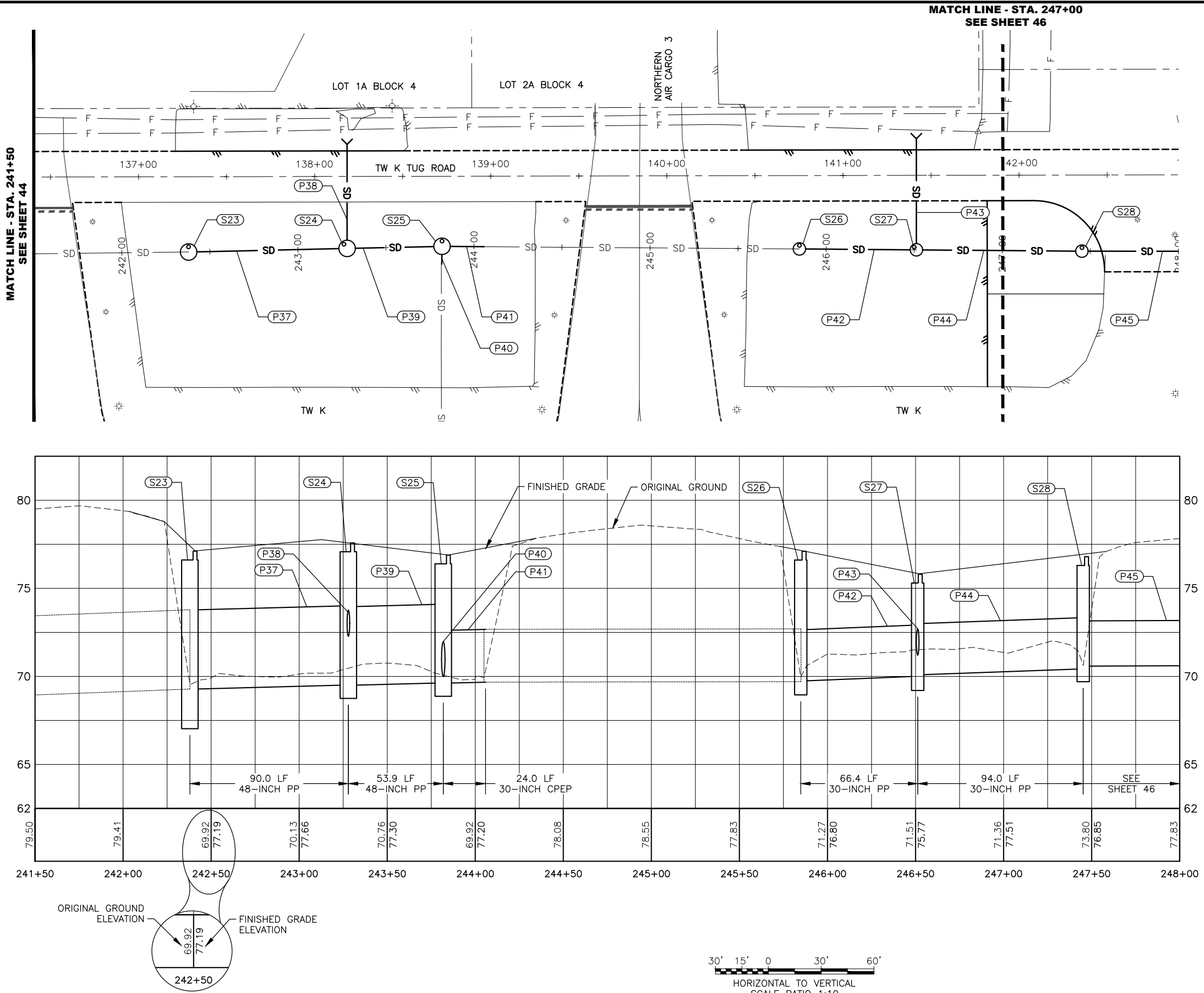
BY	DATE	REVISION

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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN PLAN & PROFILE - STA 236+00 TO STA 241+50

DATE:
SEPTEMBER 2025
SHEET:
44 OF 57

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45
Designed By: RB
Drawn By: SS
Checked By: SB
Date Revised:
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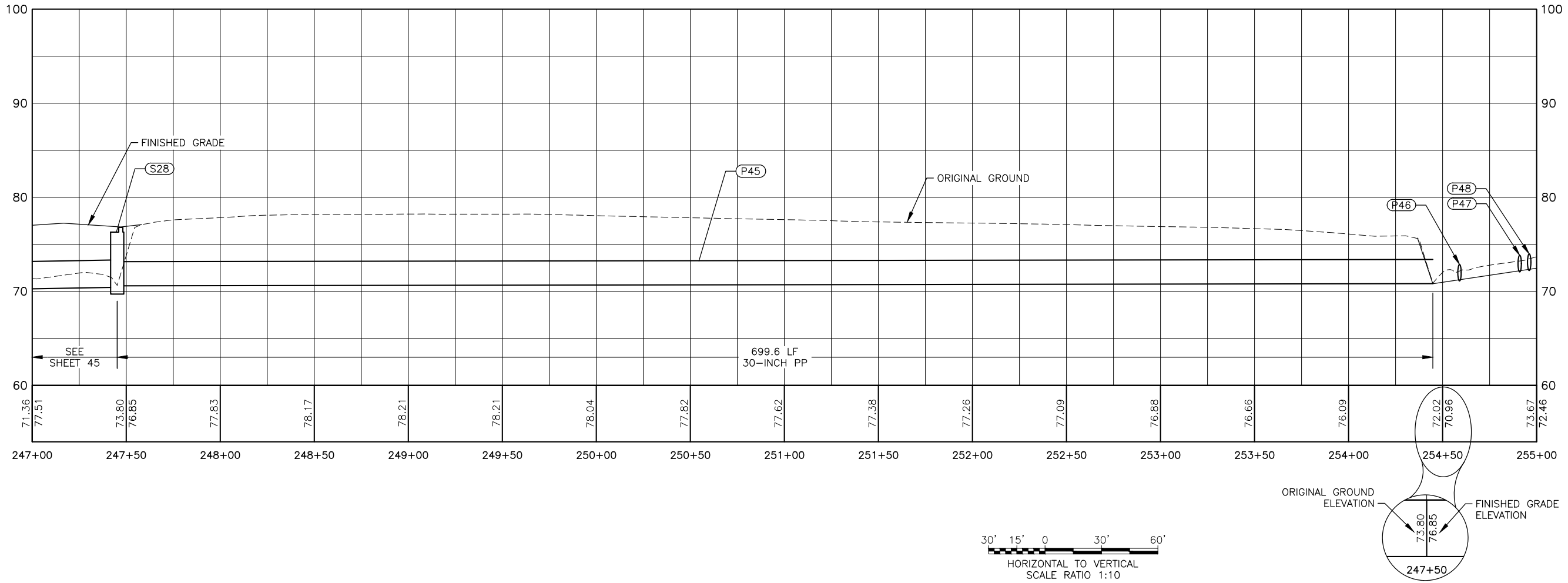
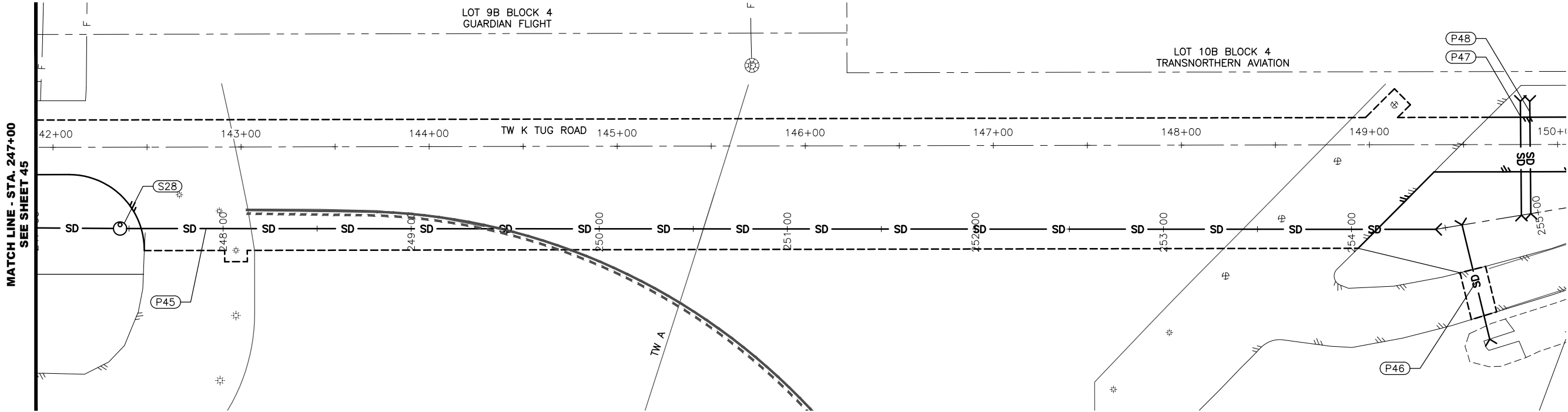


NOTES:

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- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.



PLANS DEVELOPED BY: CRW ENGINEERING GROUP 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION 4111 AVIATION AVE., ANCHORAGE ALASKA 99502 PHONE (907) 269-0590			TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3-02-0016-XXX-2026 STORM DRAIN PLAN & PROFILE - STA 241+50 TO STA 247+00			DATE: SEPTEMBER 2025
BY	DATE	REVISION							SHEET: 45 OF 57

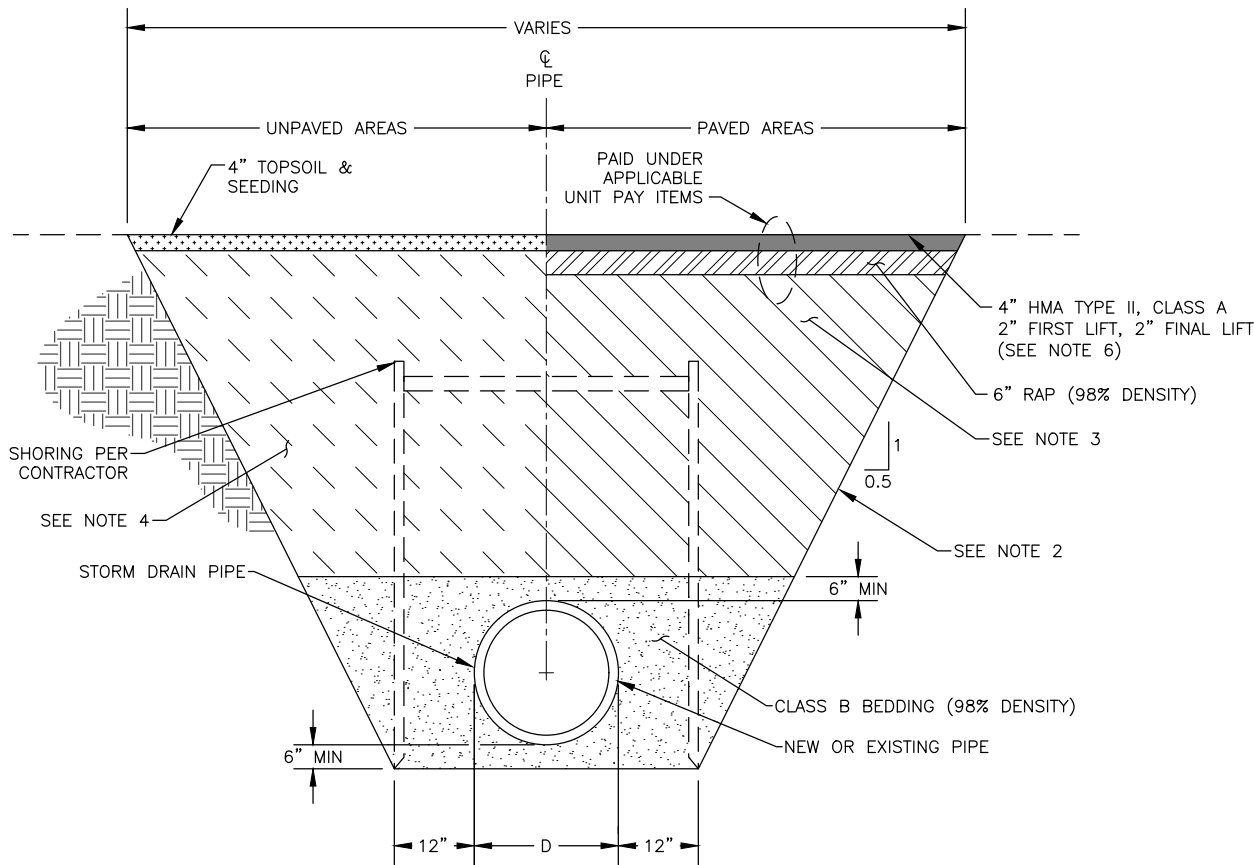


NOTES:

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- ELEVATIONS OF SHALLOW UTILITIES SHOWN IN PROFILE ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS.
- SEE DEMOLITION SHEETS 9-15 FOR EXISTING STORM DRAIN REMOVAL.

9/16/2025 7:36 AM
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Designed By: RB
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Checked By: SB

Date Revised:
Layout Name:
File Path and Name:



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47

STORM DRAIN/CULVERT TUG ROAD CROSSING TRENCH SECTION

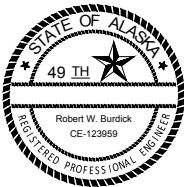
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TRENCH SECTION NOTES

- TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS.
- TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES SHALL CONFORM TO OSHA SAFETY STANDARDS.
- TRENCH BACKFILL UNDER PAVED AREAS SHALL BE SUITABLE MATERIALS COMPACTED TO 98% MAX. DENSITY.
- TRENCH BACKFILL UNDER UNPAVED AREAS SHALL BE SUITABLE MATERIALS (WAIVING THE #200 SIEVE REQUIREMENT) COMPACTED TO 95% MAX DENSITY.
- DENSITY CALLOUTS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.
- REDUCE PAVEMENT THICKNESS TO 2-INCHES OVER P46.

LEGEND:

	HMA TYPE II, CLASS A		TRENCH BACKFILL (UNPAVED AREAS)
	RAP		TRENCH BACKFILL (PAVED AREAS)
	SUBBASE		CLASS B BEDDING
	PROJECT EXCAVATION (SUITABLE OR UNSUITABLE)		TOPSOIL & SEEDING



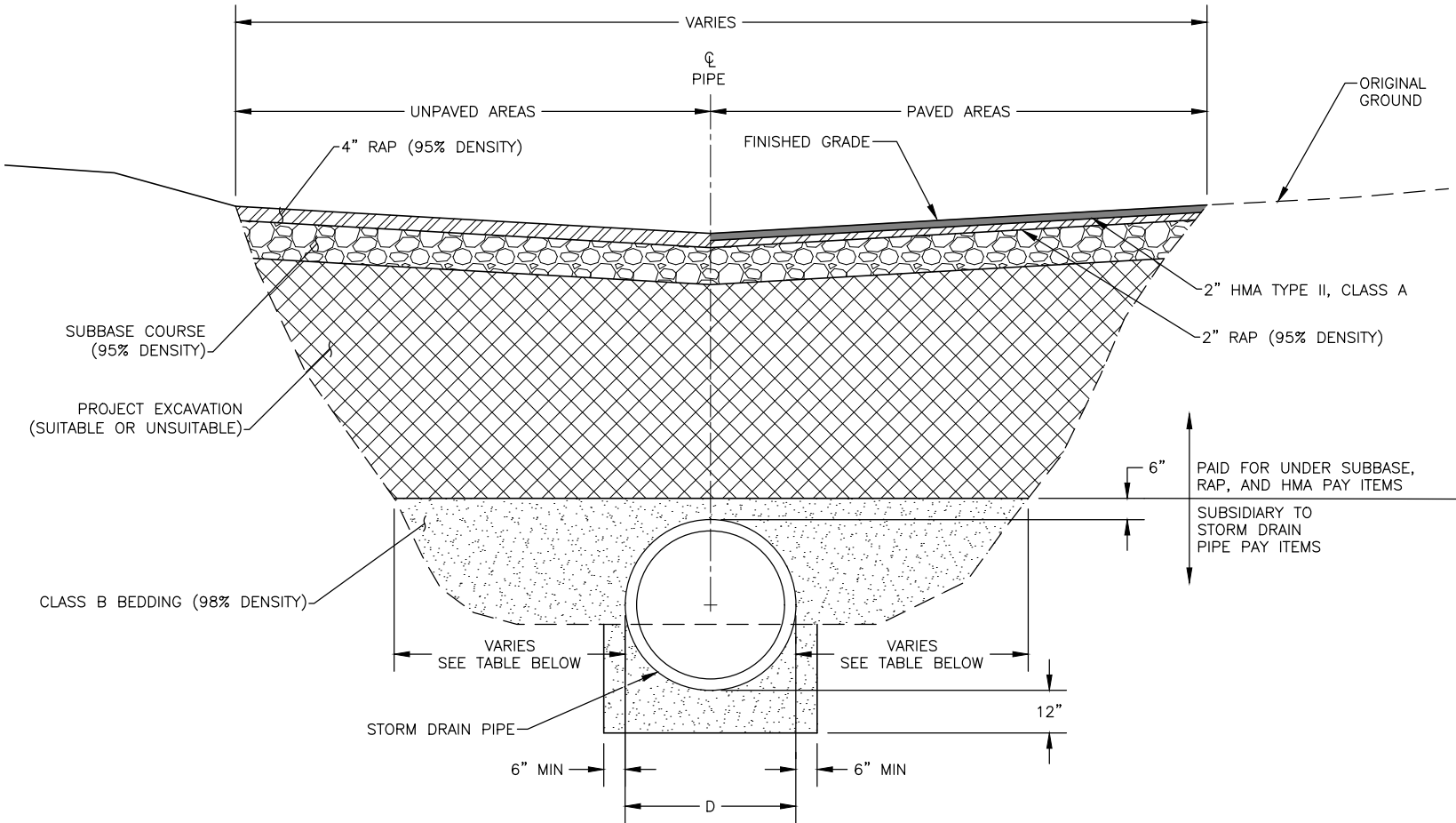
PLANS DEVELOPED BY:
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3940 ARCTIC BLVD. SUITE 300
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BY	DATE	REVISION

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TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN DETAILS

DATE:
SEPTEMBER 2025
SHEET:
47 OF 57



2
47

STORM DRAIN/CULVERT DITCH FILLING TRENCH SECTION

SCALE: NTS

TRENCH SECTION NOTES

- TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS.
- TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES SHALL CONFORM TO OSHA SAFETY STANDARDS.
- DENSITY CALLOUTS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.

BEDDING OFFSET SUMMARY TABLE				
LOCATION	APPROX. BEGIN STATION	APPROX. END STATION	AVERAGE WIDTH (FT)	
			LT	RT
DITCH 1	212+62	215+67	8.0	6.6
DITCH 2	222+76	223+89	8.3	8.4
DITCH 3	225+73	229+64	7.1	9.4
DITCH 4	231+50	232+50	11.2	11.2
DITCH 5	234+30	234+95	9.9	10.7
DITCH 6	236+72	240+53	10.7	8.9
DITCH 7	242+45	243+98	11.1	12.7
DITCH 8	245+90	247+39	6.6	5.8



1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE AND OSHA REGULATIONS AND REQUIREMENTS.
2. TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES SHALL CONFORM TO OSHA SAFETY STANDARDS.
3. TRENCH BACKFILL UNDER PAVED AREAS SHALL BE SUITABLE MATERIALS COMPACTED TO 98% MAX. DENSITY.
4. DENSITY CALLOUTS REPRESENT THE REQUIRED MINIMUM PERCENT OF THE MAXIMUM DENSITY.

	HMA TYPE II, CLASS A
	HMA TYPE V, CLASS
	CABC
	TRENCH BACKFILL



BY	DATE	REVISION

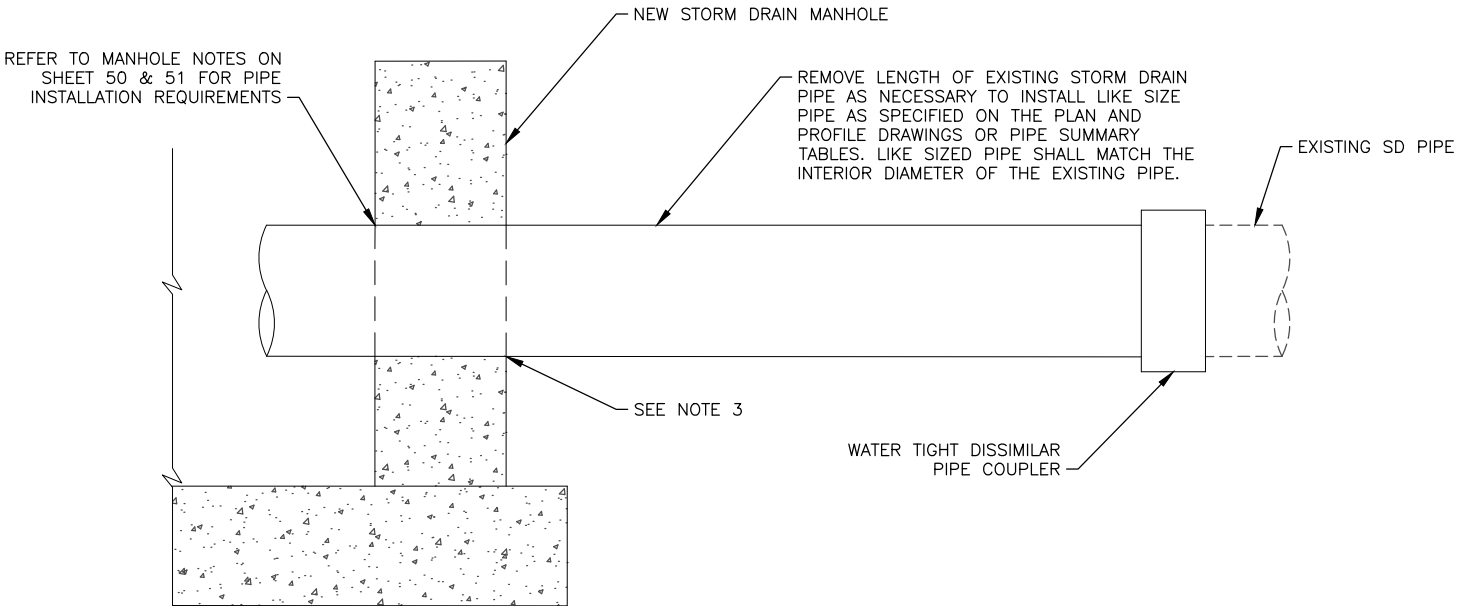


1. CONTRACTOR SHALL MEASURE COMPONENTS TO BE REPLACED PER ADJUST MANHOLE PRIOR TO ORDERING MATERIALS.
2. MAXIMUM TOTAL HEIGHT OF COVER, FRAME AND GRADE RINGS IS 18-INCHES. CONTRACTOR SHALL INSTALL AT MINIMUM ONE 6" GRADE RING UNLESS APPROVED BY THE ENGINEER.
3. FURNISH AND INSTALL STORM DRAIN MANHOLE FRAME, COVER, AND GRADE RING(S) PER SHEET 51. SEE TABLE ABOVE FOR NUMBER AND SIZE OF EXISTING GRADE RINGS. CONTRACTOR SHALL FIELD VERIFY GRADE RING QUANTITIES PRIOR TO ORDERING MATERIALS.
4. SET AND SEAL COMPONENTS WITH PLASTIC GASKET JOINT SEALER OR GROUT PER THE SPECIFICATIONS.
5. SEAL EXTERIOR GRADE RING JOINTS WITH EXTERIOR JOINT SEALANT.
6. PAYMENT FOR DEMOLITION WORK, SUBBASE, CABC, AND PAVEMENT REQUIRED TO ADJUST MANHOLES SHALL BE SUBSIDIARY TO ITEM D751.100.0000.
7. MATCH EXISTING PAVEMENT TYPE AND THICKNESS IN AREAS OUTSIDE THE PROJECT LIMITS. IN AREAS OF NEW CONSTRUCTION, SEE SITE PLAN AND TYPICAL SECTIONS FOR ASPHALT REHABILITATION AND RECONSTRUCTION WORK.

TED STEVENS ANCHORAGE
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN DETAILS

DATE: SEPTEMBER 2025

SHEET: 48 OF 57



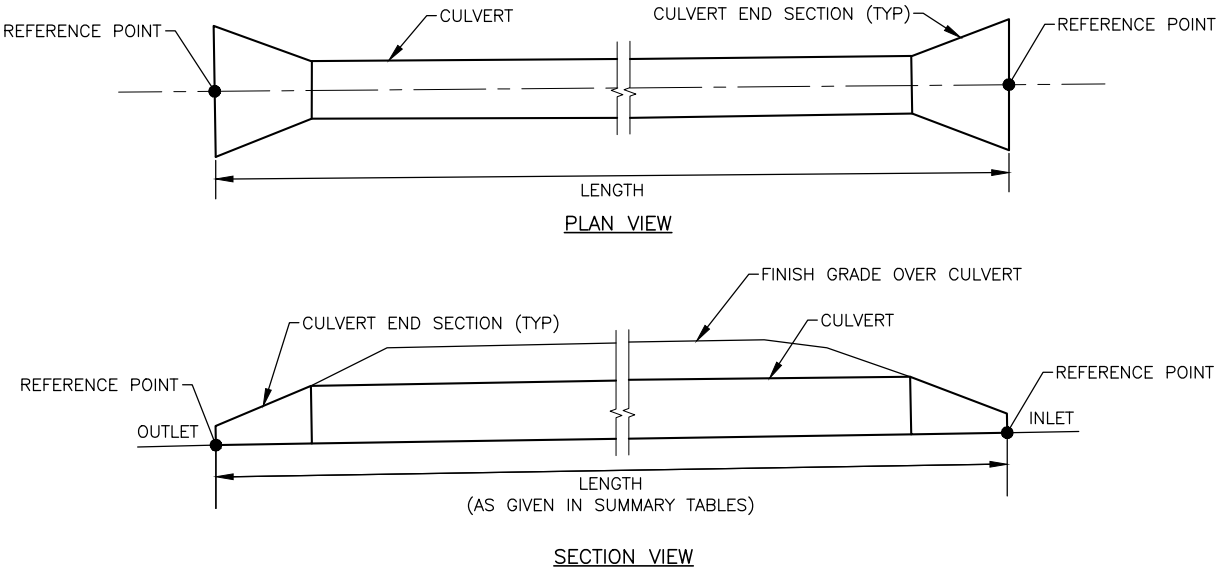
STORM DRAIN MANHOLE PIPE CONNECTION NOTES:

1. STORM PIPE REMOVED FOR NEW MANHOLE INSTALLATION SHALL BE SUBSIDIARY TO NEW MANHOLE PAY ITEM D751.010.0048.
2. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIX WITH POTABLE WATER PER MANUFACTURER'S RECOMMENDATIONS.
3. WHERE PIPES THAT WILL BE CONNECTED TO NEW MANHOLES ARE NOT ACCESSIBLE, THE CONTRACTOR WILL DETERMINE THE INVERT ELEVATION OF THE PIPE CONNECTIONS DURING MANHOLE INSTALLATION AND CORE THE MANHOLE WALL IN THE FIELD.

1
49

STORM MANHOLE PIPE CONNECTION DETAIL

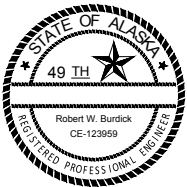
SCALE: NTS



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49

CULVERT REFERENCE DETAIL

SCALE: NTS



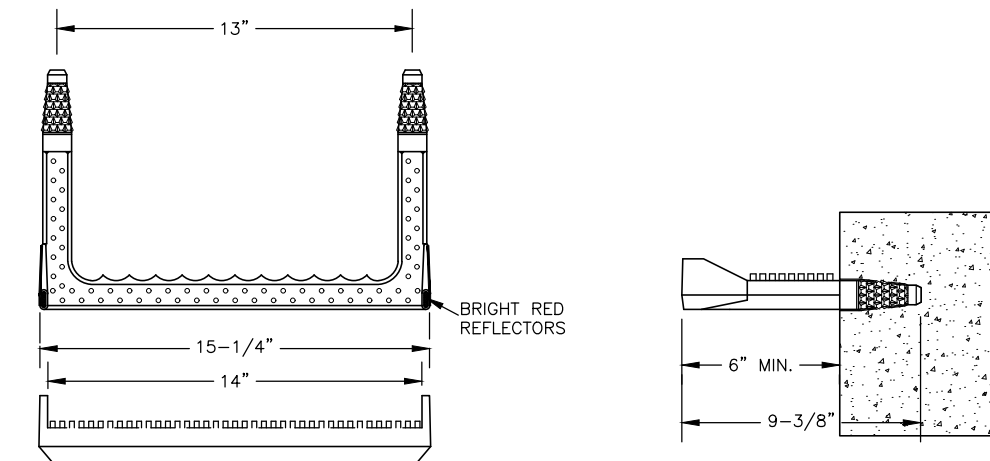
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BY	DATE	REVISION
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN DETAILS

DATE:
SEPTEMBER 2025
SHEET:
49 OF 57



1. MANHOLE STEPS SHALL BE INJECTION MOLDED POLYPROPYLENE COVERED GRADE 60 STEEL TIGHTLY IMBEDDED AT LEAST 3" INTO CONCRETE.
2. THE INSTALLED STEPS SHALL RESIST A PULLOUT FORCE OF 1500 LB.
3. STEPS SHALL BE PLACED 12" O.C. ON AN UNOBSTRUCTED SIDE OF THE STRUCTURE, 24" MAX. FROM TOP OF CASTING AND 18" FROM MANHOLE BASE.



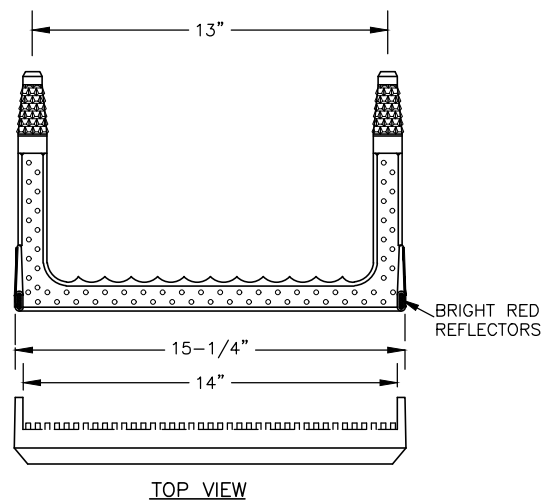
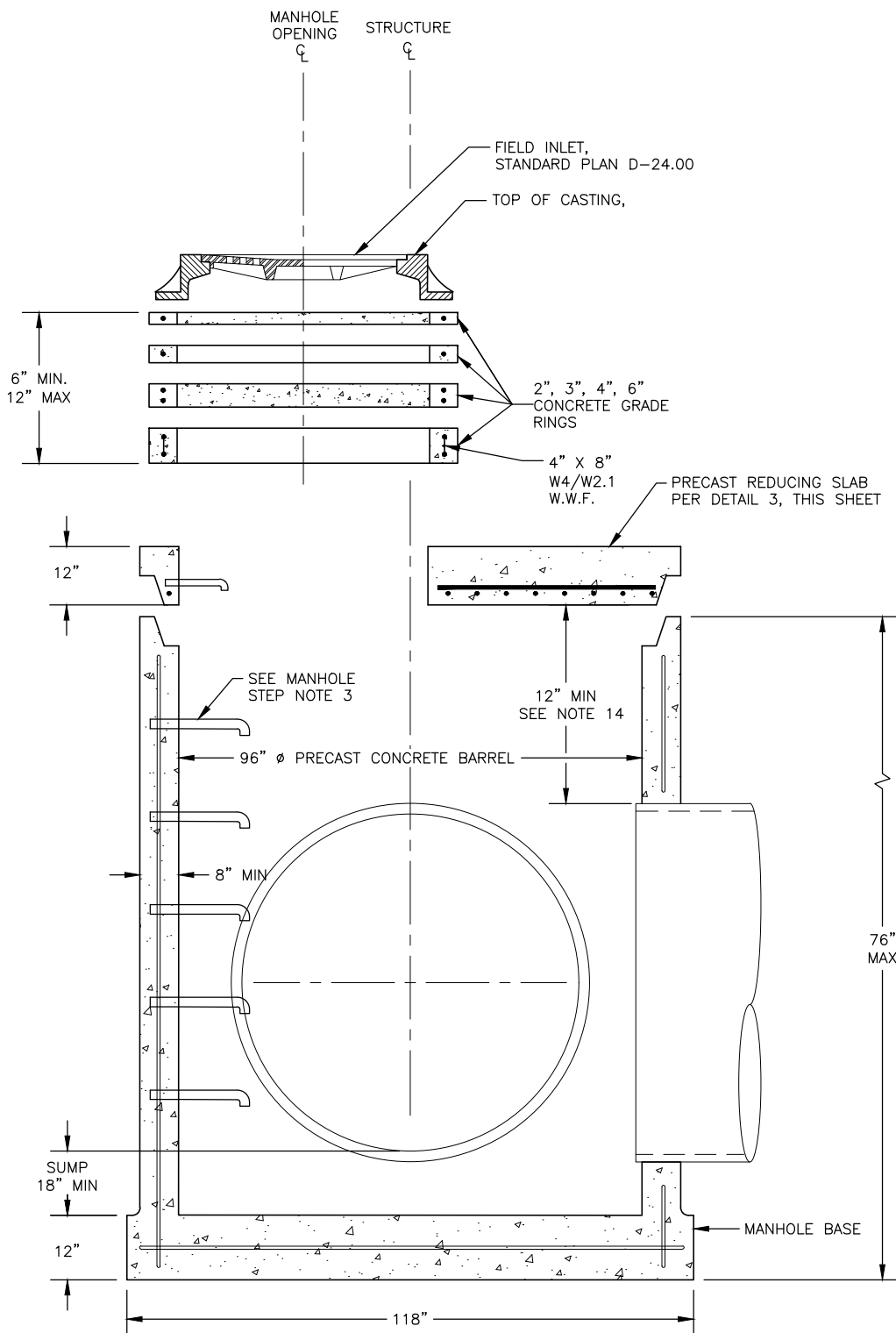
BY	DATE	REVISION

DATE:
SEPTEMBER 2025

SHEET:
50 OF 57

MANHOLE NOTES:

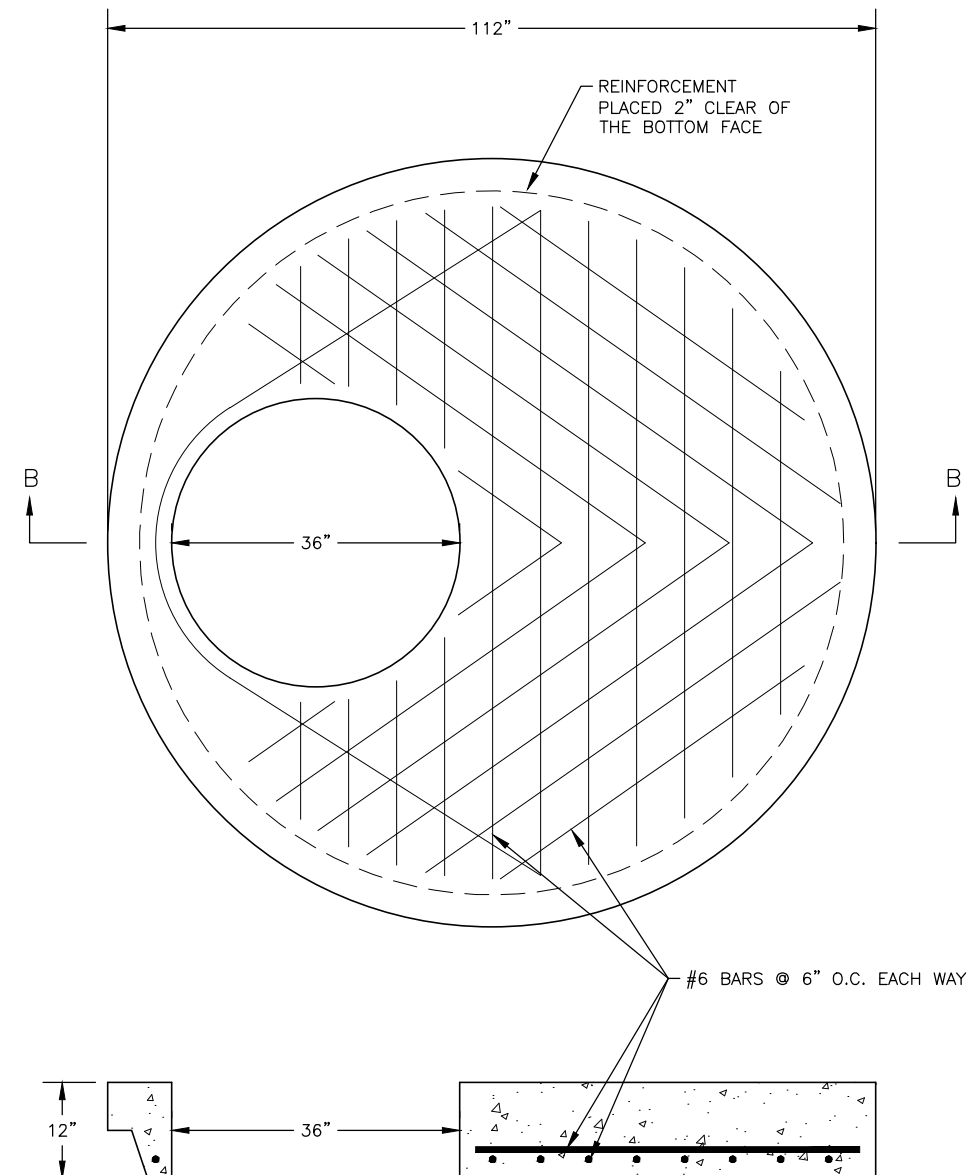
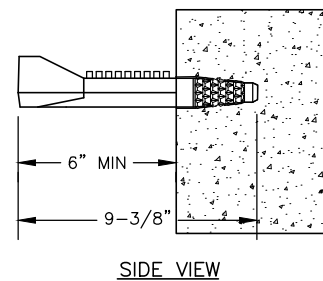
1. ALL DRAINAGE STRUCTURES AND APPURTENANCES SHALL MEET THE REQUIREMENTS OF ASTM C-478.
2. ON STORM DRAIN MANHOLE, TYPE III STRUCTURES, MINIMUM DISTANCE BETWEEN KNOCKOUTS IS 4".
3. USE CONCRETE WITH A MINIMUM 4000 PSI 28 DAY COMPRESSIVE STRENGTH AND $6\% \pm 1.5\%$ AIR ENTRAINMENT. MAXIMUM WATER/CEMENT RATIO IS 0.45.
4. MINIMUM STEEL REQUIRED FOR BARREL AS PER AASHTO M199 SHALL BE IMBEDDED IN BASE SO THAT THE FIRST BARREL SECTION IS CONNECTED TO THE BASE BY CONTINUOUS STEEL.
5. MINIMUM COVER ON REINFORCING STEEL IS $1-1/2"$.
6. FORM ALL BLOCKOUTS.
7. ALL STORM DRAIN MANHOLES AND INLETS SHALL HAVE 18" MINIMUM SUMPS, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
8. PLACE MANHOLE BASE ON 6" MINIMUM COMPACTED AGGREGATE BASE COURSE UNLESS INDICATED OTHERWISE.
9. BACKFILL AROUND MANHOLE WITH SUBBASE COURSE, COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY.
18. EXTEND PIPE A MINIMUM OF 2" INTO MANHOLE. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIX WITH POTABLE WATER PER MANUFACTURER'S RECOMMENDATIONS.
19. CONTRACTOR SHALL SUBMIT STORM MANHOLE BUILD SHEETS WITH PROPOSED COMPONENTS AND DIMENSIONS FOR APPROVAL BY THE ENGINEER PRIOR TO ORDERING MATERIALS.
20. MANHOLE LIDS SHALL BE RECESSED 0.5" BELOW FINISHED GRADE.
21. WHERE PIPES THAT WILL BE CONNECTED TO NEW MANHOLES ARE NOT ACCESSIBLE, THE CONTRACTOR WILL DETERMINE THE INVERT ELEVATION OF THE PIPE CONNECTIONS DURING MANHOLE INSTALLATION AND CORE THE MANHOLE WALL IN THE FIELD.
22. IF INSUFFICIENT COVER EXISTS TO POSITION THE STORM DRAIN FIELD INLET 0.5 INCH BELOW GRADE, THE SPACING BETWEEN THE TOP OF THE PIPE AND THE REDUCING SLAB MAY BE REDUCED TO A MINIMUM OF 6 INCHES. IF FURTHER REDUCTION IN MANHOLE HEIGHT IS NECESSARY, THE STORM DRAIN TOP INTAKE MAY BE PRECAST INTO THE REDUCING SLAB, PENDING ENGINEER APPROVAL.
16. WHERE NEW MANHOLES WILL BE CONNECTED TO EXISTING PIPES, REMOVE EXISTING PIPE AND INSTALL NEW STORM PIPE PER DETAIL 1/49.
17. OFFSET IS MEASURED TO THE CENTERLINE OF STRUCTURE.



MANHOLE STEP

MANHOLE STEP NOTES:

1. MANHOLE STEPS SHALL BE INJECTION MOLDED POLYPROPYLENE COVERED GRADE 60 STEEL TIGHTLY IMBEDDED AT LEAST 3" INTO CONCRETE.
2. THE INSTALLED STEPS SHALL RESIST A PULLOUT FORCE OF 1500 POUNDS.
3. STEPS SHALL BE PLACED 12" OC ON AN UNOBSTRUCTED SIDE OF THE STRUCTURE, 24" MAX FROM TOP OF CASTING AND 18" FROM MANHOLE BASE.



PRECAST CONCRETE REDUCING SLAB

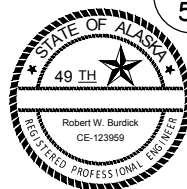
SCALE: NTS

REDUCING SLAB NOTES:

1. USE NO. 6 FOR ALL REBAR EXCEPT STIRRUPS AND HOOPS.
2. ALL REBAR SHALL BE SPACED AT 6" CENTERS UNLESS OTHERWISE NOTED.
3. MAINTAIN A MINIMUM OF 1.5" OF CONCRETE COVER OVER ALL REBAR.
4. REINFORCING STEEL SHOWN IS A MINIMUM PER ASTM C478. PRECAST MFG TO COMPLETE AND SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR ENGINEER'S REVIEW.

STORM DRAIN MANHOLE, TYPE III

SCALE: NTS



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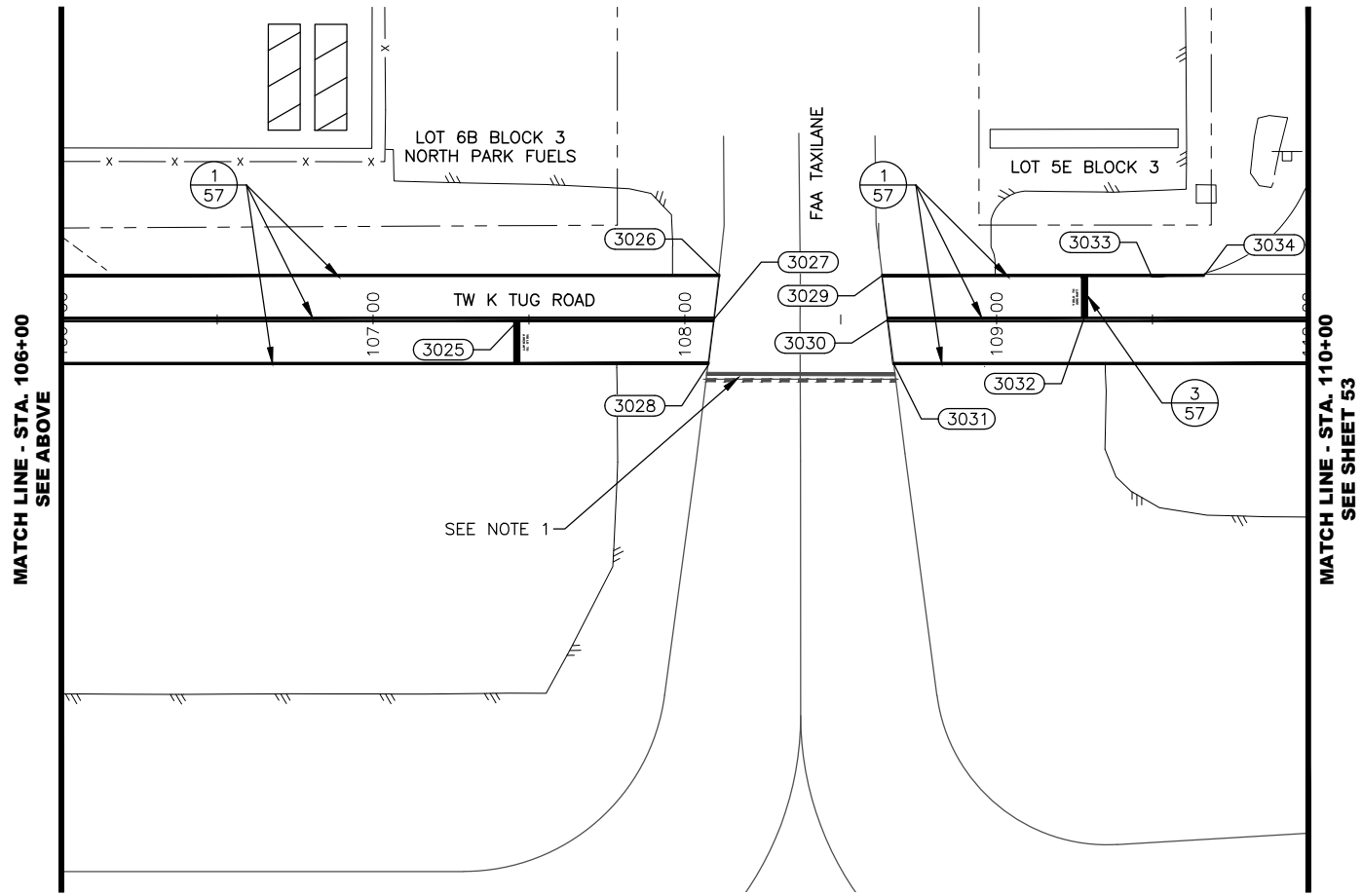
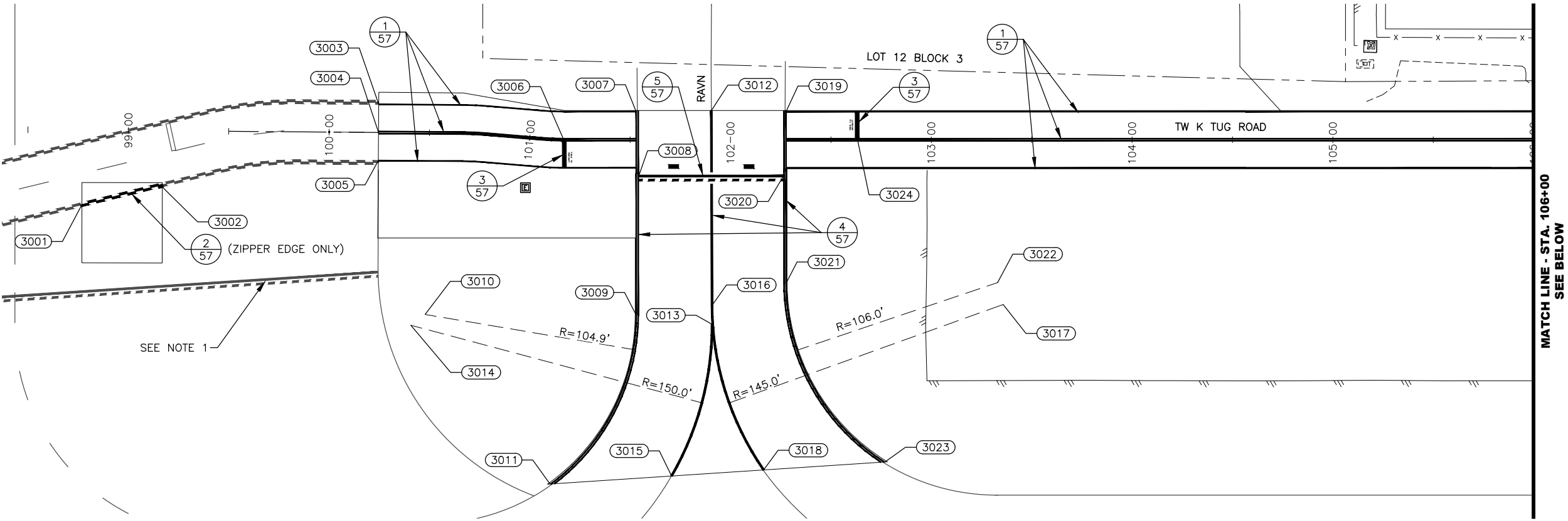
TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
STORM DRAIN DETAILS

DATE: SEPTEMBER 2025

SHEET:
51 OF 57

9/16/2025 7:49 AM
52
J:\JobsData\3020749 ANC TW K Tug Road Reconstruction\00 CAD\2019\01 Working Set\01 Civil\00992-ANC-Marking Plan.dwg
Designed By: RB
Drawn By: SS
Checked By: SB

Date Revised:
Layout Name:
File Path and Name:



POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3001	98+77.16	37.06 RT	ME
3002	99+17.11	27.96 RT	ME
3003	100+24.59	14.00 LT	ME
3004	100+24.59	0.00 CL	ME
3005	100+24.59	14.00 RT	ME
3006	101+17.27	0.75 RT	STOP BAR
3007	101+52.83	14.50 LT	ME
3008	101+54.33	18.13 RT	NON-MOVEMENT
3009	101+52.83	86.95 RT	PC
3010	100+48.49	90.52 RT	RP, R=104.9'
3011	101+13.93	171.67 RT	ME
3012	101+90.49	14.50 LT	ME
3013	101+90.84	91.98 RT	PC
3014	100+41.44	95.96 RT	RP, R=150.0'
3015	101+70.68	167.59 RT	ME

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3016	101+90.81	82.60 RT	PC
3017	103+35.81	82.13 RT	RP, R=145.0'
3018	102+16.52	164.56 RT	ME
3019	102+27.92	14.50 LT	ME
3020	102+26.42	18.13 RT	NON-MOVEMENT
3021	102+27.92	71.13 RT	PC
3022	103+33.07	71.13 RT	RP, R=106.0'
3023	102+77.04	160.57 RT	ME
3024	102+63.13	0.75 LT	STOP BAR
3025	107+46.14	0.75 RT	STOP BAR
3026	108+11.25	14.00 LT	END STRIPING
3027	108+09.26	0.00 CL	END STRIPING
3028	108+07.64	14.50 RT	END STRIPING
3029	108+63.31	14.12 LT	BEGIN STRIPING
3030	108+65.18	0.00 CL	BEGIN STRIPING

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3031	108+66.94	14.00 RT	BEGIN STRIPING
3032	109+28.20	0.75 LT	STOP BAR
3033	109+49.71	14.00 LT	PI
3034	109+66.58	14.06 LT	ME

NOTES:

1. MOVEMENT AREA BOUNDARY LINES ARE EXISTING AND SHOWN FOR REFERENCE ONLY.



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ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
MARKING PLAN - BOP TO STA 110+00

DATE:
SEPTEMBER 2025

SHEET:
52 OF 57

Date Revised: 9/16/2025 7:49 AM

Layout Name: 53

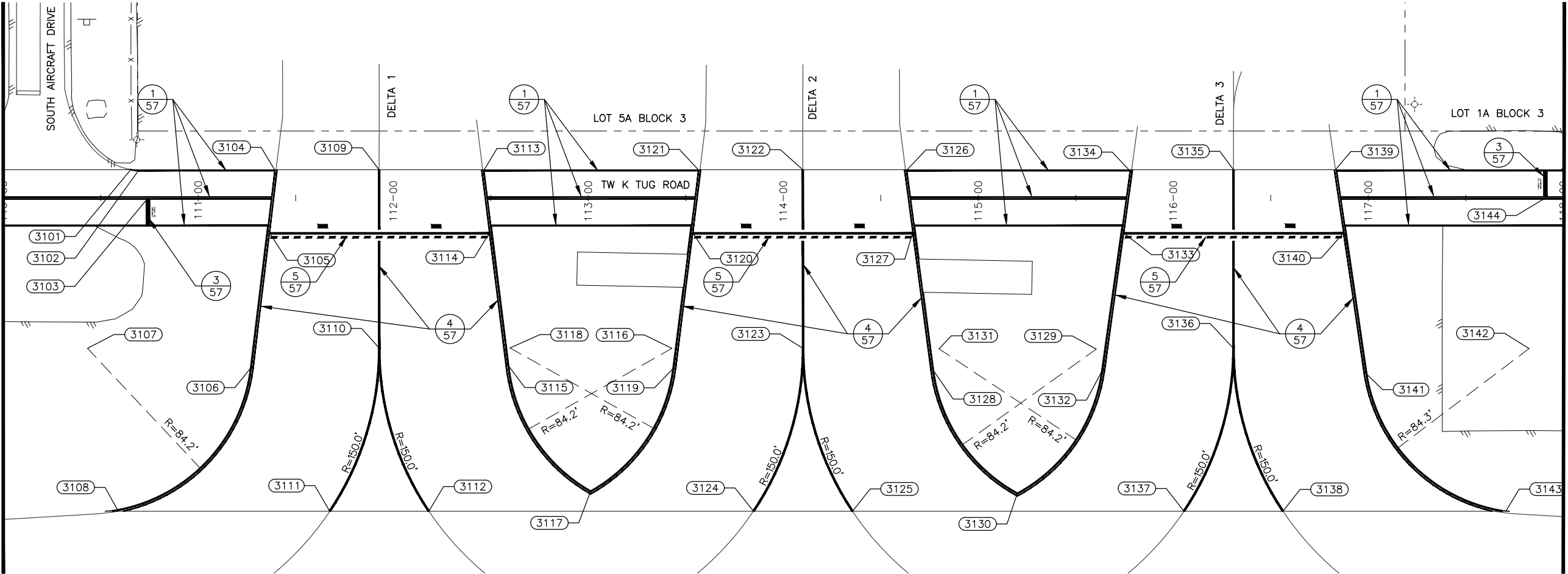
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Designed By: RB

Drawn By: SS

Checked By: SB

MATCH LINE - STA. 110+00
SEE SHEET 52



MATCH LINE - STA. 118+00
SEE SHEET 54

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3101	110+65.37	14.50 LT	ME
3102	110+69.28	14.00 LT	PI
3103	110+74.21	0.00 CL	STOP BAR
3104	111+39.19	14.50 LT	ME
3105	111+36.74	18.13 RT	NON-MOVEMENT
3106	111+26.86	87.24 RT	PC
3107	110+43.22	77.11 RT	RP, R=84.2' / 150'
3108	110+59.01	160.63 RT	ME
3109	111+92.77	14.50 LT	ME
3110	111+92.84	77.01 RT	PC

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3111	111+67.45	160.63 RT	ME
3112	112+18.23	160.63 RT	ME
3113	112+46.67	14.50 LT	ME
3114	112+49.22	18.13 RT	NON-MOVEMENT
3115	112+59.19	86.16 RT	PC
3116	113+42.96	77.12 RT	RP, R=84.2' / 150'
3117	113+01.25	150.32 RT	PT
3118	112+59.90	76.92 RT	RP, R=84.2' / 150'
3119	113+43.48	87.51 RT	PC
3120	113+53.79	18.13 RT	NON-MOVEMENT

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3121	113+56.42	14.50 LT	ME
3122	114+10.02	14.50 LT	ME
3123	114+10.09	77.12 RT	PC
3124	113+84.78	160.62 RT	ME
3125	114+35.56	160.62 RT	ME
3126	114+63.53	14.50 LT	ME
3127	114+66.29	18.13 RT	NON-MOVEMENT
3128	114+77.01	88.44 RT	PC
3129	115+60.55	77.49 RT	RP, R=84.2' / 150'
3130	115+20.08	151.39 RT	PT

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3131	114+79.90	77.34 RT	RP, R=84.2' / 150'
3132	115+63.34	89.02 RT	PC
3133	115+74.78	18.12 RT	NON-MOVEMENT
3134	115+77.76	14.00 LT	ME
3135	116+30.87	14.50 LT	ME
3136	116+30.88	77.11 RT	PC
3137	116+05.49	160.62 RT	ME
3138	116+56.27	160.62 RT	ME
3139	116+83.17	14.50 LT	ME
3140	116+87.18	18.12 RT	NON-MOVEMENT

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3141	116+98.35	89.49 RT	PC
3142	117+82.46	77.22 RT	RP, R=84.3' / 150'
3143	117+70.55	160.62 RT	ME
3144	117+90.83	0.00 CL	STOP BAR



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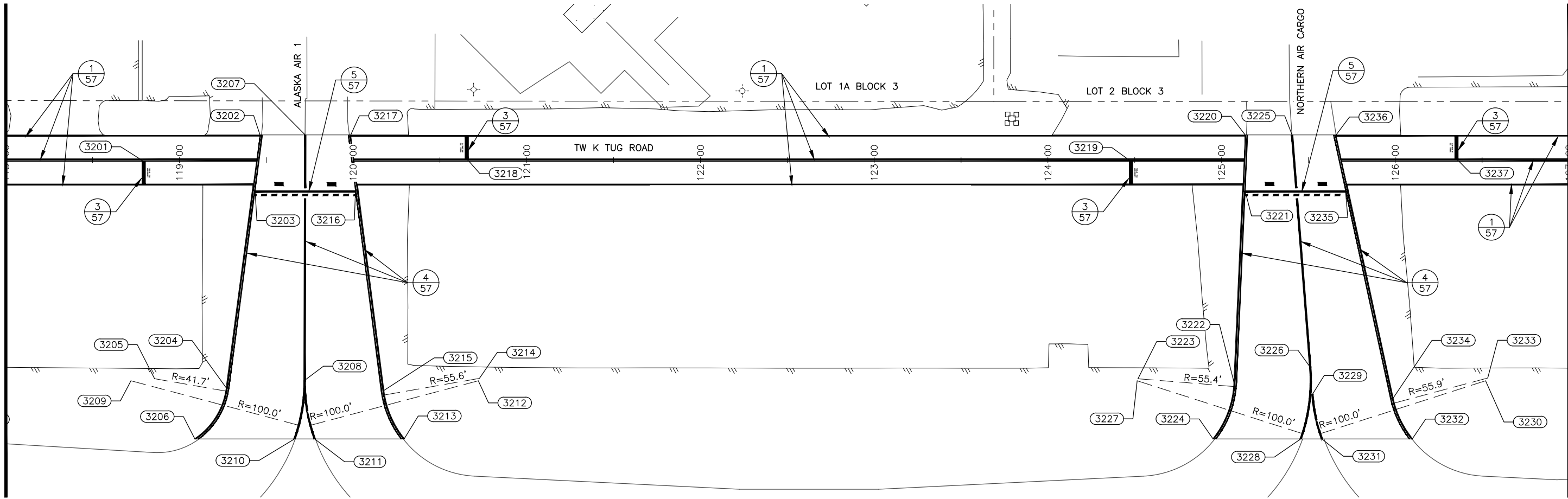
TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
MARKING PLAN - STA 110+00 TO STA 118+00

DATE:
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SHEET:
53 OF 57

9/16/2025 7:49 AM
54
Date Revised: 9/16/2025 7:49 AM
Layout Name: 54
File Path and Name: J:\JobsData\32027\49 ANC TW K Tug Road Reconstruction\00 CAD\2019\01 Working Set\01 Civil\00992-ANC-Marking Plan.dwg

Designed By: RB
Drawn By: SS
Checked By: SB

MATCH LINE - STA. 118+00
SEE SHEET 53



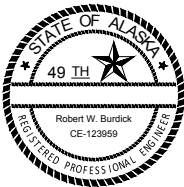
MATCH LINE - STA. 127+00
SEE SHEET 55

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3201	118+79.40	0.75 RT	STOP BAR
3202	119+46.36	14.50 LT	ME
3203	119+43.56	18.13 RT	NON-MOVEMENT
3204	119+27.07	131.39 RT	PC
3205	118+85.68	125.92 RT	RP, R=41.7'
3206	119+08.90	160.62 RT	ME
3207	119+72.45	14.50 LT	ME
3208	119+72.07	126.85 RT	PC
3209	118+72.06	127.12 RT	RP, R=100.0'
3210	119+66.29	160.62 RT	ME

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3211	119+77.84	160.62 RT	ME
3212	120+72.07	127.12 RT	RP, R=100.0'
3213	120+29.36	160.62 RT	ME
3214	120+72.71	125.73 RT	RP, R=55.6'
3215	120+17.51	132.80 RT	PC
3216	120+01.31	18.12 RT	NON-MOVEMENT
3217	119+98.64	14.50 LT	ME
3218	120+65.44	0.75 LT	STOP BAR
3219	124+47.85	0.75 RT	STOP BAR
3220	125+13.63	14.50 LT	ME

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3221	125+13.67	18.12 RT	NON-MOVEMENT
3222	125+07.25	128.42 RT	PC
3223	124+51.86	125.95 RT	RP, R=55.4'
3224	124+95.13	160.62 RT	ME
3225	125+40.60	14.50 LT	ME
3226	125+51.10	119.30 RT	PC
3227	124+51.40	127.12 RT	RP, R=100.0'
3228	125+45.62	160.62 RT	ME
3229	125+52.32	134.94 RT	PC
3230	126+52.02	127.12 RT	RP, R=100.0'

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3231	125+57.79	160.62 RT	ME
3232	126+09.82	160.62 RT	ME
3233	126+53.27	125.52 RT	RP, R=55.9'
3234	125+98.67	137.30 RT	PC
3235	125+71.43	18.12 RT	NON-MOVEMENT
3236	125+65.98	14.50 LT	ME
3237	126+35.26	0.75 LT	STOP BAR



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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
MARKING PLAN - STA 118+00 TO STA 127+00

DATE:
SEPTEMBER 2025
SHEET:
54 OF 57

Date Revised: 9/16/2025 7:49 AM

Layout Name: 55

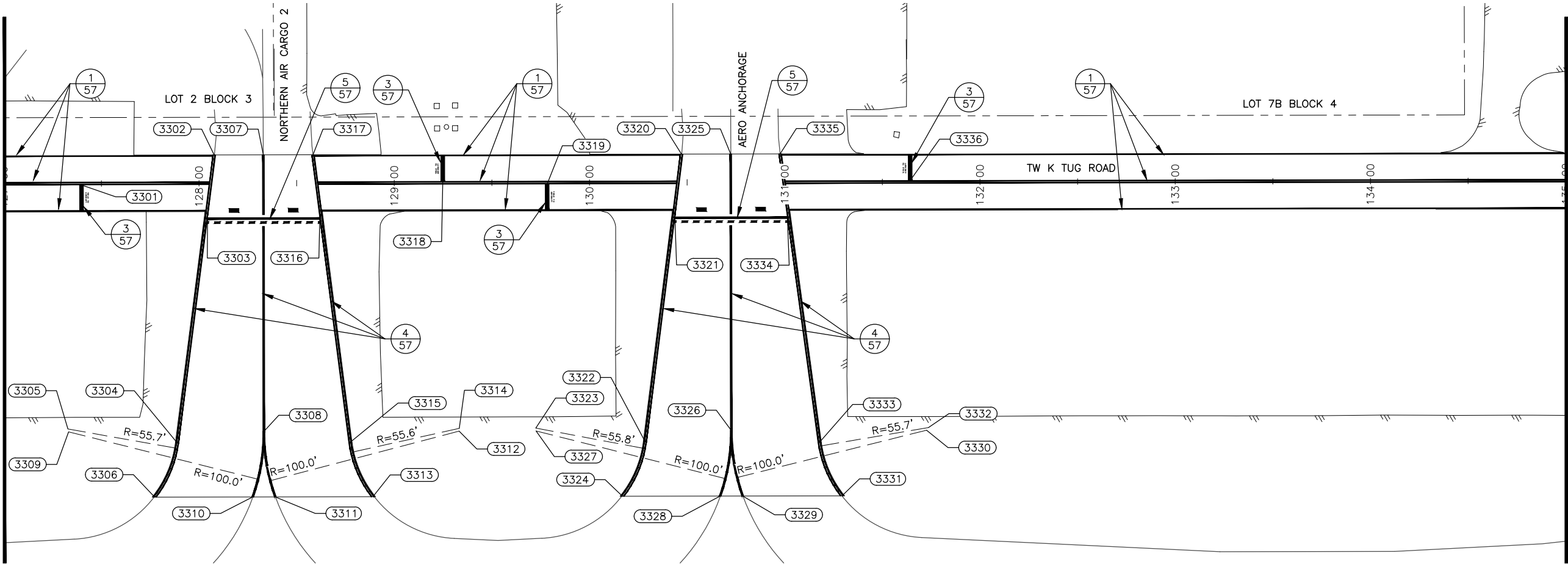
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Designed By: RB

Drawn By: SS

Checked By: SB

MATCH LINE - STA. 127+00
SEE SHEET 54

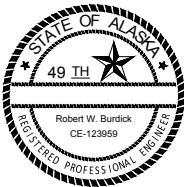


MATCH LINE - STA. 135+00
SEE SHEET 56

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3301	127+39.81	0.75 RT	STOP BAR
3302	128+07.80	14.50 LT	ME
3303	128+04.32	18.12 RT	NON-MOVEMENT
3304	127+88.63	132.93 RT	PC
3305	127+32.60	125.64 RT	RP, R=55.7'
3306	127+76.97	160.62 RT	ME
3307	128+32.99	14.50 LT	ME
3308	128+32.97	127.14 RT	PC
3309	127+32.97	127.12 RT	RP, R=100.0'
3310	128+27.19	160.62 RT	ME
3311	128+38.75	160.62 RT	ME
3312	129+32.97	127.12 RT	RP, R=100.0'
3313	128+88.76	160.62 RT	ME
3314	129+33.07	125.72 RT	RP, R=55.6'
3315	128+77.12	132.82 RT	PC
3316	128+61.80	18.12 RT	NON-MOVEMENT

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3317	128+58.41	14.50 LT	ME
3318	129+24.87	0.75 LT	STOP BAR
3319	129+78.32	0.75 RT	STOP BAR
3320	130+47.15	14.50 LT	ME
3321	130+43.73	18.12 RT	NON-MOVEMENT
3322	130+28.28	132.81 RT	PC
3323	129+72.24	125.63 RT	RP, R=55.8'
3324	130+16.60	160.62 RT	ME
3325	130+72.35	14.50 LT	ME
3326	130+72.40	127.08 RT	PC
3327	129+72.40	127.12 RT	RP, R=100.0'
3328	130+66.62	160.62 RT	ME
3329	130+78.18	160.62 RT	ME
3330	131+72.40	127.12 RT	RP, R=100.0'
3331	131+29.04	160.62 RT	ME
3332	131+73.38	125.76 RT	RP, R=55.7'

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3333	131+17.48	133.24 RT	PC
3334	131+01.31	18.12 RT	NON-MOVEMENT
3335	130+97.70	14.50 LT	ME
3336	131+64.27	0.75 LT	STOP BAR



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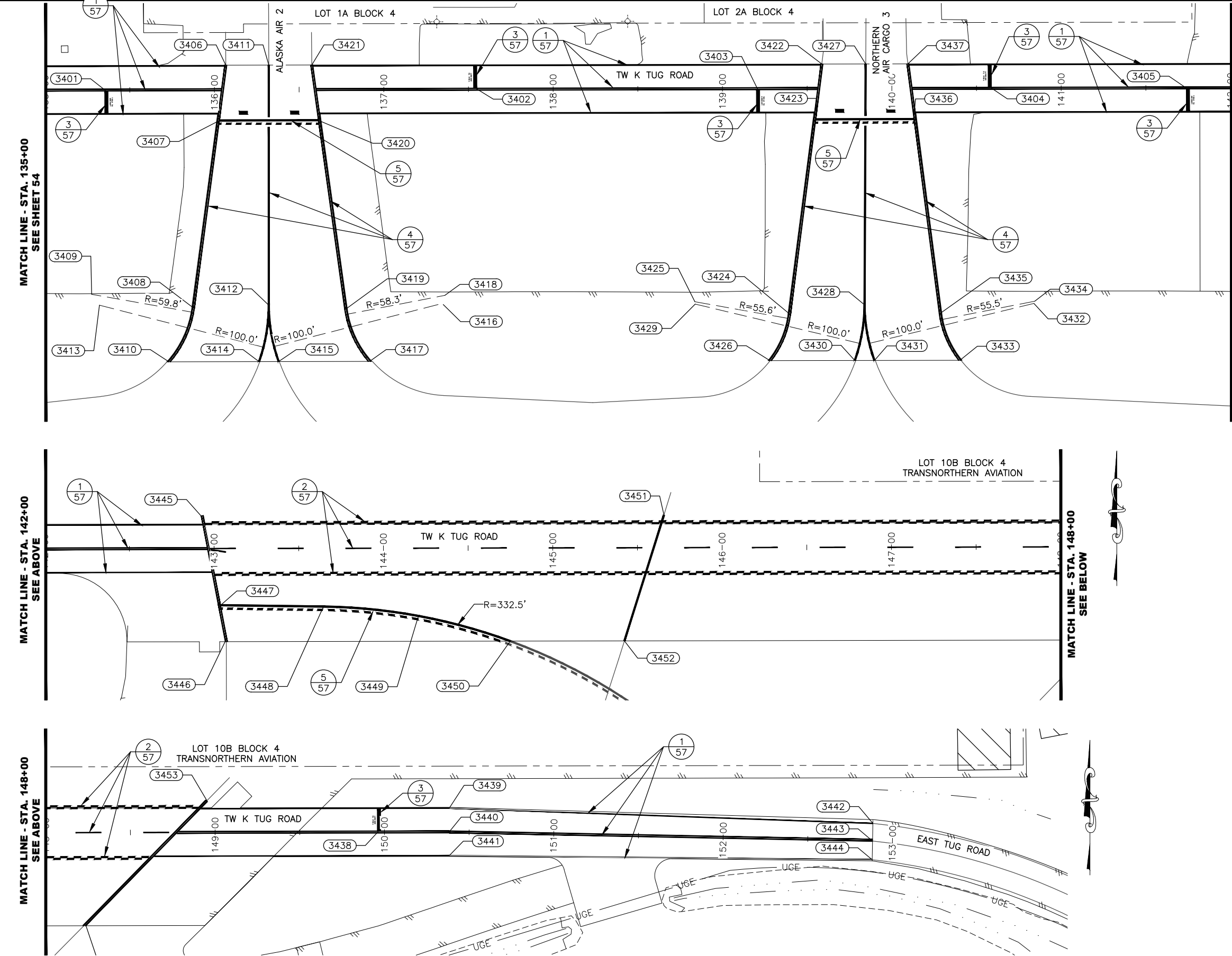
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ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
MARKING PLAN - STA 127+00 TO STA 135+00

DATE:
SEPTEMBER 2025
SHEET:
55 OF 57

Date Revised: 9/16/2025 7:49 AM
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Designed By: RB
Drawn By: SS
Checked By: SB

POINT SUMMARY			
POINT #	STATION	OFFSET	DESCRIPTION
3401	135+36.19	0.75 RT	STOP BAR
3402	137+53.98	0.75 LT	STOP BAR
3403	139+20.99	0.75 RT	STOP BAR
3404	140+57.84	0.75 LT	STOP BAR
3405	141+74.84	0.75 RT	STOP BAR
3406	136+06.72	14.50 LT	ME
3407	136+03.06	18.12 RT	NON-MOVEMENT
3408	135+87.34	128.81 RT	PC
3409	135+27.28	120.68 RT	RP, R=59.8'
3410	135+72.86	160.62 RT	ME
3411	136+32.12	14.50 LT	ME
3412	136+31.84	127.32 RT	PC
3413	135+31.84	127.12 RT	RP, R=100.0'
3414	136+26.06	160.62 RT	ME
3415	136+37.61	160.62 RT	ME
3416	137+34.84	127.12 RT	RP, R=100.0'
3417	136+91.33	160.62 RT	ME
3418	137+35.82	121.72 RT	RP, R=58.3'
3419	136+77.27	129.74 RT	PC
3420	136+61.22	18.12 RT	NON-MOVEMENT
3421	136+57.50	14.50 LT	ME
3422	139+58.73	14.50 LT	ME
3423	139+55.21	18.12 RT	NON-MOVEMENT
3424	139+39.39	133.08 RT	PC
3425	138+83.47	125.75 RT	RP, R=55.6'
3426	139+27.76	160.62 RT	ME
3427	139+84.57	14.50 LT	ME
3428	139+83.62	127.78 RT	PC
3429	138+83.63	127.12 RT	RP, R=100.0'
3430	139+77.85	160.62 RT	ME
3431	139+89.41	160.62 RT	ME
3432	140+83.63	127.10 RT	RP, R=100.0'
3433	140+39.90	160.62 RT	ME
3434	140+84.15	125.82 RT	RP, R=55.5'
3435	140+28.31	132.93 RT	PC
3436	140+12.93	18.12 RT	NON-MOVEMENT
3437	140+09.53	14.50 LT	ME
3438	149+96.78	0.75 LT	STOP BAR
3439	150+38.26	14.00 LT	PI
3440	150+38.27	0.00 RT	PI
3441	150+38.58	14.00 RT	PI
3442	152+88.27	9.94 LT	ME
3443	152+88.27	0.49 RT	ME
3444	152+88.27	11.51 RT	ME
3445	142+92.30	19.37 LT	ME
3446	143+06.38	55.00 RT	ME
3447	143+03.83	33.47 RT	PI
3448	143+64.53	34.39 RT	PC
3449	144+20.55	40.01 RT	MIDPOINT
3450	144+74.82	55.00 RT	ME
3451	145+65.70	19.27 LT	ME
3452	145+42.20	55.00 RT	ME
3453	148+95.60	18.06 LT	ME
3454	148+23.68	55.00 RT	ME



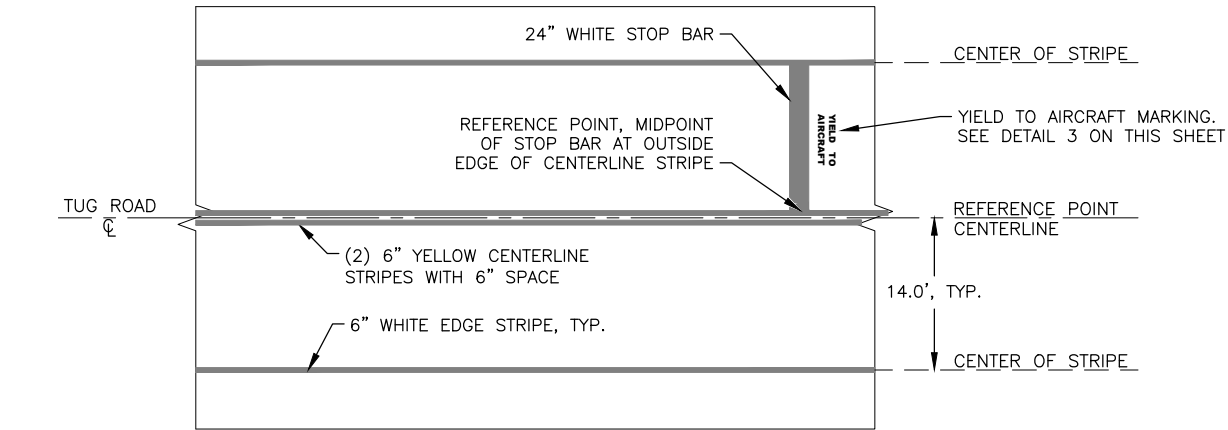
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	SHEET: 56 OF 57

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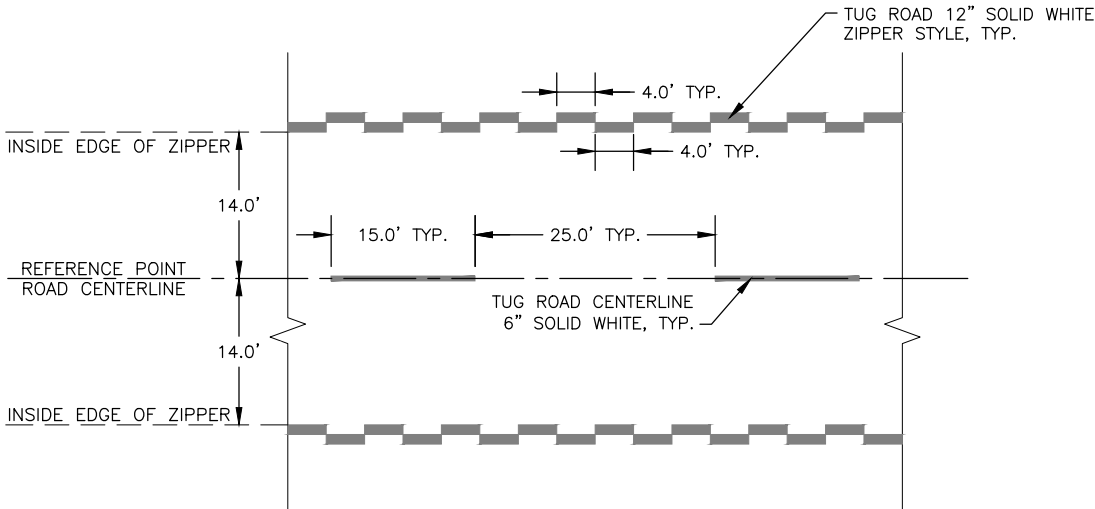
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57

TYPICAL TUG ROAD MARKING DETAIL

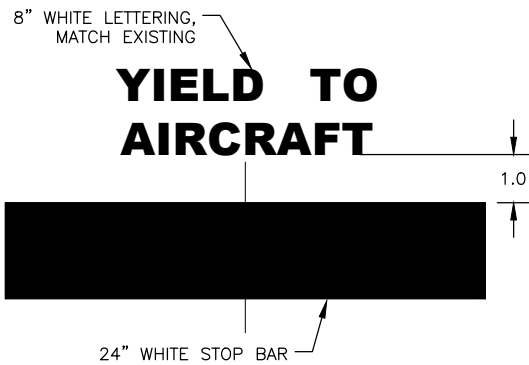
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ALTERNATE TUG ROAD MARKING DETAIL

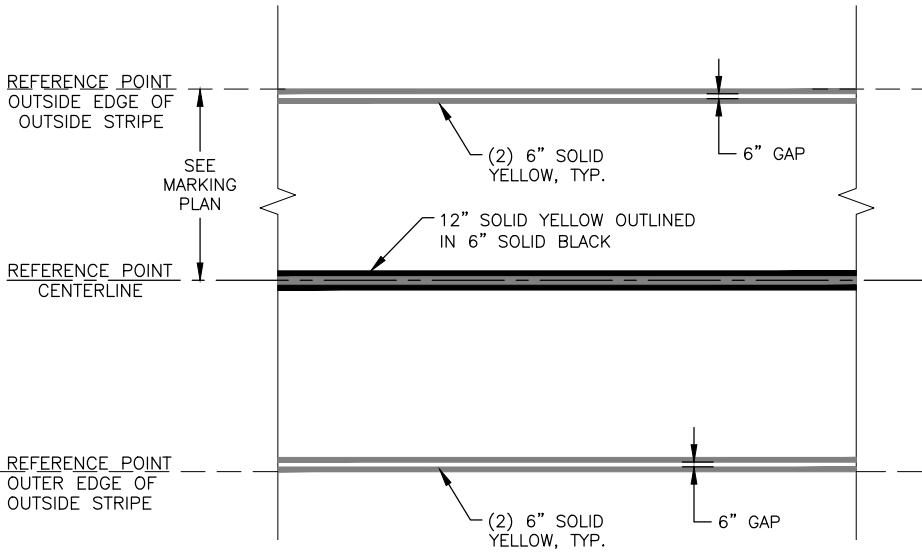
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57

24" WHITE STOP BAR MARKING DETAIL

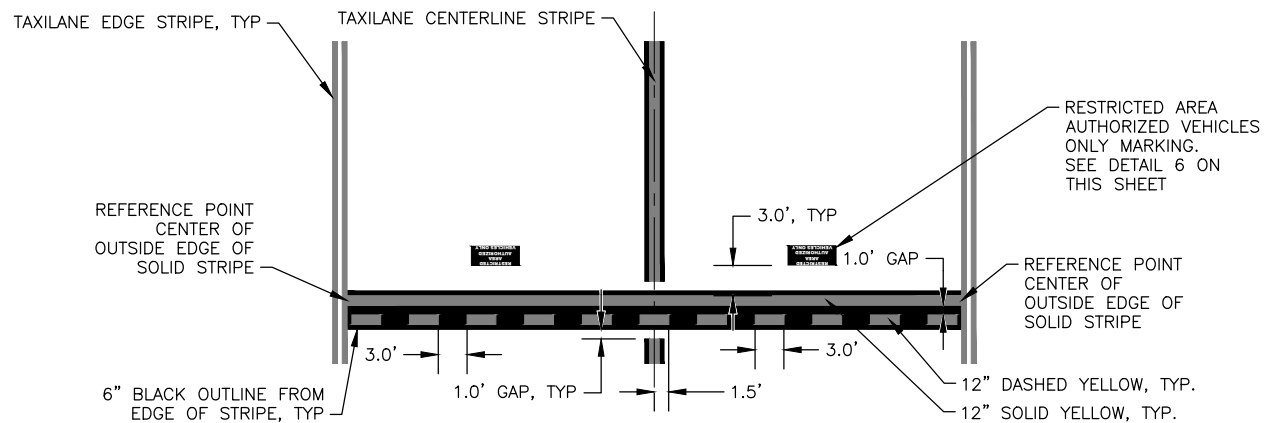
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TAXILANE CENTERLINE AND EDGE MARKINGS

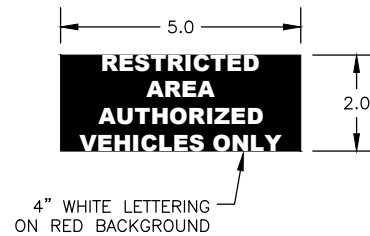
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57

TAXILANE AND NON-MOVEMENT MARKINGS

NTS



6
57

RESTRICTED AREA MARKING DETAIL

NTS

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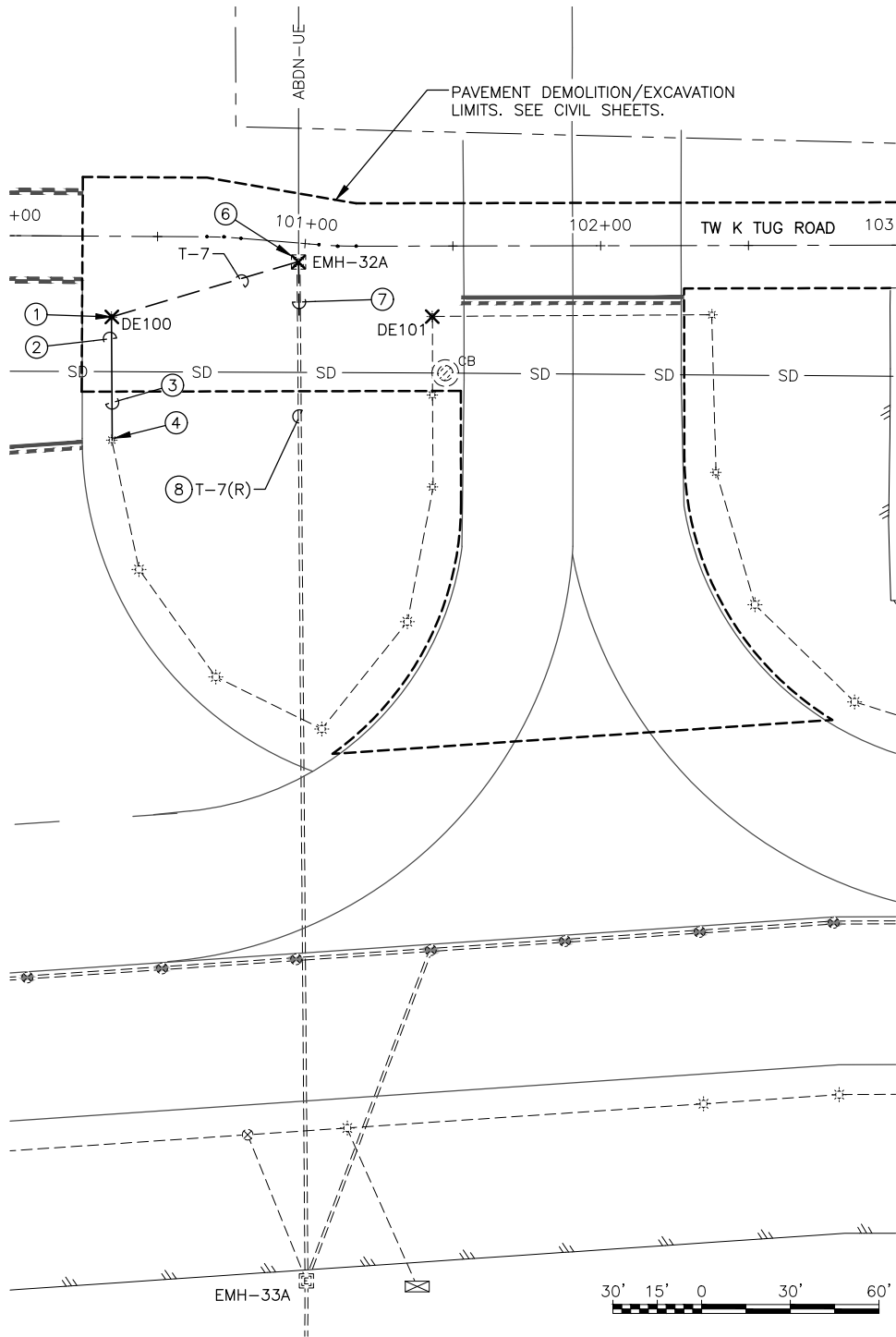
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MARKING DETAILS

DATE:
SEPTEMBER 2025
SHEET:
57 OF 57

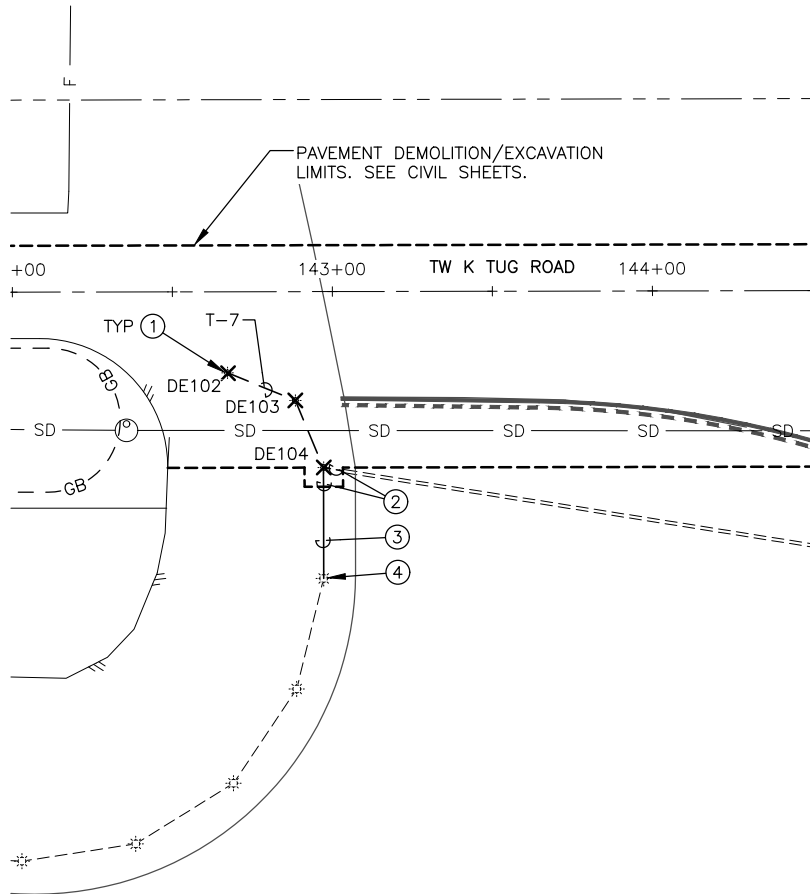
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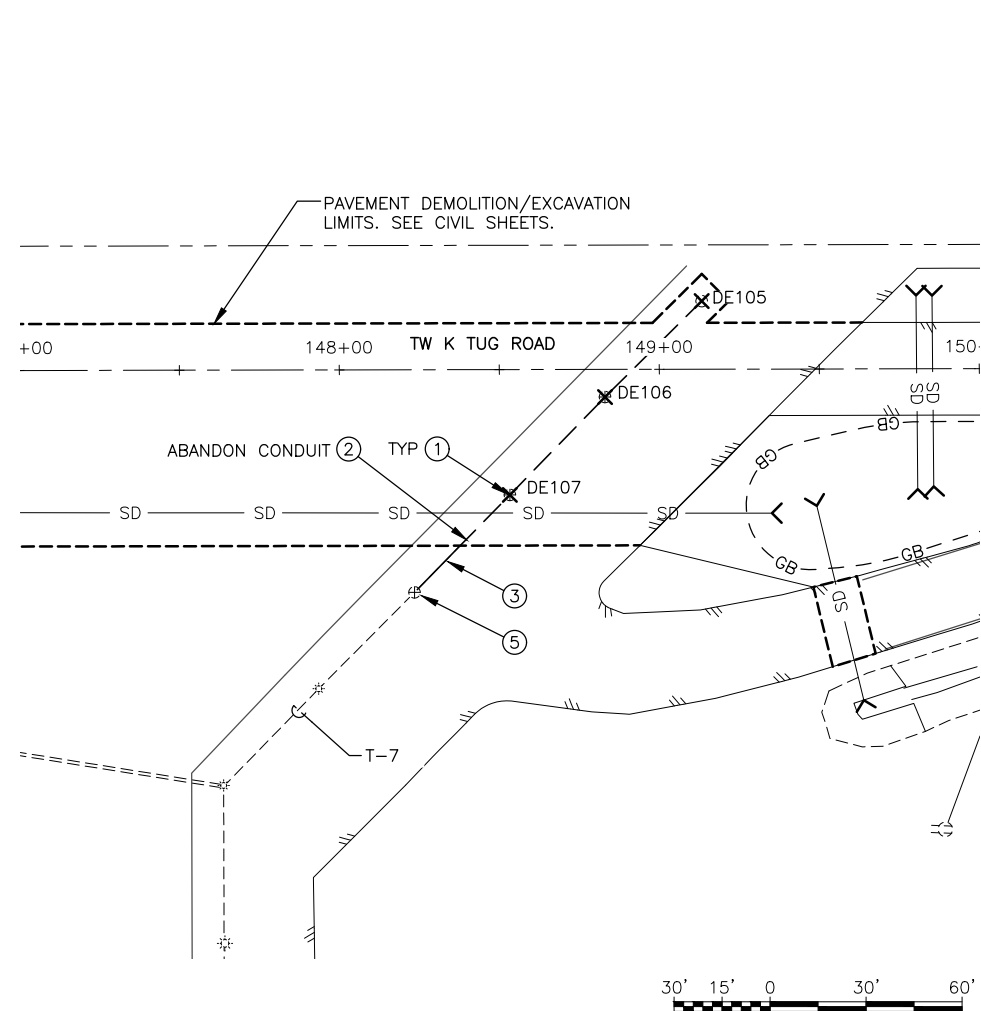
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ELECTRICAL DEMOLITION PLAN
STA. 100+00 TO 103+00



KEY MAP



2
E1
ELECTRICAL DEMOLITION PLAN
STA. 142+00 TO 144+50



3
E1
ELECTRICAL DEMOLITION PLAN
STA. 147+00 TO 150+00

DEMO TAXIWAY EDGE LIGHT SCHEDULE		
FIXTURE #	STATION	OFFSET
DE100	100+34.64	27.26 RT
DE101	101+42.97	23.84 RT
DE102	142+67.35	25.46 RT
DE103	142+88.36	34.02 RT
DE104	142+97.21	54.97 RT
DE105	149+13.28	21.27 LT
DE106	148+83.02	8.64 RT
DE107	148+53.24	39.16 RT

DEMO ELECTRICAL MANHOLE SCHEDULE		
MANHOLE #	STATION	OFFSET
EMH-32A	100+98.28	6.40 RT

SHEET NOTES:

- AREA WITHIN PAVEMENT DEMOLITION/ EXCAVATION LIMITS:
 - REMOVE ALL EDGE LIGHT FIXTURES, TRANSFORMERS, AND CONDUCTORS.
 - UNLESS OTHERWISE NOTED, REMOVE LIGHT BASES AND CONDUIT.
- REMOVE CONDUIT TO EXTENT REQUIRED BY PROJECT EXCAVATION. CAP AND MARK EXPOSED CONDUIT STUB AS INDICATED FOR RECONNECT IN NEW WORK OR ABANDONMENT.
- REMOVE CONDUCTORS BACK TO NEAREST EXISTING LIGHT OR LIGHT BASE TO REMAIN.
- EDGE LIGHT FIXTURE TO REMAIN. PROTECT FIXTURE FROM DAMAGE DURING ADJACENT EXCAVATION, MILLING, PAVING, AND STRIPING OPERATIONS AS APPLICABLE.
- RECONNECT PRIMARY CONDUCTORS FOR END OF LOOP IN EXISTING LIGHT BASE TO REMAIN.
- REMOVE EXISTING ELECTRICAL MANHOLE.
- REMOVE CONDUIT TO NEW MANHOLE LOCATION.
- PULL T-7 RETURN CONDUCTOR (WITH GROUND) BACK TO EMH-33A TO ALLOW FOR REPLACEMENT OF EMH-32A MANHOLE.

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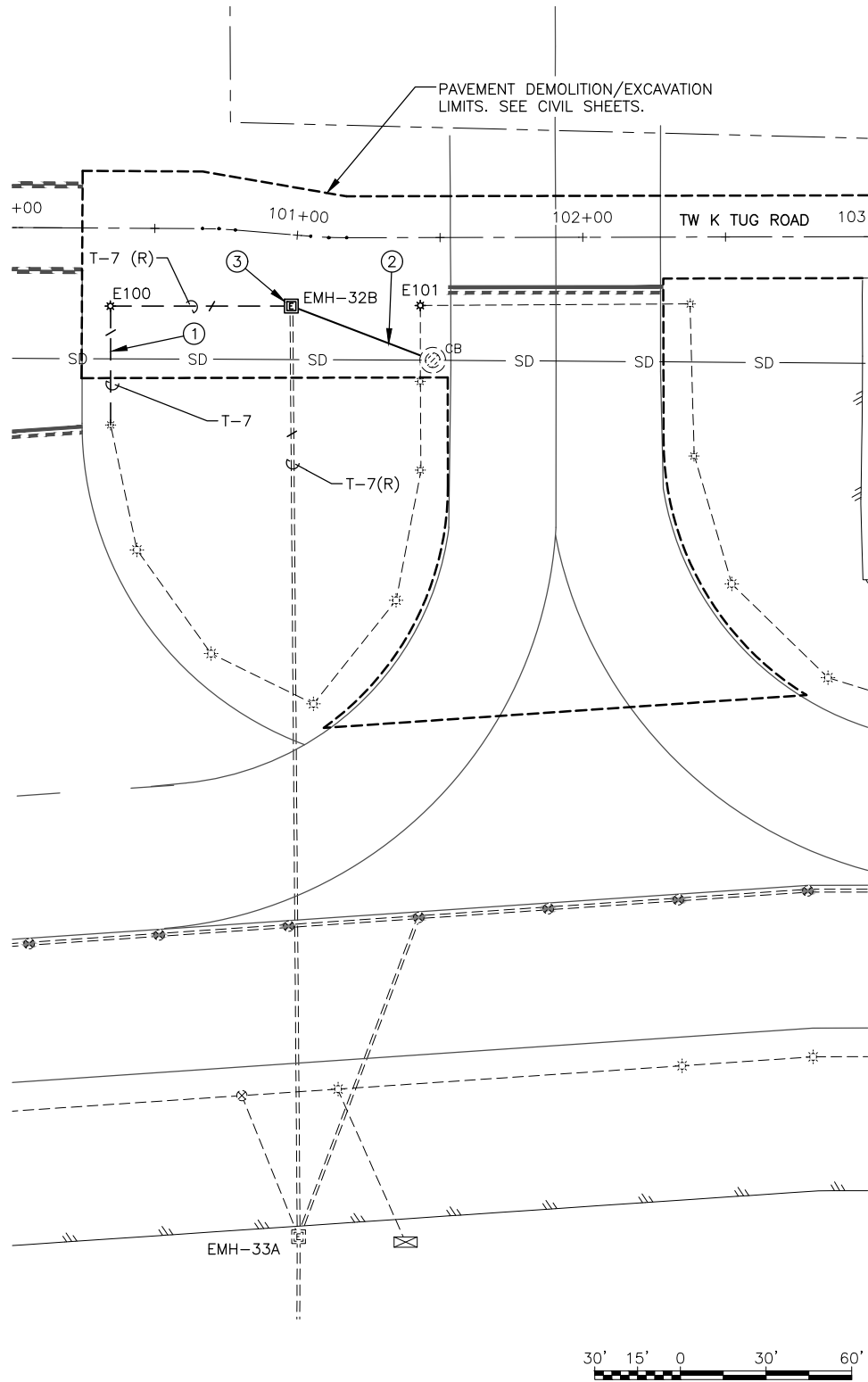
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
ELECTRICAL DEMOLITION PLAN

DATE:
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SHEET:
E1 of E4

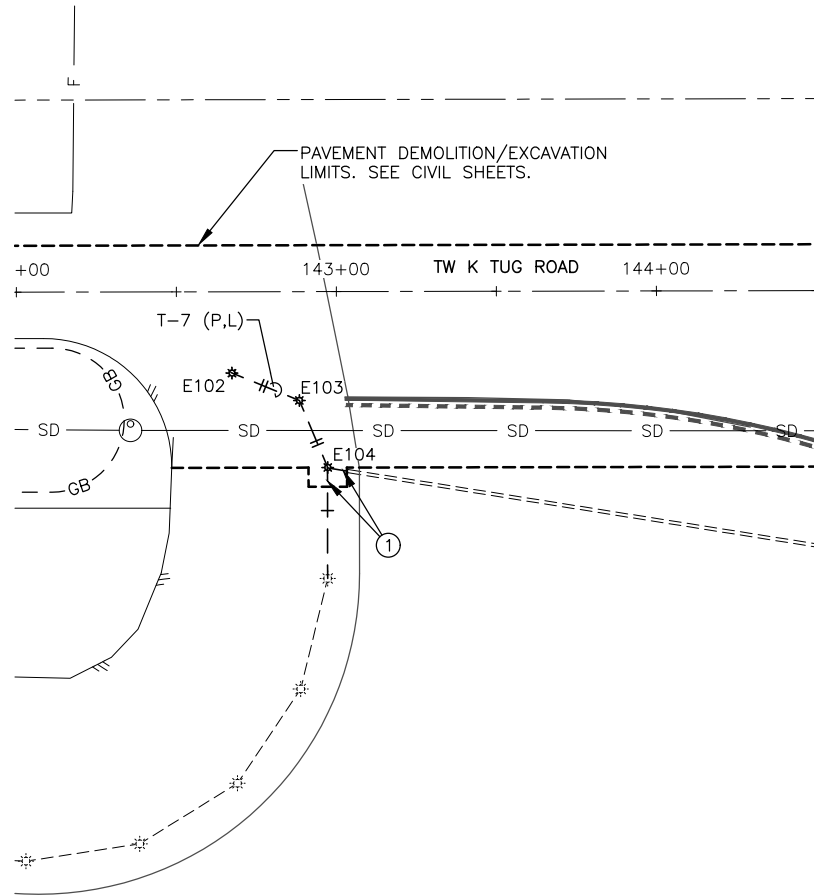
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1
E2

ELECTRICAL PLAN
STA. 100+00 TO 103+00



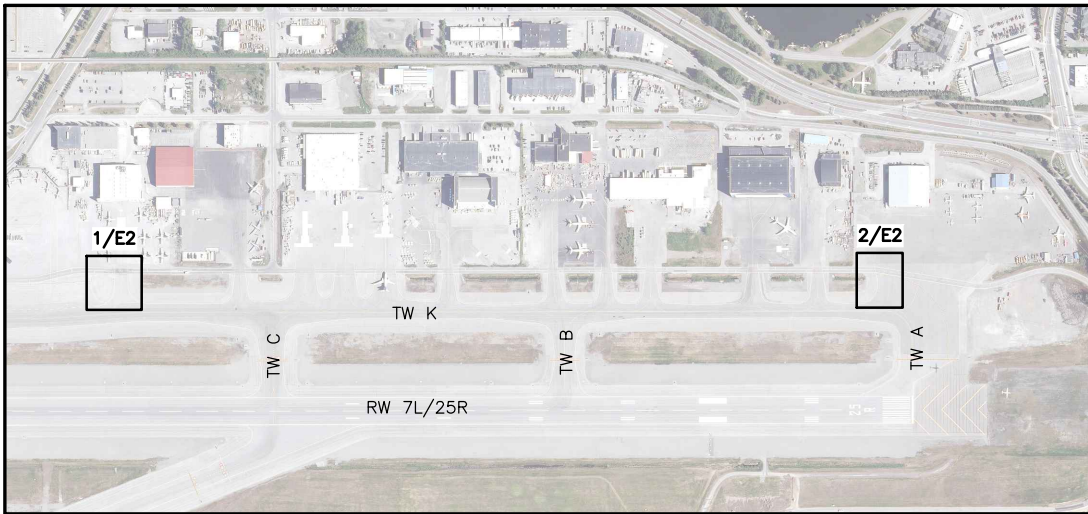
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E2

ELECTRICAL PLAN
STA. 142+00 TO 144+50

TAXIWAY EDGE LIGHT SCHEDULE		
FIXTURE #	STATION	OFFSET
E100	100+34.55	27.33 RT
E101	101+43.05	23.78 RT
E102	142+67.35	25.46 RT
E103	142+88.36	34.02 RT
E104	142+97.21	54.97 RT

ELECTRICAL MANHOLE SCHEDULE		
MANHOLE #	STATION	OFFSET
EMH-32B	100+99.95	24.94 RT

- SHEET NOTES:**
- CONNECT NEW CONDUIT TO EXISTING CONDUIT OR LIGHT BASE. EXTEND NEW CONDUCTORS WITH CONNECTIONS TO NEAREST EXISTING LIGHT BASE WIRING AND TRANSFORMER(S). PROVIDE MANUFACTURED SWEEP FITTING FOR BENDS OVER 10 DEGREES. CONNECTIONS SHALL BE SUBSIDIARY TO L108 AND L110 ITEMS.
 - INSTALL 2" CONDUIT DRAIN BETWEEN DRAINAGE STRUCTURE AND MANHOLE.
 - INSTALL NEW MANHOLE AND RECONNECT EXISTING DUCTBANK AND NEW CONDUITS TO MANHOLE. RE-PULL THE T-7(R) CIRCUIT FROM EMH-33A AND RECONNECT CIRCUIT IN MANHOLE.



KEY MAP

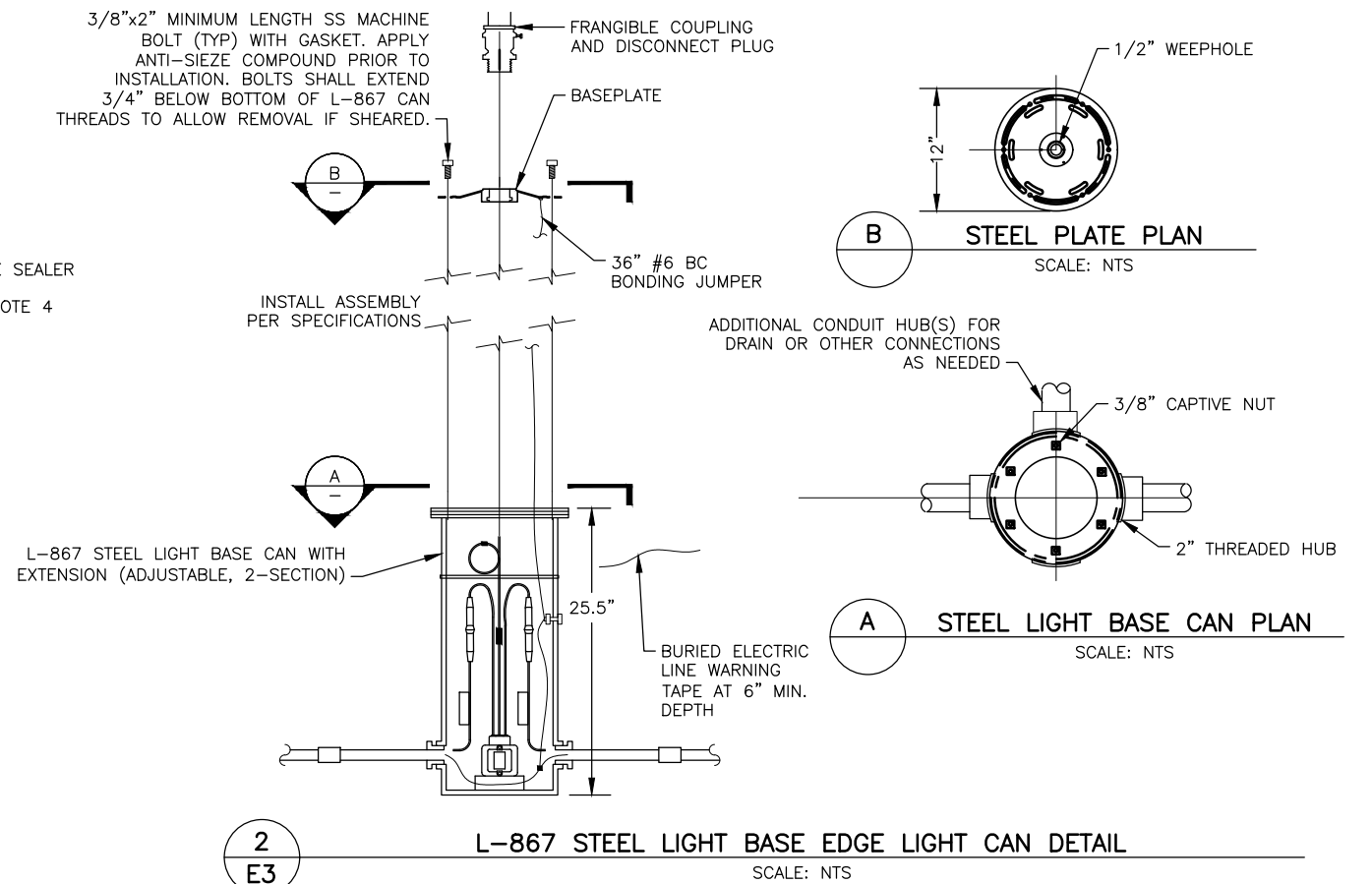


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AIP No. 3-02-0016-XXX-2026
ELECTRICAL PLAN

DATE: SEPTEMBER 2025
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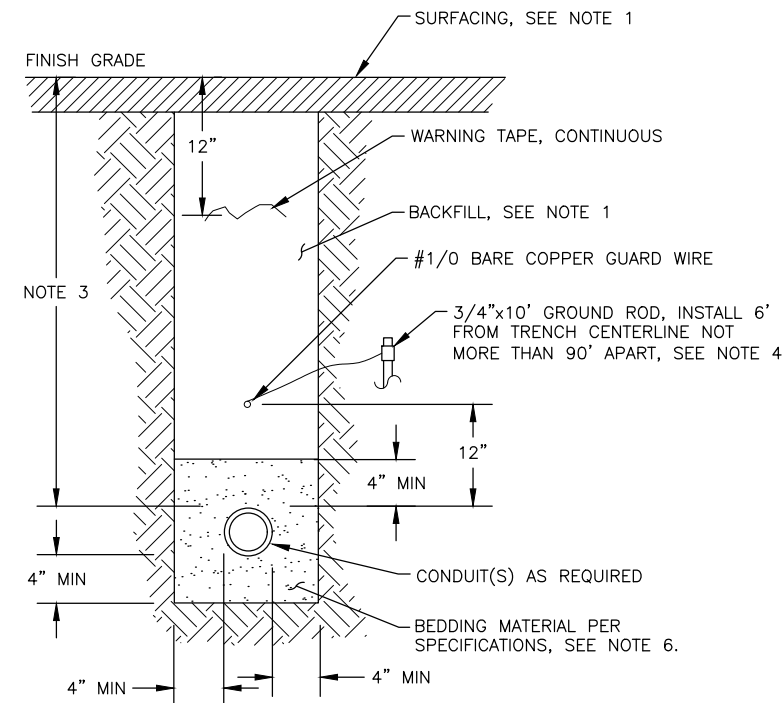
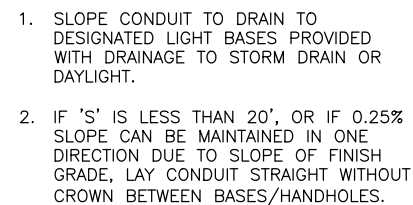


1
E3

ELEVATED TAXIWAY EDGE LIGHT

SCALE: NTS

1. PROVIDE SELF-LEVELING SILICONE SEALER, MOMENTIVE RTV118 OR APPROVED EQUAL, AT INTERFACE OF THE TOP SECTION AND BASE CAN ONLY. SEALER SHALL NOT BE INSTALLED BETWEEN TOP FLANGE OF TOP SECTION, SPACER RINGS, AND FLANGE RING.
2. CONDUIT SHALL GENERALLY MATCH GRADING OF THE RUNWAY OR TAXIWAY SURFACE EXCEPT PROVIDE MINIMUM 0.25% SLOPE TO CROWN BETWEEN BASES FOR DRAINAGE, AND SLOPED TO LOW POINT DRAINS WHERE SHOWN ON PLANS. WHERE 0.25% CONDUIT DRAIN SLOPE CANNOT BE MAINTAINED IN ONE DIRECTION DUE TO SLOPE OF GRADE, LAY CONDUIT FLAT WITHOUT CROWN.
3. PROVIDE ADDITIONAL HUB(S) FOR DRAINS OR OTHER CONNECTIONS WHERE SHOWN ON PLANS.
4. COMPLETED INSTALLATION OF ELEVATED EDGE LIGHTS WITH REPLACED LIGHT BASES SHALL INCLUDE A MINIMUM OF TWO 1/2" SPACER RINGS BELOW BASEPLATE. THICKER SPACER RINGS MAY BE REQUIRED. ADDITIONAL TEMPORARY SPACER RINGS REQUIRED DURING SET UP FOR PAVING ARE THE CONTRACTOR'S RESPONSIBILITY AND NO ADDITIONAL PAYMENT SHALL BE MADE.
5. GROUND WIRE SHALL BE CONTINUOUS THROUGH EACH LIGHT BASE AND NOT RELY ON LIGHT BASE GROUND LUG FOR CONTINUITY. USE IRREVERSIBLE COMPRESSION CONNECTOR FOR GROUND WIRE SPLICES.



4
E3

TYPICAL CONDUIT TRENCH DETAIL

SCALE: NTS

1. IN AREAS OF NEW CONSTRUCTION, SEE CIVIL TYPICAL SECTIONS FOR SURFACING AND BACKFILL. IN EXISTING AREAS, MATCH EXISTING SURFACING AND BACKFILL WITH EXISTING MATERIALS REMOVED FROM TRENCH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. SEPARATION BETWEEN CONDUITS SHALL BE AS FOLLOWS:
 - CONDUIT OF SAME TYPE (POWER OR SIGNAL) - 2"
 - AIRPORT LIGHTING AND FAA CONDUITS - 12" MIN
 - PRIMARY POWER AND ANY OTHER CONDUIT - 18" MIN
 - TELECOM SERVICE AND ANY OTHER CONDUIT - 18" MIN
 - FAA NAVAID CONDUITS, POWER AND CONTROL - 6" MIN
3. MINIMUM BURIAL DEPTH SHALL BE AS FOLLOWS:
 - AIRPORT LIGHTING CONDUITS - 18"
 - FAA AND COMMUNICATIONS CONDUITS - 36"
 - FAA CONDUITS WHERE UNDER TRAFFIC AREAS - 48"
4. PROVIDE GUARD WIRE AND ASSOCIATED GROUND RODS ONLY FOR THE FOLLOWING CONDUITS: FAA LIGHTING, NAVIGATION SYSTEM, PAPI CONDUITS, RVR CONDUITS.
5. UNDERGROUND WARNING TAPE SHALL BE 6" WIDE AND DETECTABLE FOR CONDUITS LISTED IN NOTE 4.
6. WHERE CONCRETE ENCASEMENT REQUIRED IN TRAVELED WAY, PROVIDE 3" MIN CONCRETE ENVELOPE AROUND CONDUIT.

3
E3

TYPICAL CONDUIT DRAINAGE DETAIL

SCALE: NTS



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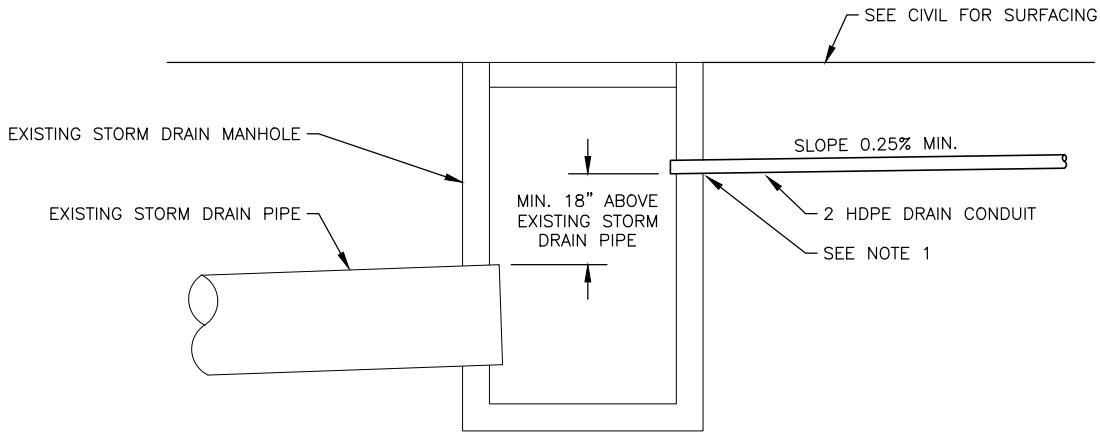
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SHEET: F3 OF F4

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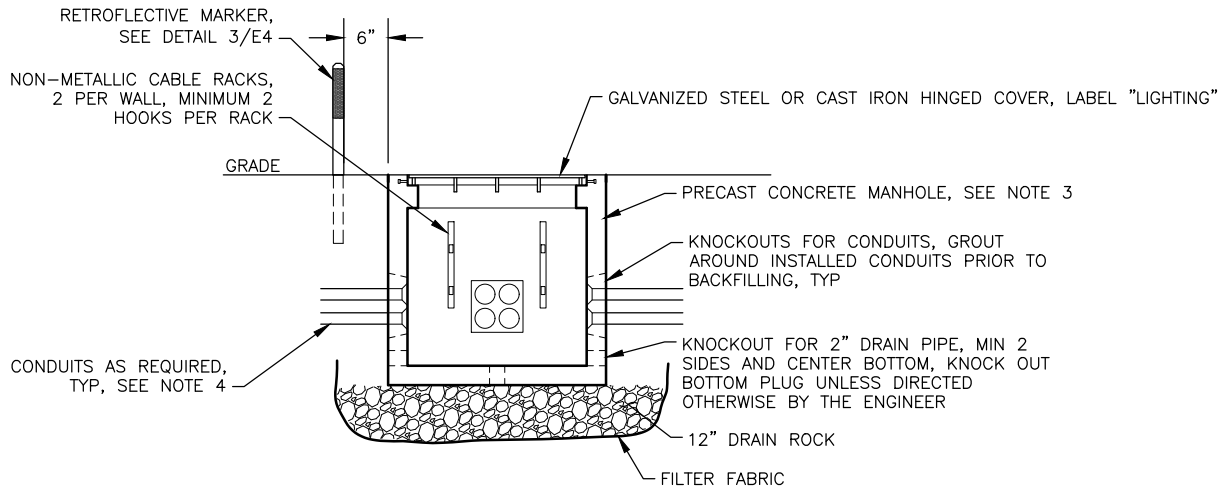
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E4

DRAIN CONDUIT DETAIL

SCALE: NTS

DETAIL 1 NOTES:

1. CORE DRILL STORM DRAIN STRUCTURE FOR CONDUIT ENTRY AND GROUT INSIDE AND OUT TO MAKE PENETRATION WATERTIGHT. TERMINATE CONDUIT WITH RUBBER BACKFLOW PREVENTER INSIDE STRUCTURE.



2
E4

ELECTRICAL MANHOLE DETAIL

SCALE: NTS

DETAIL 2 NOTES:

1. PRECAST MANHOLE, LID, FRAME, AND COVER SHALL BE RATED FOR WHEEL LOADING BASED ON LOCATION. CONCRETE TOP SECTION WITH COVER MAY BE OVERSIZED IF REQUIRED TO MEET LOADING REQUIREMENTS.
- AIRCRAFT AREA (WITHIN RSA AND TSA) – 100,000 LB. LOAD
NON-AIRCRAFT AREA – H-20 WHEEL LOADING
2. CAST IRON HINGED COVERS SHALL BE PROVIDED WITH SPRING ASSIST MECHANISM.
3. MANHOLES INSIDE DIMENSIONS SHALL BE 48"x48". MANHOLE FLOOR SHALL BE 48" MAXIMUM BELOW GRADE. MANHOLE COVERS SHALL BE 36"x36".
4. METALLIC CONDUIT SHALL EXTEND 2" INTO MANHOLE AND TERMINATE WITH AN INSULATED GROUNDING BUSHING BONDED TO THE CIRCUIT GROUNDS WITH #6 BC. NON-METALLIC CONDUIT SHALL TERMINATE AT TERMINATION FITTINGS CAST INTO THE MANHOLE WALL OR SHALL EXTEND 2" INTO MANHOLE AND HAVE THE ENDS REAMED TO PREVENT CONDUCTOR INSULATION DAMAGE.



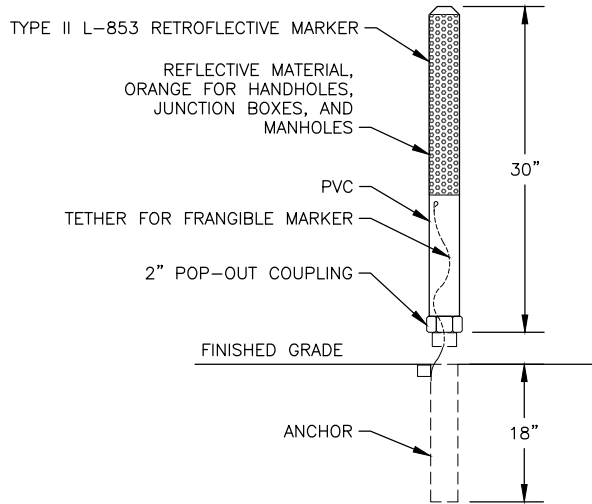
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3
E4

RETROREFLECTIVE MARKER DETAIL

SCALE: NTS



DETAIL 3 NOTE:

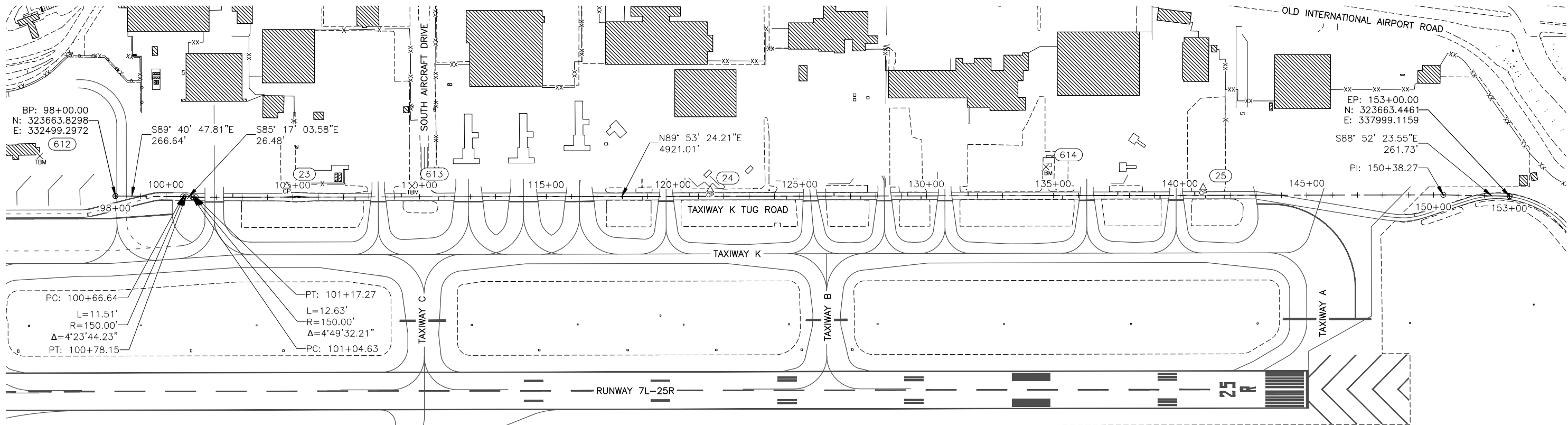
RETROFLECTIVE MARKERS SHALL BE INSTALLED 6" FROM EACH HANDHOLE, JUNCTION BOX, OR MANHOLE AS INDICATED. MARKERS SHALL BE SUBSIDIARY TO THE HANDHOLE, JUNCTION BOX, OR MANHOLE PAY ITEM AND NO SEPARATE PAYMENT SHALL BE MADE. MARKER SHALL BE TYPE II PER SPEC P-660

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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
ELECTRICAL DETAILS

DATE:
SEPTEMBER 2025
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E4 of E4

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HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM:
THIS DRAWING IS ON THE ANCHORAGE BOWL 2000 ADJUSTMENT, A LOCAL SURFACE GRID COORDINATE SYSTEM EXPRESSED IN U.S. SURVEY FEET UNITS DEVELOPED BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

BASIS OF COORDINATES:
THE BASIS OF COORDINATES IS NGS STATION O'MALLEY, LOCATED NEAR THE INTERSECTION OF THE NEW SEWARD HIGHWAY AND O'MALLEY ROAD. SAID STATION HAS ANCHORAGE BOWL 2000 COORDINATES OF 303939.2310 N, 353362.5446 E. U.S. SURVEY FEET.

BASIS OF BEARINGS:
THE BASIS OF BEARINGS IS A LOCAL PLANE BEARING BETWEEN NGS STATION O'MALLEY AND NGS STATION LOOP 2 USE RM 3 1964. NGS STATION LOOP 2 USE RM 3 1964 BEARS N 01°43'26.4"E A DISTANCE OF 49488.4476 FEET FROM NGS STATION O'MALLEY. NGS STATION LOOP 2 USE RM 3 1964 HAS ANCHORAGE BOWL 2000 COORDINATES OF 353405.2778 N, 354851.3982 E. U.S. SURVEY FEET.

TRANSLATION PARAMETERS:
TO CONVERT THE LOCAL COORDINATES TO NAD83 (92) STATE PLANE COORDINATES EXPRESSED IN U.S. SURVEY FEET, TRANSLATE USING +2,296,868.6878 N USF, +1,312,517.4904 E USF, AND SCALE USING 0.9998910192.

VERTICAL CONTROL STATEMENT

THE VERTICAL CONTROL IS BASED ON ADOT&PF BENCHMARKS SACS "ANC-D" WITH ELEVATION 85.60', "BM 7R" WITH ELEVATION 112.79', "HOTEL" WITH ELEVATION 116.83', AND "25 L" WITH ELEVATION 95.31'. REFERENCED TO THE MUNICIPALITY OF ANCHORAGE (MOA) VERTICAL DATUM (1972 ADJUSTMENT).

THE VERTICAL SHIFT FROM THE 1972 MOA ADJUSTMENT TO NAVD88 IN THE VICINITY OF THIS PROJECT IS APPROXIMATELY +6.79 FEET.

NOTES

- ALL COORDINATES AND DIMENSIONS SHOWN ARE IN U.S. SURVEY FEET.
- THE FIELD SURVEY WAS CONDUCTED AUGUST 22, 2022.
- POINTS 23 THROUGH 25, 612 THROUGH 614 COORDINATES WERE FIELD VERIFIED BY GPS FROM PRIMARY AIRPORT CONTROL "ANC D" USING LEICA GS14 GPS RECEIVERS AND PROCESSED USING LEICA INFINITY VER. 3.3. THE COORDINATES SHOWN ARE THE PUBLISHED VALUES FROM THE SURVEY CONTROL SHEET FOR TED STEVENS ANCHORAGE INT'L. AIRPORT, ANC TAXIWAYS K, G1, AND J IMPROVEMENTS DATED 4/28/2021.
- COORDINATES FOR CONTROL POINT 702 ARE REFERENCED FROM THE ADOT&PF SURVEY CONTROL DIAGRAM, RECORDED AS RECORD OF SURVEY, PLAT NO. 2015-80 AND IS ALSO SHOWN IN THE SURVEY CONTROL SHEET REFERENCED IN NOTE 3.

1
AB1

SURVEY CONTROL



SACS ANC-D, POINT 702
FOUND 1/2" STAINLESS STEEL
ROD IN 4" PVC PIPE

LEGEND

(123)	CONTROL POINT #
BM	BENCHMARK - PACS/SACS
CP	RECOVERED CONTROL
X TBM	RECOVERED TEMP BENCHMARK

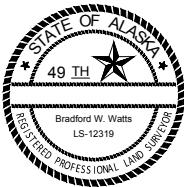
250' 0 250' 500'

HORIZONTAL CONTROL

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
23	104+76.61	43.62 LT	323703.4582	333175.7000	79.29	Fd Rbr/PC [DOT]: CP 23
24	121+46.37	25.32 LT	323688.3666	334845.4908	80.10	Fd Rbr/PC [DOT]: CP 24
25	140+90.96	30.16 LT	323696.9312	336790.0720	77.39	Fd Rbr/PC [DOT]: CP 25
702	N/A	-	322303.3357	338029.3108	85.60	Fd Rod/Bx [R&M]: SACS "ANC-D"

VERTICAL CONTROL

POINT #	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
612	N/A	-	323822	332201	94.67	Scribed "X" on SSW Fire Hydrant Flange Bolt
613	109+70.38	43.10 LT	323704	333669	78.36	Scribed "X" on NE Corner of Concrete Vault
614	134+71.25	113.95 LT	323780	336170	83.49	Scribed "X" on SW Corner of Concrete Vault



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3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
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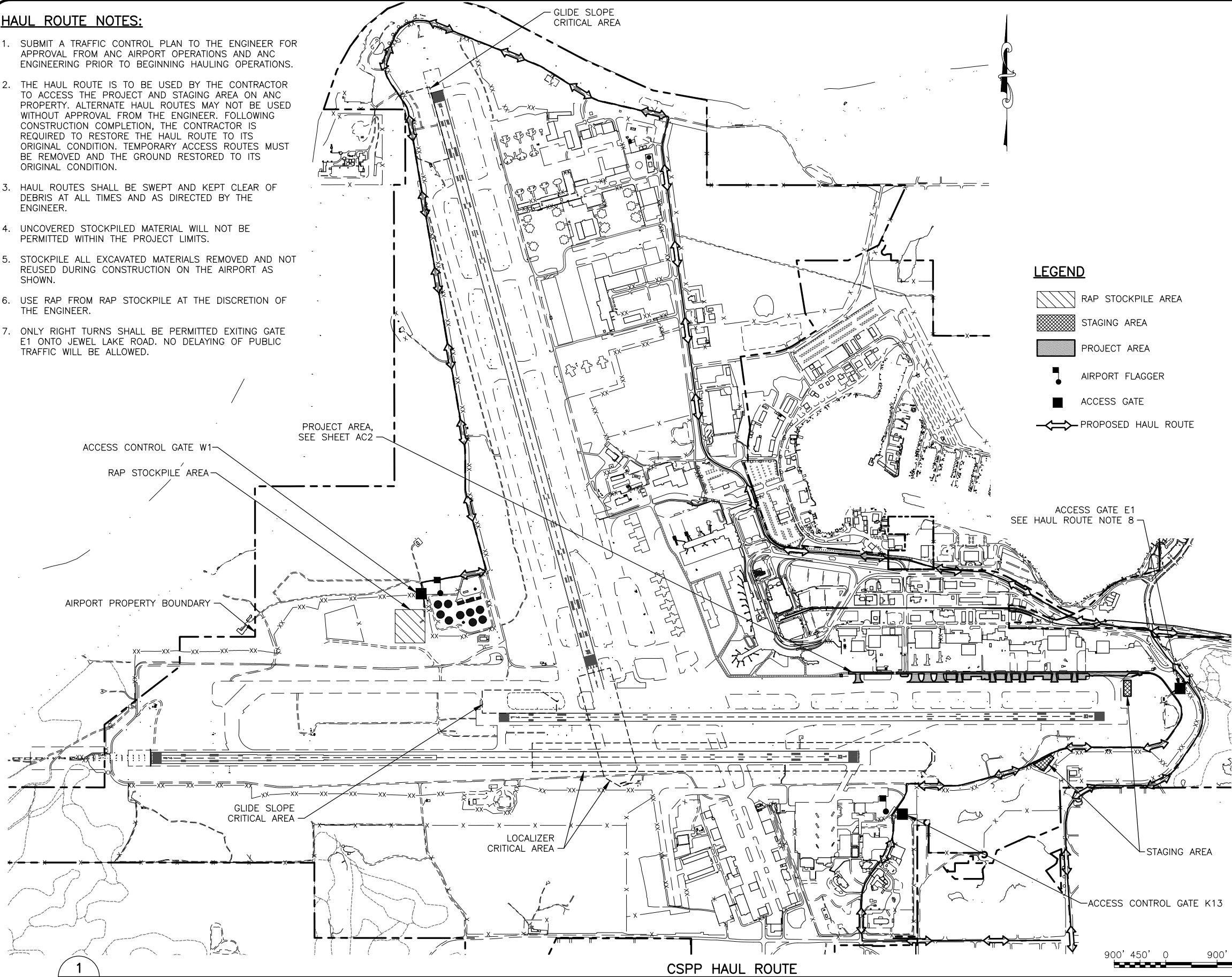
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
SURVEY CONTROL

DATE:
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AB1 of AB1

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Date Revised: 9/16/2025 7:57 AM
Layout Name: AC1
File Path and Name: J:\JobsData\30207\49 ANC TW K TUG ROAD RECONSTRUCTION\00 CAD\2019\01 Working Set\01 Civil\00992-ANC-CSPP Haul Route.dwg
Designed By: RB
Drawn By: SS
Checked By: SB

HAUL ROUTE NOTES:

1. SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL FROM ANC AIRPORT OPERATIONS AND ANC ENGINEERING PRIOR TO BEGINNING HAULING OPERATIONS.
2. THE HAUL ROUTE IS TO BE USED BY THE CONTRACTOR TO ACCESS THE PROJECT AND STAGING AREA ON ANC PROPERTY. ALTERNATE HAUL ROUTES MAY NOT BE USED WITHOUT APPROVAL FROM THE ENGINEER. FOLLOWING CONSTRUCTION COMPLETION, THE CONTRACTOR IS REQUIRED TO RESTORE THE HAUL ROUTE TO ITS ORIGINAL CONDITION. TEMPORARY ACCESS ROUTES MUST BE REMOVED AND THE GROUND RESTORED TO ITS ORIGINAL CONDITION.
3. HAUL ROUTES SHALL BE SWEEPED AND KEPT CLEAR OF DEBRIS AT ALL TIMES AND AS DIRECTED BY THE ENGINEER.
4. UNCOVERED STOCKPILED MATERIAL WILL NOT BE PERMITTED WITHIN THE PROJECT LIMITS.
5. STOCKPILE ALL EXCAVATED MATERIALS REMOVED AND NOT REUSED DURING CONSTRUCTION ON THE AIRPORT AS SHOWN.
6. USE RAP FROM RAP STOCKPILE AT THE DISCRETION OF THE ENGINEER.
7. ONLY RIGHT TURNS SHALL BE PERMITTED EXITING GATE E1 ONTO JEWEL LAKE ROAD. NO DELAYING OF PUBLIC TRAFFIC WILL BE ALLOWED.



GENERAL SAFETY REQUIREMENTS

1. SEE APPENDIX C OF THE SPECIFICATIONS FOR THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH THE SAFETY REQUIREMENTS AS REQUIRED IN THE CSPP. ALL SAFETY RELATED WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE.
2. THE CONTRACTOR SHALL SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT PER FAA AC 150/5370-2G TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF A NOTICE TO PROCEED. IF THE CONSTRUCTION PHASING PLAN DIFFERS FROM WHAT IS SHOWN OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR REVIEW AND APPROVAL.
3. CONSTRUCTION SHALL BE PLANNED TO MINIMIZE DISTURBANCE TO AIRCRAFT OPERATIONS. COORDINATE RUNWAY AND TAXIWAY CLOSURES (PARTIAL OR FULL) WITH AIRPORT OPERATIONS AND THE ENGINEER.
4. ALL CONSTRUCTION VEHICLES AND EQUIPMENT SHALL OPERATE A FLASHING AMBER BEACON WHEN WORKING ON THE AIRPORT.
5. CLEAR SAFETY AREAS AND OBJECT FREE AREAS AT ANYTIME AS DIRECTED BY THE ENGINEER.
6. CONSTRUCTION ACTIVITIES THAT REQUIRE WORK IN AN ACTIVE TOFA ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:
 - A. NOTAMS MUST BE ISSUED ADVISING TAXIING PILOTS OF HAZARD AND RECOMMENDING REDUCED TAXIING SPEEDS ON THE TAXIWAY OF 10 MPH OR LESS.
 - B. INSTALL MARKINGS PER THIS CSPP AND THE PROVISIONS OF SECTIONS 2.18 AND 2.20 OF AC 150/5370-2G PRIOR TO THE COMMENCEMENT OF WORK IN THE AREA.
 - C. MAINTAIN FIVE FOOT CLEARANCE BETWEEN EQUIPMENT AND MATERIALS AND ANY PART OF AN AIRCRAFT. IF SUCH CLEARANCE CAN NOT BE MAINTAINED WHEN THE AIRCRAFT HAS FULL USE OF THE ENTIRE TAXIWAY WIDTH, THEN IT WILL BE NECESSARY TO MOVE PERSONNEL AND EQUIPMENT FOR THE PASSAGE OF THAT AIRCRAFT.
 - D. FLAGGERS FURNISHED BY THE CONTRACTOR MUST BE USED TO DIRECT AND CONTROL CONSTRUCTION EQUIPMENT AND PERSONNEL TO A PRE-ESTABLISHED SETBACK DISTANCE FOR SAFE PASSAGE OF AIRCRAFT.
 - E. AIRLINE PERSONNEL MUST BE USED TO DIRECT TAXIING AIRCRAFT WHEN WORK IS OCCURRING WITHIN THE ADJACENT TOFA.
 - F. REMOVE MATERIAL STOCKPILES AND EQUIPMENT FROM OBJECT FREE AREAS DURING NON-WORK HOURS.
7. DAMAGE TO FAA FACILITIES INCLUDING POWER DISRUPTION SHALL BE IMMEDIATELY REPAIRED IN A MANNER ACCEPTABLE TO THE FAA AT THE CONTRACTOR'S EXPENSE.
8. PROVIDE AIRPORT FLAGGERS WHERE CONSTRUCTION ACTIVITY IS CONDUCTED IN CLOSE PROXIMITY TO OPERATING AIRCRAFT AND WHERE THE ENGINEER OR AIRPORT OPERATIONS DETERMINES A FLAGGER IS NECESSARY.
9. THE CONTRACTOR MUST REPORT SAFETY ISSUES TO THE ENGINEER AND AIRPORT OPERATIONS UPON DISCOVERY. THE CONTRACTOR MUST TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
10. IMMEDIATELY REMOVE ALL FOREIGN OBJECTS AND DEBRIS (FOD) FROM ACTIVE SURFACES UPON DISCOVERY OR NOTIFICATION. FAILURE TO REMOVE FOD MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER. STATION ADEQUATE CLEANING EQUIPMENT AT THE JOB SITE FOR IMMEDIATE CLEANUP OF ANY MATERIAL SPILLS ON ALL ACTIVE RUNWAY, TAXIWAY, APRON SURFACES, AND TUG ROADS.
11. CONTRACTOR SHALL FOLLOW LOCKOUT-TAGOUT PROCEDURES AS DEFINED IN SPECIFICATION SECTION L-125. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOUR NOTICE TO THE ENGINEER PRIOR TO CONNECTING TO EXISTING LIGHTING EQUIPMENT.
12. OTHER CONTRACTORS OR UTILITY COMPANIES MAY BE WORKING IN THE SAME PROJECT AREA OR IN THE VICINITY DURING THE PROGRESS OF THIS CONTRACT'S WORK. CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER CONTRACTORS OR UTILITY COMPANIES WORKING AT OR NEAR THE AIRPORT.
13. CONTRACTOR TO SURVEY EXISTING STAGING AREAS PRIOR TO CONSTRUCTION AND RETURN STAGING AREAS TO EXISTING ELEVATIONS ONCE CONSTRUCTION IS COMPLETE. STAGING AREAS ARE IN SNOW DISPOSAL SITES, SNOW PILES MAY BE PRESENT. CONTRACTOR SHALL VACATE THE STAGING AREAS BY LABOR DAY UNLESS APPROVED BY THE ENGINEER.

CSPP HAUL ROUTE

SCALE: GRAPHIC

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CRW ENGINEERING GROUP, INC.
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
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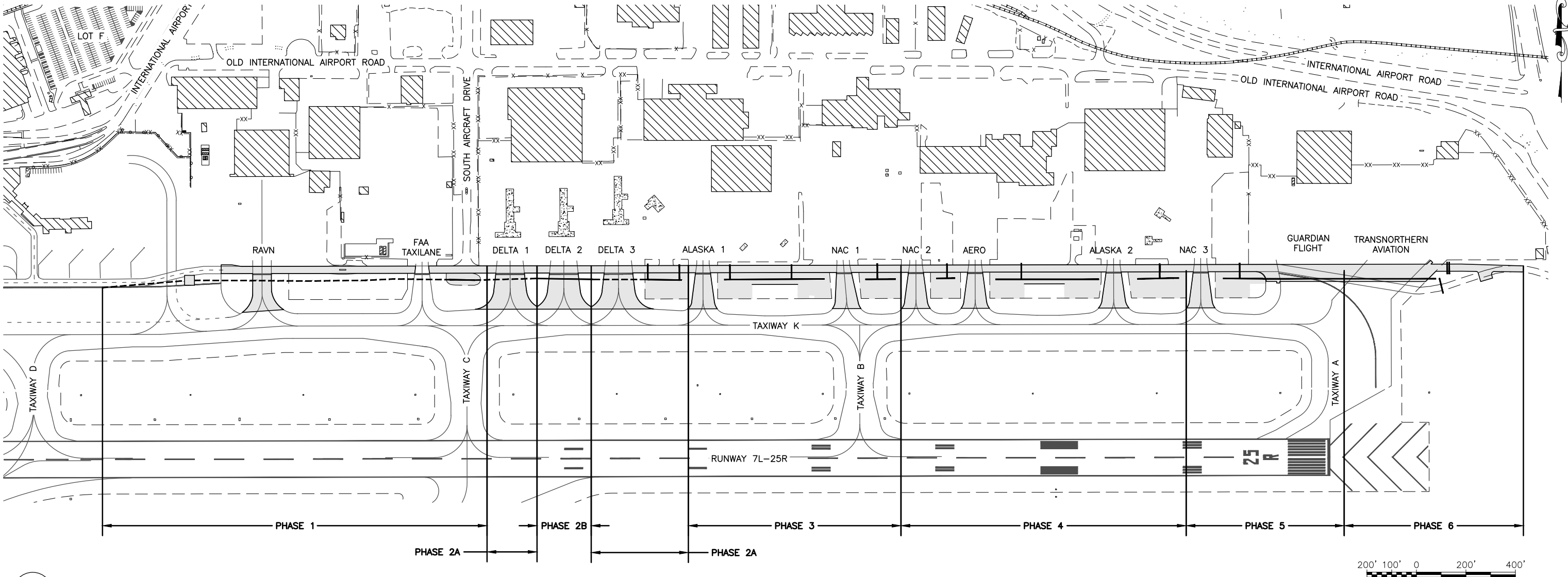
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
CSPP HAUL ROUTE

DATE:
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Date Revised: 9/16/2025 7:59 AM
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File Path and Name: J:\JobsData\3020749 ANC TW K Tug Road Reconstruction\00 CAD 2019\01 Working Set\01 Civil\00992-ANC-CSPP Overview.dwg

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Drawn By: SS
Checked By: SB



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AC2

CSPP OVERVIEW

LEGEND:

- PHASE WORK AREA
- NEW STORM DRAIN
- TRENCHLESS STORM DRAIN REPAIR

SHEET NOTES:

1. 14 DAYS PRIOR TO BEGINNING WORK, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
2. PHASE CHANGES SHALL NOT OCCUR ON WEEKENDS.
3. ONCE COMPLETED, EACH PHASE SHALL REMAIN OPEN FOR THE DURATION OF THE PROJECT.
4. WORKING IN CONCURRENT PHASES IS NOT ALLOWED UNLESS AUTHORIZED BY THE ENGINEER OR SPECIFIED IN THE CONSTRUCTION PHASING SCHEDULE BELOW.
5. ALL WORK SHALL BE COMPLETED BY THE PROJECT COMPLETION DATE REGARDLESS OF PHASE DAY DURATIONS IN THE CONSTRUCTION PHASING SCHEDULE.
6. CONTRACTOR SHALL BAG EXISTING AIRPORT SIGNS IN EACH PHASE AND AS DIRECTED BY THE ENGINEER TO MAINTAIN SAFE AIRCRAFT MOVEMENT AREAS.
7. ORDER OF PHASES TO BE DETERMINED BY THE ENGINEER.

PHASE	ESTIMATED DURATION (DAYS)	COMPLETION DATE
1	* 35	9/15/2026
2A	* 15	
2B	4	
3	14	
4	17	
5	7	
6	5	

* PHASE 1 AND 2A LINING CAN BE DONE CONCURRENTLY WITH OTHER PHASES

- PHASE 1 – BOP TO STA 111+00.00
- PHASE 2A – STA 111+00 TO 113+01.82 & STA 115+20.82 TO 119+13.49
- PHASE 2B – STA 113+01.82 TO 115+20.82
- PHASE 3 – STA 119+13.48 TO 127+72.92
- PHASE 4 – STA 127+72.92 TO 139+25.50
- PHASE 5 – STA 139+25.50 TO 145+64.19
- PHASE 6 – STA 145+64.19 TO EOP

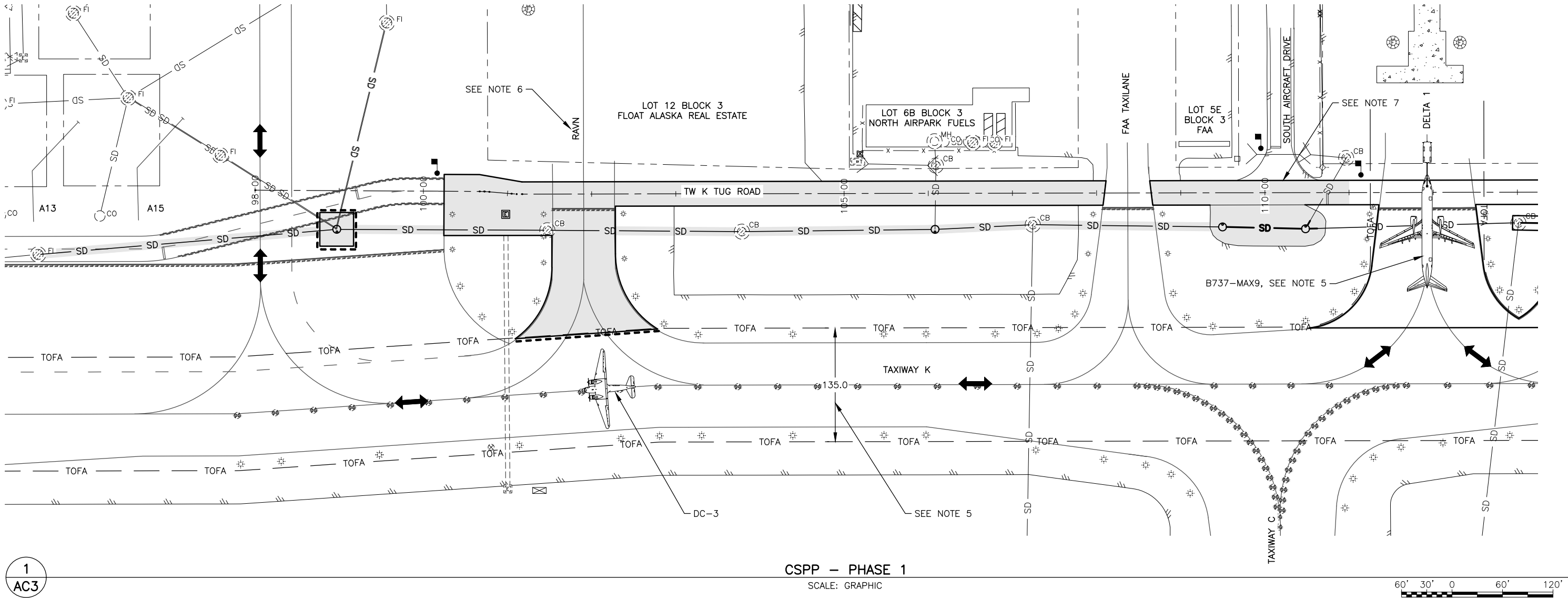
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3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
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PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
CSPP OVERVIEW

DATE:
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SHEET:
AC2 OF AC10



COMPLETE THE FOLLOWING PRIOR TO PHASE 1 CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 1 AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 1 CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- DEMOLISH EXISTING SECURITY GATE
- MILL AND PAVE RAVN APPROACH
- REHABILITATE STORM DRAIN PIPE
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- REMOVE EXISTING ELECTRICAL MANHOLE & INSTALL NEW ELECTRICAL MANHOLE (SEE SHEET E1 & E2 FOR MORE INFORMATION)
- REPLACE TAXIWAY EDGE LIGHTS
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 1 CONSTRUCTION

- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

SHEET NOTES:

- 14 DAYS PRIOR TO THE BEGGINING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
- ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
- PHASE 1 SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
- HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
- TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.
- RAVN WILL USE A GATES ENTRANCE DURING PHASE 1.
- CONTRACTOR SHALL COORDINATE CLOSURE OF GATE E21 WITH ANC OPS THROUGH THE ENGINEER DURING WORK IN INTERSECTION SOUTH AIRCRAFT DRIVE.

LEGEND:

- AIRCRAFT MOVEMENT DIRECTION
- HAZARD MARKER BARRIER
- PHASE 1 WORK AREA
- NEW STORM DRAIN
- TRENCHLESS STORM DRAIN REPAIR
- FLAGGER

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PHONE (907) 269-0590

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ANCHORAGE, ALASKA
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CSPP - PHASE 1

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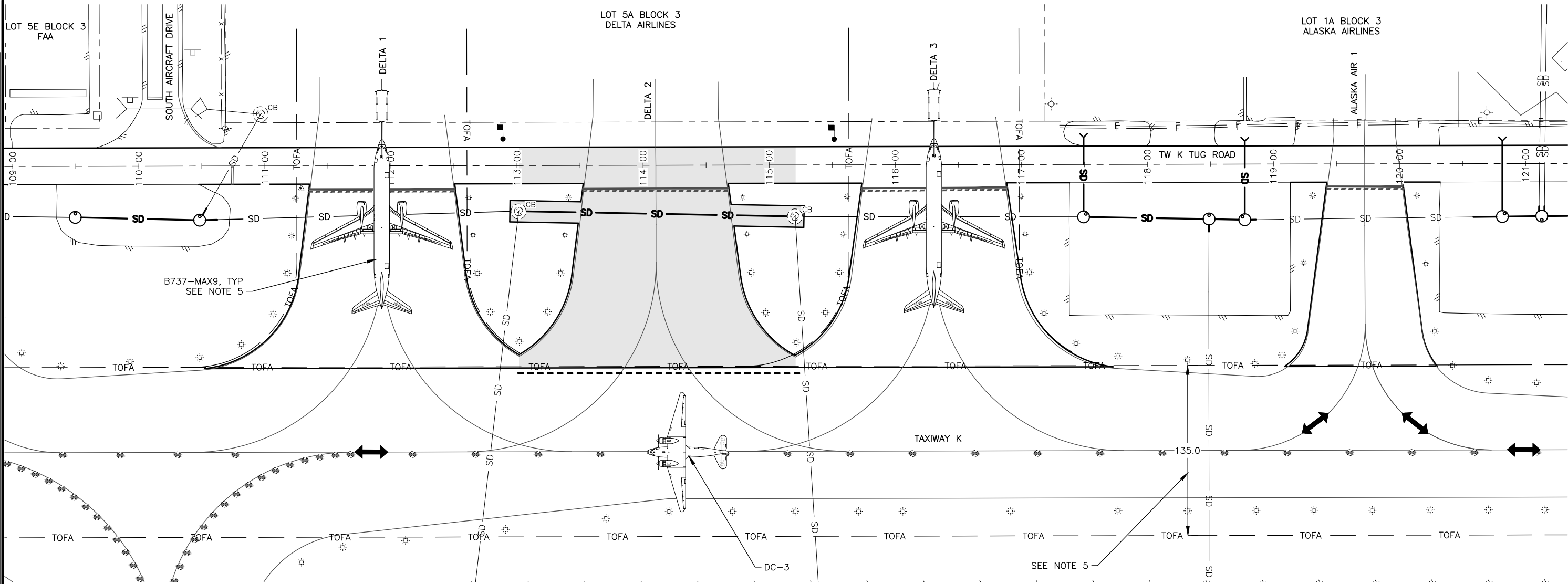


- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

1. 14 DAYS PRIOR TO THE BEGINNING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
2. ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
3. PHASE 2A SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
4. HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
5. TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.

- | | |
|---|-------------------------------|
|  | AIRCRAFT MOVEMENT DIRECTION |
|  | HAZARD MARKER BARRIER |
|  | PHASE 2A WORK AREA |
|  | NEW STORM DRAIN |
|  | TRENCHLESS STORM DRAIN REPAIR |
|  | FLAGGER |

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Designed By: RB
Drawn By: SS
Checked By: SB



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AC5

CSPP – PHASE 2B
SCALE: GRAPHIC

COMPLETE THE FOLLOWING PRIOR TO PHASE 2B CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 2B AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 2B CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- MILL AND PAVE DELTA 2 TAXILANE APPROACH
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 2B CONSTRUCTION

- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

SHEET NOTES:

- 14 DAYS PRIOR TO THE BEGGINING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
- ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
- PHASE 2B SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
- HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
- TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.

LEGEND:

- ↔ AIRCRAFT MOVEMENT DIRECTION
- - - HAZARD MARKER BARRIER
- PHASE 2B WORK AREA
- SD — NEW STORM DRAIN
- SD — TRENCHLESS STORM DRAIN REPAIR
- FLAGGER

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ANCHORAGE, ALASKA 99503
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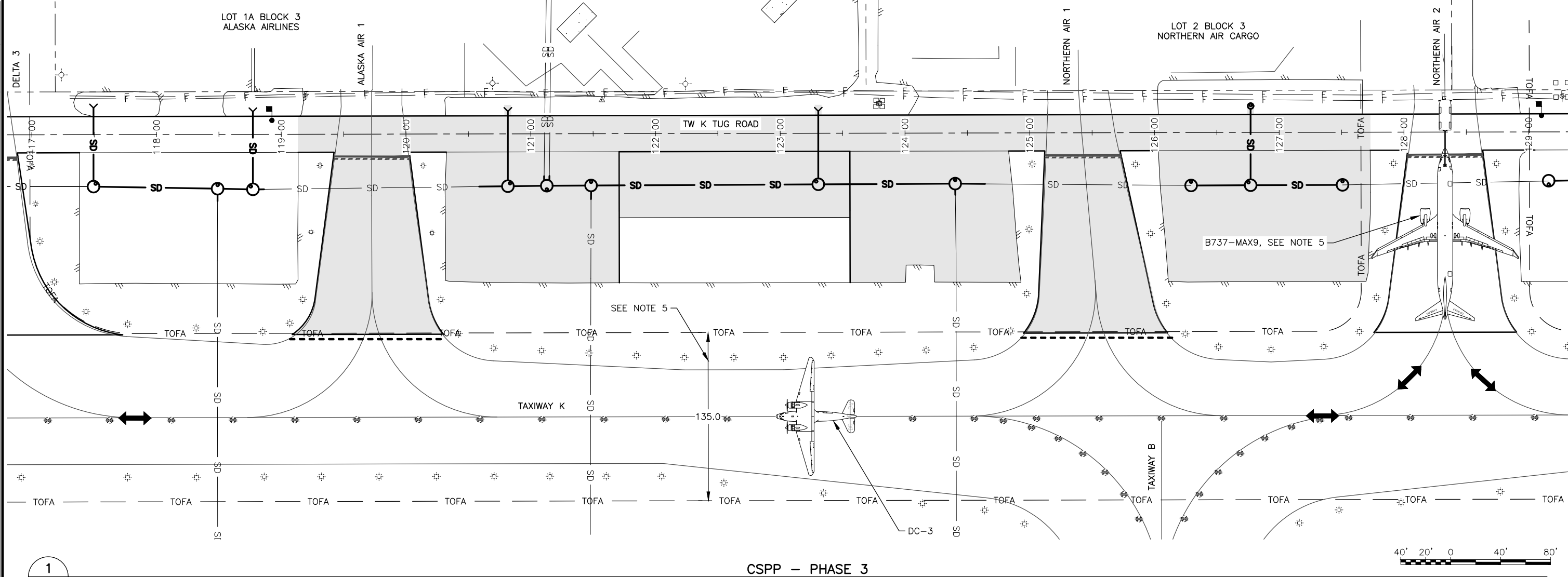
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PHONE (907) 269-0590

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ANCHORAGE, ALASKA
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CSPP – PHASE 2B

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AC5 OF AC10

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Designed By: RB
Drawn By: SS
Checked By: SB



CSPP – PHASE 3

SCALE: GRAPHIC

COMPLETE THE FOLLOWING PRIOR TO PHASE 3 CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 3 AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 3 CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- MILL AND PAVE ALASKA AIR 1 AND NORTHERN AIR CARGO 1 TAXILANE APPROACHES
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 3 CONSTRUCTION

- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

SHEET NOTES:

- 14 DAYS PRIOR TO THE BEGGINING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
- ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
- PHASE 3 SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
- HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
- TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.

LEGEND:

- AIRCRAFT MOVEMENT DIRECTION
- HAZARD MARKER BARRIER
- PHASE 3 WORK AREA
- NEW STORM DRAIN
- FLAGGER

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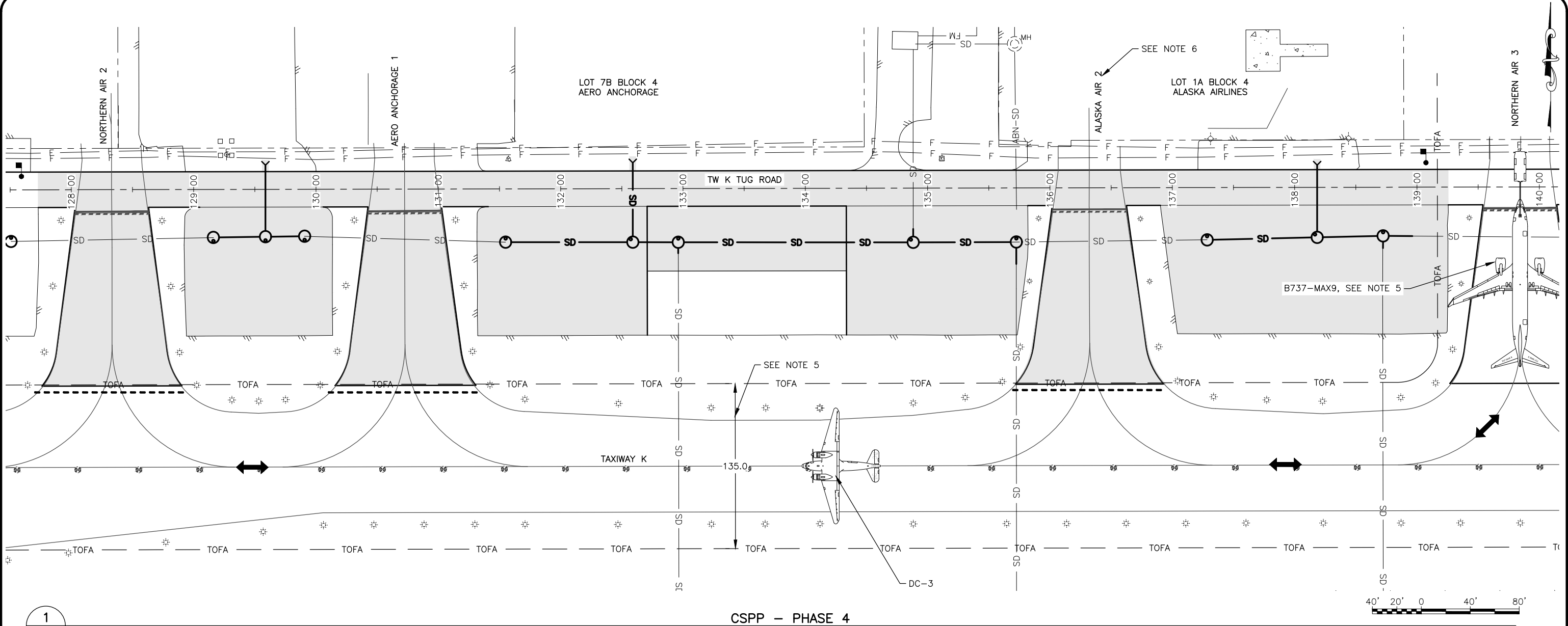
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PHONE (907) 269-0590

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CSPP – PHASE 3

DATE:
SEPTEMBER 2025

SHEET:
AC6 OF AC10



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AC7

CSPP – PHASE 4
SCALE: GRAPHIC

COMPLETE THE FOLLOWING PRIOR TO PHASE 4 CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 4 AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 4 CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- MILL AND PAVE NORTHERN AIR CARGO 2, AERO ANCHORAGE 1, & ALASKA AIR 2 TAXILANE APPROACHES
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 4 CONSTRUCTION

- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

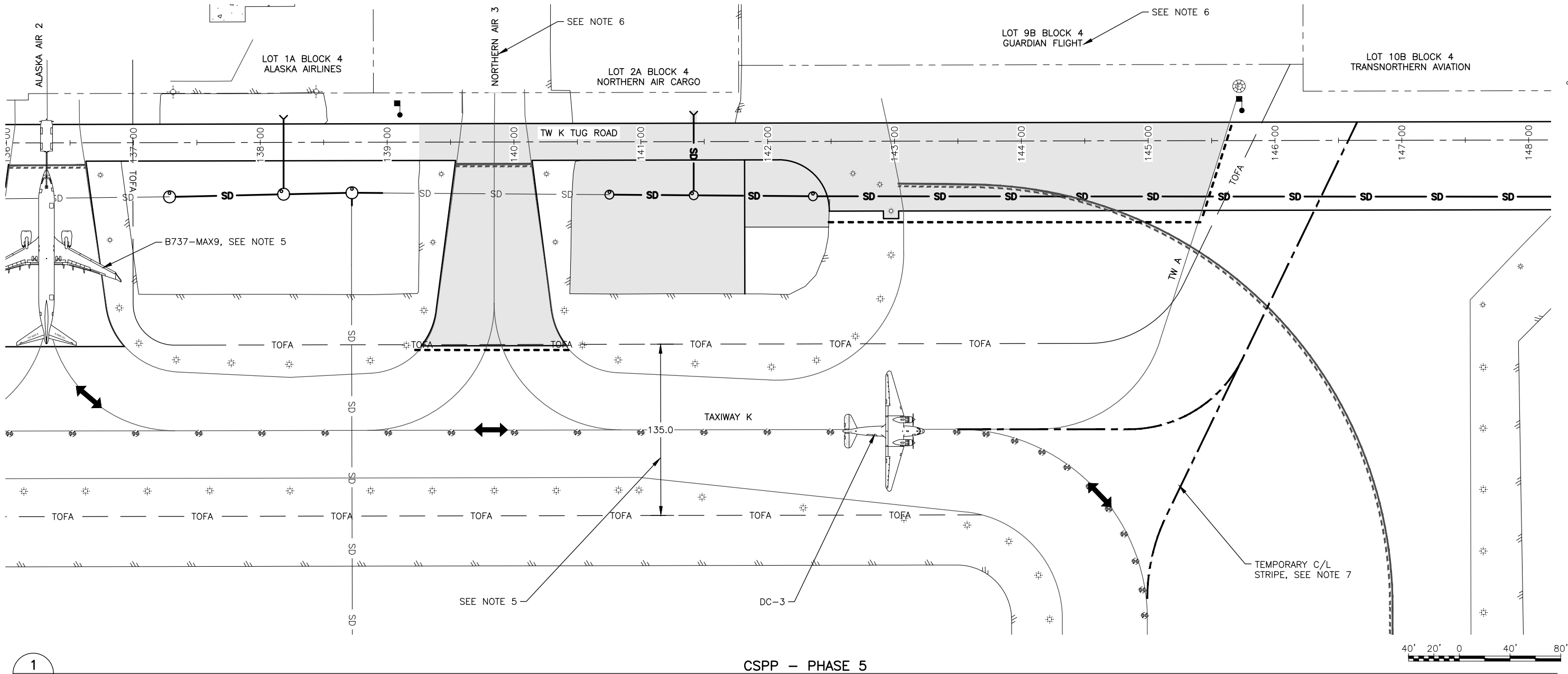
SHEET NOTES:

1. 14 DAYS PRIOR TO THE BEGGING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
2. ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
3. PHASE 4 SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
4. HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
5. TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.
6. ALASKA AIR WILL USE NORTHERN AIR CARGO LEASE LOT ENTRANCE DURING PHASE 4.

LEGEND:

- AIRCRAFT MOVEMENT DIRECTION
- HAZARD MARKER BARRIER
- PHASE 4 WORK AREA
- NEW STORM DRAIN
- FLAGGER

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION 4111 AVIATION AVE., ANCHORAGE ALASKA 99502 PHONE (907) 269-0590		TED STEVENS ANCHORAGE ANCHORAGE, ALASKA ANC TW K TUG ROAD IMPROVEMENTS PROJECT No. CFAPT00992 AIP No. 3-02-0016-XXX-2026 CSPP - PHASE 4	DATE: SEPTEMBER 2025 SHEET: AC7 OF AC10
BY	DATE	REVISION				



COMPLETE THE FOLLOWING PRIOR TO PHASE 5 CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 5 AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 5 CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- MILL AND PAVE NORTHERN AIR CARGO 3 TAXILANE APPROACH
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- REMOVE AND REPLACE TAXIWAY EDGE LIGHTS
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 5 CONSTRUCTION

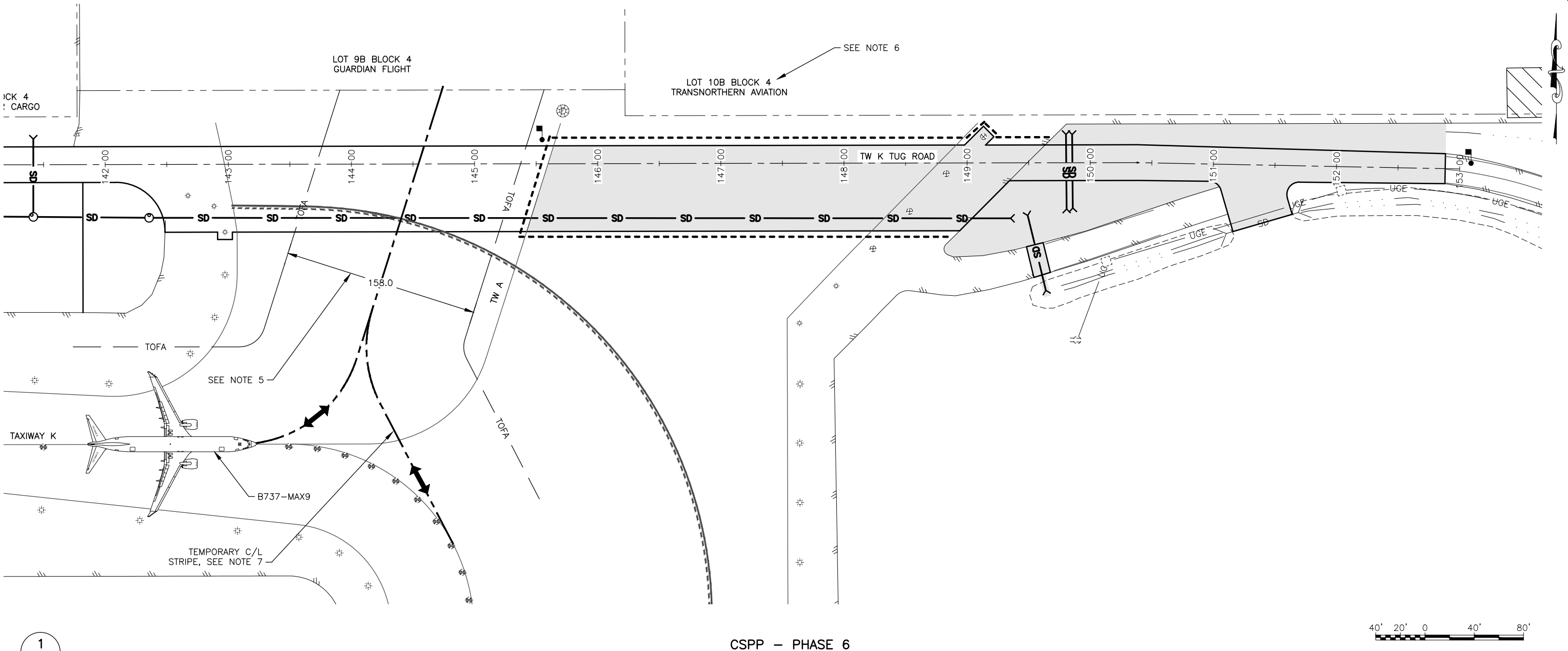
- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

SHEET NOTES:

- 14 DAYS PRIOR TO THE BEGGING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
- ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
- PHASE 5 SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
- HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
- TL OFA SHOWN IS SPECIFICALLY FOR DC-3 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.
- NORTHERN AIR CARGO 3 WILL USE ALASKA AIR 3 LEASE LOT ENTRANCE DURING PHASE 5, GUARDIAN FLIGHT WILL USE TRANSNORTHERN LEASE LOT ENTRANCE DURING PHASE 5.
- CONFIRM LOCATION AND NEED OF TEMPORARY CENTERLINE WITH ANC OPERATIONS.

LEGEND:

- AIRCRAFT MOVEMENT DIRECTION
- HAZARD MARKER BARRIER
- PHASE 5 WORK AREA
- NEW STORM DRAIN
- FLAGGER



COMPLETE THE FOLLOWING PRIOR TO PHASE 6 CONSTRUCTION

- COORDINATE THROUGH THE ENGINEER TO ISSUE A NOTAM FOR CONSTRUCTION ACTIVITY OCCURRING IN THE PHASE 6 AREA
- INSTALL HAZARD MARKER BARRIERS
- PROVIDE FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY SIGNS FOR ONE LANE CLOSURES
- INSTALL BMP'S PER CONTRACTOR'S APPROVED SWPPP

COMPLETE THE FOLLOWING DURING PHASE 6 CONSTRUCTION

- RECONSTRUCT TW K TUG ROAD
- INSTALL NEW STORM DRAIN PIPE & STRUCTURES
- FILL & GRADE EXISTING TAXIWAY K DITCHES
- REMOVE TAXIWAY EDGE LIGHT BASES
- INSTALL TAXIWAY AND TUG ROAD PAVEMENT MARKINGS

COMPLETE THE FOLLOWING AFTER PHASE 6 CONSTRUCTION

- REMOVE HAZARD MARKER BARRIERS
- REMOVE BMP'S
- REMOVE TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS

SHEET NOTES:

- 14 DAYS PRIOR TO THE BEGGINING OF EACH PHASE, NOTIFY AIRPORT OPERATIONS THROUGH THE ENGINEER.
- ONCE COMPLETED EACH PHASE SHALL REMAIN OPEN TO THE AUTHORIZED PERSONNEL AND TENANTS FOR THE DURATION OF THE PROJECT.
- PHASE 6 SHALL BE LIMITED TO ONE LANE CLOSURES ALONG TW K TUG ROAD.
- HAZARD MARKER BARRIERS SHOWN ADJACENT TO WORK AREA ARE OFFSET FOR CLARITY. PLACE HAZARD MARKER BARRIERS AS CLOSE TO THE WORK AREA AS POSSIBLE.
- TL OFA SHOWN IS SPECIFICALLY FOR B737-MAX9 AIRCRAFT, ALL LARGER AIRCRAFT SHALL BE TOWED.
- TRANSNORTHERN WILL USE GUARDIAN FLIGHT LEASE LOT ENTRANCE DURING PHASE 6.
- CONFIRM LOCATION AND NEED OF TEMPORARY CENTERLINE WITH ANC OPERATIONS.

LEGEND:

- AIRCRAFT MOVEMENT DIRECTION
- HAZARD MARKER BARRIER
- PHASE 6 WORK AREA
- NEW STORM DRAIN
- FLAGGER

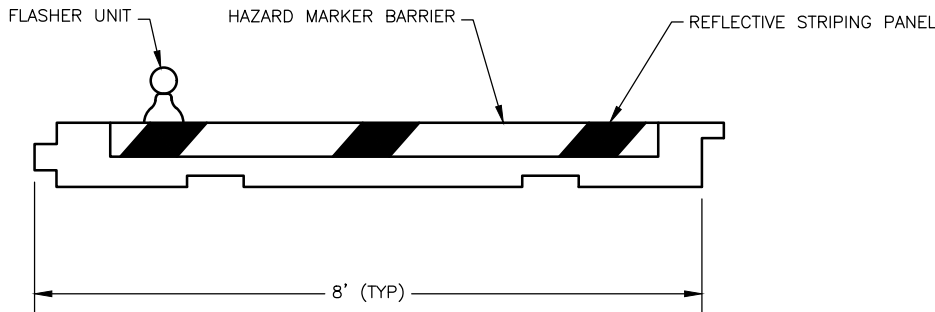
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, INC.
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

BY DATE REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE
ANCHORAGE, ALASKA
ANC TW K TUG ROAD IMPROVEMENTS
PROJECT No. CFAPT00992
AIP No. 3-02-0016-XXX-2026
CSPP - PHASE 6

DATE:
SEPTEMBER 2025
SHEET:
AC9 OF AC10



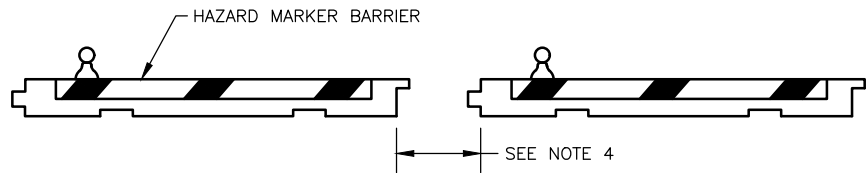
1
AC7

AVIATION HAZARD MARKER BARRICADE DETAIL

SCALE: NTS

BARRICADE NOTES:

1. FLASHER SHALL BE BATTERY POWERED LIGHTS, TYPE "A", OF LOW INTENSITY, FLASHING, CONFORMING TO PART VI OF THE MANUAL ON TRAFFIC CONTROL DEVICES, 2009 EDITION.
2. ATTACH FLASHER PER MANUFACTURER'S RECOMMENDATIONS.
3. PLACE BARRIERS TO SEPARATE CONSTRUCTION AREAS FROM OPEN PORTIONS OF THE AIRPORT.
4. ALL BARRIERS SHALL BE INTERLOCKED. DISTANCE BETWEEN BARRIERS MAY BE ADJUSTED IF APPROVED BY THE ENGINEER.



2
AC7

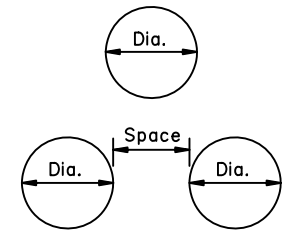
CONSTRUCTION CLOSURE HAZARD MARKER BARRIER DETAIL

SCALE: NTS

GENERAL NOTES:

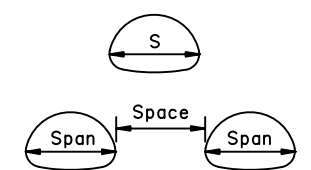
- Sidefill shall be placed and compacted with care under haunches of pipe and shall be brought up evenly and simultaneously on both sides of pipe to 1 foot above the top of the full length of the pipe.
- Alternate installation methods may only be used when specified or approved by the Engineer.

D = Nominal Pipe Diameter



MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Dia. of pipe or 3', whichever is less.

S = Nominal Pipe Arch Span



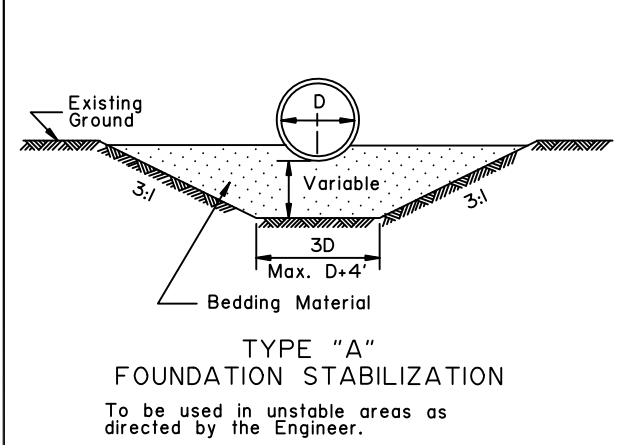
MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Span of pipe arch or 3', whichever is less.

State of Alaska DOT&PF
ALASKA STANDARD PLAN
CULVERT PIPE & ARCH
INSTALLATION DETAILS

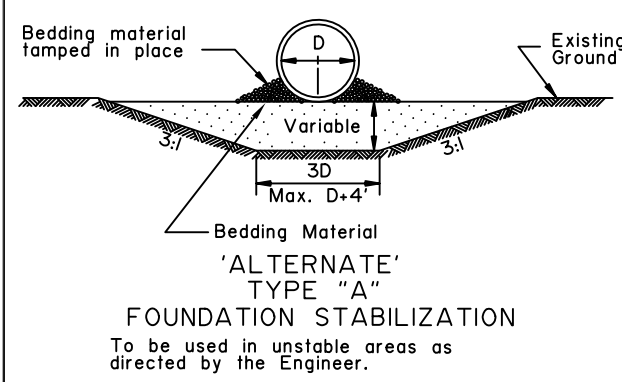
Adopted as an Alaska
Standard Plan by: *Kenneth J. Fisher*
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

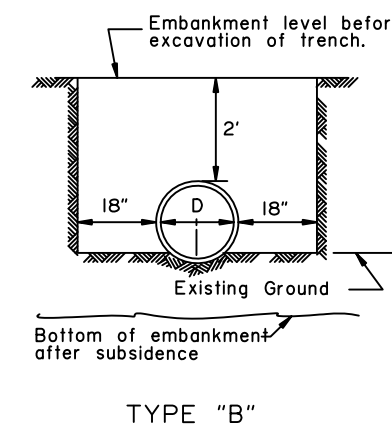
Last Code and Stds. Review
By: Date:
Next Code and Standards Review date: 02/08/2029



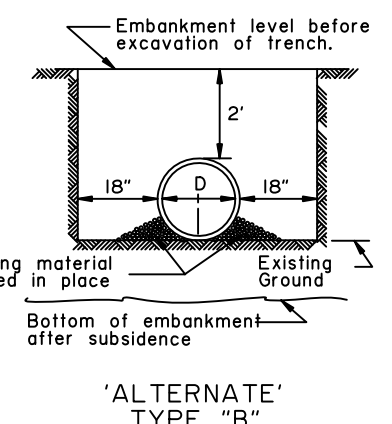
TYPE "A"
FOUNDATION STABILIZATION
To be used in unstable areas as
directed by the Engineer.



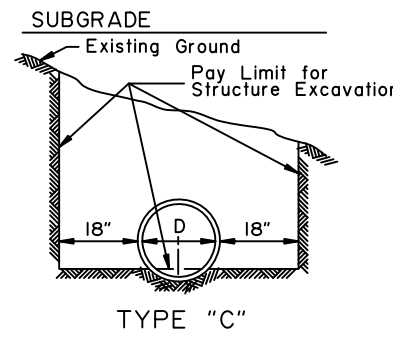
'ALTERNATE'
TYPE "A"
FOUNDATION STABILIZATION
To be used in unstable areas as
directed by the Engineer.



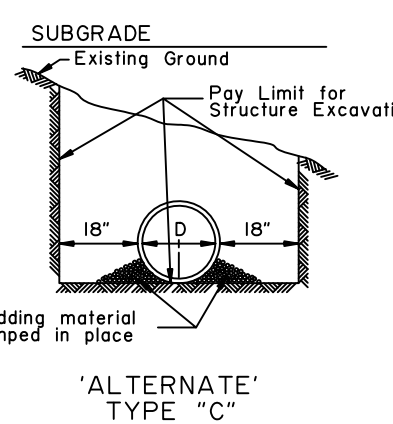
TYPE "B"



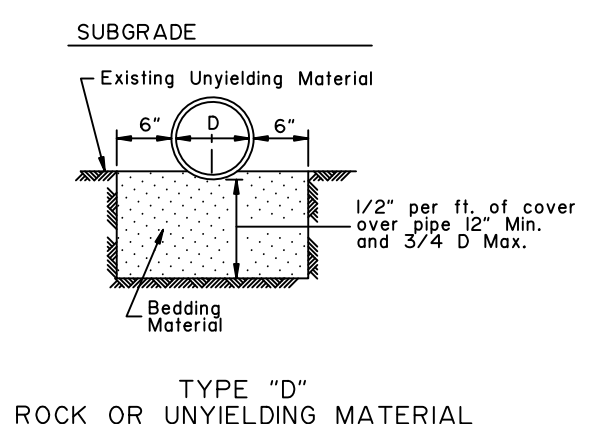
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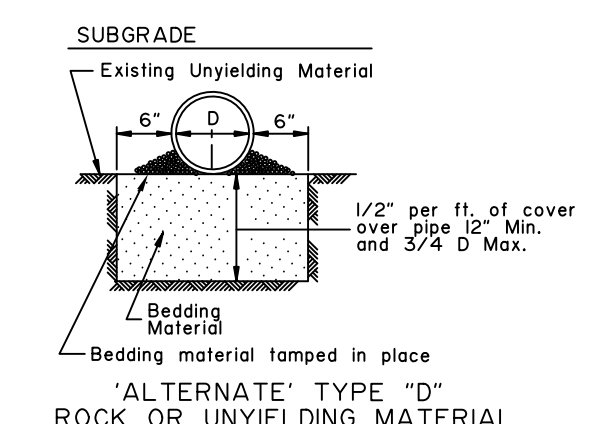
TYPE "C"



'ALTERNATE'
TYPE "C"

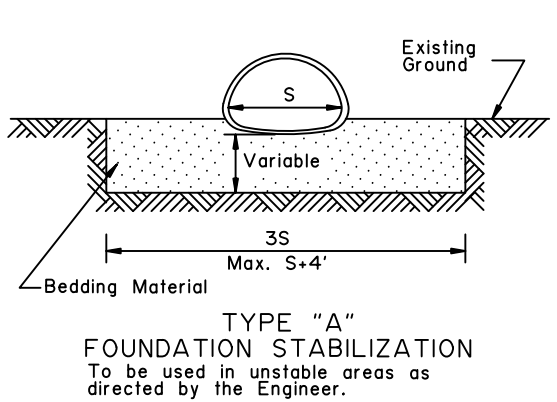


TYPE "D"
ROCK OR UNYIELDING MATERIAL

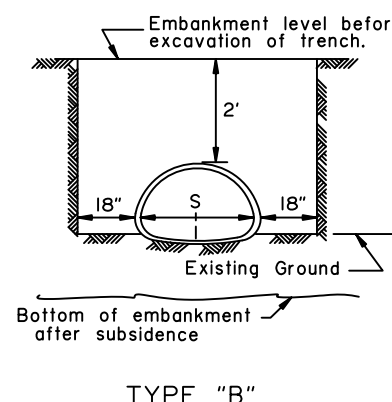


'ALTERNATE' TYPE "D"
ROCK OR UNYIELDING MATERIAL

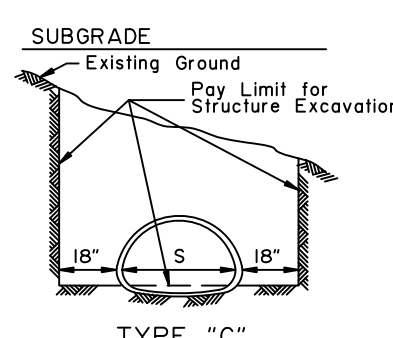
CULVERT PIPE



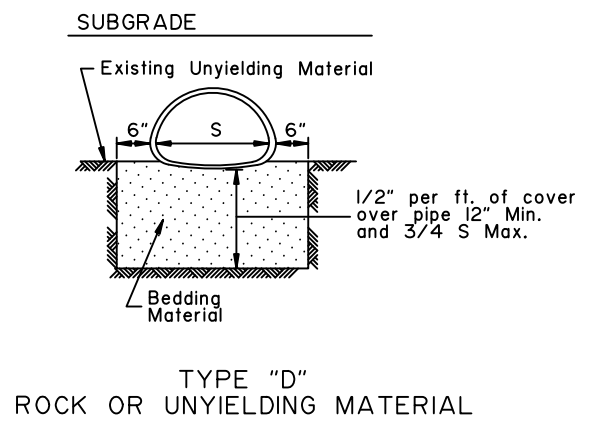
TYPE "A"
FOUNDATION STABILIZATION
To be used in unstable areas as
directed by the Engineer.



TYPE "B"



TYPE "C"



TYPE "D"
ROCK OR UNYIELDING MATERIAL

ARCH

GENERAL NOTES:

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
- No more than one type of pipe may be used on any single installation or installation grouping.
- All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
- These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

Minimum & Maximum Cover for 2 2/3" X 1/2" Aluminum Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
12	12	100+	100+	100+	100+	100+
15	12	100	100+	100+	100+	100+
18	12	83	100+	100+	100+	100+
21	12	71	89	100+	100+	100+
24	12	62	78	100+	100+	100+
27	12		69	97	100+	100+
30	12		62	87	100+	100+
36	12		51	73	94	100+
42	12			62	80	100+
48	12			54	70	85
54	15			48	62	76
60	15				52	64
66	18					52
72	18					43

Minimum & Maximum Cover for 3" x 1" Aluminum Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
30	12	57	72	100+	100+	100+
36	12	47	60	84	100+	100+
42	12	40	51	72	96	100+
48	12	35	44	62	84	99
54	15	31	39	55	74	88
60	15	28	35	50	67	79
66	18	25	32	45	61	72
72	18	23	29	41	56	66
78	21		27	38	51	61
84	21			35	48	56
90	24			33	44	52
96	24			31	41	49
102	24				39	46
108	24				37	43
114	24					39
120	24					36

Minimum & Maximum Cover for 9" X 2 1/2" Aluminum Structural Plate Pipe*			
Thickness		0.125	0.150
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)
84	18	31	
90	18	27	
96	18	27	
102	18	24	
108	18	24	
114	18	21	
120	24	21	
126	24	19	
132	30	19	
138	30	18	
144	30	18	
150	30		22
156	30		22
162	36		20
168	36		20

*5.33 - 3/4" dia. steel bolts per foot.

CORRUGATED CIRCULAR ALUMINUM PIPE

CORRUGATED ALUMINUM PIPE-ARCH

Minimum & Maximum Cover for 2 2/3" X 1/2" Aluminum Pipe-Arch					
				2 Tons/Sf Corner Bearing Pressure	
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
17	13	3 4/8	16 (0.060)	12	13
21	15	4 1/8	16 (0.060)	12	12
24	18	4 7/8	16 (0.060)	12	12
28	20	5 4/8	14 (0.075)	12	12
35	24	6 7/8	14 (0.075)	12	12
42	29	8 2/8	12 (0.105)	12	12
49	33	9 5/8	12 (0.105)	15	12
57	38	11	10 (0.135)	15	12
64	43	12 3/8	10 (0.135)	18	12
71	47	13 6/8	8 (0.164)	18	12

Minimum & Maximum Cover for 3" x 1" Aluminum Pipe-Arch					
				2 Tons/Sf Corner Bearing Pressure	
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
60	46	18 6/8	14 (0.075)	15	20
66	51	20 6/8	14 (0.075)	18	20
73	55	22 7/8	14 (0.075)	21	20
81	59	20 7/8	12 (0.105)	21	16
87	63	22 7/8	12 (0.105)	24	16
95	67	24 3/8	12 (0.105)	24	16
103	71	26 1/8	10 (0.135)	24	16
112	75	27 6/8	8 (0.164)	24	16

Minimum & Maximum Cover for 9" x 2 1/2" Aluminum Multiplate Pipe-Arch*					
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	2 Tons/Sf Corner Bearing Pressure Max. Cover (Ft)
6-7	5-8	31.75	0.125	24	24
6-11	5-9	31.75	0.125	24	24
7-3	5-11	31.75	0.125	24	18
7-9	6-0	31.75	0.125	24	18
8-5	6-3	31.75	0.125	24	16
9-3	6-5	31.75	0.125	24	15
10-3	6-9	31.75	0.125	30	13
10-9	6-10	31.75	0.125	30	13
11-5	7-1	31.75	0.125	30	13
12-7	7-5	31.75	0.125	30	11
12-11	7-6	31.75	0.125	30	11
13-1	8-2	31.75	0.125	30	11
13-11	8-5	31.75	0.125	36	10
14-8	9-8	31.75	0.125	36	9
15-4	10-0	31.75	0.150	36	8
16-1	10-4	31.75	0.150	36	8
16-9	10-8	31.75	0.150	42	7
17-3	11-0	31.75	0.150	42	7
18-0	11-4	31.75	0.175	42	7
18-8	11-8	31.75	0.175	42	7

*5.33 - 3/4" dia. steel bolts per foot.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska
Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review
By: KLH Date: 7/8/2020
Next Code and Standards Review date: 7/8/2030

GENERAL NOTES

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
- No more than one type of pipe may be used on any single installation or installation grouping.
- All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
- These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

Minimum & Maximum Cover for 2 2/3" x 1/2" Steel Pipe						
Gage	I6	I4	I2	I0	8	
Thickness	0.060	0.075	0.105	0.135	0.164	
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	
12	12	100+	100+	100+	100+	100+
15	12	100+	100+	100+	100+	100+
18	12	100+	100+	100+	100+	100+
21	12	100+	100+	100+	100+	100+
24	12	100+	100+	100+	100+	100+
30	12	83	100+	100+	100+	100+
36	12	69	86	100+	100+	100+
42	12	59	74	100+	100+	100+
48	12	51	64	91	100+	100+
54	12		57	80	100+	100+
60	12			72	93	100+
66	12			66	85	100+
72	12				78	95
78	12					84
84	12					73

Minimum & Maximum Cover fo 3" x 1" Steel Pipe						
Gage	I6	I4	I2	I0	8	
Thickness	0.060	0.075	0.105	0.135	0.164	
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	
36	12			100+	100+	100+
42	12			100+	100+	100+
48	12		74	100+	100+	100+
54	12	53	66	93	100+	100+
60	12	47	59	83	100+	100+
66	12	43	54	76	98	100+
72	12	39	49	69	89	100+
78	12	36	45	64	82	100+
84	12	33	42	59	77	94
90	12	31	39	55	71	87
96	12	29	37	52	67	82
102	18	27	34	49	63	77
108	18		32	46	59	73
114	18		31	43	56	69
120	18		29	41	53	65
126	18			39	51	62
132	18			37	48	59
138	18			36	46	57
144	18			44	54	

Minimum & Maximum Cover for 5" x 1" Steel Pipe						
Gage	I6	I4	I2	I0	8	
Thickness	0.060	0.075	0.105	0.135	0.164	
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	
36	12	71	88	100+	100+	100+
42	12	60	76	100+	100+	100+
48	12	53	66	93	100+	100+
54	12	47	59	82	100+	100+
60	12	42	53	74	96	100+
66	12	38	48	67	87	100+
72	12	35	44	62	79	97
78	12	32	40	57	73	90
84	12	30	37	53	68	83
90	12	28	35	49	63	78
96	12	26	33	46	59	73
102	18	24	31	43	56	69
108	18		29	41	53	65
114	18		27	39	50	61
120	18		26	37	47	58
126	18			35	45	55
132	18			33	43	53
138	18			32	41	50
144	18			39	48	

Minimum & Maximum Cover for 6" x 2" Steel Multiplate Pipe*							
Gage	I2	I0	8	7	5	3	1
Thickness	0.111	0.140	0.170	0.188	0.218	0.249	0.280
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
60	12	46	67	87	100	100+	100+
66	12	42	60	79	91	100+	100+
72	12	38	55	73	83	100+	100+
78	12	35	51	67	77	93	100+
84	12	32	47	62	71	86	100+
90	12	30	44	58	67	80	95
96	12	28	41	54	62	75	89
102	18	27	39	51	59	71	84
108	18	25	37	48	55	67	79
114	18	24	35	45	52	63	75
120	18	22	33	43	50	60	71
126	18	21	31	41	47	57	68
132	18	20	30	39	45	54	64
138	18	19	28	37	43	52	62
144	18	18	27	36	41	50	59

*4 - 3/4" dia. steel bolts per foot.

CORRUGATED CIRCULAR STEEL PIPE

CORRUGATED STEEL PIPE-ARCH

Minimum & Maximum Cover for 2 2/3" X 1/2" Steel Pipe-Arch						
2 Tons/Sf Corner Bearing Pressure						
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)	
17	13	3 4/8	16 (0.060)	12	11	
21	15	4 1/8	16 (0.060)	12	11	
24	18	4 7/8	16 (0.060)	12	11	
28	20	5 4/8	16 (0.060)	12	11	
35	24	6 7/8	16 (0.060)	12	11	
42	29	8 2/8	16 (0.060)	12	11	
49	33	9 5/8	14 (0.075)	12	11	
57	38	11	12 (0.109)	12	11	
64	43	12 3/8	12 (0.109)	12	11	
71	47	13 6/8	10 (0.138)	12	11	
77	52	15 1/8	10 (0.138)	12	11	
83	57	16 4/8	8 (0.168)	12	11	

Minimum & Maximum Cover for 3" X 1" Steel Pipe-Arch						
2 Tons/Sf Corner Bearing Pressure						
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)	
53	41	10 2/8	14 (0.079)	12	10	
60	46	18 6/8	14 (0.079)	15	29	
66	51	20 6/8	14 (0.079)	15	29	
73	55	22 7/8	14 (0.079)	18	18	
81	59	20 7/8	14 (0.079)	18	15	
87	63	22 7/8	14 (0.079)	18	15	
95	67	24 3/8	14 (0.079)	18	15	
103	71	26 1/8	14 (0.079)	18	14	
112	75	27 6/8	14 (0.079)	21	14	
117	79	29 4/8	12 (0.109)	21	14	
128	83	31 2/8	10 (0.138)	24	14	
137	87	33	10 (0.138)	24	14	
142	91	34 6/8	10 (0.138)	24	13	
150	96	36	10 (0.138)	30	13	
157	96	38	10 (0.138)	30	13	
164	105	40	10 (0.138)	30	14	
171	110	41	10 (0.138)	30	13	

Minimum & Maximum Cover for 5" X 1" Steel Pipe-Arch						
2 Tons/Sf Corner Bearing Pressure						
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)	
53	41	10 2/8	14 (0.079)	12	10	
60	46	18 6/8	14 (0.079)	15	29	
66	51	20 6/8	14 (0.079)	15	29	
73	55	22 7/8	14 (0.079)	18	18	
81	59	20 7/8	14 (0.079)	18	15	
87	63	22 7/8	14 (0.079)	18	15	
95	67	24 3/8	14 (0.079)	18	15	
103	71	26 1/8	14 (0.079)	18	14	
112	75	27 6/8	14 (0.079)	21	14	
117	79	29 4/8	12 (0.109)	21	14	
128	83	31 2/8	10 (0.138)	24	14	
137	87	33	10 (0.138)	24	14	
142	91	34 6/8	10 (0.138)	24	13	
150	96	36	10 (0.138)	30	13	
157	96	38	10 (0.138)	30	13	
164	105	40	10 (0.138)	30	14	
171	110	41	10 (0.138)	30	13	

Minimum & Maximum Cover for Steel Multiplate Pipe-Arch 6" x 2" *						
2 Tons/Sf Corner Bearing Pressure						
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Gage (In)	Min. Cover (In)	Max. Cover (Ft)	
6-1	4-7	18	12 (0.111)	12	14	
7-0	5-1	18	12 (0.111)	12	12	
7-11	5-7	18	12 (0.111)	12	10	
8-10	6-1	18	12 (0.111)	18	9	
9-9	6-7	18	12 (0.111)	18	8	
10-11	7-1	18	12 (0.111)	18	6	
11-10	7-7	18	12 (0.111)	18	5	
12-10	8-4	18	12 (0.111)	24	5	
13-3	9-4	31	10 (0.140)	24	11	
14-2	9-10	31	10 (0.140)	24	10	
15-4	10-4	31	10 (0.140)	24	9	
16-3	10-10	31	10 (0.140)	30	8	
17-2	11-4	31	10 (0.140)	30	8	
18-1	11-10	31	10 (0.140)	30	7	
19-3	12-4	31	10 (0.140)	30	7	
19-11	12-10	31	10 (0.140)	30	6	
20-7	13-2	31	10 (0.140)	36	6	

*4 - 3/4" dia. steel bolts per foot.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska
Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review
By: KLH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030

GENERAL NOTES

1. All materials and workmanship shall be in accordance with the State of Alaska Standard Specifications for Highway Construction.
2. For foundation and structural backfill details see Standard Plan D-01 "Culvert Pipe & Arch Installation Details".
3. Pipe cover height is measured from top of the pipe to top of rigid pavement, or to the bottom of subgrade for flexible pavement. In all cases the minimum cover shall be no less than 2 ft. Where loads traverse the culvert during construction minimum cover shall be no less than 4 ft.

Maximum Cover for Type S Corrugated Polyethelene Pipe	
Size (in)	Max. Cover (ft)
12	24
15	25
18	24
24	20
30	20
36	18
42	16
48	17

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska
Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review
By: KLH Date: 7/8/2020
Next Code and Standards Review date: 7/8/2030

GENERAL NOTES

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
- No more than one type of pipe may be used on any single installation or installation grouping.
- All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflecton.
- These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

Minimum & Maximum Cover for Aluminum Spiral Rib Circular Pipe*					
Gage		I6	I4	I2	I0
Thickness		0.064	0.079	0.109	0.138
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
18	12	43	61		
21	12	38	52	84	
24	12	33	45	73	
30	15	26	36	58	
36	18	21	30	49	69
42	21		25	41	59
48	24			36	51
54	24			32	46
60	24			29	41
66	24				37
72	30				34

* $\frac{3}{4}$ x $\frac{3}{4}$ x $7\frac{1}{2}$ in. Corrugations

Minimum & Maximum Cover for Aluminum Spiral Rib Pipe-Arch*						
Gage			I6	I4	I2	I0
Thickness			0.060	0.075	0.105	0.135
Span (Ft.-In.)	Rise (Ft.-In.)	Min. Cover (In)	Max. Cover (Ft)			
20	16	12	16			
23	19	12	15			
27	21	15	13	13		
33	26	18	13	13	13	
40	31	21		13	13	
46	36	24			13	13
53	41	24			13	13
60	46	24			13	13
66	51	24				13

* $\frac{3}{4}$ x $\frac{3}{4}$ x $7\frac{1}{2}$ in. Corrugations

ALUMINUM SPIRAL RIB PIPE

STEEL SPIRAL RIB PIPE

Minimum & Maximum Cover for Steel and Aluminized Steel Spiral Rib Circular Pipe*					
Gage		I6	I4	I2	I0
Thickness		0.064	0.079	0.109	0.138
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
18	12	91			
24	12	68	95	100+	
30	12	54	76	100+	
36	12	45	63	100+	
42	12	38	54	90	
48	12	33	47	79	
54	18	30	42	70	
60	18	27	38	63	92
66	18	24	34	57	83
72	18		31	52	76
78	24		29	48	70
84	24		27	45	65
90	24			42	61
96	24			39	56
102	30			36	50
108	30			32	45

* $\frac{3}{4}$ x $\frac{3}{4}$ x $7\frac{1}{2}$ in. Corrugations.

Minimum & Maximum Cover for Steel Spiral Rib Pipe-Arch*					
2 Tons/Sf Corner Bearing Pressure					
Thickness			0.064	0.079	0.109
Span (Ft.-In.)	Rise (Ft.-In.)	Min. Cover (In)	Max. Cover (Ft)		
20	16	12	13		
23	19	12	13		
27	21	12	11		
33	26	12	11		
40	31	12	11		
46	36	12	11		
53	41	18		11	
60	46	18		19	
66	51	18		19	
73	55	18			18
81	59	18			15
87	63	18			15
95	67	18			15

* $\frac{3}{4}$ x $\frac{3}{4}$ x $7\frac{1}{2}$ in. Corrugations

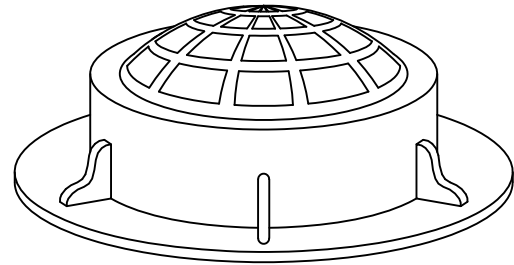
State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

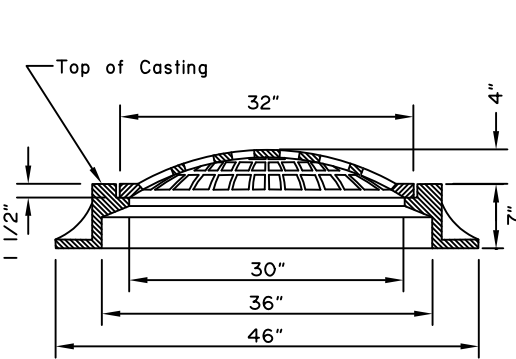
Adopted as an Alaska
Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review
By: KLH Date: 7/8/2020
Next Code and Standards Review date: 7/8/2030

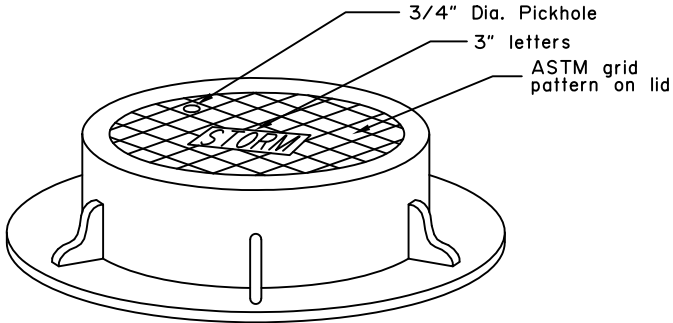


Surround field inlets with a 24" wide rock rubble collar
10" deep, 3" maximum size rock.



FIELD INLET FRAME & GRATE

To be supplied for storm drain manholes
where field inlets are specified.
Field inlet frame and grate shall have
a Minimum total weight of 525 lb.

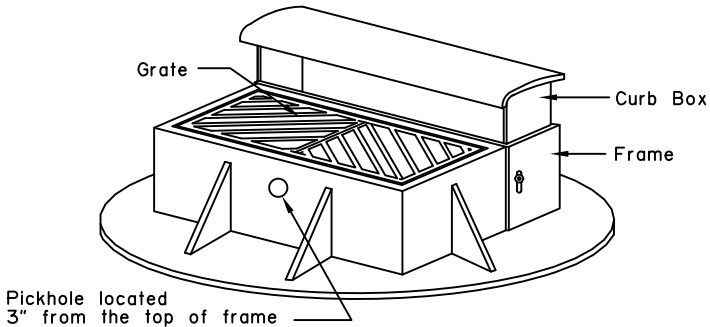


MANHOLE LID FRAME AND GRATE

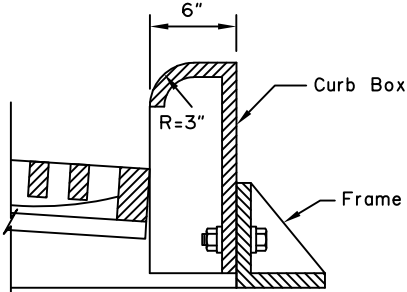
NOTES:

1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers, except that inlet grate shall be within ¼"± of dimensions shown on this drawing.
2. Manhole lids shall be 32" in diameter and may be used with field inlet frames.
3. Type A field inlet frame inside dimensions shall be 24" x 36". Lugs will not protrude outside the concrete surface of the inlet box.
4. Grates shall be bicycle safe. Where high capacity grates are called for on the plans, they shall conform to Std. Dwg. D-25.
5. Frame and grate casting types are identified by the following abbreviations:

C.I. = Curb Inlet
F.I. = Field Inlet
M.H. = Manhole
6. Flowline depression shall conform to Std. Dwg. D-23 for an on grade or sag point conditions.
7. These are the default frames and grates to be used unless shown otherwise on the drainage plans or drainage structure summary.

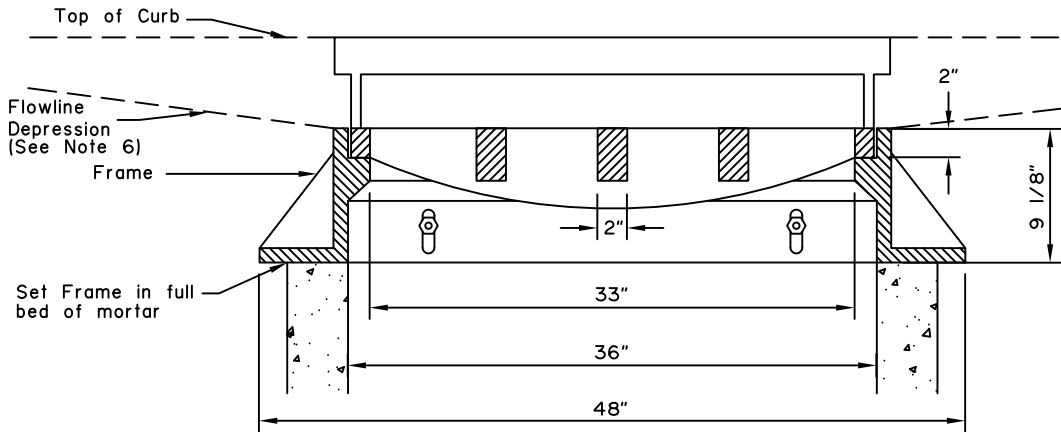


NOTE:
Curb Box, Grate and frame shall have a minimum
total weight of 725 lb.



SIDE VIEW
MOUNTABLE CURB AND GUTTER

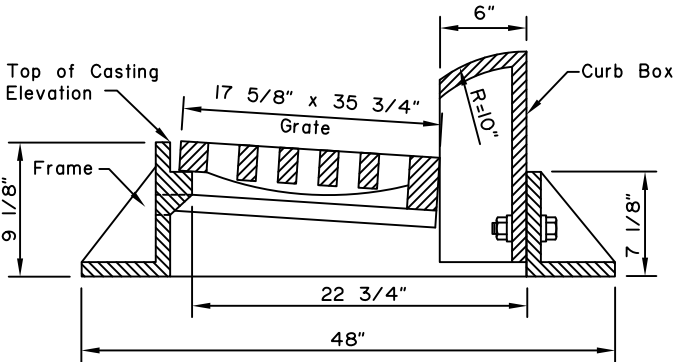
REQUIRED FRAME AND GRATES (See Note 7)			
STRUCTURE	INLET TYPE	CURB TYPE	TYPE FRAME AND GRATE
INLET BOX, TYPE A	Curb	Mountable	Standard Curb Inlet
	Curb	Expressway	Mountable Curb Inlet
	Curb	Rolled Curb	Depressed Inlet
	Field	-----	Field Inlet
STORM DRAIN MANHOLES, TYPE I, II AND III	Curb	Mountable	Mountable Curb Inlet
	Curb	Expressway	Expressway Curb Inlet
	Curb	Rolled Curb	Depressed Inlet
	Field	-----	Field Inlet
	Manhole Lids	-----	Field Inlet Frame, Solid MH. Lid



FRONT VIEW

CURB INLET FRAME AND GRATE

To be supplied for storm drain manholes Type I, Type II and Type III
where curb inlets are specified.



SIDE VIEW
EXPRESSWAY CURB AND GUTTER

State of Alaska DOT&PF
ALASKA STANDARD PLAN
STORMDRAIN MANHOLE
FRAME AND GRATE
DETAILS

Adopted as an Alaska
Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

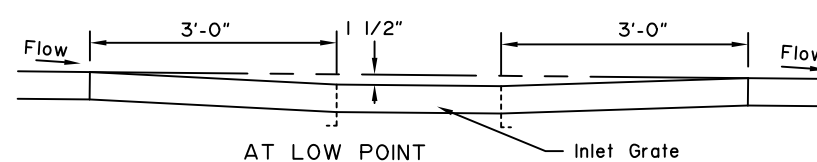
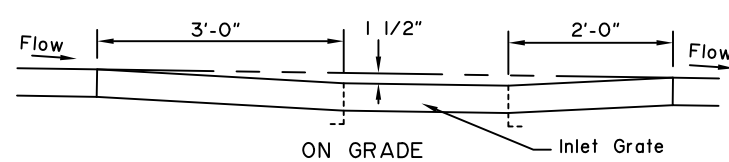
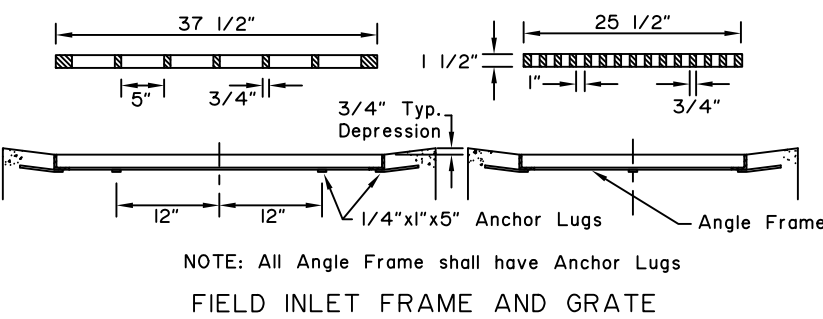
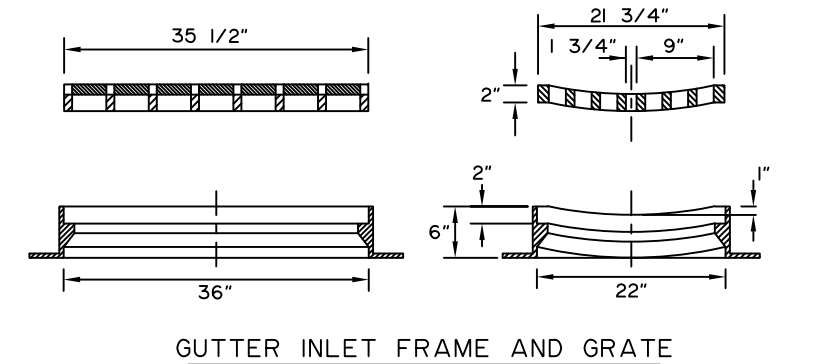
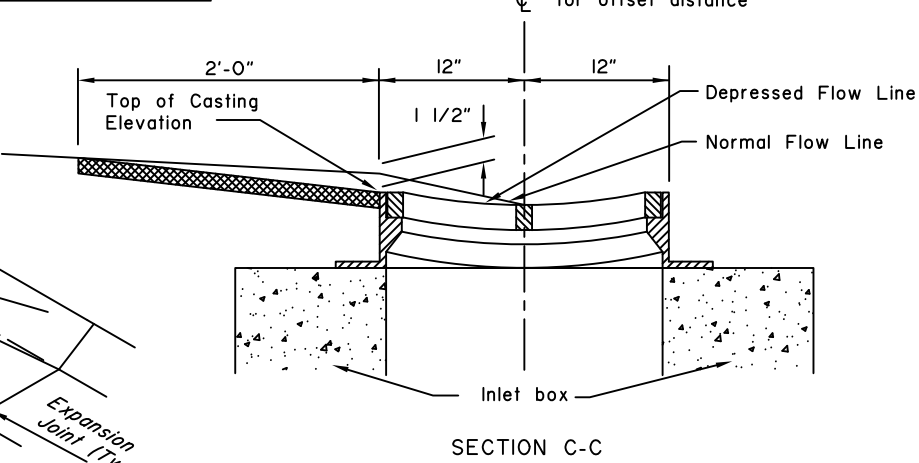
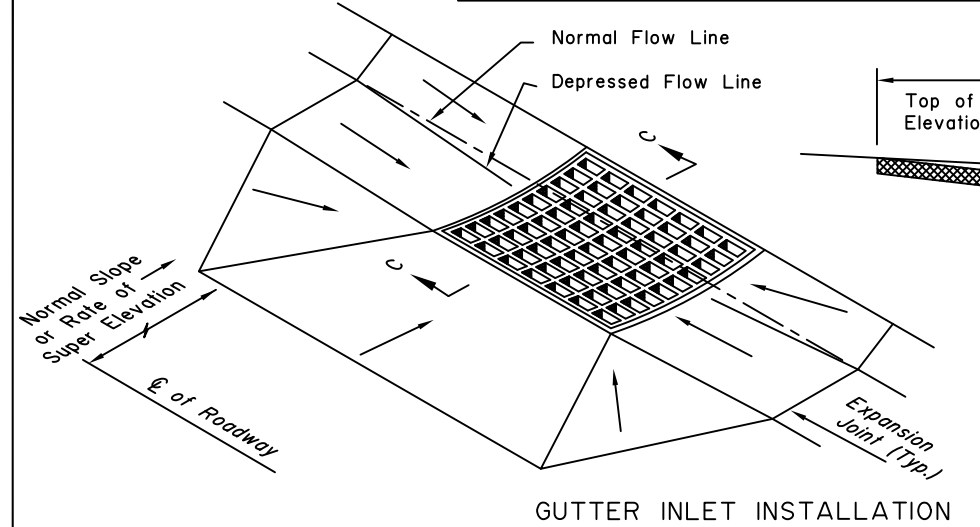
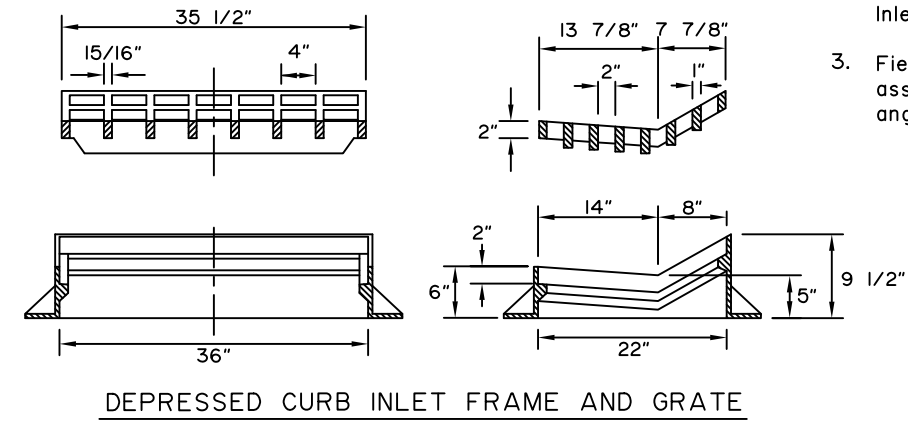
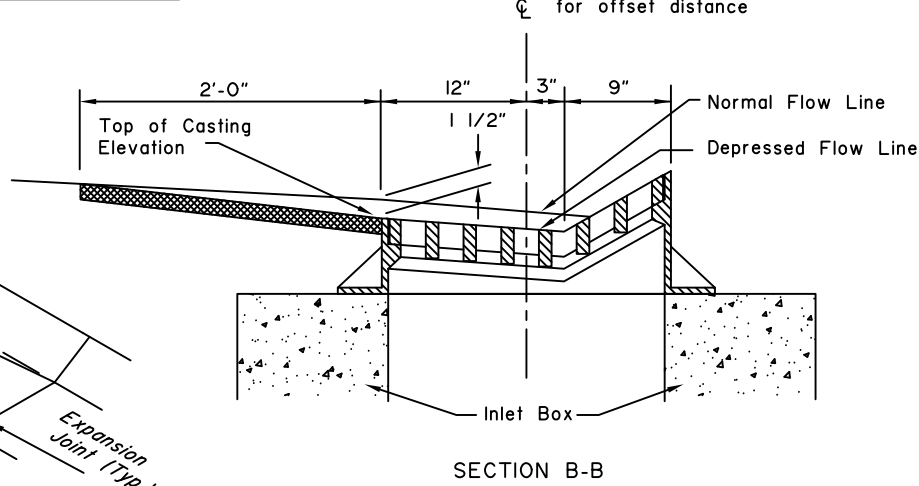
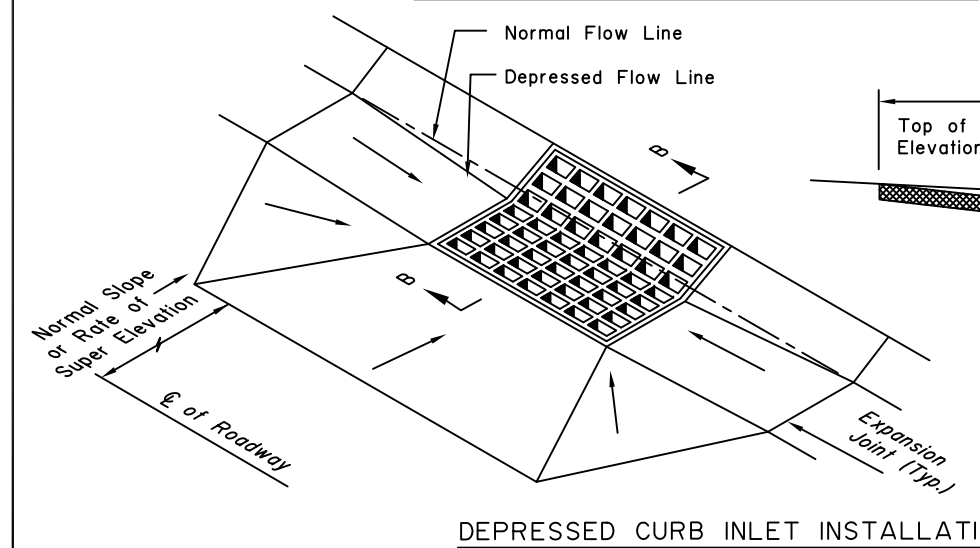
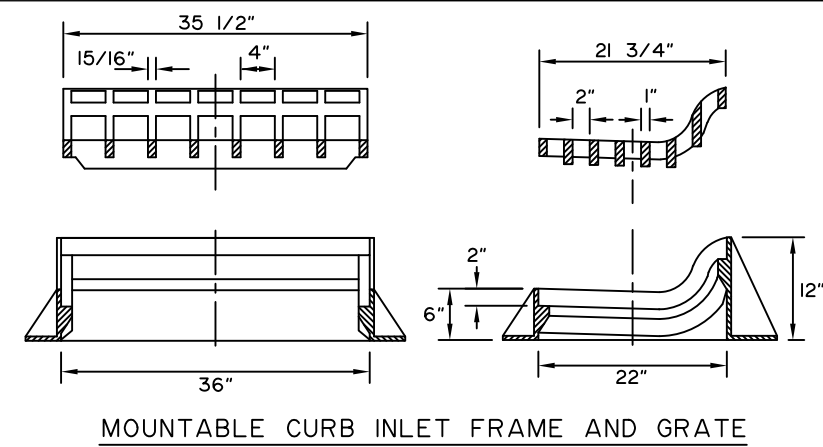
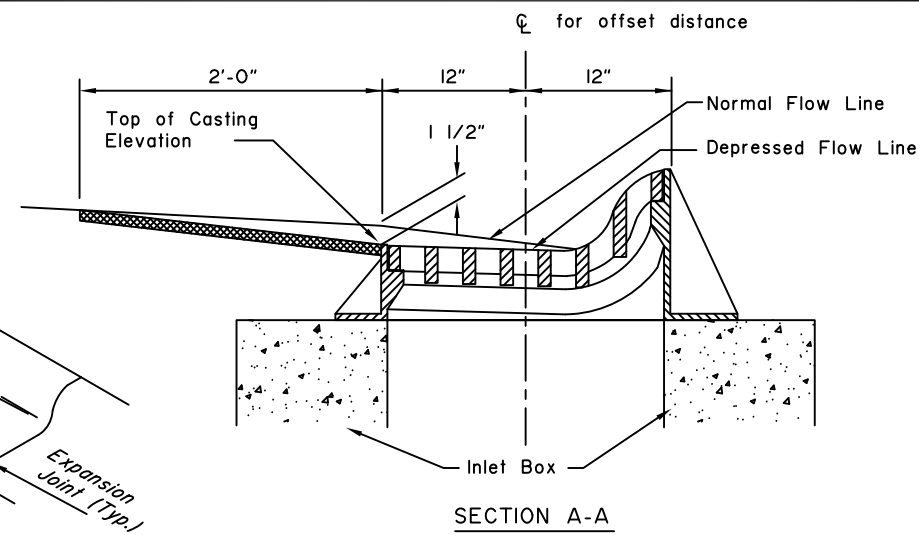
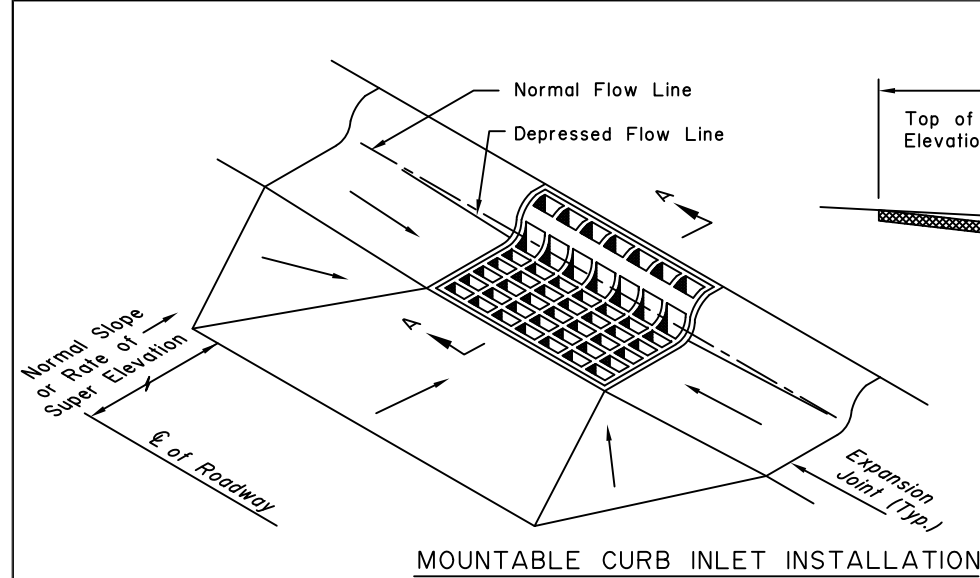
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

NOT TO SCALE

GENERAL NOTES:

1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers. Except inlet grate outside dimension shall be as shown on this drawing.
2. Minimum casting weight shall be 550lbs. for Curb Inlet Frame and Grate, 450lbs. for Gutter Inlet Frame and Grate, and 300lbs. for Field Inlet Frame and Grate.
3. Field Inlet Frame may be welded assembly of L 1 3/4"x1 3/4"x1/4" angle equivalent to ASTM A-36 steel.



DEPRESSION IN FLOW LINE AT INLET CONSTRUCTION DETAILS

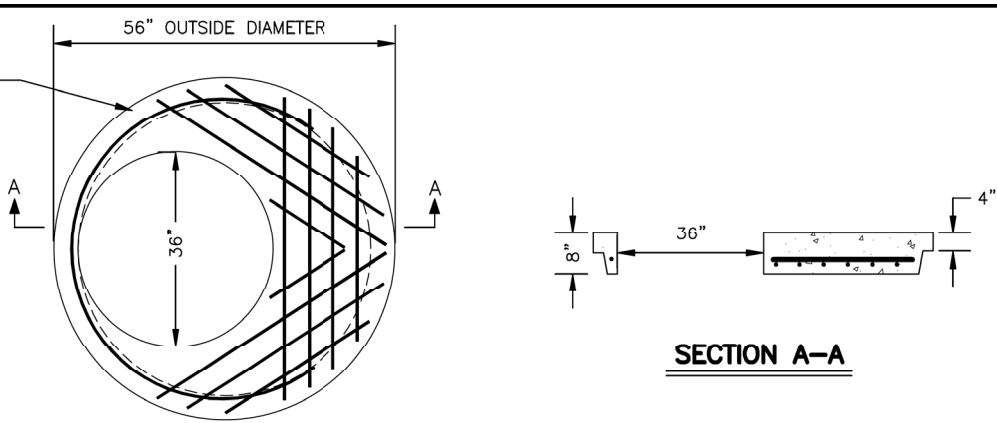
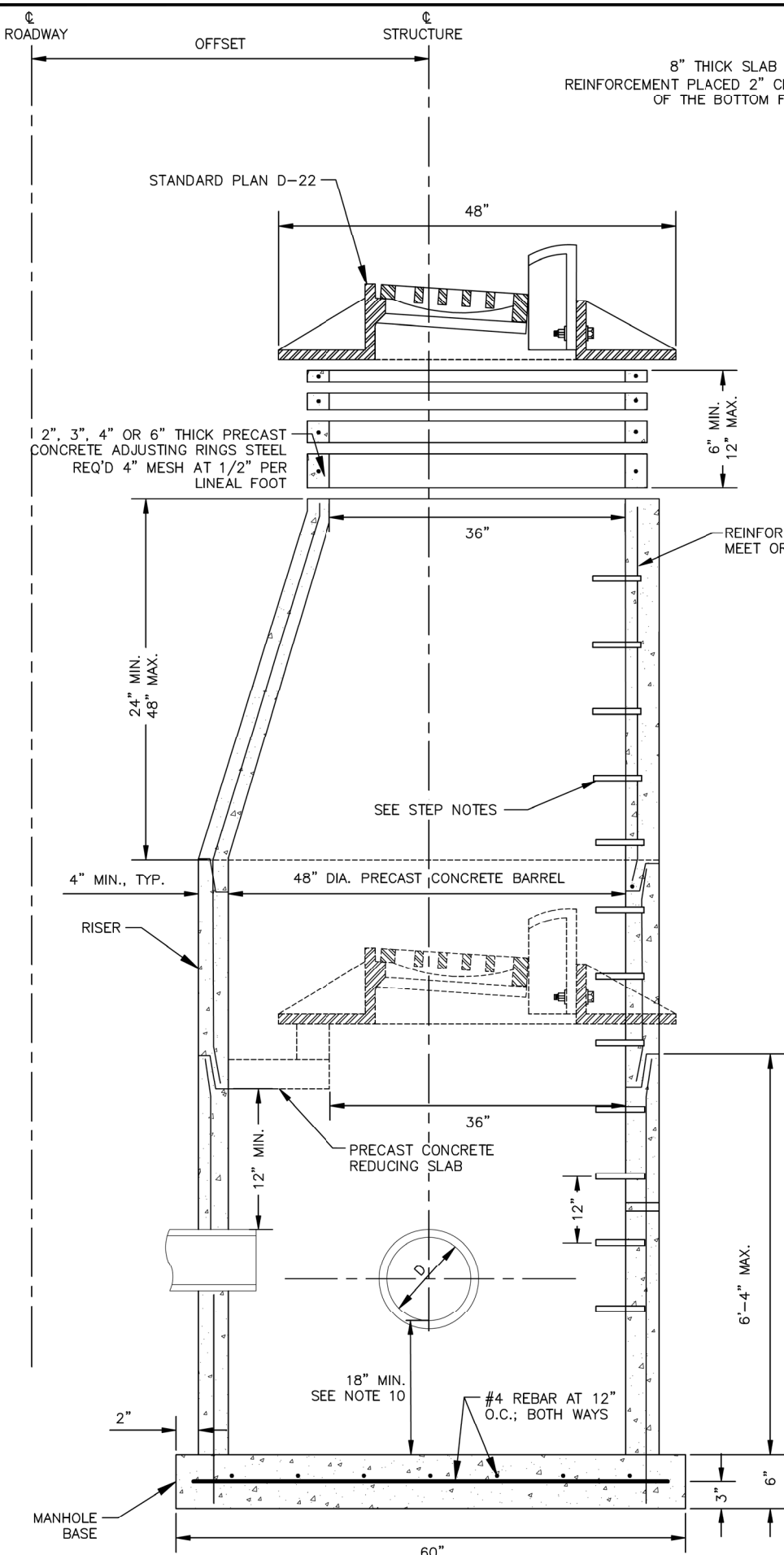
State of Alaska DOT&PF ALASKA STANDARD PLAN INLET FRAMES AND GRATES

Adopted as an Alaska
Standard Plan by: *Kenneth J. Fisher*
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029



**PRECAST CONCRETE REDUCING
SLAB (48" TO 36")**

N.T.S.

MANHOLE STEP NOTES:

1. MEET CURRENT OSHA STANDARDS FOR STEPS AND ACCESS OPENINGS.
2. PLACE STEPS 12" O.C. ON AN UNOBSTRUCTED SIDE OF THE STRUCTURE, 18" MAXIMUM FROM MANHOLE BASE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, PLACE BOTTOM STEP 6" OVER SMALLEST PIPE. WHEN USING A CONE, FIRST LADDER RUNG IS 8" MAXIMUM FROM TOP OF CONE. WHEN USING A FLAT LID, FIRST LADDER RUNG IS 4" MAXIMUM FROM TOP OF RISER.
3. PROVIDE INJECTION MOLDED POLYPROPYLENE COVERED GRADE 60 STEEL STEPS TIGHTLY IMBEDDED AT LEAST 3" INTO CONCRETE.
4. INSTALL STEPS TO RESIST A PULLOUT FORCE OF 1500 LB.
5. THE MINIMUM DIAMETER OF CLEAR ACCESS TO STEPS IS 24".
6. THE CONTRACTOR SHALL TAKE SPECIAL CARE FOR ANY MANHOLE THAT FALLS IN A CURB LINE TO SEE THAT WHEN MANHOLE IS OFFSET DURING INSTALLATION THAT THE STEPS FALL UNDER THE CURB INLET.

GENERAL NOTES:

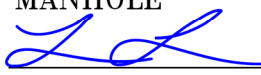
1. THESE DRAWINGS ARE FOR PRECAST REINFORCED CONCRETE FOR HIGHWAY USE. CAST IN PLACE STRUCTURES MAY BE USED AS APPROVED BY THE ENGINEER.
2. MEET THE REQUIREMENTS OF ASTM C-478 FOR ALL DRAINAGE STRUCTURES AND APPURTENANCES.
3. MINIMUM STEEL REQUIRED FOR BARREL AS PER ASTM C-478 SHALL BE IMBEDDED IN BASE SO THAT THE FIRST BARREL SECTION IS CONNECTED TO THE BASE BY CONTINUOUS STEEL. PROVIDE REINFORCING STEEL TYPE AND GRADE PER DOT&PF STANDARD SPECIFICATIONS.
4. USE CLASS A OR CLASS B CONCRETE PER DOT&PF STANDARD SPECIFICATIONS.
5. SEAL RISER JOINTS WITH FLEXIBLE PLASTIC JOINT SEALERS.
6. PROVIDE NON-SHRINK GROUT. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
7. FORM ALL BLOCK-OUTS.
8. MANHOLE SHALL HAVE A MINIMUM OF ONE 6" GRADE RING.
9. ALL STORM DRAIN MANHOLES AND INLETS SHALL HAVE 18" MINIMUM SUMPS. MANHOLES WITH PETROLEUM SEPARATORS SHALL HAVE 24" MINIMUM SUMPS.
10. OFFSET IS MEASURED TO CENTERLINE OF STRUCTURE.
11. EXTEND PIPE 2" INTO MANHOLE. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIXED WITH POTABLE WATER PER MANUFACTURER'S RECOMMENDATIONS.
12. CATCH BASIN LEADS SHALL ENTER THE MANHOLE AT LEAST ONE PRIMARY LEAD DIAMETER ABOVE THE TOP OF THE PRIMARY LEAD UNLESS MINIMUM PIPE SLOPES CANNOT BE ACHIEVED.
13. MAXIMUM PIPE DIAMETER SHALL NOT EXCEED HALF OF THE STRUCTURE DIAMETER. PRIMARY LEADS MUST BE A MINIMUM OF 135 DEGREES APART.
14. USE 72" STORM DRAIN MANHOLE OR LARGER WHEN BOTH CATCH BASIN AND ACCESS FUNCTIONS ARE REQUIRED.
15. LIVE LOAD FOR DESIGN OF THE MANHOLE BARRELS, RISERS AND REDUCING SLABS IS AASHTO HL-93 (HS20 AND DESIGN TANDEM AXLE/WHEEL LOADS).
16. A FLAT LID WITH A SMALLER OPENING MAY ALSO BE USED IF CALLED FOR IN THE PLANS.

REDUCING SLAB NOTES:

1. SPACE ALL REBAR AT 6" CENTERS UNLESS OTHERWISE NOTED.
2. MAINTAIN A MINIMUM OF 1 1/2" OF CONCRETE COVER OVER ALL REBAR.
3. REINFORCING STEEL SHOWN IS A MINIMUM PER ASTM C478. PRECAST MFR TO COMPLETE AND SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR ENGINEER'S REVIEW.

STORM DRAIN MANHOLE, TYPE I

N.T.S.

State of Alaska DOT&PF
ALASKA STANDARD PLAN
48" STORM DRAIN MANHOLE
(PRECAST CONCRETE)
TYPE I MANHOLE
Adopted as an Alaska
Standard Plan by: 
Lauren Little, P.E.
Interim Chief Engineer
Adoption Date: 01/29/2024

Last Code and Stds. Review
By: BMM Date: 12/13/2023
Next Code and Standards Review Date: 12/13/2033

D-35.10