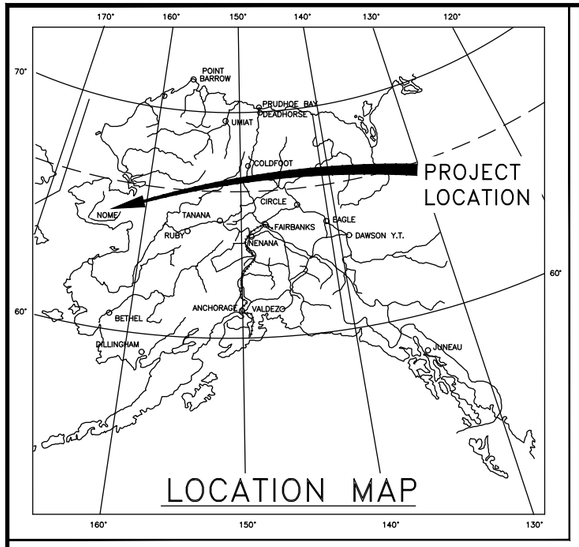
NO.	DATE	REVISION
	–	–

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A1	163
CDS ROUTE: 168100	MILEPOINT: 0.00 TO 1.32			



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT
000S828/Z620030000
SEPPALA DRIVE UPGRADE
GRADING, DRAINAGE, AND PAVING

INDEX OF SHEETS

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:

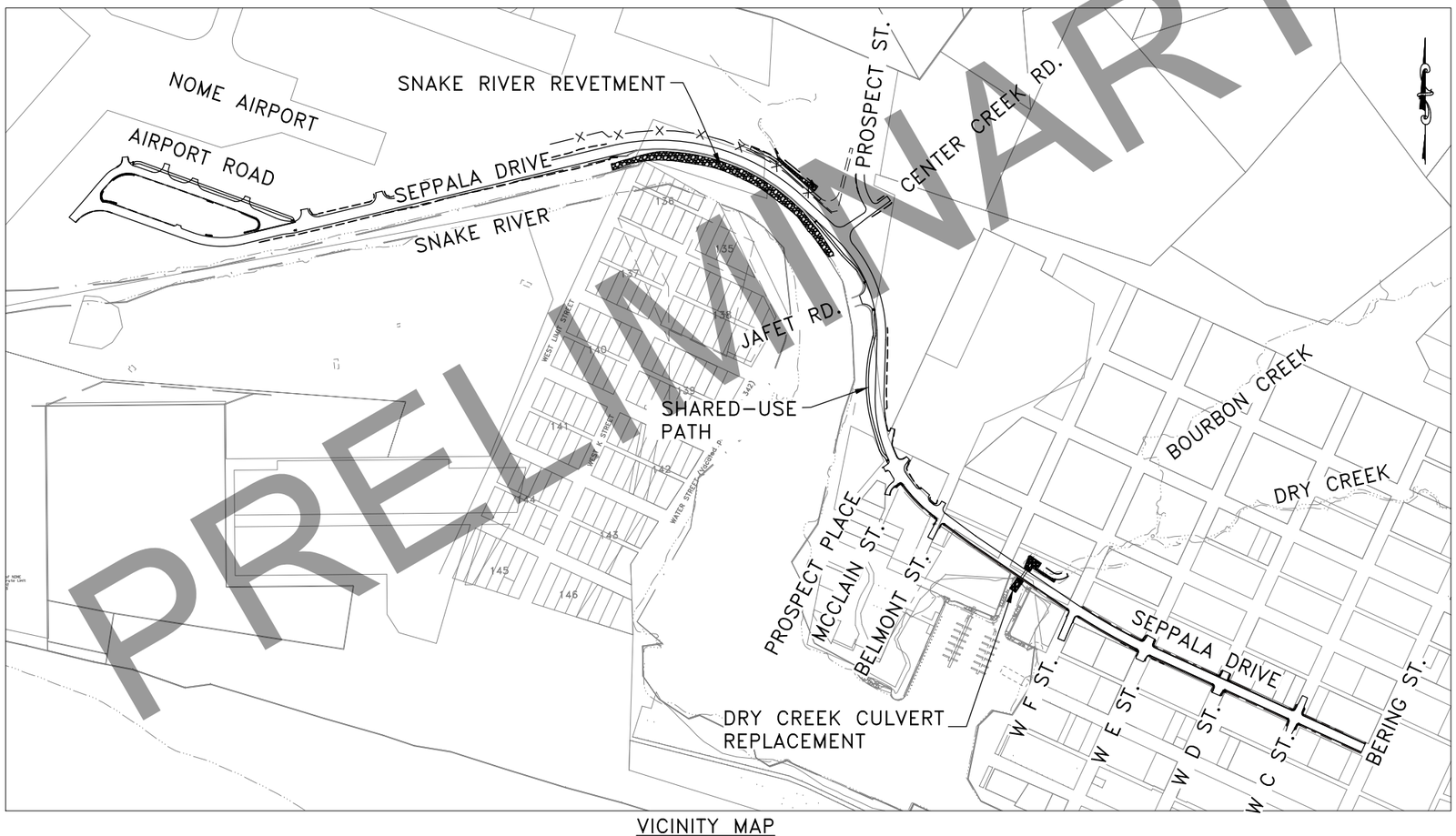
C–04.12, C–05.20 C–06.00
D–01.02, D–04.22, D–06.10, D–09.00, D–11.01, D–20.05, D–22.01, D–24.00
D–26.04, D–30.11
E–09.00
F–01.04, F–03.02
G–00.05, G–04.00, G–05.11S, G–10.21, G–20.12, G–32.03
I–20.20, I–81.00
S–00.12, S–01.02, S–05.02, S–20.11, S–30.05, S–31.02, S–32.02
T–05.10, T–20.04, T–21.04, T–22.04

DESIGN DESIGNATIONS

ADT (2018)	2,300
ADT (2045)	2,920
DHV (%)	360
PERCENT TRUCKS (T)	5.45%
DIRECTIONAL SPLIT (D)	40% 60%
DESIGN SPEED (V)	30 MPH
DESIGN EAL'S (2020 YEARS)	473,115

PROJECT SUMMARY

WIDTH OF PAVEMENT	10–46 FT.
LENGTH OF GRADING	8636
LENGTH OF PAVING	8636
LENGTH OF PROJECT	8636



VICINITY MAP

CHRISTOPHER JOHNSTON, P.E., PROJECT MANAGER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED BY:

_____ DATE _____

Lauren Little, P.E.
Acting Preconstruction Engineer, Northern Region

ACCEPTED FOR CONSTRUCTION:

_____ DATE _____

Ryan F. Anderson, P.E.
Regional Director, Northern Region

PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907) 451–2200
N:\Projects\17258FB–Seppala\C\C0001cnst–17258FB–A1 Wed, May/10/23 04:05pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A2	A14

	RECOVERED	SET
BLM MONUMENT	✠	
GLO MONUMENT	✠	
USC&GS MONUMENT	▲	
PRIMARY MONUMENT	✠	✠
CENTERLINE MONUMENT IN CASING	⊕	⊕
PRIMARY R.O.W. MONUMENT	⊕	⊕
BEARING OBJECT	✳	
MISCELLANEOUS MONUMENT	⊗	
LINE OF SIGHT MONUMENT		⊕
CONCRETE R.O.W. MONUMENT	■	
BENCHMARK		BM
REBAR AND CAP	⊙	⊙
REBAR	⊕	●
IRON PIPE	●	
PK NAIL		▽
SPIKE		✕
HUB AND TACK		⊡

CONSTRUCTION CENTERLINE — 5+00

MISCELLANEOUS CENTERLINE — 10+00

STATION EQUATION — "L"48+97.23 POT BK= / "O"48+97.23 PC AHD

PROJECT RIGHT-OF-WAY LINE — R/W

EXISTING RIGHT-OF-WAY LINE

EXISTING PROPERTY LINE

CONTROLLED ACCESS LINE — C/A

UTILITY EASEMENT LINE — PUE

TEMPORARY EASEMENT LINE (TCP OR TCE) — TCP

ACCESS OR SECTION LINE EASEMENT — ACCESS EASEMENT

PROPOSED CUT SLOPE LIMIT

PROPOSED FILL SLOPE LIMIT

PROPOSED DITCH CENTERLINE

SECTION LINE

1/4 SECTION LINE

1/16 SECTION LINE

TOWNSHIP & RANGE LINE — T. 2 N. / T. 1 N. ; T. 1 E. ; T. 2 E.

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)	SS	SS
FUEL LINE	O	O
GAS LINE	G	G
WATER LINE	W	W
METER, VALVE, FIRE HYDRANT	W	W
EXISTING STORM DRAIN (FLOW DIRECTION →)	SD	
PROPOSED STORM DRAIN		S-10, S-11, P-11, P-10, MH
FIBER OPTIC LINE	FO	
DIRECT BURIAL TELEPHONE CABLE	T	T
DIRECT BURIAL ELECTRIC CABLE	E	E
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT	T	T
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		
CULVERT END SECTION		
WOOD BOLLARD		●

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN	"S" 43+77 36" X 104' R	"S" 43+77 36" X 104' P
MAILBOX	MB	MB
RAILROAD TRACKS		
RAILROAD DEVICES	CROSS-BUCK, FLASHING LIGHT, CANTILEVER, SWITCH	
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H	H = HOUSE, G = GARAGE, M = MERCHANT/STORE, B = BARN, S = SHED, P = PRIVY, SS = SERVICE STATION, W = WAREHOUSE
POST OR BOLLARD	●	
WELL OR MONITORING WELL	W	
SEPTIC PIPE	S, MW	
FUEL TANK FILL PIPE/VENT	P	
SATELLITE DISH	SAT. DISH	
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		5
JUNCTION BOX, TYPE II		6
JUNCTION BOX, TYPE III		3
SIGNAL FACE, VEHICULAR	42	42
SIGNAL FACE, BACKPLATE	42	42
SIGNAL FACE, LEFT TURN, BACKPLATE	43	43
SIGNAL FACE, PEDESTRIAN		
LOOP DETECTOR	33	73
VIDEO DETECTOR	2	2
RADAR DETECTOR	4	4A
OPTICOM DETECTOR	1	1
PEDESTRIAN PUSH BUTTON	1	1
SIGNAL POST W/O MAST ARM		1
SIGNAL POLE W/MAST ARM		4
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		22
RIGID METAL CONDUIT		

LEGEND

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0002cnst-17258FB-A2 Wed, May/10/23 02:11pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A3	A14

GENERAL NOTES

1. APPROACH LOCATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLAN VIEW ARE HORIZONTAL MEASUREMENTS.
2. RESTORE ALL DISTURBED AREAS DUE TO CONTRACTORS WORK OUTSIDE THE CATCH AND FILL LIMITS SHOWN ON THE PLANS. PAYMENT FOR THIS WORK SHALL BE SUBSIDIARY TO THE RESPECTIVE BID ITEM.
3. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION ABUTS EXISTING ASPHALT. APPLY STE-1 ASPHALT FOR TACK COAT ON THE VERTICAL FACE OF ALL SAWCUTS.
4. SAWCUT EXISTING SIDEWALK AT THE NEAREST JOINT.
5. REFERENCE GRADING PLAN SHEETS FOR INTERSECTION TRANSITION LAYOUTS.
6. DELIVER ALL REMOVED ASPHALT TO THE NOME DOT M&O FACILITY AT 3.5 MILE CENTER CREEK ROAD.
7. NOTIFY THE CITY OF NOME EMERGENCY SERVICES DISPATCH AT 907-443-8522 A MINIMUM OF 24 HOURS PRIOR TO INTERSECTION CLOSURES AND CHANGES TO TRAFFIC CONTROL THAT WILL IMPACT EMERGENCY SERVICE RESPONSE.
8. CONTRACTOR MUST MAINTAIN EMERGENCY SERVICES ACCESS AND PEDESTRIAN ACCESS TO ALL HOMES AND BUSINESSES FOR DURATION OF PROJECT.
9. CULVERT LOCATIONS SHOWN IN THE PLANS ARE SUBJECT TO MINOR REVISIONS BY ENGINEER.

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AVE	AVENUE
BMP	BEST MANAGEMENT PRACTICES
BOP	BEGINNING OF PROJECT
BOL	BOLLARD
BP	BEGIN POINT
C/A	ACCESS CONTROL
℄, CL	CENTERLINE
C	CENTER
CB	CATCH BASIN
CGP	CONSTRUCTION GENERAL PERMIT
CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
CO	COMPANY
COM	COMMERCIAL
COMM	COMMUNICATIONS
CON	CONCRETE
CP	CONTROL POINT
CPM	CRITICAL PATH METHOD
CSP	CORRUGATED STEEL PIPE
DEMO	DEMOLITION
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DOT	DEPARTMENT OF TRANSPORTATION
DNR	DEPARTMENT OF NATURAL RESOURCES
DR	DRIVE
DRWY	DRIVEWAY
DWT	DETECTABLE WARNING TILE
E	EASTING, EAST
EA	EACH
EG	EXISTING GROUND
ELEV, EL	ELEVATION
EOP	END OF PROJECT
EOTW	EDGE OF TRAVEL WAY
EP	END POINT, END OF PAVEMENT
EPW	EDGE OF PATHWAY
ESCP	EROSION SEDIMENT CONTROL PLAN
EXP	EXPANSION JOINT
EX	EXISTING
FG	FINISHED GRADE
FL	FLOW LINE
FM	FORCE MAIN
FT	FEET
GALV	GALVANIZE
GB	GRADE BREAK
GE	GENERAL ELECTRIC
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
ID	INNER DIAMETER
INT	INTERSECTION
INV	INVERT
LDP	LOW DISTORTION PROJECTION
LF	LINEAR FEET
LHF	LEFT HAND FORWARD
LN	LANE
LOC	LIP OF CURB
LP	LOW POINT
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
LBS	POUNDS
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MMA	METHYL METHACRYLATE
MON	MONUMENT
NO./#	NUMBER
N	NORTHING, NORTH
NTS	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE / POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
PI	POINT OF INTERSECTION
PST	PERFORATED STEEL TUBES
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
RES	RESIDENTIAL
REHAB	REHABILITATION
RHF	RIGHT HAND FORWARD
RD	ROAD
ROW, R/W, R.O.W.	RIGHT OF WAY
RMC	RIGID METAL CONDUIT
RP	RADIAL POINT
RT	RIGHT
S	SOUTH
SC	STRUCTURE CENTER
SD	STORM DRAIN
SDWK	SIDEWALK
SF, SQFT	SQUARE FEET
SHLDR	SHOULDER
SS	SANITARY SEWER
ST	STREET
STD	STANDARD
STA	STATION
SW	SIDEWALK
SWR	SEWER
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SY	SQUARE YARDS
TBC	TOP BACK OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TCP	TEMPORARY CONSTRUCTION PERMIT
THK	THICK
TOC	TOP OF CASTING
TOW	TOP OF WALL
TS	TUBE STEEL
TYP	TYPICAL
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
W/	WITH
W, WTR	WATER
WWM	WELDED WIRE MESH

UTILITY NOTES

1. UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION.

   CONTACT INFORMATION
   - WATER, ELECTRIC, AND SEWER: KEN MORTON WITH NOME JOINT UTILITIES AT 907-443-6304
   - GCI: XXX-XXX-XXXX

2. PROTECT, OR REMOVE AND REPLACE IN SAME LOCATION OR TO THE SIDE OF ROADWAY, EXISTING MARKER POSTS FOR UTILITIES THAT ARE DISTURBED DURING CONSTRUCTION. THIS IS SUBSIDIARY TO OTHER ITEMS OF WORK.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0002cnst-17258FB-A3 Wed, May/10/23 02:11pm

GENERAL NOTES AND ABBREVIATIONS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A4	A14

NOTES:

1. THE PURPOSE OF THIS SURVEY IS TO PROVIDE SITE CONTROL FOR THE NOME SEPPALA DRIVE ROAD REHABILITATION PROJECT.
2. THE FIELD WORK FOR THIS SURVEY WAS CONDUCTED IN SEPTEMBER, 2017 AND AUGUST, 2018.
3. TEMPORARY BENCHMARK AND SURVEY CONTROL ELEVATIONS WERE ESTABLISHED BY CLOSED DIFFERENTIAL LEVEL LOOPS RUN FROM THE BASIS OF ELEVATION. ALL ERRORS OF CLOSURE WERE LESS THAN 0.05' TIMES THE SQUARE ROOT OF THE DISTANCE, IN MILES.
4. THE HORIZONTAL POSITIONS OF SURVEY CONTROL POINTS AND RECOVERED MONUMENTS WERE ESTABLISHED WITH A COMBINATION OF HIGH PRECISION STATIC GPS AND CONVENTIONAL TOTAL STATION METHODS.
5. THE RECOVERED MONUMENT TABLES REFERS TO THE POSITION OF THE PHYSICAL EVIDENCE RECOVERED.
6. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE. ON MULTI YEAR PROJECTS, VERIFY ALL CONTROL ON A SEASONAL BASIS.
7. THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS DEFINED BY ALASKA STATUTE 40.15.900(5)(A).

HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM:
THIS PROJECT IS IN A LOCAL GRID COORDINATE SYSTEM REFLECTING GROUND DISTANCES AT THE PROJECT ELEVATION. ALL DISTANCES SHOWN ARE GROUND BASED DISTANCES SCALED FROM THEIR STATE PLANE VALUES ABOUT THE PRIMARY AIRPORT CONTROL MONUMENT 2–BAD (3,840,181.68 NORTH, 1,729,324.97 EAST) BY A COMBINED SCALE FACTOR OF 1.00009268. ALL DIMENSIONS ARE IN U.S. SURVEY FEET.

BASIS OF COORDINATES:
THE BASIS OF COORDINATES IS THE NAD83 ALASKA STATE PLANE ZONE 8 COORDINATES FOR THE DEEP ROD PRIMARY MONUMENT CP–6 AS SHOWN ON THE NOME SNAKE RIVER BRIDGE SURVEY CONTROL RECORD OF SURVEY, PLAT 2012–2, CAPE NOME RECORDING DISTRICT. THESE NAD83 ALASKA STATE PLANE ZONE 8 COORDINATES ARE 3,840,579.60 NORTH, 1,731,791.50 EAST, U.S. SURVEY FEET. LOCAL GRID COORDINATES OF CP–6 ARE 3,840,579.64 NORTH, 1,731,791.73 EAST, U.S. SURVEY FEET (64°30'29.77870" NORTH, 165°25'12.71723" WEST). CP–6 IS LOCATED ON THE WEST SIDE OF CENTER CREEK ROAD AT THE INTERSECTION WITH THE LITTLE CREEK ROAD.

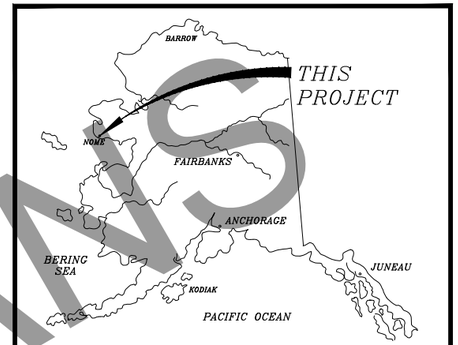
BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ALASKA ZONE 8 GRID COORDINATE SYSTEM.

VERTICAL CONTROL STATEMENT

THE BASIS OF ELEVATION IS THE PUBLISHED ELEVATION FOR UC&G BM–7, A 3 ½" BRASS CAP IN THE BASE OF A FLAG POLE ON THE EAST SIDE OF THE NOME POST OFFICE ON FRONT STREET. THIS ELEVATION IS 17.10 FEET.

LEGEND:

- BENCH MARK
- RECOVERED PRIMARY MONUMENT
- RECOVERED SECONDARY MONUMENT
- RECOVERED REBAR WITH CAP
- RECOVERED SECONDARY MONUMENT
- RECOVERED PK NAIL
- SURVEY POINT NUMBER
- RECOVERED ALUM. CAP MON.
- RECOVERED REBAR
- RECOVERED IRON PIPE
- RECOVERED PLASTIC CAP ON REBAR
- PROJECT RIGHT OF WAY
- PROPERTY LINE
- GRAVEL/PAVED ROAD



LOCATION MAP
NOT TO SCALE

THIS SURVEY LIES WITHIN SECTIONS 26 AND 27, TOWNSHIP 11 SOUTH, RANGE 34 WEST, KATEEL RIVER MERIDIAN, CAPE NOME RECORDING DISTRICT.

STATE BUSINESS NO CHARGE FOR RECORDING

0 200 400 600 800 1000
SCALE 1"=200'
PLAT DEVELOPED BY PDC, INC.

HORIZONTAL CONTROL TABLE

POINT NO.	NORTHING	EASTING	DESCRIPTION
6	3840579.64	1731791.73	STAINLESS STEEL DRIVE ROD IN CASING
1417	3839699.92	1729824.04	BRASS CAP PRIMARY MONUMENT USLM 1C

VERTICAL CONTROL TABLE

BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 090917'A'	3840127	1728506	15.60'	SW CORNER ACCESS PORT AT FIRE HYDRANT
TBM 090917'C'	3838407	1731602	11.99'	SCRIBE ON SW CORNER OF LIGHTING J–BOX (FLUSH)
TBM 090917'D'	3838196	1732604	22.66'	TOP NW FLANGE BOLT ON FIRE HYDRANT
TBM 100308'A'	3839954	1730220	11.66'	1" THERMOPILE IN CASE
TBM 100308'B'	3840012	1731301	11.43'	'X' SOUTH CORNER CONCRETE TRANSFORMER PAD
TBM 100216'B'	3837661	1733613	33.34'	TOP NE FLANGE BOLT ON FIRE HYDRANT

STATE OF ALASKA 49TH
CRAIG OWEN RAWSON
No. 11798
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO THE BEST OF MY KNOWLEDGE.

DATE _____ REGISTRATION NO. _____

_____
REGISTERED LAND SURVEYOR

SURVEY CONTROL SHEET
(1 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\L\LXREF–CNTRL–17258FB–SC 1 Sepp Wed, May/10/23 02:12pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A5	A14

VERTICAL CONTROL TABLE

BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 090917'A'	3840127	1728506	15.60'	SW CORNER ACCESS PORT AT FIRE HYDRANT

HORIZONTAL CONTROL TABLE

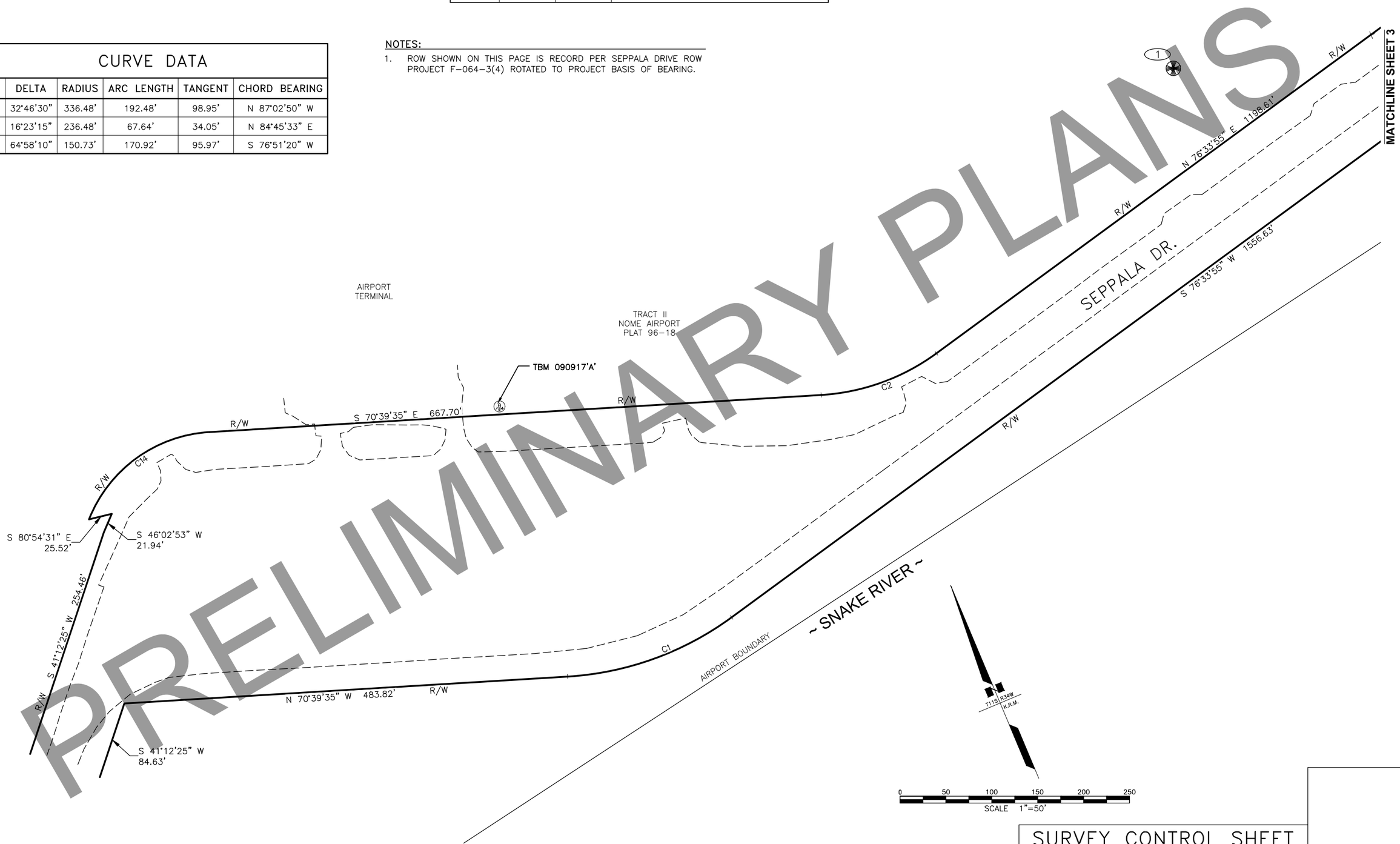
POINT #	NORTHING	EASTING	DESCRIPTION
1	3840181.68	1729324.97	PRIMARY AIRPORT CONTROL MONUMENT 2–BAD

CURVE DATA

C#	DELTA	RADIUS	ARC LENGTH	TANGENT	CHORD BEARING
C1	32°46'30"	336.48'	192.48'	98.95'	N 87°02'50" W
C2	16°23'15"	236.48'	67.64'	34.05'	N 84°45'33" E
C14	64°58'10"	150.73'	170.92'	95.97'	S 76°51'20" W

NOTES:

1. ROW SHOWN ON THIS PAGE IS RECORD PER SEPPALA DRIVE ROW PROJECT F–064–3(4) ROTATED TO PROJECT BASIS OF BEARING.



SURVEY CONTROL SHEET
(2 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\L\LXREF–CNTRL–17258FB–SC 2 Sepp Wed, May/10/23 02:12pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A6	A14

HORIZONTAL CONTROL TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
712	3839954.02	1730219.59	1" THERMOPILE IN CASE
713	3840287.01	1730371.62	NAIL IN NORTH LANE SEPPALA
714	3840287.16	1730369.28	REBAR IN NORTH LANE SEPPALA
1412	3840222.98	1730928.82	DOT 3-1/4" ALUM. CAP PCLB
1957	3839942.98	1729893.21	2" ALUM. CAP
1961	3840005.11	1730707.16	2" ALUM. CAP
1962	3839950.59	1730682.07	2" ALUM. CAP
1963	3839931.27	1730724.18	2" ALUM. CAP
1964	3839878.61	1730699.79	2" ALUM. CAP

CURVE DATA

C#	DELTA	RADIUS	ARC LENGTH	TANGENT	CHORD BEARING
C3	6°12'41"	847.46'	91.87'	45.98'	S 79°40'16" W
C4	51°57'21"	911.47'	826.52'	444.12'	S 60°11'24" E
C5	66°20'45"	851.47'	985.96'	556.61'	N 52°59'43" W

LINE DATA

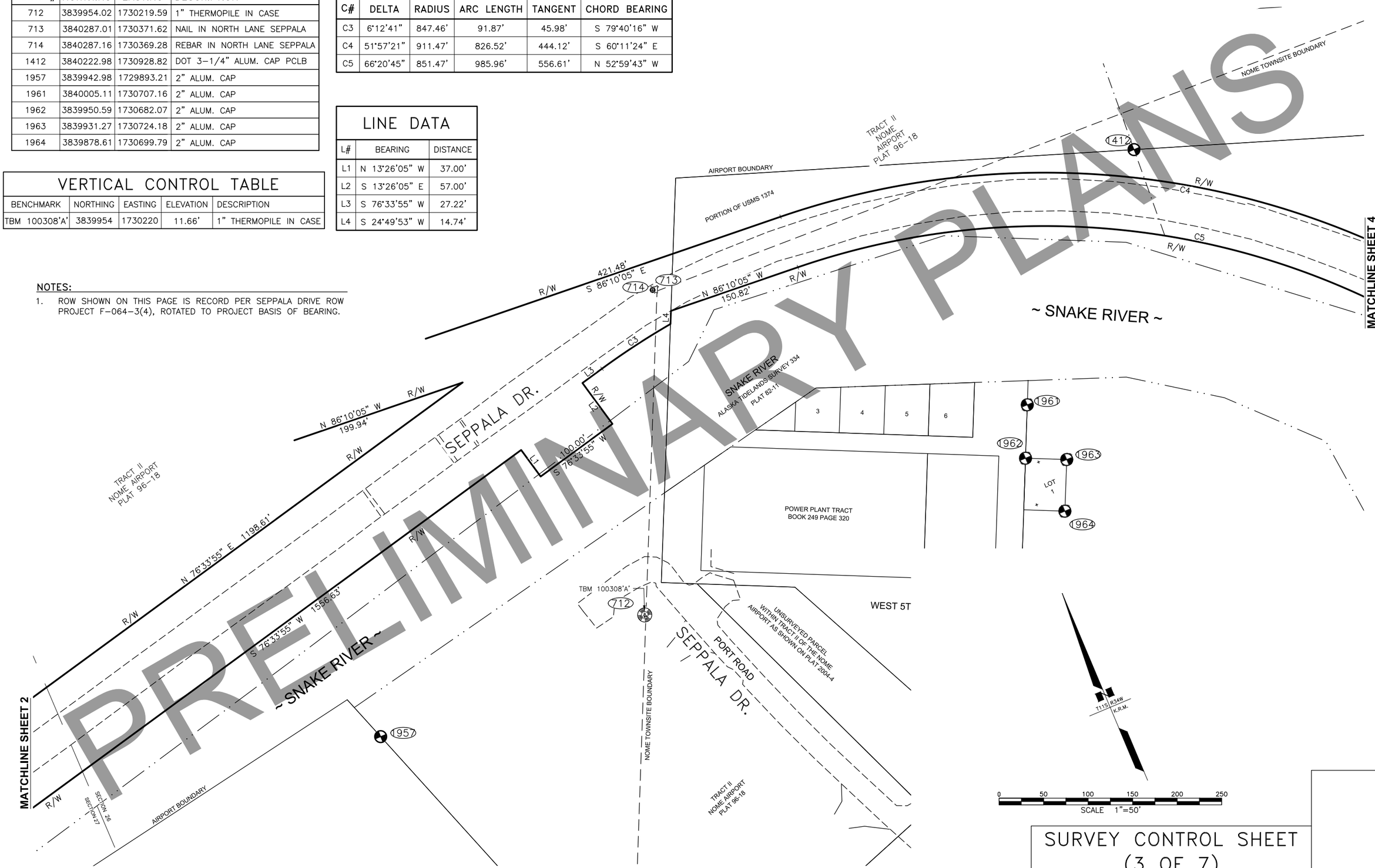
L#	BEARING	DISTANCE
L1	N 13°26'05" W	37.00'
L2	S 13°26'05" E	57.00'
L3	S 76°33'55" W	27.22'
L4	S 24°49'53" W	14.74'

VERTICAL CONTROL TABLE

BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 100308'A'	3839954	1730220	11.66'	1" THERMOPILE IN CASE

NOTES:

1. ROW SHOWN ON THIS PAGE IS RECORD PER SEPPALA DRIVE ROW PROJECT F-064-3(4), ROTATED TO PROJECT BASIS OF BEARING.



SURVEY CONTROL SHEET
(3 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\L\LXREF-CNTRL-17258FB-SC 3 Sepp Wed, May/10/23 02:13pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A7	A14

VERTICAL CONTROL TABLE

BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 100308'B'	3840012	1731301	11.43'	'X' SOUTH CORNER CONCRETE TRANSFORMER PAD

NOTES:

1. PORTION OF ROW SHOWN FOR CENTER CREEK ROAD IS RECORD PER DOT ROW PROJECT OS-4(006) RECORDED AS 81-19, ROTATED TO PROJECT BASIS OF BEARING.
2. ROW SHOWN FOR BLOCK 102 PER QUITCLAIM DEED DOCUMENT #2012-000895-0.
3. ROW SHOWN FOR JAFET DRIVE PER QUITCLAIM DEED DOCUMENT #2012-000893-0.

CURVE DATA

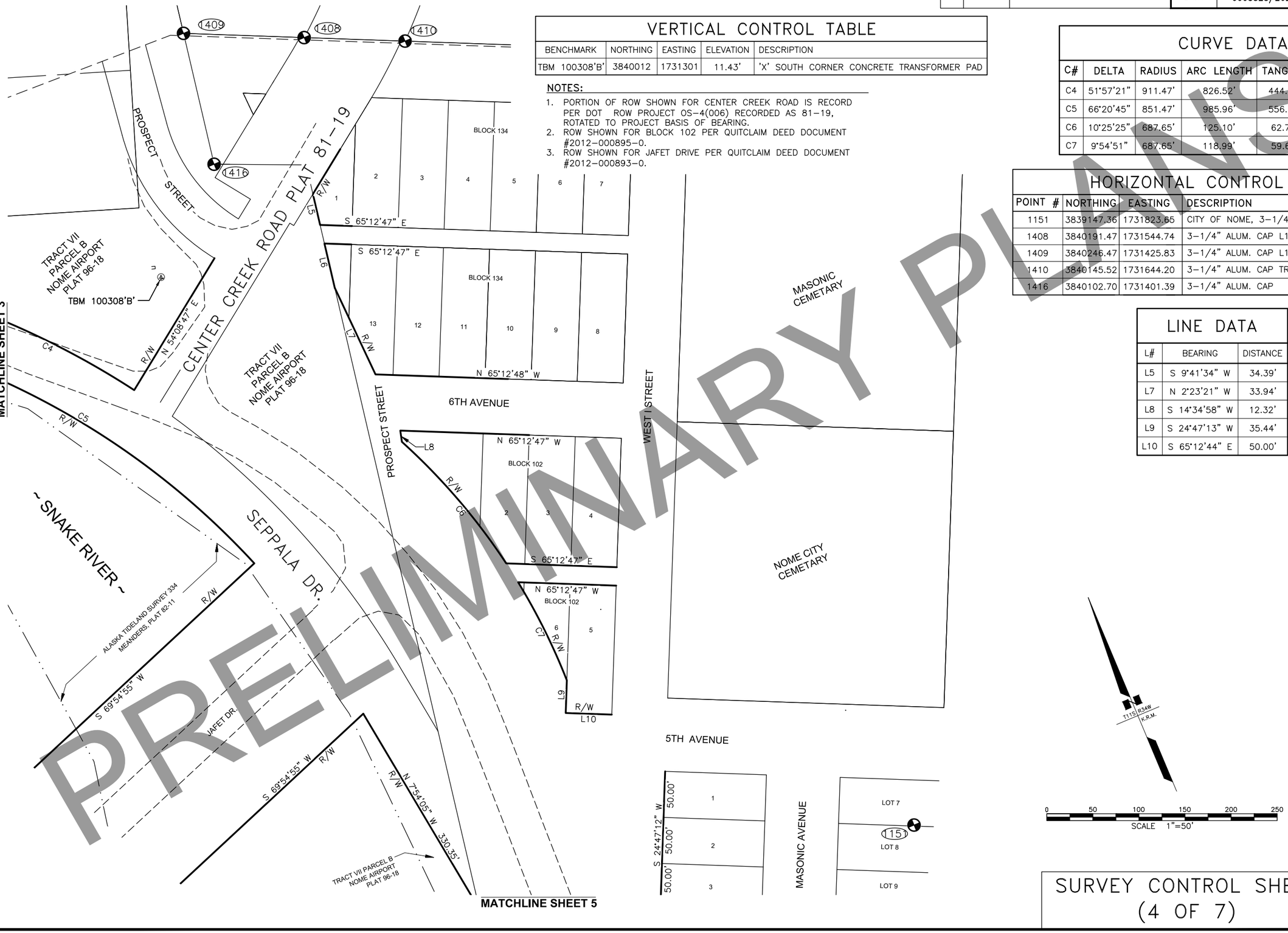
C#	DELTA	RADIUS	ARC LENGTH	TANGENT	CHORD BEARING
C4	51°57'21"	911.47'	826.52'	444.12'	S 60°11'24" E
C5	66°20'45"	851.47'	985.96'	556.61'	N 52°59'43" W
C6	10°25'25"	687.65'	125.10'	62.72'	S 19°52'37" E
C7	9°54'51"	687.65'	118.99'	59.64'	S 3°35'43" E

HORIZONTAL CONTROL TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
1151	3839147.36	1731823.65	CITY OF NOME, 3-1/4" ALUM. CAP
1408	3840191.47	1731544.74	3-1/4" ALUM. CAP L1 ALLIE SUBDIVISION 7323 S
1409	3840246.47	1731425.83	3-1/4" ALUM. CAP L1 ALLIE SUBDIVISION 7323 S
1410	3840145.52	1731644.20	3-1/4" ALUM. CAP TRC ALLIE SUBDIVISION 7323 S
1416	3840102.70	1731401.39	3-1/4" ALUM. CAP

LINE DATA

L#	BEARING	DISTANCE
L5	S 9°41'34" W	34.39'
L7	N 2°23'21" W	33.94'
L8	S 14°34'58" W	12.32'
L9	S 24°47'13" W	35.44'
L10	S 65°12'44" E	50.00'



SURVEY CONTROL SHEET
(4 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\L\LXREF-CNTRL-17258FB-SC 4 Sepp Wed, May/10/23 02:13pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A8	A14

LINE DATA

L#	BEARING	DISTANCE
L11	S 65°09'55" E	77.61'
L12	S 23°35'50" W	60.06'
L13	N 66°31'00" W	40.35'
L14	N 66°58'12" W	28.70'
L15	S 47°51'29" E	3.58'
L16	S 56°40'37" E	52.71'
L17	S 54°59'33" E	51.66'
L18	S 57°43'30" E	51.03'
L19	S 53°20'21" E	51.85'
L20	S 55°54'52" E	14.81'
L21	N 24°52'32" E	37.77'
L22	S 25°03'33" W	37.61'
L23	S 38°48'55" E	55.95'
L24	S 55°17'51" E	50.73'
L25	S 58°52'10" E	50.29'
L26	S 58°37'54" E	50.31'
L27	S 55°22'31" E	50.72'
L28	S 61°35'23" E	49.75'
L29	N 7°59'35" W	23.79'
L30	N 55°40'28" W	12.00'

HORIZONTAL CONTROL TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
39	3838903.94	1731446.92	5/8" REBAR
40	3839009.83	1731401.38	1-1/2" ALUM. CAP BLK 57
41	3839058.51	1731300.49	1-1/2" ALUM. CAP BLK 57
42	3838974.76	1731283.48	5/8" REBAR
43	3838927.45	1731272.92	5/8" REBAR
44	3838700.23	1731315.71	PLASTIC CAP 5/8" REBAR 2234 S
45	3838742.21	1731348.61	PLASTIC CAP 5/8" REBAR 2234 S
46	3838820.94	1731376.30	5/8" REBAR
47	3838781.88	1731508.17	5/8" REBAR
48	3838770.79	1731534.26	5/8" REBAR
49	3838720.08	1731579.49	2" ALUM. CAP 7323 S
50	3838839.93	1731631.76	1-1/2" ALUM. CAP
51	3838875.79	1731549.34	1-1/2" ALUM. CAP 2234-S
52	3838926.69	1731571.57	1-1/2" ALUM. CAP 2234-S
53	3838887.16	1731651.98	1-1/2" ALUM. CAP 2234-S
55	3838806.04	1731453.67	5/8" REBAR
56	3838736.08	1731488.15	1-1/2" ALUM. CAP
57	3838661.47	1731433.94	1/2" REBAR
58	3838644.66	1731448.43	3/4" IRON PIPE
59	3838615.51	1731413.89	1/2" REBAR
60	3838548.48	1731406.60	3/4" IRON PIPE
63	3838410.45	1731591.74	3" ALUM. CAP 7323 S
64	3838259.27	1731938.85	3" ALUM. CAP 7323 S
65	3838416.78	1731995.91	3" ALUM. CAP 7323 S
66	3838618.59	1731700.62	3" ALUM. CAP 7323 S
67	3838628.30	1731686.65	3" ALUM. CAP 7323 S
68	3838571.59	1731607.47	2" ALUM. CAP 7323 S
69	3838605.48	1731529.58	2" ALUM. CAP 7323 S

VERTICAL CONTROL TABLE

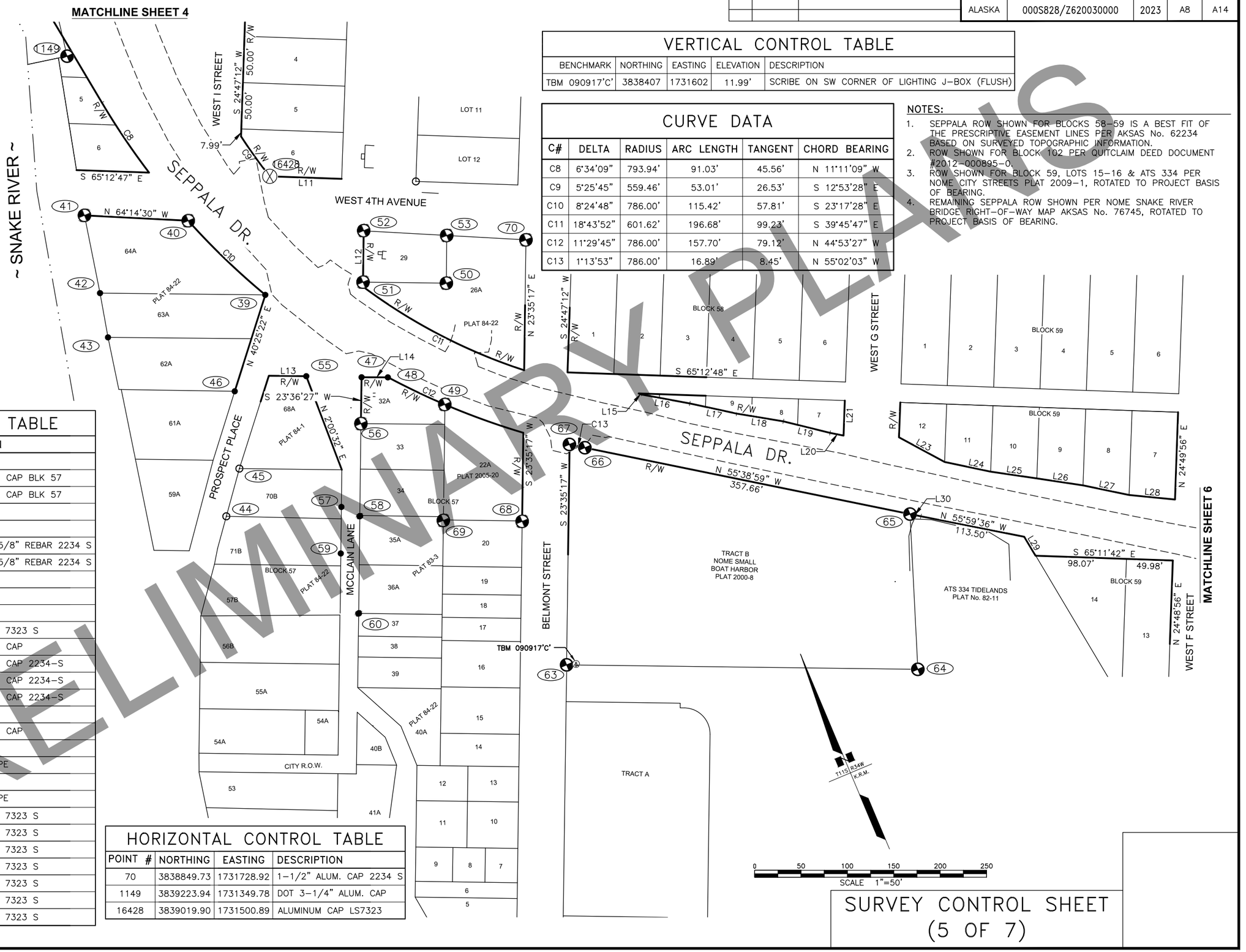
BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 090917'C'	3838407	1731602	11.99'	SCRIBE ON SW CORNER OF LIGHTING J-BOX (FLUSH)

CURVE DATA

C#	DELTA	RADIUS	ARC LENGTH	TANGENT	CHORD BEARING
C8	6°34'09"	793.94'	91.03'	45.56'	N 11°11'09" W
C9	5°25'45"	559.46'	53.01'	26.53'	S 12°53'28" E
C10	8°24'48"	786.00'	115.42'	57.81'	S 23°17'28" E
C11	18°43'52"	601.62'	196.68'	99.23'	S 39°45'47" E
C12	11°29'45"	786.00'	157.70'	79.12'	N 44°53'27" W
C13	1°13'53"	786.00'	16.89'	8.45'	N 55°02'03" W

NOTES:

1. SEPPALA ROW SHOWN FOR BLOCKS 58-59 IS A BEST FIT OF THE PRESCRIPTIVE EASEMENT LINES PER AKSAS No. 62234 BASED ON SURVEYED TOPOGRAPHIC INFORMATION.
2. ROW SHOWN FOR BLOCK 102 PER QUITCLAIM DEED DOCUMENT #2012-000895-0.
3. ROW SHOWN FOR BLOCK 59, LOTS 15-16 & ATS 334 PER NOME CITY STREETS PLAT 2009-1, ROTATED TO PROJECT BASIS OF BEARING.
4. REMAINING SEPPALA ROW SHOWN PER NOME SNAKE RIVER BRIDGE RIGHT-OF-WAY MAP AKSAS No. 76745, ROTATED TO PROJECT BASIS OF BEARING.



HORIZONTAL CONTROL TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
70	3838849.73	1731728.92	1-1/2" ALUM. CAP 2234 S
1149	3839223.94	1731349.78	DOT 3-1/4" ALUM. CAP
16428	3839019.90	1731500.89	ALUMINUM CAP LS7323

SURVEY CONTROL SHEET (5 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\L\LXREF-CNTRL-17258FB-SC 5 Sepp Wed, May/10/23 02:14pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A9	A14

HORIZONTAL CONTROL TABLE

POINT #	NORTHING	EASTING	DESCRIPTION
408	3837663.06	1733437.28	1 1/4" PLASTIC CAP CHURCH PARKING LOT
409	3837747.01	1733255.53	2 1/2" AL MON IN CASING LS-9232
717	3838128.14	1732572.69	BRASS CAP IN CASE
718	3838103.02	1732627.14	BRASS CAP IN CASE
719	3838049.00	1732601.86	BRASS CAP IN CASE
720	3838040.35	1732763.39	PLASTIC CAP 2234S
721	3838019.50	1732808.43	ALUMINUM CAP
722	3837922.87	1732874.42	BRASS CAP IN CASE
723	3837897.96	1732928.89	2" AL CAP 2234-S

VERTICAL CONTROL TABLE

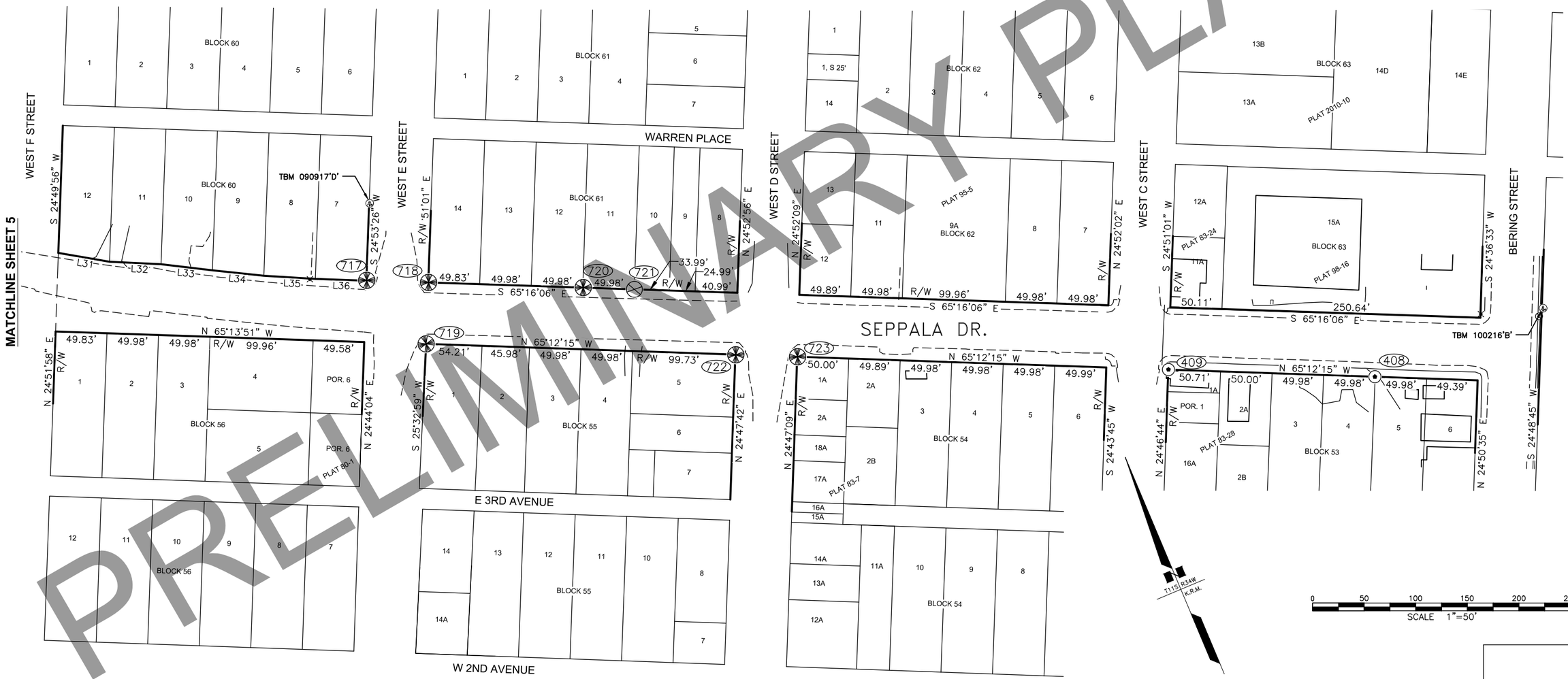
BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 090917'D'	3838196	1732604	22.66'	TOP NW FLANGE BOLT ON FIRE HYDRANT
TBM 100216'B'	3837661	1733613	33.34'	TOP NE FLANGE BOLT ON FIRE HYDRANT

LINE DATA

L#	BEARING	DISTANCE
L31	N 57°24'20" W	50.37'
L32	N 64°26'54" W	49.99'
L33	S 60°24'45" E	50.15'
L34	N 61°09'53" W	50.10'
L35	N 63°40'50" W	50.00'
L36	N 65°10'00" W	49.50'

NOTES:

1. ROW SHOWN FOR BLOCKS 53-56 & 61-63 ARE FROM GIS SHAPE FILES, PLACED ON AND ROTATED TO RECOVERED MONUMENTS.
2. ROW SHOWN FOR BLOCK 60 IS A BEST FIT OF THE PRESCRIPTIVE EASEMENT LINES PER AKSAS No. 62234 BASED ON SURVEYED TOPOGRAPHIC INFORMATION.



PRELIMINARY PLANS

SURVEY CONTROL SHEET (6 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\L\LXREF-CNTRL_17258FB-SC 6 Sepp Wed, May/10/23 02:14pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A10	A14

1

FOUND PRIMARY AIRPORT CONTROL MONUMENT "2–BAD" DRILL HOLE ON 9/16" STAINLESS STEEL DRIVE ROD IN CASING, 0.2' BELOW GROUND.

6

FOUND DRILL HOLE ON 9/16" STAINLESS STEEL DRIVE ROD IN CASING, 0.7' BELOW GROUND.

39

FOUND 5/8" REBAR, 0.9' BELOW GROUND, BENT NE'LY – TIED POINT OF ENTRY

40

FOUND 1 1/2" ALUMINUM CAP, 0.7' BELOW GROUND, GOOD CONDITION

41

FOUND 1 1/2" ALUMINUM CAP, FLUSH W/ GROUND, GOOD CONDITION

42

FOUND 5/8" REBAR FLUSH W/ GROUND, GOOD CONDITION

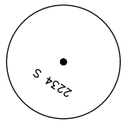
43

FOUND 5/8" REBAR FLUSH W/ GROUND, LEANING N'LY – TIED POINT OF ENTRY

44

FOUND YELLOW PLASTIC CAP, 0.3' BELOW GROUND, GOOD CONDITION

45



FOUND YELLOW PLASTIC CAP, 1.2' BELOW GROUND, GOOD CONDITION

46

FOUND 5/8" REBAR, 0.4' BELOW GROUND, GOOD CONDITION

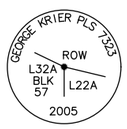
47

FOUND 5/8" REBAR, FLUSH W/ GROUND, GOOD CONDITION

48

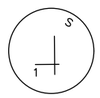
FOUND 5/8" REBAR, FLUSH W/ GROUND, GOOD CONDITION

49



FOUND 2" ALUMINUM CAP, FLUSH W/ GROUND, GOOD CONDITION

50



FOUND 1 1/2" ALUMINUM CAP, 0.7' BELOW GROUND, PORTIONS OF CAP ILLEGIBLE

51

FOUND 1 1/2" ALUMINUM CAP, 0.8' BELOW GROUND, GOOD CONDITION

52

FOUND 1 1/2" ALUMINUM CAP, FLUSH W/ GROUND, CAP LEANING NE'LY – TIED AT CENTER OF REBAR, REBAR GOOD CONDITION

53

FOUND 1 1/2" ALUMINUM CAP, 0.1' ABOVE GROUND, LEANING SW'LY – TIED POINT OF ENTRY

55

FOUND 5/8" REBAR , 0.3' BELOW GROUND, BENT NE'LY – TIED POINT OF ENTRY

56

FOUND 1 1/2" ALUMINUM CAP, 1.2' BELOW GROUND, LEANING NW'LY – TIED POINT OF ENTRY, ILLEGIBLE

57

FOUND 1/2" REBAR, FLUSH W/ GROUND, BENT NE'LY – TIED POINT OF ENTRY

58

FOUND 3/4" PIPE, 0.3' BELOW GROUND, GOOD CONDITION

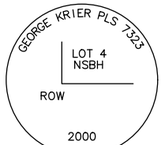
59

FOUND 1/2" REBAR, 0.5' ABOVE GROUND, BENT NW'LY – TIED POINT OF ENTRY

60

FOUND 3/4" PIPE, 0.5' BELOW GROUND, BENT N'LY – TIED POINT OF ENTRY

63

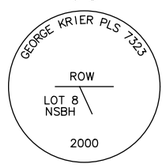


FOUND 3" ALUMINUM CAP, 0.5' BELOW GROUND, GOOD CONDITION

64

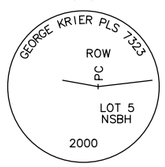
FOUND 3" ALUMINUM CAP, 1.2' BELOW GRAVEL, GOOD CONDITION

65



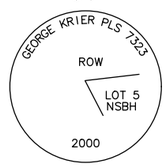
FOUND 3" ALUMINUM CAP, 1.4' BELOW GRAVEL, GOOD CONDITION

66



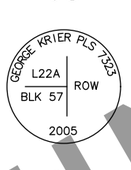
FOUND 3" ALUMINUM CAP, 0.6' BELOW GROUND, GOOD CONDITION

67



FOUND 3" ALUMINUM CAP, 0.5' BELOW GRAVEL, GOOD CONDITION

68

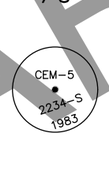


FOUND 2" ALUMINUM CAP, FLUSH W/ GROUND, GOOD CONDITION

69

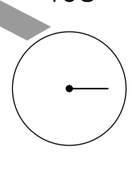
FOUND 2" ALUMINUM CAP ON 5/8" REBAR, 0.3' ABOVE GROUND, GOOD CONDITION

70



FOUND 1 1/2" ALUMINUM CAP, FLUSH W/ GROUND, GOOD CONDITION

408

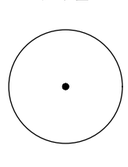


FOUND PLASTIC CAP, FLUSH, CAP IS ILLEGIBLE.

409

FOUND 2 1/2" ALUMINUM CAP IN MON CASE, IN LARGE CULVERT/TRASH CAN

712



FOUND DRILL HOLE ON 1" THERMOPILE IN CASING, 0.2' BELOW GROUND.

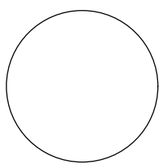
713

FOUND PK NAIL FLUSH IN PAVEMENT

714

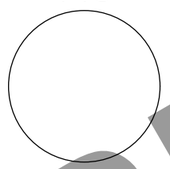
FOUND 5/8" REBAR FLUSH IN PAVEMENT

717



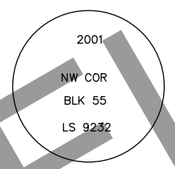
FOUND BRASS CAP

718



FOUND BRASS CAP

719



FOUND BRASS CAP IN CASE

720

FOUND PLASTIC CAP, 0.4' ABOVE GROUND, IN GOOD CONDITION.

721

FOUND ALUMINUM CAP PARTIALLY LEGIBLE, 0.4' BELOW GROUND, IN GOOD CONDITION.

722

FOUND BRASS CAP

723

2" ALUMINUM CAP, 0.35' BELOW GROUND

1149

FOUND 3 1/4" ALUMINUM CAP, 0.3' ABOVE GROUND

1151

FOUND 3 1/4" ALUMINUM CAP

1408

FOUND 3 1/4" ALUMINUM CAP PRIMARY MONUMENT, 0.25' ABOVE GROUND

1409

FOUND 3 1/4" ALUMINUM CAP PRIMARY MONUMENT, 0.1' ABOVE GROUND

1410

FOUND 3 1/4" ALUMINUM CAP PRIMARY MONUMENT, 0.25' ABOVE GROUND

1412

FOUND 3 1/4" ALUMINUM CAP, 0.25' ABOVE GROUND

1416

FOUND 3 1/4" ALUMINUM CAP, 0.3' ABOVE GROUND

1417

FOUND 3 1/4" BRASS CAP FLUSH ATOP ROUGH CONCRETE BASE.

1957

FOUND 2" ALUMINUM CAP, FLUSH WITH GROUND, GOOD CONDITION

1961

FOUND 2" ALUMINUM CAP, ON SLOPE OF DITCH

1962

FOUND 2" ALUMINUM CAP, 0.1' BELOW GROUND

1963

FOUND 2" ALUMINUM CAP, FLUSH WITH GROUND

1964

FOUND 2" ALUMINUM CAP, FLUSH WITH GROUND

16428

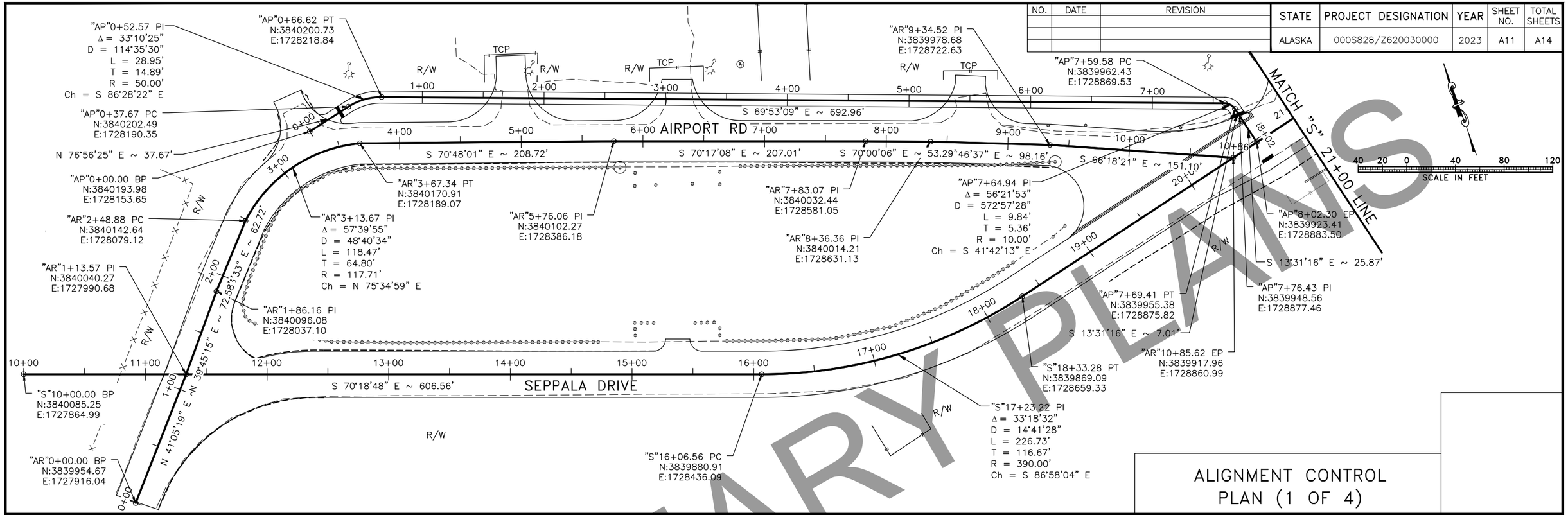
ALUMINUM CAP, 0.15' ABOVE GROUND, IN GOOD CONDITION

SURVEY CONTROL SHEET (7 OF 7)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB–Seppala\L\LXREF–CNTRL–17258FB–SC 7 Sepp Wed, May/10/23 02:14pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A11	A14



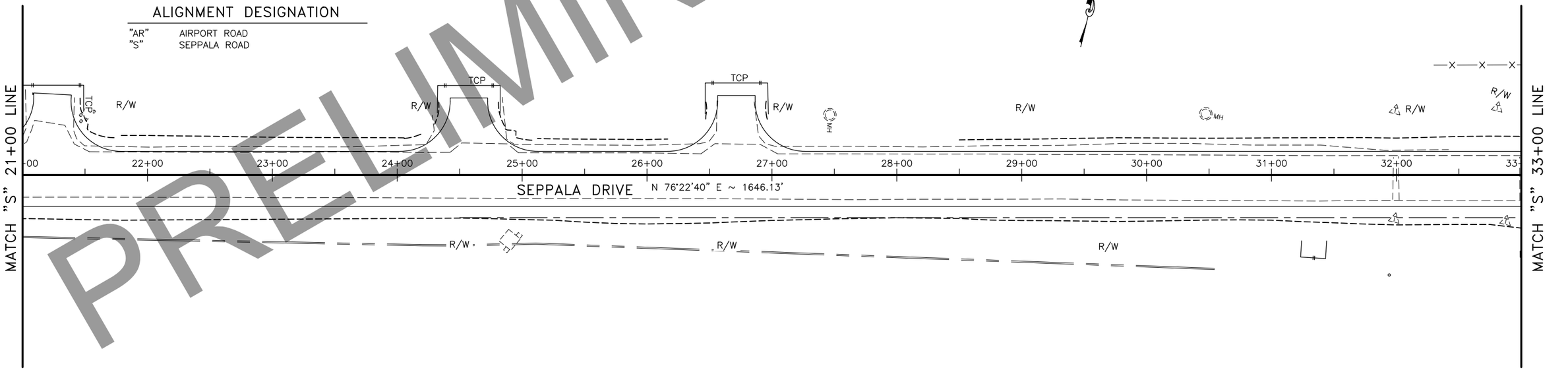
ALIGNMENT CONTROL PLAN (1 OF 4)

PROJECT CONTROL NOTES:

FOR SURVEY CONTROL INFORMATION, INCLUDING BASIS OF COORDINATES, BASIS OF BEARING, AND VERTICAL CONTROL, SEE A4 THRU A10.

ALIGNMENT DESIGNATION

"AR" AIRPORT ROAD
"S" SEPPALA ROAD



PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
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NO.	DATE	REVISION

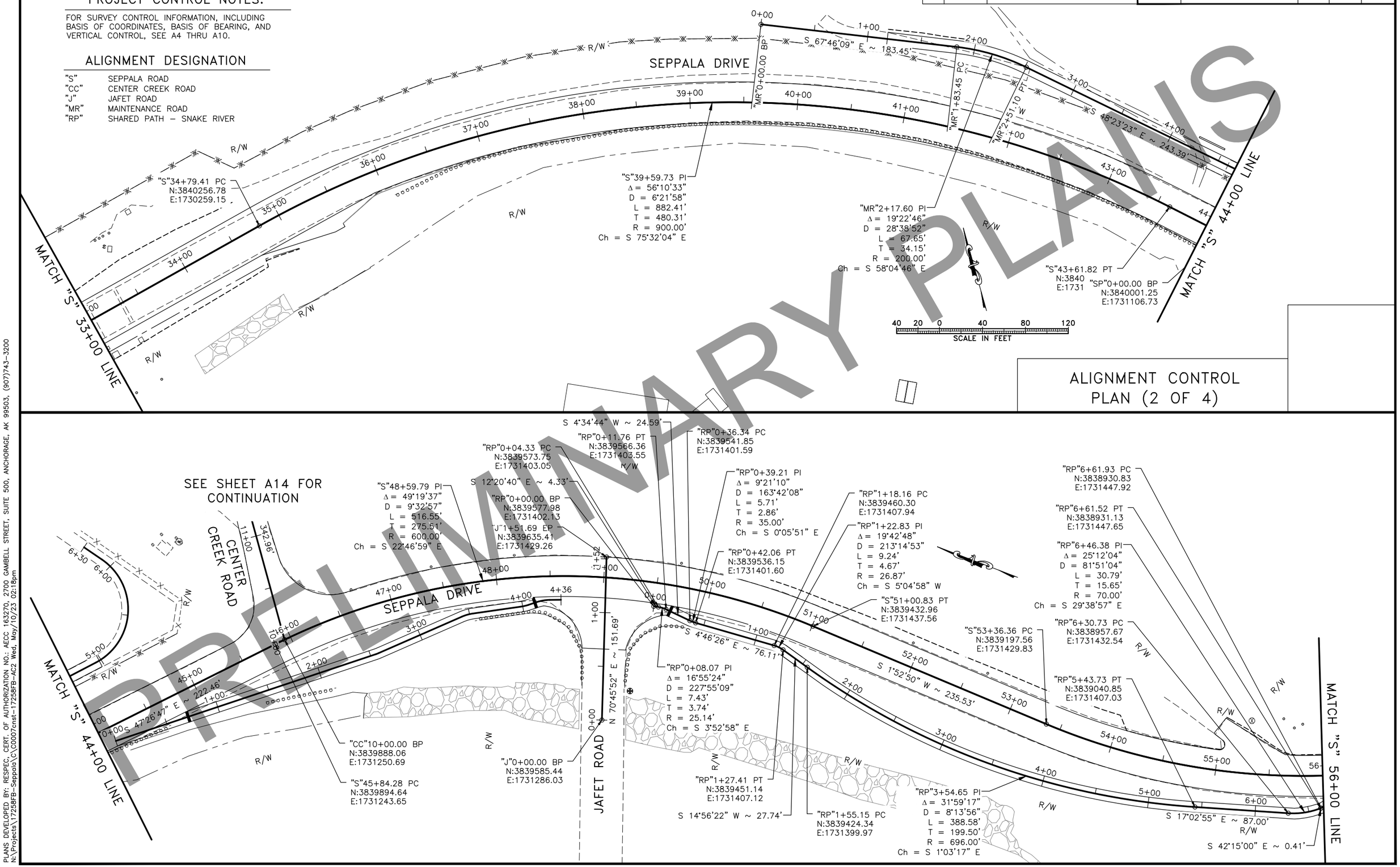
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A12	A14

PROJECT CONTROL NOTES:

FOR SURVEY CONTROL INFORMATION, INCLUDING BASIS OF COORDINATES, BASIS OF BEARING, AND VERTICAL CONTROL, SEE A4 THRU A10.

ALIGNMENT DESIGNATION

"S"	SEPPALA ROAD
"CC"	CENTER CREEK ROAD
"J"	JAFET ROAD
"MR"	MAINTENANCE ROAD
"RP"	SHARED PATH – SNAKE RIVER

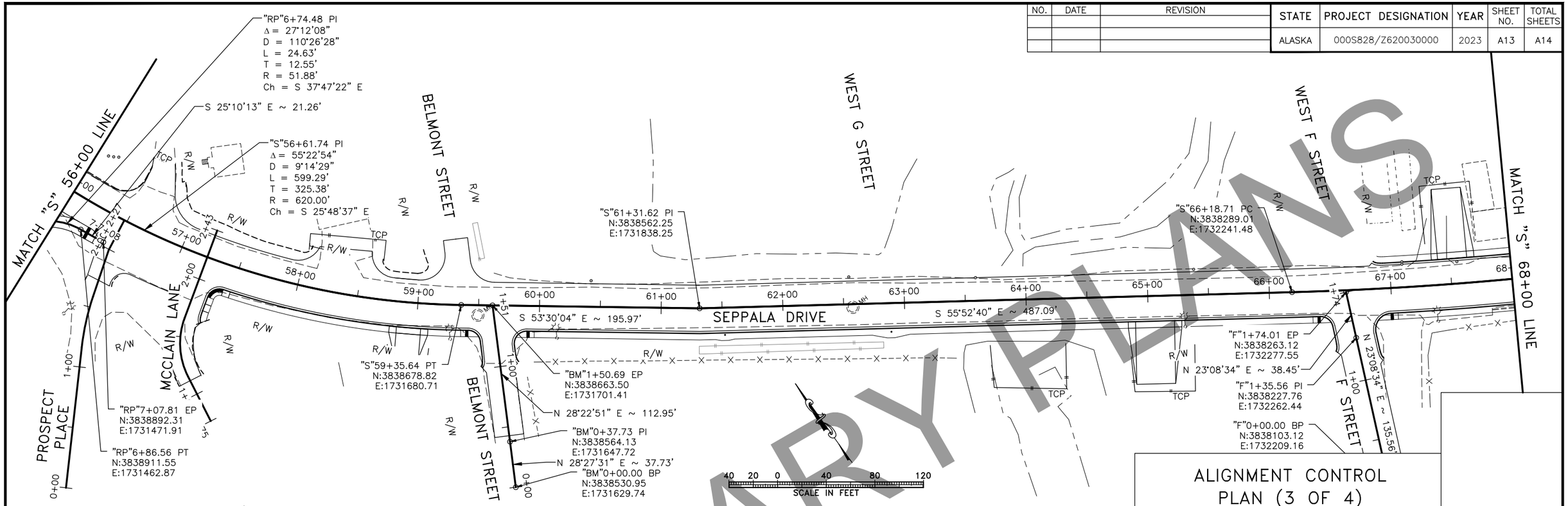


ALIGNMENT CONTROL PLAN (2 OF 4)

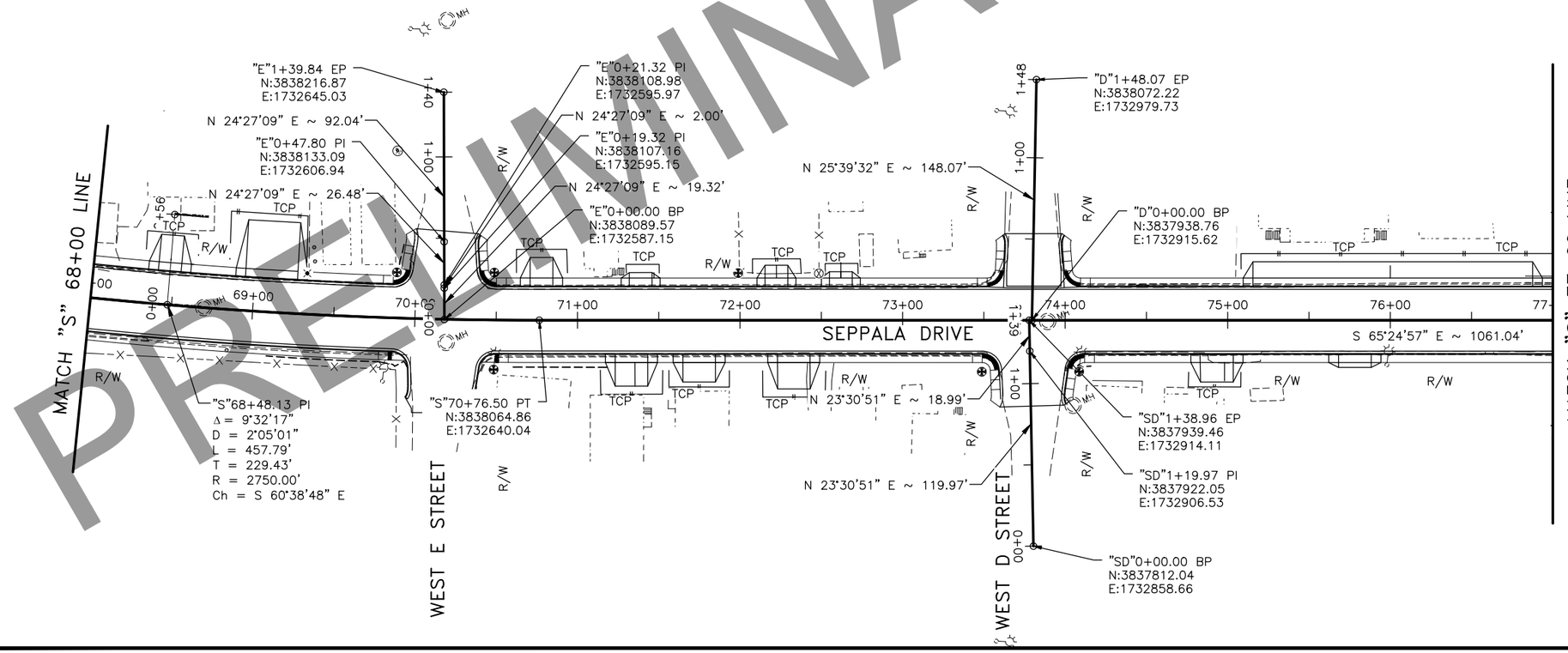
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0007cnst-17258FB-AC2 Wed, May/10/23 02:18pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A13	A14



ALIGNMENT CONTROL PLAN (3 OF 4)



PROJECT CONTROL NOTES:

FOR SURVEY CONTROL INFORMATION, INCLUDING BASIS OF COORDINATES, BASIS OF BEARING, AND VERTICAL CONTROL, SEE A4 THRU A10.

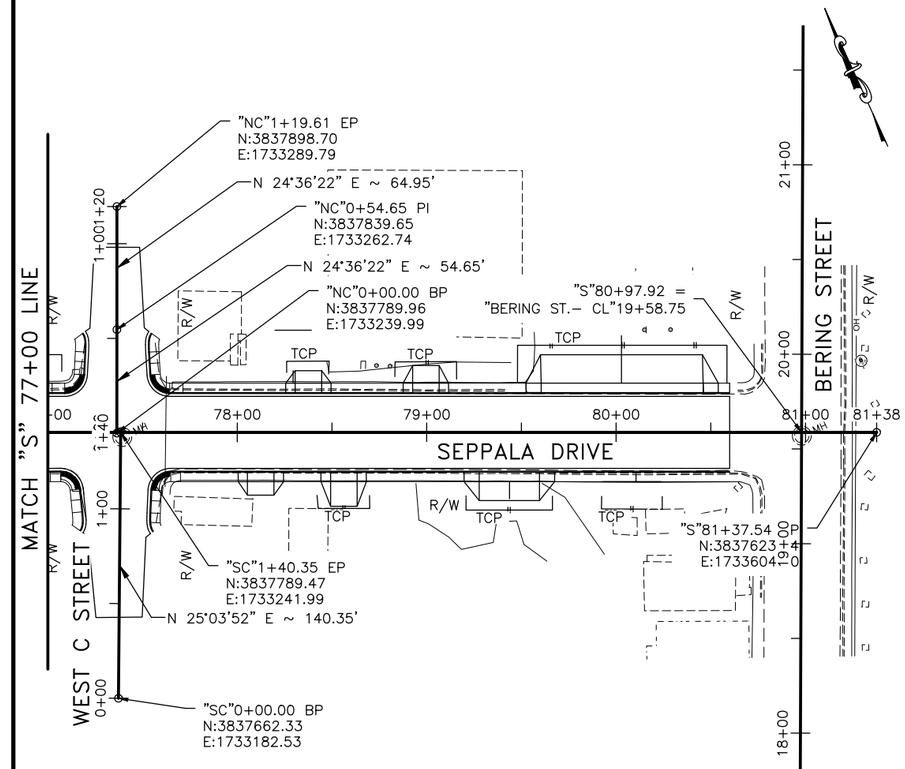
ALIGNMENT DESIGNATION

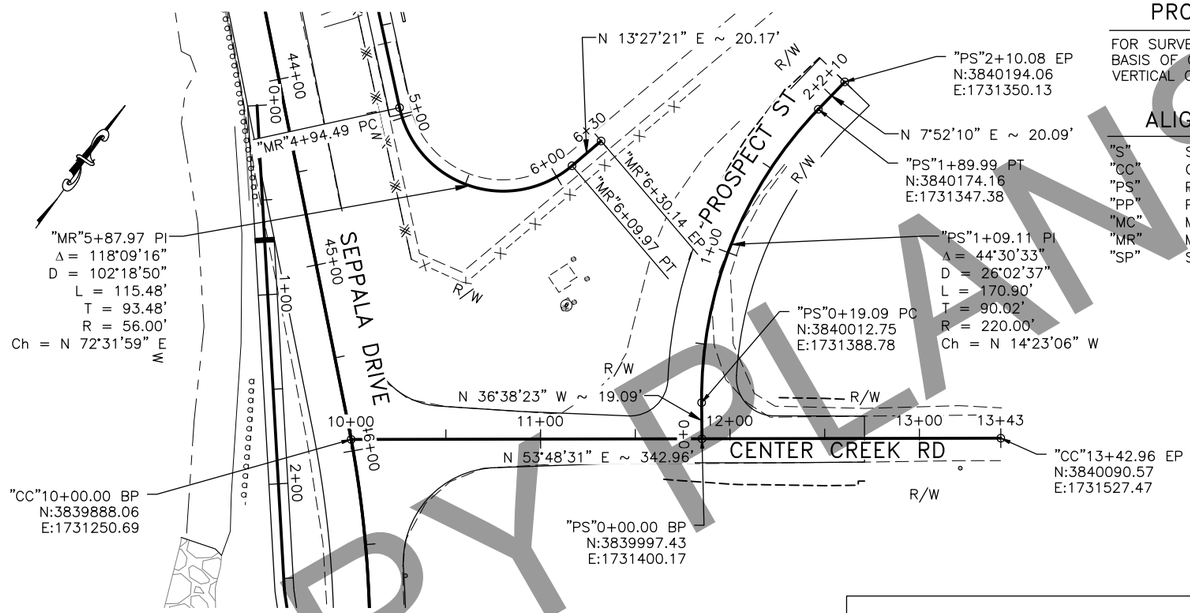
"S"	SEPPALA ROAD
"PP"	PROSPECT PLACE
"MC"	MCCLAIN LANE
"BM"	BELMONT STREET
"F"	F STREET
"E"	E STREET
"D"	NORTH D STREET
"SD"	SOUTH D STREET
"RP"	SHARED PATH – SNAKE RIVER

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0007cnst-17258FB-AC3 Wed, May/10/23 02:18pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	A14	A14





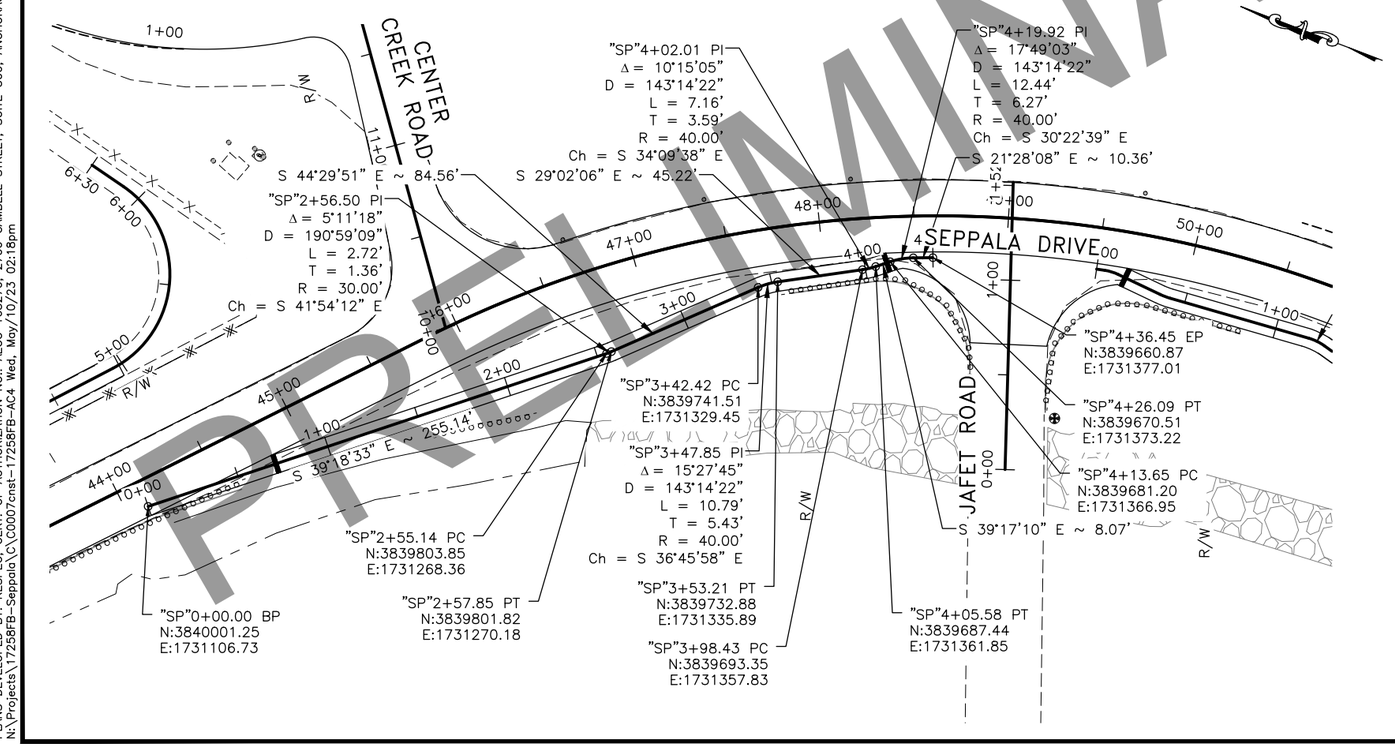
PROJECT CONTROL NOTES:

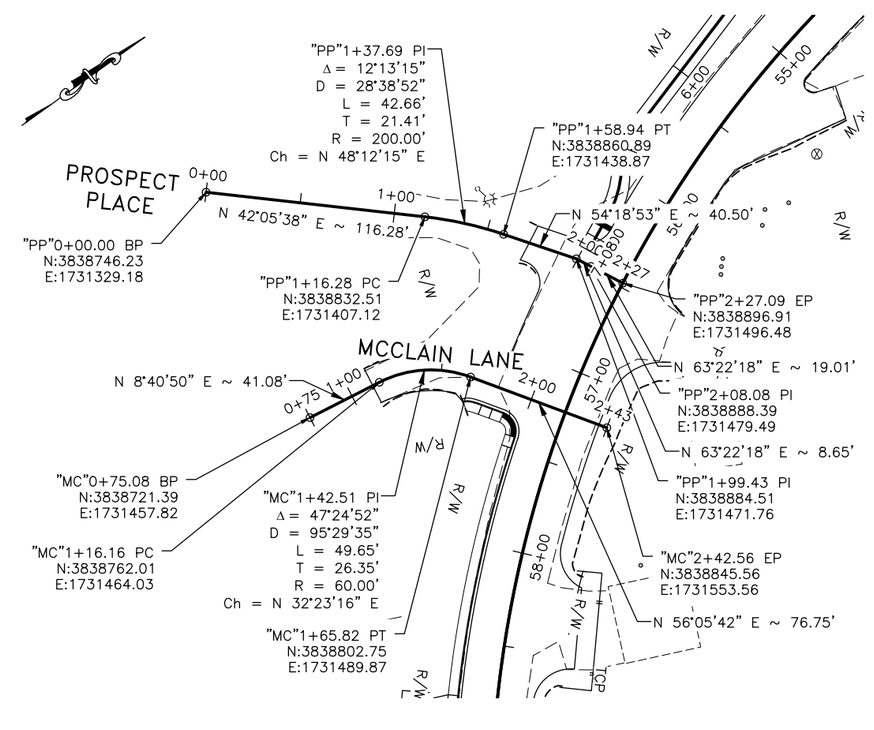
FOR SURVEY CONTROL INFORMATION, INCLUDING BASIS OF COORDINATES, BASIS OF BEARING, AND VERTICAL CONTROL, SEE A4 THRU A10.

ALIGNMENT DESIGNATION

"S"	SEPPALA ROAD
"CC"	CENTER CREEK ROAD
"PS"	PROSPECT STREET
"PP"	PROSPECT PLACE
"MC"	MCCLAIN LANE
"MR"	MAINTENANCE ROAD
"SP"	SHARED PATH

ALIGNMENT CONTROL PLAN (4 OF 4)

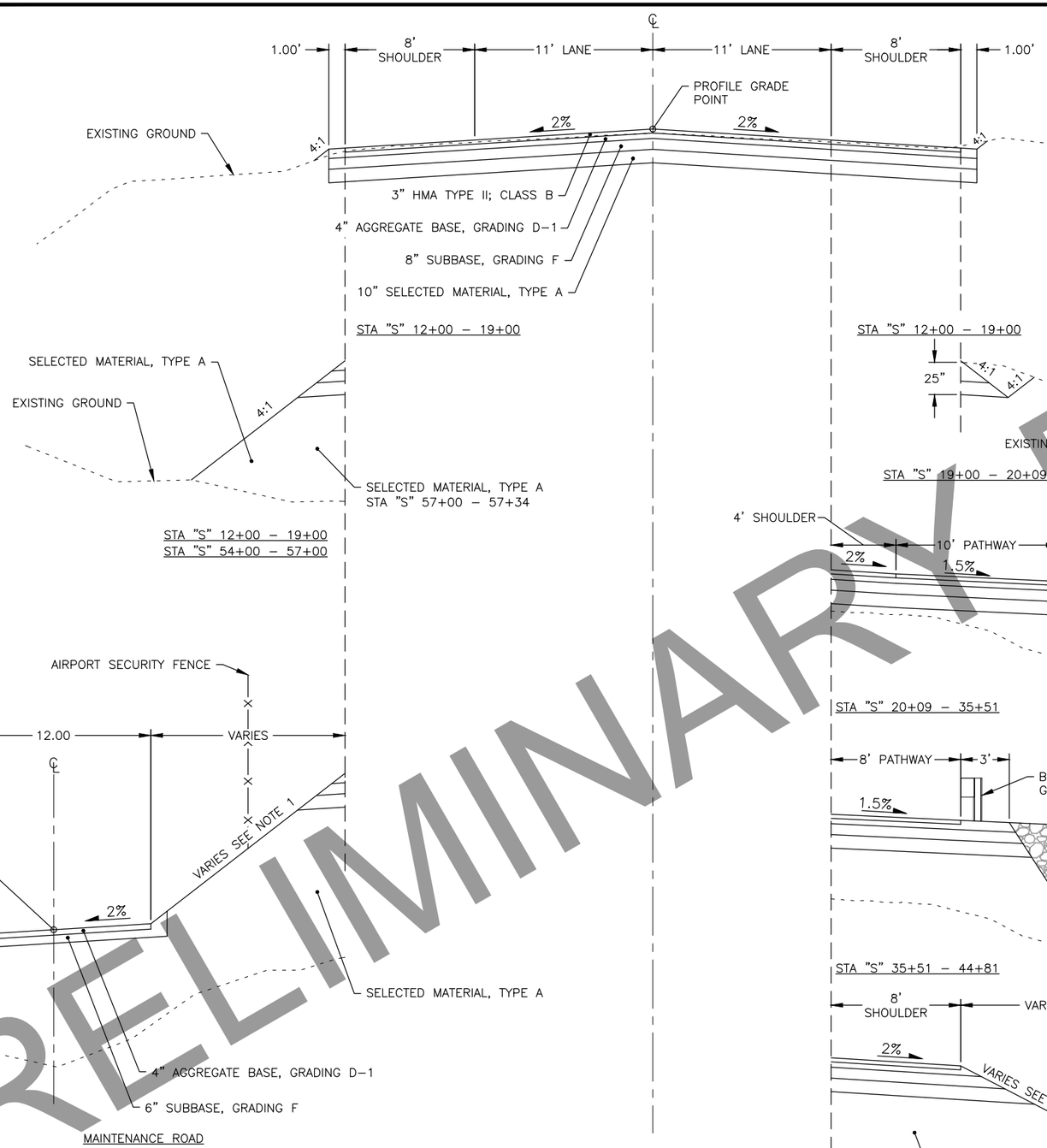




PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0007cnst-17258FB-AC4 Wed, May/10/23 02:18pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	B1	B4



NOTES:

1. SLOPE VARIES FROM SEPPALA DRIVE TO THE AIRPORT MAINTENANCE ROAD. SEE GRADING SHEETS FOR ADDITIONAL DETAILS.
2. SLOPE VARIES FROM SEPPALA DRIVE TO THE PATHWAY. ENSURE PROPER DRAINAGE FROM ROAD PAST PATHWAY.
3. APPLY TACK COAT TO SAW CUT ASPHALT FACE PRIOR TO PAVING AND FACES OF CURB AND GUTTER. TACK COAT SHALL BE SUBSIDIARY AND NOT PAID SEPARATELY.

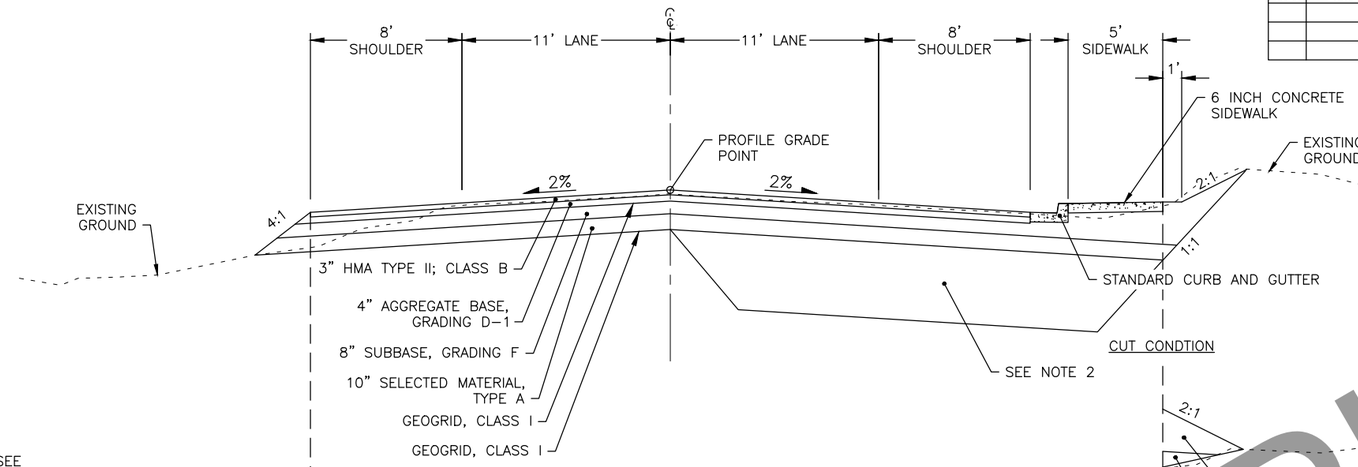
SEPPALA DRIVE
STA "S" 12+00 – 57+34

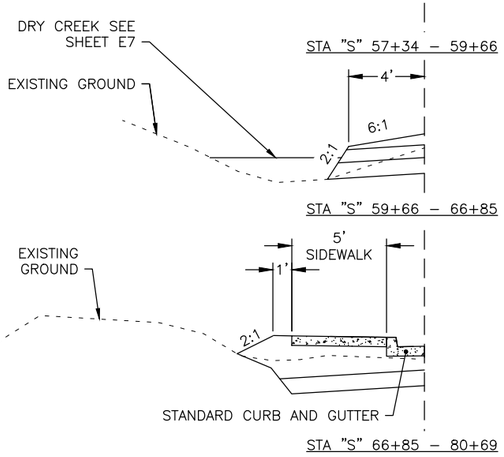
TYPICAL SECTIONS (1 OF 4)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C3001cnst-17258FB-B1 Typical Sections (1 of 4) Wed, May/10/23 02:26pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	B2	B4

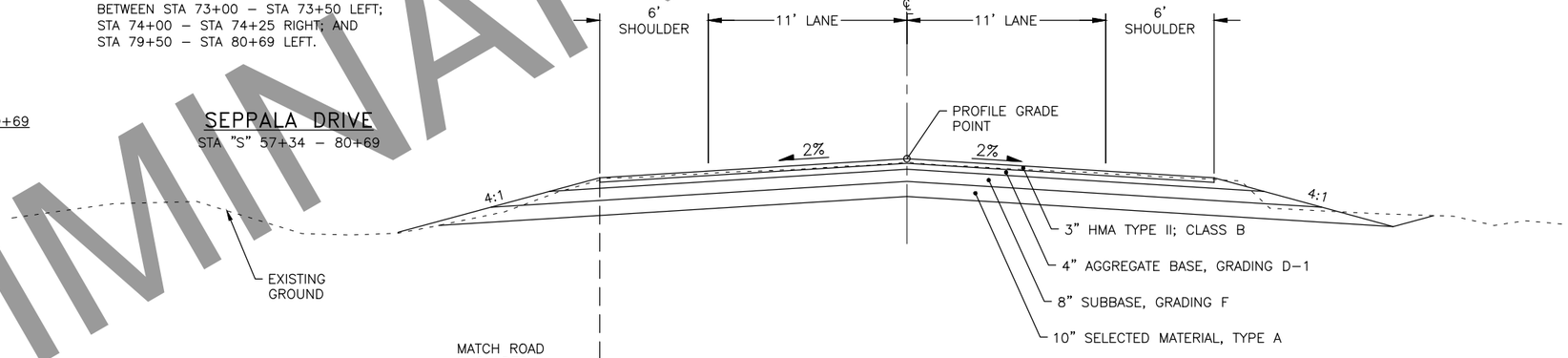


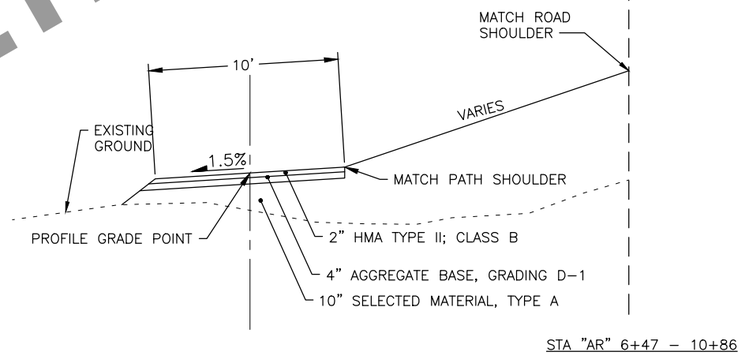


NOTES:

1. GEOGRID TO BE PLACED FROM STA 60+00 TO STA 77+50
2. OVER EXCAVATE SINK HOLE FROM STA 69+25 TO STA 69+50. CONFIRM LIMITS OF OVER EXCAVATION WITH ENGINEER IN THE FIELD. FILL SINK HOLE EXCAVATION WITH SELECTED MATERIAL, TYPE A.
3. APPLY TACK COAT TO SAW CUT ASPHALT FACE PRIOR TO PAVING AND FACES OF CURB AND GUTTER. TACK COAT SHALL BE SUBSIDIARY AND NOT PAID SEPARATELY.
4. OMIT 1' SIDEWALK SHOULDER WHERE IT CONFLICTS WITH ROW. OMIT BETWEEN STA 73+00 – STA 73+50 LEFT;
   STA 74+00 – STA 74+25 RIGHT; AND
   STA 79+50 – STA 80+69 LEFT.

SEPPALA DRIVE
STA "S" 57+34 – 80+69





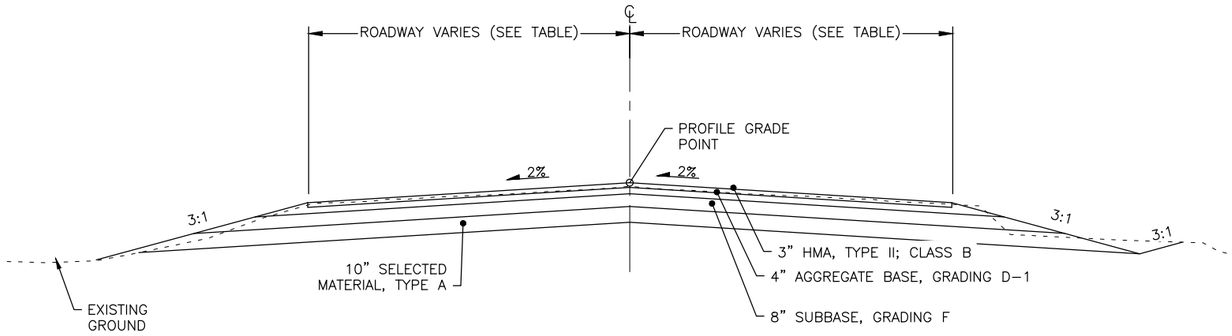
AIRPORT ROAD
STA "AR" 0+00 – 10+86

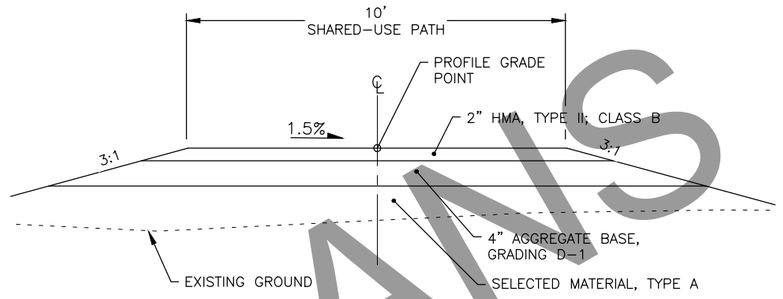
TYPICAL SECTIONS (2 OF 4)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB–Seppala\C\C3001cnst–17258FB–B2 Typical Sections (2 of 4) Wed, May/10/23 02:26pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	B3	B4





SHARED-USE PATH

STA "AP" 00+18 – 7+76
STA "SP" 00+93 – 4+14
STA "RP" 00+07 – 7+00

SIDE STREETS	
ROAD	ROADWAY (FT)
CENTER CREEK	13
PROSPECT STREET	18
PROSPECT PLACE	10
MCCLAIN STREET	10
BELMONT STREET	12
F STREET	15
NE D STREET	15
NE C STREET	18
SW C STREET	18

WIDTHS SHOWN ABOVE ARE HALF WIDTH OF ROADWAY.

CENTER CREEK

STA "CC" 10+11 – 12+70

PROSPECT STREET

STA "PS" 00+12 – 2+10

PROSPECT PLACE

STA "PP" 1+70 – 2+08

MCCLAIN STREET

STA "MC" 1+12 – 1+66

BELMONT STREET

STA "BM" 00+43 – 0+98

F STREET

STA "F" 00+25 – 1+26

WEST D STREET

STA "N D" 00+21 – 00+53

WEST C STREET

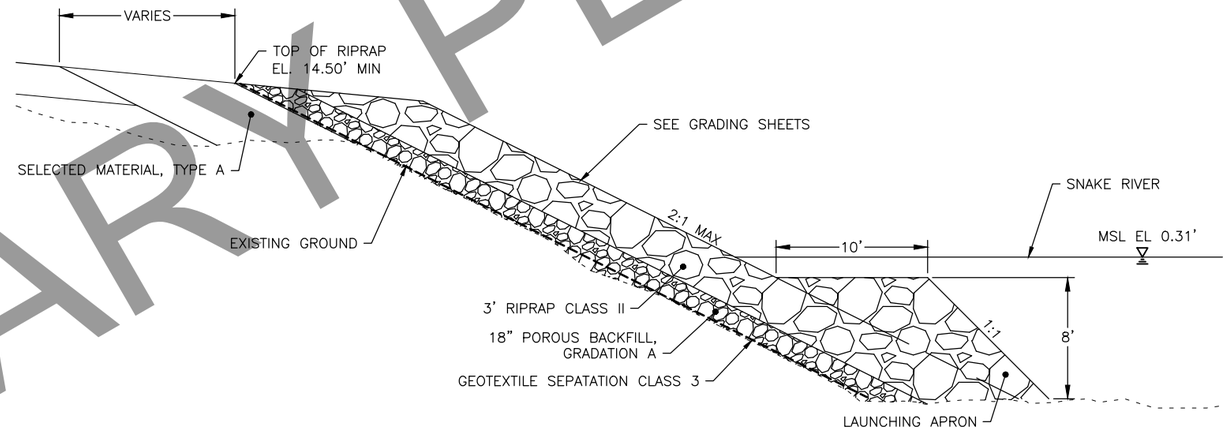
STA "N C" 00+21 – 00+53

WEST C STREET

STA "SC" 00+42 – 0+85

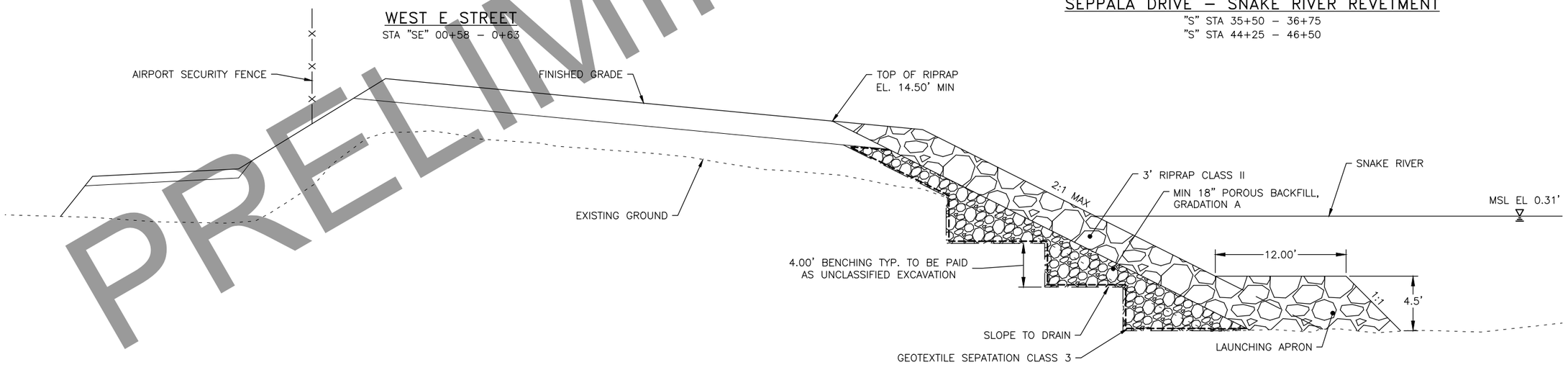
WEST E STREET

STA "SE" 00+58 – 0+63



SEPPALA DRIVE – SNAKE RIVER REVETMENT

"S" STA 35+50 – 36+75
"S" STA 44+25 – 46+50



SEPPALA DRIVE – SNAKE RIVER REVETMENT

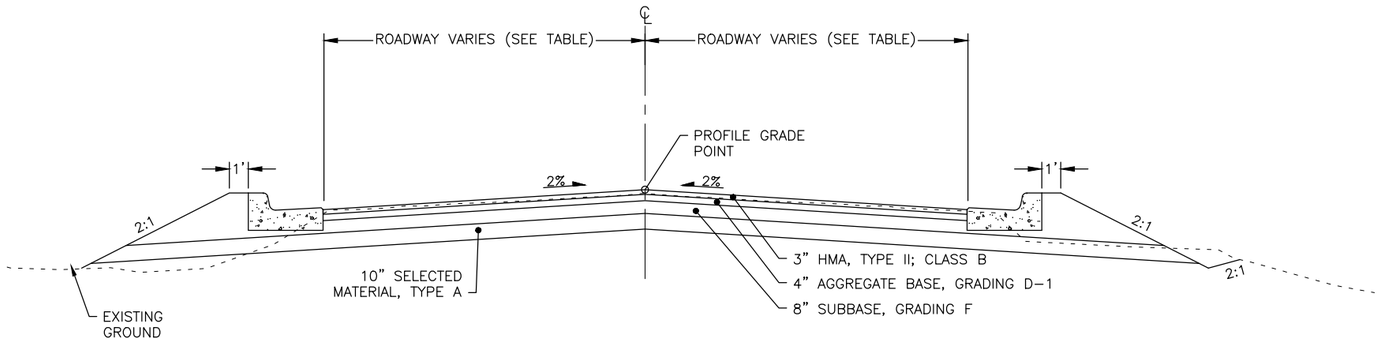
"S" STA 36+75 – 44+25

TYPICAL SECTIONS (3 OF 4)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C3001cnst-17258FB-B3 Typical Sections (3 of 4) Wed, May/10/23 02:26pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	B4	B4



MCCLAIN STREET
STA "MC" 1+66 – 2+00

BELMONT STREET
STA "BM" 0+98 – 1+32

F STREET
STA "F" 1+26 –1+56

WEST E STREET
STA "SE" 0+63 – 0+97

WEST E STREET
STA "N E" 0+19 – 0+55

WEST D STREET
STA "N D" 0+53 – 0+76

WEST D STREET
STA "S D" 0+86 – 1+20

WEST C STREET
"N C" 0+53 – 0+93

WEST C STREET
"S C" 0+85 – 1+21

TYPICAL SECTIONS
(4 OF 4)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C3001cnst-17258FB-B4 Typical Sections (4 of 4) Wed, May/10/23 02:27pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
201.0008.0000	GRUBBING	LS	ALL REQ'D
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQ'D
202.0002.0000	REMOVAL OF PAVEMENT	SY	39,730
202.0003.0000	REMOVAL OF SIDEWALK	SY	960
202.0009.0000	REMOVAL OF CURB AND GUTTER	LF	2,345
203.0003.0000	UNCLASSIFIED EXCAVATION	CY	23,720
203.0006.000A	BORROW, SELECTED MATERIAL TYPE A	TON	70,310
205.0007.0000	POROUS BACKFILL MATERIAL, TYPE A	TON	7,150
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	10990
304.0001.000F	SUBBASE, GRADING F	TON	23,800
401.0001.002B	HMA, TYPE II; CLASS B	TON	7,140
401.0004.5228	ASPHALT BINDER, GRADE PG 52-28	TON	410
401.0008.002B	HMA PRICE ADJUSTMENT, TYPE II; CLASS B	CS	ALL REQ'D
401.0012.002B	HMA DRIVEWAY, TYPE II; CLASS B	TON	150
401.0015.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQ'D
501.2007.0002	HEADWALL, TYPE IIA	EA	1
602.2009.0000	DEADMAN	EA	3
603.0001.0018	CSP 18 INCH	LF	360
603.0001.0024	CSP 24 INCH	LF	430
603.0001.0036	CSP 36 INCH	LF	910
603.0001.0084	CSP 84 INCH	LF	116
603.0001.0120	CSP 120 INCH	LF	106
603.0020.0018	END SECTION FOR PIPE 18 INCH	EA	12
603.0020.0024	END SECTION FOR PIPE 24 INCH	EA	24
603.0020.0036	END SECTION FOR PIPE 36 INCH	EA	5
604.0001.0001	STORM SEWER MANHOLE, TYPE 1	EA	2
604.0005.000A	INLET, TYPE A	EA	1
606.0001.0000	W-BEAM GUARDRAIL	LF	300
606.0003.0000	BOX BEAM GUARDRAIL	LF	945
606.0016.0000	TRANSITION RAIL	EA	2,0
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EA	2
606.2003.0000	WOOD BOLLARD, FIXED	EA	90
606.2010.0000	BOX BEAM TERMINAL	EA	2
607.0003.0000	CHAIN LINK FENCE	LF	1,400
608.0001.0006	CONCRETE SIDEWALK, 6 INCHES THICK	SY	1,870
608.0006.0000	CURB RAMP	EA	17
608.2017.0000	DETECTABLE WARNING TILE	EA	6
609.0002.0001	CURB AND GUTTER, TYPE 1	LF	4075
611.0002.0001	RIPRAP, CLASS I	TON	27
611.0002.0002	RIPRAP, CLASS II	TON	13,020
613.0002.0000	CULVERT MARKER POST	EA	16

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
615.0001.0000	STANDARD SIGN	SF	514
615.0004.0000	DELINEATOR, RIGID	EA	17
616.0002.0075	THAW PIPE 3/4 INCH DIAMETER	EA	8
618.0002.0000	SEEDING (GENERAL SEED MIX)	LBS	475
630.0001.0003	GEOTEXTILE, SEPARATION, CLASS 3	SY	1,510
631.2001.0001	GEOTEXTILE, EROSION CONTROL, CLASS 1	SY	325
634.0002.0000	GEOGRID, REINFORCEMENT, CLASS 1	SY	18,460
639.0001.0000	DRIVEWAY	EA	22
639.2000.0000	APPROACH	EA	11
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
640.0004.0000	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQ'D
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LS	ALL REQ'D
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CS	ALL REQ'D
641.0006.0000	WITHHOLDING	CS	ALL REQ'D
641.0007.0000	SWPPP MANAGER	LS	ALL REQ'D
642.0001.0000	CONSTRUCTION SURVEYING	LS	ALL REQ'D
642.0003.0000	THREE PERSON SURVEY PARTY	HR	90
643.0002.0000	TRAFFIC MAINTENANCE	LS	ALL REQ'D
643.0025.0000	TRAFFIC CONTROL	CS	ALL REQ'D
643.2005.0000	PUBLIC INFORMATION PROGRAM	LS	ALL REQ'D
643.2012.0000	CONSTRUCTION PHASING PLAN, AIRPORT	LS	ALL REQ'D
644.0001.0000	FIELD OFFICE	LS	ALL REQ'D
644.0002.0000	FIELD LABORATORY	LS	ALL REQ'D
644.0006.0000	VEHICLE	LS	ALL REQ'D
645.0001.0000	TRAINING PROGRAM, 4 TRAINEES/APPRENTICES	LABOR HOUR	2000
646.0001.0000	CPM SCHEDULING	LS	ALL REQ'D
660.0003.0000	HIGHWAY LIGHTING SYSTEM COMPLETE	LS	ALL REQ'D
670.0001.0000	PAINTED TRAFFIC MARKINGS	LS	ALL REQ'D

ESTIMATING FACTORS

ITEM NUMBER	ITEM	FACTOR
203.0006.000A	BORROW	2 TONS/CUBIC YARD
205.0007.0000	POROUS BACKFILL MATERIAL, TYPE A	1.96 TONS/CUBIC YARD
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	1.96 TONS/CUBIC YARD
304.0001.000F	SUBBASE, GRADING F	1.96 TONS/CUBIC YARD
401.0001.002B	HMA, TYPE II; CLASS B	1.96 TONS/CUBIC YARD
401.0004.5228	ASPHALT BINDER, GRADE PG 52-28	6%/TON
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.0003 TONS/SQUARE YARD
611.0002.0001	RIPRAP, CLASS I	1.6 TON / CY
611.0002.0002	RIPRAP, CLASS II	1.6 TON / CY
618.0002.0000	SEEDING	1.5 LBS/1,000 SQUARE FEET

ESTIMATED LUM SUM QUANTITIES

ITEM NO.	ITEM	QUANTITY
201.0008.0000	GRUBBING	3.1 AC
201.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	SEE SUMMARY ON SHEET D1
643.2012.0000	CONSTRUCTION PHASING PLAN, AIRPORT	
	HAZARD MARKER BARRIER, PLASTIC	68 EA
	TEMPORARY SECURITY FENCE	843 LF
	CONCRETE BARRIER	39 EA
	RUNWAY CLOSURE MARKER, ILLUMINATED	2 EA
660.0003.0000	HIGHWAY LIGHTING SYSTEM COMPLETE	
	REMOVE LIGHT EXISTING ELECTROILER	1 EA
	REMOVE EXISTING JUNCTION BOX	1 EA
	REMOVE EXISTING LOAD CENTER	1 EA
	ELECTROILER DRIVEN PILE FOUNDATION	1 EA
	ELECTROILER	1 EA
	JUNCTION BOX 1A	1 EA
	LOAD CENTER FOUNDATION	1 EA
	LOAD CENTER	1 EA
670.0001.0000	PAINTED TRAFFIC MARKINGS	SEE SUMMARY ON SHEET H1

ESTIMATE OF QUANTITIES

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0003cnst-17258FB-C1 Estimate of Quantities Wed, May/10/23 02:27pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	D1	D2

202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

DESCRIPTION	QUANTITY
REMOVAL OF CULVERT PIPE	750 LF
GUARDRAIL	1125 LF
BOLLARD	51 EA
SIGN	48 EA
DELINEATOR	26 EA
FENCE	1392 LF

202.0002.0000 REMOVAL OF PAVEMENT SUMMARY

ALIGNMENT	BEGIN STATION	END STATION	QUANTITY (SQUARE YARD)	REMARKS
SP	10+76	80+60	32338	
AR	1+40	10+50	3820	
CC	10+20	12+70	855	
PS	+19	2+10	780	

202.0003.0000 REMOVAL OF SIDEWALK SUMMARY

ALIGNMENT	BEGIN STATION	END STATION	OFFSET	QUANTITY (SY)	REMARKS
SP	67+82	69+88	RT	94	
SP	68+02	69+96	LT	89	
SP	70+40	73+56	LT	145	
SP	70+42	73+57	RT	137	
SP	74+00	77+17	LT	145	
SP	74+01	76+83	RT	127	
SP	77+07	77+17	RT	5	
SP	77+60	80+60	RT	136	
SP	77+66	79+52	LT	81	

202.0009.0000 REMOAL OF CURB AND GUTTER SUMMARY

ALIGNMENT	BEGIN STATION	END STATION	OFFSET	QUANTITY (LF)	REMARKS
SP	67+82	69+88	RT	207	
SP	68+02	69+96	LT	203	
SP	70+40	73+56	LT	327	
SP	70+42	73+57	RT	324	
SP	74+00	76+98	LT	303	
SP	74+01	77+17	RT	331	
SP	77+60	80+60	RT	308	
SP	77+66	80+60	LT	295	

SUMMARY TABLES

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-D1 Wed, May/10/23 02:27pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	D2	D2

SUPERELEVATION TABLE

ALIGNMENT	SUPERELEVATION RATE (%)	RADIUS OF CURVE (FT)	BEGIN TRANSITION	BEGIN FULL SUPERELEVATION	END FULL SUPERELEVATION	END TRANSITION	REMARKS
SP	5.4	390	15+05	16+39	18+01	19+35	
SP	2	900	33+97	35+02	43+39	44+44	
SP	2.5	600	45+12	45+92	50+86	51+66	
SP	4.4	620	52+47	53+63	59+09	60+25	
SP	2	2750	65+59	66+31	70+65	71+37	
AR	4	118	1+73	2+71	3+46	4+43	

SUPERELEVATION NOTES:

1. THE SUPERELEVATION ROTATION POINT IS CENTERLINE AT PROFILE GRADE.
2. SEE STANDARD PLAN 1–81.00 FOR SUPERELEVATION TRANSITION DETAILS. THE TRANSITION LENGTHS GIVEN IN THE SUMMARY DO NOT INCLUDE THE 1/2 VERTICAL CURVE LENGTHS SHOWN ON EACH END OF THE TRANSITION.
3. SUPERELEVATION SHALL BE BUILT INTO THE SUBGRADE AND CARRIED THROUGH THE FULL WIDTH.

607.0003.0000 CHAIN LINK FENCE

ALIGN	START		END		LENGTH	REMARKS
	STA	OFFSET	STA	OFFSET		
"S"	32+30	−88.1	45+07	−49.8	1349.31	SECURITY FENCE
"AR"	5+74	−235	6+15	−225	42.52	SECURITY FENCE. OFFSETS ARE APPROXIMATE

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-D2 Wed, May/10/23 02:27pm

SUMMARY TABLES

NO.	DATE	REVISION

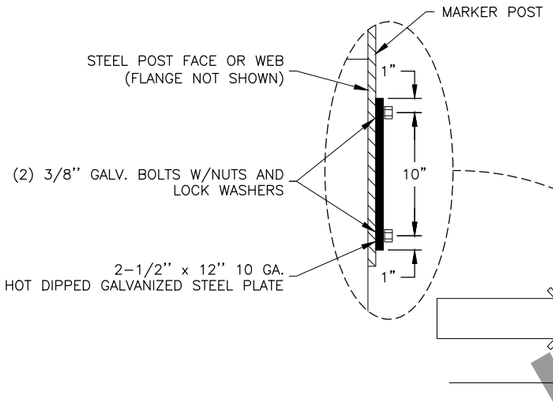
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E1	E7

W–BEAM GUARDRAIL SUMMARY

ALIGNMENT	606.0001.0000 W–BEAM GUARDRAIL				606.0013.0000 PARALLEL GUARDRAIL TERMINAL (EACH)	606.0016.0000 TRANSITION RAIL (EACH)
	BEGIN STATION	END STATION	OFFSET	LENGTH (LINEAR FOOT)		
"SP"	47+75	48+83	RT	142.00	1	1
"SP"	49+30	50+36	RT	142.00	1	1
PAY ITEM TOTALS				284.00	2	2

BOX BEAM GUARDRAIL SUMMARY

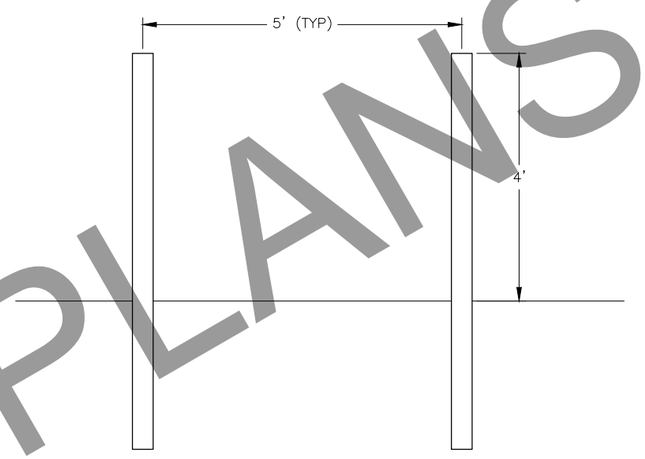
606.0003.000 BOX BEAM GUARDRAL				606.2010.0000 BOX BEAM TERMINAL (EACH)
BEGIN STATION	END STATION	OFFSET	LENGTH (LINEAR FOOT)	
36+00	44+10	RT	812.50	2
PAY ITEM TOTALS			812.50	2

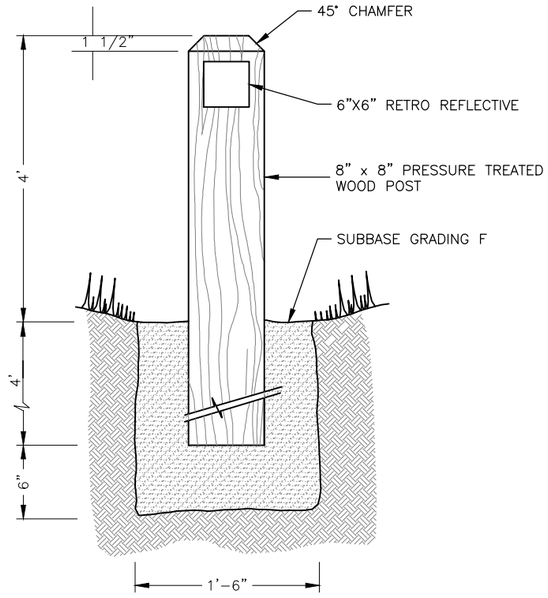


GUARDRAIL MARKER POST ATTACHMENT DETAIL
PARALLEL GUARDRAIL TERMINAL

GUARDRAIL MARKER NOTES:

1. GUARDRAIL MARKER POSTS SHALL BE YELLOW, 3" MINIMUM TO 4" MAXIMUM WIDTH AND AT LEAST 78" LONG. POSTS SHALL BE CARSONITE CIB–380, TRAFFICWORKS TW–375, DAVIDSON FLEXI–GUIDE FG 500 FLEXIBLE MARKERS, OR APPROVED EQUAL
2. AT THE TOP OF THE MARKER POST, INSTALL 3" X 12" RETROREFLECTIVE SHEETING MEETING ASTM D4956 REQUIREMENTS FOR TYPE VII OR IX, AT THE TOP OF THE GUARDRAIL MARKER POST. ALTERNATIVELY, USE 3M DIAMOND GRADE DG3 OR APPROVED EQUAL. COLOR OF SHEETING SHALL MATCH COLOR OF ADJACENT EDGE LINE STRIPE. PLACE SHEETING ON SIDE OF MARKER POST FACING TRAFFIC IN ADJACENT LANE.
3. DRILL ALL BOLT HOLES. COAT HOLES WITH ZINC RICH PAINT. FLAME CUTTING SHALL NOT BE PERMITTED.
4. ALL WORK AND MATERIAL REQUIRED TO INSTALL GUARDRAIL MARKER POSTS IS SUBSIDIARY TO 606 PAY ITEMS.





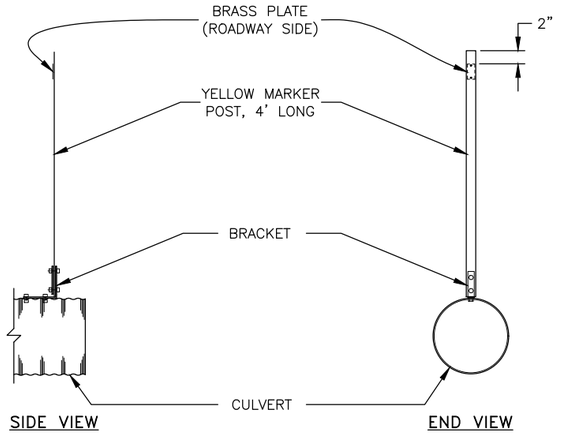
WOOD BOLLARD DETAILS

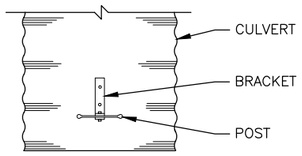
DETAILS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C0005cnst–17258FB–E1 Wed, May/10/23 02:28pm

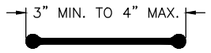
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E2	E7





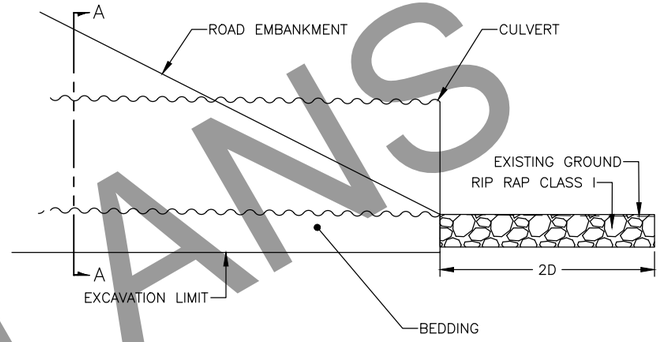
TOP VIEW



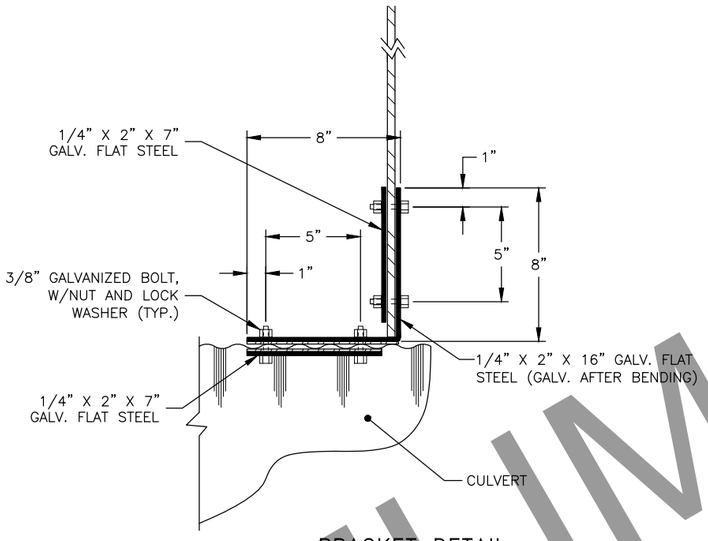
POST DETAIL
NTS

CULVERT MARKER POST DETAIL
N.T.S.

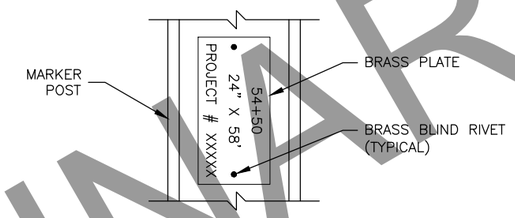
CULVERT MARKER POST DETAILS



DETAIL: CULVERT INSTALLATION
N.T.S.



BRACKET DETAIL
N.T.S.

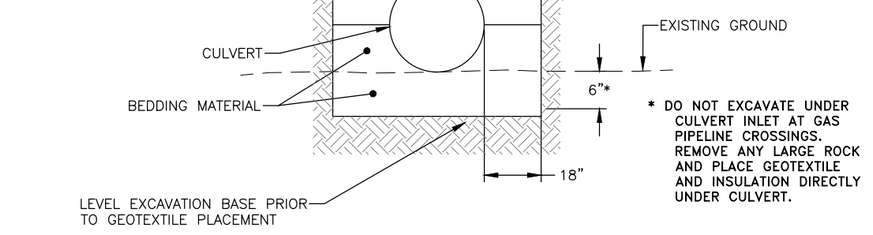


STAMP PROJECT NUMBER, STATION, AND PIPE SIZE, USING 3/8" HIGH MINIMUM LETTERS INTO A 2"X4"X 0.064" THICK BRASS PLATE. FASTEN PLATE TO THE SIDE FACING THE ROADWAY WITH TWO 1/8" BRASS BLIND RIVETS.

BRASS PLATE DETAIL
N.T.S.

NOTES:

1. CONSTRUCT APRON TWO CULVERT DIAMETERS WIDE BY TWO CULVERT DIAMETERS LONG AT CULVERT INLET AND OUTLET.
2. DETAILS SHOWN THIS SHEET ARE FOR CULVERTS SMALLER THAN 48" DIAMETER.

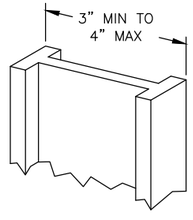


* DO NOT EXCAVATE UNDER CULVERT INLET AT GAS PIPELINE CROSSINGS. REMOVE ANY LARGE ROCK AND PLACE GEOTEXTILE AND INSULATION DIRECTLY UNDER CULVERT.

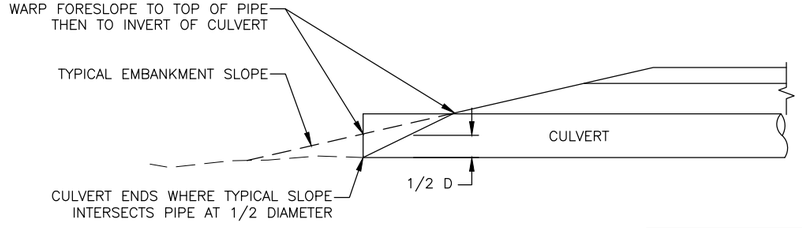
SECTION A–A CULVERT INSTALLATION
N.T.S.

CULVERT MARKER POSTS NOTES:

1. MARKER POSTS ARE TO BE INSTALLED ON CROSS CULVERTS ONLY.
2. IF CULVERTS ARE CLOSELY SPACED, MARK ONLY THE FIRST AND LAST CULVERT IN SERIES AS APPROVED BY THE ENGINEER, UNLESS OTHERWISE INDICATED IN CULVERT SUMMARY
3. DRILL ALL BOLT HOLES. COAT HOLES WITH ZINC RICH PAINT. FLAME CUTTING SHALL NOT BE PERMITTED.
4. GASKET MATERIAL SHALL BE PLACED BETWEEN DISSIMILAR METALS. GASKET MATERIAL SHALL BE APPROVED PRIOR TO INSTALLATION.
5. STATION STAMPS ON BRASS PLATES TO BE PER INSTALLED LOCATION AND NOT NECESSARILY THE LOCATION INDICATED ON THE PLANS.



MARKER POST DETAIL
N.T.S.



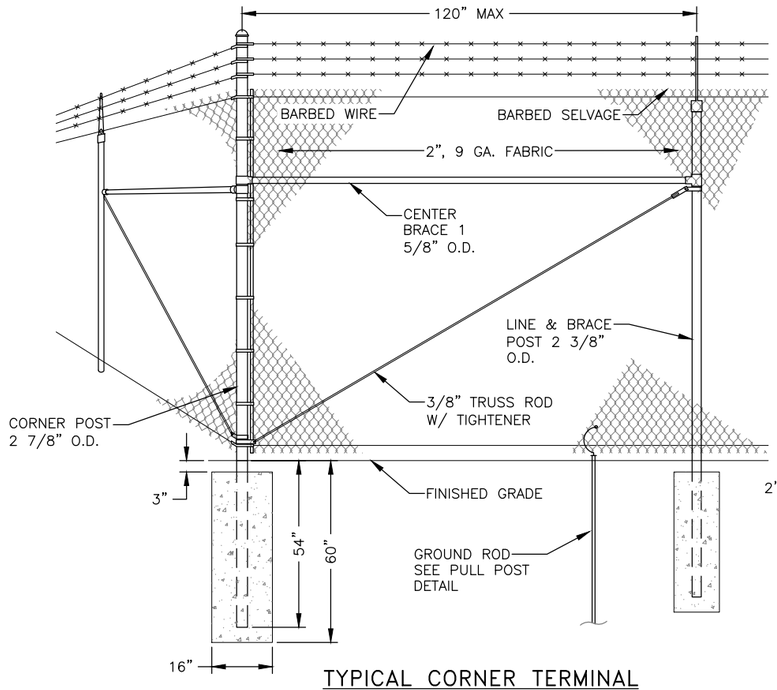
SECTION A–A CULVERT INSTALLATION
N.T.S.

DETAILS

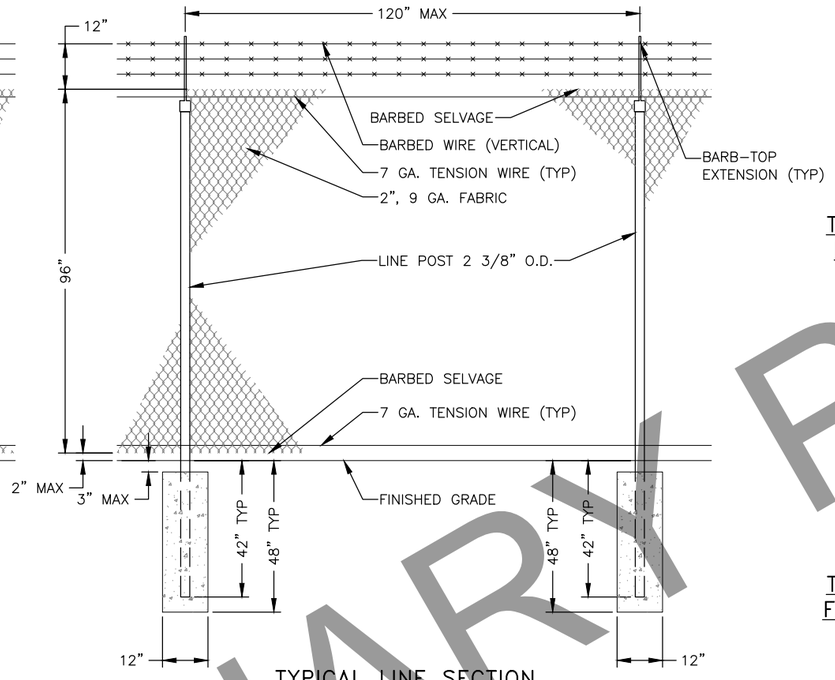
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0005cnst-17258FB-E2 Wed, May/10/23 02:28pm

NO.	DATE	REVISION

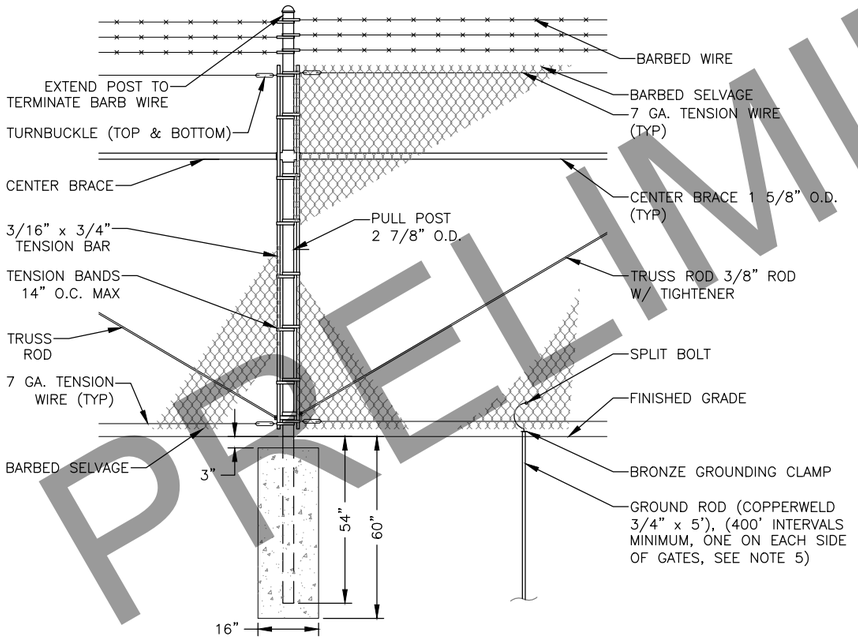
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E3	E7



TYPICAL CORNER TERMINAL



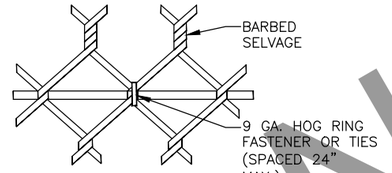
TYPICAL LINE SECTION



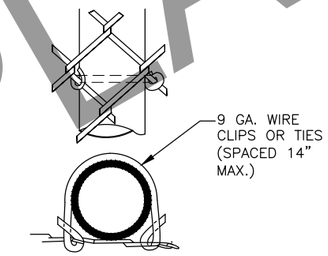
TYPICAL PULL / TERMINAL POST

GENERAL FENCE NOTES

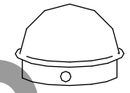
1. ALL CONCRETE USED FOR FENCE FOOTINGS SHALL BE 2500 PSI MINIMUM.
2. FINISHED CONCRETE TO BE RECESSED BELOW THE GROUND LINE. BACKFILL AND COMPACT AROUND RECESSED CONCRETE WITH EXCAVATED MATERIAL (TYPICAL ALL CONCRETE POSTS IN GROUND).
3. FINISHED CONCRETE TO BE FLUSH WITH PAVEMENT (TYPICAL ALL CONCRETE POSTS IN PAVEMENT).
4. USE DISPOSABLE FORM TUBE (E.G., SONOTUBE) FOR CONCRETE FOOTINGS, AND WRAP WITH 3 LAYERS OF 6 MIL POLYETHYLENE SHEETING.
5. GROUNDING RODS SHALL BE PLACED A MINIMUM OF 20 FT AWAY FROM BUILDING EXTERIOR, TO ENSURE THEY DO NOT PUNCTURE THE SUBSURFACE MEMBRANE LAYER.



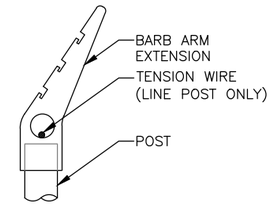
TYPICAL METHOD OF TYING FABRIC TO TENSION WIRE



TYPICAL METHOD OF TYING FABRIC TO TUBULAR POSTS



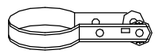
ACORN OR DOME CAP FOR GATE/TERMINAL POST



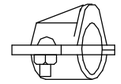
NOTES

1. TYPICAL TOP FOR ALL LINE AND PULL POST.
2. TENSION WIRE TO BE THREADED THROUGH EYE-TOP, AS SHOWN, ON ALL POST.

TYPICAL EYE-TOP BARB-TOP EXTENSION



BARB WIRE BAND WITH RATCHET No. 60



BACK STOP C-2

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0005cnst-17258FB-E3 Wed, May/10/23 02:28pm

FENCE DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E4	E7

CULVERT SUMMARY

PIPE NO.	INLET			OUTLET			SLOPE (%)	LENGTH OF PIPE (FT)					CULVERT MARKING POST	CULVERT THAWPIPE	REMARKS	CENTERLINE AS-BUILT INFORMATION	
	STATION	OFFSET	INVERT ELEVATION	STATION	OFFSET	INVERT ELEVATION		18"	24"	36"	84"	120"				LATITUDE	LONGITUDE
1	"AR" 03+12	36.1 LT	10.6	"AR"3+49	36.8 LT	12.7	−4.33%		48								
2	"SP" 20+78	39.8 LT	12.61	"SP" 20+48	37.5 RT	12.5	0.18%		84				2	X			
3	"SP" 20+86	39.7 LT	12.65	"SP" 21+57.8	35.3 LT	12.94	−0.40%		72								
4	"SP" 24+27	35.8 LT	12.25	"SP" 24+92.55	34.5 LT	12.19	−0.10%		66								
5	"SP" 26+34	35.6 LT	12	"SP" 27+13	36.4 LT	11.51	0.62%		80								
6	"SP" 31+40	40.7 LT	8.8	"SP" 31+34	56.00 RT	7.91	0.92%			98			2	X			
7	"SP" 43+70	71.3 LT	1.6	"SP" 43+83	42.8 RT	0.35	−1.08%				116		2	X	SEE NOTE 2		
8	"PS" 00+40	47.6 LT	8	"PS" 00+71	25.9 RT	9.7	−2.07%		80				2	X			
9	"SP" 47+20	79.0 LT	3.5	"SP" 47+23	105.6 RT	0.35	1.69%			186			2	X			
10	"SP" 54+95	24.6 LT	20.18	"SP" 55+73	23.8 LT	20.49	0.41%	74					2	X			
11	"SP" 56+28	27.6 LT	20.3	"SP" 57+03.00	26.8 LT	19.66	0.95%	72					2	X			
12	"SP" 57+98	27.8 LT	16.6	"SP" 58+80	27.2 LT	15	1.91%	80									
13	"SP" 59+00	27.60 LT	14.4	"SP" 59+63	27.9 LT	13.2	2.04%	62									
14	"SP" 63+98	49.0LT	−2.25	"SP" 63+98	56.6RT	−2.38	−0.12%					106	2	X	SEE NOTE 1		
15	"SP" 67+73	30.9 LT	10.08	"SP" 67+26	32.4LT	9.42	1.42%	46									
16	"SP" 68+60	28.8 LT	13.4	"SP" 68+34	29.3 LT	12.6	3.18%	26									
							TOTALS:	360	430	284	116	106	16	8			

NOTES:

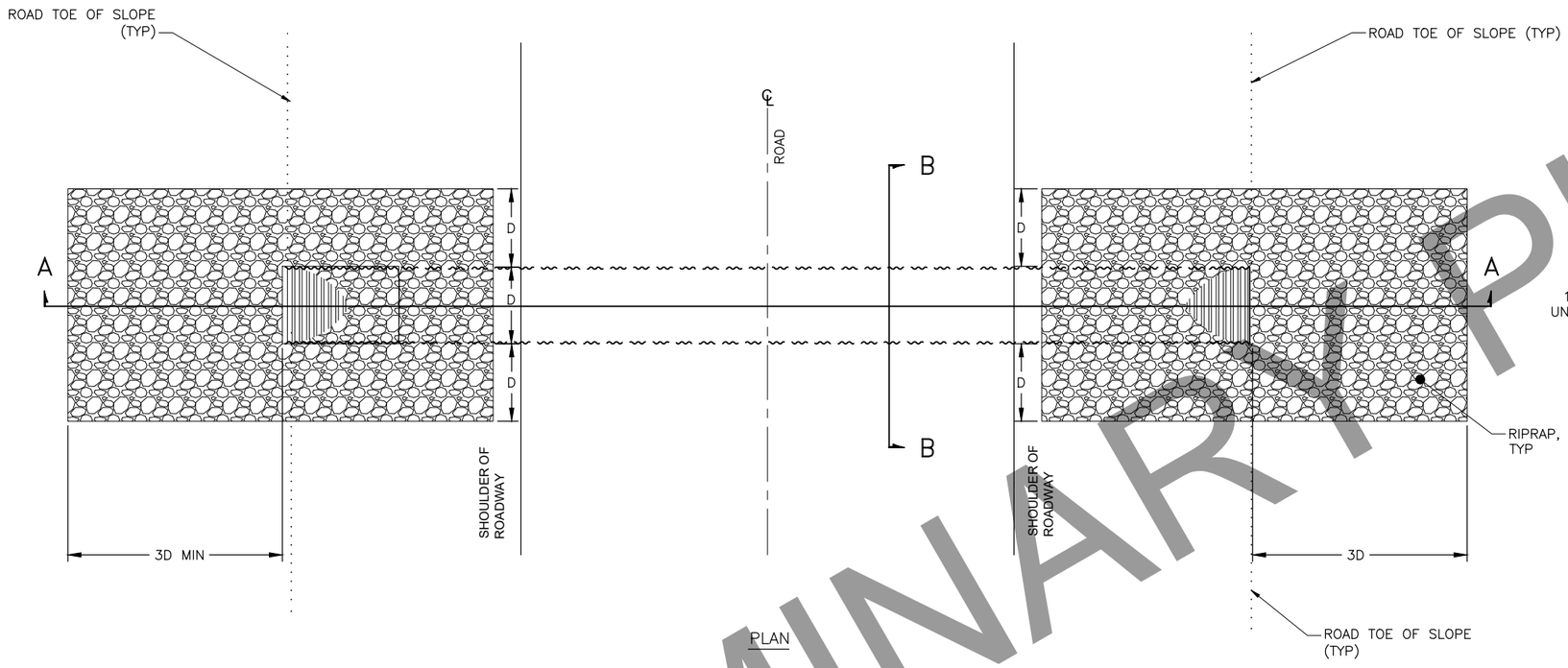
1. THIS IS THE FISH PASSAGE CULVERT FOR THE PROJECT.
2. USE FISH PASSAGE CULVERT DETAILS AND OMIT THE RIPRAP AND POROUS BACKFILL WITHIN THE CULVERT.

CULVERT SUMMARY TABLE

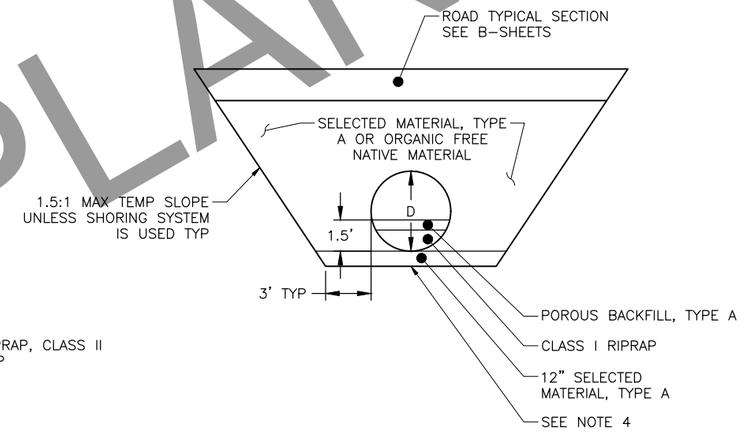
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-E4 Wed, May/10/23 02:28pm

NO.	DATE	REVISION

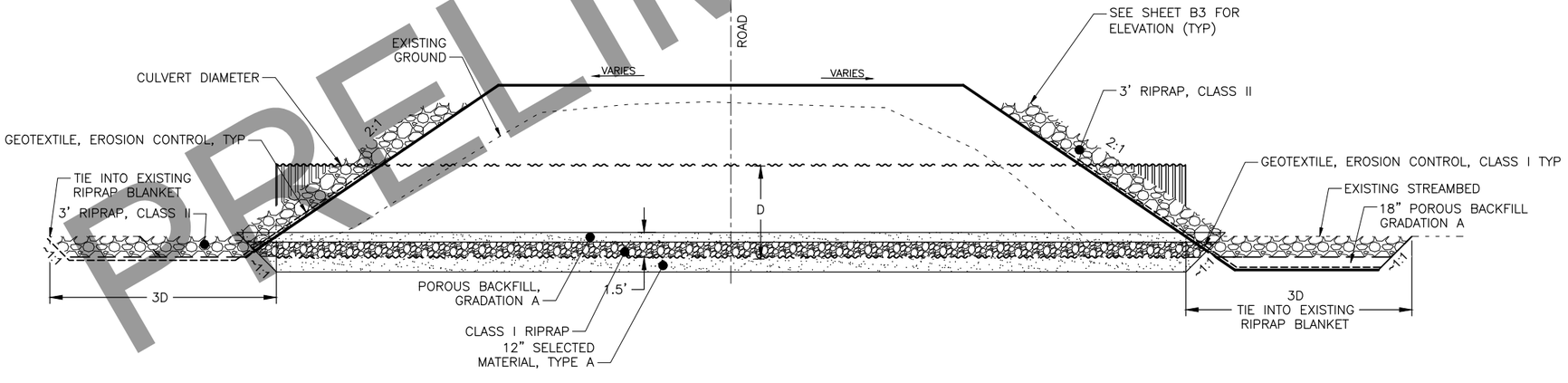
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E5	E7



PLAN



SECTION B–B



SECTION A–A

NOTES:

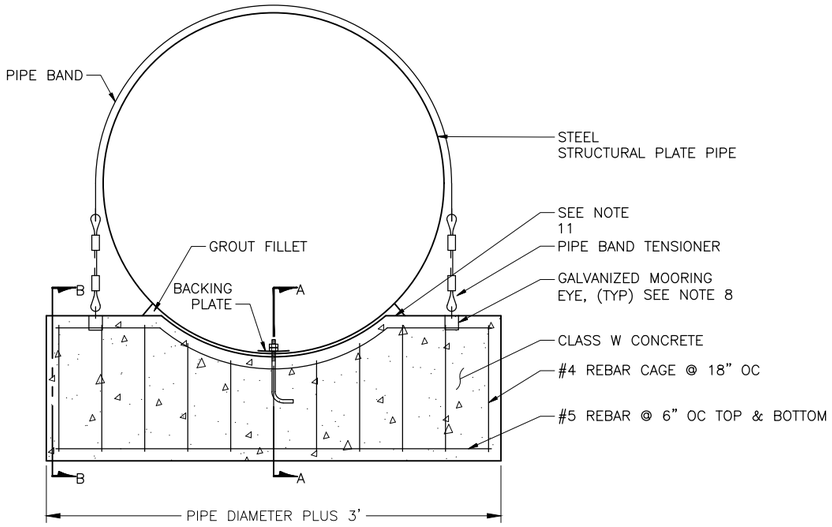
1. INSTALL CULVERT MARKER POSTS ON BOTH ENDS OF EACH INSTALLED CULVERT.
2. INSTALL CONCRETE DEADMAN ON BOTH ENDS OF CULVERT. SEE DEADMAN DETAIL SHEET E6.
3. INSTALL CULVERT THAW PIPES ON BOTH CULVERTS. SEE SHEET E6 FOR INSTALLATION DETAILS.
4. THE 12" OF SELECTED MATERIAL TYPE A SHALL BE PLACED ON IN–SITU GRANULAR MATERIAL FREE FROM ORGANICS. PERFORM ADDITIONAL EXCAVATION AT THE DIRECTION OF THE ENGINEER IN THE FIELD.
5. THE RIPRAP AND POROUS BACKFILL WITHIN THE CULVERT ONLY APPLY TO FISH PASSAGE CULVERT AT DRY CREEK.

FISH PASSAGE CULVERT DETAIL

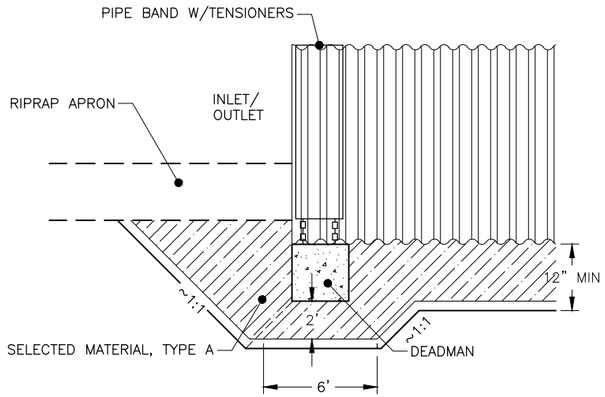
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C4003cnst-17258FB-FishPassageDTL Wed, May/10/23 02:30pm

NO.	DATE	REVISION

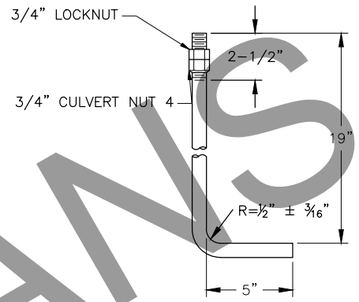
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E6	E7



DEADMAN, ELEVATION



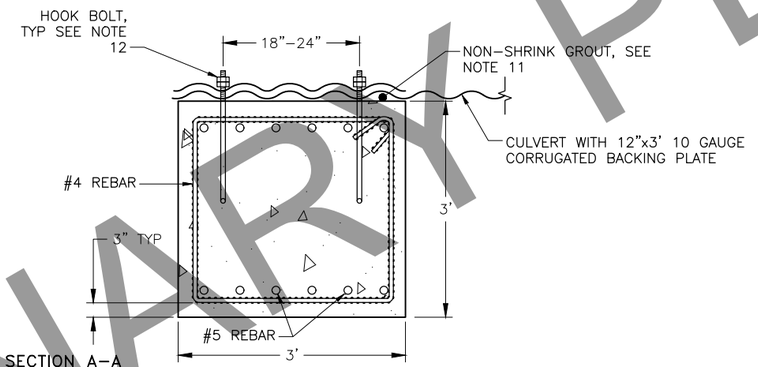
DEADMAN, SIDE VIEW



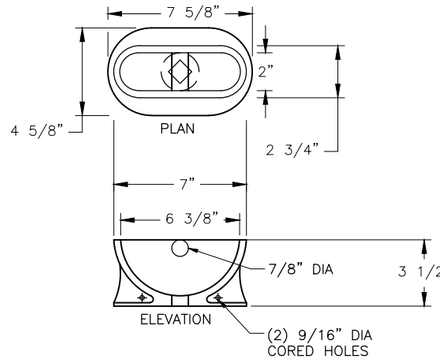
HOOK BOLT

DEADMAN NOTES:

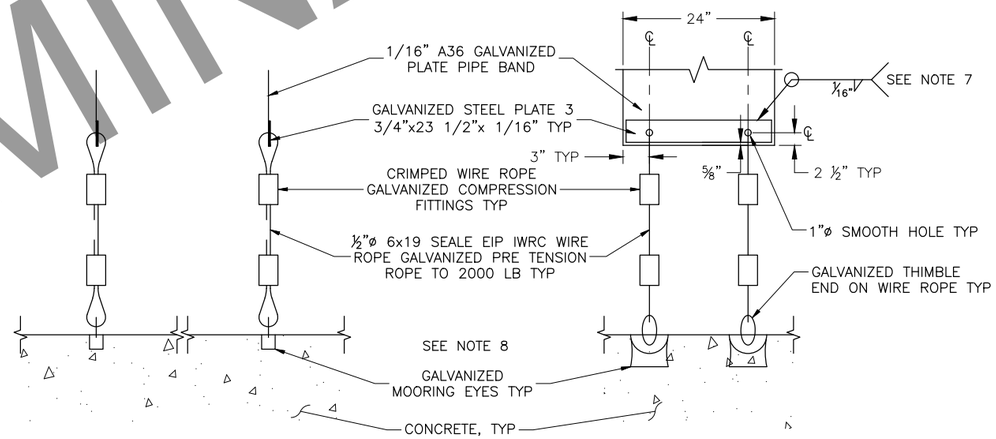
1. PLACE DEADMAN PERPENDICULAR TO THE CULVERT.
2. ALL REBAR MUST BE PREFORMED STEEL BARS WITH A YIELD STRENGTH OF 60,000 POUNDS PER SQUARE INCH.
3. ALL REBAR LAP SPLICES MUST BE STAGGERED AND AT LEAST 16 BAR DIAMETERS LONG.
4. THE LENGTH OF THE PIPE BAND IS A MINIMUM OF HALF THE CIRCUMFERENCE OF THE CULVERT PLUS ONE FOOT.
5. THE PIPE BAND MUST BE GALVANIZED. HOOK BOLTS AND NUTS MUST BE GALVANIZED.
6. DEADMAN MAY BE PRECAST.
7. COAT ALL WELDS ACCORDING TO AASHTO M36 WITH ZINC RICH PAINT MEETING ASTM A-780 STANDARD
8. TO WITHSTAND ULTIMATE LOAD OF 9,000 LBS IN BENDING.
9. CONCRETE DEADMAN SHALL BE CAST TO CONFORM TO THE OUTER RADIUS OF THE CULVERT.
10. USE A SPREADER BEAM/BAR WHEN LIFTING DEADMAN TO AVOID BENDING OF MOORING EYES.
11. THE PIPE SHALL BE SET IN A BED OF NON-SHRINK GROUT OF SUFFICIENT THICKNESS TO FULLY FILL THE CORRUGATIONS AFTER TENSIONING OF THE ANCHOR BOLTS AND TIE-DOWN BAND. THE DEADMAN SURFACE SHALL BE PROPERLY PREPARED FOR BEST BONDING WITH GROUT – CLEAN, DUST FREE, SATURATED SURFACE DRY (SSD) CONDITION. BOTTOM OF PIPE SHALL BE AS CLEAN AND DUST FREE AS PRACTICABLE. GROUT SHALL BE FILLETED/CROWNED ALONG SIDES OF PIPE AT THE DEADMAN/PIPE SEAM IN ORDER TO REDUCE WATER INFILTRATION INTO THE GROUTED AREA.
12. ANCHOR HOOK BOLTS SHOULD PENETRATE CULVERT INVERT IN A CORRUGATION VALLEY TO PROTECT NUT. ANCHOR BOLT HOLES SHALL BE DRILLED, NOT CUT WITH A TORCH, AND COATED WITH APPROPRIATE ZINC RICH PAINT PRIOR TO INSTALLATION. AFTER INSTALLATION AND ANCHOR BOLT NUTS HAVE BEEN TIGHTENED, COAT THE ANCHOR BOLT AND SURROUNDING AREA WITH ZINC RICH PAINT.



SECTION A-A

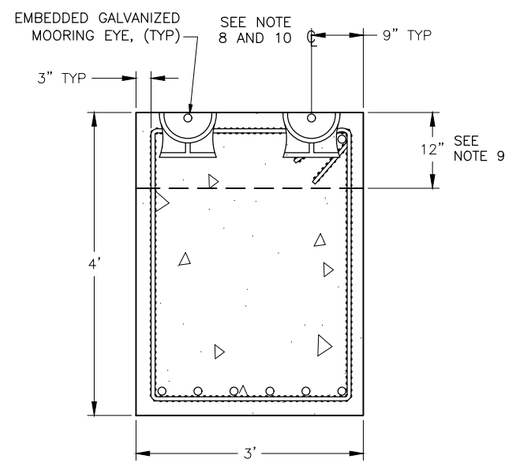


MOORING EYE



PIPE BAND TENSIONER
FRONT VIEW

PIPE BAND TENSIONER
SIDE VIEW



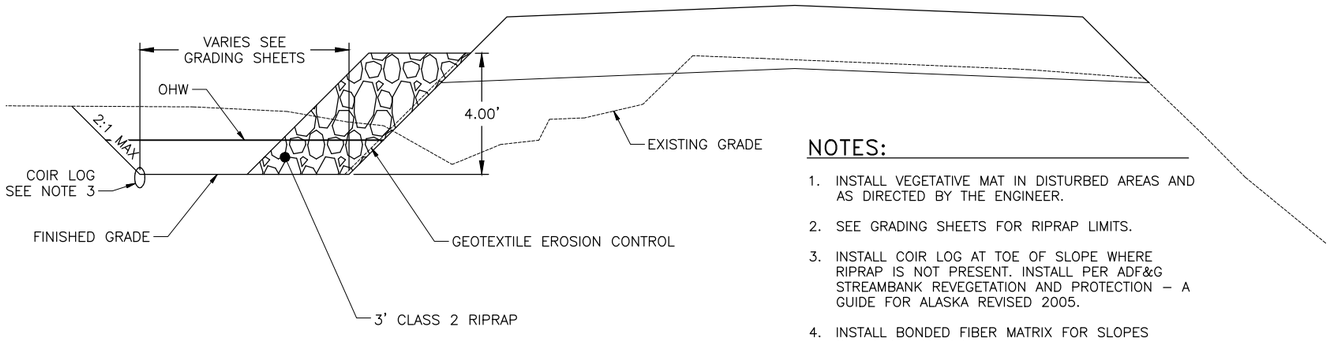
SECTION B-B

FISH PASSAGE DEADMAN DETAIL

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C400Jcnst-17258FB-Deadguy Wed, May/10/23 02:30pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	E7	E7

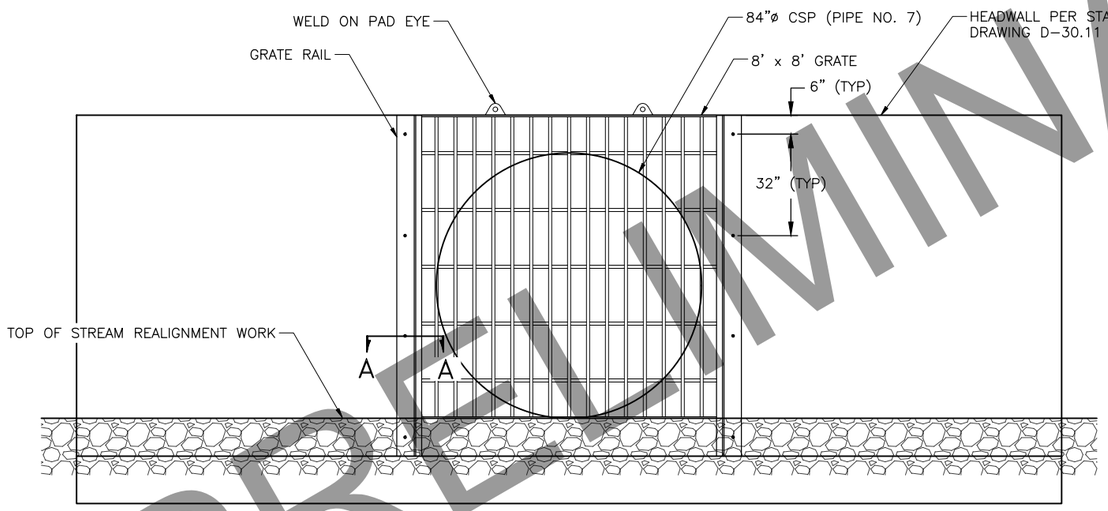


NOTES:

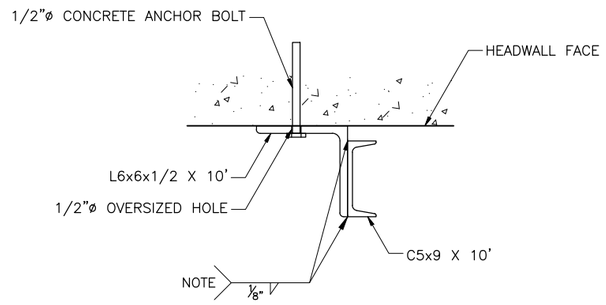
1. INSTALL VEGETATIVE MAT IN DISTURBED AREAS AND AS DIRECTED BY THE ENGINEER.
2. SEE GRADING SHEETS FOR RIPRAP LIMITS.
3. INSTALL COIR LOG AT TOE OF SLOPE WHERE RIPRAP IS NOT PRESENT. INSTALL PER ADF&G STREAMBANK REVEGETATION AND PROTECTION – A GUIDE FOR ALASKA REVISED 2005.
4. INSTALL BONDED FIBER MATRIX FOR SLOPES STEEPER THAN 4:1.

CREEK SECTION DETAIL

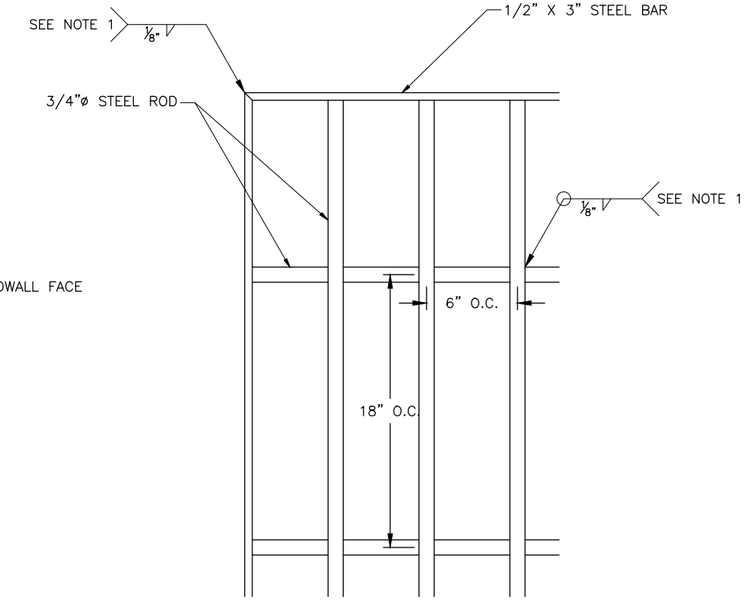
"S" STA 41+88 TO STA 43+49
"S" STA 64+33 TO STA 65+25



CULVERT GRATE ELEVATION
NTS



SECTION A–A
NTS



GRATE DETAILS
NTS

GRATE NOTES:

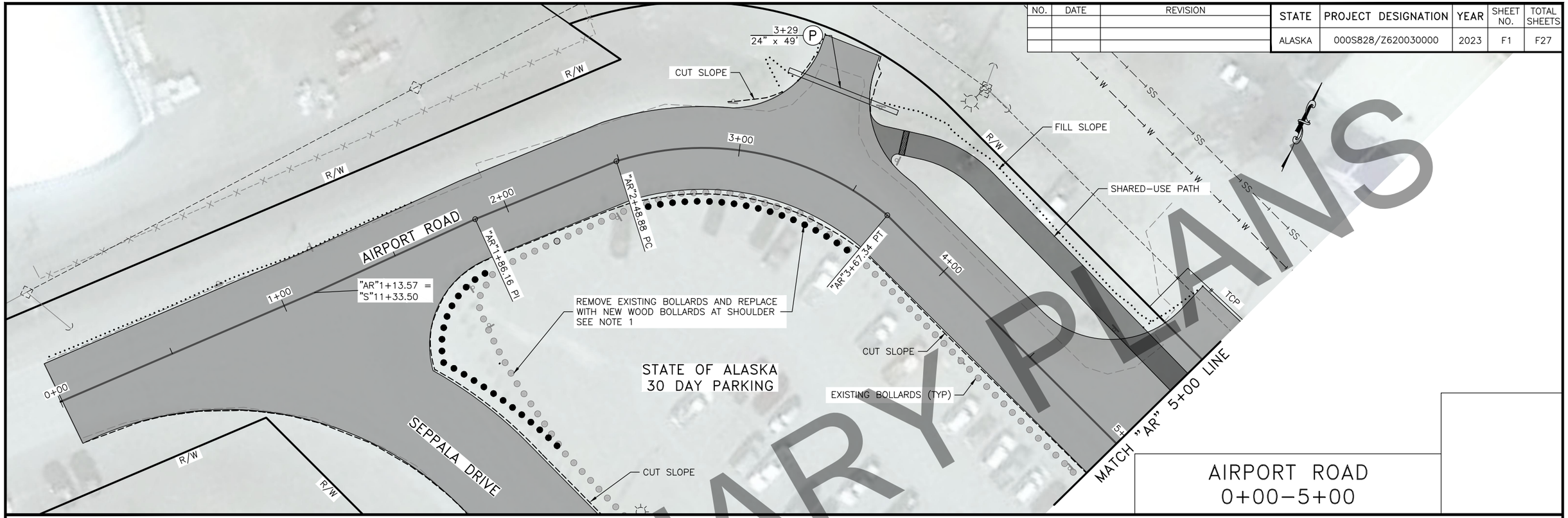
1. COAT ALL WELDS ACCORDING TO AASHTO M36 WITH ZINC RICH PAINT MEETING ASTM A–780 STANDARD.

CREEK SECTION DETAIL

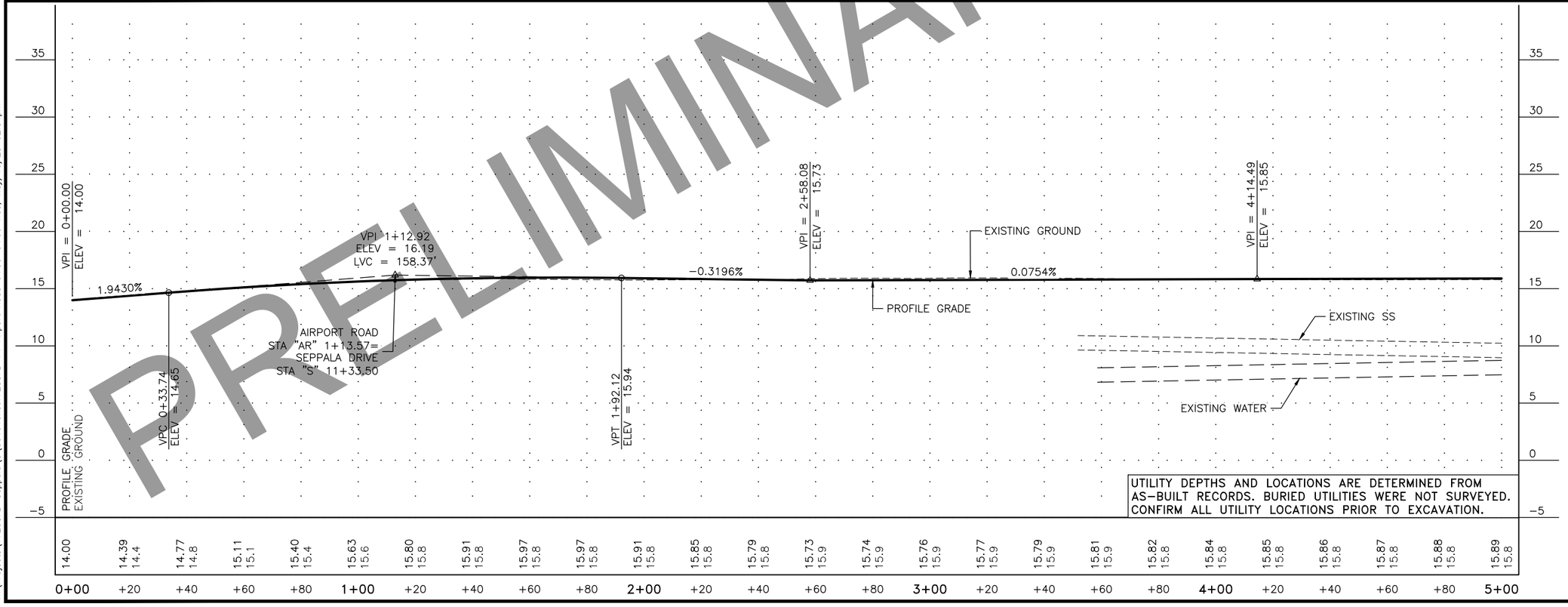
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C400Scnst-17258FB-Creek-DTL Wed, May/10/23 02:30pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F1	F27



AIRPORT ROAD
0+00–5+00



UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

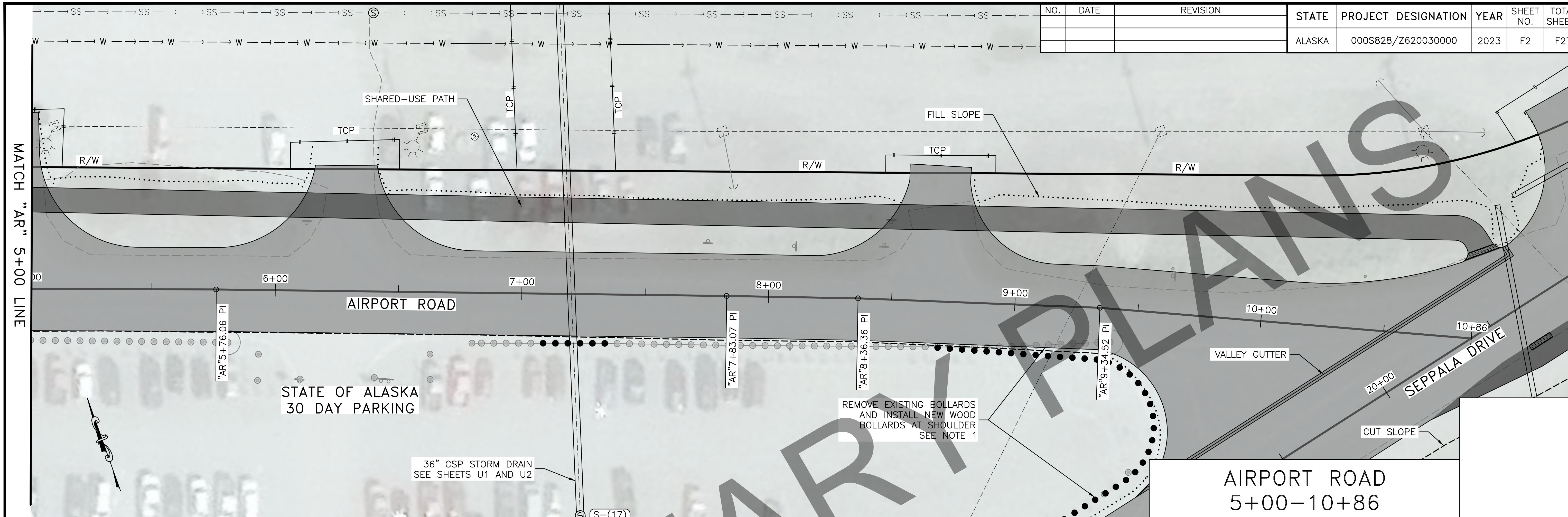
NOTES:

1. UPON REMOVAL OF BOLLARDS CONTRACTOR SHALL BACKFILL HOLE WITH SELECTED MATERIAL, TYPE A COMPACTED TO 95% DENSITY AND PATCH ASPHALT WITH 2" OF ASPHALT. THIS WORK IS SUBSIDIARY TO OTHER WORK ITEMS AND NO SEPARATE PAYMENT WILL BE MADE.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F1 Airport Road 0+00-5+00 Wed, May/10/23 02:34pm

NO.	DATE	REVISION

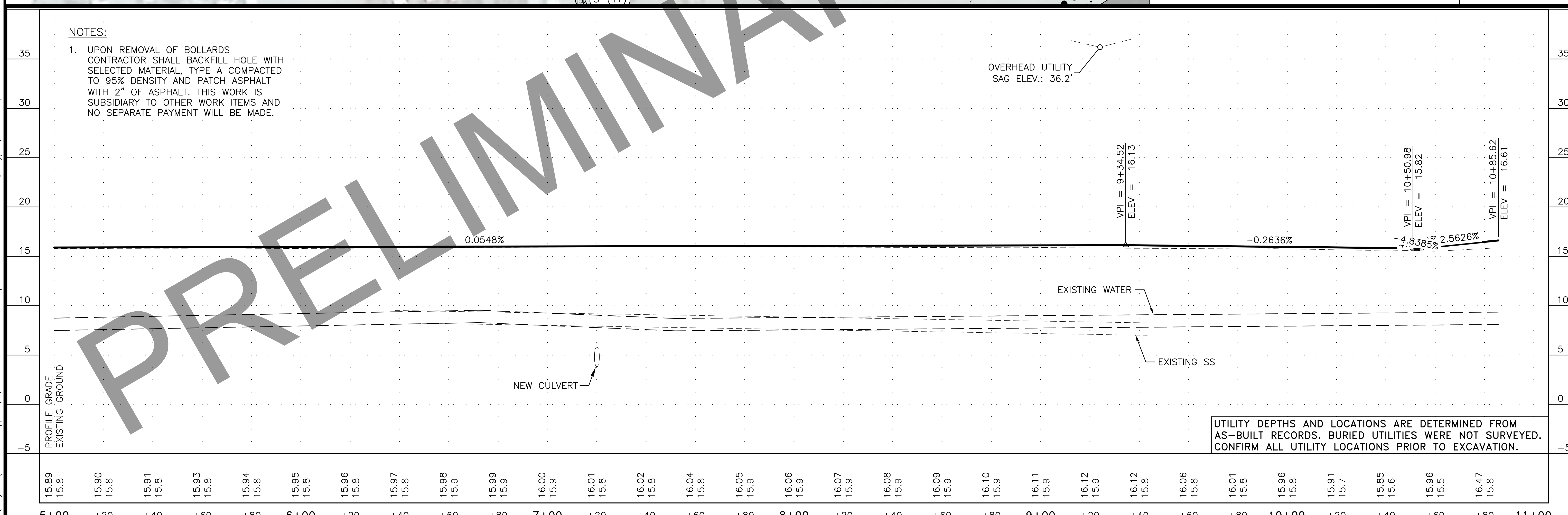
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F2	F27



AIRPORT ROAD
5+00–10+86

NOTES:

1. UPON REMOVAL OF BOLLARDS CONTRACTOR SHALL BACKFILL HOLE WITH SELECTED MATERIAL, TYPE A COMPACTED TO 95% DENSITY AND PATCH ASPHALT WITH 2" OF ASPHALT. THIS WORK IS SUBSIDIARY TO OTHER WORK ITEMS AND NO SEPARATE PAYMENT WILL BE MADE.



UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F2 Airport Road 5+00-10+00 Wed, May/10/23 02:34pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F3	F27

STATE OF ALASKA
30 DAY PARKING

"AR"1+86.16 PI

REMOVE EXISTING BOLLARDS AND REPLACE WITH NEW WOOD BOLLARDS AT SHOULDER SEE NOTE 1

AIRPORT ROAD

2+00

1+00

R/W

"AR"1+13.57 =
"S"11+33.50

CUT SLOPE

10+00 11+00 12+00 13+00 14+00 15+00 16+00

SEPPALA DRIVE

FILL SLOPE

MATCH "S" 16+20 LINE

R/W

R/W

R/W

SEPPALA DRIVE
10+00–16+20

NOTES:

1. UPON REMOVAL OF BOLLARDS CONTRACTOR SHALL BACKFILL HOLE WITH SELECTED MATERIAL, TYPE A COMPACTED TO 95% DENSITY AND PATCH ASPHALT WITH 2" OF ASPHALT. THIS WORK IS SUBSIDIARY TO OTHER WORK ITEMS AND NO SEPARATE PAYMENT WILL BE MADE.

VPI = 11+33.18
ELEV = 15.75

AIRPORT ROAD
STA "AR" 1+13.57=
SEPPALA DRIVE
STA "S" 11+33.50
ELEV:15.75

PROFILE GRADE

0.2948%

0.0134%

EXISTING GROUND

VPC 15+30.00
ELEV = 15.98

VPI 16+20.00
ELEV = 15.99
LVC = 180.00'

PROFILE GRADE
EXISTING GROUND

30 25 20 15 10 5 0 −5 −10

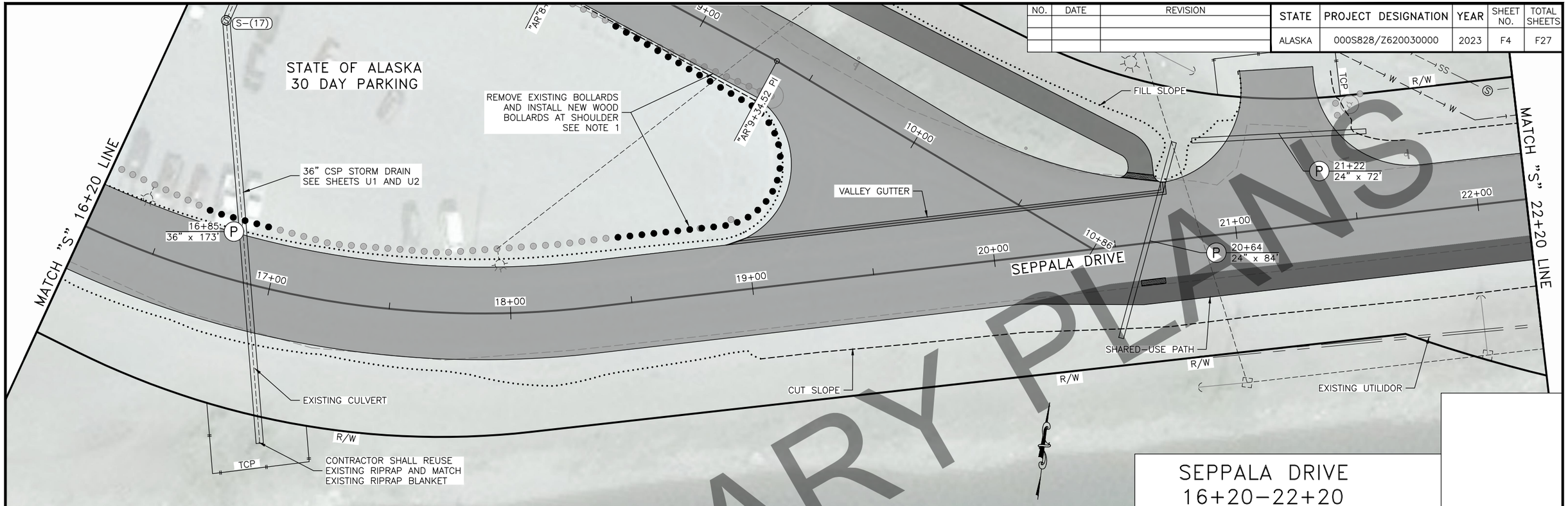
10+20	+40	+60	+80	11+00	+20	+40	+60	+80	12+00	+20	+40	+60	+80	13+00	+20	+40	+60	+80	14+00	+20	+40	+60	+80	15+00	+20	+40	+60	+80	16+00	16+20
12.5				15.5		15.77 15.7		15.83 15.5	15.89 15.7	15.94 15.9	15.94 15.9	15.94 15.9	15.94 15.9	15.95 16.0	15.95 16.0	15.95 16.0	15.95 16.0	15.96 15.9	15.96 15.9	15.96 15.9	15.96 15.8	15.97 15.8	15.97 15.8	15.97 15.8	15.98 15.8	15.98 15.8	15.98 15.9	15.99 15.9	16.01 15.9	16.04 15.9	16.07 16.0

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 16327O, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-10+00-16+00 Wed, May/10/23 02:35pm

NO.	DATE	REVISION

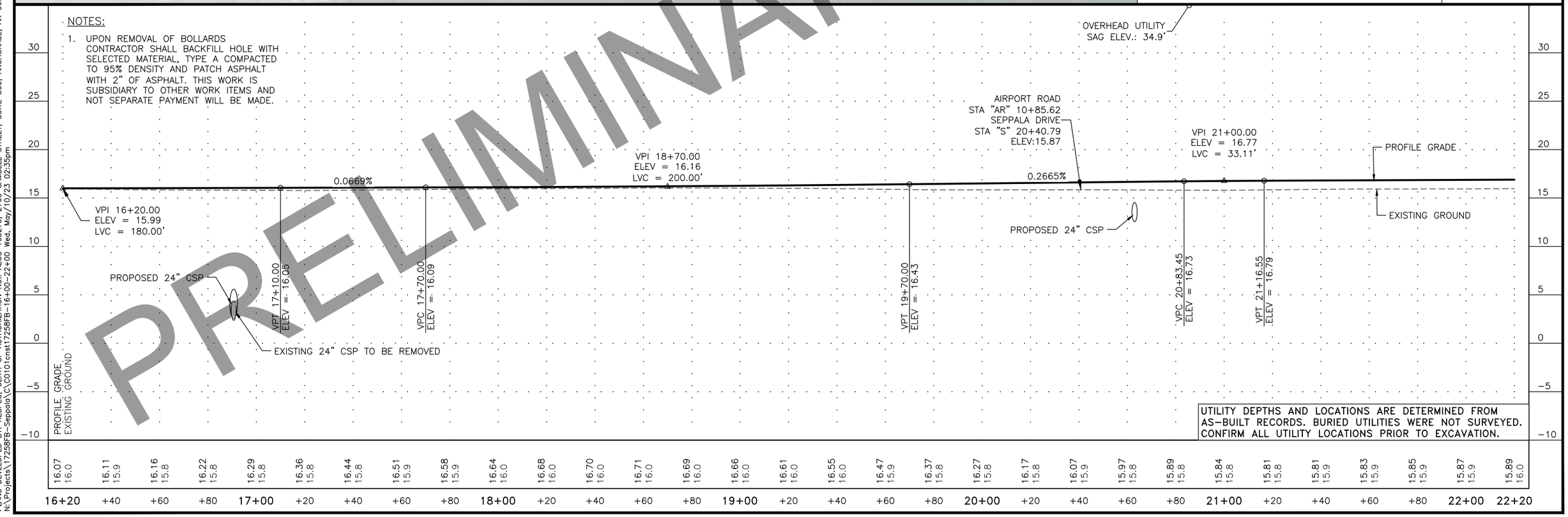
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F4	F27



SEPPALA DRIVE
16+20–22+20

NOTES:

1. UPON REMOVAL OF BOLLARDS CONTRACTOR SHALL BACKFILL HOLE WITH SELECTED MATERIAL, TYPE A COMPACTED TO 95% DENSITY AND PATCH ASPHALT WITH 2" OF ASPHALT. THIS WORK IS SUBSIDIARY TO OTHER WORK ITEMS AND NOT SEPARATE PAYMENT WILL BE MADE.

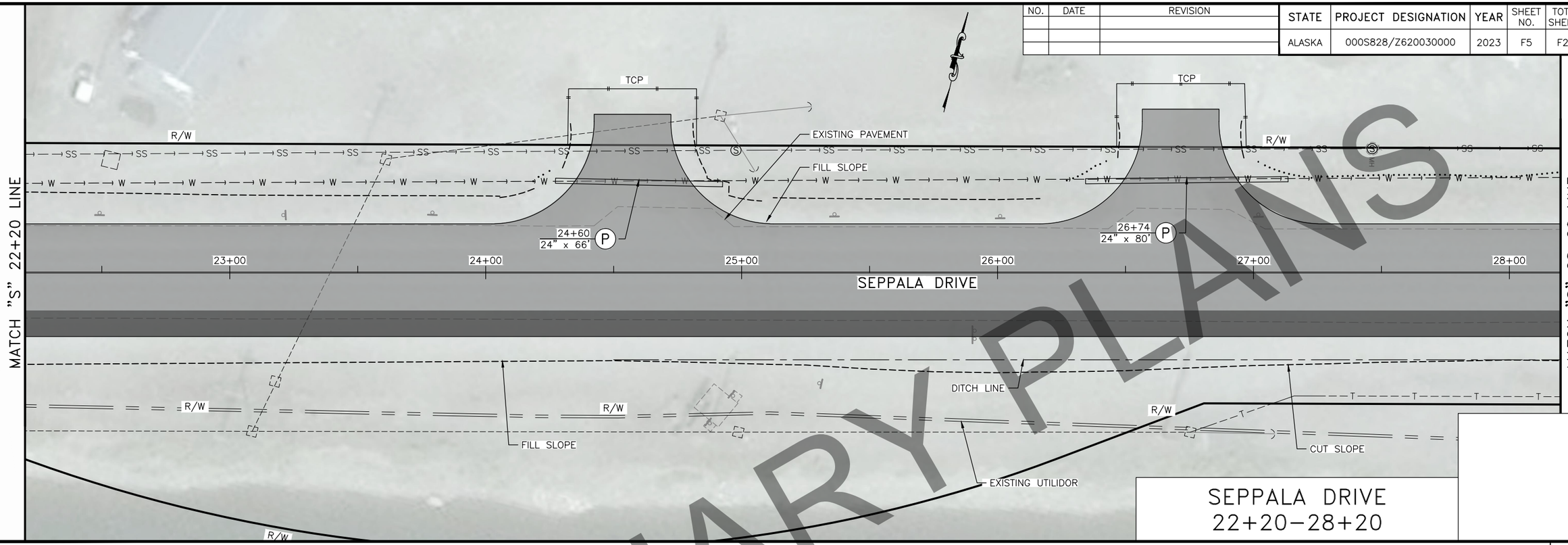


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-16+00-22+00 Wed, May/10/23 02:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F5	F27



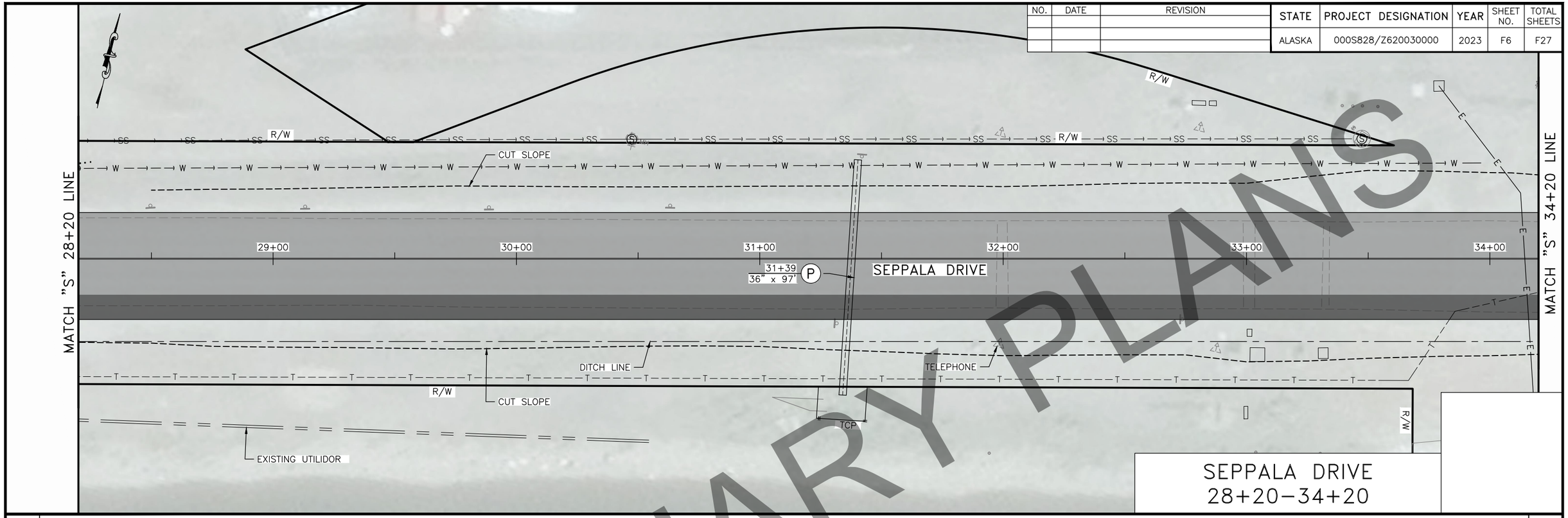
SEPPALA DRIVE
22+20–28+20

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS–BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

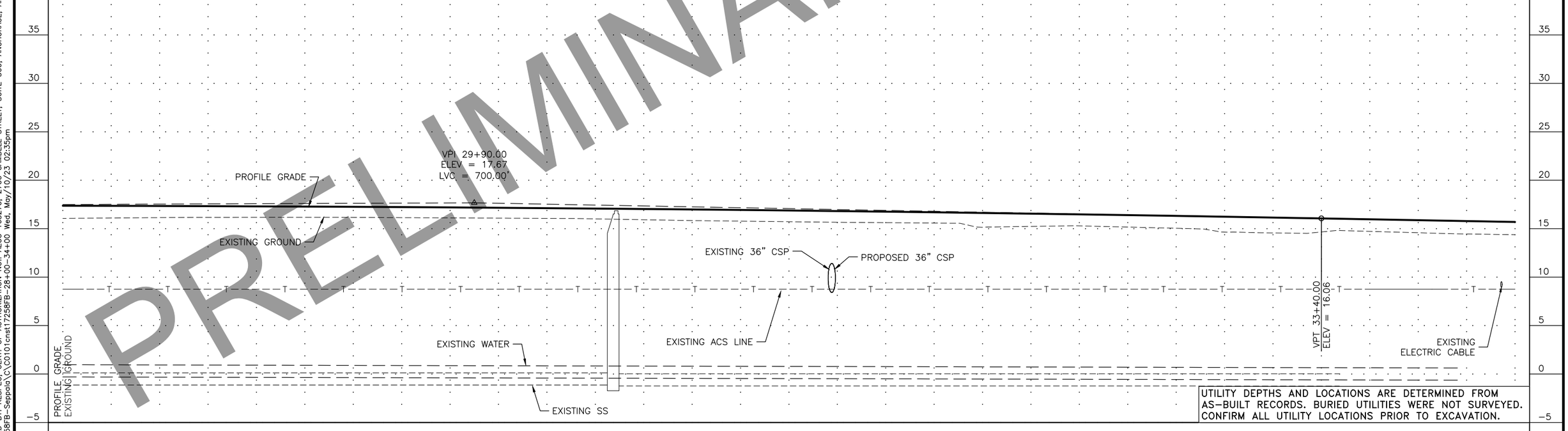
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C0101cnst17258FB–22+00–28+00 Wed, May/10/23 02:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F6	F27



SEPPALA DRIVE
28+20–34+20

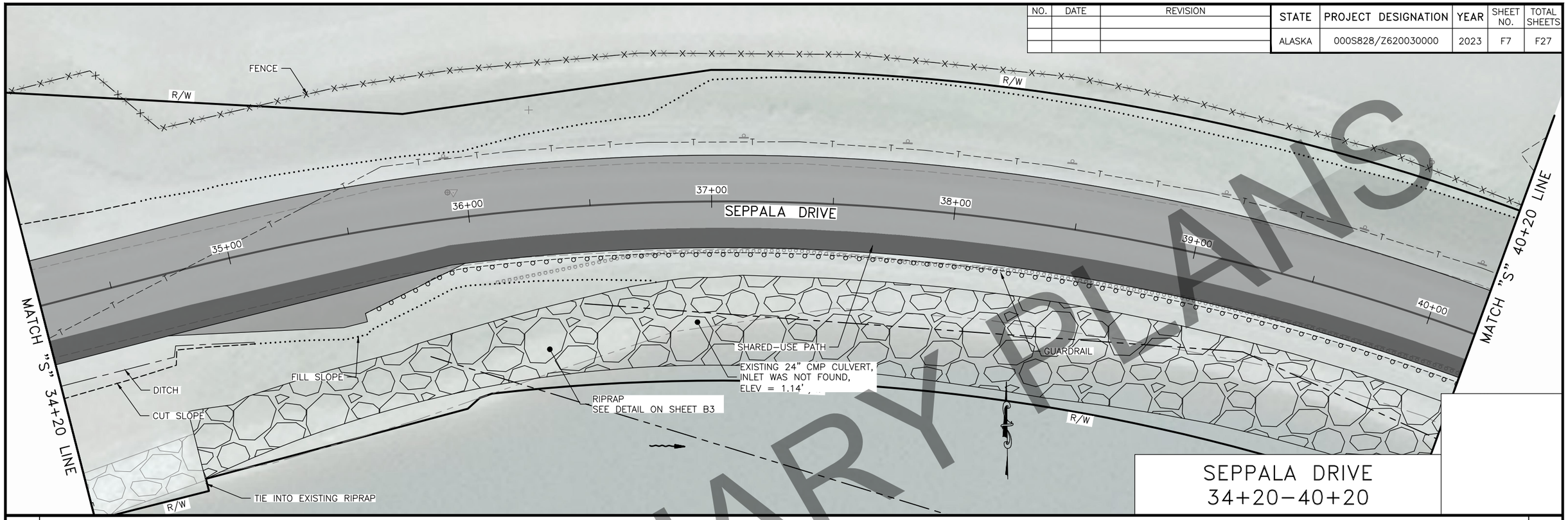


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

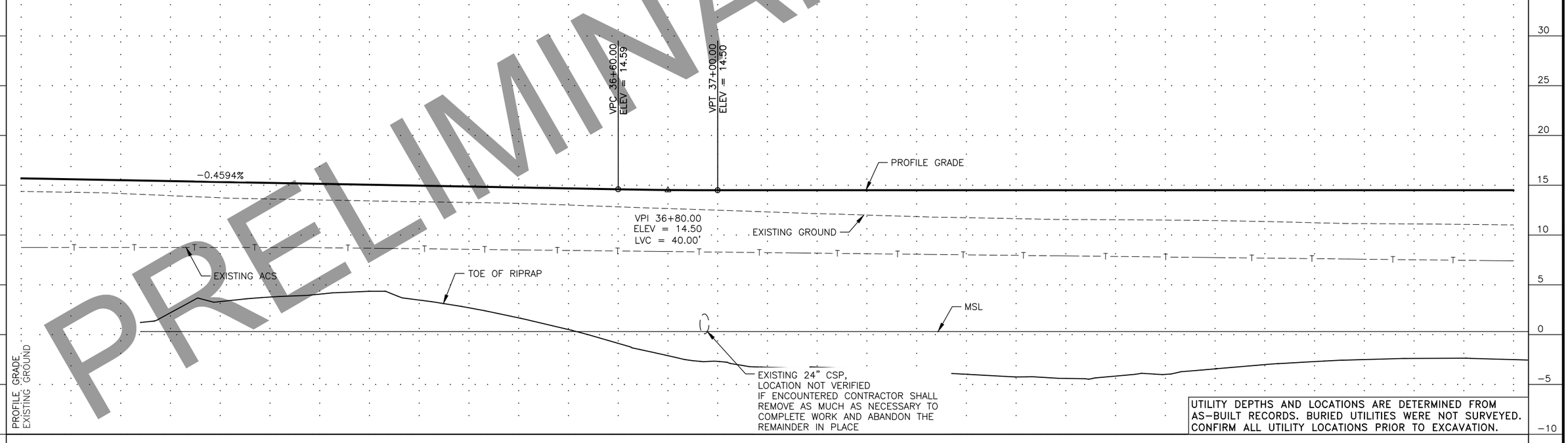
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-28+00-34+00 Wed, May/10/23 02:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F7	F27



SEPPALA DRIVE
34+20–40+20

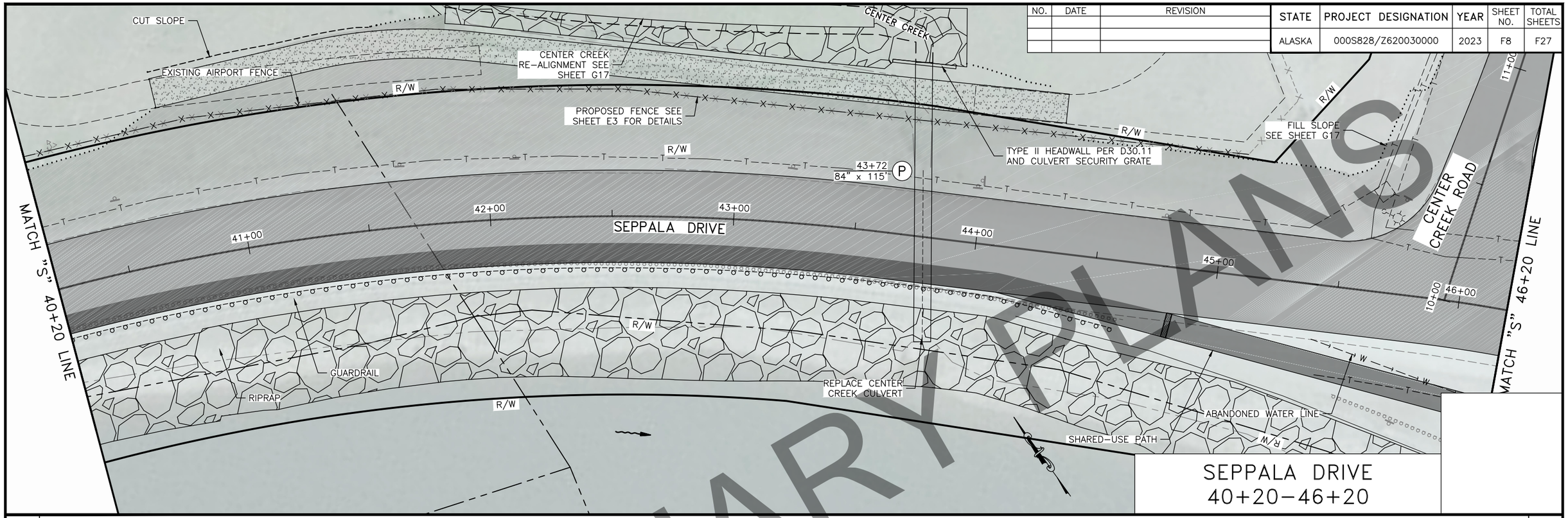


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-34+20-40+220 Wed, May/10/23 02:36pm

NO.	DATE	REVISION

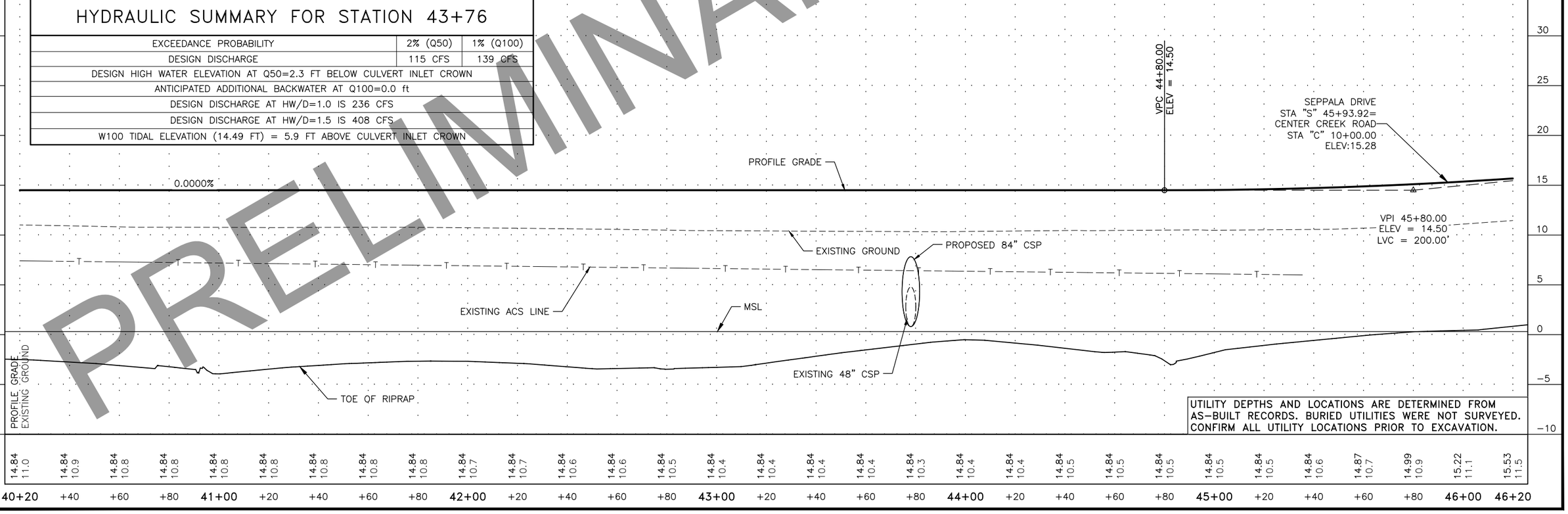
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F8	F27



SEPPALA DRIVE
40+20–46+20

HYDRAULIC SUMMARY FOR STATION 43+76

EXCEEDANCE PROBABILITY	2% (Q50)	1% (Q100)
DESIGN DISCHARGE	115 CFS	139 CFS
DESIGN HIGH WATER ELEVATION AT Q50=2.3 FT BELOW CULVERT INLET CROWN		
ANTICIPATED ADDITIONAL BACKWATER AT Q100=0.0 ft		
DESIGN DISCHARGE AT HW/D=1.0 IS 236 CFS		
DESIGN DISCHARGE AT HW/D=1.5 IS 408 CFS		
W100 TIDAL ELEVATION (14.49 FT) = 5.9 FT ABOVE CULVERT INLET CROWN		

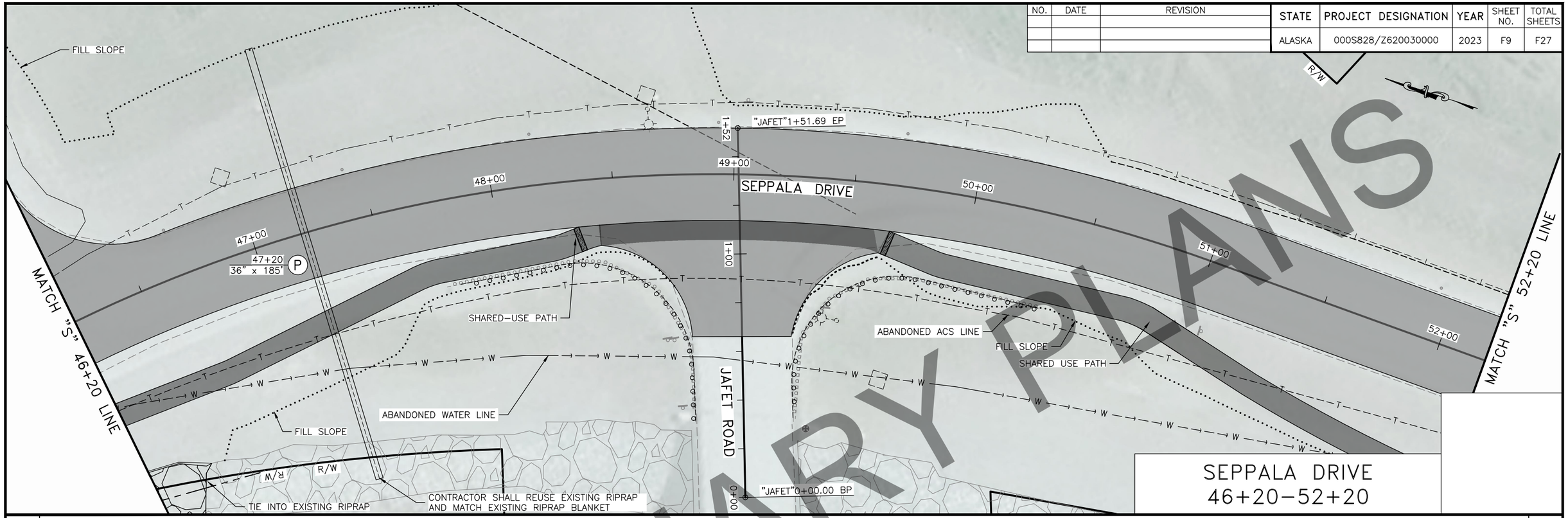


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

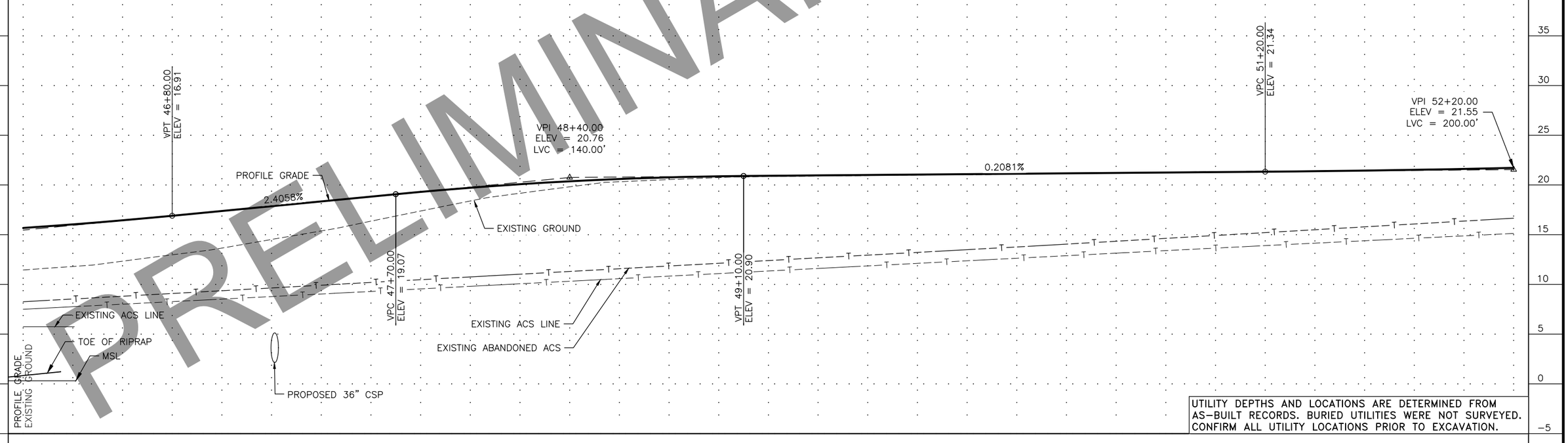
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-40+20-46+20 Wed, May/10/23 03:18pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F9	F27



SEPPALA DRIVE
46+20–52+20



UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-46+20-52+20 Wed, May/10/23 02:37pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F10	F27

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-52+20-58+20 Wed, May/10/23 02:37pm

MATCH "S" 52+20 LINE

MATCH "S" 58+20 LINE

R/W

53+00

54+00

55+00

56+00

57+00

58+00

SEPPALA DRIVE

CUT SLOPE

56+66
18" x 72'
P

"ML"2+42.56 EP

2+43

2+00

PROSPECT PLACE

MCCLAIN LANE

SIDEWALK (TYP)

"ML"1+65.82 PT

"ML"1+16.16 PC

BP/

EXISTING ELECTRICAL LINE

ABANDONED WATER LINE

ABANDONED ACS LINE

FILL SLOPE

SHARED-USE PATH

SEE U-SHEETS FOR PROPOSED WATER WORK

SEPPALA DRIVE
52+20–58+20

VPT 53+20.00
ELEV = 22.44

VPI 52+20.00
ELEV = 21.55
LVC = 200.00'

0.8937%

VPI 54+80.00
ELEV = 23.87
LVC = 200.00'

PROFILE GRADE

−0.4147%

VPI 57+20.00
ELEV = 22.87
LVC = 160.00'

EXISTING GROUND

EXISTING ACS LINE

EXISTING ABANDONED ACS

VPC 53+80.00
ELEV = 22.98

EXISTING ACS LINE

EXISTING ELECTRICAL LINE

VPT 55+80.00
ELEV = 23.45

VPC 56+40.00
ELEV = 23.21

EXISTING WATER

VPT 58+00.00
ELEV = 20.78

PROFILE GRADE
EXISTING GROUND

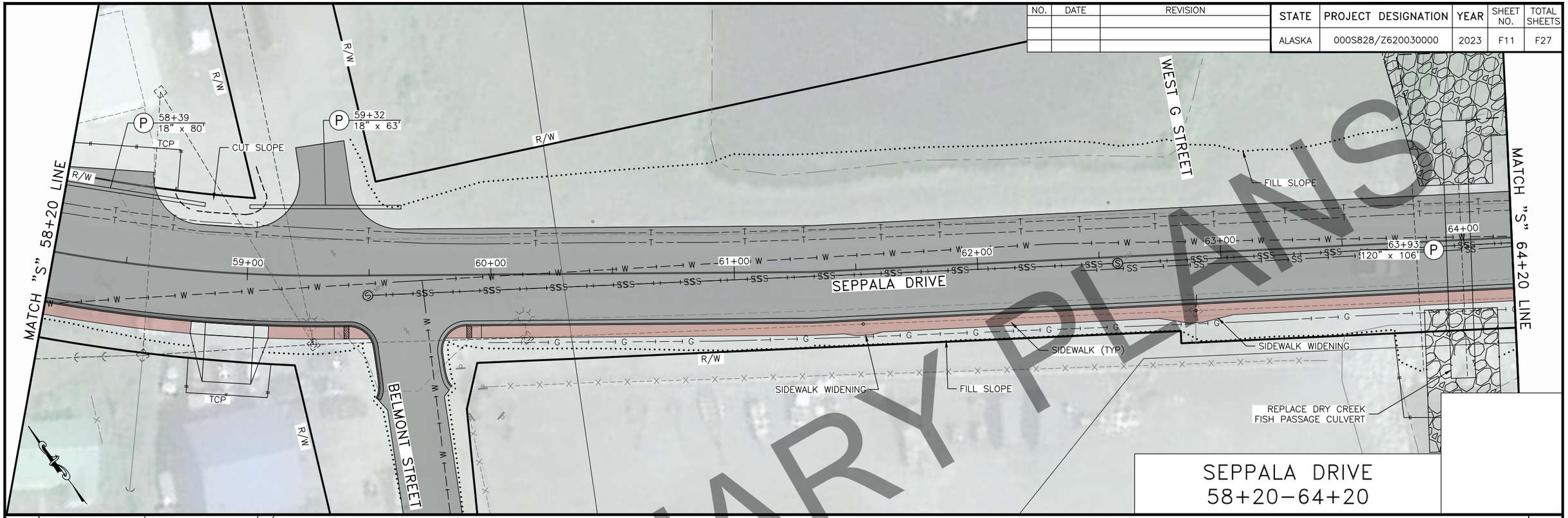
35 30 25 20 15 10 5 0 −5

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

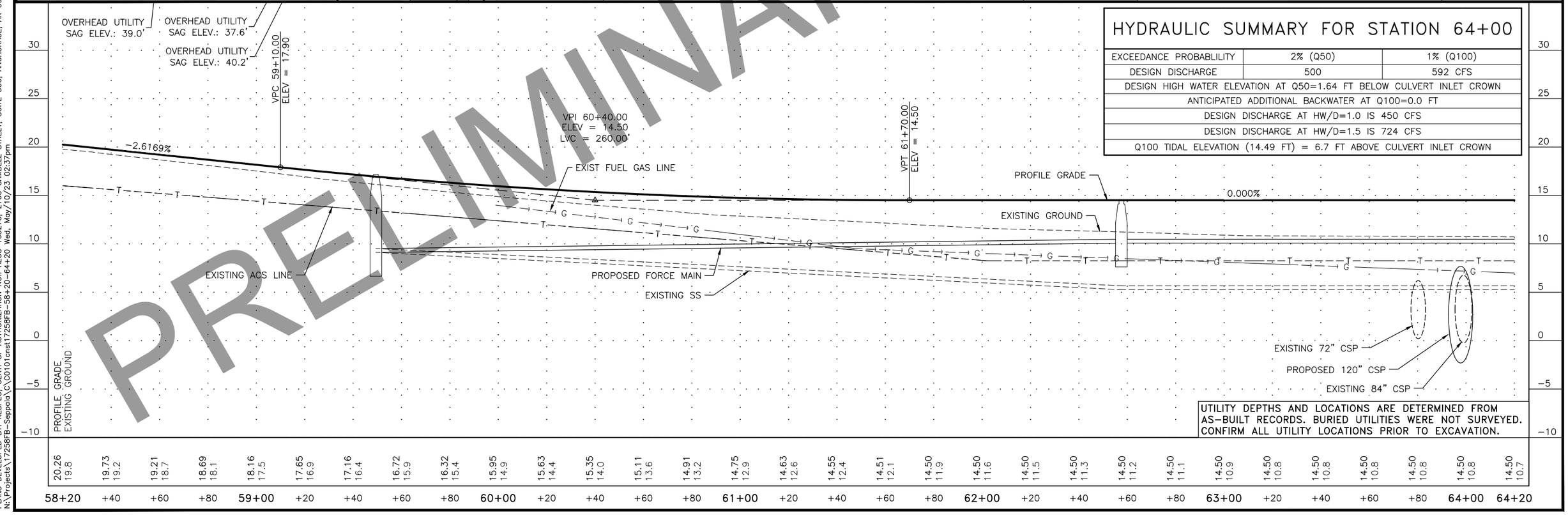
52+20	+40	+60	+80	53+00	+20	+40	+60	+80	54+00	+20	+40	+60	+80	55+00	+20	+40	+60	+80	56+00	+20	+40	+60	+80	57+00	+20	+40	+60	+80	58+00	58+20
21.72 21.7	21.83 21.8	21.97 21.9	22.11 22.0	22.27 22.1	22.44 22.3	22.62 22.4	22.80 22.6	22.98 22.7	23.14 22.8	23.28 22.9	23.39 23.0	23.48 23.1	23.54 23.3	23.58 23.4	23.59 23.4	23.57 23.4	23.52 23.4	23.45 23.4	23.37 23.4	23.29 23.2	23.21 23.0	23.10 22.7	22.93 22.4	22.71 22.1	22.43 21.7	22.10 21.3	21.72 21.0	21.28 20.6	20.78 20.2	20.26 19.8

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F11	F27



SEPPALA DRIVE
58+20–64+20



HYDRAULIC SUMMARY FOR STATION 64+00

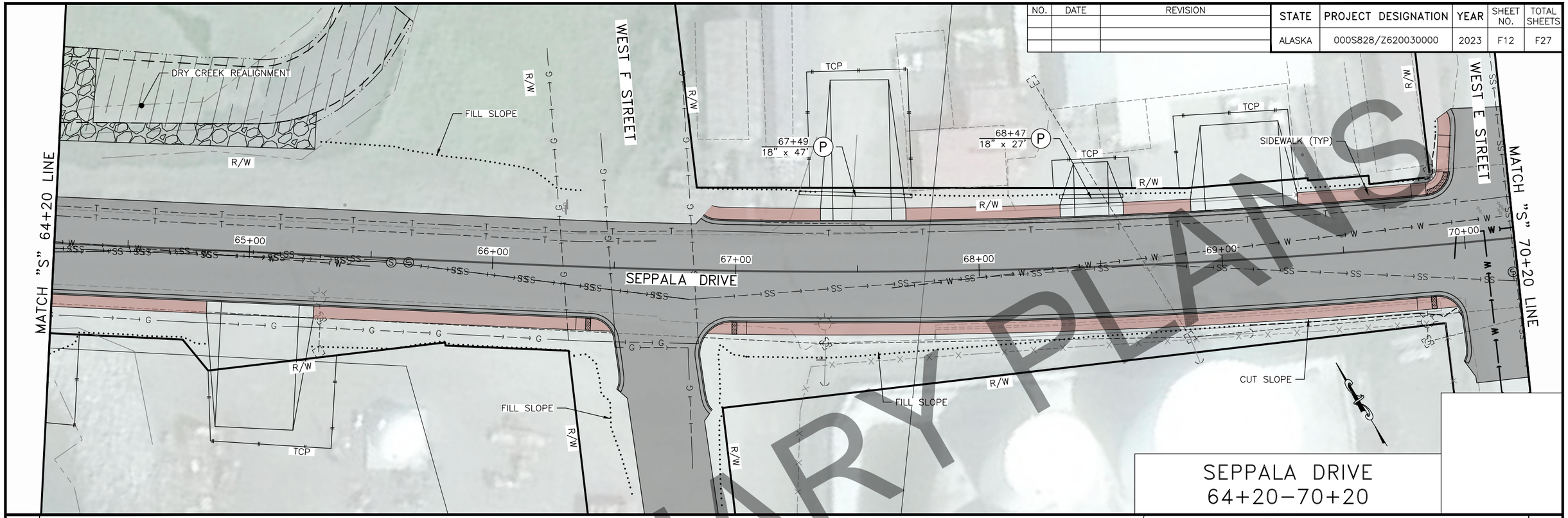
EXCEEDANCE PROBABLILITY	2% (Q50)	1% (Q100)
DESIGN DISCHARGE	500	592 CFS
DESIGN HIGH WATER ELEVATION AT Q50=1.64 FT BELOW CULVERT INLET CROWN		
ANTICIPATED ADDITIONAL BACKWATER AT Q100=0.0 FT		
DESIGN DISCHARGE AT HW/D=1.0 IS 450 CFS		
DESIGN DISCHARGE AT HW/D=1.5 IS 724 CFS		
Q100 TIDAL ELEVATION (14.49 FT) = 6.7 FT ABOVE CULVERT INLET CROWN		

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

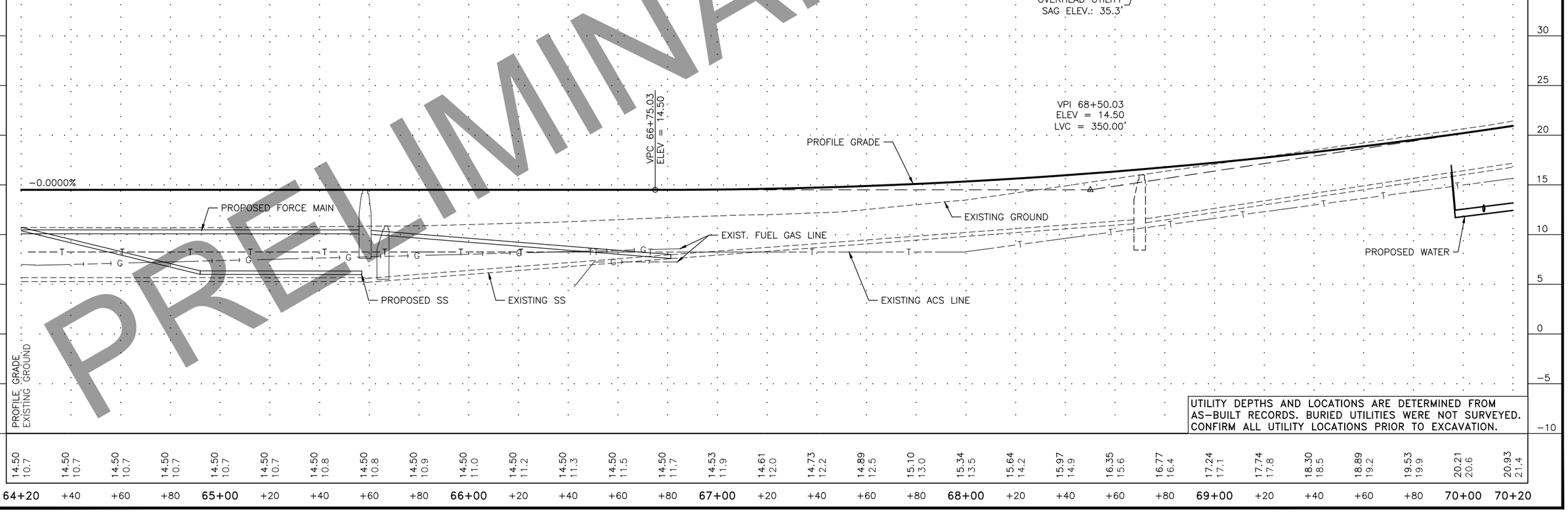
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-58+20-64+20 Wed, May/10/23 02:37pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F12	F27



SEPPALA DRIVE
64+20–70+20



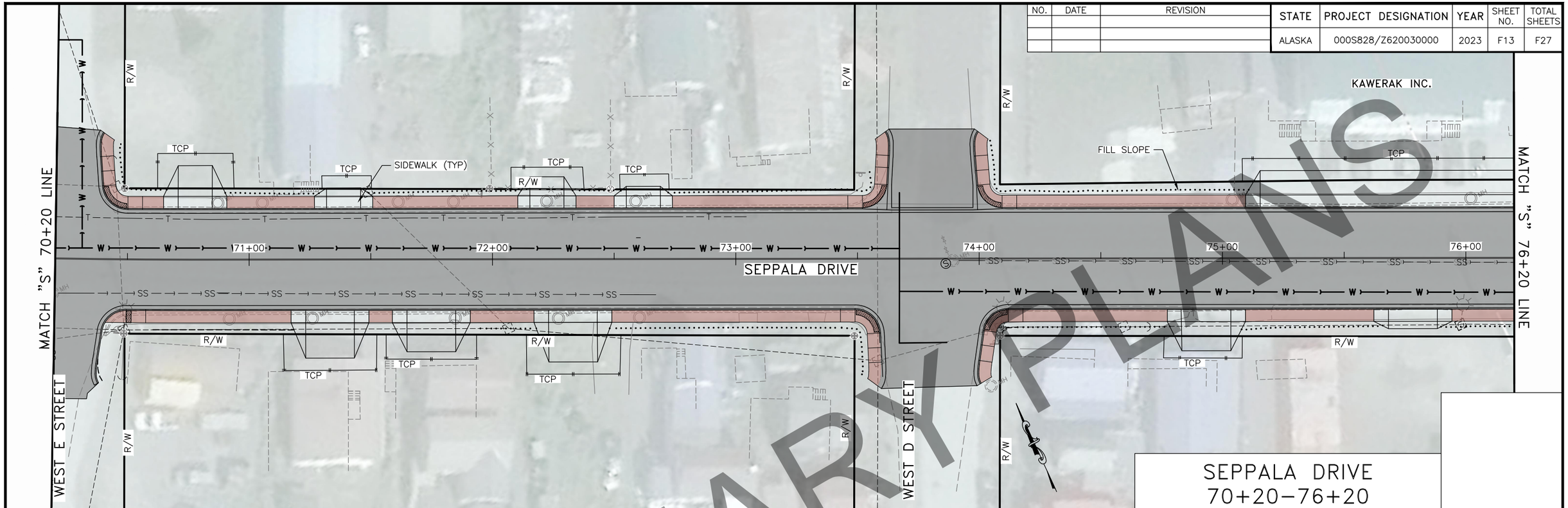
64+20	+40	+60	+80	65+00	+20	+40	+60	+80	66+00	+20	+40	+60	+80	67+00	+20	+40	+60	+80	68+00	+20	+40	+60	+80	69+00	+20	+40	+60	+80	70+00	70+20
14.50 10.7	14.50 10.7	14.50 10.7	14.50 10.7	14.50 10.7	14.50 10.7	14.50 10.8	14.50 10.8	14.50 10.9	14.50 11.0	14.50 11.2	14.50 11.3	14.50 11.5	14.50 11.7	14.53 11.9	14.61 12.0	14.73 12.2	14.89 12.5	15.10 13.0	15.34 13.5	15.64 14.2	15.97 14.9	16.35 15.6	16.77 16.4	17.24 17.1	17.74 17.8	18.30 18.5	18.89 19.2	19.53 19.9	20.21 20.6	20.93 21.4

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS–BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

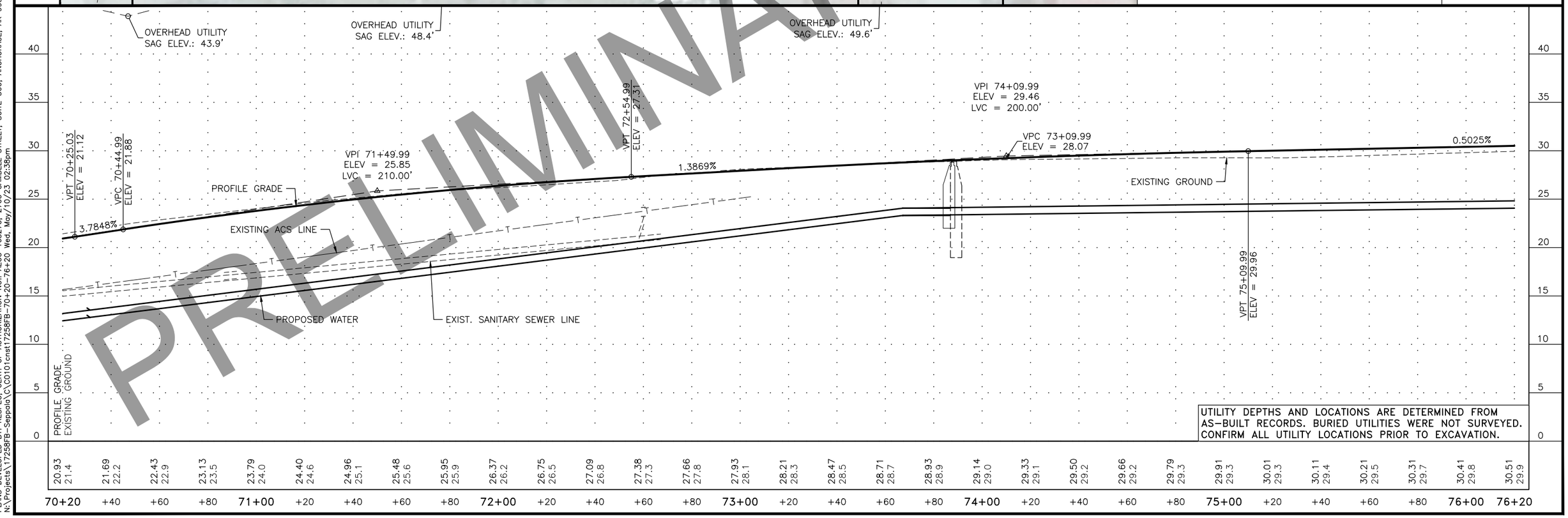
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C0101cnst17258FB–64+20–70+20 Wed, May/10/23 02:37pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F13	F27



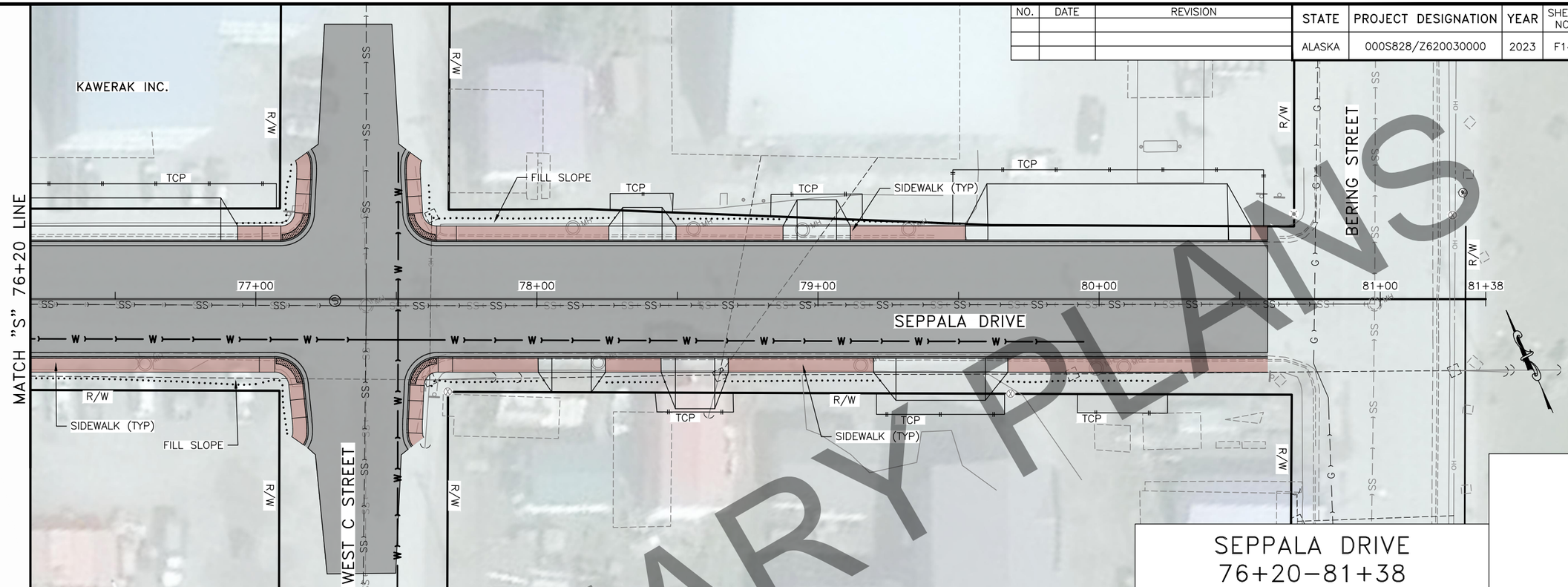
SEPPALA DRIVE
70+20–76+20



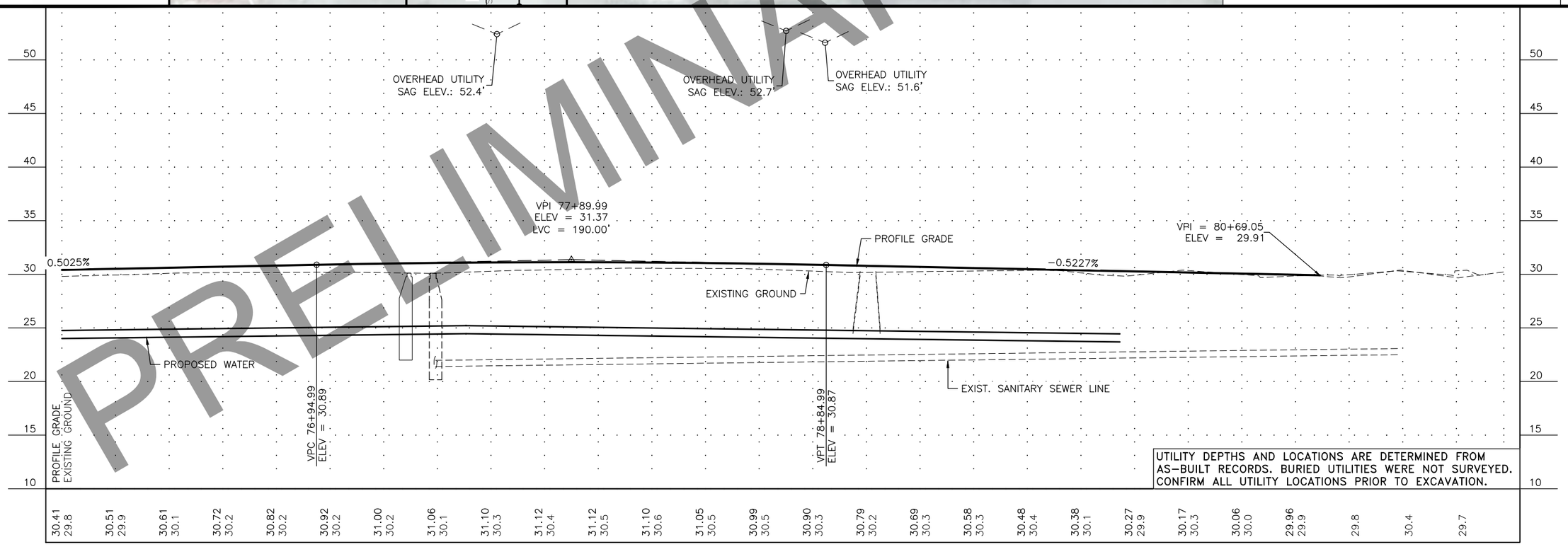
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-70+20-76+20 Wed, May/10/23 02:38pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F14	F27



SEPPALA DRIVE
76+20–81+38

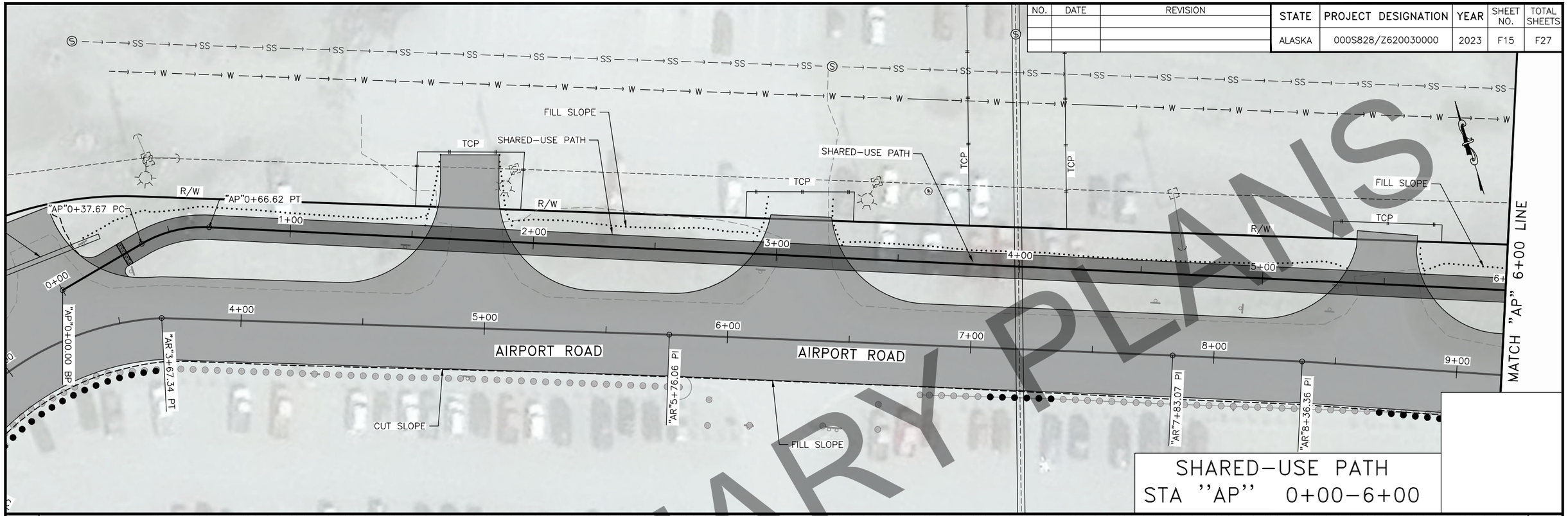


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

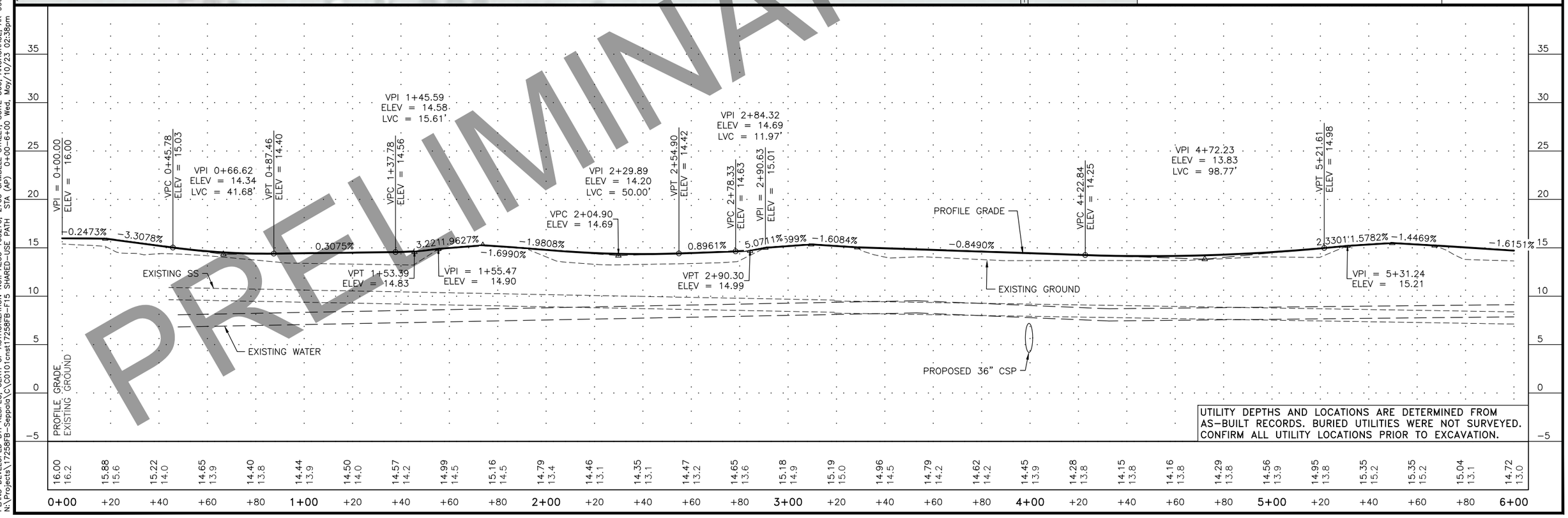
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-76+00-81+38 Wed, May/10/23 02:38pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F15	F27



SHARED-USE PATH
STA ''AP'' 0+00-6+00

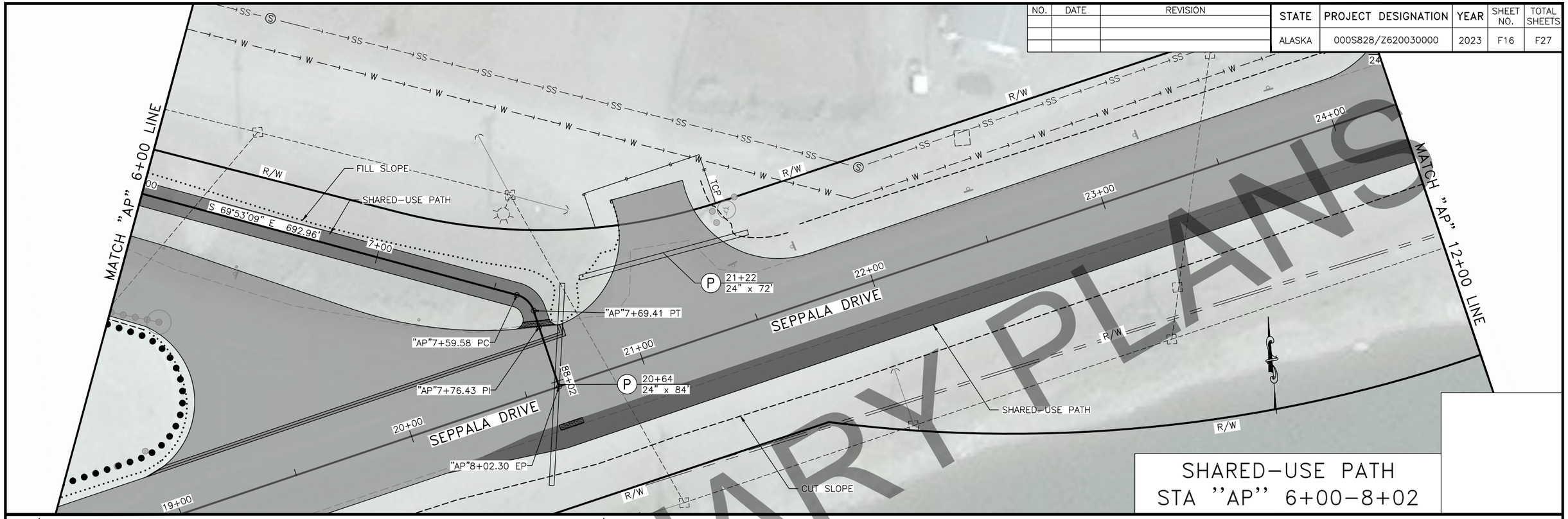


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

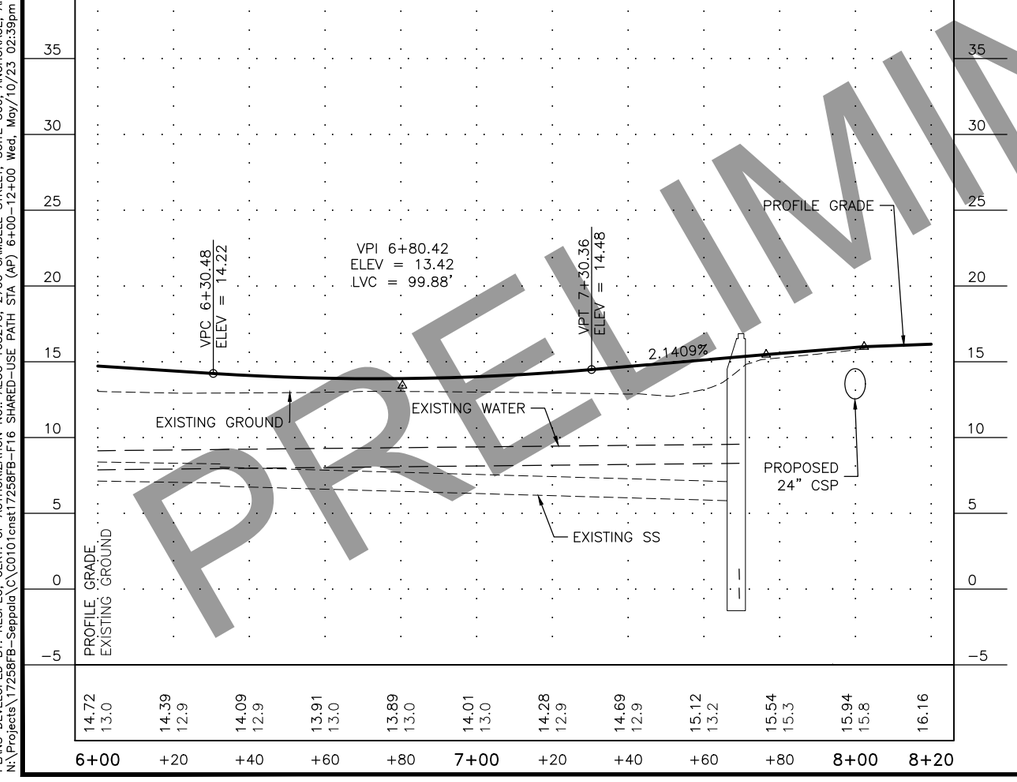
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F15 SHARED-USE PATH STA (AP) 0+00-6+00 Wed, May/10/23 02:38pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F16	F27



SHARED-USE PATH
STA "AP" 6+00-8+02

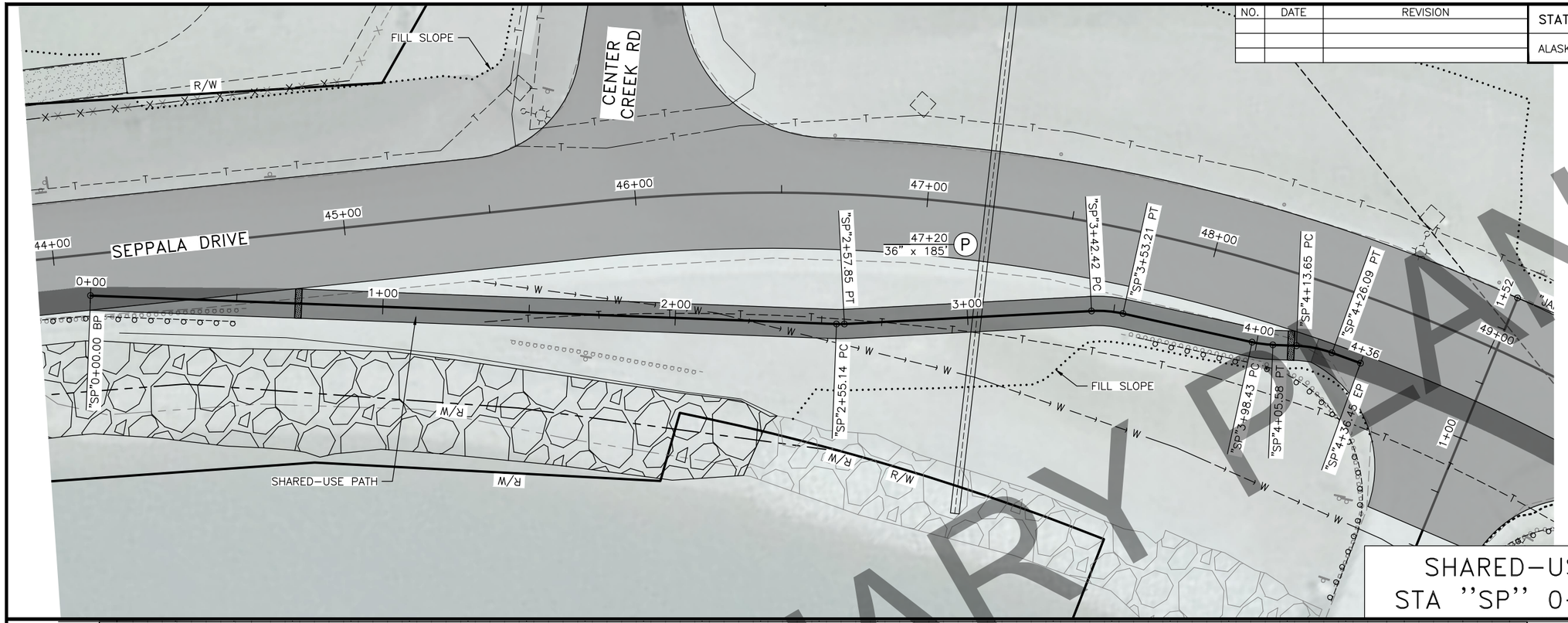


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

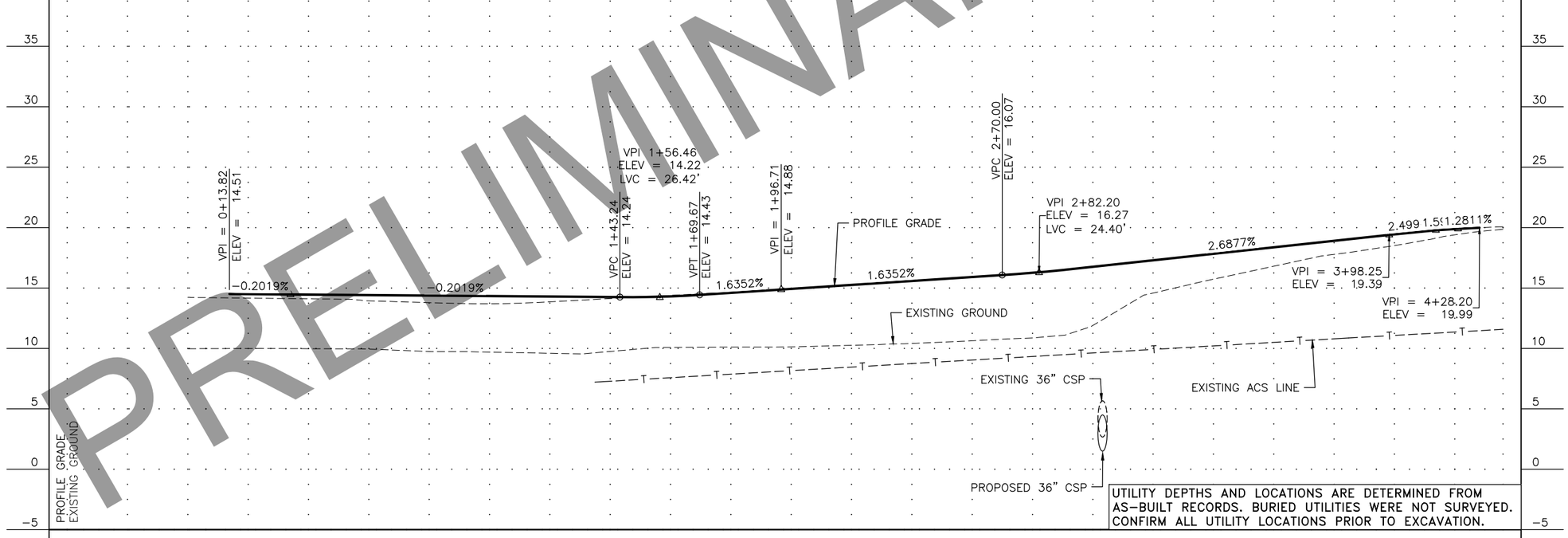
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F16 SHARED-USE PATH STA (AP) 6+00-12+00 Wed, May/10/23 02:39pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F17	F27



SHARED-USE PATH
STA "SP" 0+00-4+36

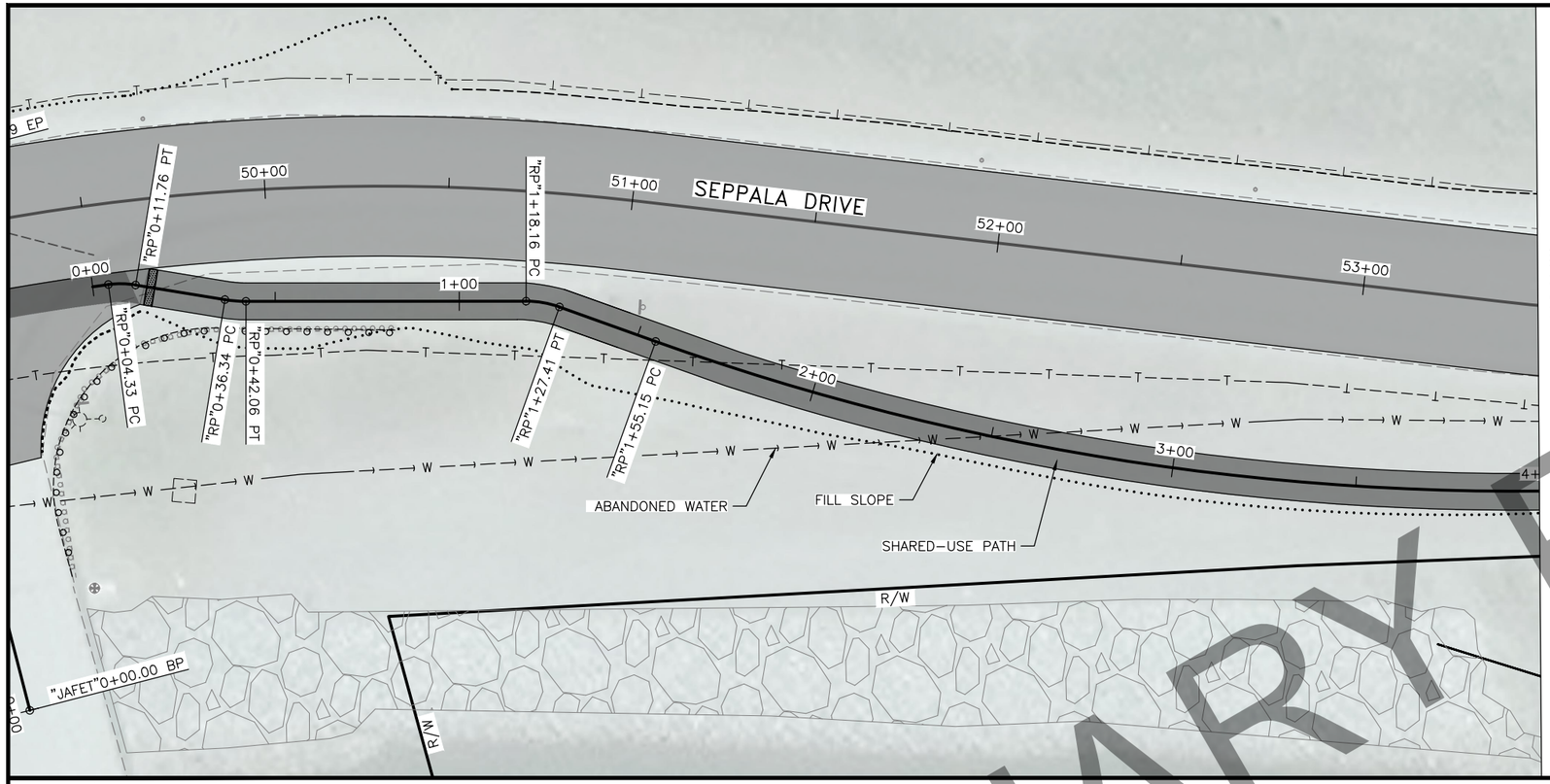


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F17 SHARED-USE PATH STA (SP) 0+00-4+36 Wed, May/10/23 02:39pm

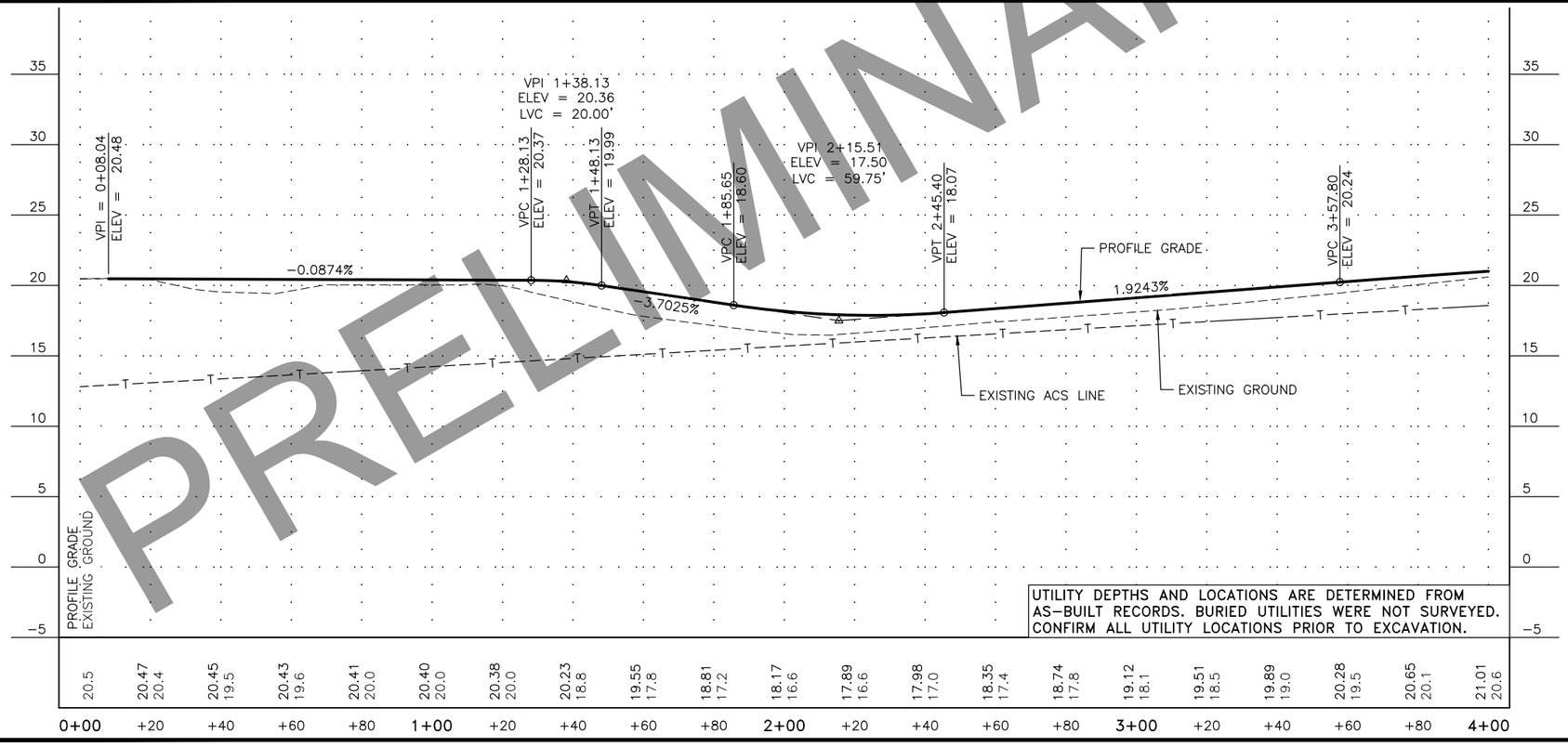
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F18	F27



MATCH "PR" 4+00 LINE

SHARED–USE PATH
STA ''RP'' 0+00–4+00

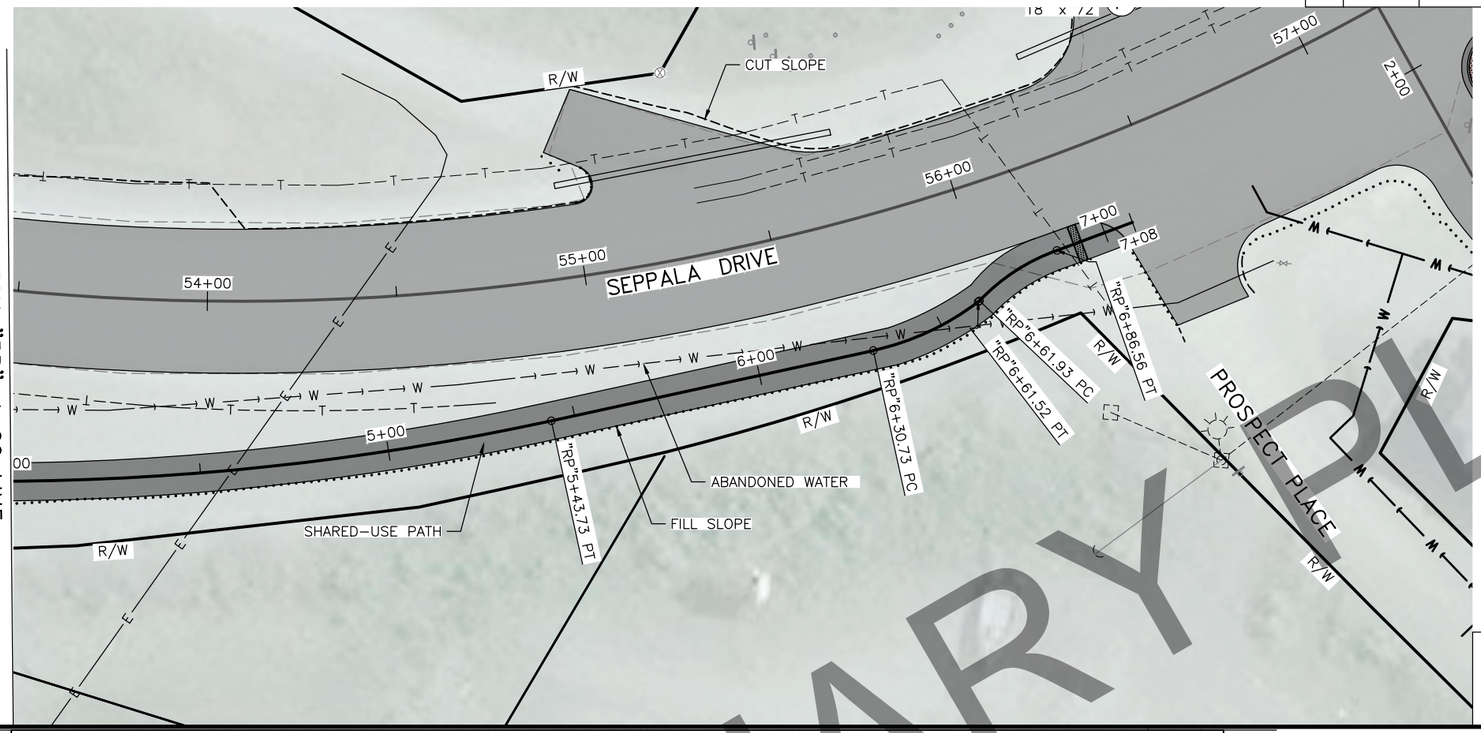


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS–BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

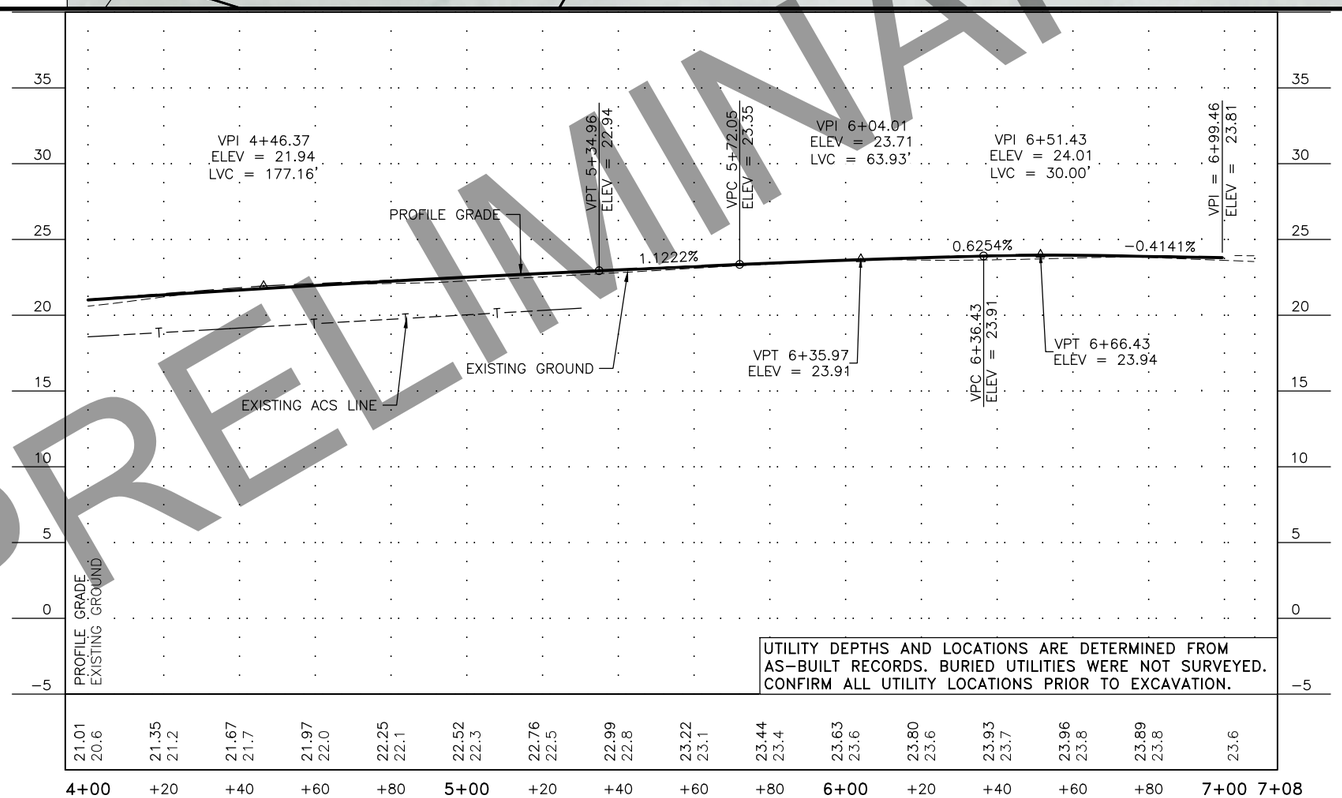
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C0101cnst17258FB–F18 SHARED–USE PATH STA (RP) 0+00–4+00 Wed, May/10/23 02:39pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F19	F27



SHARED-USE PATH
STA "RP" 4+00-7+08

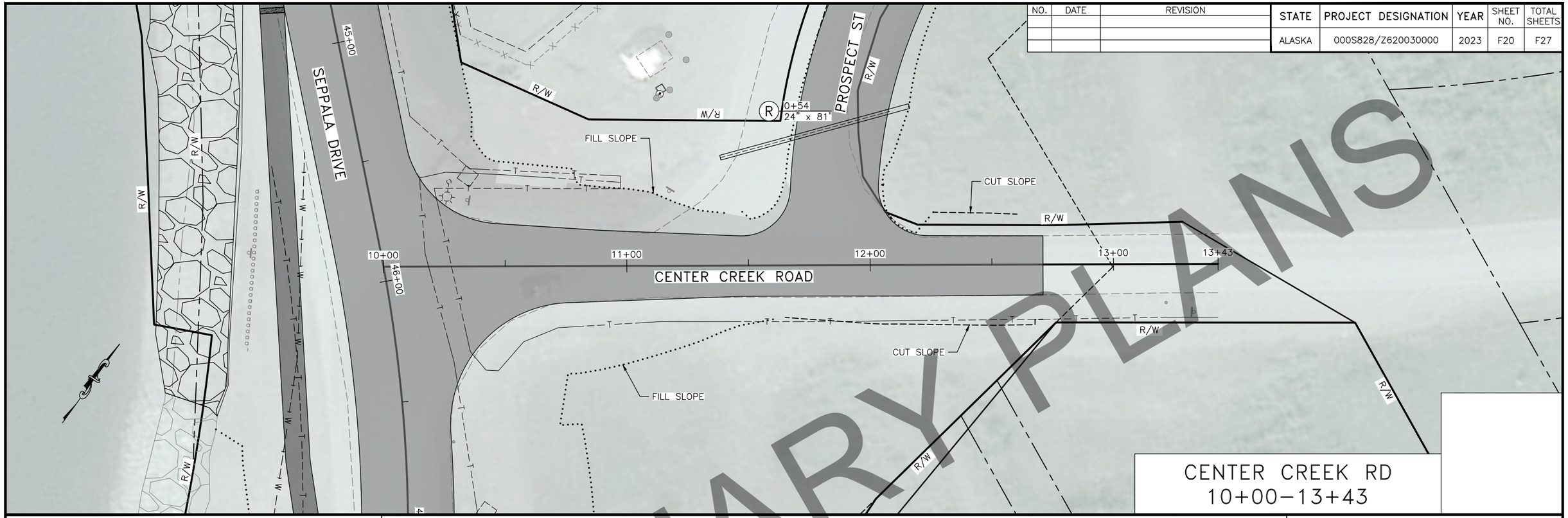


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

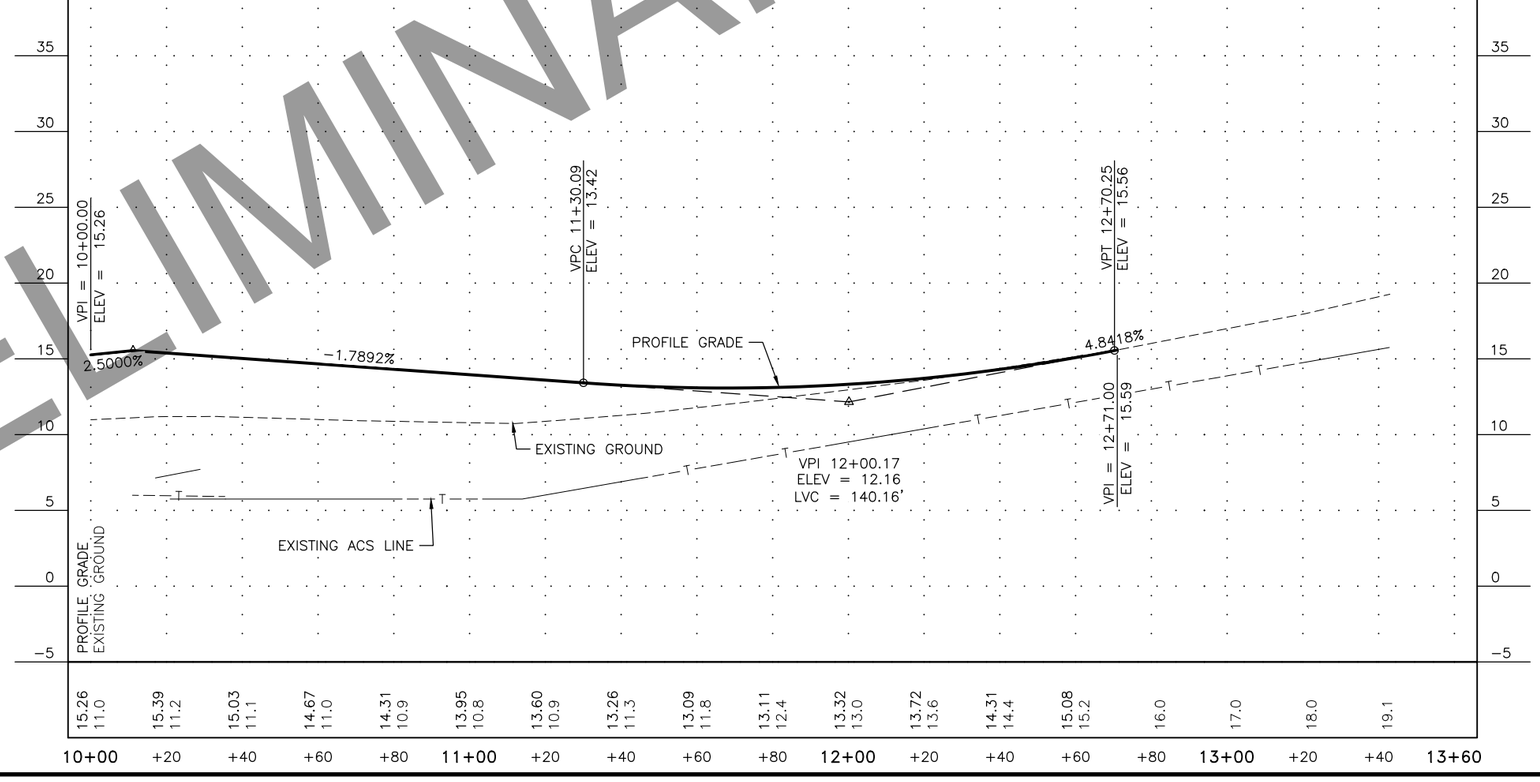
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F19 SHARED-USE PATH STA (RP) 4+00-7+08 Wed, May/10/23 02:40pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F20	F27



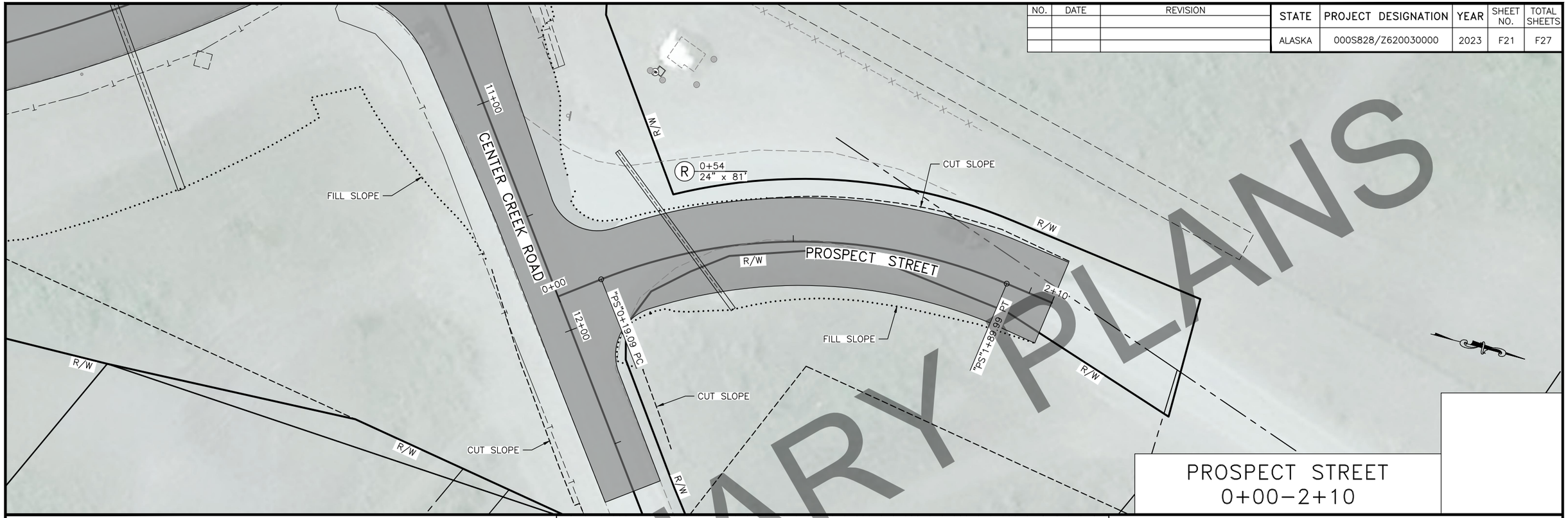
CENTER CREEK RD
10+00–13+43



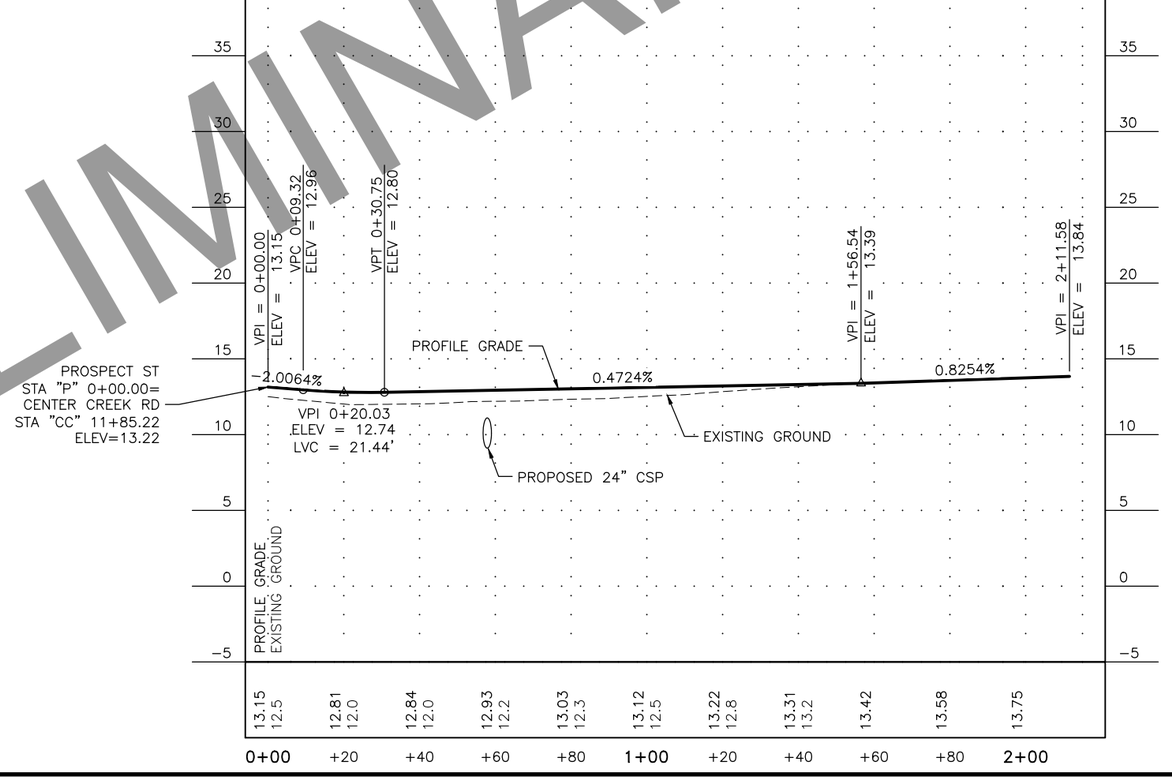
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0101cnst17258FB-F20 Center Creek Rd Wed, May/10/23 02:40pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F21	F27



PROSPECT STREET
0+00–2+10

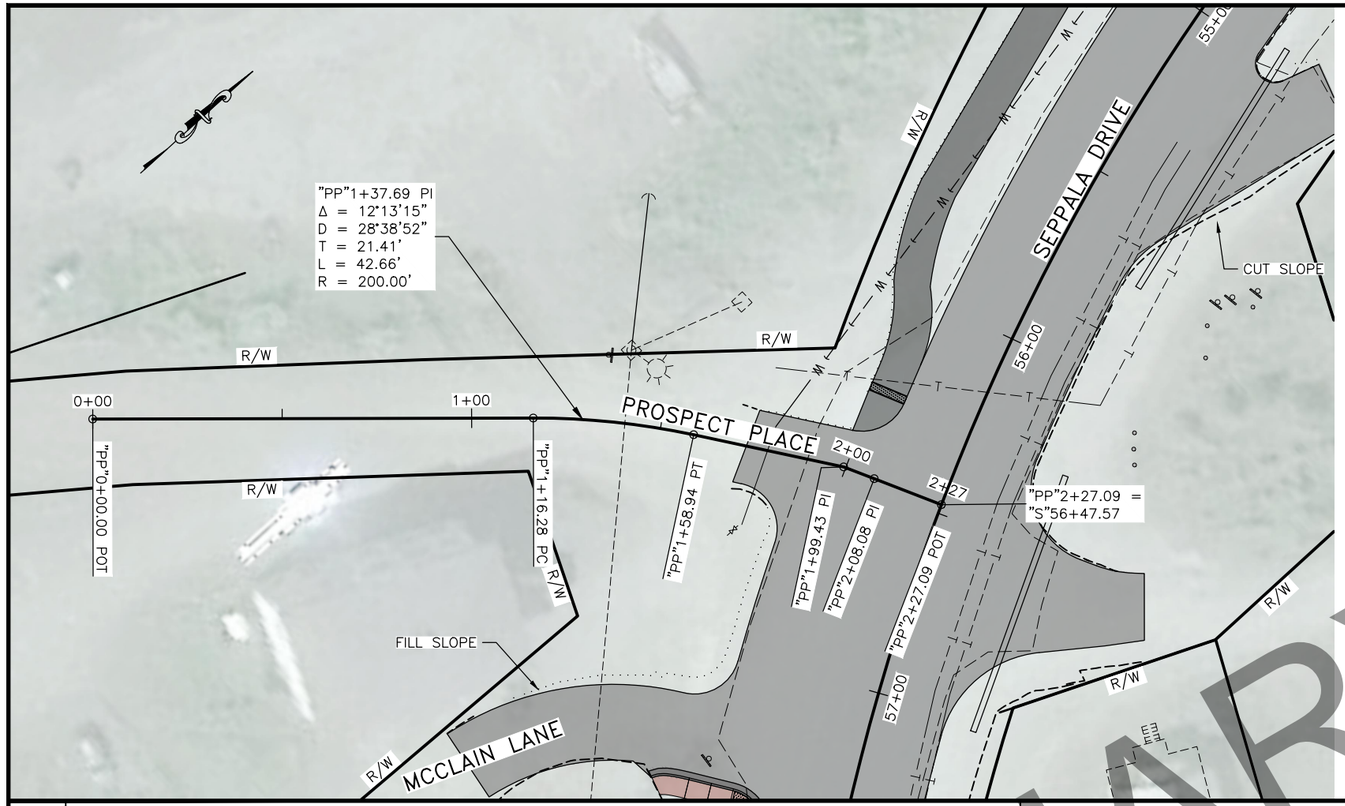


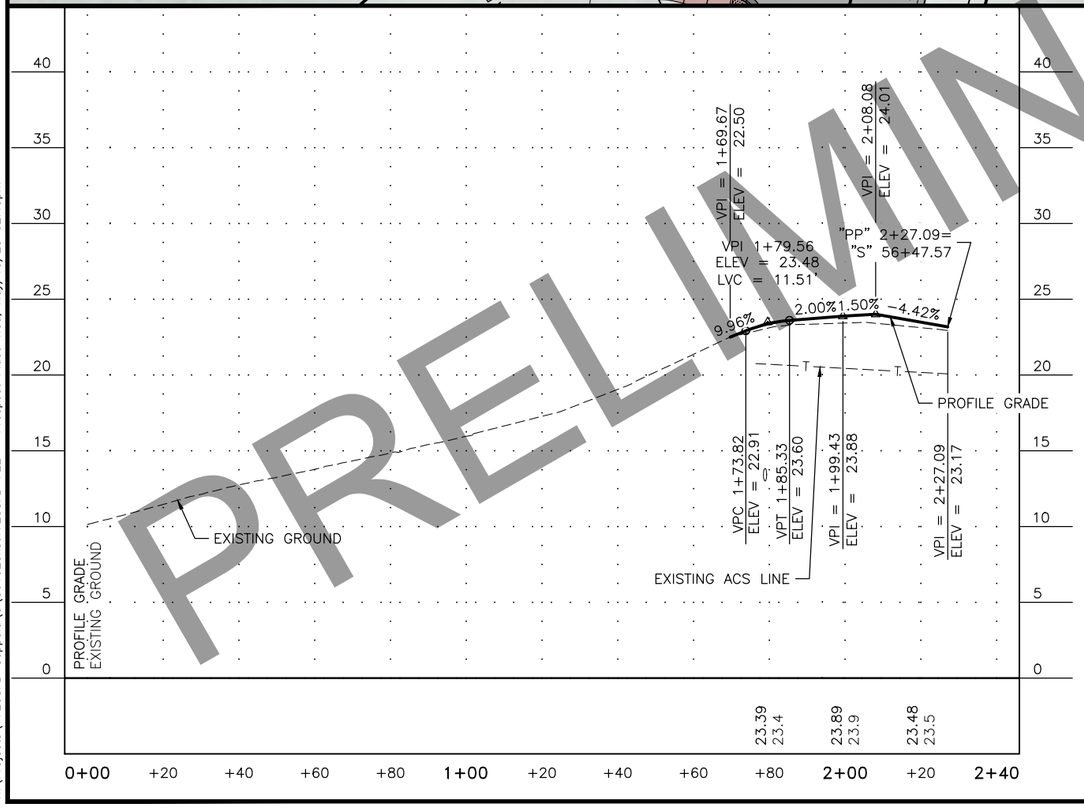
UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS–BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C0101cnst17258FB–F21 Prospect Street 1+00–2+10 Wed, May/10/23 02:40pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F22	F27





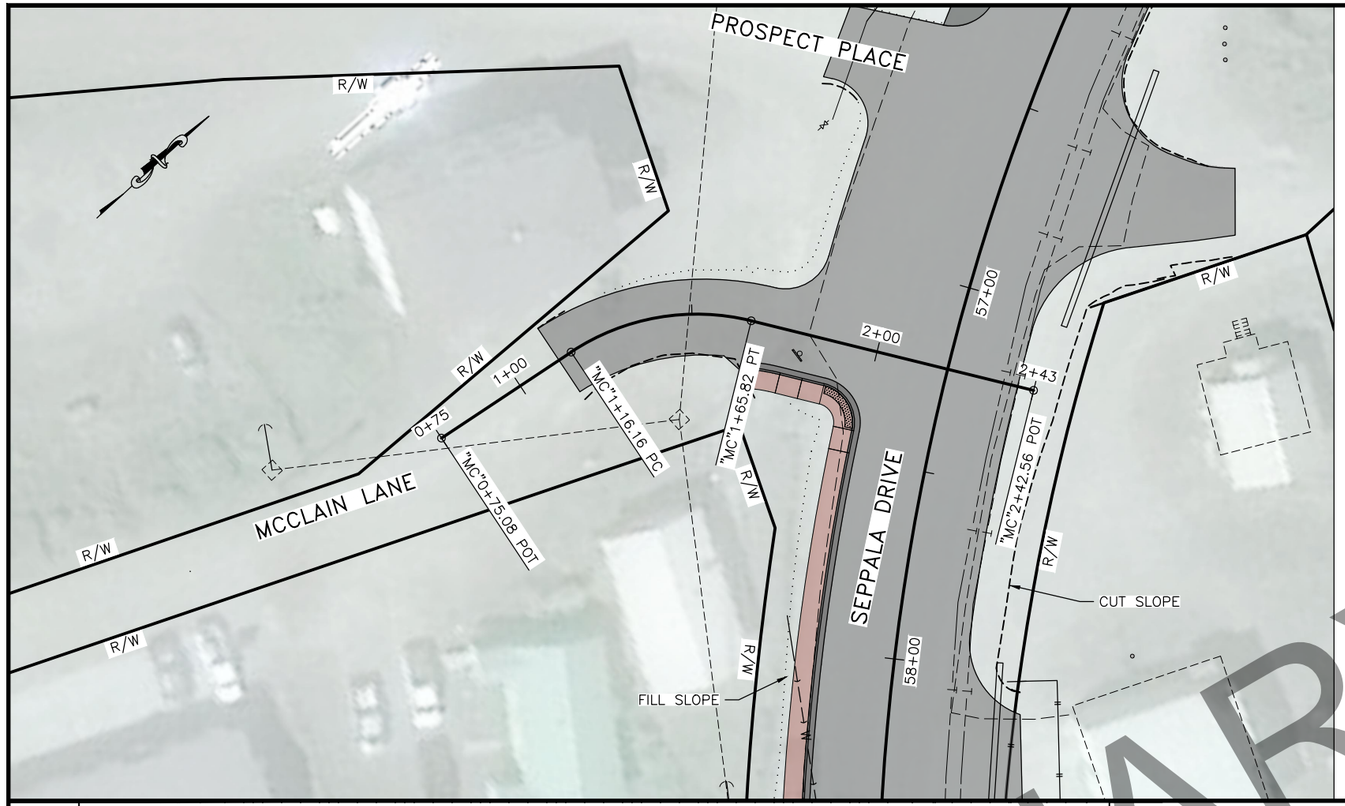
PROSPECT PLACE

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

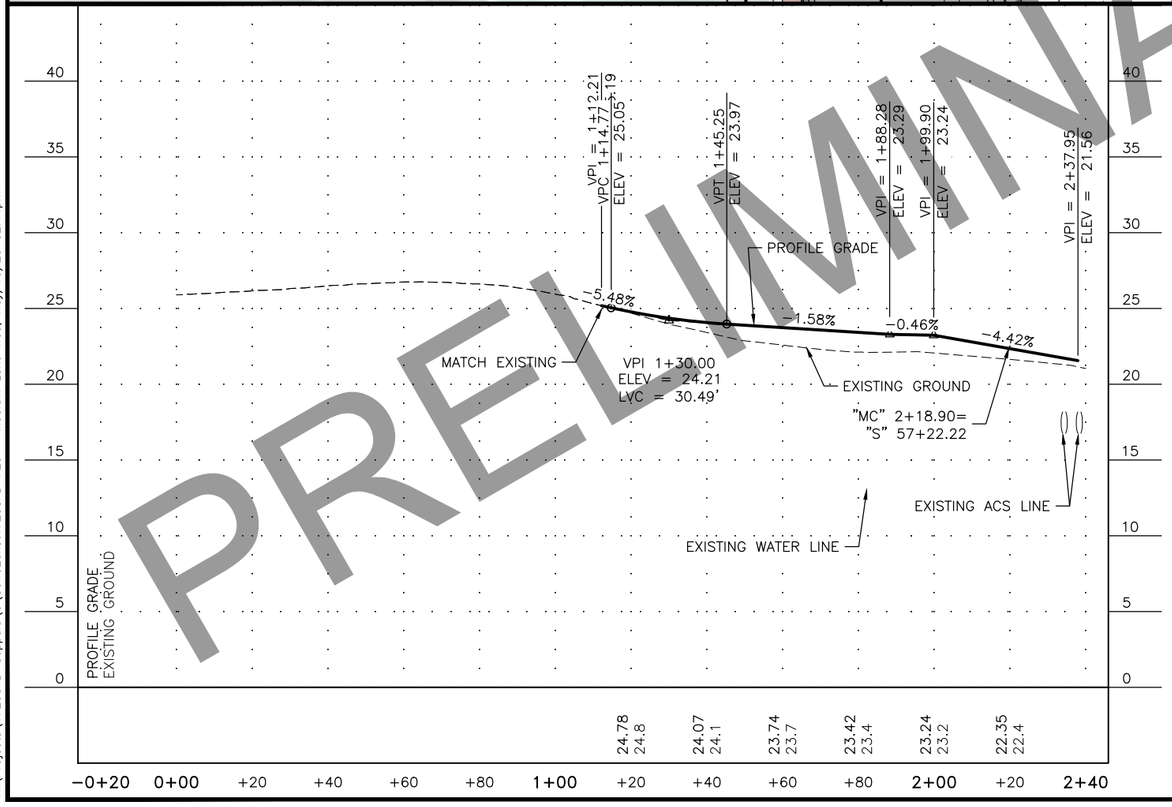
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-F22 - Prospect Place Wed, May/10/23 02:43pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F23	F27



MCCLAIN LANE

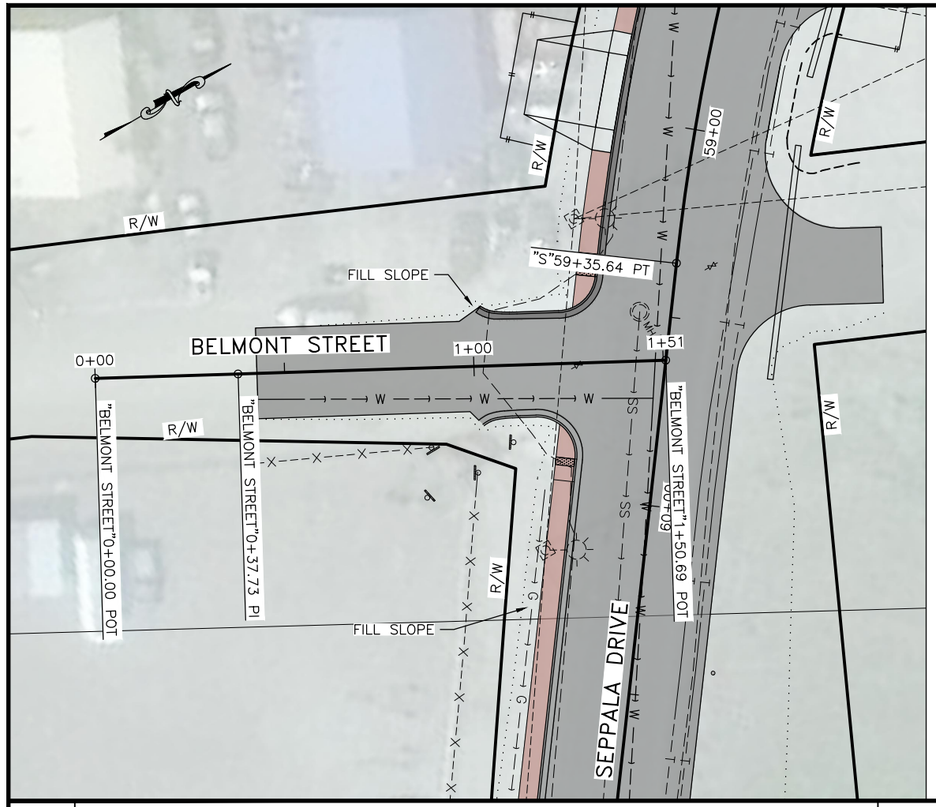


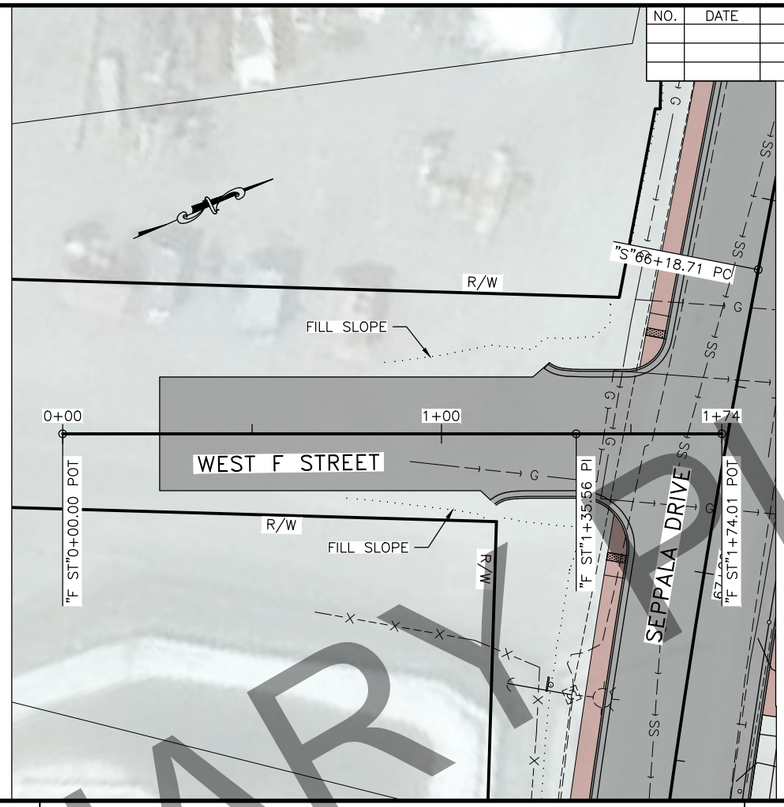
UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-F23 - McClain Lane Wed, May/10/23 02:44pm

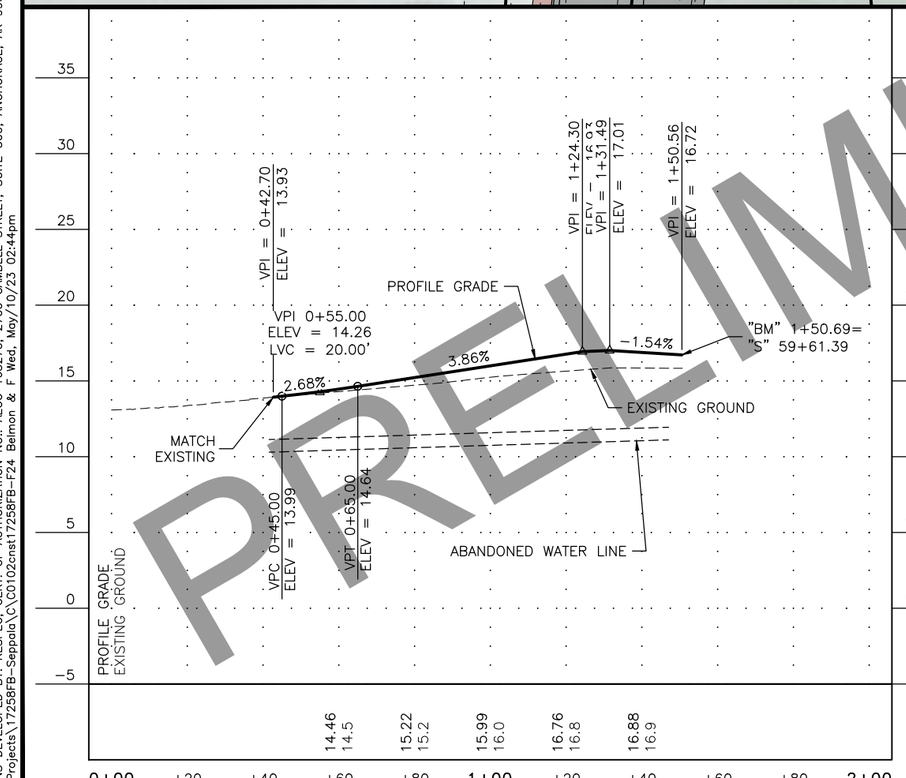
NO.	DATE	REVISION

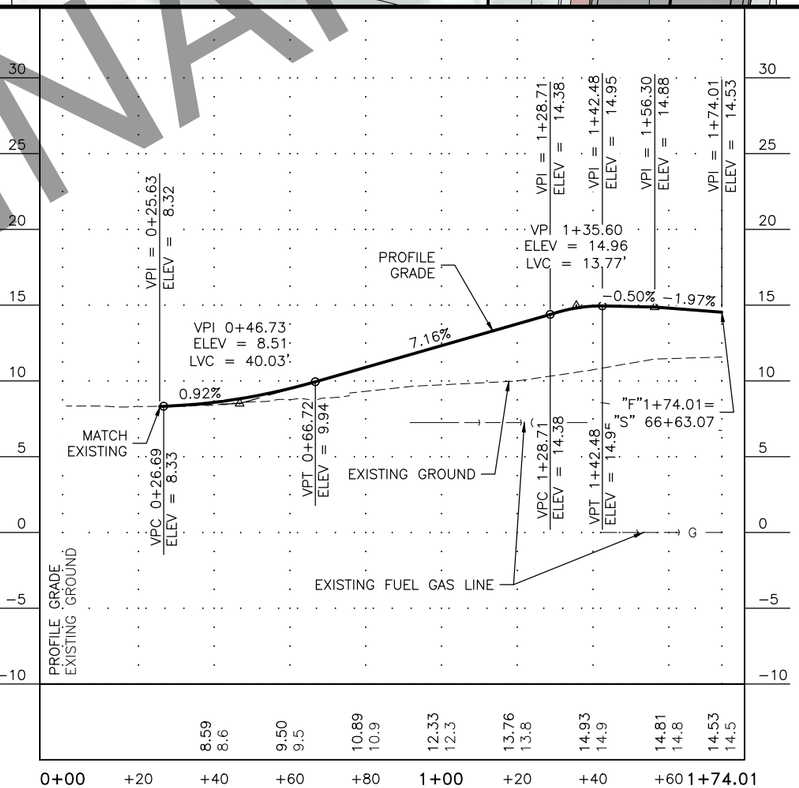
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F24	F27





BELMONT STREET & F STREET



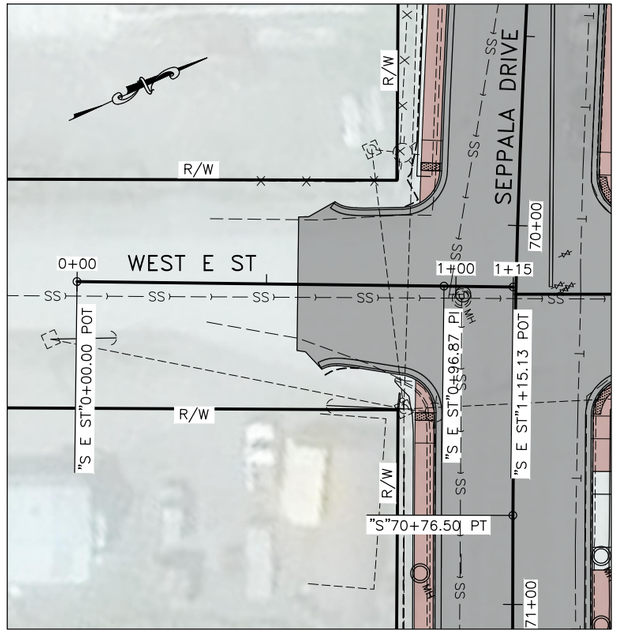


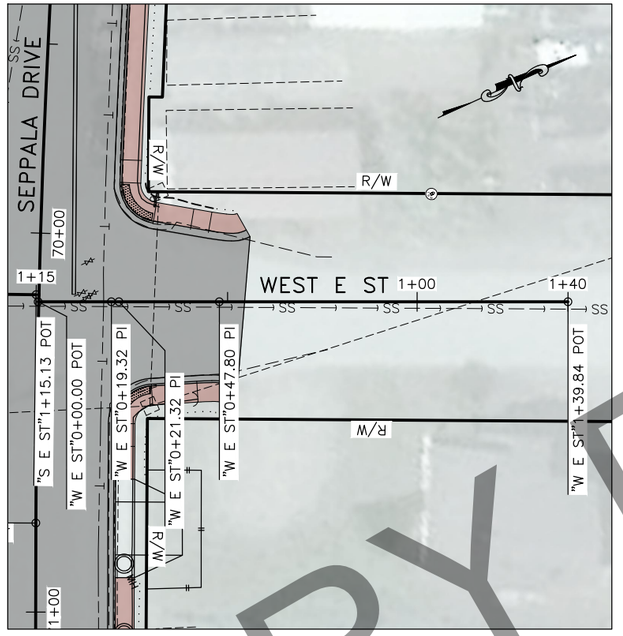
UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY:: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-F24 Belmon & F Wed, May/10/23 02:44pm

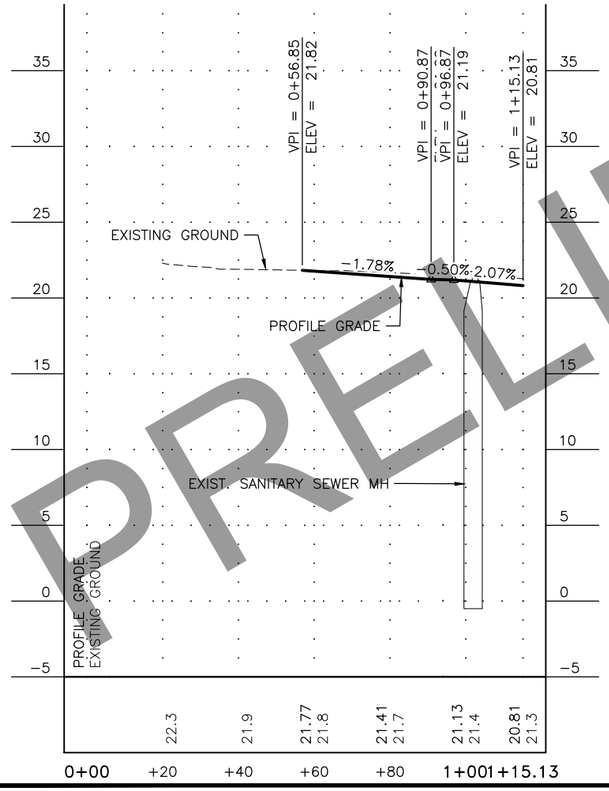
NO.	DATE	REVISION

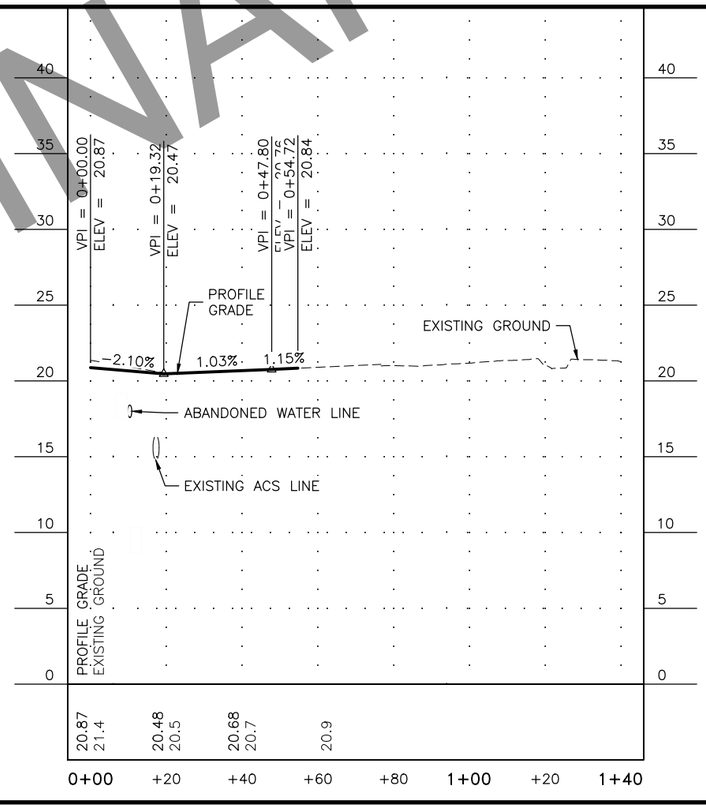
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F25	F27





WEST E STREET



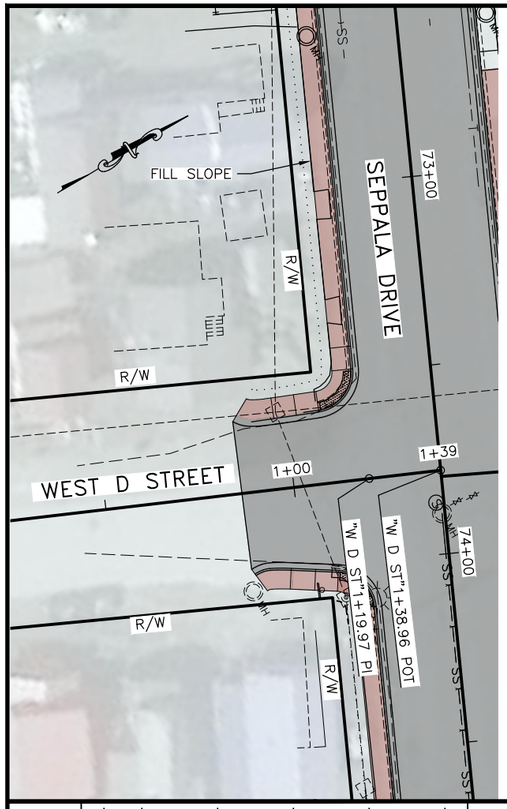


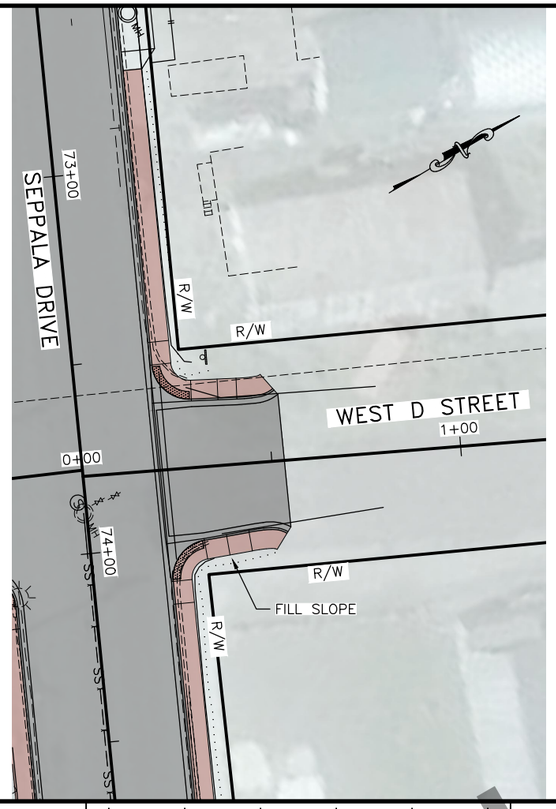
UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

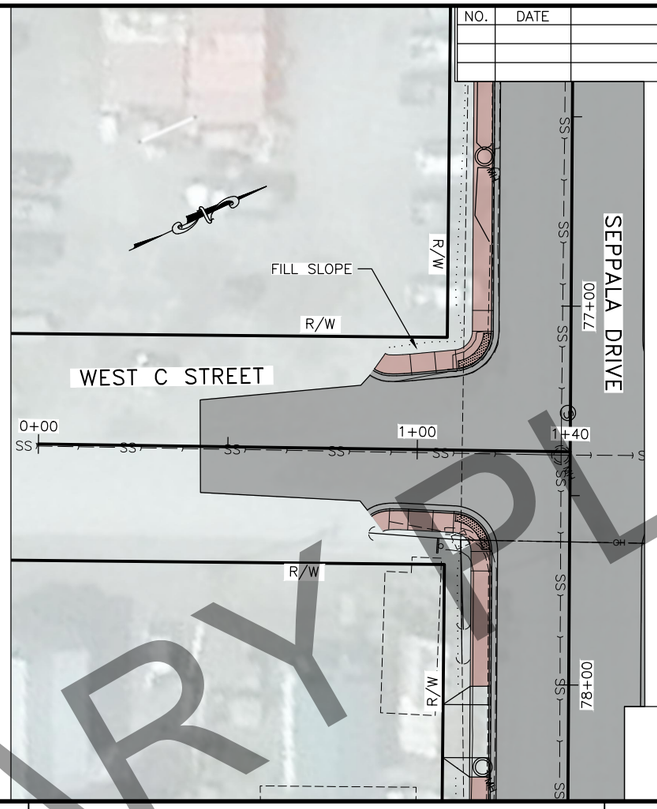
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-E Streets Wed, May/10/23 02:44pm

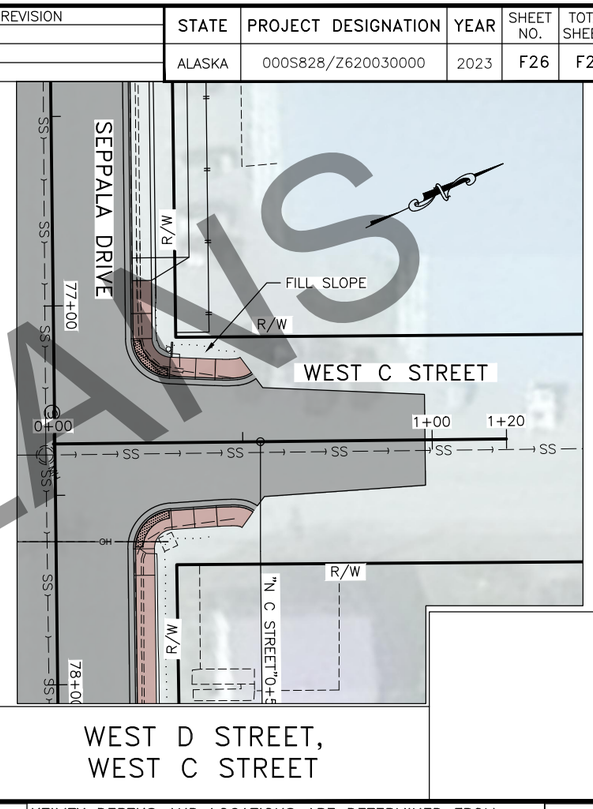
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F26	F27



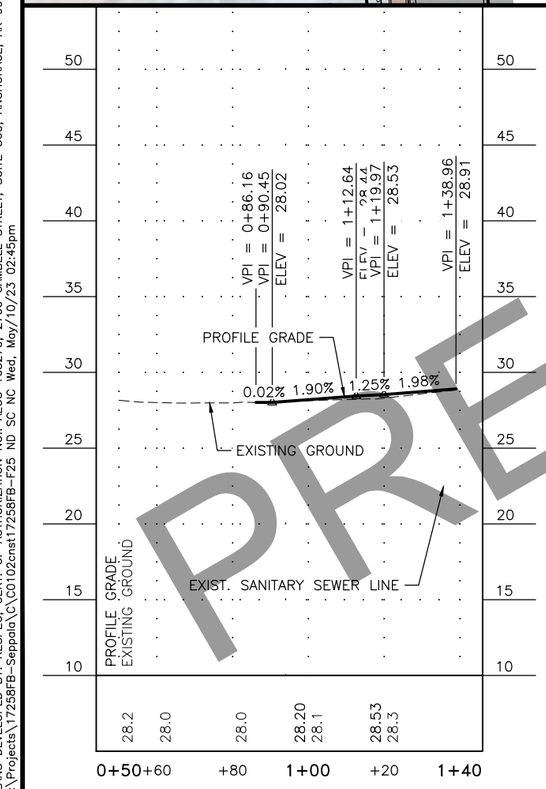


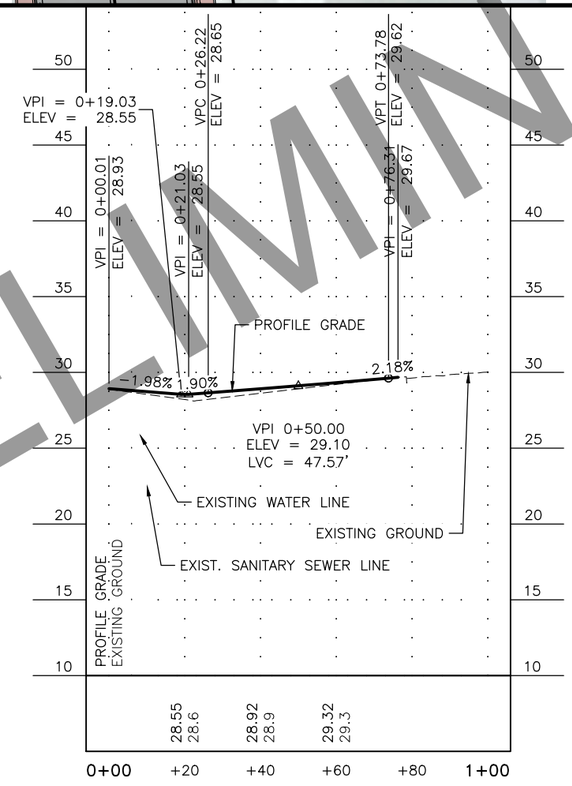


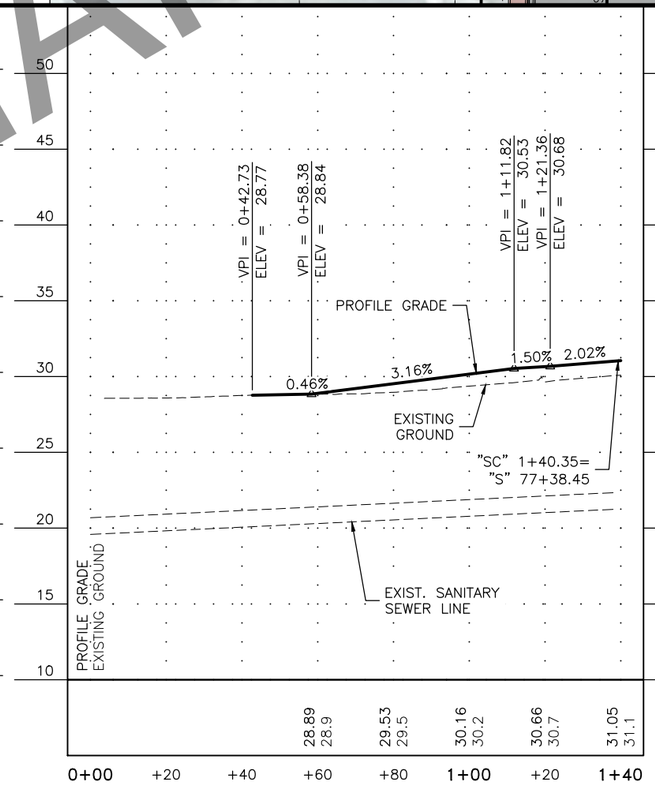


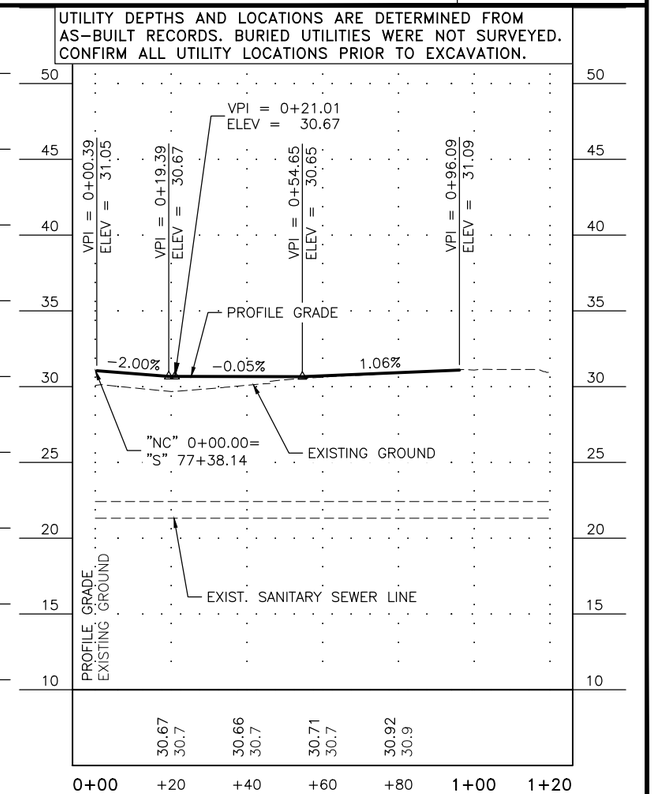
WEST D STREET,
WEST C STREET

UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.





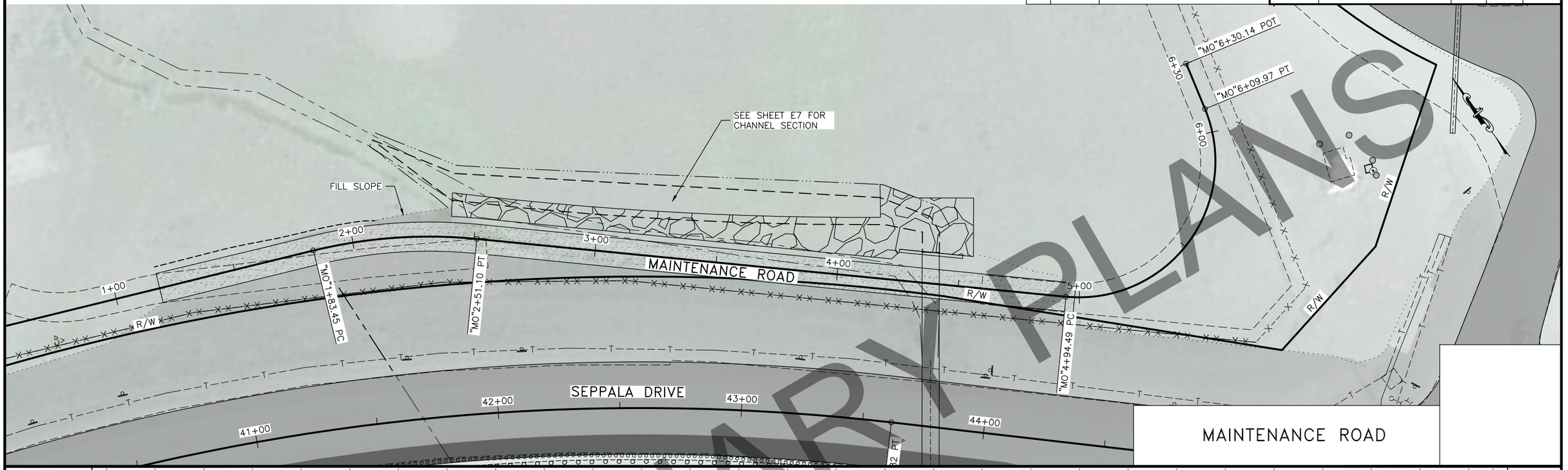




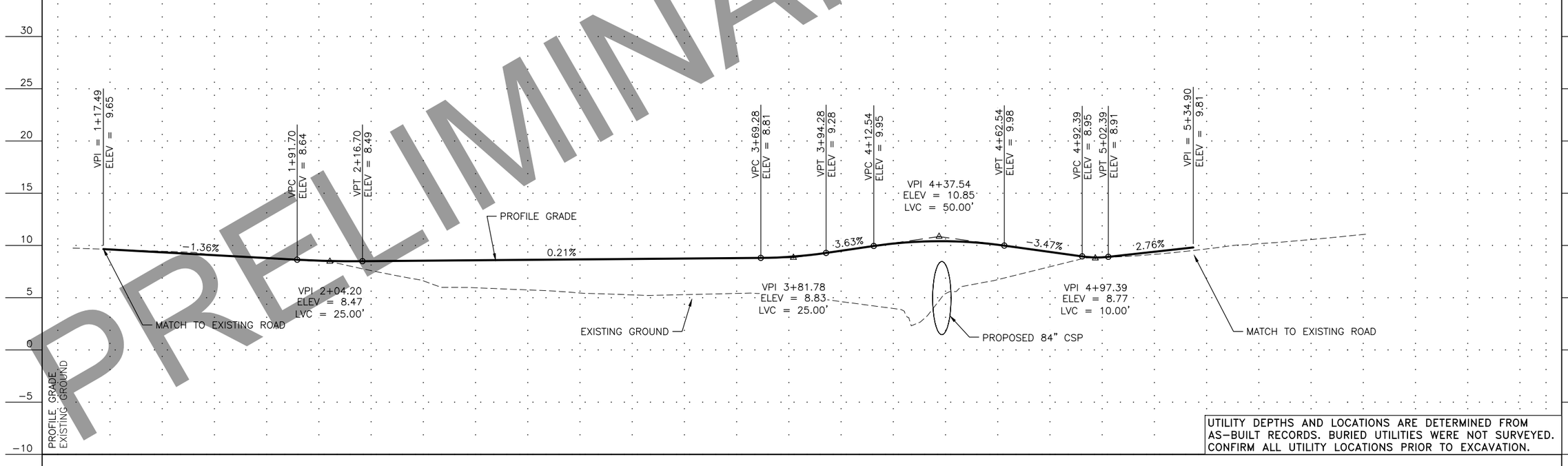
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-F25 ND SC NC Wed, May/10/23 02:45pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	F27	F27



MAINTENANCE ROAD

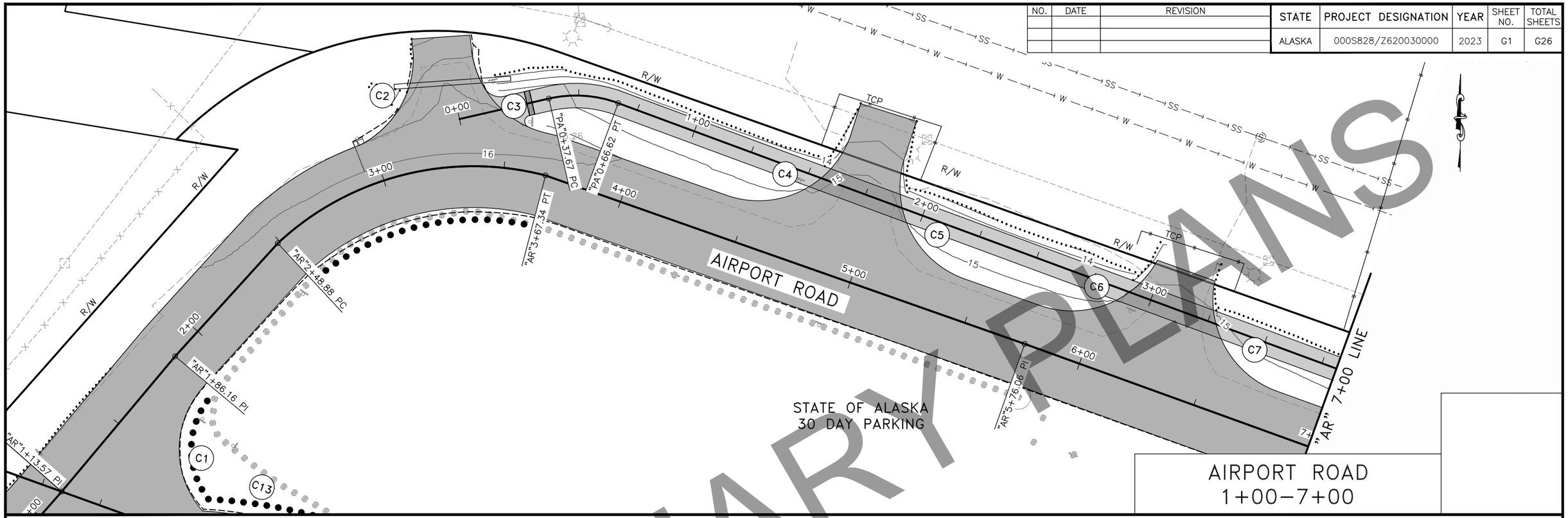


UTILITY DEPTHS AND LOCATIONS ARE DETERMINED FROM AS-BUILT RECORDS. BURIED UTILITIES WERE NOT SURVEYED. CONFIRM ALL UTILITY LOCATIONS PRIOR TO EXCAVATION.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0102cnst17258FB-Maintenance Road Wed, May/10/23 02:45pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G1	G26



AIRPORT ROAD
1+00–7+00

G1 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C1	38	100	SHLDR	"AR"	1+44.60	49.37'	3840032.55	1728048.48	15.57'	PRC
		101	RP	"AR"	1+82.25	55.08'	3840057.85	1728076.95	0.00'	
		102	SHLDR	"AR"	1+85.81	17.00'	3840084.94	1728049.95	15.58'	PT
C2	40	103	SHLDR	"AR"	2+95.91	17.00'	3840183.20	1728112.91	15.42'	PRC
		104	RP	"AR"	2+92.37	57.38'	3840219.16	1728093.96	0.00'	
		105	SHLDR	"AR"	3+19.73	47.59'	3840220.28	1728134.59	14.46'	ME
C3	40	106	SHLDR	"AR"	3+36.87	47.44'	3840222.05	1728158.56	14.53'	PC–ME
		107	RP	"AR"	3+63.84	57.00'	3840227.33	1728198.21	0.00'	
		108	SHLDR	"AR"	3+63.84	17.00'	3840188.31	1728189.41	15.47'	PRC
C4	40	110	SHLDR	"AR"	4+40.15	17.00'	3840163.02	1728263.42	15.52'	PC
		111	RP	"AR"	4+40.16	57.00'	3840200.79	1728276.58	0.00'	
		112	SHLDR	"AR"	4+80.16	56.96'	3840187.60	1728314.34	13.81'	PT
C5	40	115	SHLDR	"AR"	5+04.15	57.03'	3840179.78	1728337.02	13.85'	PC
		116	RP	"AR"	5+44.14	57.00'	3840166.59	1728374.78	0.00'	
		117	SHLDR	"AR"	5+44.15	17.00'	3840128.82	1728361.63	15.58'	PT
C6	40	118	SHLDR	"AR"	5+76.15	17.00'	3840118.24	1728392.00	15.59'	PC
		119	RP	"AR"	5+76.16	57.00'	3840155.89	1728405.50	0.00'	
		120	SHLDR	"AR"	6+15.69	50.94'	3840136.85	1728440.67	14.38'	ME

G1 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C7	40	121	SHLDR	"AR"	6+40.76	50.93'	3840128.39	1728464.27	14.29'	ME
		122	RP	"AR"	6+80.30	57.00'	3840120.76	1728503.54	0.00'	
		123	SHLDR	"AR"	6+80.31	17.00'	3840083.11	1728490.05	15.65'	PT

SHEET G1 CONTROL POINT TABLE

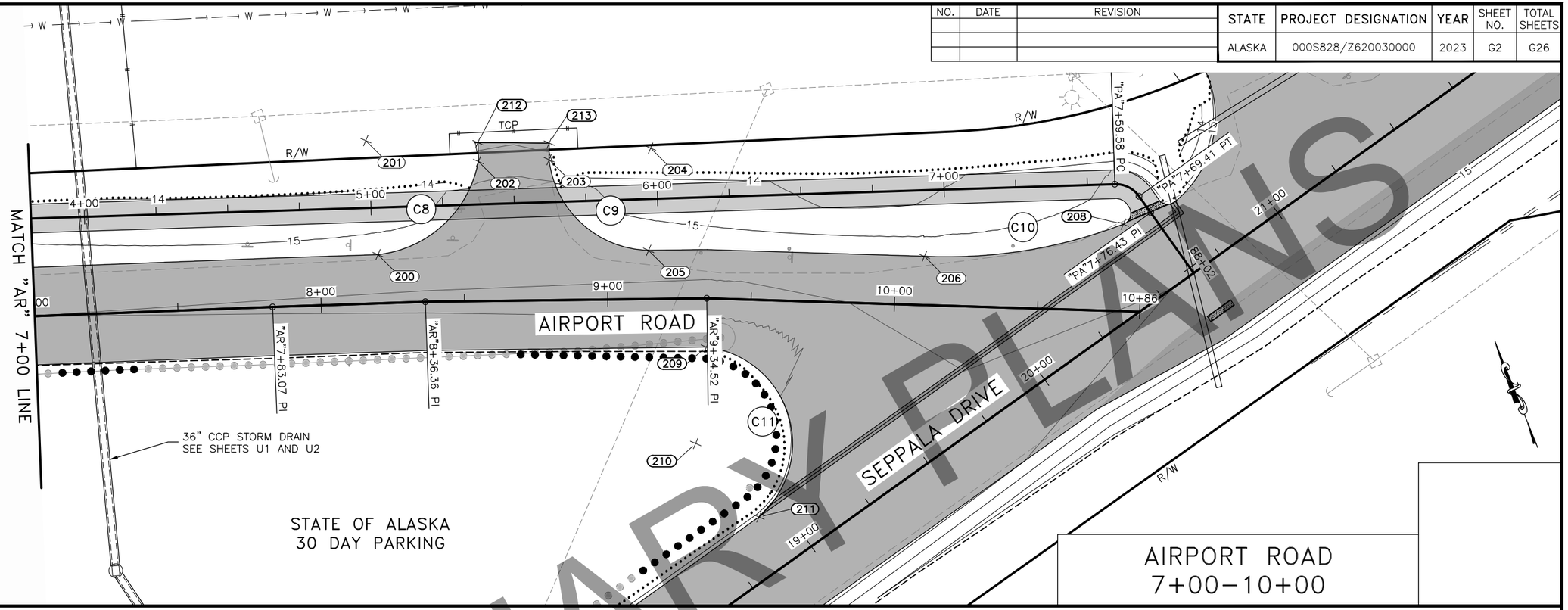
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
109	"AR"	3+67.34	17.02'	3840187.19	1728194.01	15.00'	SHLDR	PRC
113	"AR"	4+79.74	70.83'	3840200.83	1728318.51	12.93'	SHLDR	ME
114	"AR"	5+03.72	71.58'	3840193.66	1728341.40	12.94'	SHLDR	ME
124	"AR"	3+56.77	22.73'	3840195.51	1728182.39	15.06'	EPW	PT
125	"AR"	3+57.05	18.00'	3840190.79	1728181.94	15.45'	EPW	PC R=2.5'
126	"AR"	3+47.54	29.26'	3840203.37	1728172.00	0.00'	EPW	PT
127	"AR"	3+40.94	32.27'	3840206.83	1728163.86	14.90'	EPW	PC R=7.5'
128	"AR"	3+55.23	27.37'	3840200.38	1728181.26	14.98'	DWT	
129	"AR"	3+19.94	54.10'	3840226.76	1728133.90	13.50'	SHLDR	ME
130	"AR"	3+36.40	53.90'	3840228.50	1728157.84	14.60'	SHLDR	ME

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C5001cnst–17258FB–G1 Airport Road 1+00–7+00 Wed, May/10/23 03:48pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G2	G26



NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

G2 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C8	40	200	SHLDR	"AR"	8+20.38	17.00'	3840035.65	1728621.93	15.73'	PC
		201	RP	"AR"	8+17.47	56.88'	3840074.12	1728632.83	0.00'	
		202	SHLDR	"AR"	8+55.48	48.67'	3840052.66	1728666.57	14.60'	PT
C9	35	203	SHLDR	"AR"	8+80.14	49.03'	3840044.07	1728689.69	14.46'	PT
		204	RP	"AR"	9+15.59	52.62'	3840034.58	1728724.04	0.00'	
		205	SHLDR	"AR"	9+14.44	17.00'	3840001.79	1728710.07	15.78'	PT
C10	172	206	SHLDR	"AR"	10+09.95	17.00'	3839963.93	1728798.54	15.67'	PC
		207	RP	"AR"	10+12.60	188.74'	3840120.13	1728869.98	0.00'	
		208	SHLDR	"AR"	10+78.99	30.32'	3839948.39	1728867.11	15.50'	PRC
C11	34	209	SHLDR	"AR"	9+34.89	17.00'	3839962.96	1728716.14	15.79'	PC
		210	RP	"AR"	9+30.03	50.56'	3839933.17	1728700.14	0.00'	
		211	SHLDR	"AR"	9+55.07	75.62'	3839901.17	1728711.06	16.30'	LOC – PT

SHEET G2 CONTROL POINT TABLE

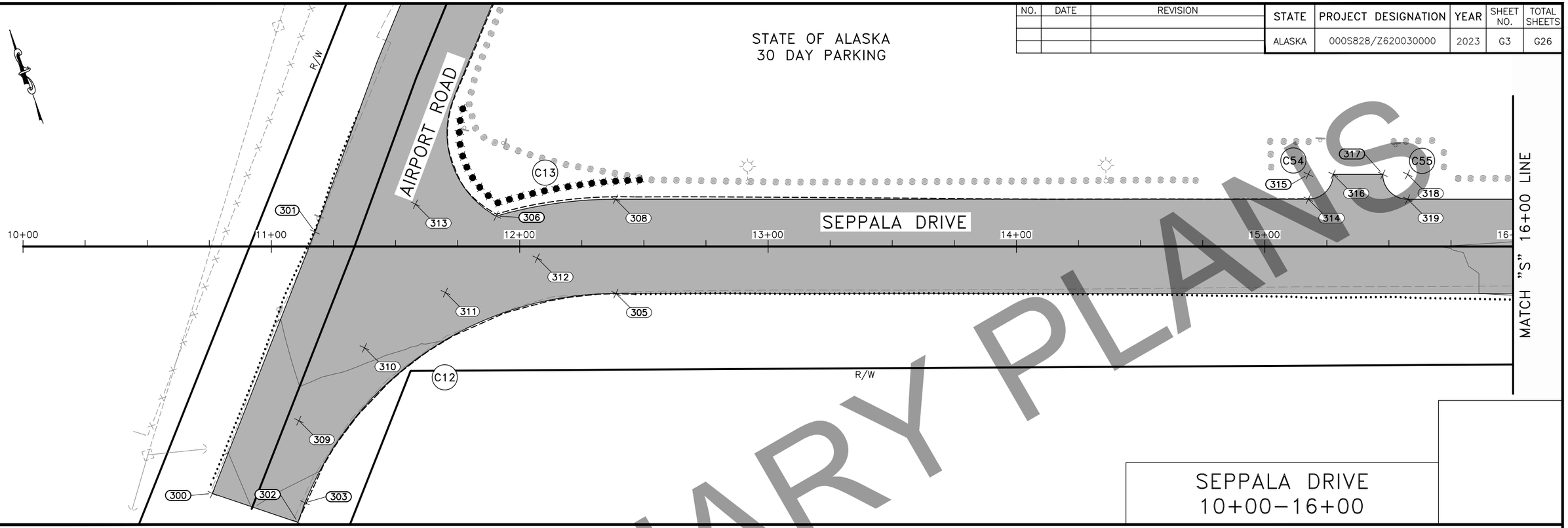
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
212	"AR"	8+55.36	55.26'	3840058.84	1728668.85	14.05'	DRWY	ME
213	"AR"	8+80.24	54.83'	3840049.44	1728691.88	14.05'	DRWY	ME

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G2 Airport Road 7+00-10+00 Wed, May/10/23 03:48pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G3	G26

STATE OF ALASKA
30 DAY PARKING



SEPPALA DRIVE
10+00–16+00

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

G3 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C12	135	303	SHLDR	"S"	11+13.50	103.28'	3839949.77	1727937.07	13.72'	PC
		304	RP	"S"	12+38.46	153.77'	3839860.13	1728037.71	0.00'	
		305	SHLDR	"S"	12+38.74	19.00'	3839986.93	1728083.38	15.51'	PT
C13	173	306	SHLDR	"S"	11+90.52	12.20'	3840032.55	1728048.48	15.57'	PRC
		307	RP	"S"	12+38.46	153.77'	3839860.13	1728037.71	0.00'	
		308	SHLDR	"S"	12+38.54	18.99'	3840022.77	1728095.99	15.57'	PT
C54	10	314	SHLDR	"S"	15+17.55	19.00'	3839928.79	1728358.69	15.60'	PC
		315	RP	"S"	15+17.55	29.00'	3839938.20	1728362.06	0.00'	
		316	SHLDR	"S"	15+27.55	29.00'	3839934.83	1728371.47	15.48'	PT
C55	10	317	SHLDR	"S"	15+47.55	29.00'	3839928.10	1728390.30	15.45'	PT
		318	RP	"S"	15+57.54	29.00'	3839924.73	1728399.72	0.00'	
		319	SHLDR	"S"	15+57.54	19.00'	3839915.31	1728396.35	15.61'	PC

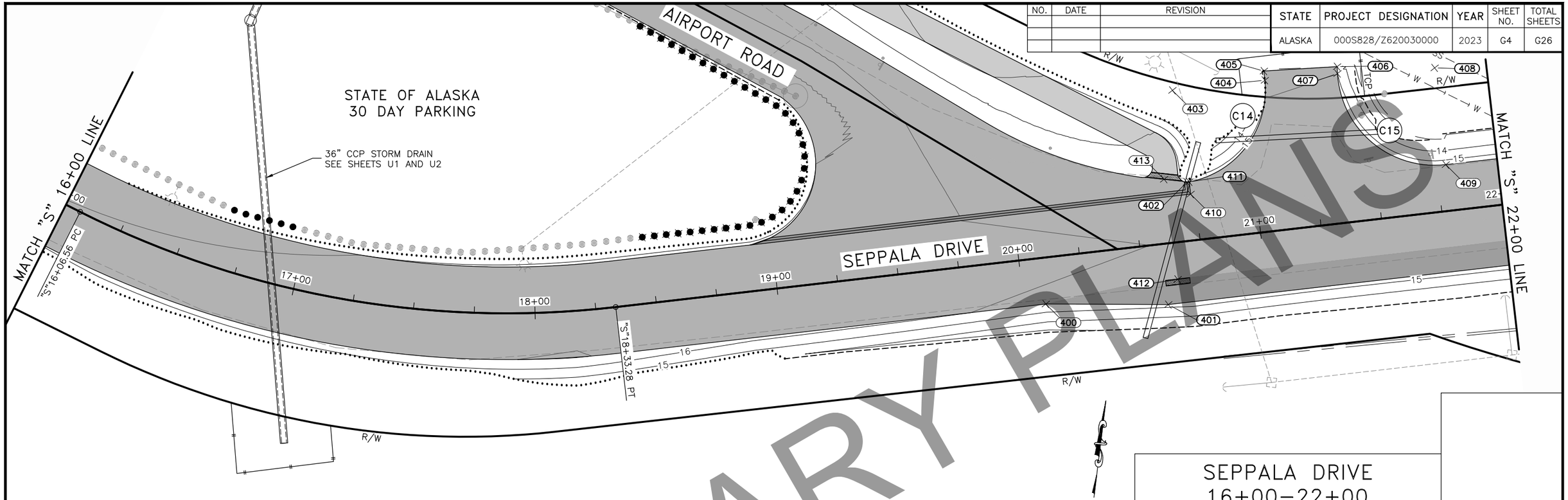
SHEET G3 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
300	"S"	10+76.23	99.54'	3839965.85	1727903.23	13.68'	SHLDR	
301	"S"	11+17.52	5.84'	3840051.15	1727977.61	15.41'	SHLDR	
302	"S"	11+10.68	111.20'	3839943.26	1727931.74	13.59'	SHLDR	
309	"S"	11+11.04	70.21'	3839981.73	1727945.89	14.68'	FG	
310	"S"	11+37.47	40.86'	3840000.47	1727980.66	15.12'	FG	
311	"S"	11+70.08	18.60'	3840010.44	1728018.87	15.42'	FG	
312	"S"	12+07.06	4.72'	3840011.05	1728058.36	15.80'	FG	
313	"S"	11+58.01	17.01'	3840048.03	1728019.50	15.79'	FG	

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G3 Seppala Drive 10+00-16+00 Wed, May/10/23 03:48pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G4	G26



SEPPALA DRIVE
16+00–22+00

G4 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C14	38	402	SHLDR	"S"	20+72.26	24.00'	3839948.70	1728885.93	15.45'	FL
		403	RP	"S"	20+70.71	62.19'	3839985.45	1728875.43	0.00'	
		404	SHLDR	"S"	21+08.92	61.93'	3839994.19	1728912.63	14.80'	PT
C15	40	407	SHLDR	"S"	21+38.89	61.28'	3840000.62	1728941.91	14.99'	PC
		408	RP	"S"	21+78.82	59.00'	3840007.81	1728981.25	0.00'	
		409	SHLDR	"S"	21+78.83	18.99'	3839968.93	1728990.68	15.47'	PT

SHEET G4 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
400	"S"	20+08.96	19.00'	3839892.00	1728834.54	15.85'	SHLDR	BEGIN TRANSITION
401	"S"	20+58.96	25.00'	3839897.94	1728884.55	15.29'	SHLDR	END TRANSITION
405	"S"	21+08.97	65.74'	3839997.91	1728911.78	14.68'	SHLDR	ME
406	"S"	21+39.05	64.09'	3840003.39	1728941.40	14.67'	SHLDR	ME
410	"S"	20+73.26	19.00'	3839944.07	1728888.08	15.54'	LOC	
411	"S"	20+73.26	24.06'	3839948.99	1728886.89	15.54'	LOC	PRC
412	"S"	20+63.96	15.16'	3839908.68	1728887.09	15.65'	DWT	
413	"S"	20+63.13	26.32'	3839948.80	1728876.51	15.16'	DWT	

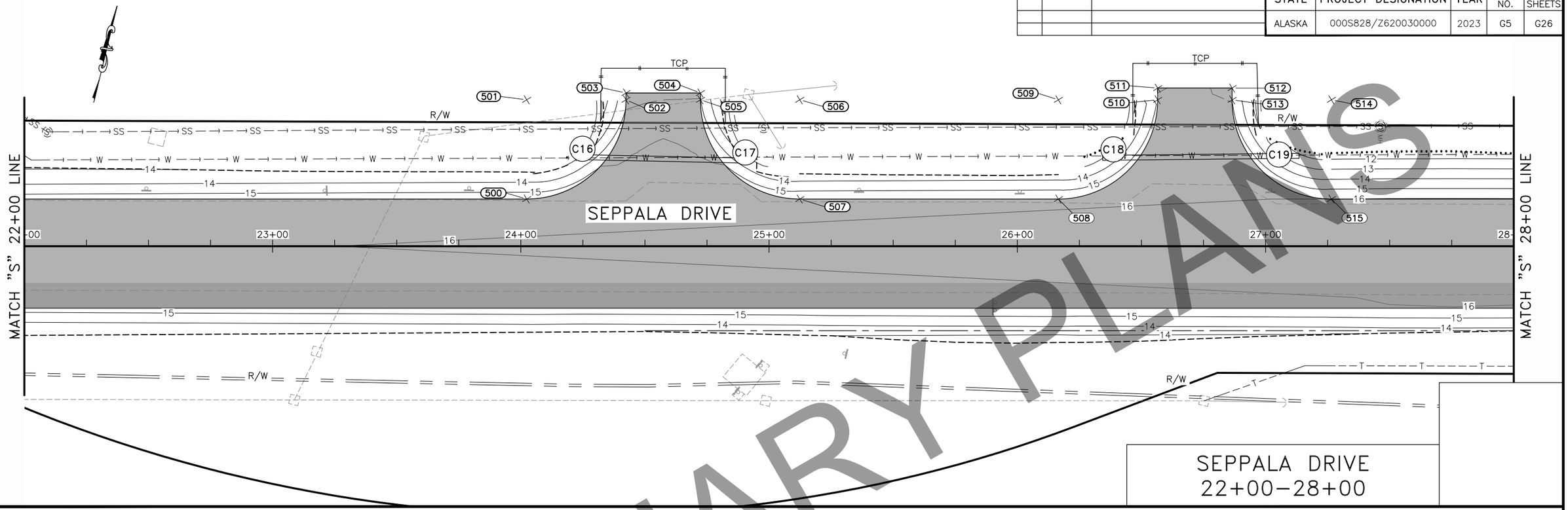
NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G4 Seppala Drive 16+00-22+00 Wed, May/10/23 03:49pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G5	G26



SEPPALA DRIVE
22+00–28+00

G5 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C16	40	500	SHLDR	"S"	24+02.37	19.00'	3840021.58	1729207.93	15.70'	PC
		501	RP	"S"	24+02.37	59.00'	3840060.46	1729198.51	0.00'	
		502	SHLDR	"S"	24+42.37	59.00'	3840069.88	1729237.39	13.86'	PT
C17	40	505	SHLDR	"S"	24+72.37	59.00'	3840076.94	1729266.54	14.02'	PC
		506	RP	"S"	25+12.37	59.00'	3840086.37	1729305.42	0.00'	
		507	SHLDR	"S"	25+12.37	19.00'	3840047.49	1729314.84	15.81'	PT
C18	40	508	SHLDR	"S"	26+16.56	19.00'	3840072.03	1729416.10	15.91'	PC
		509	RP	"S"	26+16.55	59.00'	3840110.90	1729406.67	0.00'	
		510	SHLDR	"S"	26+56.56	59.00'	3840120.32	1729445.55	15.08'	PT
C19	40	513	SHLDR	"S"	26+86.56	59.00'	3840127.39	1729474.71	14.97'	PC
		514	RP	"S"	27+26.56	59.00'	3840136.81	1729513.58	0.00'	
		515	SHLDR	"S"	27+26.56	19.00'	3840097.94	1729523.00	16.01'	PT

SHEET G5 CONTROL POINT TABLE

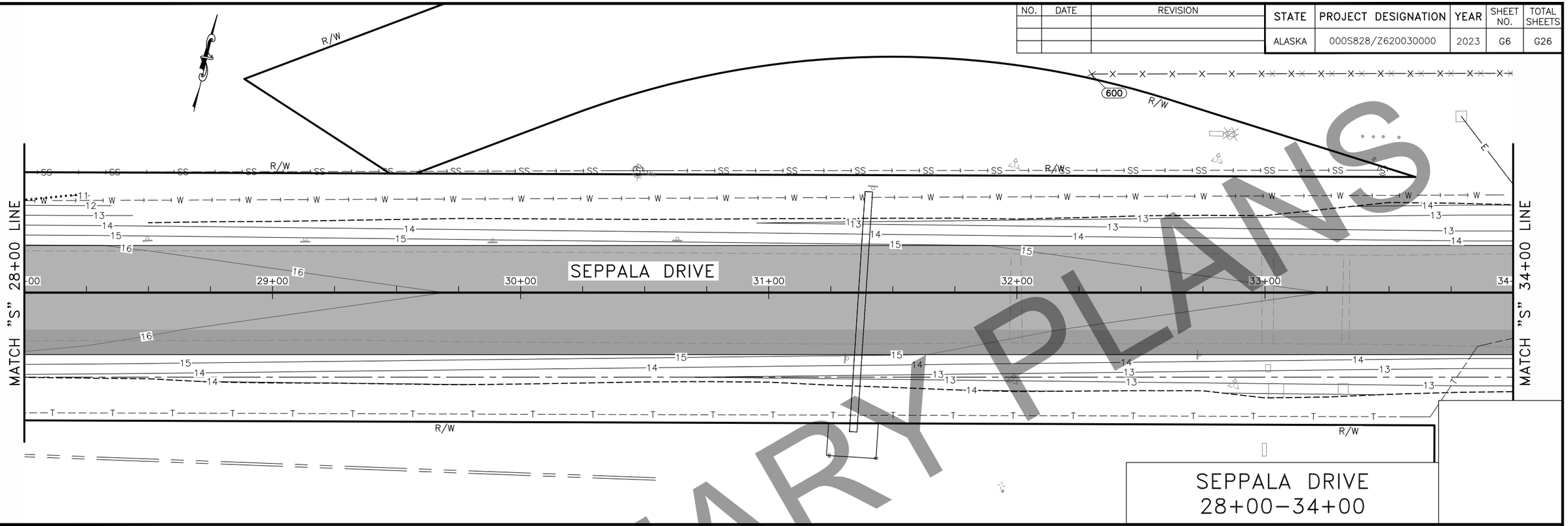
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
503	"S"	24+42.37	61.74'	3840072.54	1729236.74	13.85'	SHLDR	ME
504	"S"	24+72.37	61.73'	3840079.60	1729265.90	13.93'	SHLDR	ME
511	"S"	26+56.56	63.73'	3840124.92	1729444.44	14.95'	SHLDR	ME
512	"S"	26+86.56	63.73'	3840131.99	1729473.59	14.77'	SHLDR	ME

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-05 Seppala Drive 22+00-28+00 Wed, May/10/23 03:49pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G6	G26



SEPPALA DRIVE
28+00–34+00

NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.

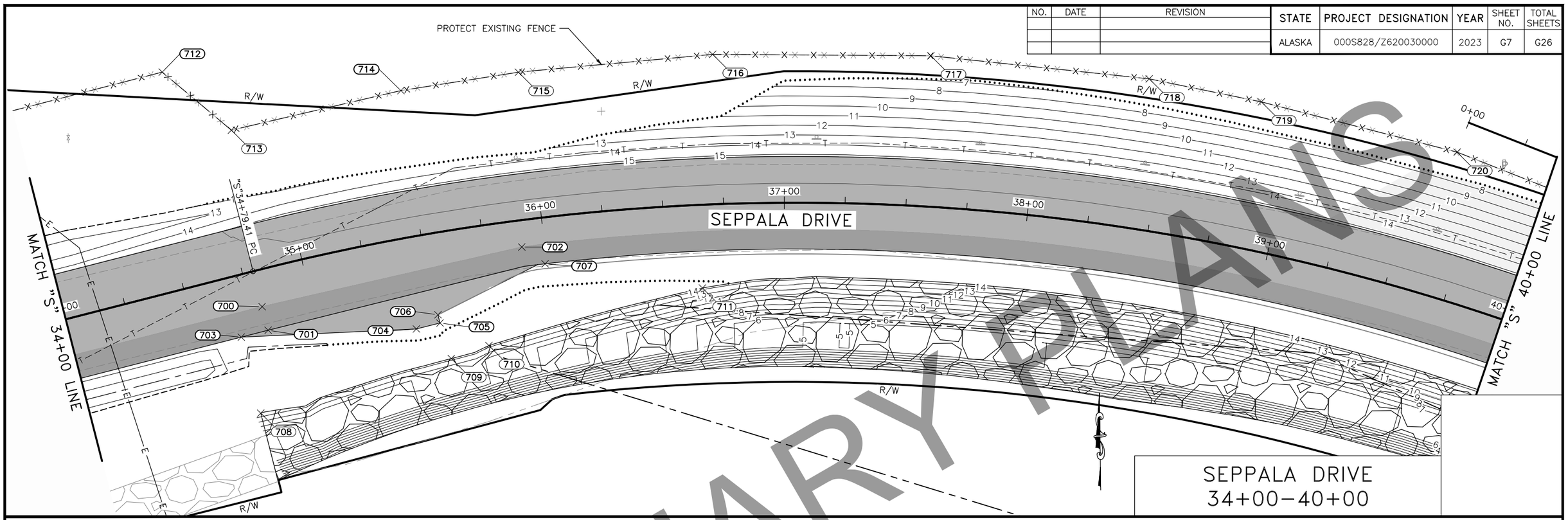
SHEET G6 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
600	"S"	32+30.00	88.06'	3840283.62	1729996.02	13.00'	ME	FENCE

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G6 Seppala Drive 28+00-34+00 Wed, May/10/23 03:49pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G7	G26



SEPPALA DRIVE
34+00–40+00

SHEET G7 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
700	"S"	34+79.42	15.00'	3840242.20	1730262.69	14.54'	EPW	BEGIN TRANSITION
701	"S"	34+79.41	25.00'	3840232.49	1730265.04	14.39'	SHLDR	
702	"S"	35+90.46	11.00'	3840265.29	1730369.67	14.62'	EPW	END TRANSITION
703	"S"	34+68.01	25.00'	3840229.80	1730253.96	14.39'	SHLDR	BEGIN TERMINAL WIDENING
704	"S"	35+41.17	37.55'	3840232.24	1730325.95	14.20'	SHLDR	
705	"S"	35+51.58	36.88'	3840234.53	1730335.68	14.22'	SHLDR	
706	"S"	35+51.31	33.38'	3840237.94	1730334.88	14.27'	SHLDR	
707	"S"	35+99.28	19.01'	3840258.28	1730379.16	14.50'	SHLDR	END WIDENING
708	"S"	34+68.04	57.23'	3840198.49	1730261.58	14.75'	RIPRAP	ME
709	"S"	35+53.79	52.04'	3840219.88	1730340.12	14.33'	RIPRAP	
710	"S"	35+70.86	49.21'	3840225.02	1730355.65	14.33'	RIPRAP	
711	"S"	36+64.86	34.16'	3840247.50	1730443.67	14.33'	RIPRAP	
712	"S"	34+63.58	88.49'	3840339.05	1730222.93	0.00'	AP	FENCE
713	"S"	34+84.82	58.35'	3840314.83	1730251.01	0.00'	AP	FENCE
714	"S"	35+51.92	59.91'	3840330.18	1730320.85	0.00'	AP	FENCE
715	"S"	35+97.73	60.41'	3840337.09	1730369.23	0.00'	AP	FENCE
716	"S"	36+72.78	61.53'	3840343.37	1730449.11	0.00'	AP	FENCE
717	"S"	37+56.70	61.89'	3840341.61	1730538.73	0.00'	AP	FENCE
718	"S"	38+41.13	61.80'	3840330.97	1730628.30	0.00'	AP	FENCE
719	"S"	38+85.16	60.53'	3840320.91	1730674.24	0.00'	AP	FENCE
720	"S"	39+62.97	59.87'	3840299.23	1730754.35	0.00'	AP	FENCE

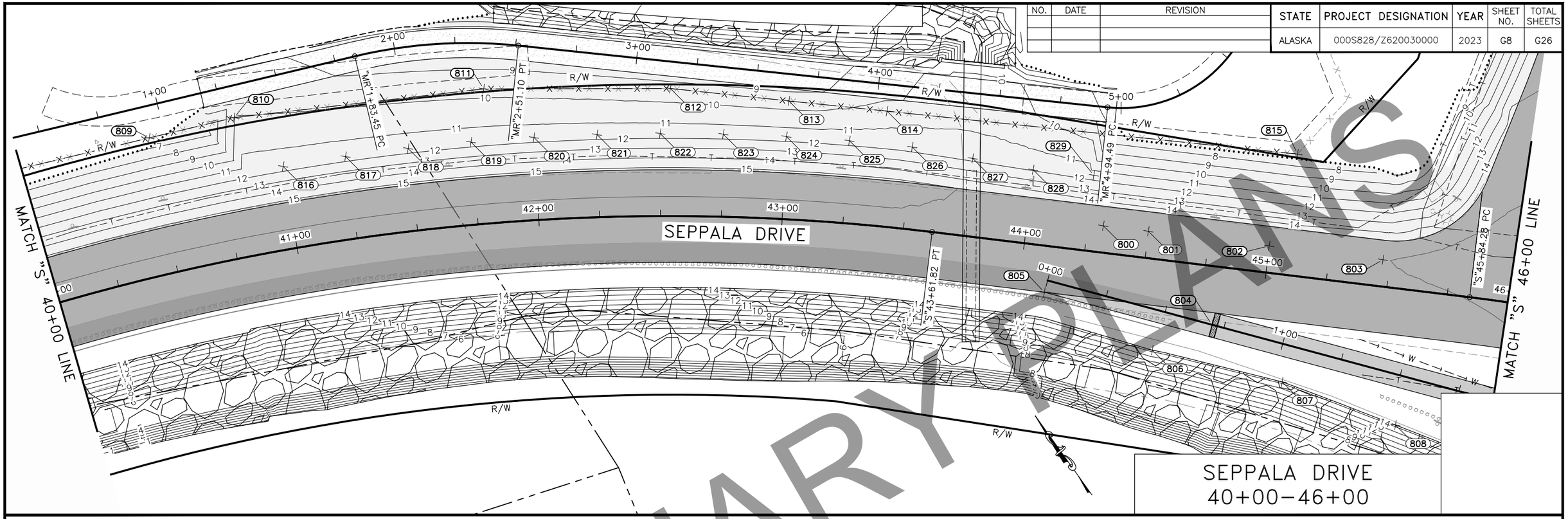
NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.
2. SEE B3 FOR RIPRAP DETAILS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\C\C5001cnst–17258FB–G7 Seppala Drive 34+00–40+00 Wed, May/10/23 03:50pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G8	G26



SEPPALA DRIVE
40+00–46+00

SHEET G8 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
800	"S"	44+31.36	11.01'	3840006.16	1731138.44	14.62'	FG	GB
801	"S"	44+50.00	11.00'	3839993.55	1731152.17	14.62'	FG	GB
802	"S"	45+00.00	11.00'	3839959.74	1731189.00	14.62'	FG	GB
803	"S"	45+47.09	11.00'	3839927.89	1731223.69	14.96'	FG	GB
804	"S"	44+80.56	23.95'	3839947.14	1731151.04	14.39'	DWT	
805	"S"	44+10.62	18.99'	3839998.09	1731102.87	14.50'	SHLDR	
806	"S"	44+57.49	37.25'	3839952.94	1731125.05	14.33'	RIPRAP	
807	"S"	45+11.99	43.75'	3839911.29	1731160.81	14.33'	RIPRAP	
808	"S"	45+60.32	55.72'	3839869.79	1731188.32	14.33'	RIPRAP	
809	"S"	40+50.82	56.16'	3840263.84	1730840.95	6.68'	AP	FENCE
810	"S"	40+84.51	57.16'	3840250.29	1730874.11	9.68'	AP	FENCE
811	"S"	41+81.69	55.21'	3840200.14	1730964.32	9.97'	AP	FENCE
812	"S"	42+54.02	52.35'	3840155.57	1731026.73	9.44'	AP	FENCE
813	"S"	43+00.24	48.52'	3840123.04	1731063.31	9.62'	AP	FENCE
814	"S"	43+38.72	47.31'	3840096.15	1731093.64	10.57'	AP	FENCE
815	"S"	45+07.00	49.79'	3839983.58	1731220.39	7.48'	ME	FENCE
816	"S"	41+00.00	33.88'	3840222.28	1730878.83	11.50'	GB	
817	"S"	41+25.00	33.88'	3840210.63	1730902.01	11.50'	GB	
818	"S"	41+50.00	33.88'	3840198.35	1730924.85	11.50'	GB	
819	"S"	41+75.00	33.88'	3840185.43	1730947.35	11.50'	GB	

SHEET G8 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
820	"S"	42+00.00	33.88'	3840171.89	1730969.48	11.50'	GB	
821	"S"	42+25.00	33.88'	3840157.75	1730991.22	11.50'	GB	
822	"S"	42+50.00	33.88'	3840143.00	1731012.56	11.50'	GB	
823	"S"	42+75.00	33.88'	3840127.67	1731033.49	11.50'	GB	
824	"S"	43+00.00	33.88'	3840111.76	1731053.98	11.50'	GB	
825	"S"	43+25.00	33.88'	3840095.29	1731074.02	11.50'	GB	
826	"S"	43+50.00	33.70'	3840078.14	1731093.47	11.50'	GB	
827	"S"	43+74.78	31.97'	3840059.87	1731110.94	11.72'	GB	
828	"S"	44+00.00	30.33'	3840041.60	1731128.41	11.91'	GB	
829	"S"	44+25.00	31.09'	3840025.26	1731147.34	11.50'	GB	

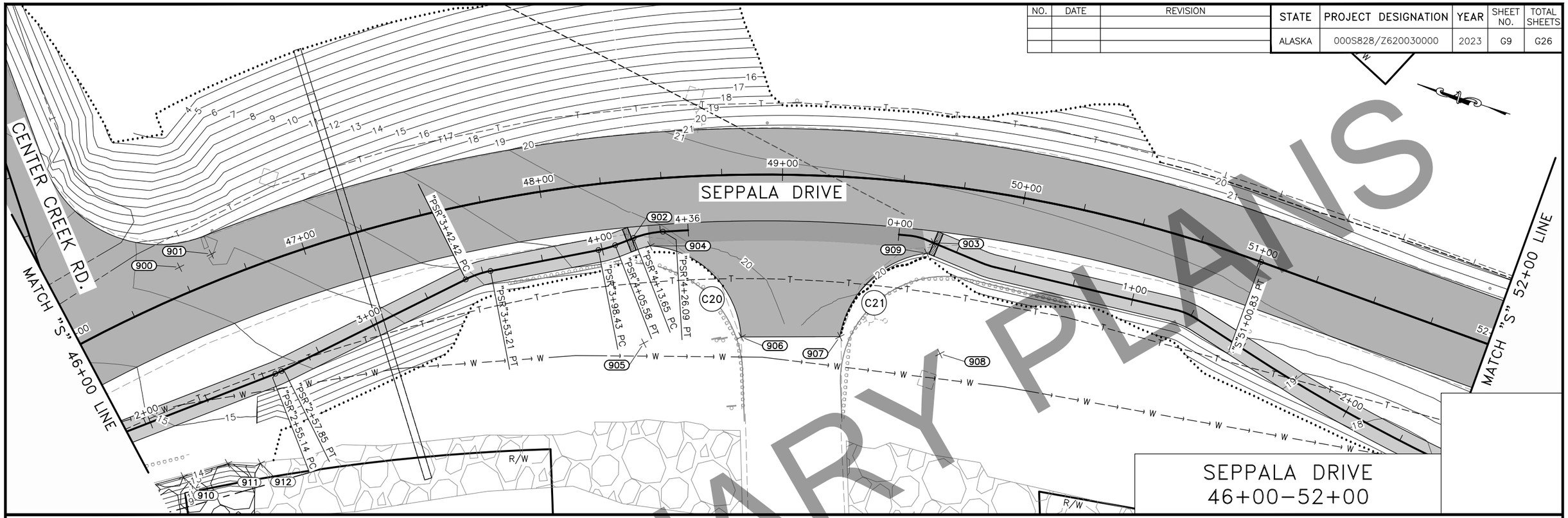
NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.
2. SEE B3 FOR RIPRAP DETAILS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-08 Seppala Drive 40+00-46+00 Wed, May/10/23 03:50pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G9	G26



SEPPALA DRIVE
46+00–52+00

NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.
2. SEE B3 FOR RIPRAP DETAILS.

G9 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C20	40	904	SHLDR	"S"	48+43.21	27.39'	3839673.81	1731366.05	19.80'	PC
		905	RP	"S"	48+36.73	67.04'	3839663.80	1731327.23	0.00'	
		906	SHLDR	"S"	48+81.85	66.68'	3839626.55	1731342.05	19.65'	PT – ME
C21	42	907	SHLDR	"S"	49+27.44	65.73'	3839588.02	1731354.71	19.83'	PT – ME
		908	RP	"S"	49+74.30	68.70'	3839546.76	1731360.77	0.00'	
		909	SHLDR	"S"	49+62.73	28.37'	3839564.73	1731398.41	20.33'	PT

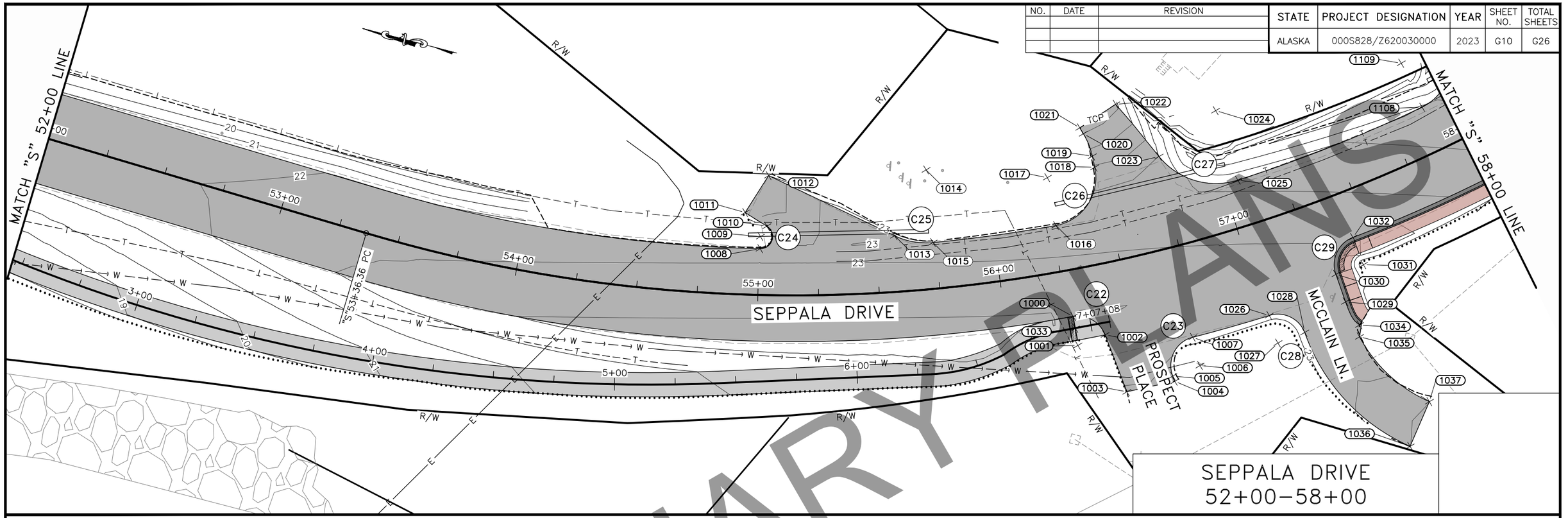
SHEET G9 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
900	"S"	46+50.00	11.00'	3839854.87	1731297.81	16.46'	FG	GB
901	"S"	46+63.88	11.00'	3839844.13	1731306.99	16.79'	FG	GB
902	"S"	48+35.80	23.85'	3839681.72	1731366.53	19.76'	DWT	
903	"S"	49+65.08	23.81'	3839563.41	1731403.32	20.47'	DWT	
910	"S"	46+13.39	67.85'	3839826.74	1731216.34	14.33'	RIPRAP	
911	"S"	46+34.58	70.87'	3839811.10	1731227.10	14.33'	RIPRAP	
912	"S"	46+48.75	76.20'	3839798.28	1731231.45	8.53'	RIPRAP	ME

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G9 Seppala Drive 46+00-52+00 Wed, May/10/23 03:50pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G10	G26



SEPPALA DRIVE
52+00–58+00

G10 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C22	12	1000	SHLDR	"S"	56+27.00	19.11'	3838907.33	1731470.16	23.90'	PC
		1001	RP	"S"	56+26.76	31.11'	3838902.49	1731459.18	0.00'	
		1002	SHLDR	"S"	56+38.02	28.98'	3838892.75	1731466.18	23.85'	PT
C23	12	1005	SHLDR	"S"	56+60.19	51.49'	3838861.50	1731456.85	22.67'	PC
		1006	RP	"S"	56+71.19	50.00'	3838851.75	1731463.85	0.00'	
		1007	SHLDR	"S"	56+71.19	38.00'	3838857.58	1731474.34	23.47'	PRC
C24	5	1008	SHLDR	"S"	55+00.53	19.00'	3839039.05	1731464.59	22.76'	PC
		1009	RP	"S"	55+00.54	24.00'	3839040.19	1731469.46	0.00'	
		1010	SHLDR	"S"	55+03.15	28.33'	3839038.76	1731474.25	23.46'	PT
C25	30	1013	SHLDR	"S"	55+57.93	23.09'	3838986.87	1731483.75	22.58'	PC
		1014	RP	"S"	55+73.99	49.00'	3838981.17	1731513.20	0.00'	
		1015	SHLDR	"S"	55+74.00	19.00'	3838970.87	1731485.03	22.64'	PT
C26	30	1016	SHLDR	"S"	56+26.72	19.00'	3838923.67	1731504.59	22.43'	PC
		1017	RP	"S"	56+26.72	39.00'	3838932.11	1731522.73	0.00'	
		1018	SHLDR	"S"	56+48.06	39.34'	3838914.28	1731531.78	23.89'	PT
C27	30	1023	SHLDR	"S"	56+76.60	37.40'	3838889.78	1731542.74	22.98'	PC
		1024	RP	"S"	57+06.36	48.98'	3838871.99	1731566.90	0.00'	
		1025	SHLDR	"S"	57+06.35	18.98'	3838855.96	1731541.54	21.79'	PT
C28	12	1026	SHLDR	"S"	57+02.05	38.00'	3838829.37	1731490.95	23.21'	PRC
		1027	RP	"S"	57+02.10	49.85'	3838823.05	1731480.92	0.00'	
		1028	SHLDR	"S"	57+13.05	49.07'	3838813.49	1731487.92	23.40'	PT

G10 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C29	12	1030	LOC	"S"	57+31.81	30.73'	3838807.10	1731514.27	23.06'	PC – END CATCH
		1031	RP	"S"	57+43.24	31.00'	3838797.14	1731520.96	0.00'	
		1032	LOC	"S"	57+43.25	19.00'	3838804.14	1731530.71	22.88'	PRC – BEGIN SPILL

NOTE:
1. SEE A-SHEETS FOR CENTERLINE CONTROL.

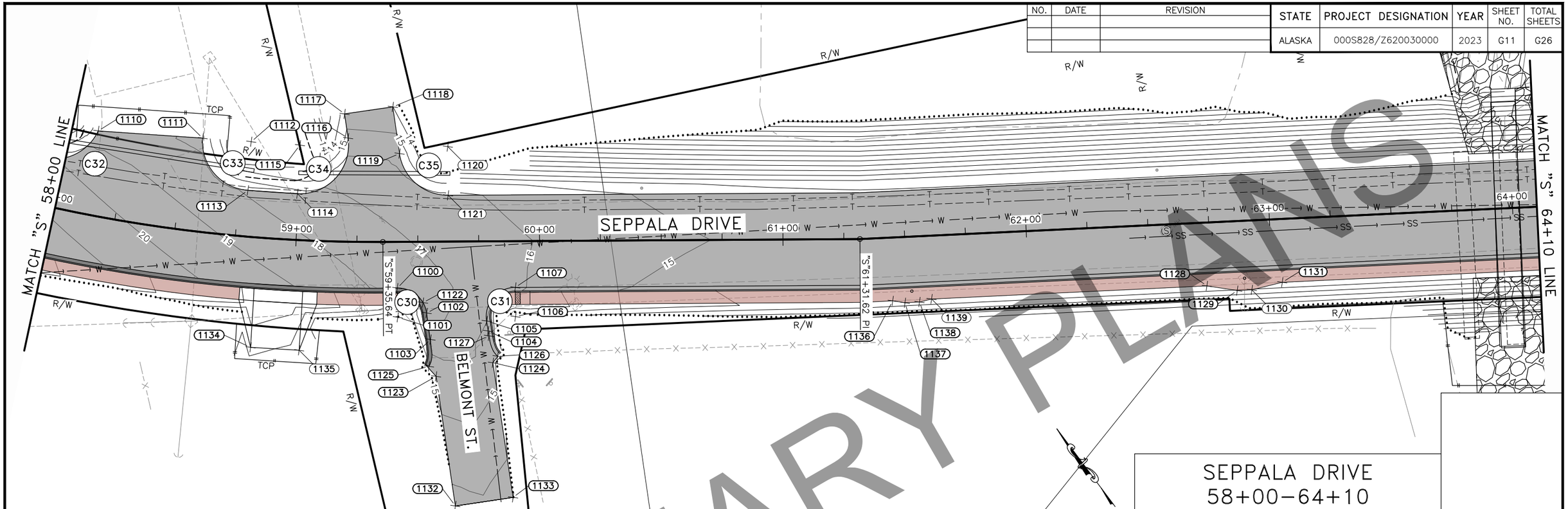
SHEET G10 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1003	"S"	56+41.90	53.68'	3838878.14	1731445.84	22.67'	SHLDR	ME
1004	"S"	56+60.46	53.78'	3838860.16	1731454.97	22.44'	SHLDR	ME
1011	"S"	54+93.62	33.69'	3839048.79	1731477.42	24.71'	SHLDR	ME
1012	"S"	55+03.54	49.12'	3839043.28	1731494.55	24.71'	SHLDR	ME
1019	"S"	56+48.07	44.03'	3838916.40	1731535.96	24.53'	SHLDR	PC
1020	"S"	56+46.27	53.81'	3838922.29	1731543.94	25.99'	SHLDR	PT
1021	"S"	56+45.25	56.48'	3838924.32	1731545.91	26.31'	SHLDR	ME
1022	"S"	56+63.55	62.63'	3838912.49	1731559.00	26.26'	SHLDR	ME
1029	"S"	57+31.67	42.73'	3838800.40	1731504.31	23.35'	LOC	BEGIN TERMINATION
1033	"S"	56+27.02	24.05'	3838905.23	1731465.69	23.83'	DWT	
1034	"S"	57+33.65	53.61'	3838792.45	1731496.59	23.79'	LOC	END TERMINATION – BEGIN CATCH
1035	"S"	57+32.12	58.20'	3838791.20	1731491.87	23.70'	SHLDR	PT
1036	"S"	57+35.62	107.65'	3838759.68	1731453.56	24.78'	SHLDR	ME
1037	"S"	57+47.63	93.32'	3838756.66	1731473.33	25.24'	SHLDR	ME

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G10 Seppala Drive 52+00-58+00 Wed, May/10/23 03:51pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G11	G26



SEPPALA DRIVE
58+00–64+10

PRELIMINARY PLANS

G11 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C30	12	1100	LOC	"S"	59+41.47	18.97'	3838660.10	1731674.11	17.70'	PC
		1101	RP	"S"	59+41.58	30.97'	3838650.39	1731667.06	0.00'	
		1102	LOC	"S"	59+53.46	29.28'	3838644.68	1731677.62	17.65'	PT
C31	12	1105	LOC	"S"	59+78.07	32.71'	3838627.29	1731695.36	16.01'	PC
		1106	RP	"S"	59+89.95	31.00'	3838621.60	1731705.93	0.00'	
		1107	LOC	"S"	59+89.95	19.01'	3838631.24	1731713.06	16.17'	PT
C32	20	1108	SHLDR	"S"	57+90.56	19.00'	3838790.15	1731589.73	20.18'	PC
		1109	RP	"S"	57+90.56	39.00'	3838803.03	1731605.03	0.00'	
		1110	SHLDR	"S"	58+11.29	34.56'	3838785.41	1731614.49	18.61'	PT – ME
C33	20	1111	SHLDR	"S"	58+56.81	38.37'	3838757.31	1731647.04	17.78'	PC – ME
		1112	RP	"S"	58+78.13	38.99'	3838744.18	1731662.13	0.00'	
		1113	SHLDR	"S"	58+78.50	18.99'	3838729.04	1731649.06	17.89'	PT
C34	20	1114	SHLDR	"S"	58+99.54	19.00'	3838715.71	1731664.50	17.36'	PC
		1115	RP	"S"	58+99.54	39.00'	3838731.07	1731677.31	0.00'	
		1116	SHLDR	"S"	59+20.60	42.58'	3838721.51	1731694.88	15.33'	PT
C35	20	1119	SHLDR	"S"	59+42.74	36.24'	3838703.73	1731707.97	15.74'	PC
		1120	RP	"S"	59+62.55	39.01'	3838694.17	1731725.54	0.00'	
		1121	SHLDR	"S"	59+62.55	19.00'	3838678.09	1731713.64	16.25'	PT

SHEET G11 CONTROL POINT TABLE

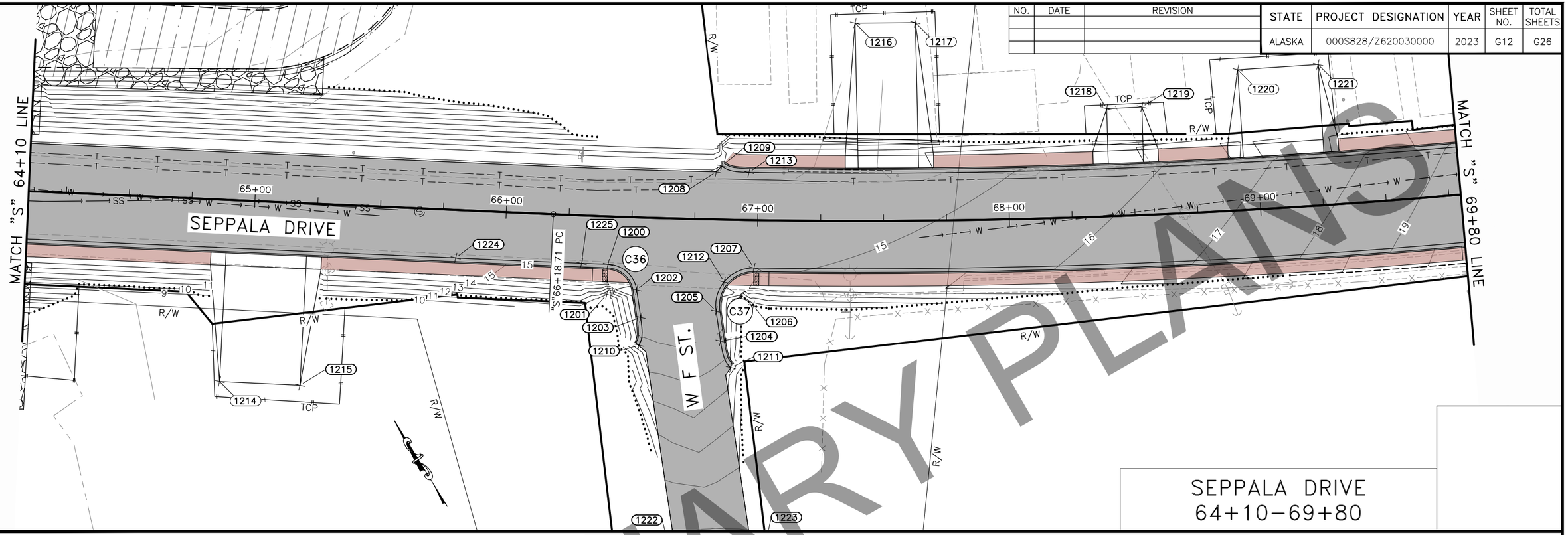
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1103	"S"	59+55.01	40.17'	3838635.01	1731672.39	16.58'	LOC	BEGIN TERMINATION
1104	"S"	59+78.66	36.82'	3838623.63	1731693.39	15.87'	LOC	
1117	"S"	59+18.83	52.46'	3838730.31	1731699.67	14.46'	SHLDR	ME
1118	"S"	59+40.07	55.43'	3838720.74	1731717.24	14.03'	SHLDR	ME
1122	"S"	59+51.99	25.01'	3838648.99	1731678.98	17.69'	LOC	END SPILL
1123	"S"	59+57.18	55.33'	3838621.53	1731665.11	15.65'	SHLDR	PT
1124	"S"	59+80.54	49.89'	3838612.01	1731687.13	15.37'	SHLDR	PT
1125	"S"	59+54.29	51.20'	3838626.57	1731665.25	15.56'	LOC	END TERMINATION
1126	"S"	59+82.48	47.22'	3838613.00	1731690.27	15.48'	LOC	END TERMINATION – BEGIN CATCH
1127	"S"	59+78.98	38.84'	3838621.82	1731692.45	15.80'	LOC	BEGIN TERMINATION
1128	"S"	62+73.06	26.00'	3838461.38	1731940.76	14.59'	SDWK	
1129	"S"	62+85.42	28.50'	3838452.38	1731949.59	13.35'	SDWK	
1130	"S"	62+91.43	28.50'	3838449.01	1731954.56	13.34'	SDWK	
1131	"S"	63+04.07	26.00'	3838443.99	1731966.43	14.59'	SDWK	
1132	"S"	59+64.78	108.59'	3838574.20	1731639.54	13.79'	SHLDR	ME
1133	"S"	59+88.49	105.21'	3838562.80	1731660.62	13.41'	SHLDR	ME
1134	"S"	58+84.69	45.18'	3838676.79	1731611.27	17.81'	DRWY	ME
1135	"S"	59+03.33	45.18'	3838663.84	1731626.52	17.32'	DRWY	ME
1136	"S"	61+43.85	26.00'	3838533.86	1731833.79	14.63'	SDWK	
1137	"S"	61+48.83	27.00'	3838530.24	1731837.36	14.63'	SDWK	
1138	"S"	61+54.83	27.00'	3838526.88	1731842.32	14.62'	SDWK	
1139	"S"	61+59.85	26.00'	3838524.89	1731847.04	14.60'	SDWK	

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G11 Seppala Drive 58+00-64+10 Wed, May/10/23 03:51pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G12	G26



SEPPALA DRIVE
64+10–69+80

G12 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C36	12	1200	LOC	"S"	66+41.16	19.00'	3838260.68	1732249.59	14.88'	PRC
		1201	RP	"S"	66+41.11	31.00'	3838250.72	1732242.90	0.00'	
		1202	LOC	"S"	66+52.78	28.84'	3838246.00	1732253.93	14.81'	PT
C37	15	1205	LOC	"S"	66+84.20	36.46'	3838222.26	1732276.40	14.68'	
		1206	RP	"S"	66+98.81	34.00'	3838216.36	1732290.19	0.00'	
		1207	LOC	"S"	66+98.80	19.00'	3838229.02	1732298.24	14.91'	BEGIN SPILL

SHEET G12 CONTROL POINT TABLE

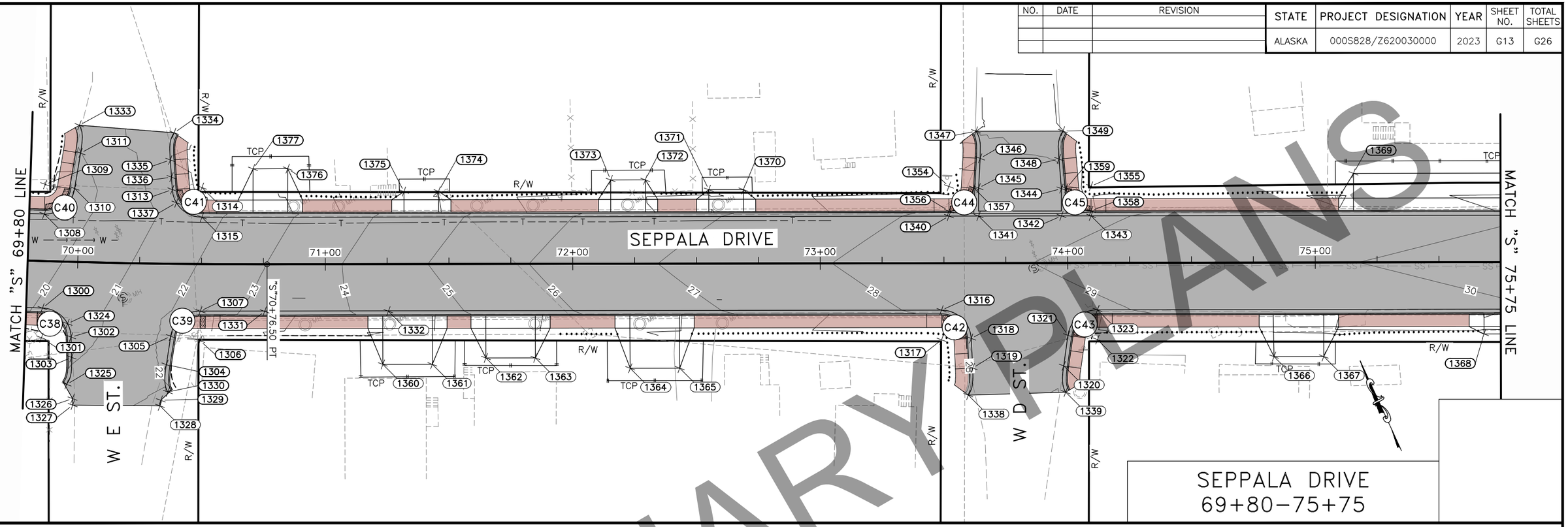
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1203	"S"	66+54.72	39.66'	3838235.89	1732249.61	14.39'	LOC	BEGIN TERMINATION
1204	"S"	66+86.17	48.30'	3838211.22	1732271.68	13.71'	LOC	BEGIN TERMINATION
1208	"S"	66+83.15	19.01'	3838269.47	1732305.54	14.12'	SHLDR	PT
1209	"S"	66+85.29	21.34'	3838270.28	1732308.59	14.08'	LOC	END TERMINATION
1210	"S"	66+54.38	50.74'	3838226.82	1732243.23	13.90'	LOC	END TERMINATION
1211	"S"	66+90.34	58.77'	3838200.11	1732269.61	12.71'	LOC	END TERMINATION – BEGIN CATCH
1212	"S"	66+87.11	24.77'	3838230.50	1732285.20	14.84'	LOC	END CATCH
1213	"S"	66+96.25	19.00'	3838262.45	1732316.49	14.14'	LOC	BEGIN TERMINATION
1214	"S"	64+89.11	72.27'	3838301.88	1732093.66	8.20'	DRWY	ME
1215	"S"	65+21.11	72.36'	3838283.85	1732120.10	8.77'	DRWY	ME
1216	"S"	67+38.66	78.69'	3838290.91	1732383.48	12.80'	DRWY	ME
1217	"S"	67+63.34	78.78'	3838278.52	1732404.00	12.78'	DRWY	ME
1218	"S"	68+40.30	42.89'	3838209.55	1732450.85	15.50'	DRWY	ME
1219	"S"	68+54.52	43.03'	3838202.81	1732463.12	15.52'	DRWY	ME
1220	"S"	68+93.97	55.89'	3838195.42	1732503.27	16.79'	DRWY	ME
1221	"S"	69+26.63	56.01'	3838180.48	1732531.57	17.71'	DRWY	ME
1222	"S"	66+73.63	150.30'	3838132.58	1732205.44	8.70'	SHLDR	ME
1223	"S"	67+01.70	145.32'	3838120.79	1732233.03	8.77'	SHLDR	ME
1224	"S"	65+80.70	19.00'	3838294.60	1732199.36	14.35'	LOC	END CATCH
1225	"S"	66+30.70	19.01'	3838266.53	1732240.83	14.88'	LOC	BEGIN SPILL

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G12 Seppala Drive 64+10-69+80 Wed, May/10/23 03:51pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G13	G26



SEPPALA DRIVE
69+80–75+75

G13 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C38	12	1300	LOC	"S"	69+86.33	19.01'	3838086.70	1732550.20	20.13'	PRC
		1301	RP	"S"	69+86.29	31.00'	3838075.98	1732544.82	0.00'	
		1302	LOC	"S"	69+98.13	30.38'	3838071.22	1732555.83	20.57'	PT
C39	12	1305	LOC	"S"	70+37.96	29.27'	3838054.70	1732592.56	22.29'	PC
		1306	RP	"S"	70+49.71	31.00'	3838048.07	1732602.56	0.00'	
		1307	LOC	"S"	70+49.68	19.00'	3838058.94	1732607.63	22.43'	PRC
C40	12	1308	LOC	"S"	69+85.88	19.01'	3838120.93	1732566.74	19.34'	PRC
		1309	RP	"S"	69+85.87	31.00'	3838131.67	1732572.08	0.00'	
		1310	LOC	"S"	69+97.94	29.68'	3838125.19	1732582.19	19.48'	PT
C41	12	1313	LOC	"S"	70+37.85	30.02'	3838108.31	1732617.88	21.48'	PC
		1314	RP	"S"	70+49.95	30.96'	3838104.05	1732629.10	0.00'	
		1315	LOC	"S"	70+50.03	18.95'	3838093.15	1732624.07	21.70'	PRC – BEGIN CATCH
C42	12	1316	LOC	"S"	73+48.97	19.00'	3837934.23	1732879.91	28.20'	PC
		1317	RP	"S"	73+48.97	31.00'	3837923.32	1732874.92	0.00'	
		1318	LOC	"S"	73+60.95	30.43'	3837918.85	1732886.05	28.11'	PT
C43	12	1321	LOC	"S"	74+00.10	29.28'	3837903.61	1732922.12	28.75'	PC
		1322	RP	"S"	74+11.98	31.00'	3837897.11	1732932.21	0.00'	
		1323	LOC	"S"	74+11.97	19.00'	3837908.02	1732937.20	28.88'	PT

G13 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C44	12	1340	LOC	"S"	73+52.05	19.00'	3837967.50	1732898.52	28.23'	
		1354	RP	"S"	73+52.05	31.00'	3837978.42	1732903.51	0.00'	
		1345	LOC	"S"	73+64.03	30.34'	3837972.83	1732914.13	28.37'	
C45	12	1343	LOC	"S"	74+09.46	19.00'	3837943.62	1732950.72	28.85'	
		1355	RP	"S"	74+09.47	31.00'	3837954.53	1732955.72	0.00'	
		1344	LOC	"S"	73+97.50	30.04'	3837958.63	1732944.44	28.94'	

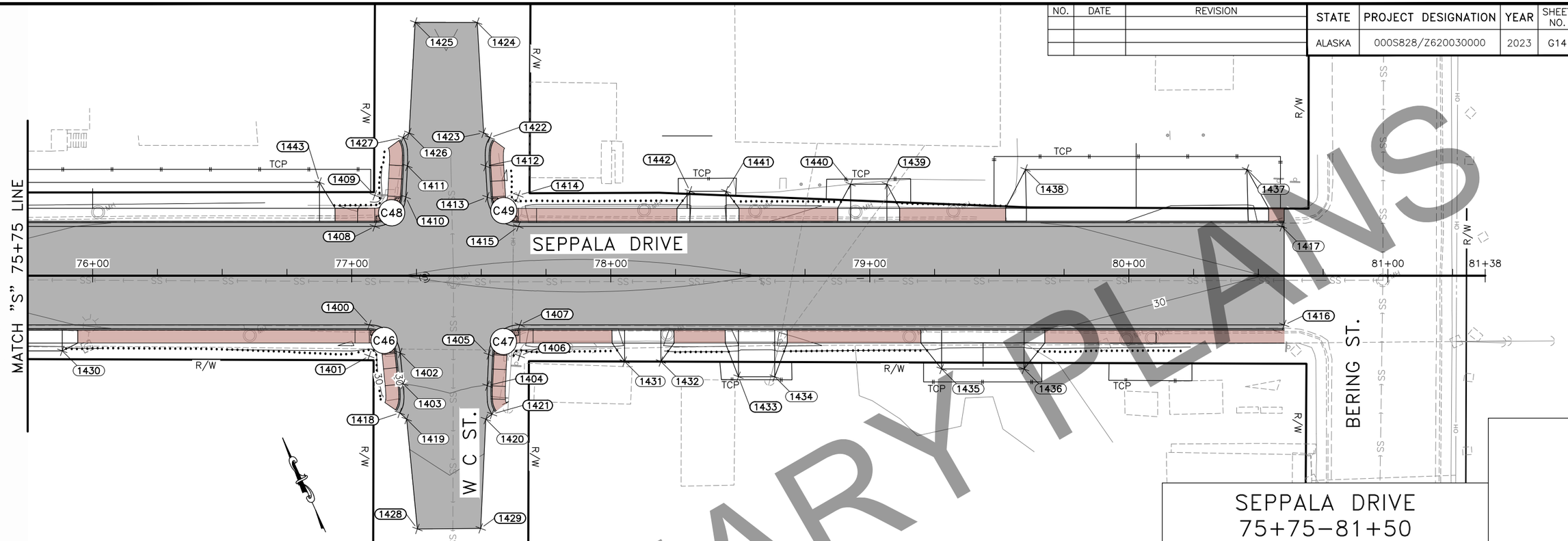
NOTE:

1. SEE SHEET G19 FOR CONTROL POINT TABLE.
2. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G13 Seppala Drive 69+80-75+75 Wed, May/10/23 03:52pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G14	G26



SEPPALA DRIVE
75+75–81+50

G14 CURVE LAYOUT TABLE

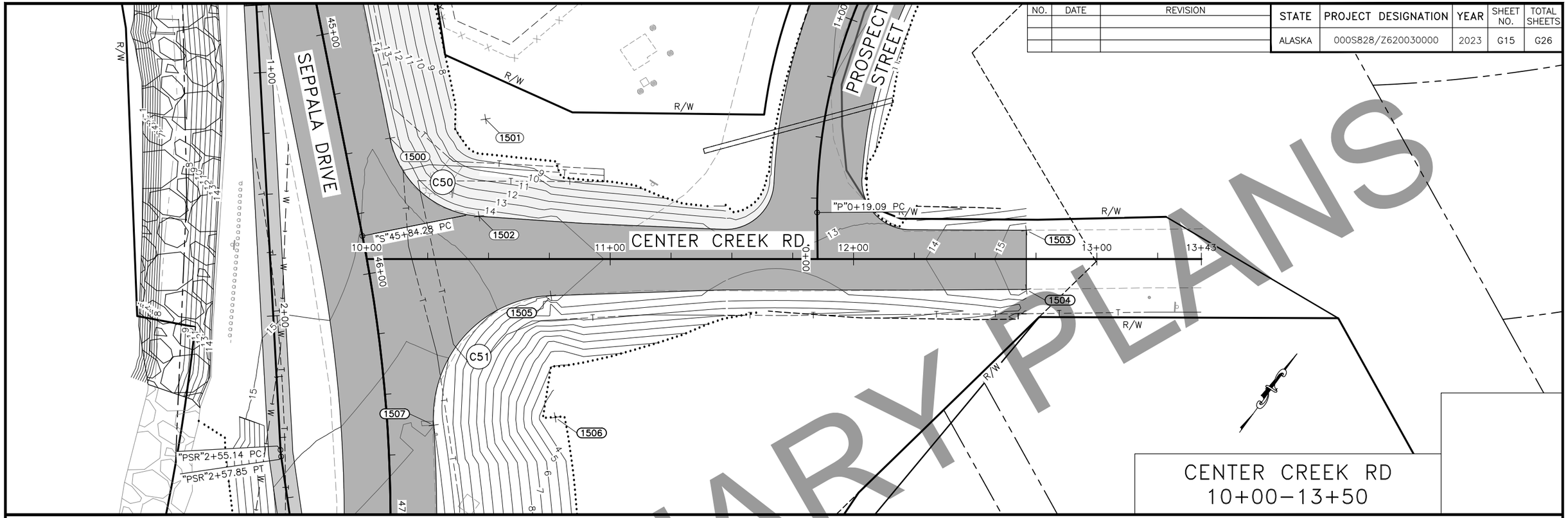
NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C46	12	1400	LOC	"S"	77+06.78	19.00'	3837785.37	1733205.28	30.57'	PC
		1401	RP	"S"	77+06.77	31.00'	3837774.46	1733200.28	0.00'	
		1402	LOC	"S"	77+18.71	29.83'	3837770.56	1733211.63	30.48'	PT
C47	12	1405	LOC	"S"	77+52.91	30.46'	3837755.76	1733242.46	30.60'	PC
		1406	RP	"S"	77+64.90	31.01'	3837750.27	1733253.14	0.00'	
		1407	LOC	"S"	77+64.90	19.00'	3837761.19	1733258.13	30.74'	PT
C48	12	1408	LOC	"S"	77+08.90	19.00'	3837819.04	1733223.02	30.58'	PC
		1409	RP	"S"	77+08.90	31.00'	3837829.96	1733228.01	0.00'	
		1410	LOC	"S"	77+20.88	30.36'	3837824.39	1733238.64	30.48'	PT
C49	12	1413	LOC	"S"	77+52.37	30.31'	3837811.24	1733267.25	30.59'	PC
		1414	RP	"S"	77+64.35	31.01'	3837806.89	1733278.44	0.00'	
		1415	LOC	"S"	77+64.35	18.99'	3837795.97	1733273.44	30.74'	PT

NOTE:
1. SEE SHEET G19 FOR CONTROL POINT TABLE.
2. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G14 Seppala Drive 75+75-81+50 Wed, May/10/23 03:52pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G15	G26



CENTER CREEK RD
10+00–13+50

G15 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C50	40	1500	SHLDR	"C"	10+09.57	49.64'	3839933.78	1731229.10	14.78'	PC
		1501	RP	"C"	10+48.80	57.46'	3839963.25	1731256.15	0.00'	
		1502	SHLDR	"C"	10+46.10	17.54'	3839929.44	1731277.54	14.70'	PT
C51	50	1505	SHLDR	"C"	10+75.68	15.06'	3839920.60	1731320.66	14.09'	PC
		1506	RP	"C"	10+77.38	65.03'	3839881.27	1731351.54	0.00'	
		1507	SHLDR	"C"	10+27.48	68.21'	3839849.24	1731313.15	17.00'	PT

SHEET G15 CONTROL POINT TABLE

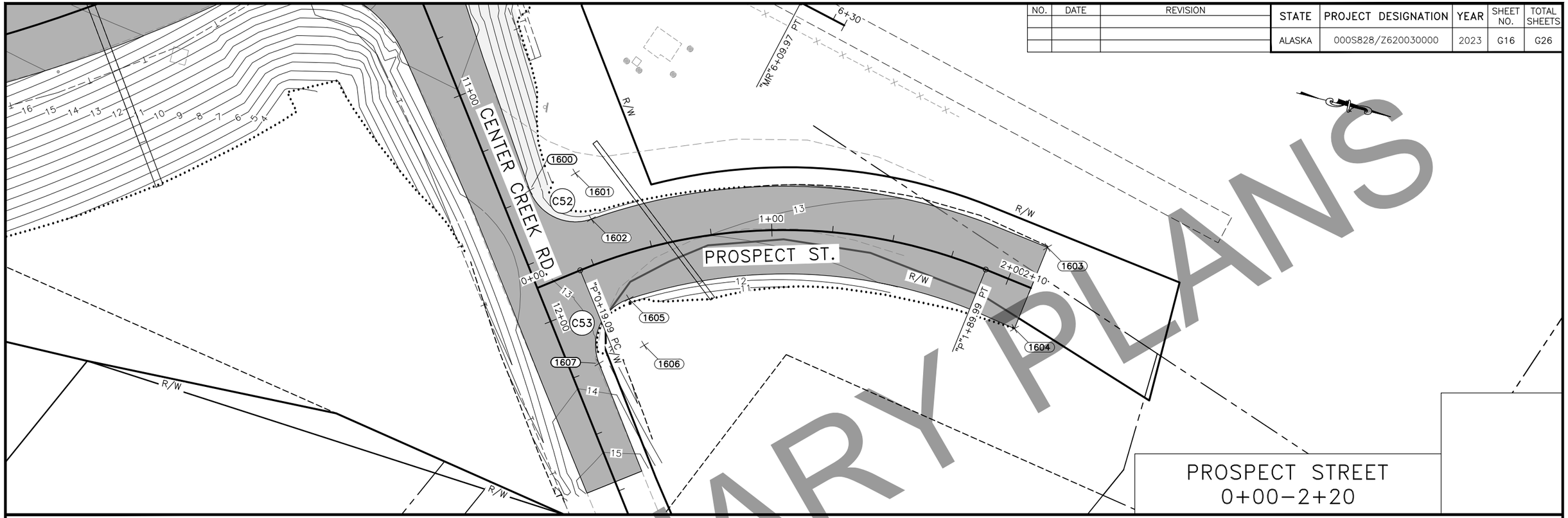
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1503	"C"	12+71.00	11.79'	3840057.60	1731462.44	15.36'	SHLDR	ME
1504	"C"	12+71.00	12.48'	3840038.01	1731476.77	15.19'	SHLDR	ME

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB–Seppala\C\C5001cnst–17258FB–G15 Center Creek Rd 10+00–13+50 Wed, May/10/23 03:52pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G16	G26



PROSPECT STREET
0+00–2+20

G16 CURVE LAYOUT TABLE

NO.	R (FT)	PT #	DESC	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	REMARKS
C52	20	1600	SHLDR	"P"	0+12.43	38.27'	3839984.56	1731362.04	12.94'	PC
		1601	RP	"P"	0+30.47	37.99'	3840000.98	1731350.61	0.00'	
		1602	SHLDR	"P"	0+30.41	18.00'	3840012.02	1731367.28	12.44'	PRC
C53	20	1605	SHLDR	"P"	0+34.42	18.04'	3840035.09	1731395.25	12.51'	PRC
		1606	RP	"P"	0+34.35	38.04'	3840045.83	1731412.12	0.00'	
		1607	SHLDR	"P"	0+11.71	38.32'	3840029.69	1731423.93	13.57'	PC

SHEET G16 CONTROL POINT TABLE

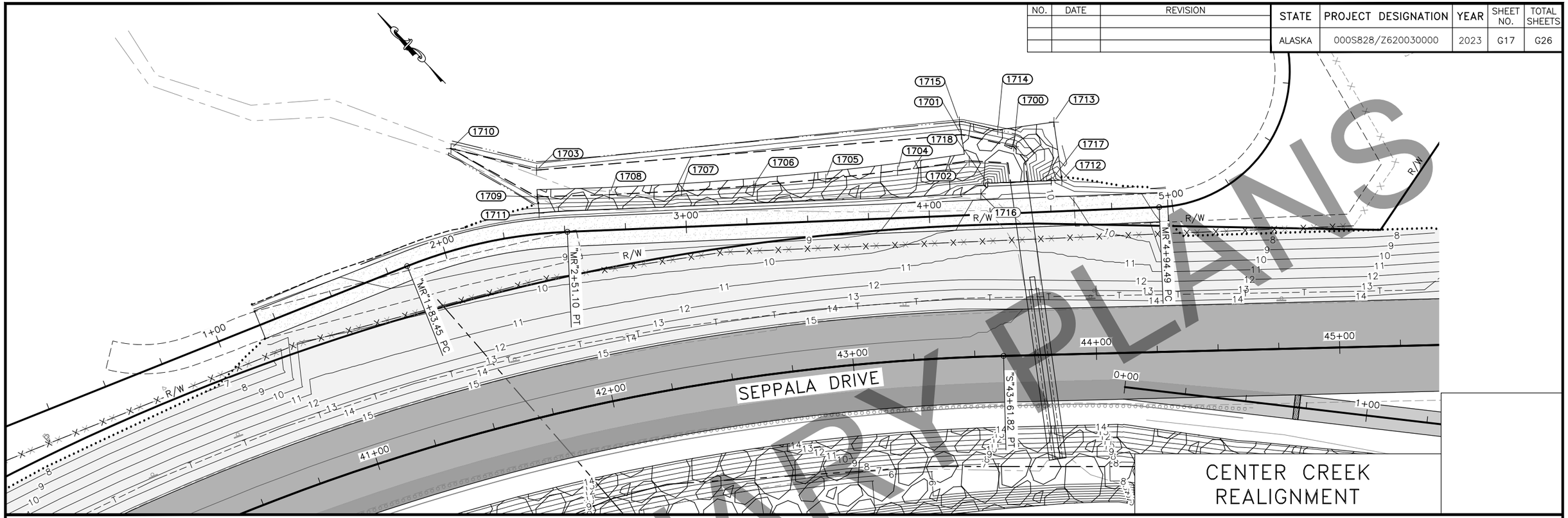
POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1603	"P"	2+10.08	18.00'	3840196.53	1731332.30	13.47'	SHLDR	ME
1604	"P"	2+10.08	18.00'	3840191.60	1731367.96	13.47'	SHLDR	ME

NOTE:
1. SEE A–SHEETS FOR CENTERLINE CONTROL.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G16 Prospect Street 0+00-2+20 Wed, May/10/23 03:53pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G17	G26



SHEET G17 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1700	"S"	43+68.19	85.84'	3840104.01	1731142.52	1.68'	BOTTOM OF CREEK	
1701	"S"	43+48.15	91.38'	3840122.49	1731130.40	1.90'	BOTTOM OF CREEK	
1702	"S"	43+50.75	80.52'	3840112.49	1731125.29	1.76'	BOTTOM OF CREEK	
1703	"S"	41+89.71	99.38'	3840233.32	1730994.73	3.63'	BOTTOM OF CREEK	
1704	"S"	43+23.52	78.05'	3840130.06	1731101.31	2.07'	BOTTOM OF CREEK	
1705	"S"	42+96.17	77.11'	3840148.13	1731077.70	2.37'	BOTTOM OF CREEK	
1706	"S"	42+68.80	77.70'	3840166.69	1731054.48	2.67'	BOTTOM OF CREEK	
1707	"S"	42+41.53	79.82'	3840185.74	1731031.66	2.97'	BOTTOM OF CREEK	
1708	"S"	42+14.48	83.46'	3840205.27	1731009.25	3.28'	BOTTOM OF CREEK	
1709	"S"	41+87.75	88.59'	3840225.26	1730987.25	3.58'	BOTTOM OF CREEK	
1710	"S"	41+60.97	115.98'	3840264.02	1730975.53	3.99'	BOTTOM OF CREEK	
1711	"S"	41+87.21	81.90'	3840219.87	1730983.25	7.04'	EDGE OF RIPRAP	
1712	"S"	43+87.60	71.58'	3840080.37	1731147.17	8.02'	EDGE OF RIPRAP	
1713	"S"	43+84.89	95.47'	3840099.81	1731161.34	5.77'	EDGE OF RIPRAP	
1714	"S"	43+61.79	92.85'	3840113.50	1731142.54	4.37'	EDGE OF RIPRAP	
1715	"S"	43+47.59	96.75'	3840126.92	1731133.51	4.60'	EDGE OF RIPRAP	
1716	"S"	43+54.69	66.81'	3840099.45	1731119.29	9.80'	EDGE OF RIPRAP	
1717	"S"	43+83.20	71.51'	3840083.29	1731143.88	9.52'	TOW	TOP OF HEADWALL
1718	"S"	43+57.43	71.09'	3840100.64	1731124.35	9.52'	TOW	TOP OF HEADWALL

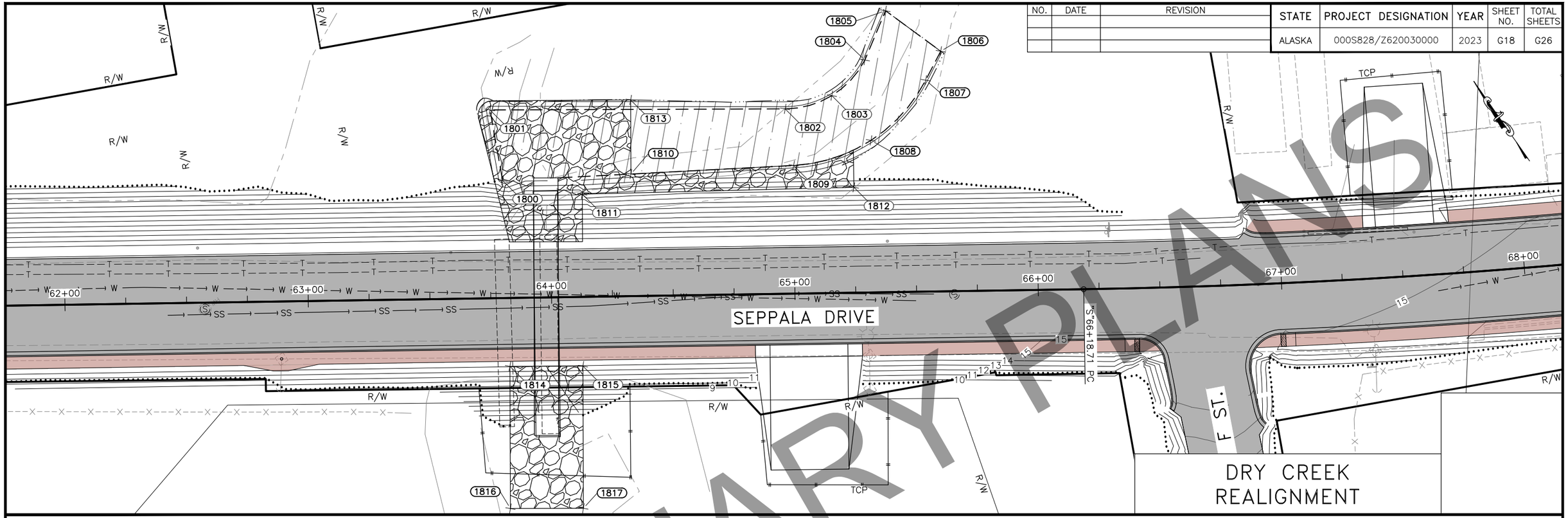
NOTE:

1. SEE A-SHEETS FOR CENTERLINE CONTROL.
2. SEE E-SHEETS FOR CULVERT DETAILS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G17 Center Creek Wed, May/10/23 03:53pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G18	G26



SHEET G18 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1800	"S"	63+80.59	48.29'	3838462.56	1732071.45	−0.75'	BOTTOM OF CREEK	
1801	"S"	63+75.86	77.33'	3838489.26	1732083.82	−0.75'	BOTTOM OF CREEK	
1802	"S"	64+97.14	75.91'	3838420.04	1732183.43	−0.45'	BOTTOM OF CREEK	
1803	"S"	65+16.41	81.05'	3838413.50	1732202.26	−0.40'	BOTTOM OF CREEK	
1804	"S"	65+30.20	95.45'	3838417.68	1732221.76	−0.35'	BOTTOM OF CREEK	
1805	"S"	65+39.00	115.59'	3838429.42	1732240.34	−0.30'	BOTTOM OF CREEK	
1806	"S"	65+61.42	98.60'	3838402.77	1732249.37	−0.30'	BOTTOM OF CREEK	
1807	"S"	65+55.07	86.80'	3838396.56	1732237.49	−0.33'	BOTTOM OF CREEK	
1808	"S"	65+32.21	62.42'	3838389.21	1732204.89	−0.42'	BOTTOM OF CREEK	
1809	"S"	65+00.26	52.63'	3838399.03	1732172.95	−0.50'	BOTTOM OF CREEK	
1810	"S"	64+33.36	50.13'	3838434.48	1732116.17	−0.67'	BOTTOM OF CREEK	EDGE OF RIPRAP
1811	"S"	64+13.26	42.16'	3838439.16	1732095.06	3.75'	EDGE OF RIPRAP	
1812	"S"	65+24.90	43.28'	3838377.47	1732188.10	3.31'	EDGE OF RIPRAP	
1813	"S"	64+33.72	80.55'	3838459.47	1732133.53	1.34'	EDGE OF RIPRAP	
1814	"S"	63+82.43	28.07'	3838398.32	1732030.14	9.66'	EDGE OF RIPRAP	
1815	"S"	64+12.43	28.42'	3838381.20	1732054.77	9.68'	EDGE OF RIPRAP	
1816	"S"	63+81.74	86.45'	3838350.38	1731996.82	0.32'	EDGE OF RIPRAP	
1817	"S"	64+11.74	86.80'	3838333.25	1732021.45	0.37'	EDGE OF RIPRAP	

NOTE:

1. SEE A–SHEETS FOR CENTERLINE CONTROL.
2. SEE E–SHEETS FOR CULVERT DETAILS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C5001cnst-17258FB-G18 Dry Creek Wed, May/10/23 03:53pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G19	G26

SHEET G13 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1303	"S"	69+98.55	38.59'	3838063.67	1732552.58	20.89'	LOC	BEGIN TERMINATION – BEGIN CATCH
1304	"S"	70+36.34	40.75'	3838045.03	1732586.15	22.11'	LOC	BEGIN TERMINATION
1311	"S"	69+99.98	44.04'	3838137.18	1732590.34	19.99'	LOC	BEGIN TERMINATION
1319	"S"	73+61.52	42.42'	3837907.71	1732881.58	28.06'	LOC	BEGIN TERMINATION
1320	"S"	73+98.31	41.61'	3837893.14	1732915.37	28.20'	LOC	BEGIN TERMINATION
1324	"S"	69+96.57	25.01'	3838076.74	1732556.79	20.37'	LOC	END SPILL
1325	"S"	69+96.86	49.54'	3838054.61	1732546.20	21.28'	LOC	END TERMINATION
1326	"S"	69+99.35	55.23'	3838048.38	1732545.97	21.32'	SHLDR	
1327	"S"	69+99.48	57.86'	3838045.96	1732544.93	21.33'	SHLDR	ME
1328	"S"	70+34.01	57.43'	3838030.99	1732576.84	22.32'	SHLDR	ME
1329	"S"	70+34.31	55.20'	3838032.87	1732578.08	22.29'	SHLDR	
1330	"S"	70+37.07	51.82'	3838034.72	1732582.07	21.85'	LOC	END TERMINATION – BEGIN SPILL
1331	"S"	70+75.50	19.01'	3838048.00	1732631.22	23.24'	LOC	END SPILL
1332	"S"	71+25.49	19.03'	3838027.18	1732676.67	24.29'	LOC	BEGIN CATCH
1333	"S"	69+99.23	55.29'	3838147.61	1732594.64	20.40'	LOC	END TERMINATION
1334	"S"	70+38.32	52.97'	3838128.85	1732628.14	21.02'	LOC	END TERMINATION – BEGIN CATCH
1335	"S"	70+36.87	41.98'	3838119.53	1732622.14	21.63'	LOC	BEGIN TERMINATION – END CATCH
1336	"S"	70+37.45	35.01'	3838112.99	1732619.66	21.51'	LOC	BEGIN SPILL
1337	"S"	70+39.58	24.72'	3838102.79	1732617.16	21.51'	LOC	END SPILL
1338	"S"	73+59.75	53.36'	3837898.50	1732875.41	27.99'	LOC	END TERMINATION
1339	"S"	73+99.10	52.23'	3837883.16	1732911.67	28.15'	LOC	END TERMINATION
1341	"S"	73+64.03	19.00'	3837962.52	1732909.41	28.37'	LOC	
1342	"S"	73+97.50	19.01'	3837948.60	1732939.85	28.73'	LOC	
1346	"S"	73+64.70	42.32'	3837983.45	1732919.72	28.63'	LOC	BEGIN TERMINATION
1347	"S"	73+63.00	53.27'	3837994.12	1732922.73	29.46'	LOC	END TERMINATION
1348	"S"	73+96.54	42.00'	3837969.91	1732948.54	29.01'	LOC	BEGIN TERMINATION
1349	"S"	73+98.16	53.28'	3837979.49	1732954.71	29.08'	LOC	END TERMINATION
1356	"S"	73+52.05	21.00'	3837969.32	1732899.35	28.24'	TBC	
1357	"S"	73+62.03	30.46'	3837973.77	1732912.36	28.37'	TBC	
1358	"S"	74+09.46	21.00'	3837945.44	1732951.55	28.85'	TBC	
1359	"S"	73+99.49	30.20'	3837957.95	1732946.32	28.94'	TBC	
1360	"S"	71+23.22	40.52'	3838008.58	1732665.67	25.12'	DRWY	ME
1361	"S"	71+43.22	40.52'	3838000.26	1732683.86	26.44'	DRWY	ME
1362	"S"	71+64.86	37.99'	3837993.55	1732704.58	27.19'	DRWY	ME
1363	"S"	71+84.86	37.99'	3837985.24	1732722.77	26.07'	DRWY	ME
1364	"S"	72+23.16	42.25'	3837965.43	1732755.82	27.48'	DRWY	ME
1365	"S"	72+43.16	42.25'	3837957.11	1732774.01	27.35'	DRWY	ME
1366	"S"	74+83.28	38.01'	3837861.07	1732994.14	30.01'	DRWY	ME
1367	"S"	75+03.39	38.01'	3837852.71	1733012.42	29.20'	DRWY	ME
1368	"S"	75+68.15	29.01'	3837833.94	1733075.05	29.90'	DRWY	ME
1369	"S"	75+15.53	35.99'	3837914.94	1733054.25	30.29'	DRWY	ME
1370	"S"	72+69.03	29.86'	3838011.92	1732827.54	27.54'	DRWY	ME
1371	"S"	72+55.03	29.86'	3838017.75	1732814.81	27.02'	DRWY	ME
1372	"S"	72+29.40	33.85'	3838032.03	1732793.16	26.66'	DRWY	ME
1373	"S"	72+15.40	33.85'	3838037.86	1732780.43	26.37'	DRWY	ME
1374	"S"	71+45.86	29.38'	3838062.72	1732715.33	25.13'	DRWY	ME
1375	"S"	71+31.86	29.30'	3838068.48	1732702.57	24.80'	DRWY	ME
1376	"S"	70+84.91	38.67'	3838096.53	1732663.78	23.30'	DRWY	ME
1377	"S"	70+70.83	38.58'	3838102.28	1732651.01	22.66'	DRWY	ME

SHEET G14 CONTROL POINT TABLE

POINT #	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION	REMARKS
1403	"S"	77+19.90	41.77'	3837759.21	1733207.74	30.00'	LOC	BEGIN TERMINATION
1404	"S"	77+52.36	42.44'	3837745.09	1733236.98	29.98'	LOC	BEGIN TERMINATION
1411	"S"	77+21.52	42.34'	3837835.02	1733244.21	30.42'	LOC	BEGIN TERMINATION
1412	"S"	77+51.67	42.28'	3837822.42	1733271.60	30.50'	LOC	BEGIN TERMINATION
1416	"S"	80+59.96	18.99'	3837638.44	1733526.45	29.58'	LOC	ME
1417	"S"	80+59.04	19.01'	3837673.38	1733541.42	29.58'	LOC	ME
1418	"S"	77+18.56	52.95'	3837749.60	1733201.87	29.37'	LOC	END TERMINATION
1419	"S"	77+21.23	55.35'	3837746.30	1733203.30	29.35'	SHLDR	PT
1420	"S"	77+51.77	55.37'	3837733.58	1733231.06	29.41'	SHLDR	PT
1421	"S"	77+54.19	53.42'	3837734.34	1733234.08	29.43'	LOC	END TERMINATION
1422	"S"	77+53.36	53.27'	3837831.71	1733277.71	30.41'	LOC	END TERMINATION
1423	"S"	77+50.92	55.15'	3837834.43	1733276.27	30.38'	SHLDR	PT
1424	"S"	77+48.45	97.69'	3837874.15	1733291.72	30.85'	SHLDR	ME
1425	"S"	77+24.49	97.72'	3837884.14	1733269.94	30.85'	SHLDR	ME
1426	"S"	77+22.20	55.04'	3837846.29	1733250.11	30.38'	SHLDR	PT
1427	"S"	77+19.80	53.29'	3837845.69	1733247.20	30.36'	LOC	END TERMINATION
1428	"S"	77+25.37	97.74'	3837706.03	1733189.43	28.55'	SHLDR	ME
1429	"S"	77+49.79	97.51'	3837696.09	1733211.73	28.56'	SHLDR	ME
1430	"S"	75+88.25	29.01'	3837825.58	1733093.33	29.80'	DRWY	ME
1431	"S"	78+05.35	33.13'	3837731.51	1733289.04	30.16'	DRWY	ME
1432	"S"	78+19.35	33.13'	3837725.69	1733301.77	30.05'	DRWY	ME
1433	"S"	78+49.29	39.01'	3837707.89	1733326.55	29.91'	DRWY	ME
1434	"S"	78+63.29	39.01'	3837702.07	1733339.28	29.99'	DRWY	ME
1435	"S"	79+27.73	36.00'	3837677.99	1733399.13	30.03'	DRWY	ME
1436	"S"	79+59.54	36.00'	3837664.76	1733428.05	29.95'	DRWY	ME
1437	"S"	80+45.58	40.99'	3837698.98	1733538.33	31.33'	DRWY	ME
1438	"S"	79+60.09	40.99'	3837734.54	1733460.58	31.28'	DRWY	ME
1439	"S"	79+06.59	35.29'	3837751.62	1733409.57	30.67'	DRWY	ME
1440	"S"	78+92.59	35.29'	3837757.44	1733396.84	30.58'	DRWY	ME
1441	"S"	78+44.56	32.58'	3837774.95	1733352.03	30.76'	DRWY	ME
1442	"S"	78+30.56	32.58'	3837780.77	1733339.30	30.89'	DRWY	ME
1443	"S"	76+87.57	35.99'	3837843.37	1733210.69	30.39'	DRWY	ME

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
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CONTROL POINT TABLES
(1 OF 1)

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G20	G26

SHEET G1 BOLLARD TABLE

POINT NO.	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
2000	"AR"	1+80.57	21.91	3840077.77	1728050.38	BOL
2001	"AR"	1+75.80	22.54	3840073.70	1728047.81	BOL
2002	"AR"	1+71.16	23.85	3840069.30	1728045.85	BOL
2003	"AR"	1+66.77	25.81	3840064.66	1728044.54	BOL
2004	"AR"	1+62.70	28.38	3840059.89	1728043.92	BOL
2005	"AR"	1+59.04	31.51	3840055.08	1728043.99	BOL
2006	"AR"	1+55.87	35.14	3840050.32	1728044.75	BOL
2007	"AR"	1+53.26	39.18	3840045.73	1728046.19	BOL
2008	"AR"	1+51.25	43.56	3840041.38	1728048.27	BOL
2009	"AR"	1+49.90	48.18	3840037.39	1728050.96	BOL
2010	"AR"	1+52.75	52.08	3840037.09	1728055.77	BOL
2011	"AR"	1+55.51	56.04	3840036.68	1728060.58	BOL
2012	"AR"	1+58.19	60.06	3840036.17	1728065.39	BOL
2013	"AR"	1+60.77	64.13	3840035.55	1728070.17	BOL
2014	"AR"	1+63.27	68.27	3840034.82	1728074.95	BOL
2015	"AR"	1+65.67	72.46	3840033.99	1728079.70	BOL
2016	"AR"	1+67.98	76.70	3840033.05	1728084.44	BOL
2017	"AR"	1+70.19	80.99	3840032.01	1728089.15	BOL
2018	"AR"	1+72.31	85.33	3840030.86	1728093.84	BOL
2019	"AR"	1+74.33	89.71	3840029.61	1728098.50	BOL
2020	"AR"	1+76.25	94.14	3840028.26	1728103.14	BOL
2021	"AR"	1+78.07	98.61	3840026.80	1728107.74	BOL
2022	"AR"	2+51.05	21.28	3840128.35	1728095.00	BOL
2023	"AR"	2+57.24	21.43	3840131.54	1728098.94	BOL
2024	"AR"	2+63.44	21.56	3840134.53	1728103.04	BOL
2025	"AR"	2+69.65	21.68	3840137.31	1728107.27	BOL
2026	"AR"	2+75.86	21.79	3840139.88	1728111.64	BOL
2027	"AR"	2+82.09	21.88	3840142.23	1728116.13	BOL
2028	"AR"	2+88.31	21.95	3840144.35	1728120.74	BOL
2029	"AR"	2+94.55	22.01	3840146.24	1728125.44	BOL
2030	"AR"	3+00.78	22.05	3840147.89	1728130.23	BOL
2031	"AR"	3+07.02	22.07	3840149.31	1728135.10	BOL
2032	"AR"	3+13.26	22.08	3840150.48	1728140.03	BOL
2033	"AR"	3+19.50	22.07	3840151.40	1728145.01	BOL
2034	"AR"	3+25.73	22.04	3840152.08	1728150.04	BOL
2035	"AR"	3+31.97	22.00	3840152.50	1728155.09	BOL
2036	"AR"	3+38.20	21.94	3840152.68	1728160.15	BOL
2037	"AR"	3+44.43	21.86	3840152.60	1728165.22	BOL
2038	"AR"	3+50.65	21.77	3840152.27	1728170.28	BOL
2039	"AR"	3+56.86	21.66	3840151.69	1728175.31	BOL
2040	"AR"	3+63.07	21.54	3840150.86	1728180.31	BOL
2041	"AR"	3+70.70	21.20	3840149.78	1728185.26	BOL

SHEET G2 BOLLARD TABLE

POINT NO.	ALIGNMENT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
2042	"AR"	8+69.37	18.77	3839984.76	1728655.11	BOL
2043	"AR"	8+74.35	18.94	3839982.80	1728659.69	BOL
2044	"AR"	8+79.33	19.11	3839980.84	1728664.27	BOL
2045	"AR"	8+84.31	19.29	3839978.87	1728668.85	BOL
2046	"AR"	8+89.29	19.46	3839976.91	1728673.43	BOL
2047	"AR"	8+94.27	19.63	3839974.95	1728678.01	BOL
2048	"AR"	8+99.25	19.80	3839972.99	1728682.59	BOL
2049	"AR"	9+04.23	19.97	3839971.03	1728687.17	BOL
2050	"AR"	9+09.21	20.14	3839969.06	1728691.75	BOL
2051	"AR"	9+14.19	20.31	3839967.10	1728696.33	BOL
2052	"AR"	9+19.17	20.48	3839965.14	1728700.91	BOL
2053	"AR"	9+24.15	20.65	3839963.18	1728705.49	BOL
2054	"AR"	9+29.13	20.83	3839961.21	1728710.07	BOL
2055	"AR"	9+34.98	21.01	3839959.26	1728714.61	BOL
2056	"AR"	9+39.85	21.80	3839956.57	1728718.76	BOL
2057	"AR"	9+44.51	23.45	3839953.19	1728722.35	BOL
2058	"AR"	9+48.78	25.92	3839949.21	1728725.28	BOL
2059	"AR"	9+52.54	29.12	3839944.77	1728727.43	BOL
2060	"AR"	9+55.66	32.95	3839940.01	1728728.75	BOL
2061	"AR"	9+58.04	37.28	3839935.09	1728729.19	BOL
2062	"AR"	9+59.59	41.97	3839930.17	1728728.73	BOL
2063	"AR"	9+60.27	46.86	3839925.42	1728727.39	BOL
2064	"AR"	9+60.06	51.79	3839920.99	1728725.21	BOL
2065	"AR"	9+58.96	56.60	3839917.02	1728722.27	BOL
2066	"AR"	9+57.01	61.14	3839913.65	1728718.66	BOL
2067	"AR"	9+54.27	65.25	3839910.99	1728714.50	BOL
2068	"AR"	9+50.84	68.79	3839909.13	1728709.93	BOL
2069	"AR"	9+46.91	71.80	3839907.95	1728705.13	BOL
2070	"AR"	9+42.96	74.77	3839906.82	1728700.31	BOL
2071	"AR"	9+39.01	77.74	3839905.69	1728695.50	BOL
2072	"AR"	9+31.57	80.66	3839904.55	1728690.69	BOL
2073	"AR"	9+27.50	83.46	3839903.42	1728685.87	BOL
2074	"AR"	9+23.42	86.25	3839902.29	1728681.06	BOL
2075	"AR"	9+19.34	89.05	3839901.16	1728676.25	BOL
2076	"AR"	9+15.26	91.85	3839900.03	1728671.43	BOL
2077	"AR"	9+11.19	94.65	3839898.90	1728666.62	BOL
2078	"AR"	7+54.02	162.39	3839889.36	1728498.93	BOL
2079	"AR"	7+58.96	161.73	3839888.32	1728503.80	BOL
2080	"AR"	7+63.86	160.72	3839887.62	1728508.75	BOL
2081	"AR"	7+68.75	159.71	3839886.92	1728513.70	BOL
2082	"AR"	7+73.65	158.69	3839886.22	1728518.65	BOL
2083	"AR"	7+78.55	157.68	3839885.52	1728523.60	BOL
2084	"AR"	7+08.90	20.12	3840038.51	1728504.44	BOL
2085	"AR"	7+13.90	20.06	3840036.88	1728509.17	BOL
2086	"AR"	7+18.90	20.00	3840035.26	1728513.90	BOL
2087	"AR"	7+23.90	19.94	3840033.63	1728518.62	BOL
2088	"AR"	7+28.90	19.88	3840032.00	1728523.35	BOL
2089	"AR"	7+33.90	19.87	3840030.32	1728528.06	BOL

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
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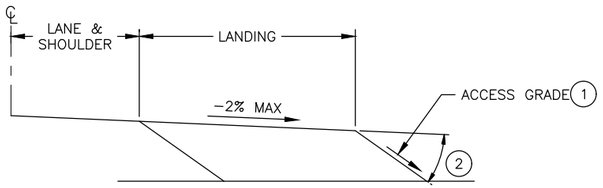
BOLLARD LAYOUT POINT TABLES (1 OF 1)

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G21	G26



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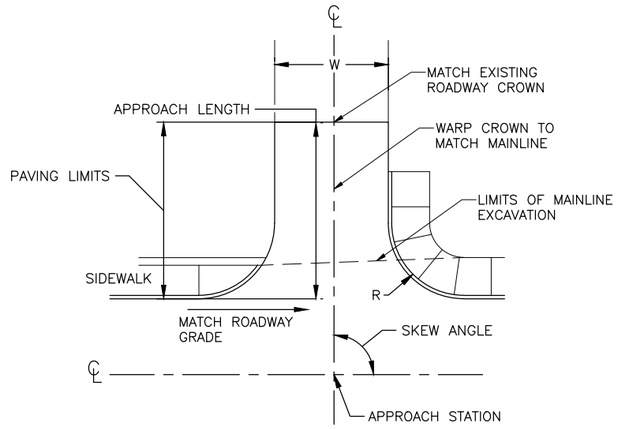
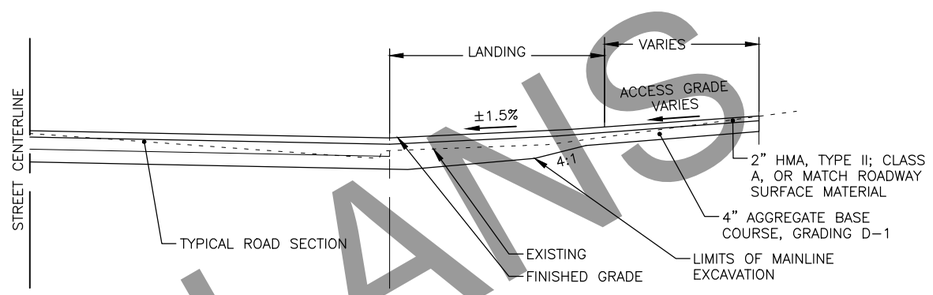


APPROACH PLAN TYPE 1 PLAN DETAIL
NTS



APPROACH PLAN TYPE 1 SECTION DETAIL
NTS

APPROACH NOTES:

1. MATERIAL FOR CONSTRUCTION OF APPROACH IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.

639.2000.0000 APPROACH SUMMARY

NO.	ALIGNMENT	STATION	OFFSET	SKEW ANGLE (DEGREE)	WIDTH (FT)	LENGTH (FT)	RADIUS (FT)	LANDING LENGTH (FT)	APPROACH SURFACING	REMARKS
1	"AR"	03+29	LT	1	24	36	40	30	ASPHALT	see note 3
2	"AR"	04+94	LT	2	24	54	40	30	ASPHALT	
3	"AR"	06+28	LT	0	25	42	40	30	ASPHALT	
4	"AR"	08+67	LT	1	25	39	40	30	ASPHALT	rigth skew angle, see note 3
5	"S"	21+23	LT	3	30	45	40	30	ASPHALT	rigth skew angle
6	"S"	24+57	LT	0	30	43	40	20	ASPHALT	see note 4
7	"S"	26+71	LT	0	30	45	40	10	ASPHALT	see note 3
8	"S"	55+63	LT	40	18	46	30	30	ASPHALT	left skew angle
9	"S"	56+71	LT	1	18	52	20	10	ASPHALT	left skew angle
10	"S"	58+38	LT	5	43	18	20	10	ASPHALT	left skew angle
11	"S"	59+38	LT	8	20	36	20	10	ASPHALT	left skew angle

APPROACH NOTES

(1) MAX RESIDENTIAL ACCESS GRADE IS 15%. MAX COMMERCIAL GRADE IS 8%.

(2) MAX ALGEBRAIC DIFFERENCE FOR COMMERCIAL ACCESS GRADE: 8% RESIDENTIAL: NONE

3. APPROACH LENGTH TIES INTO EXISTING CONDITIONS PRIOR TO FULL LANDING LENGTH.

4. SOME ACCESS GRADES, LANDINGS, AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN.

5. MATERIAL FOR CONSTRUCTION OF APPROACH IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.

APPROACH DETAILS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
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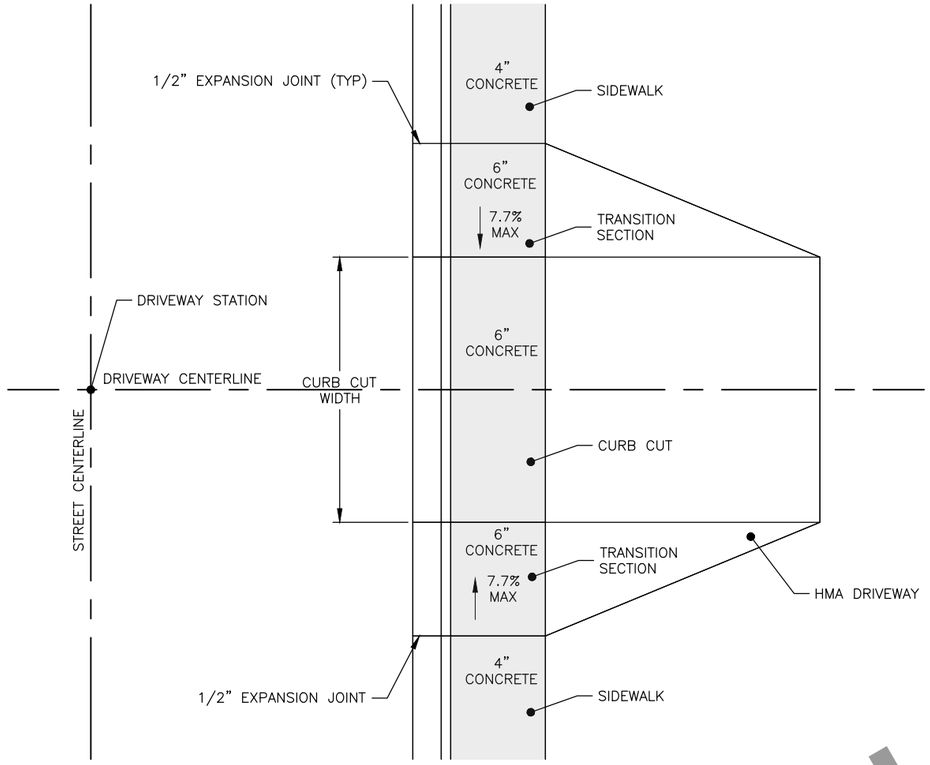
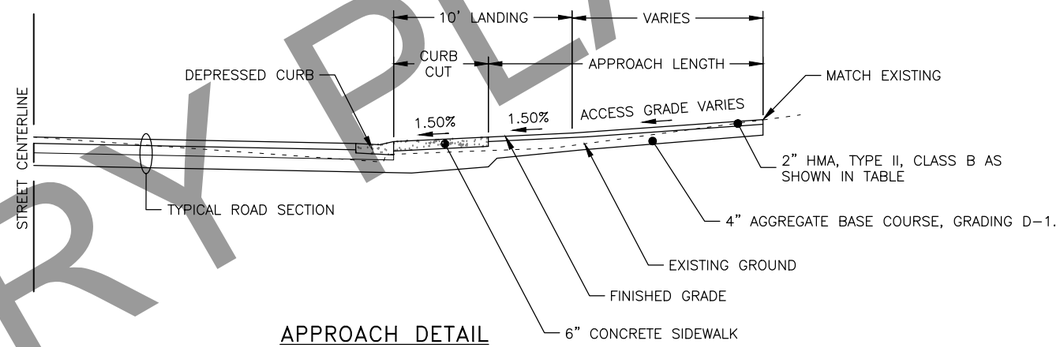
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G22	G26



APPROACH DETAIL
NTS

NOTES:
1. SEE ROADWAY TYPICAL SECTION FOR CURB TYPE.
2. MATERIAL FOR CONSTRUCTION OF APPROACH IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.
3. 6" CONCRETE APPROACH SHALL BE PAID FOR AS 6" CONCRETE SIDEWALK UNDER BID ITEM 608(1B).



APPROACH DETAIL
NTS

639.0001.0000 DRIVEWAY SUMMARY

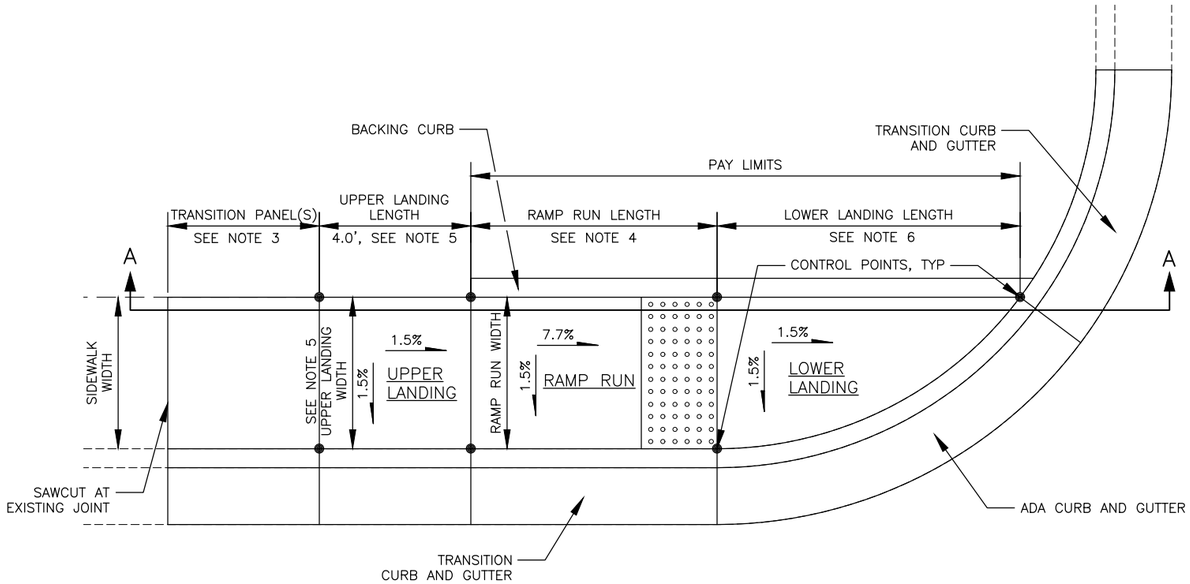
No.	ALIGNMENT	STATION	OFFSET	SKEW ANGLE (DEGREE)	WIDTH (FT)	LENGTH (FT)	LANDING LENGTH (FT)	APPROACH SURFACING	REMARKS
1	"S"	58+94	RT	0	20	24	10	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
2	"S"	65+13	RT	0	33	51	10	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
3	"S"	67+52	LT	1	24	58	10	ASPHALT	
4	"S"	68+27	LT	0	14	22	10	ASPHALT	
5	"S"	69+11	LT	0	32	35	30	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
6	"S"	70+78	LT	0	14	18	10	ASPHALT	
7	"S"	71+35	RT	0	20	20	10	ASPHALT	
8	"S"	71+39	LT	0	14	10	10	ASPHALT	APPROACH LENGTH TIES INTO EXISTING CONDITIONS PRIOR TO FULL LANDING LENGTH
9	"S"	71+75	RT	0	20	17	10	ASPHALT	
10	"S"	72+23	LT	0	14	13	10	ASPHALT	
11	"S"	72+33	RT	0	20	21	10	ASPHALT	
12	"S"	72+62	LT	0	14	10	10	ASPHALT	APPROACH LENGTH TIES INTO EXISTING CONDITIONS PRIOR TO FULL LANDING LENGTH
13	"S"	74+93	RT	1	20	17	10	ASPHALT	LEFT SKEW ANGLE
14	"S"	75+58	LT	1	172	15	10	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
15	"S"	75+78	RT	0	20	10	10	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
16	"S"	78+11	RT	4	14	12	10	ASPHALT	LEFT SKEW ANGLE. SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
17	"S"	78+38	LT	0	14	12	10	ASPHALT	
18	"S"	78+56	RT	1	14	18	10	ASPHALT	
19	"S"	79+00	LT	0	14	14	10	ASPHALT	
20	"S"	79+44	RT	0	32	15	10	ASPHALT	
21	"S"	80+03	LT	0	85	20	10	ASPHALT	SOME ACCESS GRADES, LANDINGS , AND ALGEBRAIC DIFFERENCES ARE NON STANDARD DUE TO TIE IN WITH EXISTING TERRAIN
22	"S"	80+08	RT	1	15	19	10	ASPHALT	

SIDEWALK DETAILS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-Sidewalk Details Wed, May/10/23 03:42pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G23	G26



PLAN VIEW

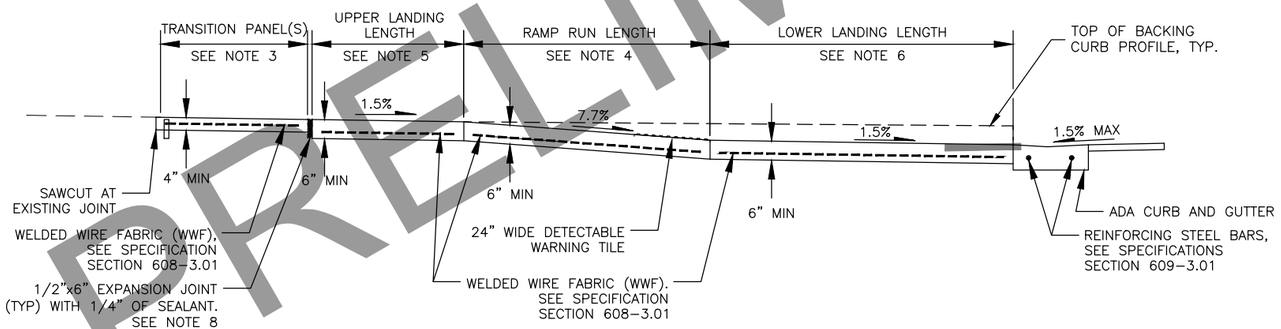
= DETECTABLE WARNING TILE SEE NOTE 7

SLOPE DIRECTION KEY:

RUNNING SLOPE

CROSS SLOPE

SLOPES GUIDE			
	PREFERRED	MINIMUM	MAXIMUM
UPPER LANDING RUNNING SLOPE	1.5%	1.0%	5.0%
UPPER LANDING CROSS SLOPE	1.5%	1.0%	2.0%
RAMP RUN RUNNING SLOPE	7.7%	N/A	8.3%
RAMP RUN CROSS SLOPE	1.5%	1.0%	2.0%
LOWER LANDING RUNNING SLOPE	1.5%	1.0%	2.0%
LOWER LANDING CROSS SLOPE	1.5%	1.0%	2.0%



PROFILE A-A

NOTES:

1. CONSTRUCT RAMP RUN AND BOTH UPPER AND LOWER LANDING OF 6" CONCRETE WITH COARSE BROOM FINISH IN THE DIRECTION OF THE CROSS SLOPE.
2. NOTIFY THE ENGINEER PRIOR TO CONCRETE PLACEMENT IF MAXIMUM OR MINIMUM GRADES CANNOT BE CONSTRUCTED. UNLESS PREVIOUSLY APPROVED BY THE ENGINEER, ANY FEATURE EXCEEDING MINIMUM OR MAXIMUM ALLOWABLE SLOPES WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
3. TRANSITION PANEL(S): WHEN CONNECTING INTO EXISTING SIDEWALK, REPLACE ADJACENT SIDEWALK PANEL(S) LABELED AS TRANSITION PANEL(S), AS REQUIRED FOR CROSS SLOPE TRANSITION FROM THE EXISTING SIDEWALK TO THE NEW UPPER LANDING TO ENSURE THE UPPER LANDING IS CONSTRUCTED WITH A COMPLIANT CROSS SLOPE.
4. RAMP RUN LENGTH: SURVEY PRIOR TO CONSTRUCTION TO VERIFY RAMP RUN LENGTH REQUIRED FOR COMPLIANT SLOPES. ADJUST THE RAMP RUN LENGTH AS NEEDED TO ENSURE COMPLIANT RAMP RUN RUNNING SLOPE. THIS SURVEY IS SUBSIDIARY TO 642 PAY ITEMS.
5. UPPER LANDING LENGTH: CONSTRUCT UPPER LANDING LENGTH TO 4.0 FEET. UPPER LANDING LENGTH MAY BE DECREASED TO 3 .0 FEET IF APPROVED BY THE ENGINEER.
   UPPER LANDING WIDTH: UPPER LANDING WIDTH SHALL MATCH OR EXCEED THE WIDTH OF THE RAMP RUN.
6. LOWER LANDING LENGTH: LENGTH OF LOWER LANDING DEPENDS ON RAMP RUN WIDTH AND CURB RADII.
7. DETECTABLE WARNING TILE: INSTALL 24" DETECTABLE WARNING TILES FOR THE FULL WIDTH OF THE RAMP RUN. DETECTABLE WARNING TILES IN CURB RAMPS WILL NOT BE MEASURED SEPARATELY AND ARE SUBSIDIARY TO 608.0006.0000.
8. JOINTS: INSTALL CONTINUOUS MINIMUM 6 INCH DEEP 1/2" EXPANSION JOINT AT ALL LOCATIONS WHERE SIDEWALK, CURB RAMP, OR CURB AND GUTTER (ANY TYPE) MEET. SEAL ALL EXPANSION JOINTS WITH HOT POURED ELASTIC TYPE JOINT SEAL CONFORMING TO SPECIFICATIONS 705-2.02 JOINT SEALANT. EXPANSION AND DUMMY JOINTS IN THE SIDEWALK AND CURB RAMP SHALL LINE UP WITH EXPANSION AND DUMMY JOINTS IN THE CURB AND GUTTER.

608.2017.0000 DETECTABLE WARNING TILE				
ALIGNMENT	STATION	OFFSET	QUANTITY (EACH)	REMARKS
"AR"	3+55	-27.4	1	
"S"	20+63	-26.3	1	
"S"	20+64	15	1	
"S"	48+36	23.9	1	
"S"	49+65	23.8	1	
"S"	+56	24.1	2	

608.0006.0000 CURB RAMP				
ALIGNMENT	STATION	OFFSET	QUANTITY (EACH)	REMARKS
"S"	57+38	RT	1	PARALLEL
"S"	59+40	RT	1	DIRECTIONAL
"S"	59+80	RT	1	DIRECTIONAL
"S"	66+45	RT	1	DIRECTIONAL
"S"	66+95	RT	1	DIRECTIONAL
"S"	69+90	LT	1	PARALLEL
"S"	69+90	RT	1	DIRECTIONAL
"S"	70+40	LT	1	DIRECTIONAL
"S"	70+40	RT	1	PARALLEL
"S"	73+55	LT/RT	2	PARALLEL
"S"	74+00	LT/RT	2	PARALLEL
"S"	77+15	LT/RT	2	PARALLEL
"S"	77+15	LT/RT	2	PARALLEL

DIRECTIONAL CURB RAMPS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-Directional Curb Ramps Wed, May/10/23 03:42pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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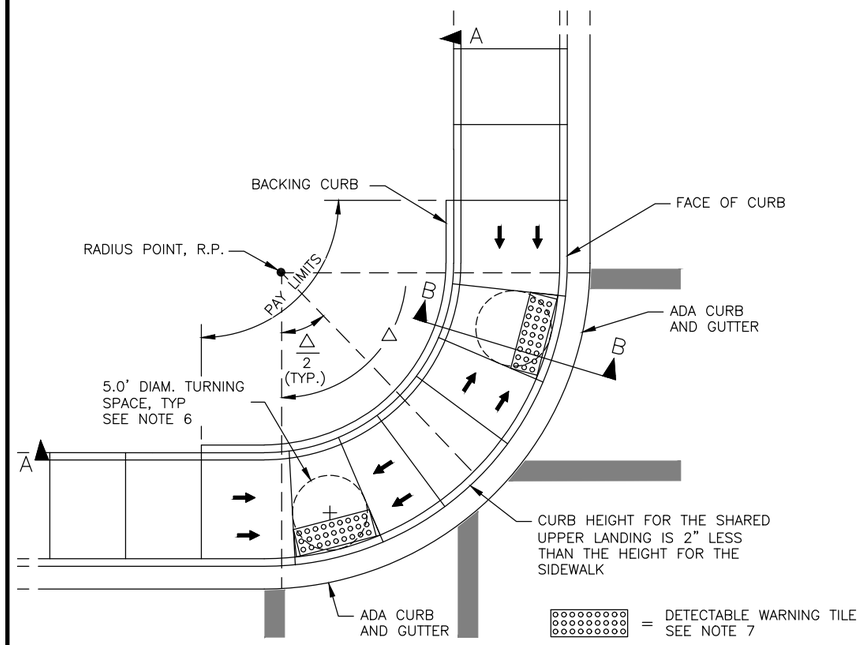
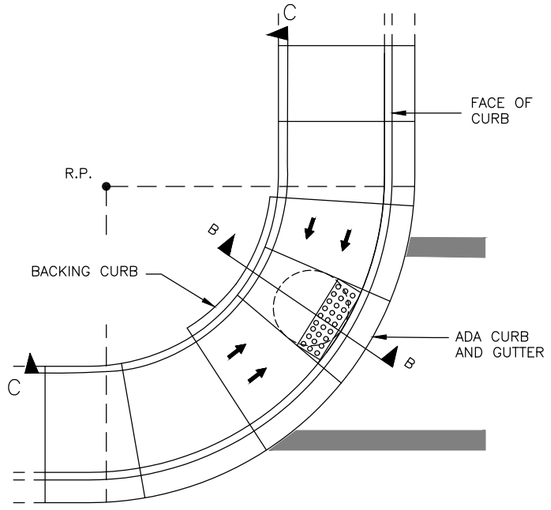


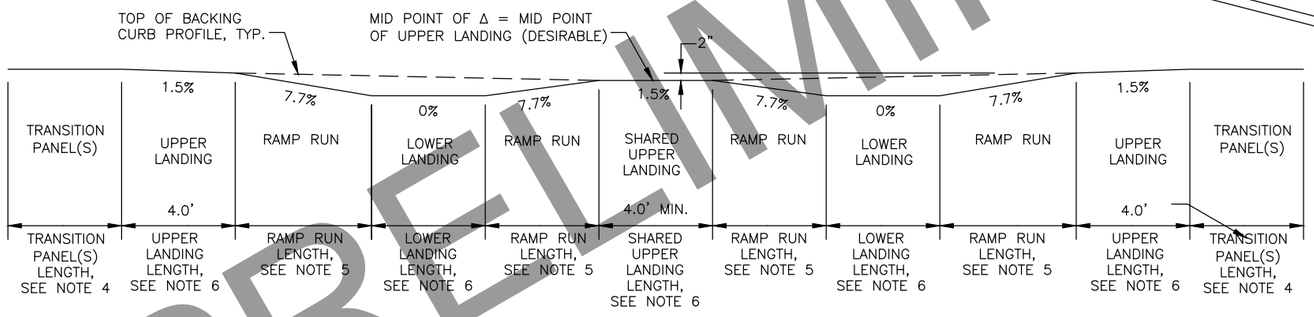
TWO CROSSING DIRECTIONS



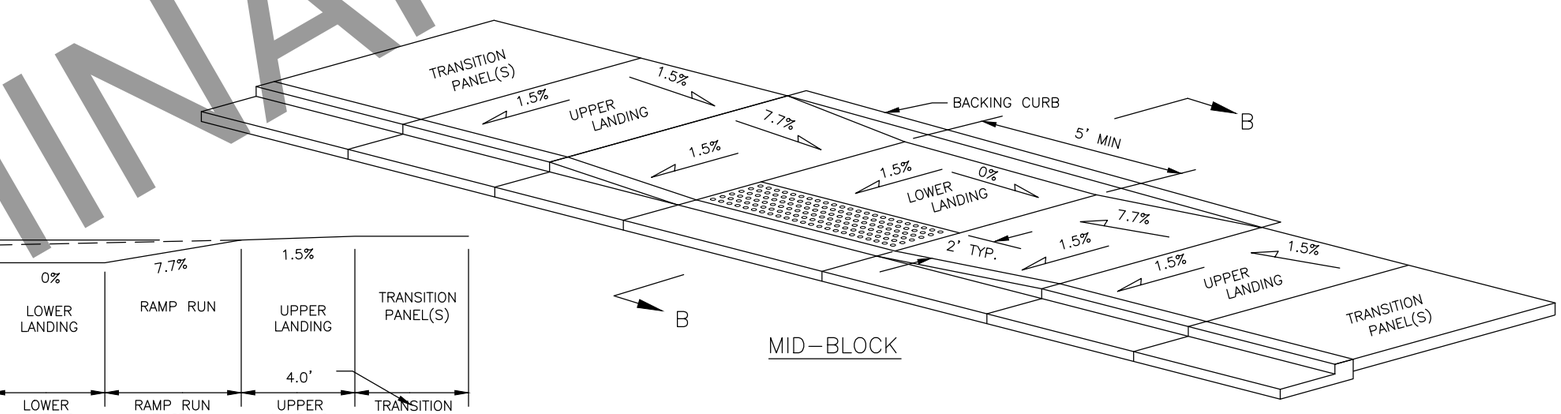
ONE CROSSING DIRECTION

CONSTRUCTION NOTES:

1. CONSTRUCT RAMP RUN AND BOTH UPPER AND LOWER LANDING OF 6" CONCRETE WITH COARSE BROOM FINISH IN THE DIRECTION OF THE CROSS SLOPE.
2. NOTIFY THE ENGINEER PRIOR TO CONCRETE PLACEMENT IF MAXIMUM OR MINIMUM GRADES CANNOT BE CONSTRUCTED. UNLESS PREVIOUSLY APPROVED BY THE ENGINEER, ANY FEATURE EXCEEDING MINIMUM OR MAXIMUM ALLOWABLE SLOPES WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
3. WHEN ONE PARALLEL CURB RAMP WILL SERVE TWO DIRECTIONS, USE THE ONE CROSSING DIRECTION DETAIL AND REFER TO THE STRIPING PLANS FOR CROSSWALK LAYOUTS.
4. TRANSITION PANEL(S): WHEN CONNECTING INTO EXISTING SIDEWALK, REPLACE ADJACENT SIDEWALK PANEL(S) LABELED AS TRANSITION PANEL(S), AS REQUIRED FOR CROSS SLOPE TRANSITION FROM THE EXISTING SIDEWALK TO THE NEW UPPER LANDING TO ENSURE THE UPPER LANDING IS CONSTRUCTED WITH A COMPLIANT CROSS SLOPE.
5. RAMP RUN: SURVEY PRIOR TO CONSTRUCTION OF ADJACENT CURB AND GUTTER TO VERIFY RAMP RUN LENGTHS REQUIRED FOR COMPLIANT RUNNING SLOPES. ADJUST THE RAMP RUN LENGTH AS NEEDED TO ENSURE COMPLIANT RAMP RUN RUNNING SLOPE. THIS SURVEY IS SUBSIDIARY TO 642 PAY ITEMS.
6. UPPER LANDING LENGTH: CONSTRUCT UPPER LANDING LENGTH TO 4.0 FEET. UPPER LANDING LENGTH MAY BE DECREASED TO 3.0 FEET IF APPROVED BY THE ENGINEER.
   SHARED UPPER LANDING LENGTH: CONSTRUCT SHARED UPPER LANDING LENGTH TO 4.0 FEET, SHARED UPPER LANDING LENGTH MAY NOT BE DECREASED.
   UPPER LANDING WIDTH: THE WIDTH OF ALL UPPER LANDINGS SHALL MATCH OR EXCEED THE WIDTH OF THE ADJACENT RAMP RUN.
   LOWER LANDING: ENSURE LOWER LANDING HAS A 5-FT DIAMETER TURNING SPACE.
7. DETECTABLE WARNING TILE: INSTALL 24" DETECTABLE WARNING TILES FOR THE FULL WIDTH OF THE RAMP RUN. DETECTABLE WARNING TILES IN CURB RAMPS WILL NOT BE MEASURED SEPARATELY AND ARE SUBSIDIARY TO 608.0006.0000.
8. JOINTS: INSTALL CONTINUOUS MINIMUM 6 INCH DEEP 1/2" EXPANSION JOINT AT ALL LOCATIONS WHERE SIDEWALK, CURB RAMP, OR CURB AND GUTTER (ANY TYPE) MEET. SEAL ALL EXPANSION JOINTS WITH HOT POURED ELASTIC TYPE JOINT SEAL CONFORMING TO SPECIFICATIONS 705-2.02 JOINT SEALANT.
   EXPANSION AND DUMMY JOINTS IN THE SIDEWALK AND CURB RAMP SHALL LINE UP WITH EXPANSION AND DUMMY JOINTS IN THE CURB AND GUTTER.



PROFILE A-A



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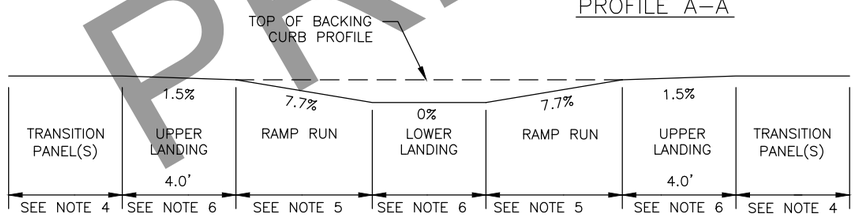
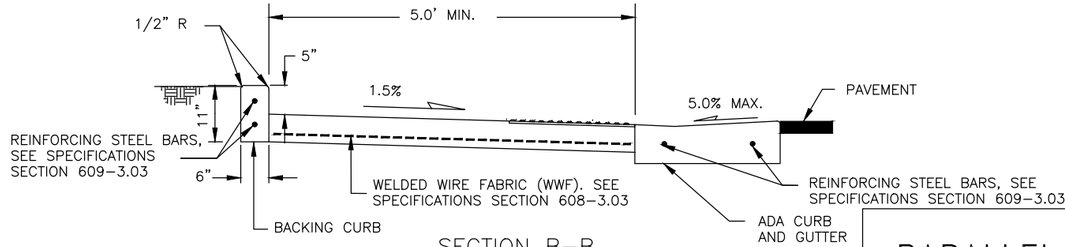


PROFILE C-C



SECTION B-B

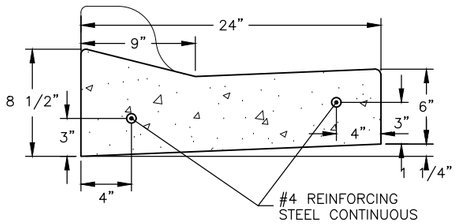
NTS

PARALLEL CURB RAMPS

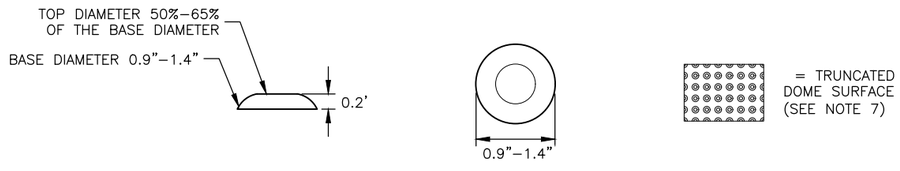
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-Parallel Curb Ramps Wed, May/10/23 03:42pm

NO.	DATE	REVISION

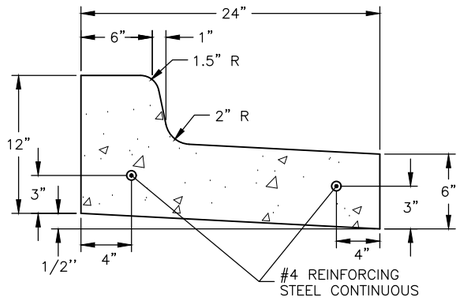
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G25	G26



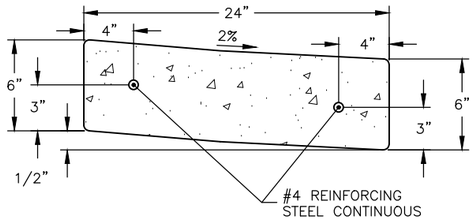
DEPRESSED CURB AND GUTTER



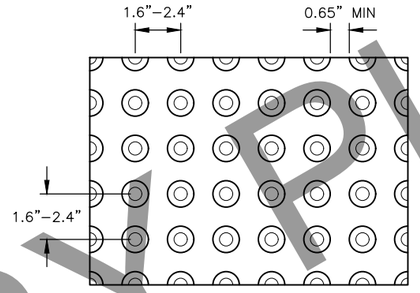
TRUNCATED DOME DETAILS



STANDARD CURB AND GUTTER
SPILL



CURB RAMP CURB AND GUTTER
SPILL



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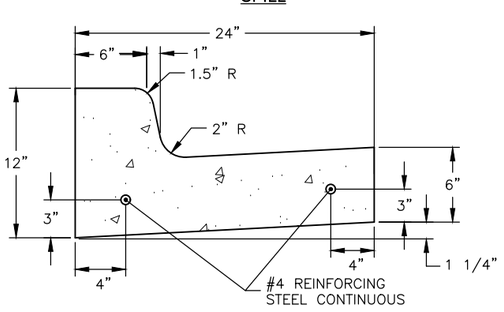
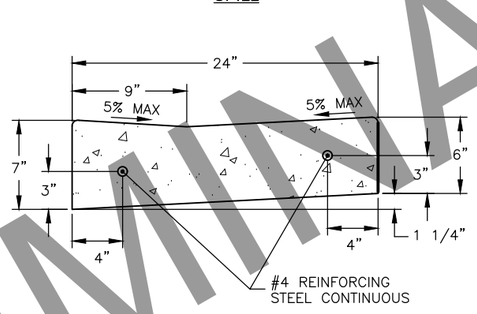
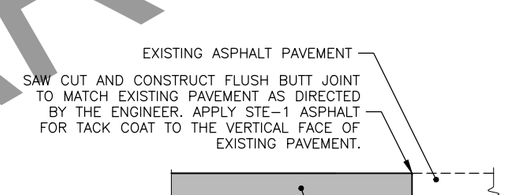


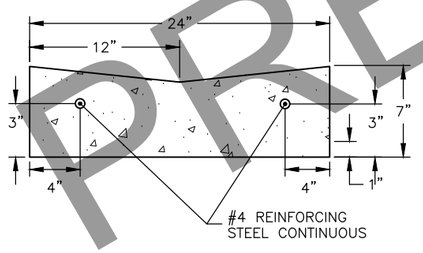
STANDARD CURB AND GUTTER
CATCH



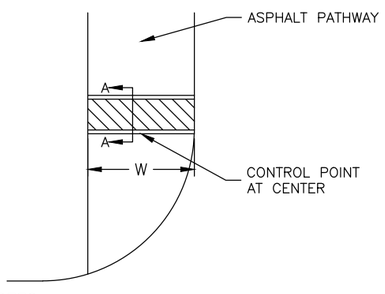
CURB RAMP CURB AND GUTTER
CATCH



MATCH EXISTING PAVEMENT DETAIL



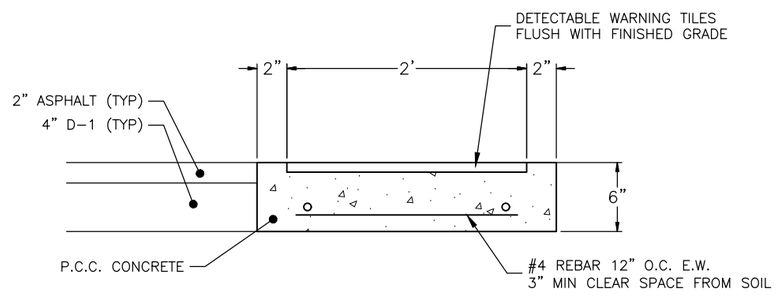
VALLEY GUTTER



NOTES:

1. DETECTABLE WARNING TILES IN ASPHALT PATHWAY WILL BE PAID UNDER 608.2017.0000.

DETECTABLE WARNING TILE DETAIL IN ASPHALT PATH
NTS



SECTION A–A
NTS

GENERAL NOTES:

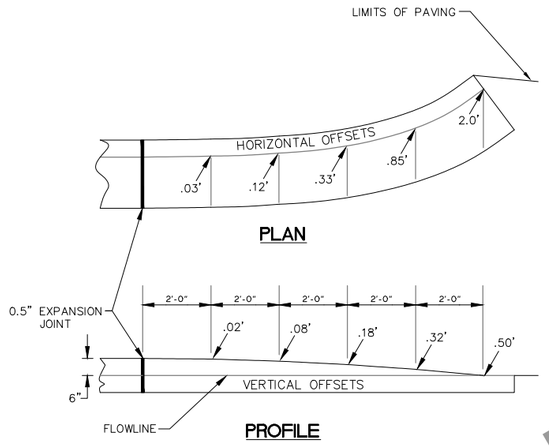
1. USE THE TYPE OF CURB AND GUTTER SPECIFIED ON THE PLANS.
2. CONSTRUCT RAMP RUNS AND LANDINGS OF CONCRETE REGARDLESS OF WHETHER THE SIDEWALK IS ASPHALT OR CONCRETE.
3. CONSTRUCT RAMP SLOPES AT A 7.7% NOMINAL GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM OF 8.3% WHEN SITE CONDITIONS WARRANT IT. RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER THE 8.3% MAXIMUM.
4. CONSTRUCT FLARE SLOPES AT 8.3% (MEASURED PARALLEL TO THE CURB LINE) OR FLATTER, SIDEWALK CROSS SLOPES AT 1.5% NOMINAL (1.0% MIN. AND 2.0% MAX) AND CURB RAMP CURB AND GUTTER PAN SLOPES AT 4.7% NOMINAL. CONSTRUCT GRADE BREAKS PERPENDICULAR TO RAMP RUNS.
5. DO NOT CONSTRUCT FLARE SLOPES STEEPER THAN 10.0%, SIDEWALK CROSS SLOPES STEEPER THAN 2.0% AND CURB RAMP CURB CURB AND GUTTER GUTTER PAN SLOPES STEEPER THAN 5.0%. THESE ARE THE STEEPEST SLOPES ALLOWED UNDER THE 2006 ADA STANDARDS FOR TRANSPORTATION FACILITIES.
6. PROVIDE A COARSE BROOMED FINISH ON RAMP RUNS PERPENDICULAR TO THE RAMP SLOPE.
7. INSTALL 24'' WIDE DETECTABLE WARNING TILES FOR THE FULL WIDTH OF THE RAMP. PROVIDE TILES WITH TRUNCATED DOMES MEETING SECTION 705.1 OF THE 2006 ADA STANDARDS FOR TRANSPORTATION FACILITIES. ALIGN TRUNCATED DOME PATTERN IN THE PREDOMINANT DIRECTION OF WHEELCHAIR TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
8. STANDARD CURB AND GUTTER, EXPRESSWAY CURB AND GUTTER, DEPRESSED CURB AND GUTTER, GUTTER, CURB RAMP CURB AND GUTTER, AND CURB AND GUTTER TERMINATION TRANSITIONS, AND TRANSITION CURB AND GUTTER OFFSETS SHALL ALL BE MEASURED AND PAID FOR UNDER ITEM 609.0002.0001.
9. CURB AND GUTTER REINFORCING BARS TO BE SPLICED SHALL BE LAPPED AT LEAST 20 BAR DIAMETERS AND DOUBLE TIED. THE INNER AND OUTER BAR SPLICES SHALL BE OFFSET FROM EACH OTHER BY AT LEAST SIX INCHES.
10. ALL DETECTABLE WARNINGS TO BE FEDERAL YELLOW AND CAST IRON. PROJECT ENGINEER TO APPROVE COLOR PRIOR TO PLACEMENT.
11. ALL CURB RAMP LAYOUTS AND DIMENSIONS IN THIS PLAN SET ARE APPROXIMATE AND NEED TO BE FIELD FIT AND SHALL MEET 2006 ADA STANDARDS FOR MAXIMUM SLOPES. FINAL LAYOUT TO BE APPROVED BY THE ENGINEER PRIOR TO CONCRETE POUR.

CURB AND GUTTER DETAIL

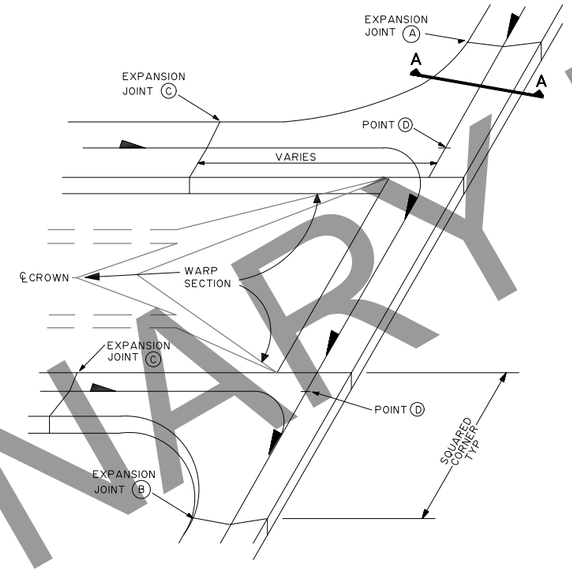
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-Curb and Gutter Details-1 Wed, May/10/23 03:42pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	G26	G26



CURB AND GUTTER
TERMINATION TRANSITIONS



TYPICAL SECTION
VALLEY GUTTER

NOTES:

1. VALLEY GUTTER TO BE PAID AS CURB AND GUTTER TYPE 1 AND MEASURED ALONG FLOWLINE BETWEEN POINT D ON EACH CORNER.
2. SQUARED CORNER TO BE PAID AS CURB AND GUTTER TYPE 1 AND SHALL BE MEASURED ALONG FLOWLINE FROM EXPANSION JOINT C TO POINT D AND FROM POINT D TO EXPANSION JOINT B.

CURB AND GUTTER
DETAILS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0004cnst-17258FB-Curb and Gutter Details-2 Wed, May/10/23 03:42pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H1	H17

SIGNING NOTES

1. REMOVE AND DISPOSE OF ALL EXISTING SIGNS AND SIGN FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, SALVAGE OR OTHERWISE NOTED.
2. OFFSET DISTANCES LISTED ARE FROM DESIGN CENTERLINE TO NEAR EDGE OF SIGN.
3. INSTALL MILEPOST SIGNS (D10 SERIES) IN ACCORDANCE WITH STANDARD PLAN S-05.02, EXCEPT WITH A 15 TO 30 FOOT OFFSET. REDUCE THE OFFSET AS NECESSARY SO THE BOTTOM OF THE SIGN IS NO MORE THAN 15 FEET ABOVE THE GROUND. THE SIGN OFFSET SHALL NOT BE LESS THAN THE OFFSETS SHOWN IN S-05.02.
4. MOUNT SIGNS THAT PROJECT OVER OR WITHIN 2 FEET OF THE SIDEWALK WITH A MOUNTING HEIGHT OF 8 FEET.
5. INSTALL BIKE PATH SIGNS 3 TO 6 FEET FROM THE EDGE OF THE SHARED-USE PATH AND AT A MOUNTING HEIGHT OF 5 FEET. IF THE SIGN MUST BE LOCATED CLOSER THAN 3 FEET, INSTALL AT AN 8-FOOT MOUNTING HEIGHT.
6. MOUNTING HEIGHTS ARE PER STANDARD PLAN S-05.02 UNLESS OTHERWISE NOTED.
7. DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
8. 1/4" X 1 1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES AS SHOWN ON STANDARD PLAN S-01.02.
9. INSTALL 48" DIAMOND WARNING SIGNS ON A SINGLE POST WITH A BRACE HAVING EFFECTIVE BRACE LENGTH OF 54" OR WITH THREE WIND FRAMING MEMBERS AS SHOWN ON STANDARD PLAN S-00.12. THIS MODIFIES STANDARD PLAN S-01.02.
10. ATTACH ALL SIGNS TO THEIR SUPPORTS WITH 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
11. ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE "FASTENER SPECIFICATION TABLE" ON SHEET STANDARD PLAN S-20.10.
12. INSTALL OM-3 OBJECT MARKERS, USING A SLEEVE TYPE SOIL EMBEDMENT FOUNDATION, LOCATED MIDWAY BETWEEN THE FIRST AND SECOND GUARDRAIL POSTS NEAREST TO THE BRIDGE. MOUNT THE SIGN PANEL SO THE BOTTOM IS 2 INCHES ABOVE THE TOP OF GUARDRAIL WITH THE NEAR EDGE LINING UP WITH THE BACK OF THE RAIL.
13. STOP (R1-1) AND YIELD (R1-2) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
14. INSTALL D3-100 SIGNS ABOVE THEIR RESPECTIVE STOP SIGNS. WHEN TWO D3-100 SERIES SIGNS ARE TO BE LOCATED ON THE SAME POST, INSTALL THE CROSS-STREET PANEL IN THE LOWER POSITION.
15. D3-100 SERIES SIGNS REQUIRE TWO SEPARATE SINGLE SIDED PANELS. END-BRACE PANELS PER SMALL STREET NAME SIGN BRACING DETAILS IN STANDARD PLAN S-01.02.
16. MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
17. ALL SIGNS NOTED FOR REMOVAL AND REINSTALLATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF THEY ARE DAMAGED DURING THE RELOCATION EFFORT.
18. USE SERIES C LETTERS FOR D3-100 SERIES SIGNS UNLESS OTHERWISE NOTED. USE 4.5" FOR DIMENSION "E" FOR 12" D3-100 SIGNS. THE LETTERING INDICATING THE TYPE OF STREET (SUCH AS St, Ave, OR Rd) WILL BE UPPER CASE AND LOWER CASE. THIS MODIFIES THE ASDS.
19. USE A 3" HORIZONTAL SPACING BETWEEN WORDS, BETWEEN CARDINAL DIRECTIONS AND WORDS, AND BETWEEN WORDS AND NUMBERS ON D3-100 AND D3-100A SIGNS UNLESS OTHERWISE NOTED.
20. LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO: PIPELINES, INTERCONNECT CABLES, SIGNAL SYSTEMS, LIGHTING SYSTEMS, STORM AND SANITARY SEWERS, WATER SYSTEMS, AND TELEPHONE AND ELECTRICAL CABLES, PRIOR TO INSTALLING SIGN POSTS. NOT ALL EXISTING UTILITIES MAY BE SHOWN ON THE PLANS.
21. DELIVER ALL SALVAGED SIGNS TO THE DOT M&O MAINTENANCE YARD LOCATED AT MP 3.5 OF THE NOME-TELLER HWY AND WILL REMAIN PROPERTY OF THE DEPARTMENT.
22. CLEARING, AS DIRECTED BY THE ENGINEER, MAY BE REQUIRED TO ENSURE ADEQUATE VISIBILITY OF SIGNS. THIS WORK IS SUBSIDIARY TO PAY ITEM 615(1).
23. INSTALL WEATHER TIGHT CAPS ON ALL TS POSTS.
24. INSTALL FRANGIBLE COUPLING SYSTEMS IN ACCORDANCE WITH STANDARD PLAN S-31.02.
25. HINGED JOINTS WITH FRANGIBLE FUSE PLATES ARE REQUIRED ON ALL MULTIPLE POST SIGNS WITH FRANGIBLE COUPLING SYSTEMS. THE HINGE LOCATION ON ALL POSTS SHALL BE THE SAME DISTANCE BELOW THE SIGN, INSTEAD OF THE 6" MINIMUM SHOWN ON STANDARD PLAN S-31.02. SEE MANUFACTURER'S SPECIFICATION FOR HINGE LOCATION BELOW SIGN.
26. INSTALL TS SIGN POST BASES AND FOUNDATIONS BEHIND BARRIER IN ACCORDANCE WITH STANDARD PLAN S-32.02. PLACE SIGNS TO MEET 3' MINIMUM TO EDGE OF SIGN AND 5' MINIMUM TO SIGN POST FROM FACE OF GUARDRAIL.
27. THE 4" MOUNTING AREA ON MILEPOST SIGNS (D10-200 SERIES) SHALL BE BARE ALUMINUM. THIS ELIMINATES THE OPTION OF INSTALLING GREEN REFLECTIVE SHEETING IN THIS AREA AS NOTED IN THE ASDS.

STRIPING NOTES

1. ALL PROPOSED PAVEMENT MARKINGS SHALL BE PAINTED TRAFFIC MARKINGS.
2. DIMENSIONS REFER TO THE CENTER OF STRIPE OF STRIPE GROUP, EDGE OF PAVEMENT OR LIP OF CURB WHEN PRESENT.
3. TRANSITION NEW PAVEMENT MARKINGS TO MATCH EXISTING MARKINGS AT A 100:1 TAPER ON THE NEW ASPHALT.
4. STATION PROVIDED FOR TURN ARROWS IS THE LEADING EDGE OF THE ARROW.

POST TYPE LEGEND

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

TRAFFIC MARKING KEY

4"W	4" WHITE LINE
4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
4"DY	4" DOUBLE YELLOW LINE
8"W	8" WHITE LINE
18"W	18" WHITE GORE
24"W	24 WHITE LINE
STD	SEE STANDARD DRAWING
DTL	SEE DETAILS

SIGN SYMBOL KEY

(#) SIGN CODE(S) / STATION
SIGNING LOCATION #

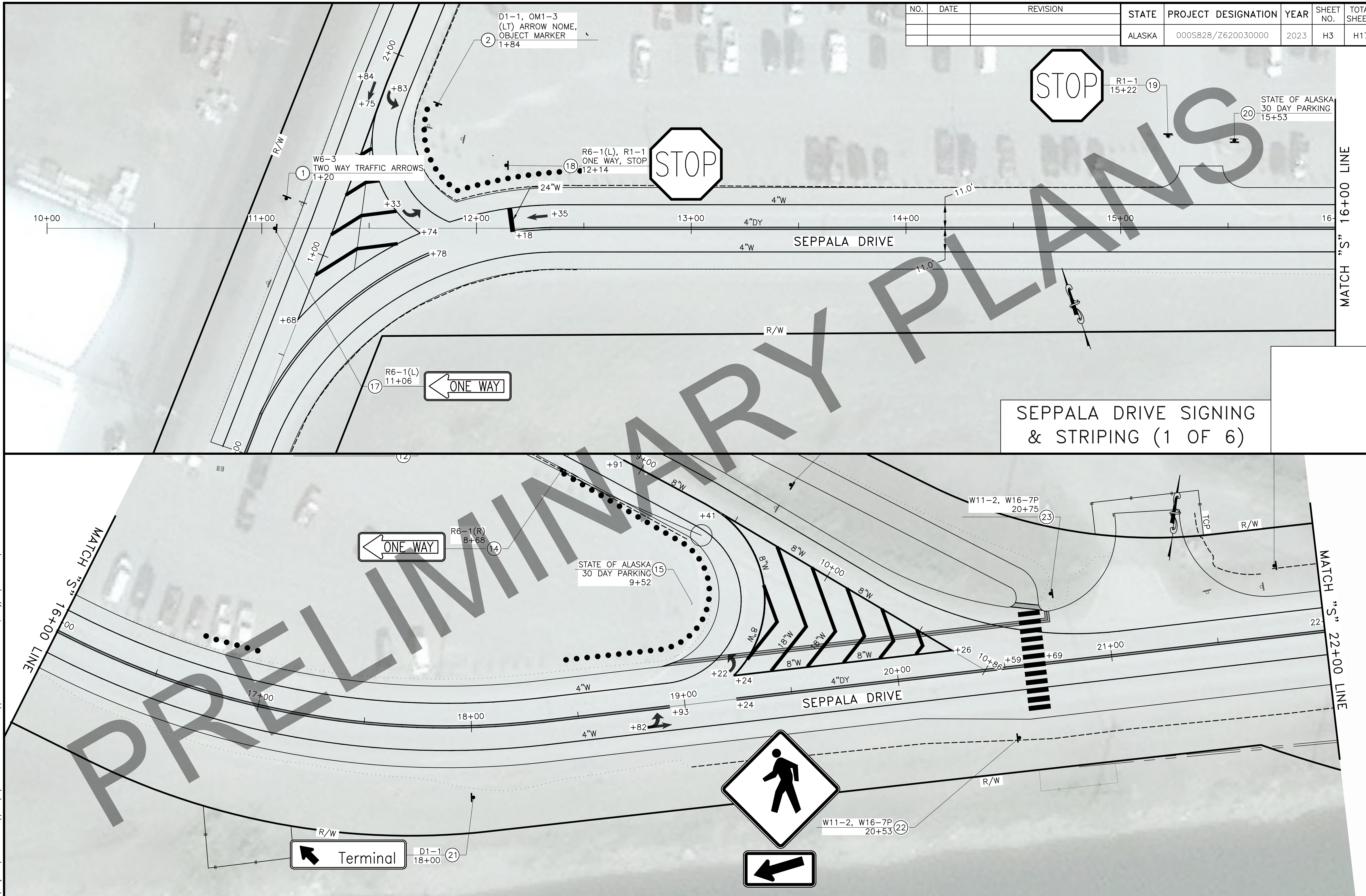
670.0001.0000 PAINTED TRAFFIC MARKINGS SUMMARY

DESCRIPTION	QUANTITY	UNIT	REMARKS
4"DY	10,160	LF	
4"W	15,471	LF	
4"WS	615	LF	INCLUDES SKIPS
8"W	712	LF	
LENGTH TOTAL	26,958	LF	
18"W GORE	505	SF	
24"W	840	SF	
AREA TOTAL	1,345	SF	
TURN ARROW SYMBOL	6	EA	
EACH TOTAL	6	EA	

SIGNING & STRIPING SUMMARY & NOTES

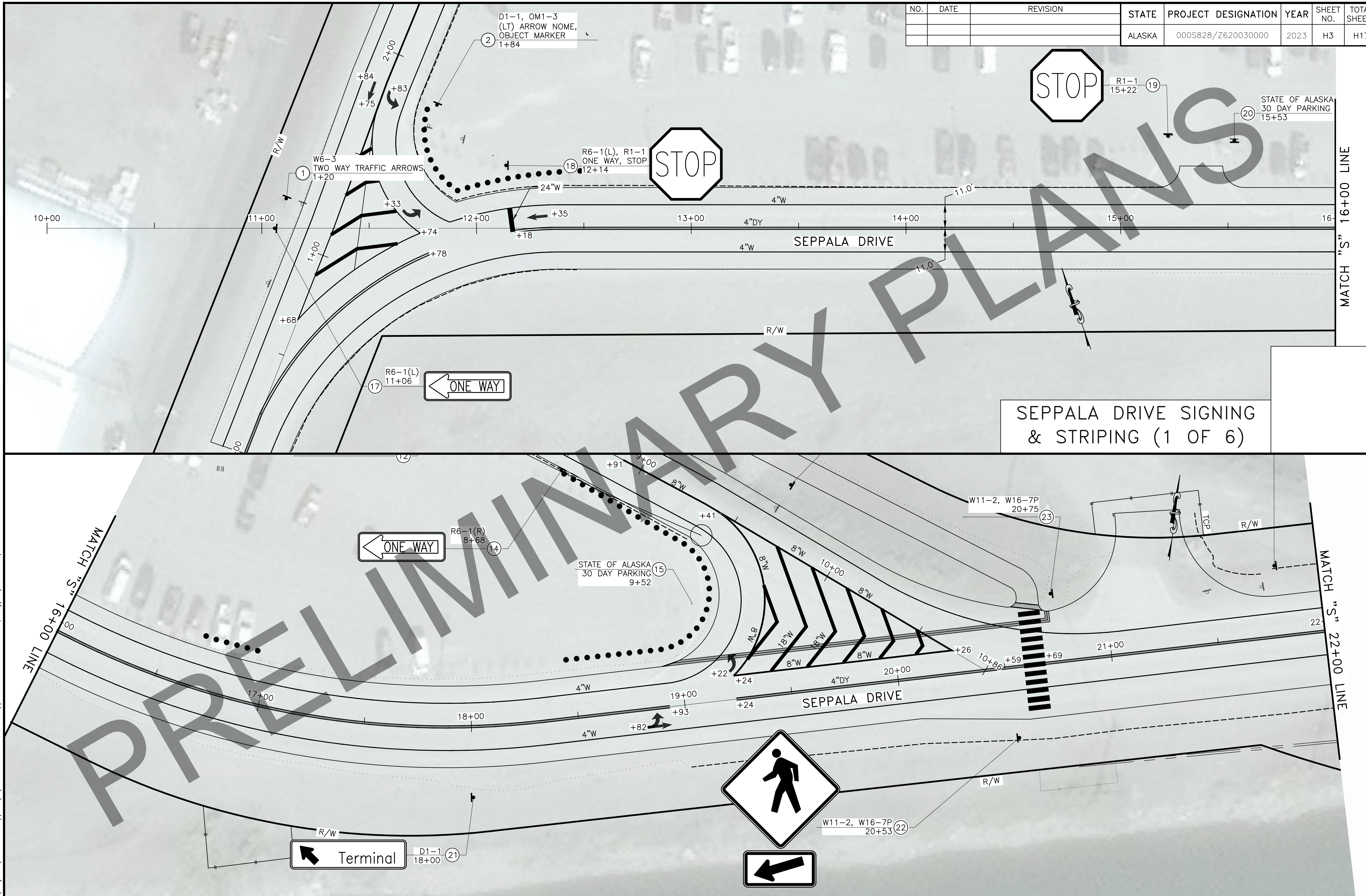
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H1 Signing and Striping Summary Table Wed, May/10/23 02:02pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	000S828/Z620030000	2023	H3	H17



PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-Seppala 10+00-22+00 Wed, May/10/23 03:39pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	000S828/Z620030000	2023	H3	H17

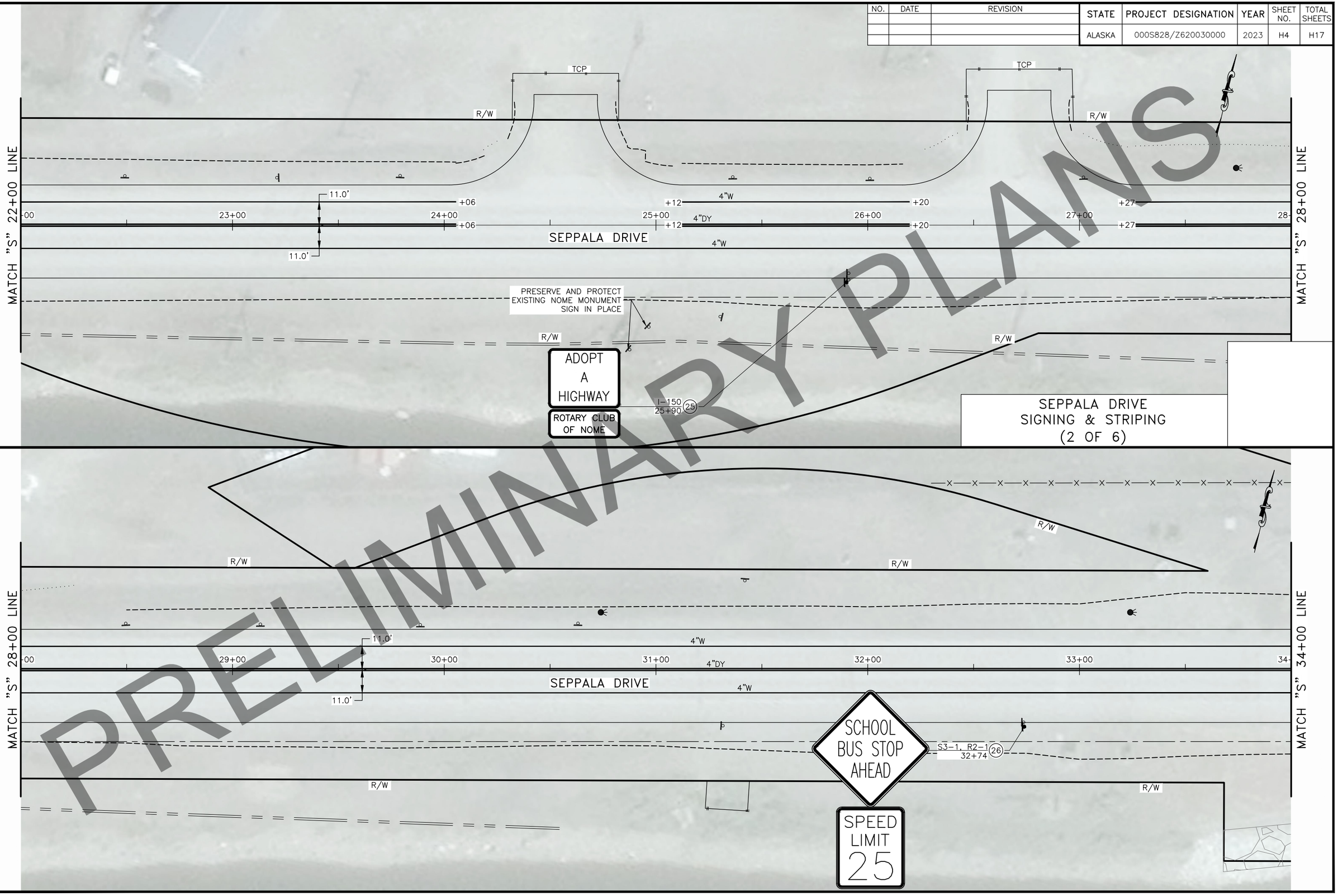


SEPPALA DRIVE SIGNING & STRIPING (1 OF 6)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-Seppala 10+00-22+00 Wed, May/10/23 03:39pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H4	H17



SEPPALA DRIVE
SIGNING & STRIPING
(2 OF 6)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H4 Seppala Drive (2 of 6) Wed, May/10/23 02:02pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H5	H17

R/W

4"W

4"DY

4"W

SEPPALA DRIVE

35+00

36+00

37+00

38+00

39+00

11.0'

11.0'

MATCH "S" 34+00 LINE

MATCH "S" 40+00 LINE

R/W

SEPPALA DRIVE
SIGNING & STRIPING
(3 OF 6)

D3-100, D3-100, R1-1
SEPPALA DR,
CENTER CREEK RD, STOP
45+61 (28)

Seppala Dr

Center Creek Rd

STOP

R/W

CENTER CREEK ROAD

24' W

4"W

4"DY

4"W

SEPPALA DRIVE

41+00

42+00

43+00

44+00

45+00

11.0'

11.0'

MATCH "S" 40+00 LINE

MATCH "S" 46+00 LINE

R/W

SPEED LIMIT 25

R2-1
SPEED LIMIT 25
44+00 (27)

W1-7
TWO WAY ARROW
45+80 (29)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H5 Seppala Drive (3 of 6) Wed, May/10/23 02:03pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H6	H17

W1-7
TWO WAY ARROWS
49+05 (31)

R2-1
SPEED LIMIT 25
51+50 (33)

SPEED LIMIT 25

CENTER CREEK ROAD

MATCH "S" 46+00 LINE

SEPPALA DRIVE

4"W
4"DY
11.0'
47+00
48+00
49+00
50+00
51+00
+28
+64
+43
+74

Snake River

I-3
SNAKE RIVER
48+73 (30)

JAFET ROAD

24"W
+04

D3-100, D3-100, R1-1
SEPPALA DR, JAFET RD, STOP
49+43 (32)

Seppala Dr
Jafet Rd
STOP

MATCH "S" 52+00 LINE

R/W

SEPPALA DRIVE
SIGNING & STRIPING
(4 OF 6)

ROTARY CLUB
AND VFW SIGNS
55+57 (34)

Seppala Dr
Prospect Pl
STOP

D3-100, D3-100, R1-1
SEPPALA DR,
PROSPECT PL, STOP
56+63 (35)

Seppala Dr
McClain Ln
STOP

D3-100, D3-100, R1-1
SEPPALA DR,
MCCLAIN LN, STOP
57+41 (36)

MATCH "S" 52+00 LINE

MATCH "S" 58+00 LINE

53+00
54+00
55+00
56+00
57+00
58+00
+20
+77
+94
+50
+51
TCP

REMOVE AND REPLACE
3 EXISTING ROTARY CLUB
AND VFW SIGNS IN PLACE

PRESERVE AND PROTECT
EXISTING CHILDREN PLAYING
AND BELMONT BEACH SIGNS
IN PLACE

PROSPECT PLACE

MCCLAIN LANE

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H6 Seppala Drive (4 of 6) Wed, May/10/23 02:03pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H7	H17

MATCH "S" 58+00 LINE

R/W

TCP

G STREET

MATCH "S" 64+00 LINE

59+00 60+00 61+00 62+00 63+00 64

+27 +11

4"W 4"DY 4"W

11.0' 11.0'

SEPPALA DRIVE

+65 24"W

BELMONT STREET

Seppala Dr
Belmont St

STOP

D3-100, D3-100, R1-1
SEPPALA DR,
BELMONT ST, STOP
59+84 (37)

PRESERVE AND PROTECT EXISTING SMALL BOAT HARBOR MONUMENT SIGN IN PLACE

SEPPALA DRIVE
SIGNING & STRIPING
(5 OF 6)

MATCH "S" 64+00 LINE

ADOPT A HIGHWAY
ROTARY CLUB OF NOME

I-150
66+29 (38)

65+00 66+00 67+00 68+00 69+00 70

+41 +99 +86

4"W 4"DY 4"W

SEPPALA DRIVE

+69 24"W

WEST F STREET

Seppala Dr
West E St

STOP

D3-100, D3-100, R1-1
SEPPALA DR,
WEST E ST, STOP
69+87 (40)

Seppala Dr
West F St

STOP

D3-100, D3-100, R1-1
SEPPALA DR,
WEST F ST, STOP
66+91 (39)

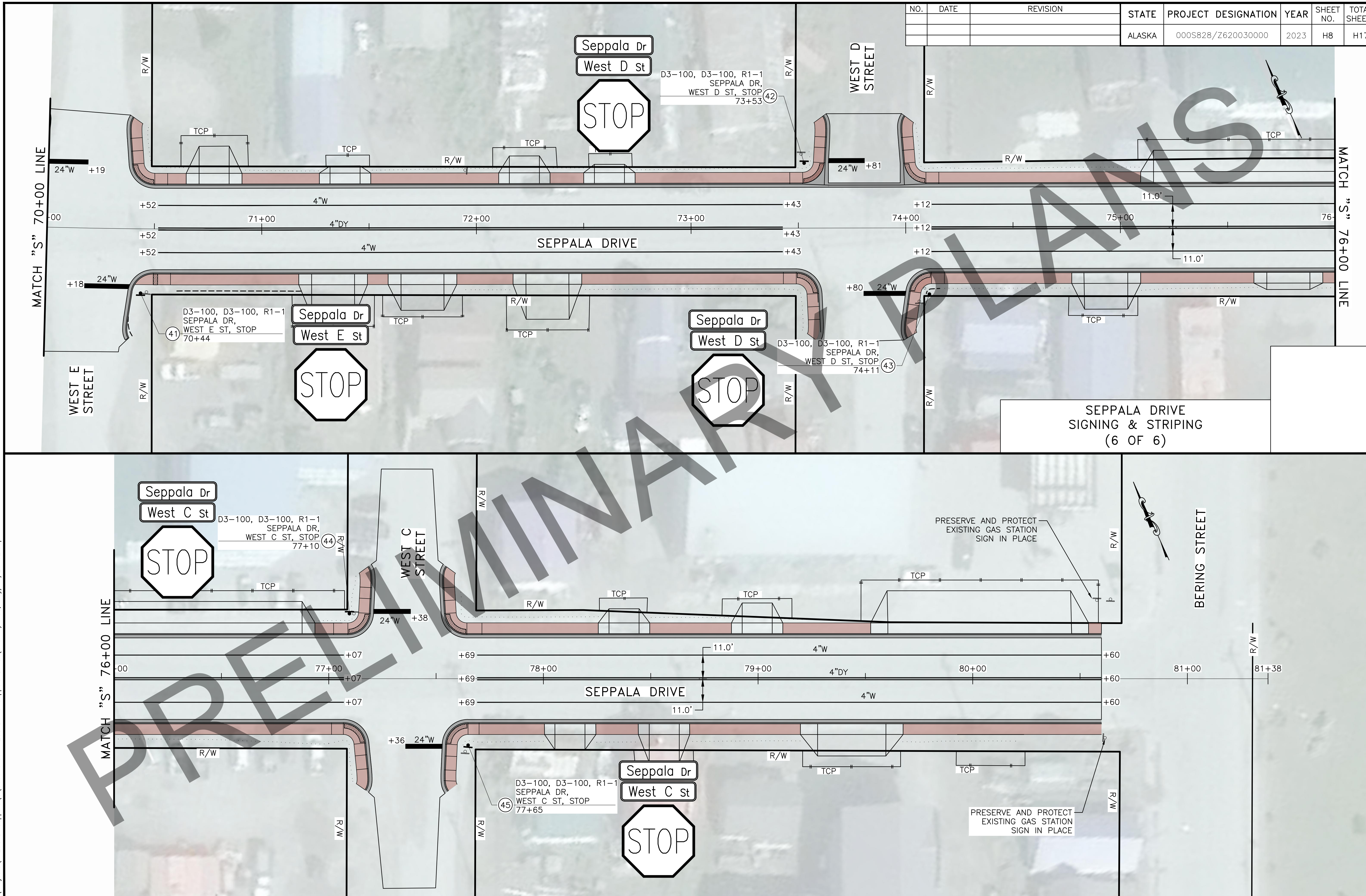
MATCH "S" 70+00 LINE

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H7 Seppala Drive (5 of 6) Wed, May/10/23 02:03pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H8	H17

SEPPALA DRIVE SIGNING & STRIPING (6 OF 6)



PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H8 Seppala Drive (6 of 6) Wed, May/10/23 02:03pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H9	H17

PLANS DEVELOPED BY:: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H9 Center Creek Rd - Prospect Street Wed, May/10/23 02:03pm

SEPPALA DRIVE

PROSPECT STREET

CENTER CREEK ROAD

R/W

44+00

45+00

46+00

47+00

10+00

11+00

12+00

0+00

1+00

2+00

+10

+28

+29

+31

+64

+71

24"W

4"W

4"DY

10.9'

R2-1
(47) SPEED LIMIT 20
1+20

SPEED LIMIT 20

D3-100, D3-100, R1-1
CENTER CREEK RD.,
PROSPECT ST., STOP
(46) 11+52

Prospect St

Center Creek Rd

STOP

PRESERVE AND PROTECT IN PLACE
EXISTING SPEED LIMIT SIGN

CENTER CREEK RD –
PROSPECT STREET
SIGNING & STRIPING

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H10	H17

SIGN SUMMARY

LOC. NO.	STATION	OFFSET (FT)	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/ FRAMING		AREA (SQ. FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
			LT.	RT.				BRACED	FRAMED				TYPE	SIZE (IN.)	NO.	
1	"AR" 01+20	25.5	X		W6-3	TWO WAY TRAFFIC ARROWS	36X36	X		9.00			TS	3	1	
2	"AR" 01+84	25.5		X	D1-1	(LT) ARROW NOME	42X12	X		3.50			TS	3	1	
					OM1-3	OBJECT MARKER	18X18			2.25						
3	"AR" 02+39	23.0		X	R3-108B	(LT TURN) ARROW ONLY (THRU) ARROW ONLY	30X30	X		6.25						
4	"AR" 03+10	34.0	X		R1-1	STOP	36X36	X		9.00			TS	3	1	
5	"AR" 04+72	48.0		X	R1-1	STOP	36X36	X		9.00			TS	3	1	
5A	"AR" 03+99	20.0		X	R3-108B	(LT TURN) ARROW ONLY (THRU) ARROW ONLY	30X30	X		6.25			TS	3	1	
6	"AR" 04+93	21.0		X	R6-1	ONE WAY	54X18	X		6.75			TS	3	2	
7	"AR" 06+07	46.0	X		R1-1	STOP	36X36	X		9.00			TS	3	1	
8	"AR" 06+10	37.0		X	SPECIAL 1	STATE OF ALASKA 30 DAY PARKING NOTICE	54X66	X	X	24.75			TS	3	1	SEE SIGN DETAIL ON SHEET H13
9	"AR" 06+43	37.0		X	SPECIAL 1	STATE OF ALASKA 30 DAY PARKING NOTICE	54X66	X	X	24.75			TS	3	1	SEE SIGN DETAIL ON SHEET H13
10	"AR" 06+46	36.5		X	R1-1	STOP	36X36	X		9.00			TS	3	1	
					R6-1(L)	ONE WAY	54X18	X		6.75						
11	"AR" 08+10	26.0	X		R3-108B	(LT TURN) ARROW ONLY (THRU) ARROW ONLY	30X30	X		6.25			TS	3	1	
					R5-1A	WRONG WAY	30X18	X		3.75						
12	"AR" 08+10	19.6		X	R3-108B	(LT TURN) ARROW ONLY (THRU) ARROW ONLY	30X30	X		6.25			TS	3	1	
					R5-1A	WRONG WAY	30X18	X		3.75						
13	"AR" 08+45	45.0	X		R1-1	STOP	36X36	X		9.00			TS	3	1	
14	"AR" 08+68	18.0		X	R6-1(R)	ONE WAY	54X18	X		6.75			TS	3	2	
15	"AR" 09+52	43.0		X	SPECIAL 1	STATE OF ALASKA 30 DAY PARKING NOTICE	54X66	X	X	24.75			TS	3	1	SEE SIGN DETAIL ON SHEET H13

POST TYPE LEGEND
PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H10 Signing and Striping Summary Table Wed, May/10/23 02:04pm

SIGNING & STRIPING SUMMARY TABLE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H11	H17

SIGN SUMMARY

LOC. NO.	STATION	OFFSET (FT)	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/ FRAMING		AREA (SQ. FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
			LT.	RT.				BRACED	FRAMED				TYPE	SIZE (IN.)	NO.	
16	"AR" 09+64	28.0	X		R1-2	YIELD	48X48X48	X		6.93			TS	3	1	
17	"S" 11+06	0.0		X	R6-1(L)	ONE WAY	54X18	X		6.75			TS	3	2	
18	"S" 12+14	29.0	X		R1-1	STOP	30X30	X		6.25			TS	3	2	
					R6-1(L)	ONE WAY	54X18	X		6.75						
19	"S" 15+22	43.0	X		R1-1	STOP	36X36	X		9.00			TS	3	1	
20	"S" 15+53	41.0	X		SPECIAL 1	STATE OF ALASKA 30 DAY PARKING NOTICE	54X66	X	X	24.75			TS	3	1	SEE SIGN DETAIL ON SHEET H13
21	"S" 18+00	33.0		X	D1-1	(LT) ARROW TERMINAL	48X12	X		4.00			TS	3	1	
22	"S" 20+53	33.0		X	W11-2	PED CROSSING	30X30	X		6.25			TS	3	1	
					W16-7P	(LT DIAGONAL) ARROW	24X12			2.00						
23	"S" 20+75	32.0	X		W11-2	PED CROSSING	30X30	X		6.25			TS	3	1	
					W16-7P	(LT DIAGONAL) ARROW	24X12			2.00						
24	"S" 21+80	33.0	X		D1-1	(RT) ARROW TERMINAL	48X12	X		4.00			TS	3	1	
25	"S" 25+90	27.0		X	I-150	ADOPT A HIGHWAY	30X24	X		5.00			TS	3	1	
						ROTARY CLUB OF NOME	30X12	X		2.50						
26	"S" 32+74	27.0		X	S3-1	SCHOOL BUS STOP AHEAD	36X36	X		9.00			TS	3	1	
					R2-1	SPEED LIMIT 25	24X30			5.00						
27	"S" 44+00	26.0	X		R2-1	SPEED LIMIT 25	24X30			5.00			TS	3	1	
28	"S" 45+61	38.0	X		D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	CENTER CREEK RD	48X8	X		5.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
29	"S" 45+80	31.0		X	W1-7	TWO WAY ARROW	48X24	X		8.00			TS	3	1	
30	"S" 48+73	68.0		X	I-3	SNAKE RIVER	42X24	X		7.00			TS	3	2	
31	"S" 49+05	31.0	X		W1-7	TWO WAY ARROW	48X24	X		8.00			TS	3	1	

POST TYPE LEGEND

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

NOTES

1. D3-100 SERIES SIGNS ARE TO INCLUDE TWO IDENTICAL SIGNS INSTALLED BACK TO BACK AS SHOWN ON H14 SIGN DETAIL FOR STREET NAME SIGNS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C600\1cnst-17258FB-H11 Signing and Striping Summary Table Wed, May/10/23 02:04pm

SIGNING & STRIPING SUMMARY TABLE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H12	H17

SIGN SUMMARY

LOC. NO.	STATION	OFFSET (FT)	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/ FRAMING		AREA (SQ. FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
			LT.	RT.				BRACED	FRAMED				TYPE	SIZE (IN.)	NO.	
32	"S" 49+43	52.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	JAFET DR	24X8			2.67						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
33	"S" 51+50	32.0		X	R2-1	SPEED LIMIT 25	24X30			5.00			TS	3	1	
34	"S" 55+57	52.0	X		–	ROTARY CLUB AND VFW SIGNS	–	–		–			TS	3	3	REUSE 3 EXISTING SIGNS
35	"S" 56+63	49.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	PROSPECT PL	36X8	X		4.00						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
36	"S" 57+41	30.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	MCCLAIN LN	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
37	"S" 59+84	28.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	BELMONT ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
38	"S" 66+29	33.0	X		I-150	ADOPT A HIGHWAY	30X24	X		5.00			TS	3	1	
						ROTARY CLUB OF NOME	30X12	X		2.50						
39	"S" 66+91	30.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST F ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
40	"S" 69+87	30.0	X		D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST E ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
41	"S" 70+44	30.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST E ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						

POST TYPE LEGEND

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

NOTES

1. D3-100 SERIES SIGNS ARE TO INCLUDE TWO IDENTICAL SIGNS INSTALLED BACK TO BACK AS SHOWN ON H14 SIGN DETAIL FOR STREET NAME SIGNS.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H12 Signing and Striping Summary Table Wed, May/10/23 02:04pm

SIGNING & STRIPING SUMMARY TABLE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H13	H17

SIGN SUMMARY

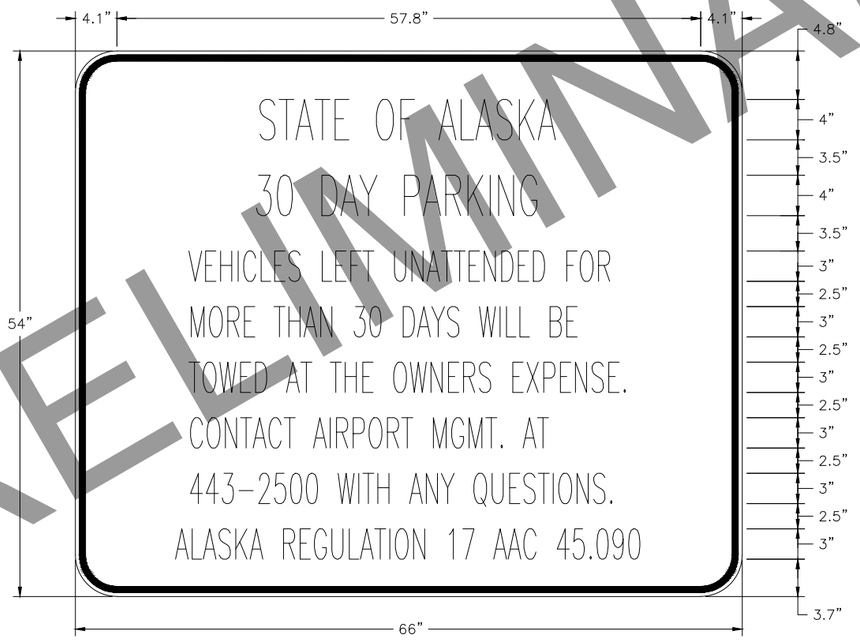
LOC. NO.	STATION	OFFSET (FT)	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/ FRAMING		AREA (SQ. FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
			LT.	RT.				BRACED	FRAMED				TYPE	SIZE (IN.)	NO.	
42	"S" 73+53	30.0	X		D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST D ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
43	"S" 74+11	31.0		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST D ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
44	"S" 77+10	30.0	X		D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST C ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
45	"S" 77+65	31.5		X	D3-100	SEPPALA DR	30X8	X		3.33			TS	3	1	SEE NOTE 1
					D3-100	WEST C ST	30X8	X		3.33						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
46	"C" 11+52	29.0	X		D3-100	CENTER CREEK RD	48X8	X		5.33			TS	3	1	SEE NOTE 1
					D3-100	PROSPECT ST	36X12	X		6.00						SEE NOTE 1
					R1-1	STOP	30X30	X		6.25						
47	"P" 1+20	23.0		X	R2-1	SPEED LIMIT 20	24X30			5.00			TS	3	1	
									TOTAL	513.3					54	
									ROUNDED TOTAL	514					54	

POST TYPE LEGEND

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

NOTES

1. D3-100 SERIES SIGNS ARE TO INCLUDE TWO IDENTICAL SIGNS INSTALLED BACK TO BACK AS SHOWN ON H14 SIGN DETAIL FOR STREET NAME SIGNS.



SPECIAL 1

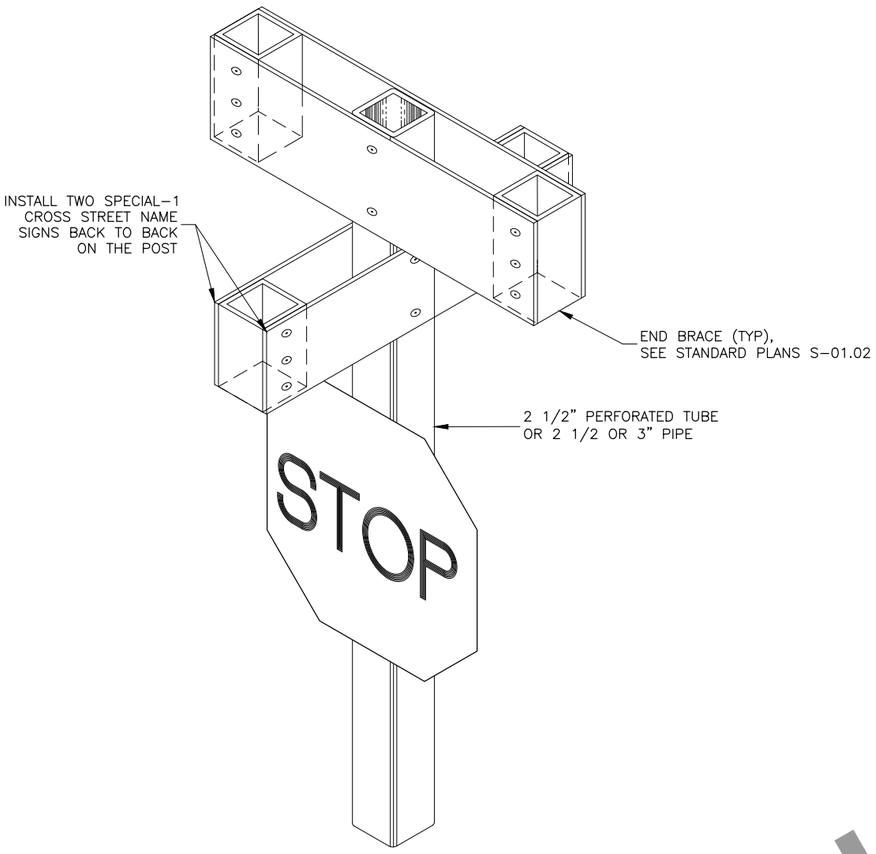
NOTES:
OUTER R: 1.5"
INNER T: 0.6" RED
OUTER T: 0.4" WHITE
INNER BORDER AND LEGEND: RED
OUTER BORDER AND BACKGROUND: WHITE

SIGNING AND STRIPING SUMMARY TABLE

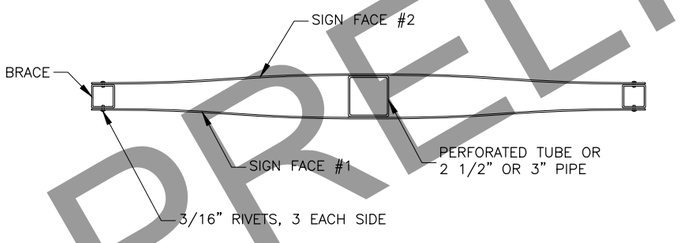
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H13 Signing and Striping Summary Table Wed, May/10/23 02:04pm

NO.	DATE	REVISION

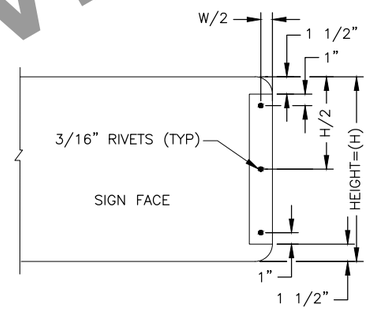
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H14	H17



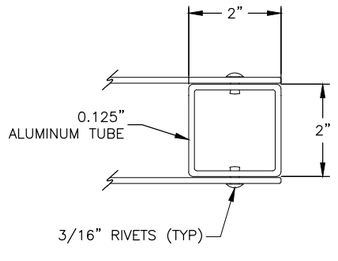
STREET NAME SIGN



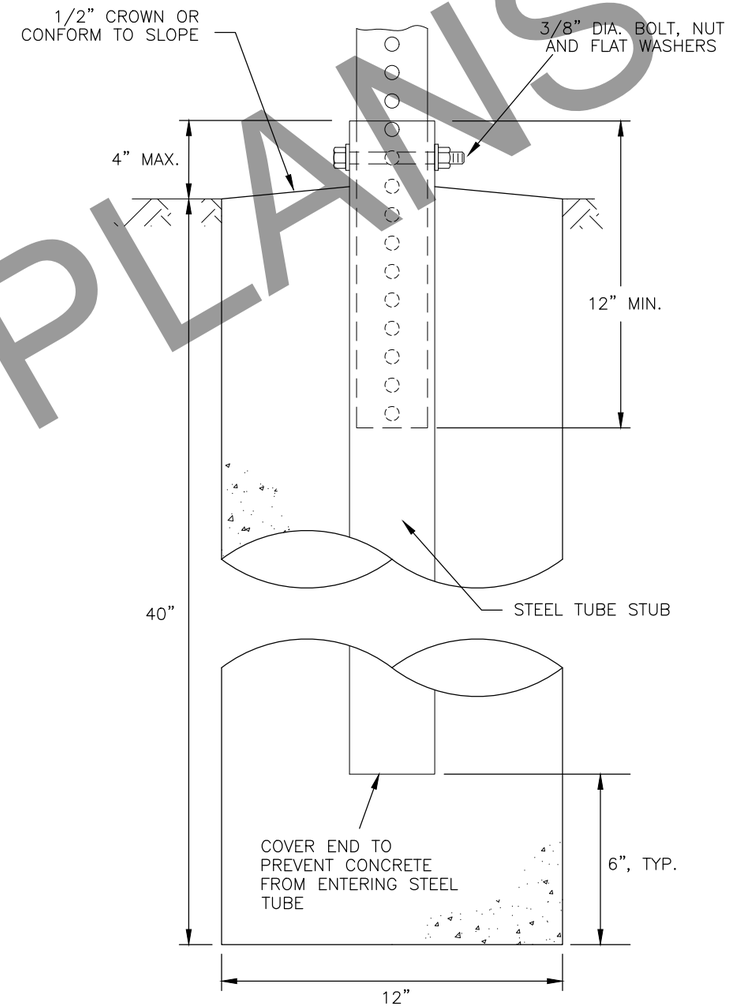
PLAN VIEW



RIVET DETAIL ELEVATION VIEW



END BRACE DETAIL



SLEEVE TYPE
CONCRETE FOUNDATION

SMALL STREET NAME SIGN (D3-1, D3-100A, D3-100) BRACING DETAILS

SIGN DETAILS

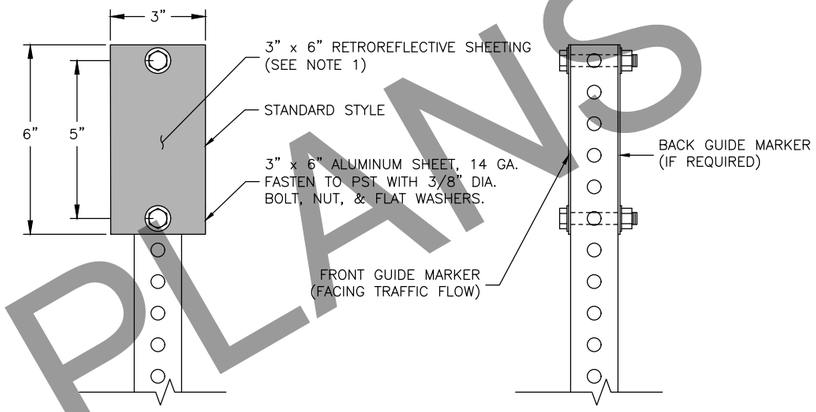
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H14 Sign Details Wed, May/10/23 02:04pm

NO.	DATE	REVISION

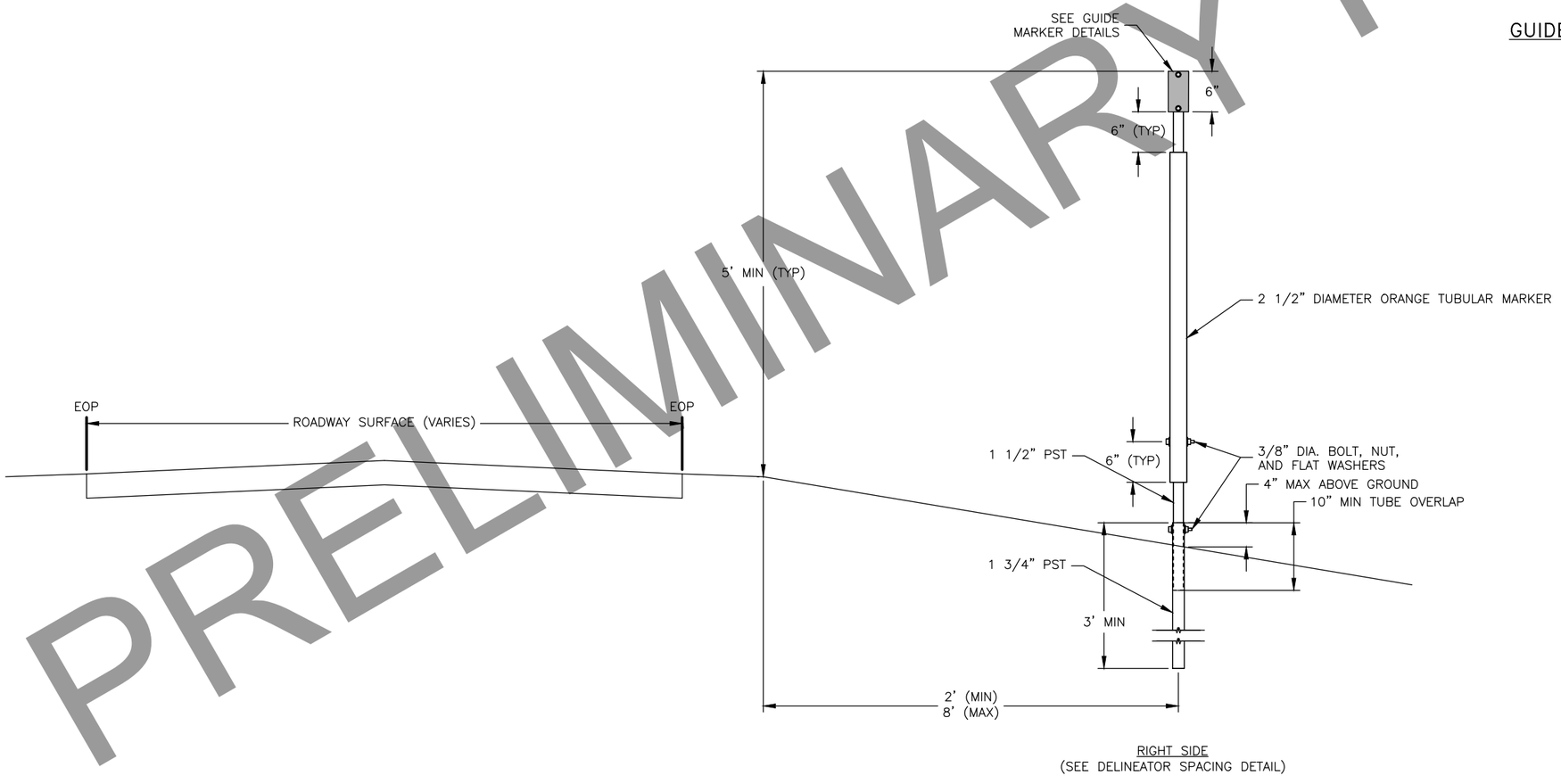
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H15	H17

615.0004.0000 DELINEATOR, RIGID

ALIGNMENT	STATION	OFFSET	QUANTITY (EACH)	REMARKS
"SP"	27+74	LT	1	
"SP"	30+74	LT	1	
"SP"	33+24	LT	1	
"SP"	34+79	LT	1	INSTALL AT CURVE PC
"SP"	35+97	LT	1	
"SP"	36+82	LT	1	
"SP"	37+67	LT	1	
"SP"	38+52	LT	1	
"SP"	39+37	LT	1	
"SP"	40+22	LT	1	
"SP"	41+07	LT	1	
"SP"	41+92	LT	1	
"SP"	42+77	LT	1	
"SP"	43+62	LT	1	INSTALL AT CURVE PT
"SP"	45+17	LT	1	
"SP"	47+67	LT	1	
"SP"	50+67	LT	1	
		TOTAL	17	



GUIDE MARKER DETAIL
PST



RIGHT SIDE
(SEE DELINEATOR SPACING DETAIL)

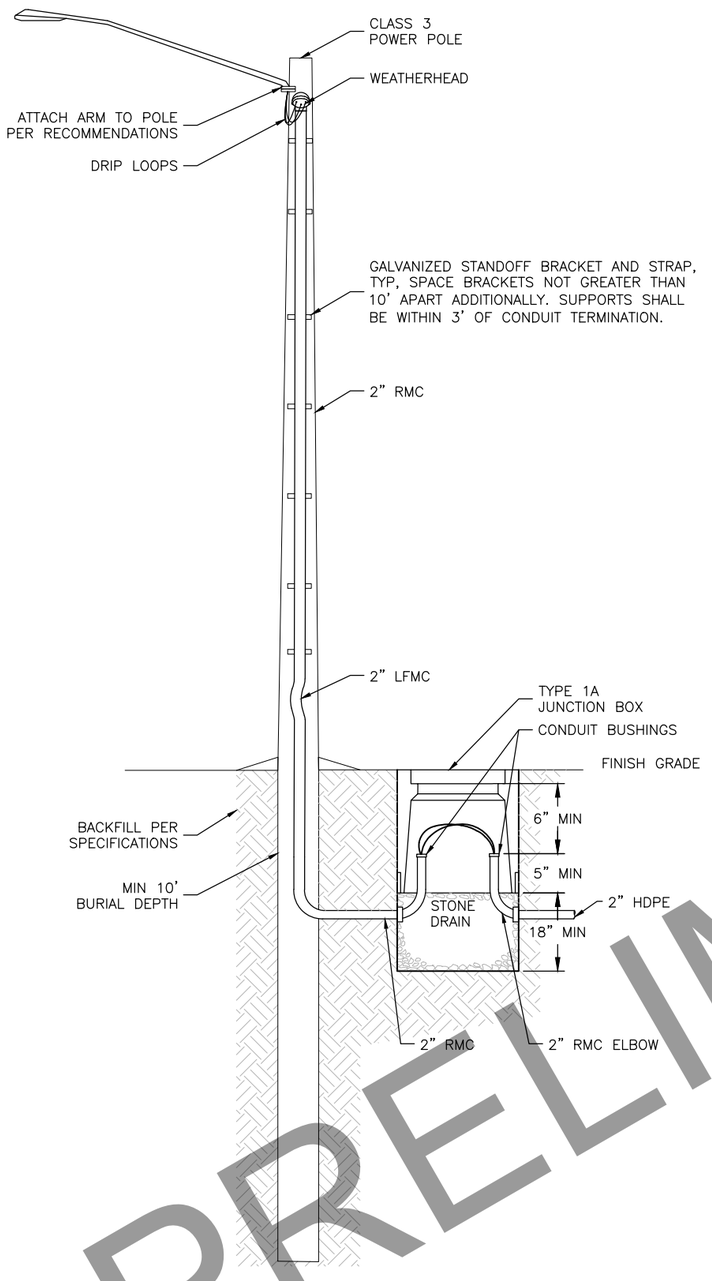
ROADSIDE DELINEATOR DETAIL

DELINEATOR DETAILS

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C6001cnst-17258FB-H15 Delineator Details Wed, May/10/23 02:04pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H16	H16



LUMINAIRE POLE DETAIL
NOT TO SCALE

ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE
CL	CENTERLINE
DOT&PF	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HDPE	HIGH DENSITY POLYETHYLENE CONDUIT
INTX	INTERSECTION
LC	LOAD CENTER
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LTG	LIGHTING
M&O	MAINTENANCE AND OPERATIONS
NEC	NATIONAL ELECTRICAL CODE
NJUS	NOME JOINT UTILITIES SERVICE
P1	POLE
PEC	PHOTOELECTRIC CELL
RMC	RIGID METAL CONDUIT (HOT-DIPPED GALVANIZED)
S	SEPPALA RD ALIGNMENT

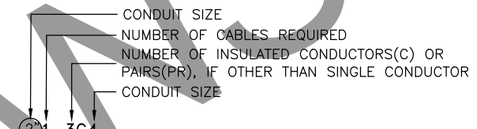
SYMBOL LEGEND:

EXISTING / PROPOSED

- LUMINAIRE (MAST ARM MOUNTED)
- JUNCTION BOX, TYPE IA
- JUNCTION BOX, TYPE II
- LOAD CENTER
- 2" — CONDUIT SIZE IN INCHES
- LIGHTING CONDUIT

NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THE INSTALLED SERVICE EQUIPMENT DIFFERS FROM WHAT IS SHOWN IN SCHEDULES. ENGINEER WILL PROVIDE A REVISED SHORT CIRCUIT CALCULATION. UTILITY CONNECTION WORK TO BE PERFORMED BY NJUS.
2. COORDINATE WITH NOME JOINT UTILITY SYSTEM (NJUS) 30 DAYS PRIOR TO COMMENCING WORK IN THE PROJECT AREA.



SUMMARY OF LOAD CENTER LC "A"

VOLTAGE: 120/240V, 1PH, 3W
BUS AMPS: 100
MAIN: MCB; 100A
MIN AIC RATING: 10,000
CIRCUITS: 20
LOAD CENTER TYPE: 2 (SOA)
SERVING UTILITY: NOME JOINT UTILITIES
LOCATION: SEPPALA & CENTER CREEK DR

LOAD	LOAD DESCRIPTION	NOTE	VA	AMP	P	CKT	PHASE	CKT	P	AMP	VA	NOTE	LOAD DESCRIPTION	LOAD
	SPARE			20	1	1	A	2	2	20	400		LUMINAIRES, SEPPALA	1
	SPARE			20	1	3	B	4	–	–	400		"	1
	SPACE			–	1	5	A	6	1	–			SPACE	
	SPACE			–	1	7	B	8	1	–			SPACE	
	SPACE			–	1	9	A	10	1	–			SPACE	
	SPACE			–	1	11	B	12	1	–			SPACE	
	SPACE			–	1	13	A	14	1	–			SPACE	
	SPACE			–	1	15	B	16	1	–			SPACE	
	SPACE			–	1	17	A	18	1	–			SPACE	
	SPACE			–	1	19	B	20	1	–			SPACE	

LOAD SUMMARY AND CODE DEFINITIONS		CONNECTED KVA PH A	PH B	TOTAL	% DIV	NEC TOTAL
1	LIGHTING =	0.4	0.4	0.8	125%	1.0
TOTAL KVA (PHASE)		0.4	0.4	0.8		1.0
TOTAL AMPERES		3.3	3.3	3.3		4.2

NOTES:

LUMINAIRE SCHEDULE

MANUFACTURER	GE OR APPROVED EQUAL
MODEL	M400A-PLUS OR APPROVED EQUAL
WATTAGE	250
LIGHT SOURCE	HPS
VOLTAGE	240
STYLE	COBRA HEAD
LUMINAIRE TYPE	M-C-3
BALLAST TYPE	MAG-REG
PE CONTROL	YES
IGNITOR MOUNTING	PLUG-IN
LENS TYPE	FLAT GLASS
IES DISTRIBUTION TYPE	MC3
FILTER	CHARCOAL W/ELASTOMER GASKET
UL LISTED	YES

VOLTAGE DROP CALCULATION - LC "A"

1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.

CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. (%VD)
A-2,4	8 AWG		240V	0.8	0.8	3.3	

LAMP SCHEDULE

MANUFACTURER	SYLVANIA OR APPROVED EQUAL
MODEL	LU250 OR APPROVED EQUAL
BULB	ET18
BASE	E39
ANSI SPEC NUMBER	S50
LAMP FINISH	CLEAR
OPERATING POSITION	UNIVERSAL
AVERAGE RATED LIFE	24,000 HOURS
INITIAL LUMENS	29,000
MEAN LUMENS	26,100
CRI	22
CCT	2100

SHORT CIRCUIT CALCULATION - LC "A"

240V AC IN A 1-PH, 3W CONFIGURATION, 1 CONDUCTOR PER PHASE IN CONDUIT. INFINITE PRIMARY BUS.

ANTICIPATED SERVICE TRANSFORMER RATING	10 KVA
SERVICE VOLTAGE	240/120V
ANTICIPATED TRANSFORMER IMPEDANCE	1.0%
LET-THRU SHORT CIRCUIT CURRENT	4167 A
LENGTH TO SERVICE	85'
ANTICIPATED SERVICE CONDUCTOR SIZE	8 AWG
ANTICIPATED SERVICE CONDUIT	HDPE
MAXIMUM FAULT CURRENT	1440 A

CALL BEFORE YOU DIG!

CONTRACTOR SHALL CALL A MINIMUM OF 3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE....907-278-3121 OR 800-478-3121

CALL OR GO TO WWW.AKONECALL.COM/STATEWIDE.HTM FOR MEMBER LIST OF WHO WILL BE NOTIFIED

ILLUMINATION LEGEND AND NOTES

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\E\E0016schd17258FB-H16 Wed, May/10/23 02:04pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	H17	H17

ELECTROLIER SCHEDULE

POLE NO.	STATION ALIGNMENT	OFFSET	DISTRIBUTION TYPE	LAMP WATTS	BALLAST VOLTAGE	MOUNTING HEIGHT	SHAFT LENGTH	MASTARM LENGTH	STYLE	TOP OF FOUNDATION	REMARKS
L–1	"S" 45+65	33.2' LT	MC3	250W	240V	25.0'	25.0'	6.0'	MAST ARM		

JUNCTION BOX SCHEDULE

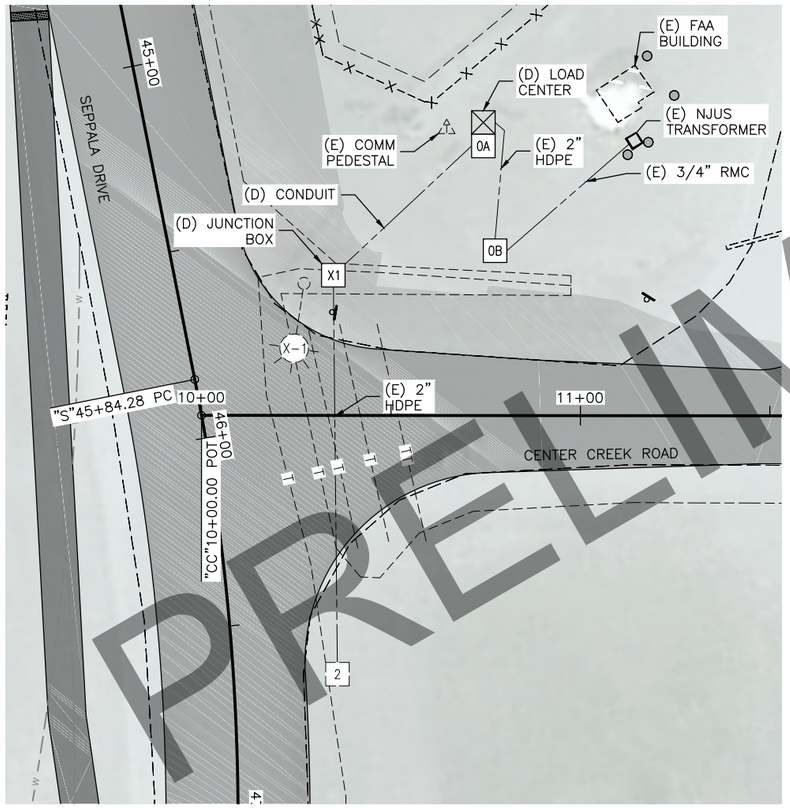
JBOX	STATION ALIGNMENT	OFFSET	TYPE
OA	EXISTING	EXISTING	EXISTING
OB	EXISTING	EXISTING	EXISTING
1	"S" 45+64.4	41.2' LT	1A
2	EXISTING	EXISTING	EXISTING

SALVAGE ELECTROLIER SCHEDULE

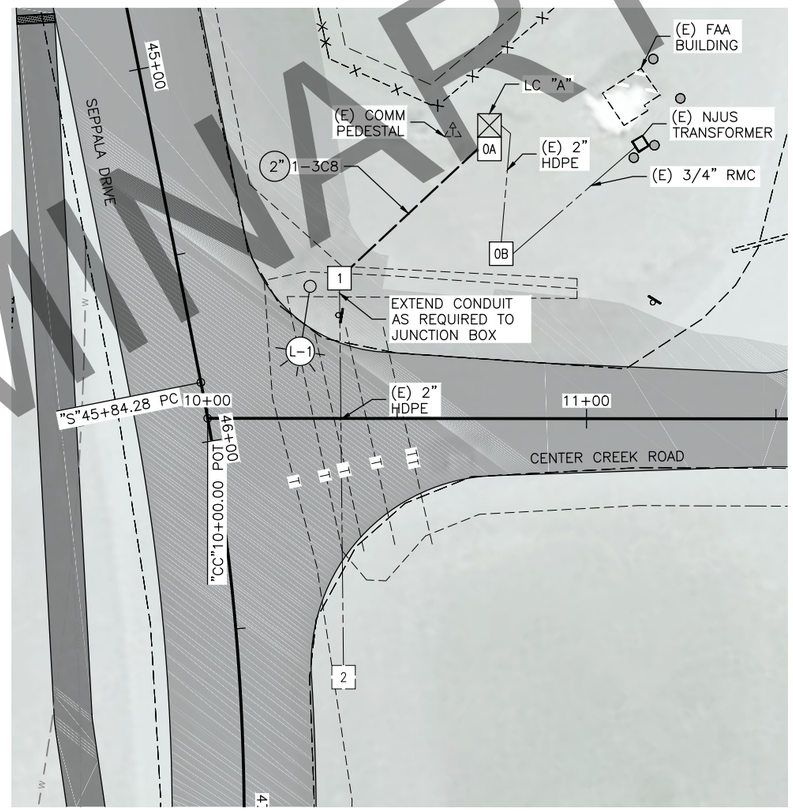
POLE NO.	STATION ALIGNMENT	OFFSET	STYLE	REMARKS
X–1	"S" 45+65	33.2' LT	MAST ARM	WOOD POLE

LOAD CENTER STATIONING

	STATION ALIGNMENT	OFFSET	TYPE
LC "A"	"S" 45+32.6	87.9' LT	TYPE 2 LOAD CENTER



DEMOLITION
NOT TO SCALE



NEW WORK
NOT TO SCALE

NOTES:

1. COORDINATE WITH NOME JOINT UTILITY SYSTEM (NJUS) 30 DAYS PRIOR TO COMMENCING WORK IN THE PROJECT AREA.
2. EXISTING ELECTRICAL CONDITIONS AND UNDERGROUND ROUTING BASED ON AS–BUILT DOCUMENTS; VERIFY LOAD CENTER, POLE, AND JUNCTION BOX LOCATIONS WITH PROJECT ENGINEER PRIOR TO WORK.
3. DEMOLISH LOAD CENTER AND SERVICE CONDUCTORS, SALVAGE CONDUIT FROM TRANSFORMER ENCLOSURE. NOTIFY PROJECT ENGINEER IF CONDUIT IS IN POOR CONDITION. COORDINATE WITH DOT&PF AND NJUS TO DE–ENERGIZE THE EXISTING CIRCUIT AS REQUIRED.
4. PROVIDE LOAD CENTER AT SAME LOCATION, AND 100' OF SERVICE CABLE COILED NEATLY AT LOAD CENTER. NJUS TO PULL SERVICE CABLE FROM LOAD CENTER TO TRANSFORMER ENCLOSURE AND TERMINATE.
5. SALVAGE EXISTING ELECTROLIER AND POLE. COORDINATE THE OWNERSHIP OF THE SALVAGE POLE WITH DOT&PF, M&O, AND NJUS THROUGH THE PROJECT ENGINEER. DELIVER SALVAGED POLE AND ELECTROLIER TO THE RESPECTIVE OWNERS. COORDINATE FOR DELIVERY WITH OWNER THROUGH PROJECT ENGINEER A MINIMUM 7 DAYS PRIOR TO REMOVAL. DEMOLISH JUNCTION BOX AT POLE BASE, AND CONDUIT AND CONDUCTORS FROM LOAD CENTER.
6. INSTALL SALVAGED ELECTROLIER. PROVIDE NEW JUNCTION BOX AT POLE BASE, AND CONDUIT AND CONDUCTORS TO LOAD CENTER.
7. INTERCEPT EXISTING CONDUIT FROM UPSTREAM ELECTROLIER AND DEMOLISH CONDUCTORS. EXTEND CONDUIT TO REVISED ELECTROLIER LOCATION. PROVIDE NEW CONDUCTORS FROM UPSTREAM ELECTROLIER TO RELOCATED ELECTROLIER AND CONNECT TO LIGHTING CIRCUIT; DO NOT SPLICE CONDUCTORS.
8. RACEWAY MAY BE REUSED IN PLACE IF NOT RENDERED UNUSABLE DUE TO OTHER DEMOLITION AND COMPLIES WITH CONTRACT DOCUMENTS. REUSED RACEWAY SHALL BE IN LIKE–NEW, OR REPAIRED TO LIKE–NEW CONDITION BEFORE INSTALLING CONDUCTORS.
9. ALL STATION LOCATIONS ARE APPROXIMATE. INSTALL EQUIPMENT TO THE STATIONING SHOWN ON THE TABLES OR AS DIRECTED BY THE FIELD ENGINEER.
10. INSTALL WOOD POLES AND LOAD CENTER FOUNDATIONS WITHIN 1–DEGREE OF PLUMB.

ILLUMINATION PLAN – CENTER CREEK

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743–3200
N:\Projects\17258FB–Seppala\E\E0017spep17258FB–H17 Wed, May/10/23 03:41pm

NO.	DATE	REVISION

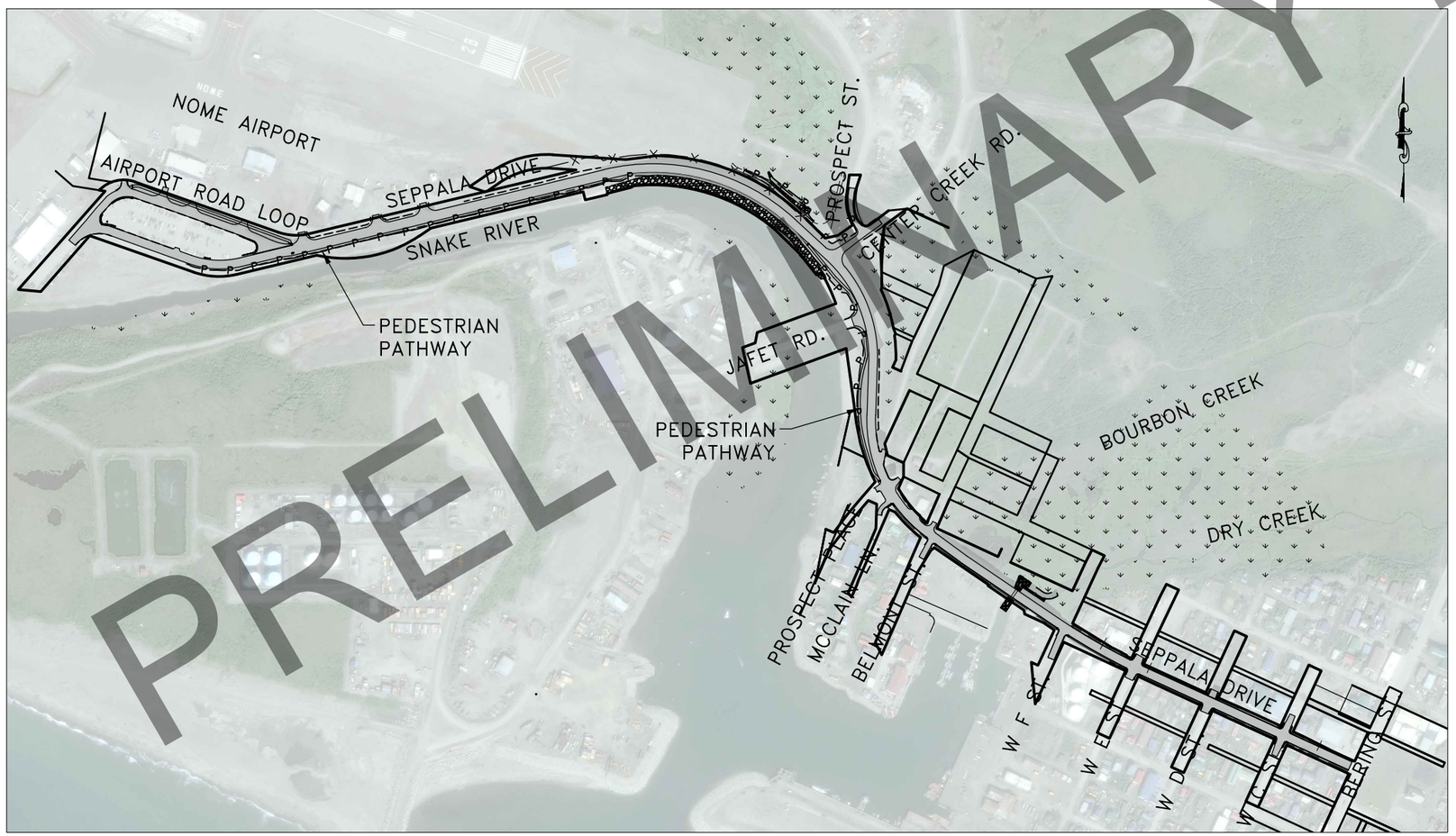
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q1	Q9

ESCP GENERAL NOTES:

1. THIS ESCP IS A GENERAL PLAN FOR GUIDING THE DEVELOPMENT OF THE CONTRACTOR'S SWPPP. THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL DETAILS AND BMPS BASED ON THE CONTRACTORS ACTUAL SCHEDULE AND CONSTRUCTION METHODS, AS REQUIRED TO COMPLY WITH THE CONSTRUCTION GENERAL PERMIT AND SECTION 641 OF THE PROJECT SPECIFICATIONS.
2. CONSTRUCTION ENTRANCE/EXIT MUST BE ESTABLISHED TO MINIMIZE OFF-SITE IMPACTS.
3. INSTALL PERIMETER CONTROL BMP WHEN WORKING WITHIN 25 FEET OF SURFACE WATERS AND ALONG WETLANDS WHERE A 25 FOOT VEGETATIVE BUFFER IS NOT RETAINED.
4. IF EXCAVATION DE-WATERING WILL OCCUR WITHIN 1,500FT OF AN ADEC IDENTIFIED CONTAMINATED SITE, THEN THE PROJECT MUST COMPLY WITH THE ADEC EXCAVATION DE-WATERING GENERAL PERMIT.
5. ALL IN-WATER WORK MUST BE ISOLATED FROM WATERS OF THE U.S. USING APPROPRIATE BMPS. ISOLATION METHODS MAY INCLUDE:
   - 5.1. SILT CURTAINS
   - 5.2. COFFERDAMS
   - 5.3. DIVERSIONS
   - 5.4. OTHER METHODS APPROVED BY THE ENGINEER
6. INLET / OUTLET PROTECTION REQUIRED FOR ALL CULVERTS, CROSSING CULVERT PROTECTION IS SHOWN ON THE ESCP SHEETS, DRIVEWAY CULVERTS ARE NOT SHOWN FOR VISUAL CLARIFICATION.
7. AREAS OF DISTURBANCE, TEMPORARY AND PERMANENT STABILIZATION, WILL BE MARKED AS WORK PROCEEDS AND ADDED TO THE LEGEND.
8. REFER TO APPENDIX A OF THE CONTRACT FOR ENVIRONMENTAL PERMIT INFORMATION.
9. REFER TO APPENDIX C OF THE CONTRACT FOR THE ESCP TEMPLATE.
10. IF THE DEPARTMENT PROVIDES AN AREA FOR SUPPORT ACTIVITY (E.G. MATERIAL SITE, STAGING AREA, ETC.), PROVIDE A MAP SHOWING ALL REQUIREMENTS LISTED IN SECTION 5.3.5 OF THE CGP.

ESCP LEGEND:

- R/W — RIGHT OF WAY
- SURFACE WATER FLOW DIRECTION
- —P—P—P—P— PERIMETER CONTROL – FIBER ROLL, VEGETATIVE BUFFER OR SILT FENCE (BMP 10.01 OR 20.00, DOT&PF SWPPP GUIDE) OR FUNCTIONAL EQUIVALENT TO MANUFACTURER'S SPECIFICATIONS.
- CULVERT INLET PROTECTION (SEE BMP 08.00 DOT&PF SWPPP GUIDE)
- CULVERT OUTLET PROTECTION (SEE SS-10 CALTRANS CONSTRUCTION SITE BMP MANUAL)
- VEHICLE TRACKING ENTRANCE/EXIT
- WETLANDS
- DITCH LINE
- PROPOSED FILL
- CATCH BASIN
- DISTURBED AREA



PROJECT LOCATION

ESCP – GENERAL NOTES AND LEGEND

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q1 ESCP - General Notes and Legend Wed, May/10/23 03:34pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q2	Q9

EROSION, SEDIMENT AND CONTROL PLAN (1 OF 8)

AIRPORT ROAD

SEPPALA DRIVE

MATCH "AR" 6+00 LINE

MATCH "AR" 6+00 LINE

36" CCP STORM DRAIN
SEE SHEETS U1 AND U2

"AR"1+13.57 PI

"AR"1+86.16 PI

"AR"2+48.88 PC

"AR"3+67.34 PT

"AR"5+76.06 PI

"AR"7+83.07 PI

"AR"8+36.36 PI

"AR"9+34.52 PI

"AR"10+85.62 EP

TCP

R/W

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-02 Erosion Control and Sediment Plan (1 of 8) Wed, May/10/23 03:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q3	Q9

EROSION, SEDIMENT AND CONTROL PLAN (2 OF 8)

SEPPALA DRIVE

AIRPORT ROAD

"S" 10+00.00 BP

"AR" 1+86.16 PI

"AR" 1+13.57 PI

"AR" 8+

"AR" 9+34.52 PI

"AR" 10+85.62 EP

"S" 16+46.56 PC

"S" 18+33.28 PT

36" CCP STORM DRAIN
SEE SHEETS U1 AND U2

MATCH "S" 16+00 LINE

MATCH "S" 22+00 LINE

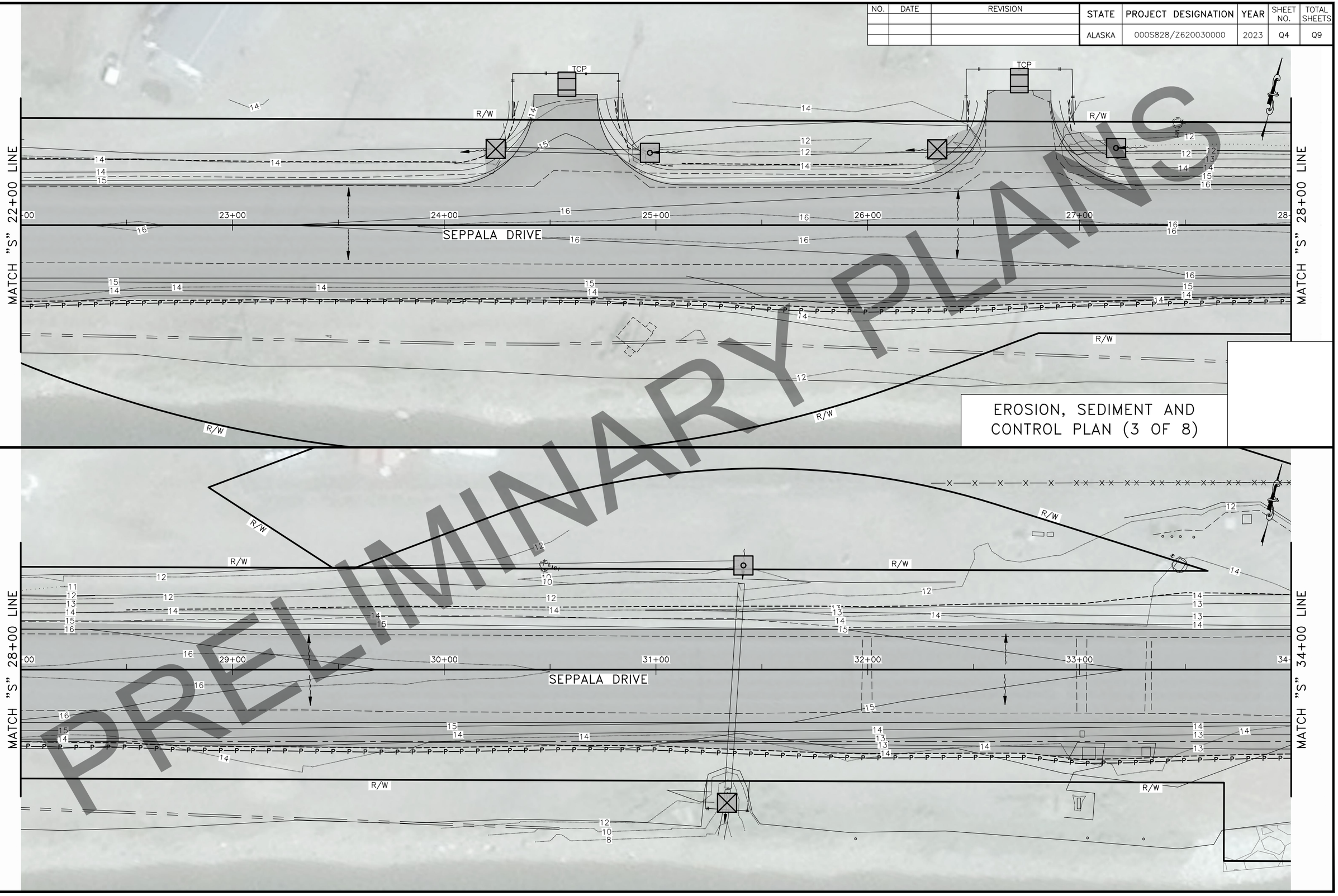
R/W

TOP

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\7001cnst-17258FB-Q3 Erosion Control and Sediment Plan (2 of 8) Wed, May/10/23 03:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q4	Q9



EROSION, SEDIMENT AND CONTROL PLAN (3 OF 8)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001const-17258FB-Q4 Erosion Control and Sediment Plan (3 of 8) Wed, May/10/23 03:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q5	Q9

EROSION, SEDIMENT AND CONTROL PLAN (4 OF 8)

SEPPALA DRIVE

MATCH "S" 34+00 LINE

MATCH "S" 40+00 LINE

MATCH "S" 46+00 LINE

"S"34+79.41 PC

"S"43+61.82 PT

"S"45+84.28 PC

R/W

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q5 Erosion Control and Sediment Plan (4 of 8) Wed, May/10/23 03:35pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q6	Q9

EROSION, SEDIMENT AND CONTROL PLAN (5 OF 8)

SEPPALA DRIVE

JAFFET ROAD

MATCH "S" 46+00 LINE

MATCH "S" 52+00 LINE

MATCH "S" 58+00 LINE

"C"10+00.00 BP

"S"51+00.83 PT

"S"53+36.36 PC

PROSPECT PLACE

MCCLAIN LANE

R/W

TCP

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q6 Erosion Control and Sediment Plan (5 of 8) Wed, May/10/23 03:36pm

NO.	DATE	REVISION

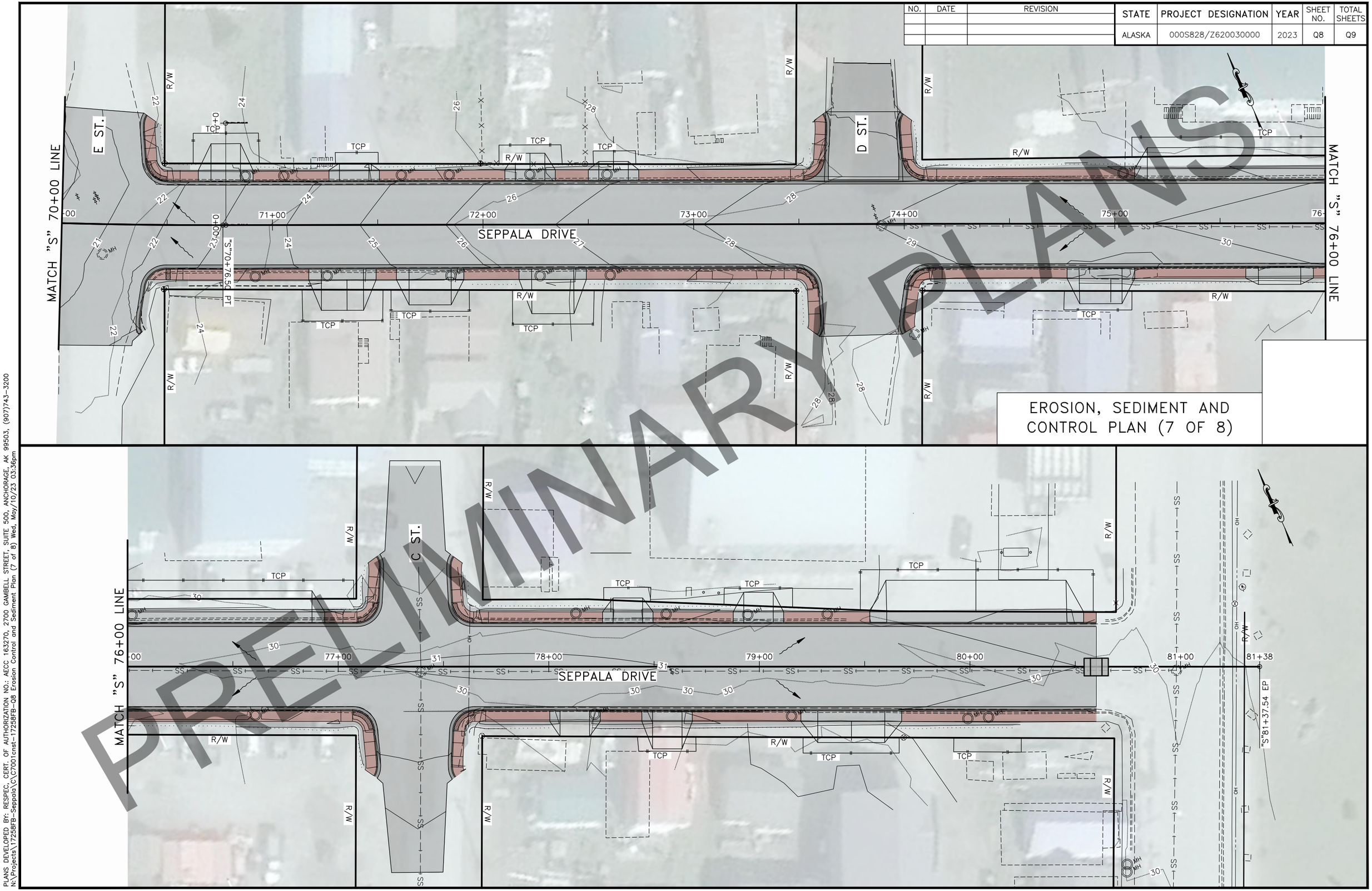
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q7	Q9

EROSION, SEDIMENT AND CONTROL PLAN (6 OF 8)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q7 Erosion Control and Sediment Plan (6 of 8) Wed, May/10/23 03:36pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q8	Q9



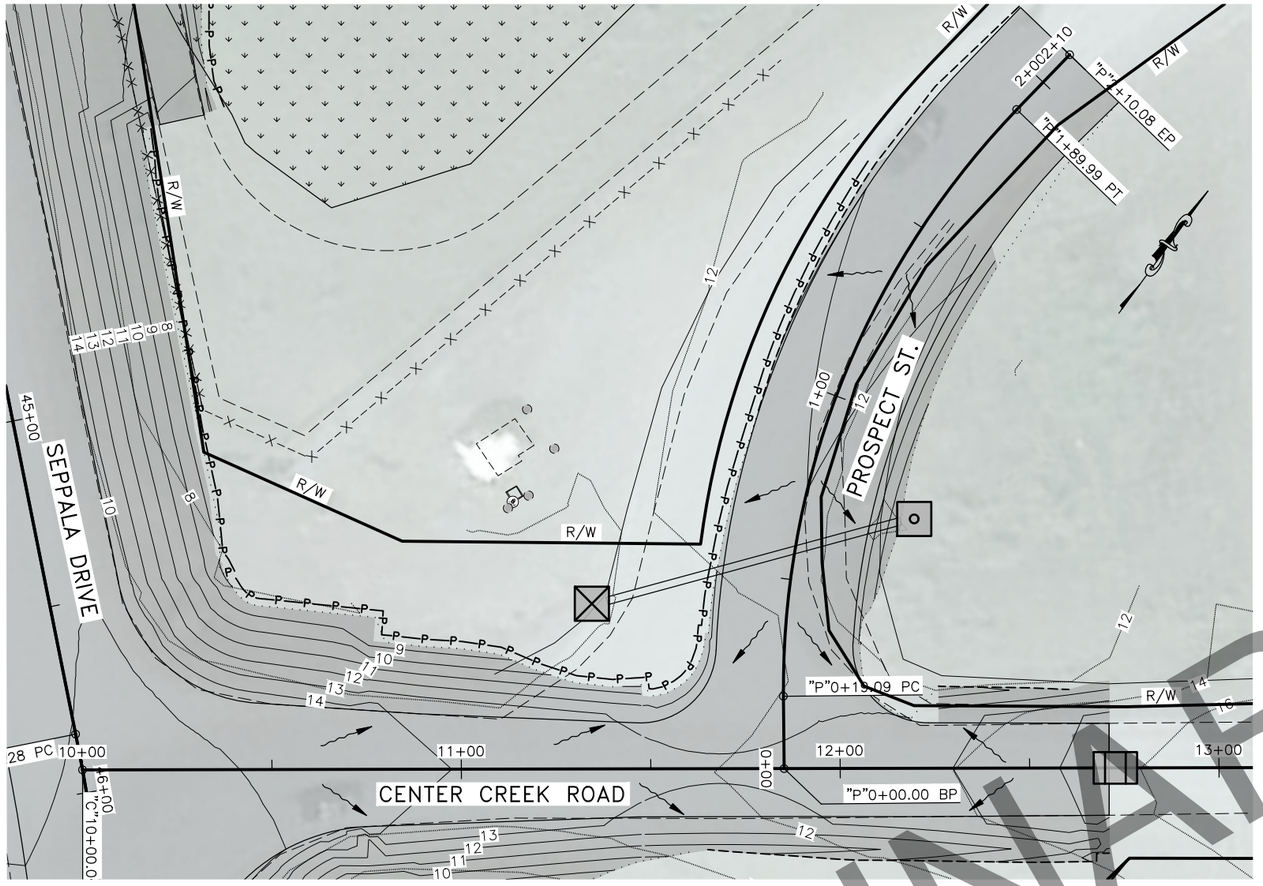
PRELIMINARY PLANS

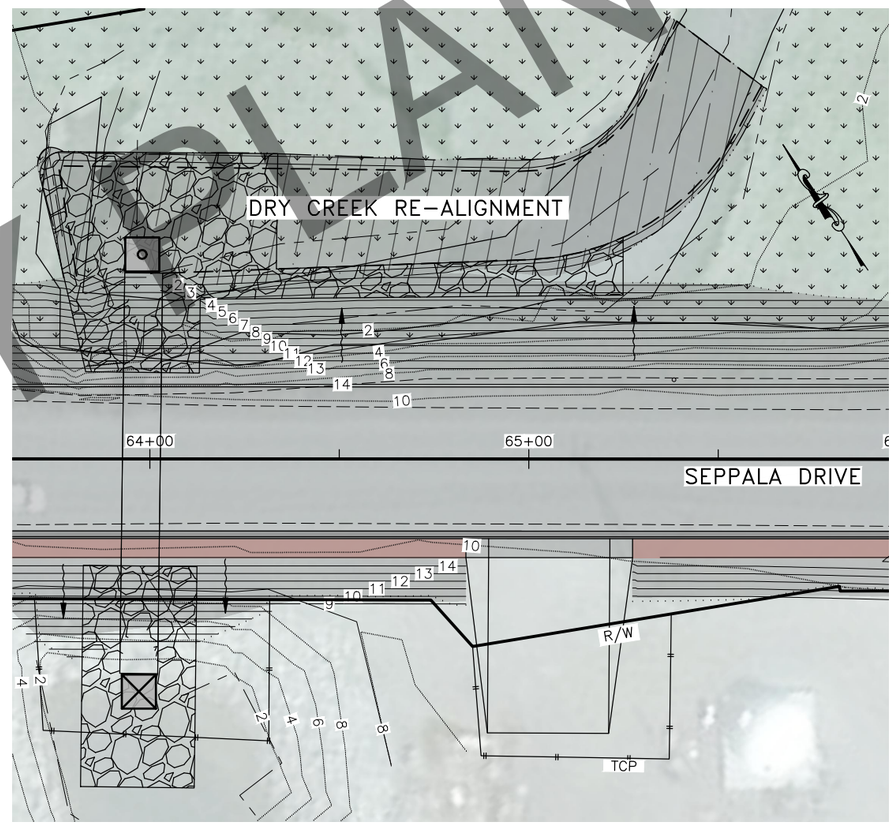
EROSION, SEDIMENT AND CONTROL PLAN (7 OF 8)

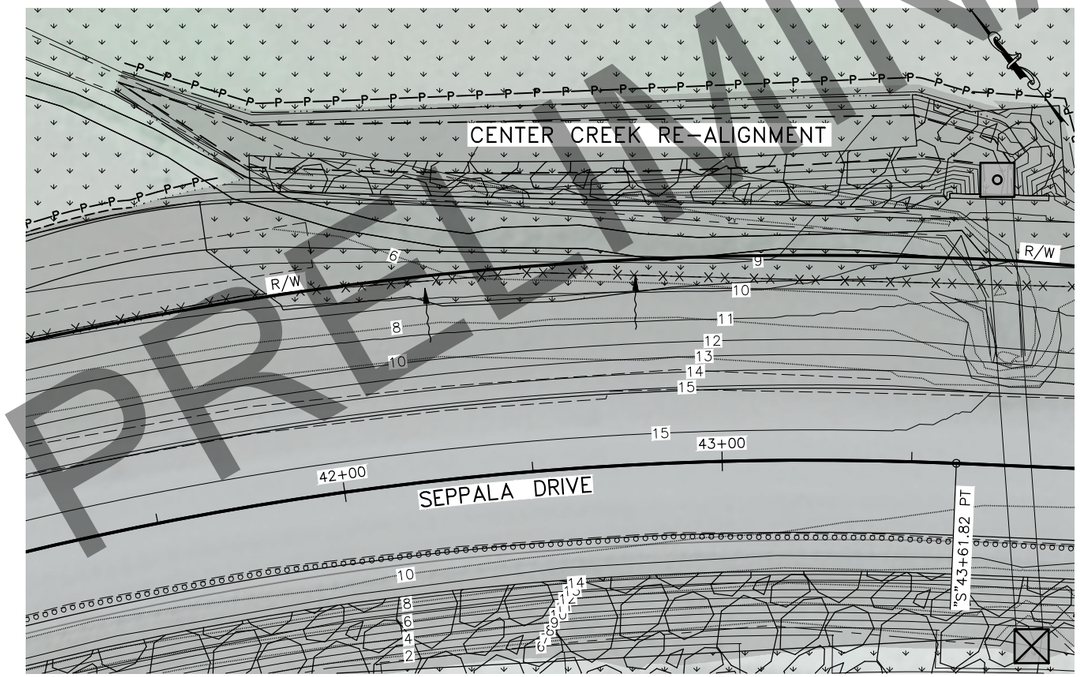
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q8 Erosion Control and Sediment Plan (7 of 8) Wed, May/10/23 03:36pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	Q9	Q9







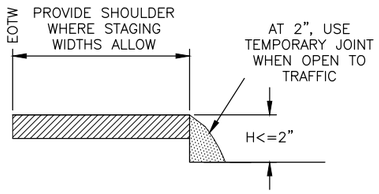
EROSION, SEDIMENT AND CONTROL PLAN (8 OF 8)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C7001cnst-17258FB-Q9 Erosion Control and Sediment Plan (8 of 8) Wed, May/10/23 03:36pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	T1	T8

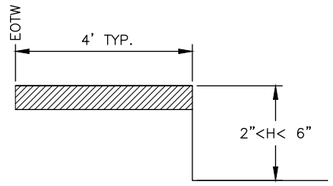
VERTICAL DROP–OFFS



CASE A

DROP–OFFS ≤2 INCHES
(PAVED SURFACES ONLY)

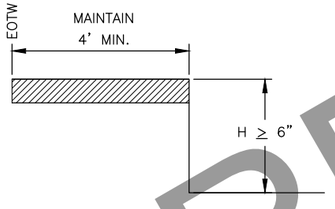
1. USE "UNEVEN LANES" (W8–11) SIGNS FOR ALL DROP–OFFS IN BETWEEN TRAFFIC LANES
2. LEAVE NO DROP–OFFS > 1.5" IN THE TRAFFIC LANE OR ACTIVE WHEEL TRACK



CASE B

2"< DROP–OFFS < 6"
(ALL ROADWAY SURFACES)

1. PLACE CONES OR CANDLES FOR DROP–OFFS ≥ 4 FEET AND ≤ 30 FEET FROM EOTW.
2. USE DRUMS OR TYPE II BARRICADES FOR DROP–OFFS < 4 FEET FROM THE EOTW.



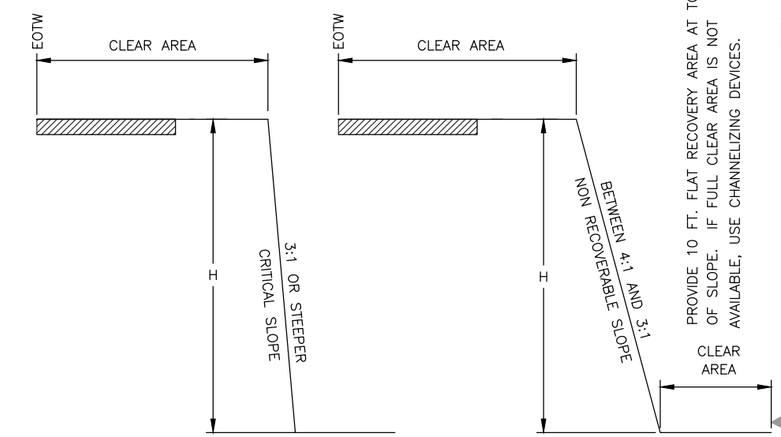
CASE C

DROP–OFFS ≥6"
(ALL ROADWAY SURFACES
AND ROADSIDE SLOPES)

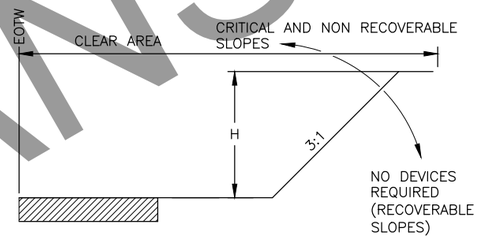
1. PLACE DRUMS OR TYPE II BARRICADES FOR DROP–OFFS ≤ 24" WITHIN THE CLEAR AREA.
2. PROVIDE PORTABLE CONCRETE BARRIERS FOR DROP–OFFS > 24" WITHIN 15 FEET OF THE EOTW. USE DRUMS OR TYPE II BARRICADES IF BEYOND 15 FEET.

FILL SLOPES

STEEPER THAN OR EQUAL TO 3:1 | BETWEEN 4:1 AND 3:1 | FLATTER THAN OR EQUAL TO 4:1



CUT SLOPES



EOTW = EDGE OF TRAVELED WAY

CLEAR AREA REQUIREMENTS

	LOW SPEED < = 35 MPH	INTERMEDIATE SPEED 40 MPH TO 45 MPH	HIGH SPEED ≥ = 50 MPH
RURAL	15'	24'	30'
URBAN	10' DITCH SECTIONS, OR 2' BEHIND CURB	15' DITCH CONDITIONS, OR 2' BEHIND CURB	15' DITCH CONDITIONS, OR 2' BEHIND CURB

CHANNELIZING DEVICE REQUIREMENTS FOR SLOPES 3:1 OR STEEPER WITHIN THE CLEAR AREA

	H <= 15'	H > 15'
< 2000 VPD LOW VOLUME	CANDLES OR CONES	TYPE II BARRICADES OR DRUMS
> 2000 VPD	TYPE II BARRICADE OR DRUMS	PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL

TRAFFIC CONTROL NOTES:

1. USE THE EXISTING CROSS–SECTION (PRIOR TO CONSTRUCTION) AS A BASIS FOR DETERMINING WHEN CHANNELIZING DEVICES ARE NEEDED.
2. INSTALL CHANNELIZING DEVICES WHEN THE HORIZONTAL OR VERTICAL CURVATURE IS MADE MORE SEVERE.
3. INSTALL FLEXIBLE DELINEATORS WHEN ALL VEGETATION OVER 4 FEET HIGH IS CLEARED FROM FILL SLOPES THAT ARE 3:1 OR STEEPER IN THE CLEAR AREA.
4. USE PORTABLE CONCRETE BARRIER FOR WARRANTING CONDITIONS WHICH LAST LONGER THAN 3 DAYS. FOR CONDITIONS LASTING LESS THAN 3 DAYS, OTHER CHANNELIZING DEVICES MAY BE INSTALLED.
5. TERMINATE RUNS OF PORTABLE CONCRETE BARRIER USING THE FOLLOWING METHODS:
   - A) CONNECT TO A PORTABLE CRASH CUSHION, OR
   - B) PROVIDE A CONCRETE BARRIER WITH THRIE BEAM TRANSITION TO W–BEAM GUARDRAIL, TREATED WITH A PARALLEL TERMINAL (SEE SECTION 710).
   - C) FLARE THE ENDS OF THE PORTABLE CONCRETE BARRIER AWAY FROM THE ROADWAY AT A RATE OF 7:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER, OUTSIDE OF THE CLEAR AREA. INSTALL A SLOPING PORTABLE CONCRETE BARRIER END TREATMENT, OR
   - D) BURY IN THE BACKSLOPE.
6. TERMINATE THE RUNS OF TEMPORARY W–BEAM GUARDRAIL USING THE FOLLOWING METHODS:
   - A) PROVIDE A PARALLEL TERMINAL (SEE SECTION 710)
   - B) FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 6:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER OUTSIDE OF THE CLEAR AREA, TERMINATE WITH A STANDARD W–BEAM END SECTION, OR
   - C) BURY IN THE BACKSLOPE.

EQUIPMENT NOTES:

1. WHEN THERE IS ACTIVE, NONMOBILE CONSTRUCTION EQUIPMENT WITHIN THE CLEAR AREA, DELINEATE THE ROADSIDE WITH TRAFFIC CONES.
2. SEPARATE PROCEDURES ARE REQUIRED FOR MOBILE WORK ZONE OPERATIONS AND SHORT DURATION WORK OF LESS THAN 12 HOURS.

WINTER SHUTDOWN NOTES:

1. WHEN REQUIRED, USE CHANNELIZING DEVICES WHICH CAN BE MAINTAINED OVER WINTER.
2. NO CHANNELIZING DEVICES ARE REQUIRED IF:
   - A) CONSTRUCTION SLOPES ARE RECOVERABLE, AND
   - B) SLOPES ARE SMOOTH AND COMPACTED, AND
   - C) REQUIRED CLEAR AREA IS PROVIDED

REVISIONS

DESCRIPTION	BY	DATE
CREATED	GG	11/20/03
CLARIFIED DETAILS	CA	01/31/06
UPDATED ET–PLUS NOMENCLATURE	CFJ	02/02/10
UPDATED 6A	CMA	07/18/11
NATIONAL CAD STDS	SP	02/13/15
NOTE TO DESIGNERS & MINOR CHANGES	SP	12/05/18

TRAFFIC CONTROL PLAN

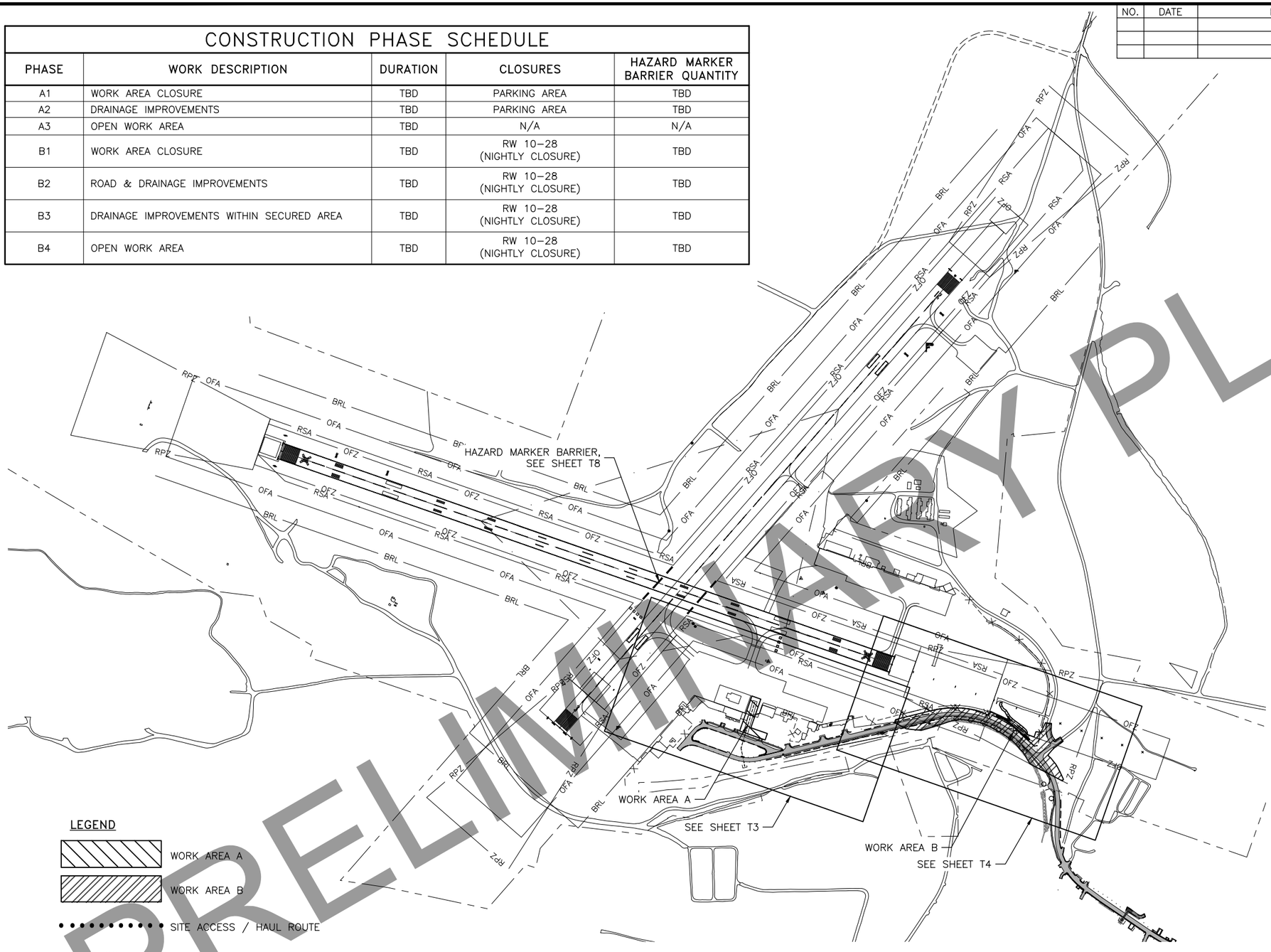
PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907)451–2200
N:\Projects\17258FB–Seppala\C\C8001cnst–17258FB–T1 Fri, May/05/23 01:42pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	T2	T8

CONSTRUCTION PHASE SCHEDULE

PHASE	WORK DESCRIPTION	DURATION	CLOSURES	HAZARD MARKER BARRIER QUANTITY
A1	WORK AREA CLOSURE	TBD	PARKING AREA	TBD
A2	DRAINAGE IMPROVEMENTS	TBD	PARKING AREA	TBD
A3	OPEN WORK AREA	TBD	N/A	N/A
B1	WORK AREA CLOSURE	TBD	RW 10–28 (NIGHTLY CLOSURE)	TBD
B2	ROAD & DRAINAGE IMPROVEMENTS	TBD	RW 10–28 (NIGHTLY CLOSURE)	TBD
B3	DRAINAGE IMPROVEMENTS WITHIN SECURED AREA	TBD	RW 10–28 (NIGHTLY CLOSURE)	TBD
B4	OPEN WORK AREA	TBD	RW 10–28 (NIGHTLY CLOSURE)	TBD



LEGEND

- WORK AREA A
- WORK AREA B
- SITE ACCESS / HAUL ROUTE
- LIGHTED "X" CLOSURE MARKER
- RSA — RUNWAY SAFETY AREA (RSA)
- OFA — OBJECT FREE AREA (OFA)
- OFZ — OBSTACLE FREE ZONE (OFZ)
- RPZ — RUNWAY PROTECTION ZONE (RPZ)

CONSTRUCTION SAFETY & PHASING NOTES:

1. REFER TO THE SPECIFICATIONS AND THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) NARRATIVE, ATTACHED AS AN APPENDIX TO THE SPECIFICATIONS, FOR FURTHER INFORMATION REGARDING OPERATIONAL SAFETY FOR THE PROJECT.
2. CONTRACTOR SHALL DEVELOP A CONSTRUCTION SCHEDULE AS PART OF THE SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) BASED ON THE REQUIREMENTS OF SUBSECTION 643–1.04.
3. THE CONTRACTOR MUST REPORT ANY SAFETY ISSUES TO THE ENGINEER AND AIRPORT MANAGER UPON DISCOVERY. THE CONTRACTOR MUST TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
4. AIRCRAFT HAVE THE RIGHT OF WAY OVER CONSTRUCTION VEHICLES AND EQUIPMENT AT ALL TIMES. HAULING ACTIVITIES SHALL BE REGULATED TO THE ACCESS SHOWN ON THE PLANS.
5. THE CONTRACTOR SHALL CONTINUOUSLY CLEAN UP DURING ALL CONSTRUCTION ACTIVITIES AND SHALL PERFORM FINAL CLEAN UP PRIOR TO FINAL INSPECTION. THE CONTRACTOR SHALL ENSURE THAT ALL FOREIGN OBJECT DEBRIS (FOD) CREATED BY CONSTRUCTION ACTIVITY IS TO BE REMOVED IMMEDIATELY FROM ACTIVE SURFACES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL AND TAKE APPROPRIATE MEASURES AS NECESSARY OR AS DIRECTED BY THE ASO, ASCO, OR PROJECT ENGINEER. DUST CONTROL IS SUBSIDIARY TO 643 PAY ITEMS.
7. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR AIRPORT VEHICLES, GROUND SERVICE EQUIPMENT, AND EMERGENCY VEHICLES AT ALL TIMES.
8. ALL PHASES REQUIRE ISSUANCE OF NOTAMS PRIOR TO BEGINNING CONSTRUCTION.
9. WORK WITHIN AREAS A AND B, CAN BE COMPLETED CONTEMPORANEOUSLY

PROJECT SCHEDULE:

SPRING YEAR TBD:
SUBMIT THE SPCD WITHIN 90 DAYS OF RECEIPT OF NTP. BEGIN COORDINATION THROUGH ENGINEER WITH AIRPORT MANAGEMENT, FAA, AIRPORT USERS, AND OTHER PARTIES DESCRIBED IN THE CSPP.

SUMMER YEAR TBD:
COMPLETE ALL WORK WITHIN AREA A
COMPLETE ALL WORK WITHIN AREA B

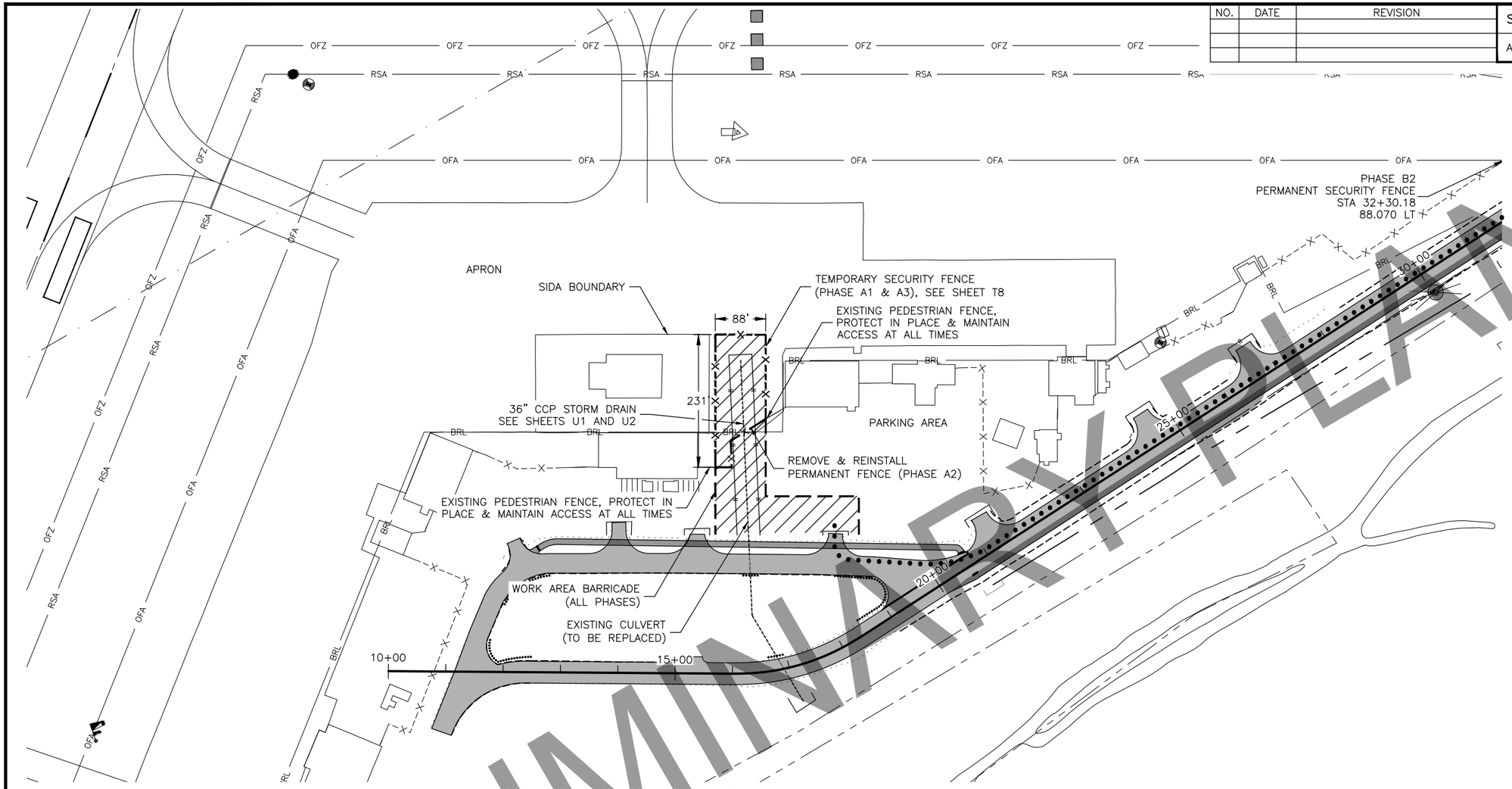
500' 250' 0 500' 1000'

CONSTRUCTION SAFETY AND PHASING PLAN OVERVIEW

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0006cnst-17258FB-T2 Fri, May/05/23 01:43pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	T3	T8



LEGEND

- PHASE A WORK AREA
- SITE ACCESS / HAUL ROUTE
- AIRPORT PROPERTY BOUNDARY
- TEMPORARY SECURITY FENCE
- PERMANENT SECURITY FENCE
- CONSTRUCTION BARRICADE
- RSA — RUNWAY SAFETY AREA (RSA)
- OFA — OBJECT FREE AREA (OFA)
- OFZ — OBSTACLE FREE ZONE (OFZ)
- RPZ — RUNWAY PROTECTION ZONE (RPZ)

100' 50' 0 100' 200'

CONSTRUCTION SAFETY & PHASING NOTES:

1. PRIOR TO STARTING ALL PHASES, COORDINATE THE FOLLOWING:
   A. WITH THE AIRPORT MANAGER AND FAA FOR THE DE-ENERGIZING OF NAVAIDS AND RUNWAY LIGHTING (45 DAYS)
   B. WITH THE AIRPORT MANAGER FOR THE ISSUANCE OF NOTAMS (14 DAYS)
   C. WITH THE AIR CARRIERS, AIRPORT USERS, AND TENANTS (45 DAYS)
2. PRIOR TO COMPLETION OF THE PHASE, COORDINATE THE FOLLOWING.
   A. REMOVE ALL HAZARDOUS AREA BARRICADES, RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS. ENSURE THE RUNWAY, APRON, AND TAXIWAY SURFACES ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD).
3. AT THE END OF THE PHASE, COMPLETE INSPECTION OF ALL SURFACES WITH THE ENGINEER AND AIRPORT MANAGER. COMPLETE ANY PUNCH LISTS THAT ARE BROUGHT TO ATTENTION DURING THE INSPECTION WITHIN 24 HOURS OF THE INSPECTION.
4. COORDINATE WITH THE AIRPORT MANAGER AND FAA FOR THE RE-ENERGIZING OF NAVAIDS AND RUNWAY LIGHTING. PERFORM THE COORDINATION WITH FAA FOR THE RE-ENERGIZING OF NAVAIDS AT A MINIMUM OF 7-DAYS IN ADVANCE.
5. LOCATIONS OF HAZARD BARRIERS, CONSTRUCTION BARRICADES AND TEMPORARY SECURITY FENCING ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY ENGINEER. RELOCATE AS REQUIRED OR DIRECTED BY ENGINEER. REPAIR OR REPLACE DAMAGED ITEMS UPON DISCOVERY OR NOTIFICATION.

WORK RESTRICTIONS & OPERATIONAL IMPACTS:

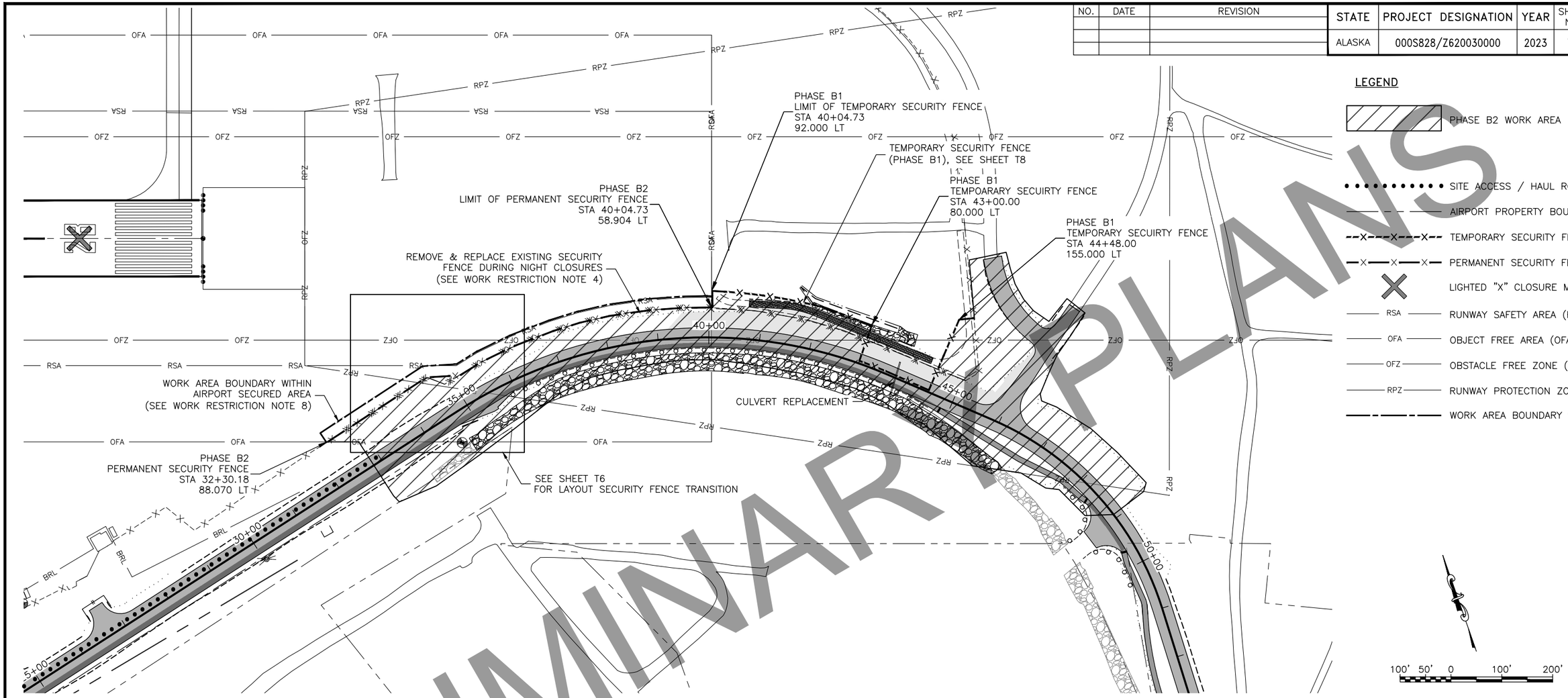
1. WORK AREA A WILL INCLUDE THE ALL CONSTRUCTION ACTIVITIES REQUIRED TO REPLACE THE EXISTING CULVERT WITHIN THE AIRPORT PARKING AREA. THIS WORK AREA INCLUDES ALL WORK WITHIN THE SECURED AREA OF THE AIRPORT.
2. ALL WORK WITHIN WORK AREA B SHALL BE COMPLETED DURING NIGHTTIME CLOSURES OF RUNWAY 10/28.
3. WORK ELEMENTS SHALL CONFORM TO THE FOLLOWING PHASING REQUIREMENTS. SUBSEQUENT PHASING WORK CANNOT BE STARTED UNTIL THE PREVIOUS PHASING WORK IS COMPLETED.
   A1. INSTALL TEMPORARY SECURITY FENCE WITH CONCRETE BARRIERS AROUND PHASE A2 WORK AREA. PLACE HAZARD BARRIERS AROUND THE PHASE A2 WORK AREA PRIOR TO BEGINNING WORK PHASE A1. HAZARD BARRIERS WITHIN THE AIRPORT SAFETY AREA CAN BE REMOVED UPON INSTALLATION OF TEMPORARY FENCE.
   A2. PERFORM ALL WORK REQUIRED WITHIN PHASE A2 WORK AREA. EXISTING SECURITY FENCE SHALL BE REMOVED PRIOR TO BEGINNING PHASE A2 WORK AND REINSTALLED AT COMPLETION OF PHASE A2 WORK.
   A3. REMOVE TEMPORARY SECURITY FENCE AND HAZARD BARRIERS WITHIN THE PARKING AREA.

CONSTRUCTION SAFETY AND PHASING PLAN WORK AREA A

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0006cnst-17258FB-T3 Fri, May/05/23 01:43pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	T4	T8



LEGEND

- PHASE B2 WORK AREA
- SITE ACCESS / HAUL ROUTE
- AIRPORT PROPERTY BOUNDARY
- TEMPORARY SECURITY FENCE
- PERMANENT SECURITY FENCE
- LIGHTED "X" CLOSURE MARKER
- RSA — RUNWAY SAFETY AREA (RSA)
- OFA — OBJECT FREE AREA (OFA)
- OFZ — OBSTACLE FREE ZONE (OFZ)
- RPZ — RUNWAY PROTECTION ZONE (RPZ)
- WORK AREA BOUNDARY WITHIN OFA

CONSTRUCTION SAFETY & PHASING NOTES:

1. PRIOR TO STARTING ALL PHASES, COORDINATE THE FOLLOWING:
   A. WITH THE AIRPORT MANAGER AND FAA FOR THE DE-ENERGIZING OF NAVAIDS AND RUNWAY LIGHTING (45 DAYS)
   B. WITH THE AIRPORT MANAGER FOR THE ISSUANCE OF NOTAMS (14 DAYS)
   C. WITH THE AIR CARRIERS, AIRPORT USERS, AND TENANTS (45 DAYS)
2. PRIOR TO COMPLETION OF THE PHASE, COORDINATE THE FOLLOWING.
   A. REMOVE ALL HAZARDOUS AREA BARRICADES, RUNWAY CLOSURE MARKERS, AND TAXIWAY CLOSURE MARKERS. ENSURE THE RUNWAY, APRON, AND TAXIWAY SURFACES ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD).
3. AT THE END OF THE PHASE, COMPLETE INSPECTION OF ALL SURFACES WITH THE ENGINEER AND AIRPORT MANAGER. COMPLETE ANY PUNCH LISTS THAT ARE BROUGHT TO ATTENTION DURING THE INSPECTION WITHIN 24 HOURS OF THE INSPECTION.
4. COORDINATE WITH THE AIRPORT MANAGER AND FAA FOR THE RE-ENERGIZING OF NAVAIDS AND RUNWAY LIGHTING. PERFORM THE COORDINATION WITH FAA FOR THE RE-ENERGIZING OF NAVAIDS AT A MINIMUM OF 7-DAYS IN ADVANCE.
5. LOCATIONS OF HAZARD BARRIERS, CONSTRUCTION BARRICADES AND TEMPORARY SECURITY FENCING ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY ENGINEER. RELOCATE AS REQUIRED OR DIRECTED BY ENGINEER. REPAIR OR REPLACE DAMAGED ITEMS UPON DISCOVERY OR NOTIFICATION.

WORK RESTRICTIONS & OPERATIONAL IMPACTS:

1. WORK AREA B WILL INCLUDE THE CONSTRUCTION ACTIVITIES ALONG SEPPALA DRIVE FROM STATION 31+70.84 TO 51+28.84, THE INTERSECTION OF SEPPALA DRIVE AND CENTER CREEK ROAD, MAINTENANCE ROAD CONNECTION, CENTER CREEK AND STREAM REALIGNMENT, AND ALL WORK ON CENTER CREEK ROAD AND PROSPECT STREET.
2. ALL WORK WITHIN WORK AREA B SHALL BE COMPLETED DURING NIGHTTIME CLOSURES OF RUNWAY 10/28.
3. WORK ELEMENTS SHALL CONFORM TO THE FOLLOWING PHASING REQUIREMENTS. SUBSEQUENT PHASING WORK CANNOT BE STARTED UNTIL THE PREVIOUS PHASING WORK IS COMPLETED.
   B1. INSTALL TEMPORARY SECURITY FENCE BETWEEN 40+04.73 AND 45+00 AND REMOVE EXISTING SECURITY FENCE. TEMPORARY SECURITY FENCE SHALL BECOME OUTER BOUNDARY OF SECURED AREA FOR AIRPORT. HAZARD MARKER BARRIERS SHALL BE PLACED PRIOR TO INSTALLATION OF TEMPORARY SECURITY FENCE AND CAN BE REMOVED UPON COMPLETION OF INSTALLATION.
   B2. PERFORM ALL WORK WITHIN WORK AREA B2 AND OUTSIDE OF SECURED AREA OF AIRPORT. REMOVE EXISTING SECURITY FENCE AND REPLACE WITH PERMANENT SECURITY FENCE BETWEEN STATIONS 32+30.18 AND 40+04.73.
   B3. INSTALL TEMPORARY SECURITY FENCE BETWEEN 43+00 AND 44+48.00 AND REMOVE EXISTING SECURITY FENCE. TEMPORARY SECURITY FENCE SHALL BECOME OUTER BOUNDARY OF SECURED AREA FOR AIRPORT. HAZARD MARKER BARRIERS SHALL BE PLACED PRIOR TO INSTALLATION OF TEMPORARY SECURITY FENCE AND CAN BE REMOVED UPON COMPLETION OF INSTALLATION.
   B4. ESTABLISH TEMPORARY ACCESS POINT IN SECURITY FENCE, FOR CONTROLLED ACCESS TO WORK AREA B3. PERFORM ALL WORK REQUIRED WITHIN SECURED AREA OF AIRPORT.
   B5. INSTALL PERMANENT SECURITY FENCE IN PRE-CONSTRUCTION LAYOUT, BETWEEN STATIONS 40+04.73 AND 45+50 AND REMOVE TEMPORARY SECURITY FENCE.
4. THE CONTRACTOR SHALL MINIMIZE OPENINGS IN THE SECURITY FENCE TO A MAXIMUM WIDTH THAT CAN BE REASONABLY PROTECTED BY A GATE ATTENDANT. ALL OPENINGS SHALL BE CLOSED TO RESTRICT ACCESS AT THE END OF EACH WORK SHIFT.
5. A GATE ATTENDANT SHALL BE STATIONED AT ALL TIMES THAT THERE IS AN ACTIVE ACCESS POINT OR OPENING IN THE SECURITY FENCE.
6. ALL PERSONNEL PERFORMING WORK WITHIN THE AIRPORT SECURED AREA SHALL BE BADGED OR UNDER ESCORT.
7. TEMPORARY SECURITY FENCE SHALL CONFORM TO THE FENCE DETAIL REQUIREMENTS ON SHEET E4.
8. ALL WORK PERFORMED WITHIN AIRPORT OBJECT FREE AREA, INCLUDING ALL LABOR, EQUIPMENT, AND MATERIALS, SHALL REMAIN WITHIN 20 FEET OF SECURITY FENCE.

CONSTRUCTION SAFETY AND PHASING PLAN WORK AREA B (1 OF 3)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0006cnst-17258FB-T4 Fri, May/05/23 01:43pm

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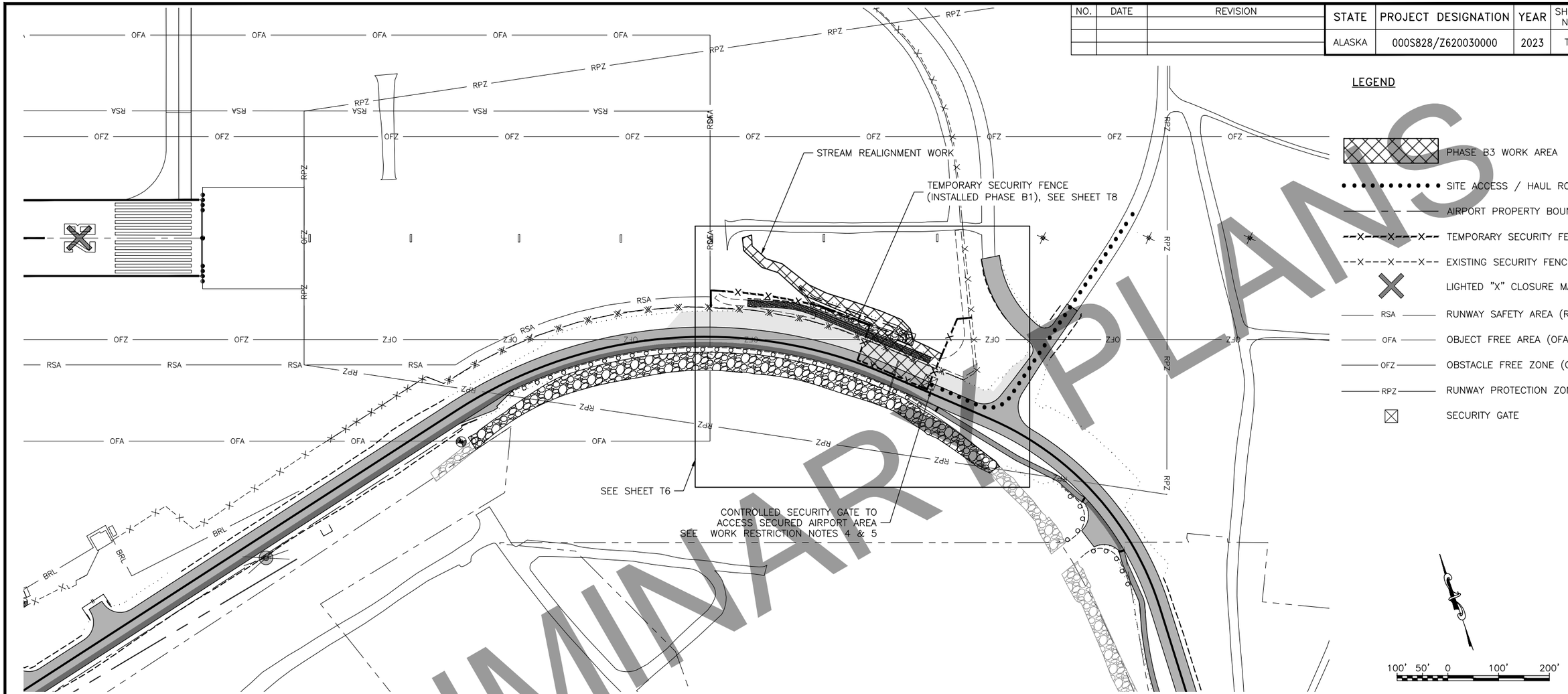

LEGEND

- PHASE B3 WORK AREA
- SITE ACCESS / HAUL ROUTE
- AIRPORT PROPERTY BOUNDARY
- TEMPORARY SECURITY FENCE
- EXISTING SECURITY FENCE
- LIGHTED "X" CLOSURE MARKER
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- SECURITY GATE

CONSTRUCTION SAFETY & PHASING NOTES:

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   B. WITH THE AIRPORT MANAGER FOR THE ISSUANCE OF NOTAMS (14 DAYS)
   C. WITH THE AIR CARRIERS, AIRPORT USERS, AND TENANTS (45 DAYS)
2. PRIOR TO COMPLETION OF THE PHASE, COORDINATE THE FOLLOWING.
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3. AT THE END OF THE PHASE, COMPLETE INSPECTION OF ALL SURFACES WITH THE ENGINEER AND AIRPORT MANAGER. COMPLETE ANY PUNCH LISTS THAT ARE BROUGHT TO ATTENTION DURING THE INSPECTION WITHIN 24 HOURS OF THE INSPECTION.
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2. ALL WORK WITHIN WORK AREA B SHALL BE COMPLETED DURING NIGHTTIME CLOSURES OF RUNWAY 10/28.
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5. A GATE ATTENDANT SHALL BE STATIONED AT ALL TIMES THAT THERE IS AN ACTIVE ACCESS POINT OR OPENING IN THE SECURITY FENCE.
6. ALL PERSONNEL PERFORMING WORK WITHIN THE AIRPORT SECURED AREA SHALL BE BADGED OR UNDER ESCORT.
7. TEMPORARY SECURITY FENCE SHALL CONFORM TO THE FENCE DETAIL REQUIREMENTS ON SHEET E4.

CONSTRUCTION SAFETY AND PHASING PLAN WORK AREA B (2 OF 3)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0006cnst-17258FB-T5 Fri, May/05/23 01:43pm

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LEGEND

- PHASE B2 WORK AREA
- PHASE B3 WORK AREA
- AIRPORT PROPERTY BOUNDARY
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- EXISTING SECURITY FENCE
- NEW PERMANENT SECURITY FENCE
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- RSA — RUNWAY SAFETY AREA (RSA)
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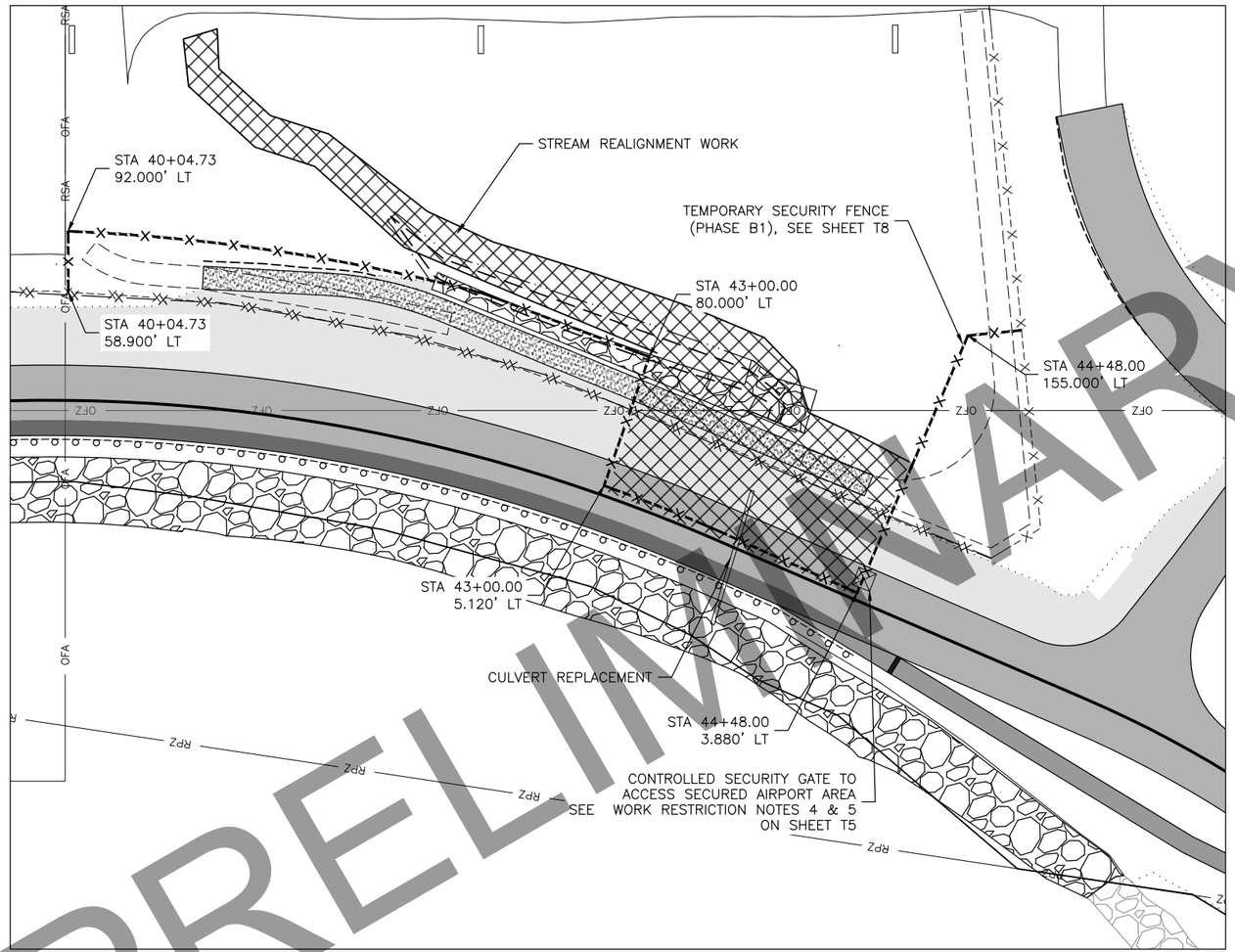
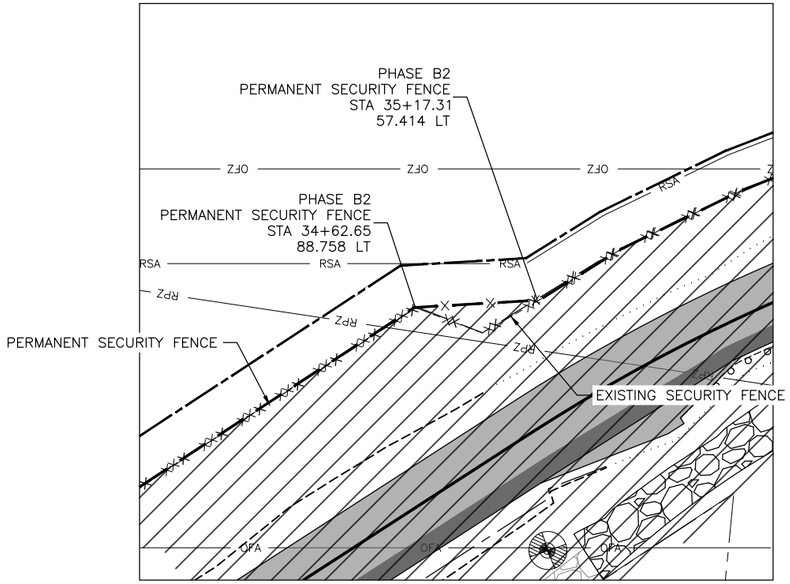


WORK AREA B2 PLAN VIEW



SECURITY FENCE TRANSITION

40' 20' 0 40' 80'

CONSTRUCTION SAFETY AND PHASING PLAN WORK AREA B (3 OF 3)

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
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1. REFER TO THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) NARRATIVE (SPECIFICATIONS APPENDIX D) AND SPECIFICATIONS SECTION 643 FOR ADDITIONAL CONSTRUCTION PHASING AND SEQUENCING INFORMATION AND FOR LIMITATIONS ON CONSTRUCTION. PHASE CONSTRUCTION ACTIVITIES TO COMPLY WITH ALL CONDITIONS OF THE SAFETY PLAN AND PROJECT PERMITS STIPULATIONS.

2. SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE ENGINEER FOR REVIEW PER FAA AC 150/5370—2G. DO NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER APPROVES THE SPCD IN WRITING. ALLOW 30 DAYS FOR REVIEW. INCLUDE CONSTRUCTION SEQUENCING. IF PLAN DIFFERS FROM WHAT IS SHOWN OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR REVIEW AND APPROVAL. ALLOW 10 DAYS FOR REVIEW OF REVISED SAFETY AND SEQUENCING PLANS.

3. WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH FAA, TSA, AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS, AIR CARRIERS, AIRPORT TENANTS, AIRPORT USERS, ANY LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE THROUGH, IN THE PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER. ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED WORK SCHEDULES.

4. MAINTAIN AIRCRAFT ACCESS FOR CARGO AND PASSENGER OPERATIONS TO THE ACTIVE RUNWAY AT ALL TIMES. DO NOT ENTER THE ACTIVE RUNWAY RSA. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND WORKING AROUND ALL SCHEDULED OPERATIONS.

5. PROVIDE AN ACCESS PLAN FOR APPROVAL BY THE ENGINEER. APPROVAL OF ACCESS PLAN IS REQUIRED PRIOR TO BEGINNING OF WORK. ACCESS PLAN SHALL INCLUDE, BUT IS NOT LIMITED TO, SCHEDULING WORK, SEPARATION OF AIRCRAFT AND PASSENCERS FROM ACTIVE CONSTRUCTION, TRAFFIC CONTROL DEVICES REQUIRED, AND HAZARD MARKER BARRIER LOCATIONS. SEE GCP—80 AND SPECIFICATIONS APPENDIX D FOR DETAILS.

6. THE PROJECT WILL REQUIRE TEMPORARY CLOSURES OF RUNWAY RUNWAY 10—28, AND TAXIWAYS. COORDINATE THROUGH THE ENGINEER PRIOR TO OPENING OR CLOSING AREAS TO AIRCRAFT OPERATIONS AND/OR ADVANCING TO THE NEXT WORK AREA. ALLOW FOR ISSUANCE OF NOTICE TO AIR MISSIONS (NOTAMS) BY AIRPORT MANAGEMENT TO KEEP ALL AIRPORT USERS INFORMED OF CLOSED AREAS AND APRON, TAXIWAY, AND RUNWAY STATUS.

7. RUNWAY AND TAXIWAY CLOSURES CAN BE PROPOSED AND PUT INTO AFFECT ONLY WITH THE APPROVAL OF THE ENGINEER. TEMPORARY CLOSURES OF RUNWAY 10—28 ARE ANTICIPATED FOR COMPLETION OF ROAD IMPROVEMENTS, CULVERT AND STORM DRAIN INSTALLATION, STREAM REALIGNMENT, AND GUARDRAIL INSTALLATION.

8. PROVIDE WEEKLY NOTIFICATIONS OF ACTIVE AIRPORT AREAS AND CONSTRUCTION ACTIVITIES TO THE CONTACTS LISTED IN THE CSPP AND/OR SPECIFICATIONS. CARRYOUT CONTINUING COORDINATION THROUGH THE ENGINEER USING WEEKLY BRIEFINGS WITH AIRPORT OPERATIONS, AIRPORT MAINTENANCE, AIRPORT RESCUE AND FIRE FIGHTING (ARFF) PERSONNEL, AND AIRPORT USERS TO KEEP EVERYONE AWARE OF THE STATUS AND CHANGES OF AIRPORT SURFACES IN RELATION TO GROUND TRAFFIC. PROVIDE DETAILED DRAWINGS INDICATING TRAFFIC ROUTES FOR GROUND TRAFFIC. INDICATE CLOSED AREAS AND PROVIDE UPDATED DRAWINGS AS CONSTRUCTION PROCEEDS.

9. PLACE HAZARD MARKER BARRIERS WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER FOR EACH PHASE. HAZARD MARKER BARRIERS ARE SHOWN AT APPROXIMATE LOCATIONS. ADDITIONAL LOCATIONS OR ADJUSTMENTS MAY BE REQUIRED. PLACE HAZARD MARKER BARRIERS IN ACCORDANCE WITH SPECIFICATIONS SECTION 643, THE CSPP, AND AS APPROVED BY THE ENGINEER. THE ENGINEER MAY DIRECT THE PLACEMENT OF ADDITIONAL BARRIERS AS DEEMED NECESSARY. MONITOR HAZARD MARKER BARRIERS FREQUENTLY. CORRECT DEFICIENCIES IMMEDIATELY.

10. THE CONTRACTOR MUST REPORT ANY SAFETY ISSUES TO THE ENGINEER AND AIRPORT MANAGER UPON DISCOVERY. THE CONTRACTOR MUST TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.

11. NO PERSONNEL OR EQUIPMENT MAY BE IN THE RSA DURING AIRCRAFT OPERATIONS. CLEAR EQUIPMENT FROM WORK AREAS WHEN REQUESTED BY THE ENGINEER. NO EQUIPMENT OR MATERIAL STOCKPILES MAY REMAIN IN CRITICAL AREAS; RUNWAY OBJECT FREE AREAS; TAXIWAY OBJECT FREE AREAS; OR ON CLOSED RUNWAYS, TAXIWAYS, OR APRONS DURING NON—WORK HOURS.

12. COORDINATE THROUGH THE ENGINEER FOR THE SHUTDOWN OF ONLY THOSE FAA FACILITIES OUTLINED IN THE CSPP NARRATIVE AND THE CONTRACTOR'S APPROVED SPCD, ALL OTHER FAA FACILITIES MUST REMAIN IN OPERATION. REMAIN CLEAR OF ALL NAVAID CRITICAL AREAS DURING AIRCRAFT OPERATIONS. SEE THE PLAN VIEW FOR LOCATION OF THE CRITICAL AREAS. DAMAGE TO FAA FACILITIES, INCLUDING POWER DISTRIBUTION, MUST BE IMMEDIATELY REPAIRED

13. FIELD VERIFY SUITABILITY OF HAUL ROUTES AND STAGING AREAS SHOWN. HAUL ROUTES AND STAGING AREAS AS SHOWN MUST BE APPROVED BY THE ENGINEER. PROVIDE MAINTENANCE PER SPECIFICATIONS. PROVIDE FLAGGERS TO CONTROL ACCESS ONTO THE AIRPORT OPERATIONS AREA (AOA). FLAGGERS SHALL CONTACT FLIGHT SERVICE STATION (FSS) FOR CURRENT TRAFFIC ADVISORIES PRIOR TO EACH TRANSIT. HAUL ACCESS ACROSS CLOSED PORTIONS OF THE RUNWAY WILL BE AT THE DISCRETION OF THE ENGINEER AND IS SUBJECT TO RUNWAY CLOSURE AND REOPENING REQUIREMENTS IN THE SPECIFICATIONS.

14. KEEP ALL ACTIVE HAUL ROUTES AND AIRPORT SURFACES CLEAN OF MATERIAL. REMOVE SPILLED OR TRACKED MATERIALS IMMEDIATELY TO AVOID DAMAGING AIRCRAFT. REPAIR ANY HAUL ROUTE DAMAGE TO PRECONSTRUCTION CONDITIONS. AN APPROVED FOREIGN OBJECT AND DEBRIS (FOD) INSPECTION AND TAXIWAY/APRON CLEANING IS REQUIRED PRIOR TO THE END OF EVERY SHIFT.

15. PROVIDE AN AIRPORT FLAGGER WHERE CONSTRUCTION ACTIVITY IS CONDUCTED WITHIN 125' OF AN OPEN RUNWAY; WHERE CONSTRUCTION ACTIVITY IS CONDUCTED IN CLOSE PROXIMITY TO OPERATING AIRCRAFT; WHERE ACCESS GATES TO THE AOA ARE LEFT OPEN FOR HAUL OPERATIONS; AND WHERE THE ENGINEER OR AIRPORT PERSONNEL DETERMINES A FLAGGER IS NECESSARY.

16. MARK OPEN TRENCHES OR EXCAVATIONS WITH HAZARD AREA BARRIERS. LIGHT WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. SEE CSPP REGARDING RESTRICTIONS FOR TRENCH AND EXCAVATION LOCATIONS.

17. VEHICLES AND EQUIPMENT MUST HAVE BEACONS AND COMPANY RADIOS. TRAFFIC CONTROL MUST HAVE AIRCRAFT AND COMPANY RADIOS. REFER TO THE CSPP NARRATIVE (SPECIFICATIONS APPENDIX D) FOR FURTHER VEHICLE REQUIREMENTS.

18. ARFF VEHICLES MUST HAVE CONTINUOUS ACCESS TO THE ENTIRE AIRPORT FOR EMERGENCIES. MAINTAIN SUITABLE CORRIDORS AND COORDINATE ACCESS WITH ARFF PERSONNEL THROUGH THE ENGINEER AS REQUIRED. KEEP ARFF INFORMED OF WORK AREAS, CLOSURES, AND ALL FENCE GATES THAT ARE ADDED TO SERVICE OR OUT OF SERVICE FOR WORK. CONTRACTOR MUST BE PREPARED TO OPEN THE AIRPORT FOR MEDICAL EVACUATION (MEDEVAC) AND OTHER EMERGENCY LANDINGS AT ALL TIMES THE WORK AREA MUST BE CLEARED OF EQUIPMENT, PERSONNEL, CLOSURE MARKERS, BARRICADES, AND ANY OTHER OBSTRUCTIONS GIVEN EXTREMELY SHORT NOTICE (30 MINUTES OR LESS).

19. FOR USE OF HAUL ROUTES, CONSTRUCTION OF TEMPORARY ACCESS ONTO THE RUNWAY EMBANKMENT MAY BE NECESSARY. TEMPORARY IMPROVEMENTS MAY INCLUDE GEOTEXTILE SEPARATION, CULVERT PIPE AND FILL MATERIAL. REMOVE THE ACCESS AND RESTORE TO ORIGINAL CONDITION (AS STATED IN SPECIFICATION SUBSECTION 107—1.11) AT PHASE COMPLETION.

20. LOCATE BURIED FAA ELECTRICAL LINES AND PLACE STEEL PLATES (OR EQUIVALENT PROTECTION, AS APPROVED BY THE ENGINEER) OVER UTILITY LINE CROSSING LOCATIONS.

21. PROVIDE A GATE GUARD IF ANY GATE REMAINS OPEN DURING CONSTRUCTION ACTIVITIES.

22. REFER TO FAA ADVISORY CIRCULAR (AC) 150/5370—2 FOR ADDITIONAL GUIDANCE ON PREPARING SAFETY PLANS. REFER TO AC 150/5300—13 CHAPTER 3 FOR CLEARANCE STANDARDS RELATED TO THE OFA, OFZ, AND RSA. THE MOST RESTRICTIVE CRITERIA GOVERNS.

SAFETY AREAS

RUNWAY	DIMENSION	RSA	OFA	OFZ
RUNWAY 10—28	150' x 6,008'	500' x 7,201' * SEE NOTE	800' x 8,000'	400' x 6,408'
RUNWAY 3—21	150' x 6,176'	500' x 7,176'	800' x 7,576'	400' x 5,976'

* THE LAST 500' OF THE EAST END THE RSA AT RUNWAY END 28, IS SHORTENED TO A WIDTH 365' (135' FROM THE SOUTHEAST CORNER). THIS RSA BOUNDARY MIRRORS THE EXISTING FENCE ALIGNMENT.

CONSTRUCTION SAFETY AND PHASING PLAN NOTES

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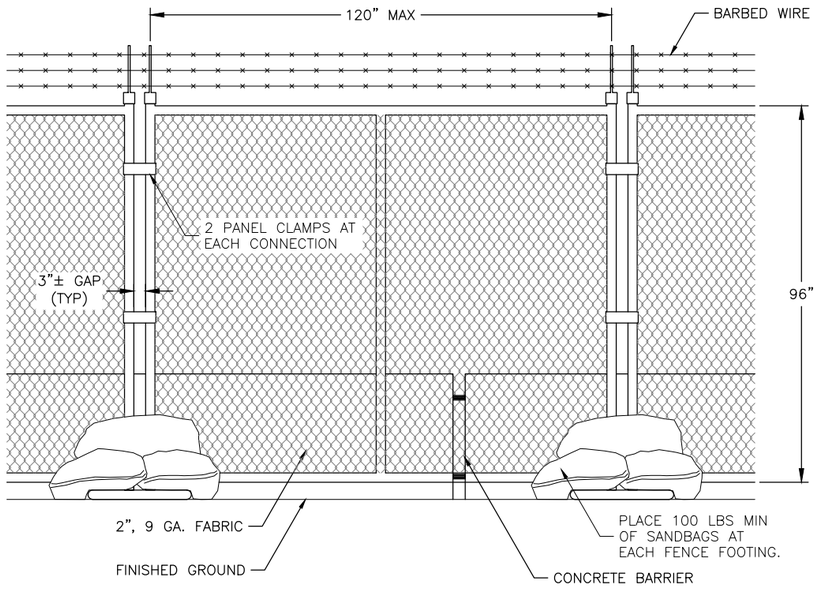
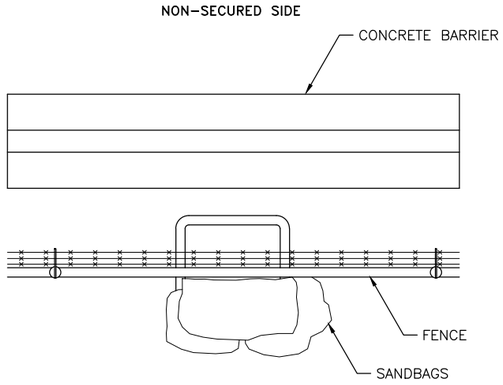


FENCE ELEVATION



FENCE PLAN

TEMPORARY SECURITY FENCE
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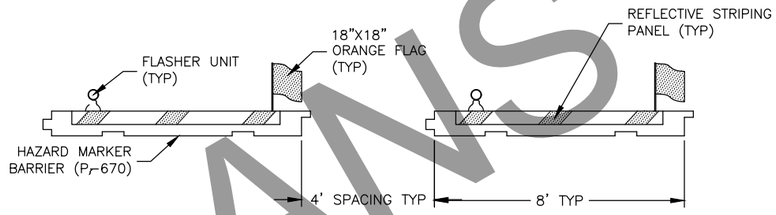
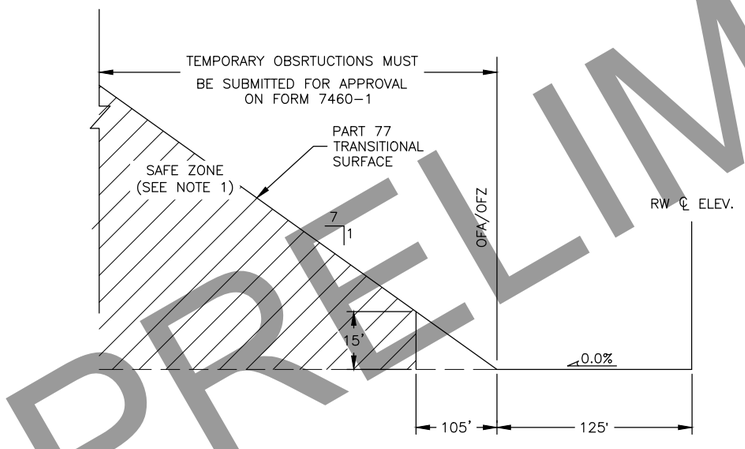


HAZARD MARKER BARRIER NOTES:

1. HAZARD MARKER BARRIERS ARE NOT TO BE PLACED WITHIN 125 FEET OF THE ACTIVE RW CENTERLINE.
2. DISTANCE BETWEEN BARRIERS CAN BE ADJUSTED FOR CONSTRUCTION TRAFFIC WITH ENGINEER APPROVAL.

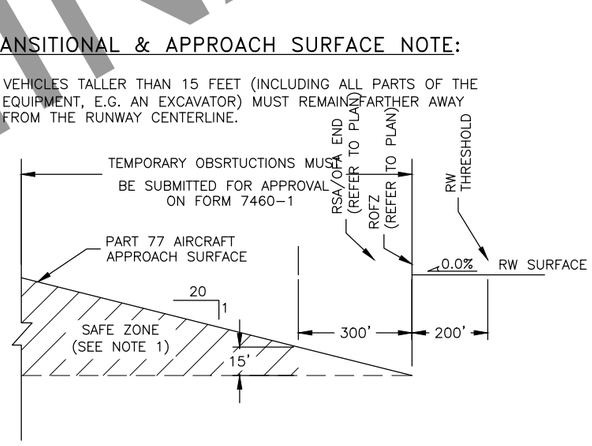
HAZARD MARKER BARRIER DETAIL
N.T.S.



TRANSITIONAL SURFACE PARALLEL TO RUNWAY CENTERLINE

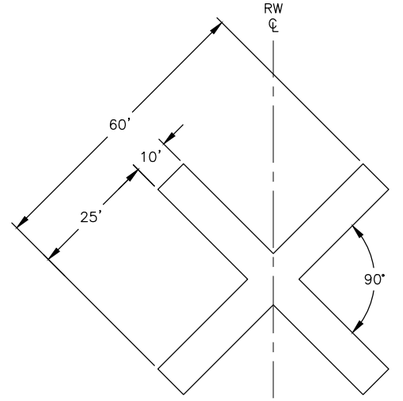
TRANSITIONAL & APPROACH SURFACE NOTE:

1. VEHICLES TALLER THAN 15 FEET (INCLUDING ALL PARTS OF THE EQUIPMENT, E.G. AN EXCAVATOR) MUST REMAIN FARTHER AWAY FROM THE RUNWAY CENTERLINE.



APPROACH SURFACE PERPENDICULAR TO RUNWAY CENTERLINE

PART 77 SURFACE OBSTRUCTION LIMITS
N.T.S.



RUNWAY CLOSURE MARKER NOTES:

1. RW CLOSURE MARKERS SHALL BE YELLOW. IF SANDBAGS ARE USED THEY SHALL BE YELLOW.
2. INSTALL RW CLOSURE MARKERS AS SHOWN IN THE PHASING PLANS.

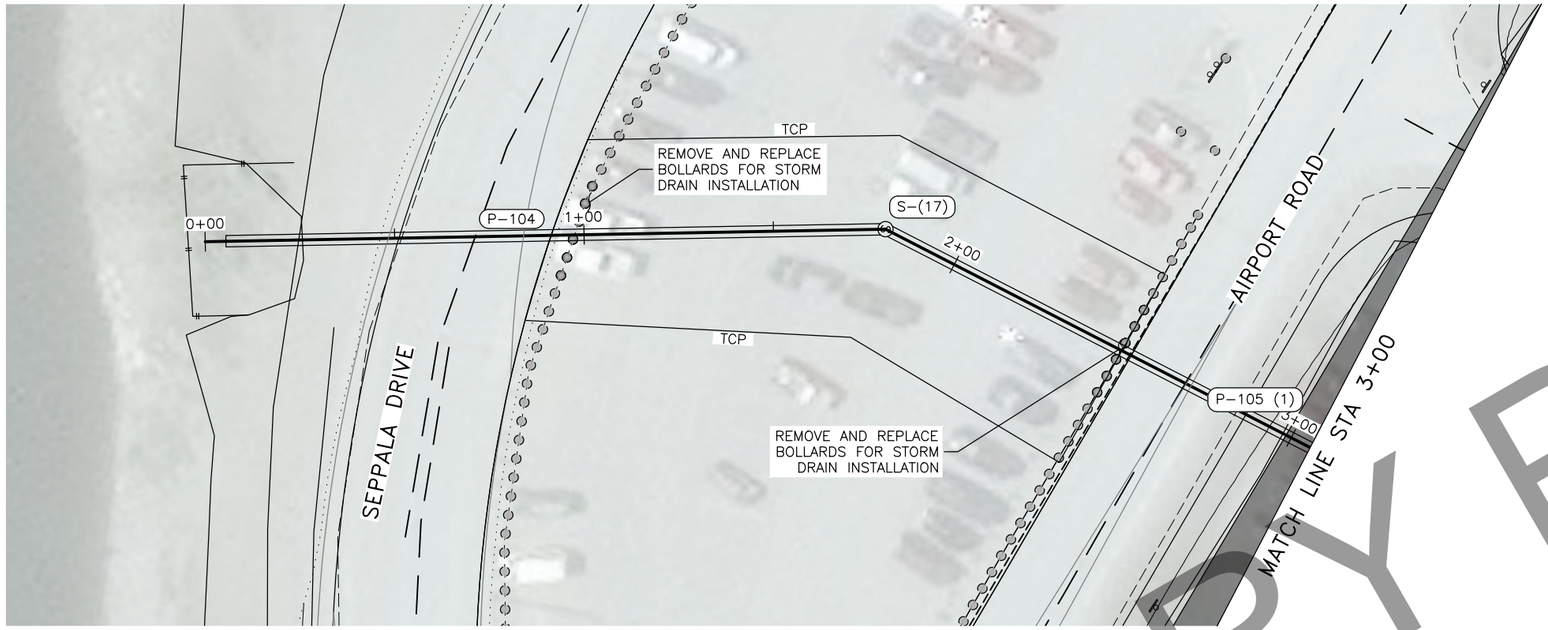
RUNWAY CLOSURE MARKER DETAIL
N.T.S.

CONSTRUCTION SAFETY AND PHASING PLAN DETAILS

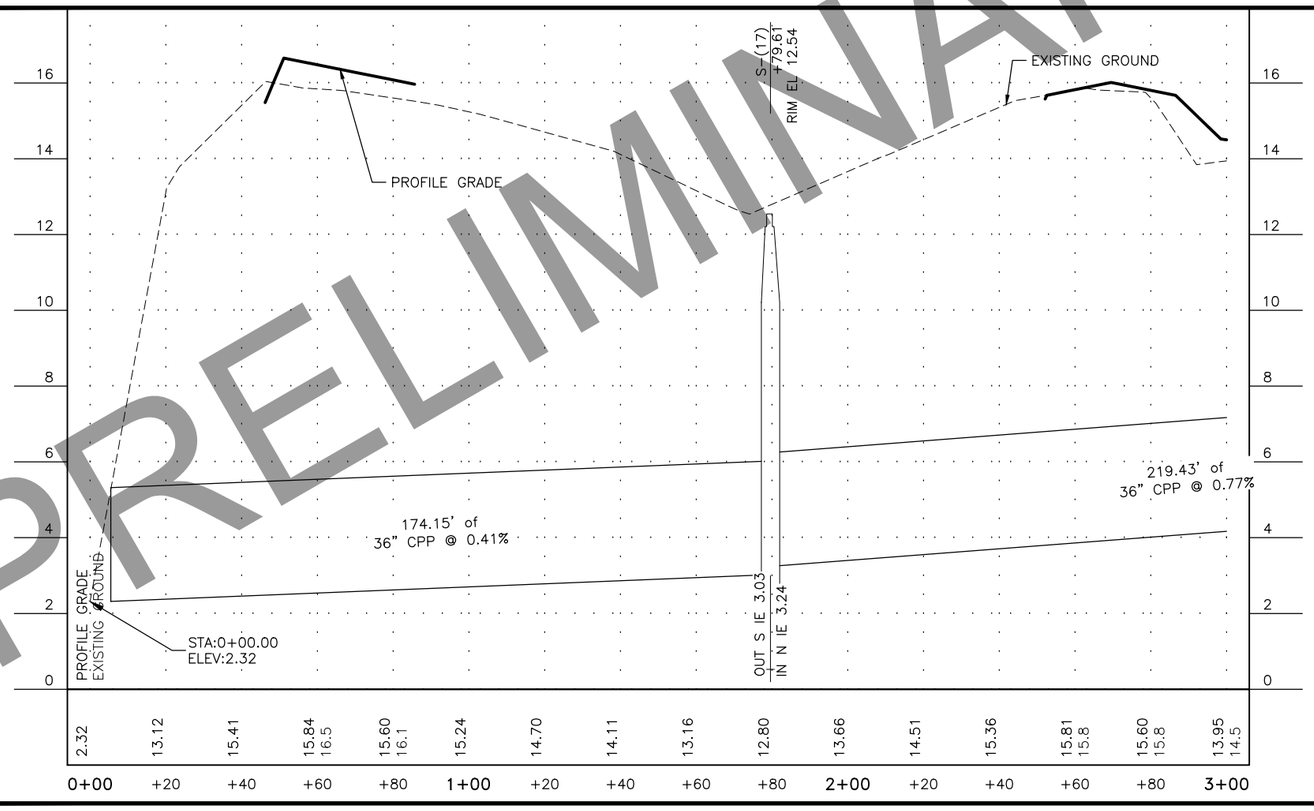
PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C0006cnst-17258FB-T8 Fri, May/05/23 01:43pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U1	U2



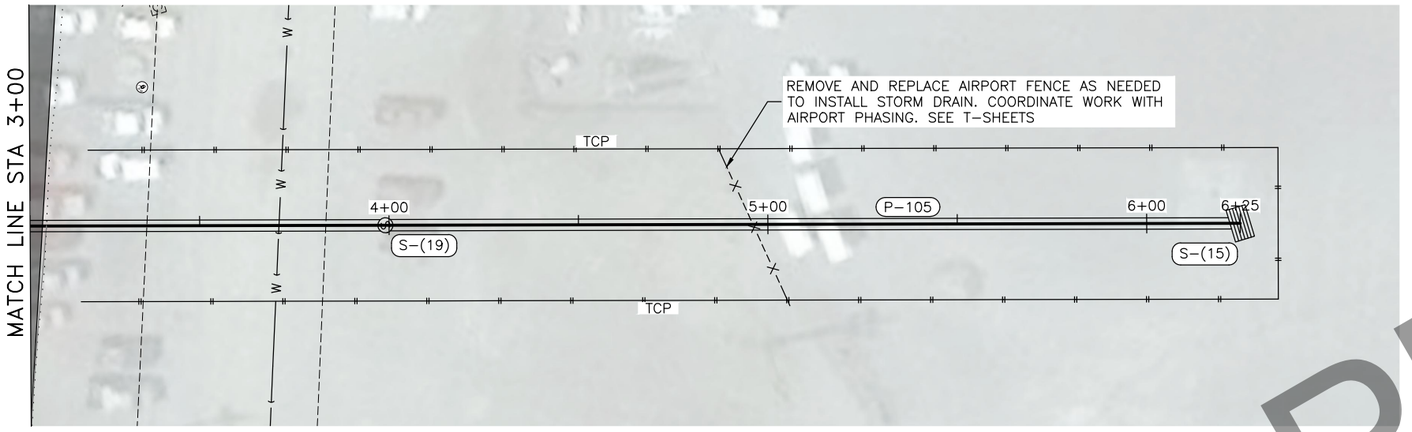
STORM DRAIN



PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C4002cnst-17258FB-U1 Force Main Fri, May/05/23 01:45pm

NO.	DATE	REVISION

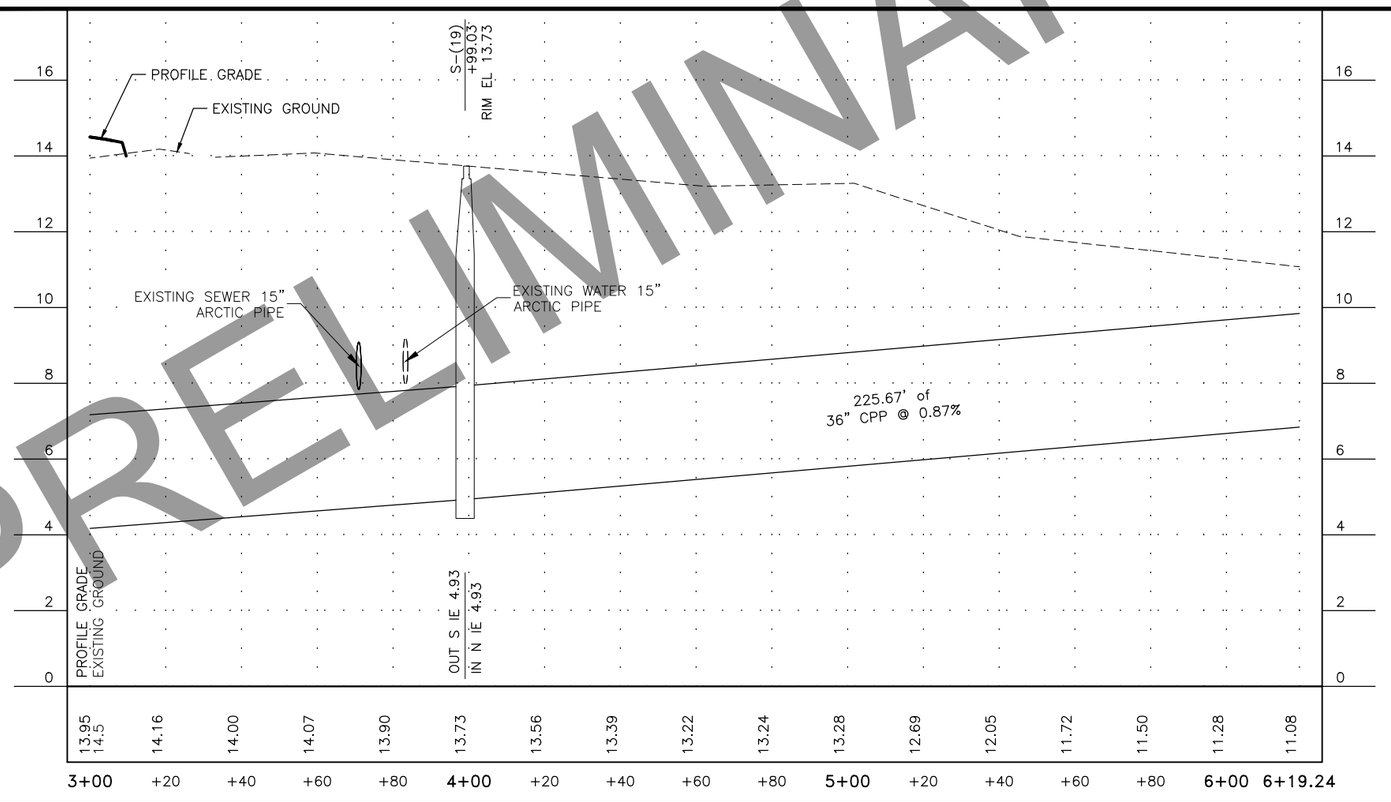
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U2	U2



STRUCTURE SUMMARY

NAME:	TYPE	STATION	OFFSET	TOC	PIPES IN INVERTS	PIPES OUT INV.	SUMP	COVER	REMARKS
S-(15)	INLET, TYPE A	6+24.70	0.00	13.733'		(P-105) 6.89' S	2.0	FIELD INLET FRAME AND GRATE	
S-(17)	STORM SEWER MANHOLE, 48 INCH	1+79.61	0.00 R	12.54	(P-105 (1)) 3.24' N	(P-104) 3.03' S	2.0	FIELD INLET FRAME AND GRATE	
S-(19)	ECCENTRIC CYLINDRICAL STRUCTURE	3+99.03	0.00 R	13.733'	(P-105) 4.93' N	(P-105 (1)) 4.93' S	0.0	FIELD INLET FRAME AND GRATE	

STORM DRAIN



NOTES:

1. ADD 4 INCHES OF R-20 INSULATION BETWEEN CULVERT AND WATER & SEWER PIPES.

PLANS DEVELOPED BY: RESPEC, CERT. OF AUTHORIZATION NO.: AECC 163270, 2700 GAMBELL STREET, SUITE 500, ANCHORAGE, AK 99503, (907)743-3200
N:\Projects\17258FB-Seppala\C\C4002cnst-17258FB-U2 Force Main Fri, May/05/23 01:45pm

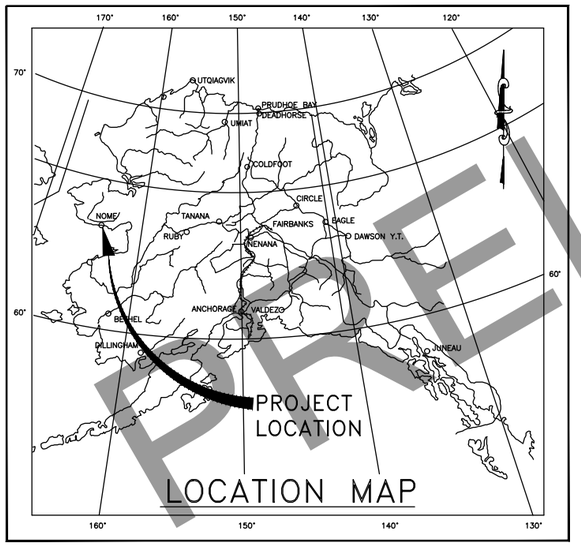
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U3	U18
CDS ROUTE: 168100	MILEPOINT: 0.0	TO	1.317	

SEPPALA DRIVE UTILITIES RELOCATION
WATER AND SANITARY SEWER SYSTEM IMPROVEMENTS

IN COOPERATION WITH

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES



LOCATION MAP

CRW ENGINEERING GROUP, LLC

3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
PHONE: (907) 562-3252
FAX: (907) 561-2273

CONSULTANT

NJUS

NOME JOINT UTILITY SYSTEM
102 DIVISION STREET
NOME, AK 99762
PHONE: (907) 443-6620
FAX: (907) 443-5349

CLIENT

STATUS:
95% DESIGN

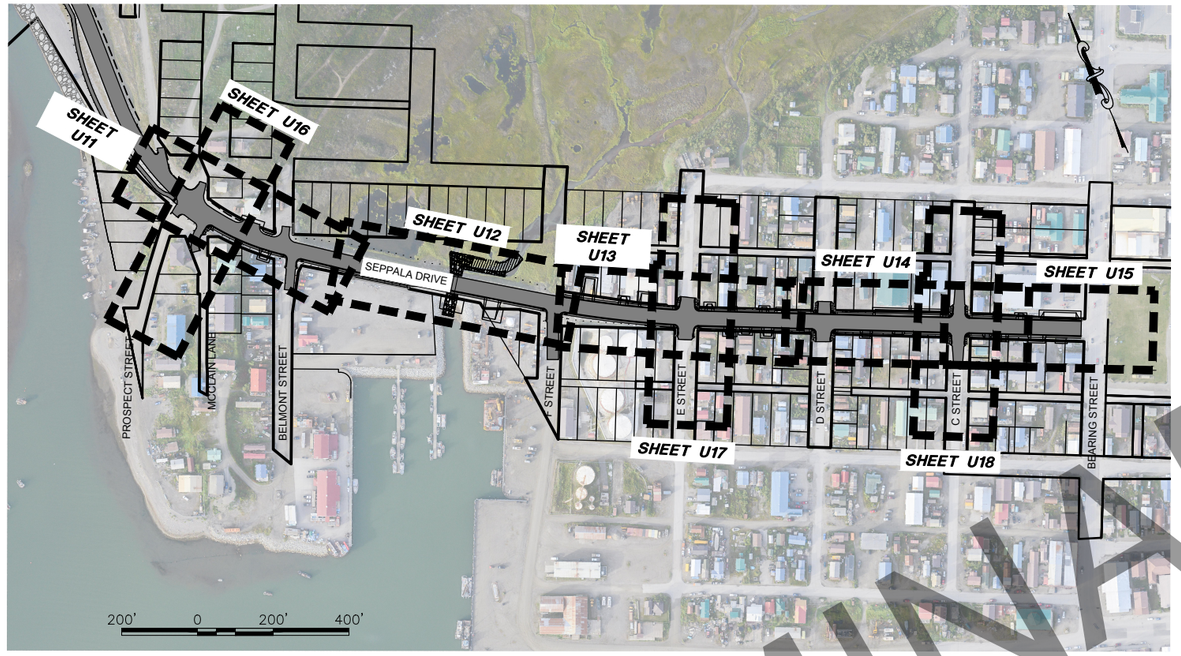
DATE:
MAY 2023

PROJECT STATUS

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Cover Sheet-U3 Cover Sheet Tue, May/02/23 09:58am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U4	U18



VICINITY MAP

INDEX OF SHEETS

WATER & SEWER UTILITY NOTES

1. CITY OF NOME, NOME FIRE DEPARTMENT AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY–TWO (72) HOURS IN ADVANCE OF WATER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY WATER SERVICE TO THE EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 8–HOURS OR IF DEEMED NECESSARY BY THE ENGINEER.
2. THE PROJECT INCLUDES MATERIALS FURNISHED BY NOME JOINT UTILITY SERVICE (NJUS). SEE SPECIFICATION SECTION 106–1.07 DEPARTMENT–FURNISHED MATERIAL FOR A LIST OF MATERIALS TO BE PROVIDED BY NJUS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIALS NOT INCLUDED IN THIS LIST.
3. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE APPROVED FOR SUCH USE BY THE NATIONAL SANITATION FOUNDATION (NSF) UNDER NSF/ANSI STANDARDS 61 AND 372.
4. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION TO THE BEST KNOWLEDGE OF THE ENGINEER AT THE TIME OF DESIGN. UTILITY RECORDS MAY NOT BE COMPLETELY ACCURATE. THE PROJECT SUPERINTENDENT SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF UTILITIES WITHIN EACH CONSTRUCTION REACH PRIOR TO CONSTRUCTION.

ELECTRIC – NOME JOINT UTILITY SYSTEM (NJUS)	(907) 443–6301
TELEPHONE – MUKLUK TELEPHONE	(907) 443–5466
WATER AND SEWER – NOME JOINT UTILITY SYSTEM (NJUS)	(907) 443–6587
CABLE TELEVISION – GCI	(907) 443–2550
STORM DRAINS – CITY OF NOME	(907) 443–6605

5. HORIZONTAL SEPARATION DISTANCE BETWEEN WATER AND SEWER MAINS SHALL BE TEN (10) FEET MINIMUM, AS MEASURED BETWEEN THE OUTSIDE EDGE OF THE PIPES AND THE OUTSIDE FACE OF A SANITARY SEWER MANHOLE. VERTICAL SEPARATION DISTANCE BETWEEN WATER MAINS, SEWER MAINS AND STORM DRAINS SHALLL BE EIGHTEEN (18) INCHES MINIMUM.
6. TOP–OF–CASTING ELEVATIONS (SEWER MANHOLE, WATER VALVE BOX, SEWER CLEANOUT) TO BE SET ONE–HALF TO THREE–FOURTHS ($\frac{1}{2}$ – $\frac{3}{4}$) INCHES BELOW THE FINAL ASPHALT GRADE AND 6–INCHES BELOW GRADE IF LOCATED OUTSIDE OF PAVED AREAS. TOP–OF–CASTING ELEVATIONS FOR WATER SERVICE VALVE VAULTS SHALL BE ONE–QUARTER ($\frac{1}{4}$) INCHES BELOW THE FINAL SIDEWALK GRADE AND 6–INCHES BELOW GRADE IF LOCATED OUTSIDE OF SIDEWALK. CONTRACTOR TO PROVIDE CALCULATED ROADWAY FINISH GRADE AND CASTING ELEVATIONS TO ENGINEER FOR APPROVAL ONE WEEK BEFORE SETTING CASTINGS TO FINAL GRADE.
7. ALL TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS: ALL TESTS SHALL BE WITNESSED BY A REPRESENTATIVE DESIGNATED BY THE UTILITY (NJUS). WHEN PRESSURE TESTING WATER MAIN PIPING THAT DOES NOT INCLUDE A GATE VALVE AT THE CONNECTION TO THE EXISTING MAIN, INSTALL A TEST PLUG AND PRESSURE TEST THE SYSTEM. UPON COMPLETION OF A SUCCESSFUL PRESSURE TEST, MAKE THE FINAL CONNECTION TO THE EXISTING WATER MAIN AND PERFORM A VISUAL LEAK INSPECTION IN THE PRESENCE OF NJUS. UPON SUCCESSFUL COMPLETION OF A TEST, THE RESULTS OF THE TEST SHALL BE DOCUMENTED ON A TEST FORM AND ACKNOWLEDGED BY SIGNATURE OF THE UTILITY'S REPRESENTATIVE WITNESSING THE TEST. RED LINED AS–BUILT DRAWINGS SHALL ALSO NOTE THE TIME AND DATE OF THE TEST, AS WELL AS THE NAME OF THE UTILITY'S WITNESS, FOR EACH PIPE SEGMENT TESTED.
8. ALL PIPE JOINTS SHALL BE VISUALLY INSPECTED FOR INTEGRITY PRIOR TO INSTALLING THE INSULATION HALF–SHELLS AND COUPLING BANDS. ALL NEWLY INSTALLED WATERMAINS SHALL BE OPEN BORE FLUSHED TO REMOVE ANY FOREIGN MATTER. OPEN BORE FLUSHING SHALL BE ACCOMPLISHED AT EACH EXTREMITY OF THE MAIN, PRIOR TO SERVICE LINE INSTALLATION, HYDROSTATIC (PRESSURE) TESTING AND DISINFECTION. PERFORM HYDROSTATIC TESTING OF WATERMAINS AFTER OPEN BORE FLUSHING AND BEFORE DISINFECTION (SEE DISINFECTION BELOW). FILL THE LINE WITH WATER AND REMOVE AIR POCKETS PRIOR TO STARTING THE TEST. PRESSURIZE TO 1.5 TIMES THE OPERATING PRESSURE (MAX 80 PSI DURING FIRE EVENTS) = 120 PSI AND LEAVE FOR A MINIMUM OF 1 HOUR. AFTER THIS INITIAL PERIOD, ADD WATER TO BRING THE PRESSURE UP TO 120 PSI AND BEGIN A 1 HOUR TEST. FOR THE LINE TO BE ACCEPTED, THE MAKE–UP WATER REQUIRED TO RETURN THE PRESSURE TO 120 PSI AT THE END OF THE TEST PERIOD SHALL NOT BE GREATER THAN 0.6 GALLONS PER 100 FT OF 8" WATER MAIN.
9. TIE–IN ELEVATIONS ARE ESTIMATED BASED ON RECORD INFORMATION. CONTRACTOR MAY ADJUST TIE–IN ELEVATIONS AS REQUIRED TO FACILITATE CONNECTION AS APPROVED BY THE ENGINEER.
10. ALL STATIONING IS CENTERLINE OF PROPOSED ROAD, UNLESS OTHERWISE NOTED.
11. GENERAL RESTORATION – THE AREAS IMPACTED BY CONSTRUCTION SHALL BE RETURNED TO PRE–CONSTRUCTION CONDITIONS OR BETTER. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE AREA AND DISPOSED OF IN AN APPROVED MANNER.
12. SERVICE SADDLES SHALL NOT BE INSTALLED WITHIN 3 FEET OF A FUSED JOINT.
13. ALL GATE VALVES SHALL BE FLANGED.
14. AT THE DISCRETION OF THE UTILITY, SALVAGED MANHOLE LIDS, VALVING COMPONENTS, FIRE HYDRANTS, CLEAN–OUTS, ETC. SHALL BE DELIVERED BY THE CONTRACTOR TO THE UTILITY'S YARD. ITEMS NOT SELECTED BY THE UTILITY SHALL BE BECOME THE PROPERTY OF THE CONTRACTOR.
15. FOR ARCTIC INSULATED PIPE, JACKET IS DEFINED AS THE OUTER PIPE (ALUMINUM CMP) AND CORE PIPE IS DEFINED AS THE INNER PIPE THAT CONVEYS WATER/WASTEWATER OR HOUSES HDPE SERVICE LINES.
16. EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL HAVE ALL PORTIONS ABOVE THE TYPICAL SECTION, 3' MINIMUM, REMOVED WITH REMAINING ENDS PLUGGED WITH A FLOWABLE CEMENTITIOUS LOW STRENGTH GROUT (UNCONFINED COMPRESSIVE STRENGTH GROUT MINIMUM OF 75 PSI AT 56 DAYS).

KEY MAP AND NOTES

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562–3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Key Map, Legend, and Abbreviations–U4 KEY MAP AND NOTES Tue, May/02/23 09:59am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U5	U18

PIPE SUMMARY - WATER MAIN			
PIPE NO	627.2031.0000 LENGTH (LF)	DESCRIPTION	REMARKS
W-1	10	8"x15" ARCTIC PIPE SDR 11	
W-2	370	8"x15" ARCTIC PIPE SDR 11	
W-3	383	8"x15" ARCTIC PIPE SDR 11	
W-4	244	8"x15" ARCTIC PIPE SDR 11	
W-5	11	8"x15" ARCTIC PIPE SDR 11	
W-6	192	8"x15" ARCTIC PIPE SDR 11	
W-7	25	8"x15" ARCTIC PIPE SDR 11	
W-8	7	8"x15" ARCTIC PIPE SDR 11	
W-9	21	8"x15" ARCTIC PIPE SDR 11	
W-10	7	8"x15" ARCTIC PIPE SDR 11	
W-11	37	8"x15" ARCTIC PIPE SDR 11	
W-12	12	8"x15" ARCTIC PIPE SDR 11	
W-13	60	8"x15" ARCTIC PIPE SDR 11	
W-14	7	8"x15" ARCTIC PIPE SDR 11	
W-16	7	8"x15" ARCTIC PIPE SDR 11	
W-16	79	8"x15" ARCTIC PIPE SDR 11	
W-17	10	8"x15" ARCTIC PIPE SDR 11	
W-18	10	8"x15" ARCTIC PIPE SDR 11	
W-19	17	8"x15" ARCTIC PIPE SDR 11	
W-20	20	8"x15" ARCTIC PIPE SDR 11	
W-21	21	8"x15" ARCTIC PIPE SDR 11	
W-22	18	8"x15" ARCTIC PIPE SDR 11	
W-23	23	8"x15" ARCTIC PIPE SDR 11	
W-24	22	8"x15" ARCTIC PIPE SDR 11	
W-25	142	8"x15" ARCTIC PIPE SDR 11	
W-26	67	8"x15" ARCTIC PIPE SDR 11	

WATER SERVICE CONNECTION			
SHEET	627.0008.0000 STATION AT MAIN	DECRIPTION	REMARKS
U11	70+60, 8' LT	1" SUPPLY & 1" RETURN	
U11	71+00, 5' LT	1" SUPPLY & 1" RETURN	
U11	71+24, 5' LT	1" SUPPLY & 1" RETURN	
U11	71+73, 5' LT	1" SUPPLY & 1" RETURN	
U11	71+83, 5' LT	1" SUPPLY & 1" RETURN	
U11	72+41, 4' LT	1" SUPPLY & 1" RETURN	
U11	72+50, 4' LT	1" SUPPLY & 1" RETURN	
U11	72+51. 4' LT	1" SUPPLY & 1" RETURN	
U12	75+00, 14' RT	1" SUPPLY & 1" RETURN	
U12	75+06, 14' RT	1" SUPPLY & 1" RETURN	
U12	76+02, 14" RT	1" SUPPLY & 1" RETURN	
U12	76+17, 14' RT	1" SUPPLY & 1" RETURN	
U12	77+97, 14' RT	1" SUPPLY & 1" RETURN	
U12	78+12, 15' RT	1" SUPPLY & 1" RETURN	
U12	78+64, 15' RT	2" SUPPLY & 1" RETURN	
U12	78+92, 15' RT	1" SUPPLY & 1" RETURN	
U13	79+27, 15' RT	1" SUPPLY & 1" RETURN	
U14	56+79, 144' RT	1" SUPPLY & 1" RETURN	
U14	57+29, 95' RT	1" SUPPLY & 1" RETURN	
U14	57+59, 137' RT	1" SUPPLY & 1" RETURN	
U16	77+51, 70' RT	1" SUPPLY & 1" RETURN	
U16	77+51, 44' RT	1" SUPPLY & 1" RETURN	

SERVICE LOCATIONS ARE APPROXIMATE AND WILL BE ADJUSTED BY THE ENGINEER IN THE FIELD

ESTIMATE OF QUANTITIES				
ITEM NO	ITEM	PAY UNIT	QUANTITY	REMARKS
203.0006.000A	BORROW, TYPE A	TON	2094	SELECTED MATERIAL, TYPE A BETWEEN BOTTOM OF ROADWAY EXCAVATION AND TOP OF UTILITY BEDDING MATERIAL. FOUNDATION BACKFILL OVEREXCAVATION BELOW BEDDING WHERE DETERMINED IN THE FIELD.
604.0002.0000	SANITARY SEWER MANHOLE	EACH	4	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
604.0003.0000	RECONSTRUCT EXISTING MANHOLE	EACH	4	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
604.0004.0001	ADJUST EXISTING MANHOLE	EACH	2	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
626.2015.0000	TEMPORARY SEWER SYSTEM	L.S.	ALL REQ'D	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
626.2016.0004	HDPE SEWER CONDUIT - ARCTIC, 4-INCH, 4"x12"	L.F.	733	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
627.0003.0000	INSTALL VALVE BOX	EACH	12	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.0005.0000	FIRE HYDRANT INSTALLATION	EACH	1	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.0008.0000	WATER SERVICE CONNECTION	EACH	22	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.0009.0008	GATE VALVE, 8-INCH	EACH	12	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.0010.0000	ADJUSTMENT OF VALVE BOX	EACH	3	INCLUDED AS PART OF ADOT HIGHWAY PROJECT.
627.2013.0000	TEMPORARY WATER SYSTEM	L.S.	ALL REQ'D	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.2031.0008	HDPE WATER CONDUIT - ARCTIC, 8-INCH, 8"x15"	L.F.	1822	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
627.2032.0000	INSTALL WATER SERVICE VALVE VAULT	EACH	5	INCLUDED AS PART OF UTILITY BETTERMENT WORK.
682.2005.0000	UTILITY POTHOLE, LOCATE DURING CONSTRUCTION	C.S.	1	INCLUDED AS PART OF UTILITY BETTERMENT WORK.

EXISTING MANHOLE ADJUSTMENT			
STATION	GRADE RING ADJUSTMENT (INCHES)	BARREL ADJUSTMENT (INCHES)	DESCRIPTION
68+70	--	-5.68	REPLACE BARREL SECTION, CONE, AND FRAME AND COVER
70+20, 14 RT	--	-16.4	REPLACE BARREL SECTION, CONE, AND FRAME AND COVER
73+78, 38 LT	-3.72		REPLACE GRADE RINGS AND FRAME AND COVER
73+89, 1 RT	--	-11.48	REPLACE BARREL SECTION, CONE, AND FRAME AND COVER
73+90, 26 LT	2.76		REPLACE GRADE RINGS AND FRAME AND COVER
77+39, 2 RT	--	11.28	REPLACE BARREL SECTION, CONE, AND FRAME AND COVER

SANITARY SEWER MANHOLE			
STRUCTURE NO	604.0002.0000 STATION	DECRIPTION	REMARKS
MH-1	59+49.42, 8.25' RT	TYPE A MANHOLE	
MH-2	62+57.54, 2.61' RT	TYPE A MANHOLE	
MH-3	65+58.34, 0.67' RT	TYPE A MANHOLE	
MH-4	66+74.4, 11.09' RT	TYPE A MANHOLE	

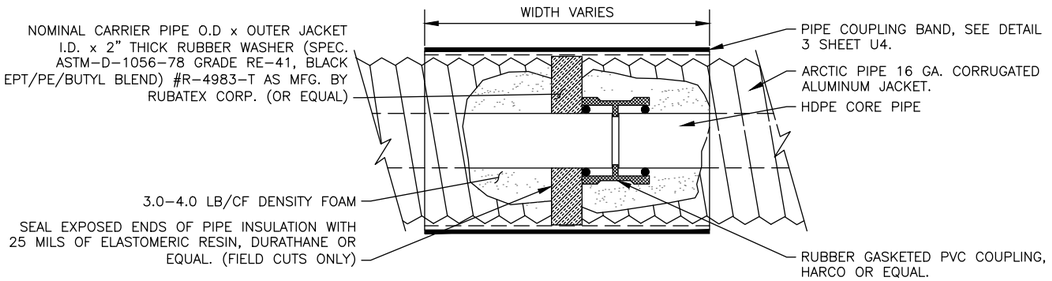
PIPE SUMMARY - SEWER FORCE MAIN			
PIPE NO	626.0001.0004 LENGTH (LF)	DESCRIPTION	REMARKS
FM-1	308	4"x12" ARCTIC PIPE HDPE SDR 11	
FM-2	301	4"x12" ARCTIC PIPE HDPE SDR 11	
FM-3	114	4"x12" ARCTIC PIPE HDPE SDR 11	
FM-4	10	4"x12" ARCTIC PIPE HDPE SDR 11	

SUMMARY TABLES

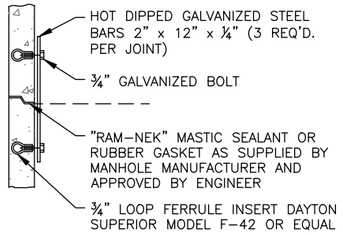
PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Summary Tables-U5 SUMMARY TABLES Tue, May/02/23 09:59am

NO.	DATE	REVISION

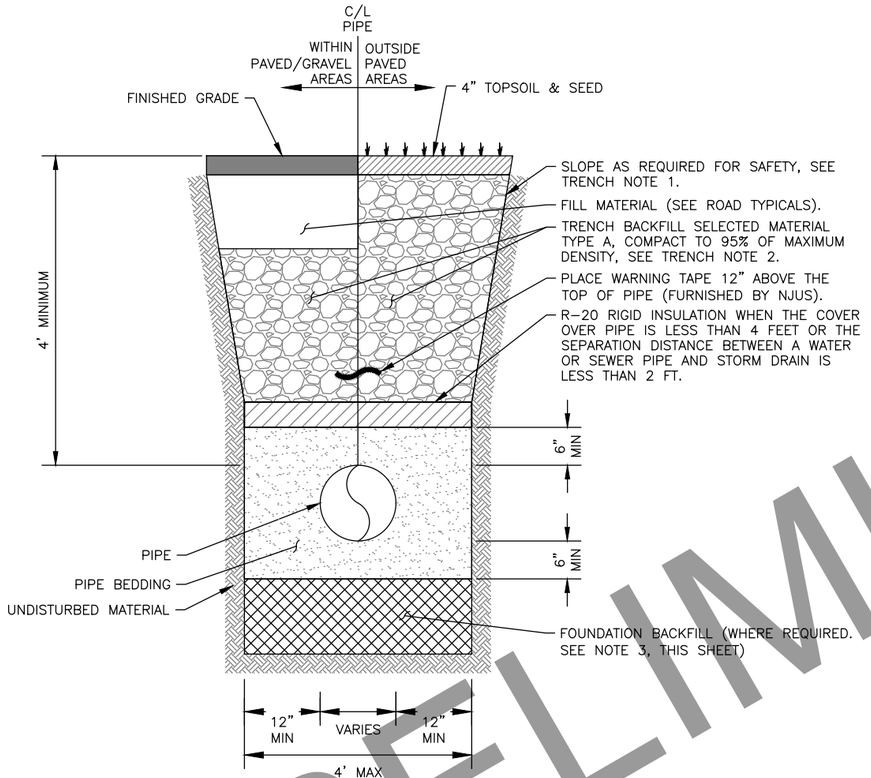
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U6	U18



1 / U6 WATER CONDUIT PIPE JOINT ENCASEMENT DETAIL
SCALE: NTS



JOINT STRAPPING DETAIL



2 / U6 TYPICAL TRENCH SECTION
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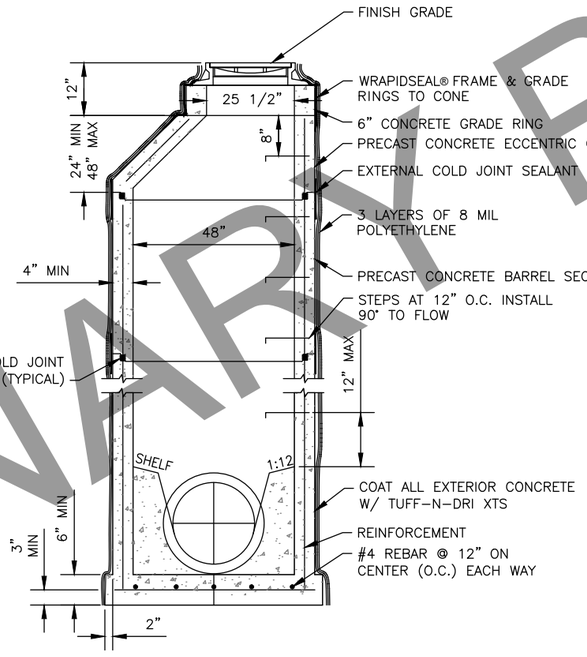
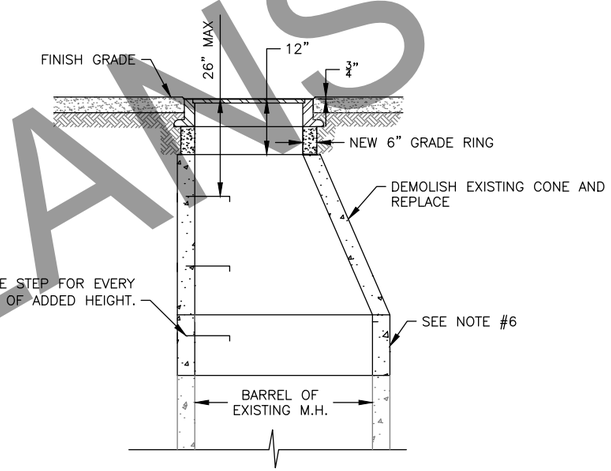


3 / U6 TYPE A MANHOLE DETAIL
SCALE: NTS



4 / U6 RECONSTRUCT EXISTING MANHOLE DETAIL
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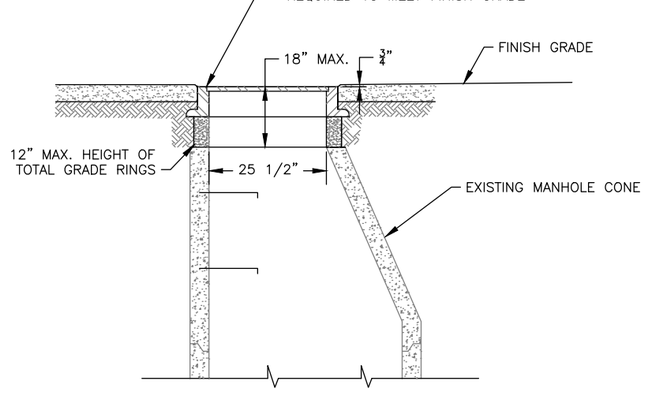


5 / U6 ADJUST EXISTING MANHOLE DETAIL
SCALE: NTS

TRENCH NOTES:

1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED TRENCH WALL SLOPES AND DIMENSIONS ARE FOR PAY QUANTITY DETERMINATIONS ONLY.
2. TRENCH BACKFILL SHALL BE NATIVE TRENCH MATERIAL AS APPROVED BY THE ENGINEER. NATIVE TRENCH MATERIAL NOT APPROVED BY THE ENGINEER SHALL BE REMOVED AND REPLACED WITH BORROW, TYPE A CLASSIFIED MATERIAL.
3. FURNISH, HAUL, PLACE AND COMPACT FOUNDATION BACKFILL WHERE THE BOTTOM OF UTILITY TRENCH IS NOT SUITABLE TO SUPPORT NEW UTILITY CONDUIT. COORDINATE WITH DEPARTMENT AUTHORIZED REPRESENTATIVE(S) FOR SUITABILITY DETERMINATIONS ONCE BOTTOM OF TRENCH IS EXPOSED. PLACE FOUNDATION BACKFILL AT STATIONS DIRECTED BY THE AUTHORIZED REPRESENTATIVE. FOUNDATION BACKFILL SHALL BE BORROW, TYPE A.
4. WHERE OTHER UTILITIES ARE ENCOUNTERED, PROVIDE BEDDING MATERIAL AS SHOWN IN THIS DETAIL.

MANHOLE NOTES:

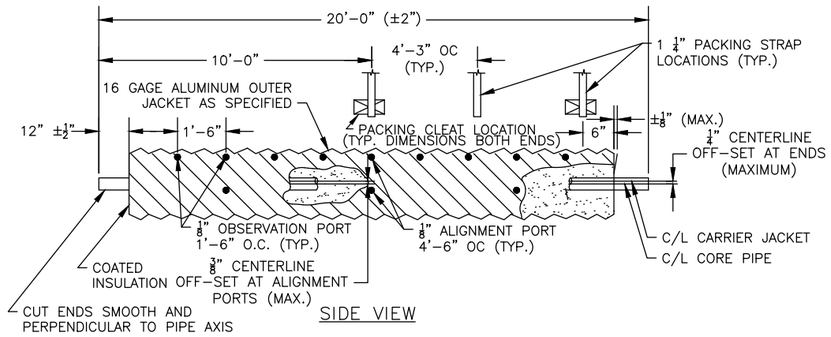
1. BACKFILL AROUND MANHOLE WITH ROADWAY FILL MATERIAL (3 FT MIN).
2. RESET CONE WITH COLD JOINT GASKET AND SEAL EXTERIOR JOINT WITH COLD JOINT SEALANT.
3. ADJUST FRAME TO PROPER DEPTH BELOW SURFACE OF PAVEMENT. FEATHER EDGE OF PAVEMENT TO SMOOTH TRANSITION.
4. SEAL FRAME, AND GRADE RINGS TO CONE WITH WRAPIDSEAL® OR APPROVED EQUAL.
5. WRAP CONES & BARREL SECTIONS WITH THREE (3) LAYERS OF 8-MIL THICK POLYETHYLENE ENCASEMENT MATERIAL AFTER INSTALLING THE WRAPIDSEAL®.
6. INSTALL REMOVE BARREL SECTIONS AS NECESSARY TO ADJUST MANHOLE TO FINISH GRADE WITH A MINIMUM OF ONE 6" GRADE RING.
7. PRECAST MANHOLE SECTIONS SHALL BE REINFORCED CONCRETE CONFORMING TO ASTM C-478.
8. SEAL FRAME AND GRADE RING TO CONE WITH WRAPIDSEAL® OR APPROVED EQUAL.

DETAILS

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Details-U6 DETAILS Tue, May/02/23 09:59am

NO.	DATE	REVISION

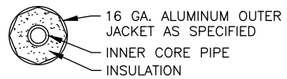
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U7	U18



SIDE VIEW

DIMENSION TABLE

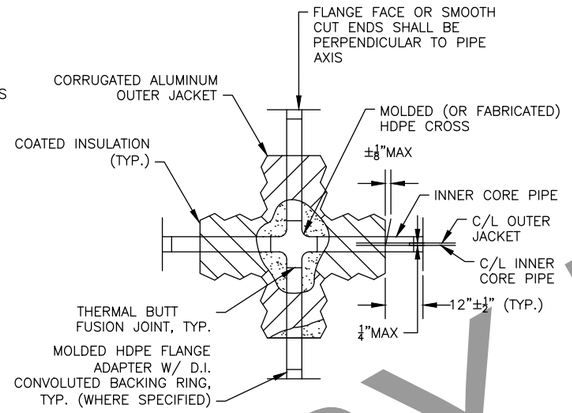
NOMINAL SIZE	CORE PIPE DIAMETER	NOM. OUTER JACKET DIA.
3"X12"	3.50"	12"
4"X12"	4.50"	12"
6"X12"	6.625"	12"
8"X15"	8.625"	15"
12"X18"	12.75"	18"



END VIEW

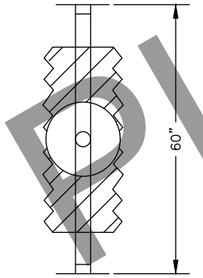
1 U7 HDPE WATERMAIN – ALUMINUM JACKET (20')

SCALE: NTS



SIDE VIEW

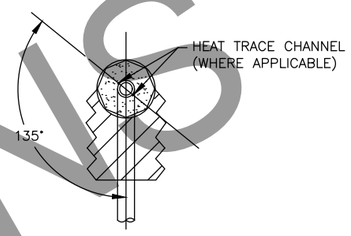
INNER CORE PIPE/OUTER JACKET SCHEDULE		
NOMINAL CORE PIPE DIA.	INNER CORE PIPE O.D.	NOMINAL OUTER JACKET DIA.
3"	3.50"	12"
4"	4.50"	12"
6"	6.625"	12"
8"	8.625"	15"
12"	12.75"	18"



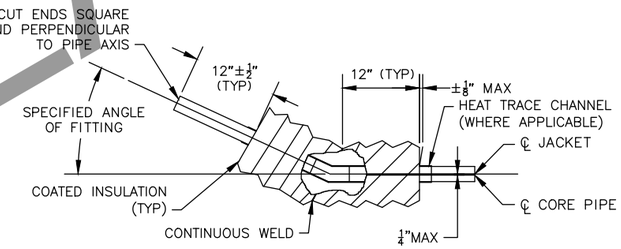
END VIEW

2 U7 HDPE WATERMAIN CROSS ALUMINUM JACKET

SCALE: NTS



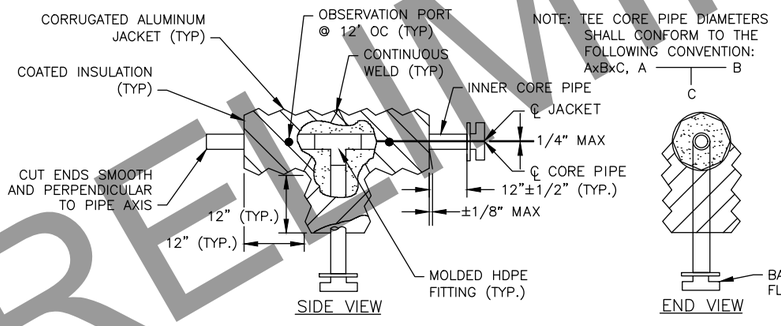
END VIEW



SIDE VIEW

3 U7 HDPE WATER 1° THROUGH 89° – ALUMINUM JACKET

SCALE: NTS



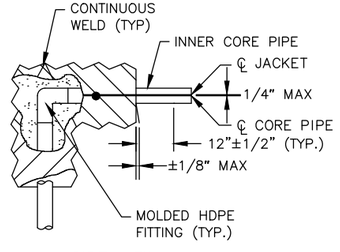
SIDE VIEW

END VIEW

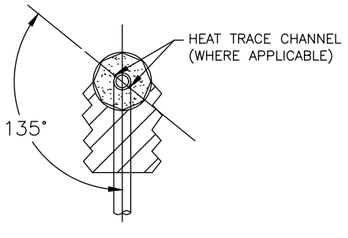
4 U7 HDPE WATER TEE – ALUMINUM JACKET

SCALE: NTS

INNER CORE PIPE/OUTER JACKET SCHEDULE		
NOMINAL CORE PIPE DIA.	INNER CORE PIPE O.D.	NOMINAL OUTER JACKET DIA.
3"	3.50"	12"
4"	4.50"	12"
6"	6.625"	12"
8"	8.625"	15"
12"	12.75"	18"



SIDE VIEW



END VIEW

5 U7 HDPE WATER 90° BEND – ALUMINUM JACKET

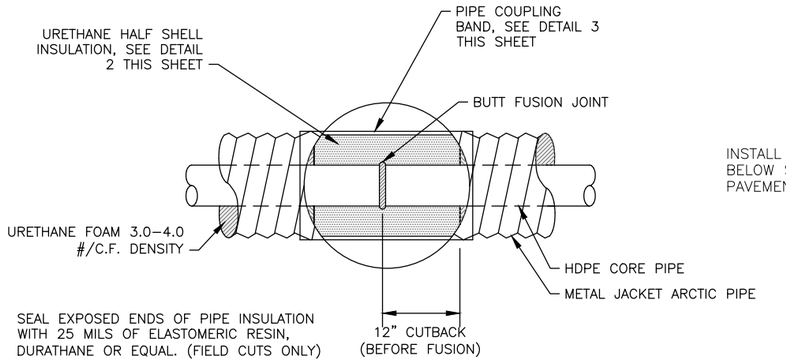
SCALE: NTS

DETAILS

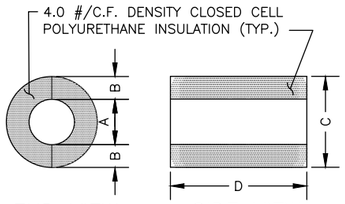
PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Details-U7 DETAILS Tue, May/02/23 09:59am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U8	U18

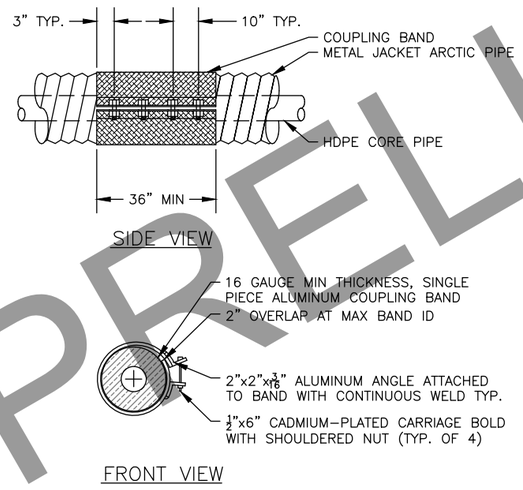


1 / U8 BUTT FUSED PIPE JOINT DETAIL
SCALE: NTS

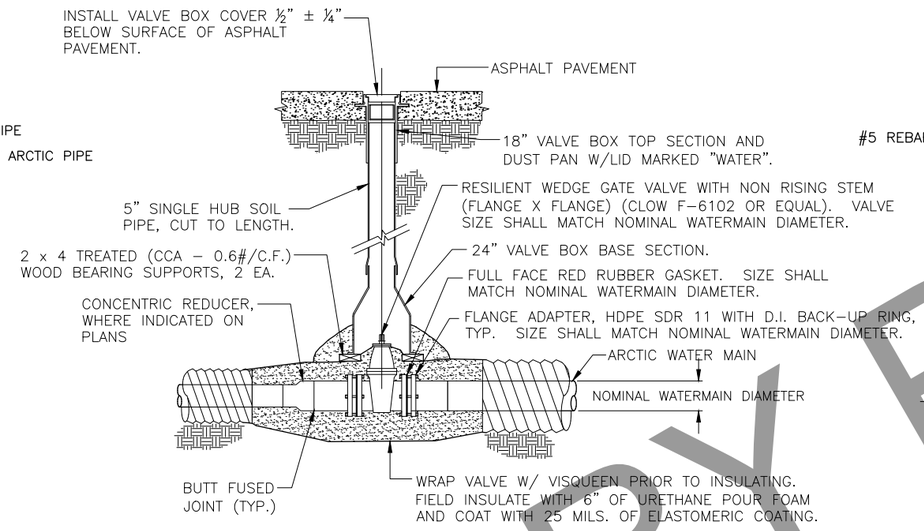


HALF SHELL	A	B	C	D
8"	8 3/4"	3 1/2"	15 3/4"	23"

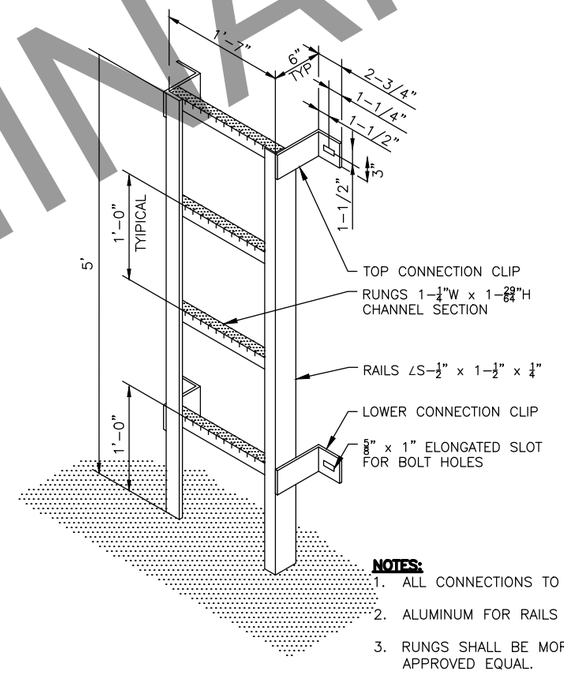
2 / U8 INSULATION HALF SHELL DETAIL
SCALE: NTS



3 / U8 ARCTIC PIPE COUPLING BAND DETAIL
SCALE: NTS

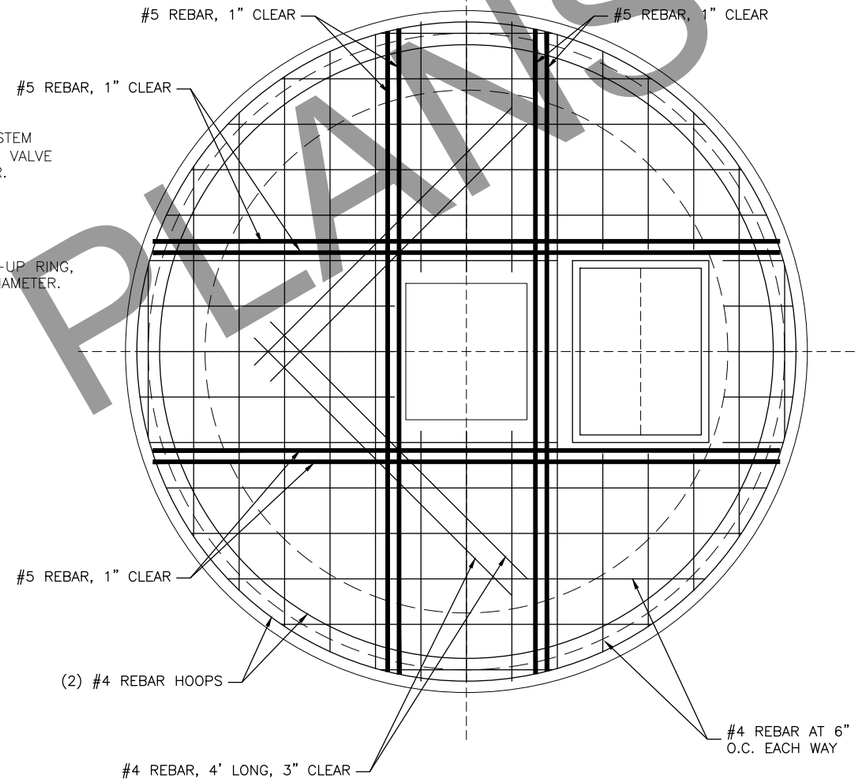


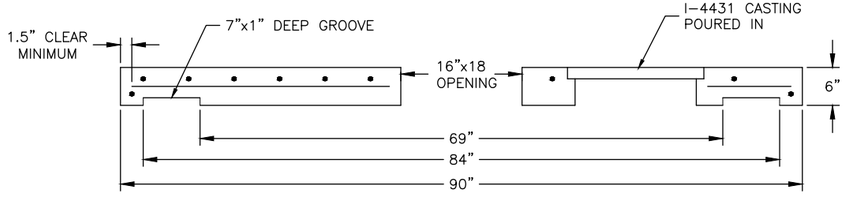
4 / U8 GATE VALVE INSTALLATION
SCALE: NTS



5 / U8 LADDER DETAIL
SCALE: NTS

NOTE:
TOP SLAB DESIGNED FOR 300 PSF LOADING.
CONTRACTOR TO DESIGN AND SUPPLY LIFTING INSERTS





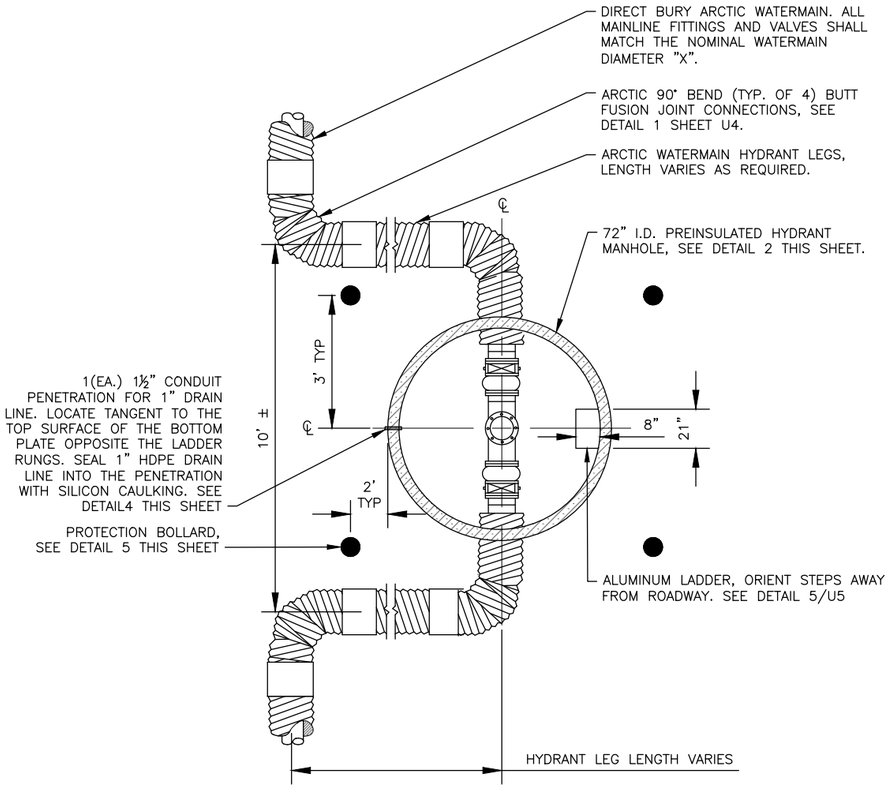
6 / U8 TOP SLAB DETAIL
SCALE: NTS

NOTES:
1. ALL CONNECTIONS TO BE 3/16" FILLET WELD USING 4043 ALLOY FILLER WIRE.
2. ALUMINUM FOR RAILS SHALL BE 6061–T6.
3. RUNGS SHALL BE MORTON TREAD GRIP LADDER RUNGS (2 ROW TYPE) OR APPROVED EQUAL.

DETAILS

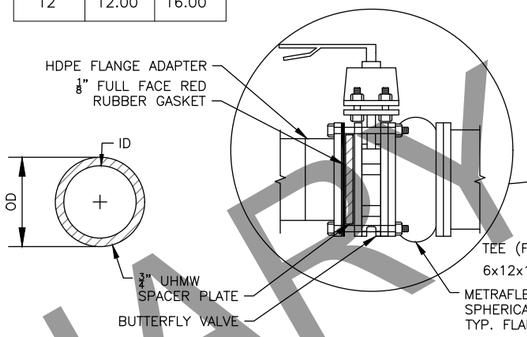
NO.	DATE	REVISION

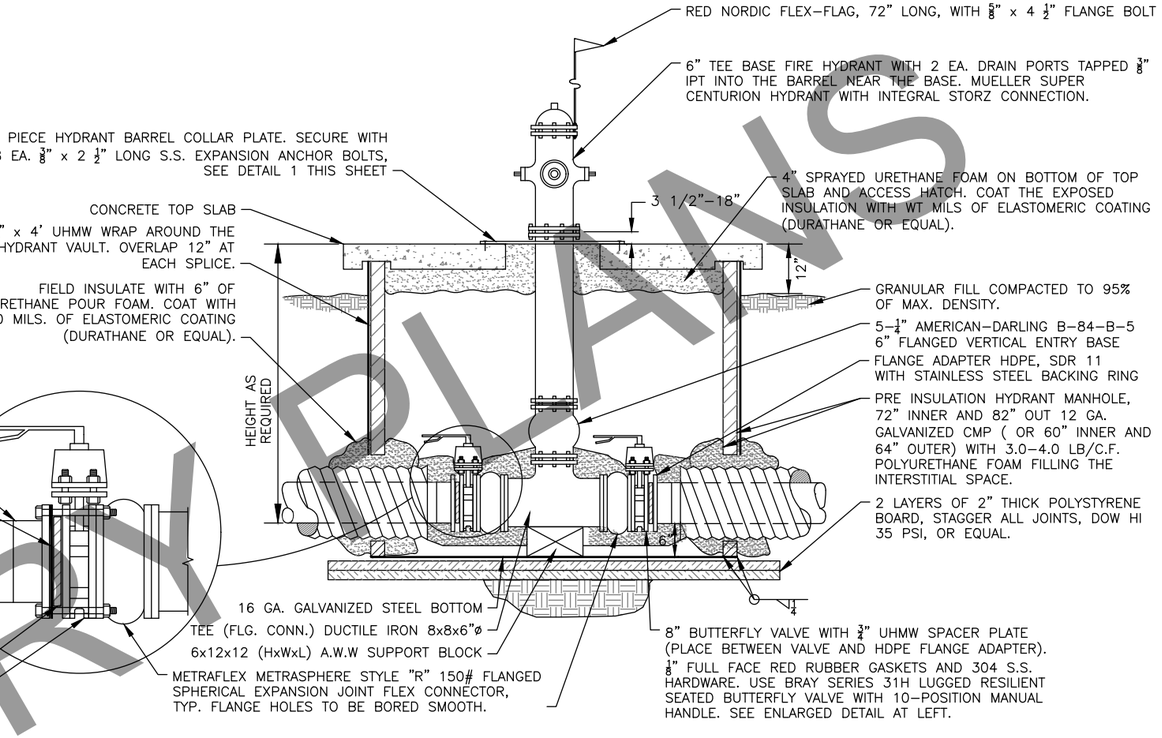
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U9	U18



UHMW SPACER DIMENSIONS

NOMINAL	ID	OD
4"	4.00"	6.75"
6"	6.00"	8.625"
8"	8.00"	10.875"
10"	10.00"	13.25"
12"	12.00"	16.00"

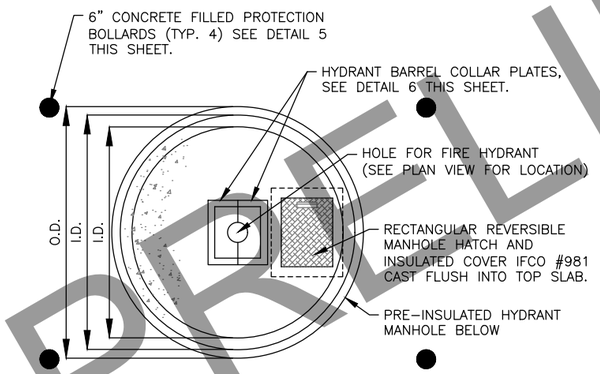




1 U9 OFFSET TEE HYDRANT
SCALE: NTS

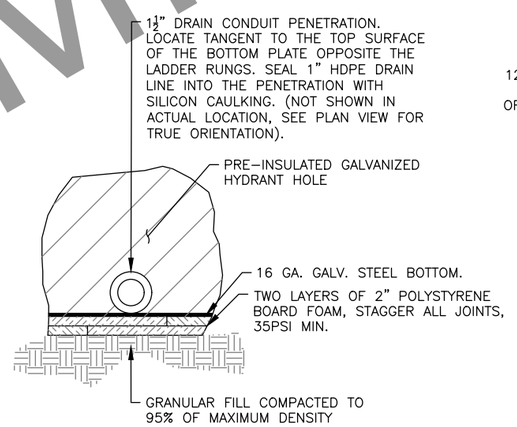
2A U9 FLANGE ADAPTER/SPACER PLATE AND BUTTERFLY VALVE
SCALE: NTS

2 U9 FIRE HYDRANT BASE TEE AND VAULT
SCALE: NTS

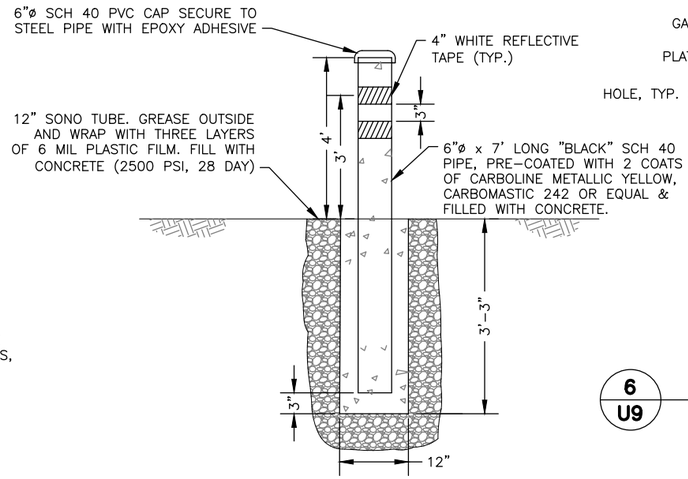


NOTES:
1. SLOPE TO PROVIDE DRAINAGE AWAY FROM HYDRANT MANHOLE.
2. SEE DETAIL 5, SHEET U4 FOR CONCRETE SLAB DIMENSIONS.

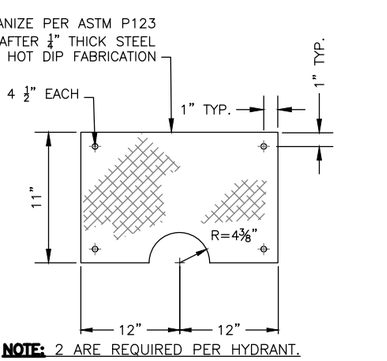
3 U9 HYDRANT AND MANHOLE TOPVIEW
SCALE: NTS



4 U9 DRAIN CONDUIT PENETRATION
SCALE: NTS



5 U9 BOLLARD DETAIL
SCALE: NTS



NOTE: 2 ARE REQUIRED PER HYDRANT.

6 U9 HYDRANT BARREL COLLAR PLATE
SCALE: NTS

DETAILS

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
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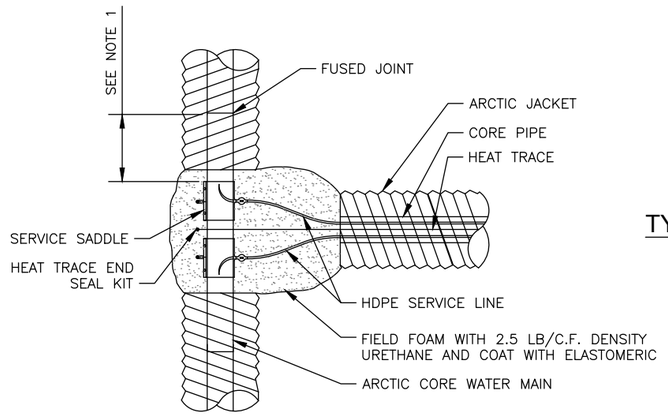
SERVICE CONNECTION NOTES:

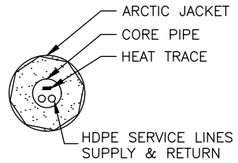
1. SERVICE SADDLES SHALL NOT BE LOCATED WITHIN 3 FEET OF A BUTT FUSED JOINT.

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U10	U18



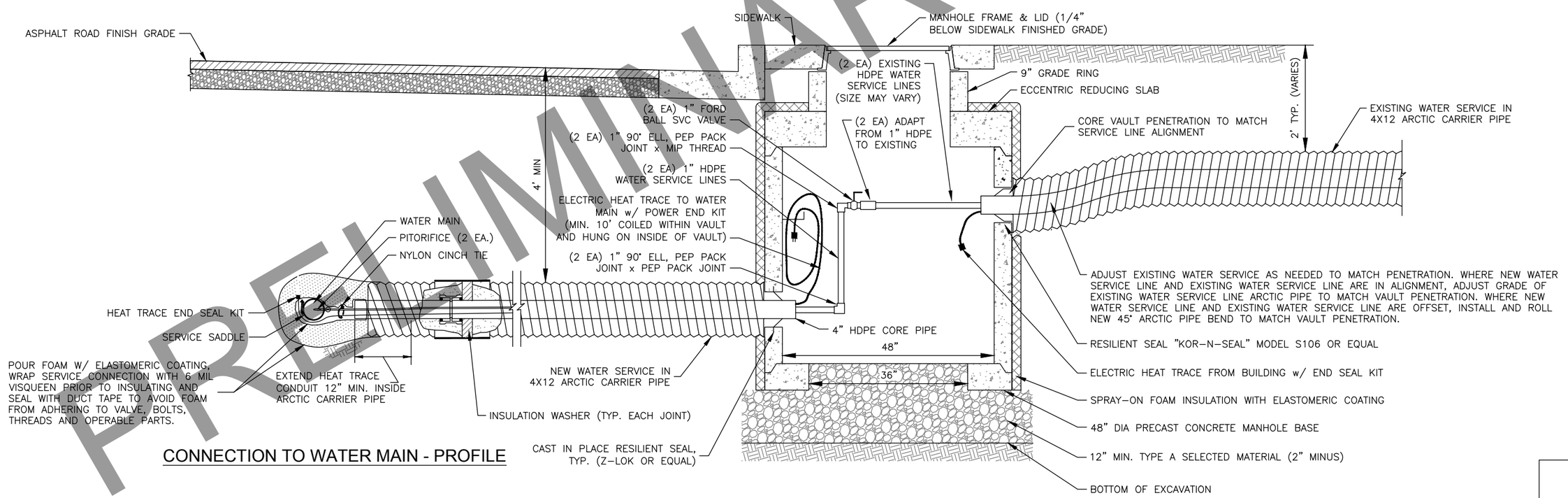
PLAN VIEW OF WATER SERVICE CONNECTION TO MAIN



TYPICAL SECTION

MATERIALS (WATER SERVICE)

SERVICE SADDLE	ROMAC SS1–H (ACTUAL WATER MAIN ODO X LENGTH X TAP SIZE (NORMALLY 1" IP), STAINLESS STEEL, 2 BOLT (MIN.) SERVICE SADDLE. PROVIDE 4 EA. SS SPRING WASHERS PER BOLT.
PITORIFICE	1" FORD PITORIFICE CORPORATION STOP F1102–4–P WITH 1" IP THREAD X 1" PACK JOINT FOR PVC SIZE HDPE (1" SDR 11 MEETING ASTM D–3035). PROVIDE SS INSERT STIFFENER (FORD INSERT NO. 53–72 OR MUELLER NO. 504–385) AND PITORIFICE STINGER FOR INSERTION IN 8"ø MAINLINE.
HDPE SERVICE	1"ø HDPE (PE 4710), SDR 11, 160 PSI MIN., NSF 61 APPROVED, MEETING ID ASTM D–3035. WATER SERVICE PIPES SHALL BE CONTINUOUS (NO JOINTS) FROM SERVICE SADDLE TO WATER VALVE VAULT)
ARCTIC CARRIER PIPE	NOMINAL 4" X 12" PRE–INSULATED HDPE, IPS, SDR 17, 16 GA. CORRUGATED ALUMINUM JACKET, PUSH ON COUPLING X BEVELED END.
PIPE COUPLING BAND	NOMINAL 12", 16 GA. ALUMINUM, SINGLE PIECE, 3 BOLT BAND SEE DETAIL 6, SHEET U2.2.
INSULATION WASHER	NOMINAL 4 X 12 RUBBER WASHER, 4.75" I.D.X 12" O.D.X 2" THICK (SPEC. ASTM–D–1056–85 GRADE 2A1 BLACK EPT/PE/BUTYL BLEND).
POUR FOAM	2 COMPONENT, 2.5 LBS/FT POLYURETHANE FOAM.
ELASTOMERIC COATING	APPLY 50 MILS DURATHANE ELASTOMERIC RESIN COATING
HEAT TRACE	5 WATTS/FT, 120 VAC, 16 AWG, SELF LIMITING, NELSON #LT5J
HEAT TRACE END SEAL KIT	USE MANUFACTURER'S RECOMMENDED HEAT TRACE END SEAL FOR BELOW GROUND CONDITIONS.
BALL SRV VALVE	FORD BALL SERVICE VALVE, FIP–THREAD x PEP PACK JOINT (FORD #B61–444)
90° ELL (@ BALL VALVE)	90° ELBOW, PEP PACK JOINT x MIP–THREAD
90° ELL (TYPICAL)	90° ELBOW, PEP PACK JOINT X PEP PACK JOINT



CONNECTION TO WATER MAIN - PROFILE

WATER VALVE VAULT - SECTION

DETAILS

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562–3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Details–U10 DETAILS Tue, May/02/23 09:59am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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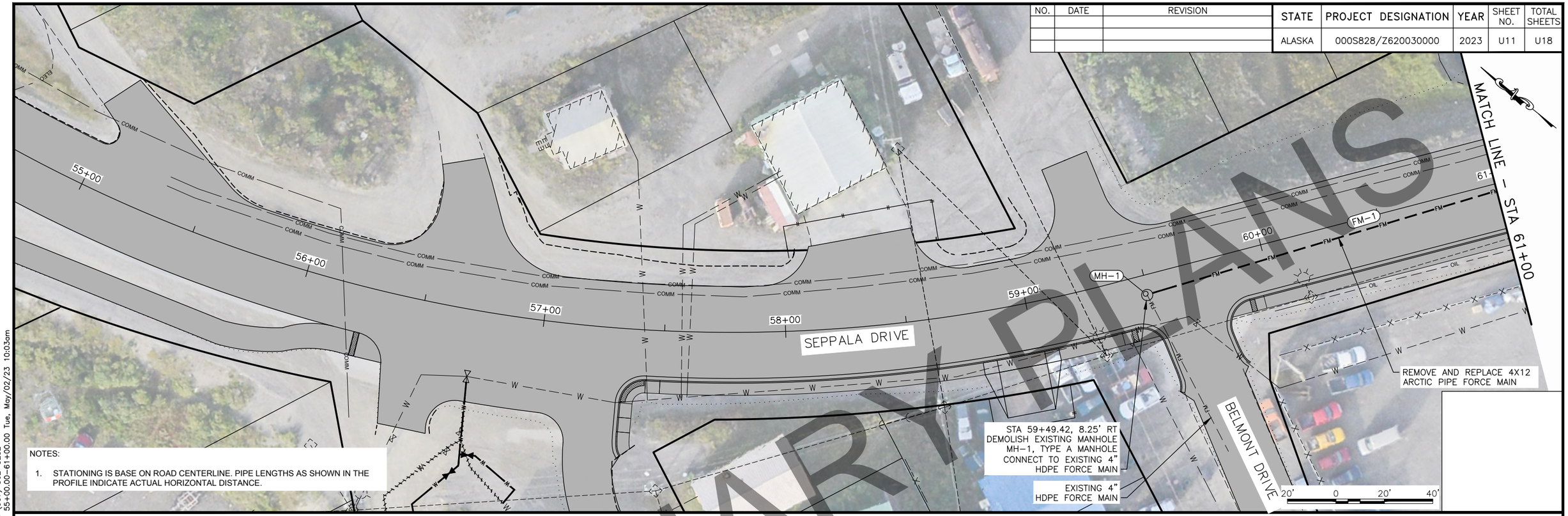
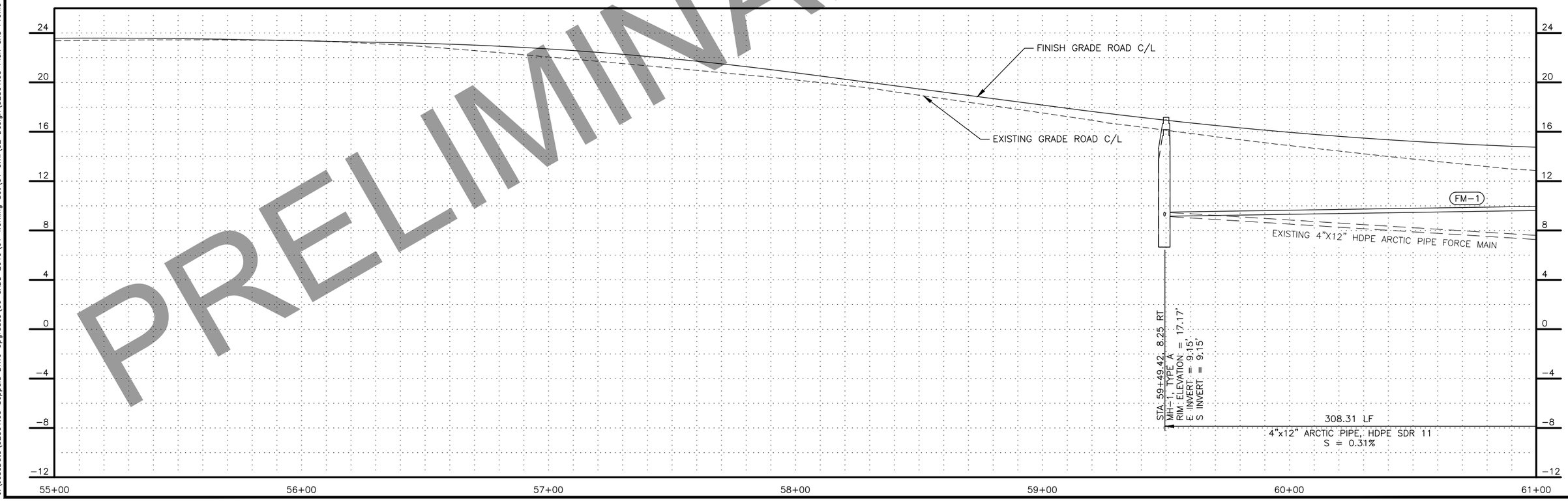


NOTES:

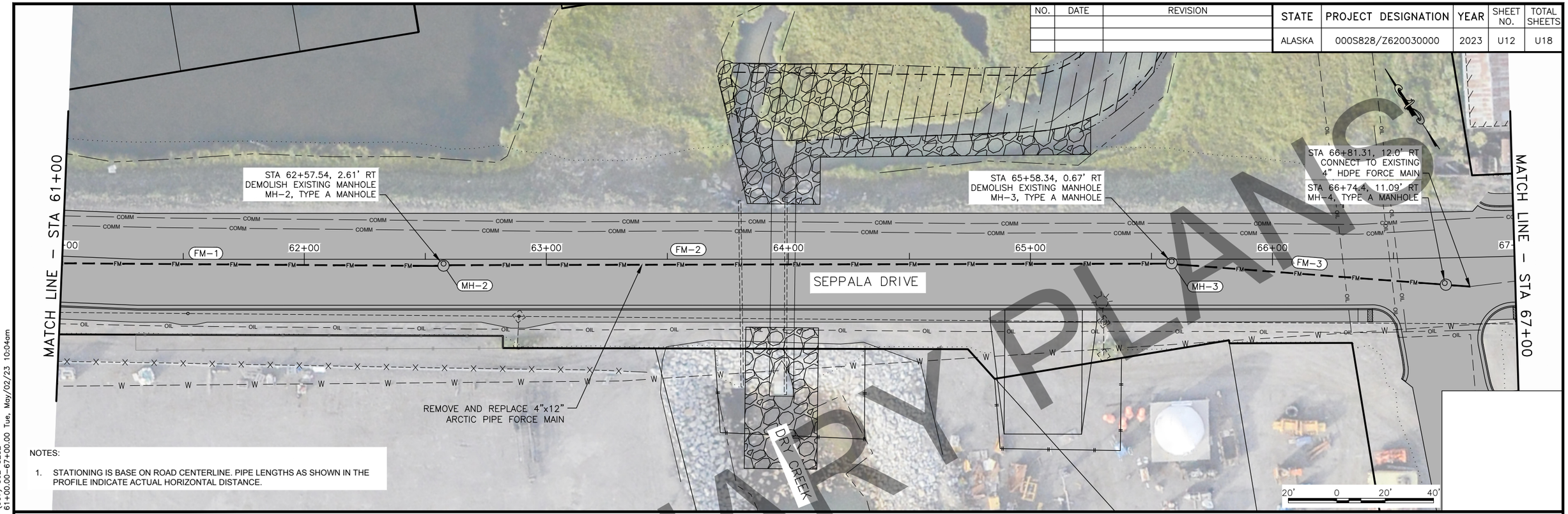
1. STATIONING IS BASE ON ROAD CENTERLINE. PIPE LENGTHS AS SHOWN IN THE PROFILE INDICATE ACTUAL HORIZONTAL DISTANCE.



PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Plan and Profile-U11 55+00.00-61+00.00 Tue, May/02/23 10:03am

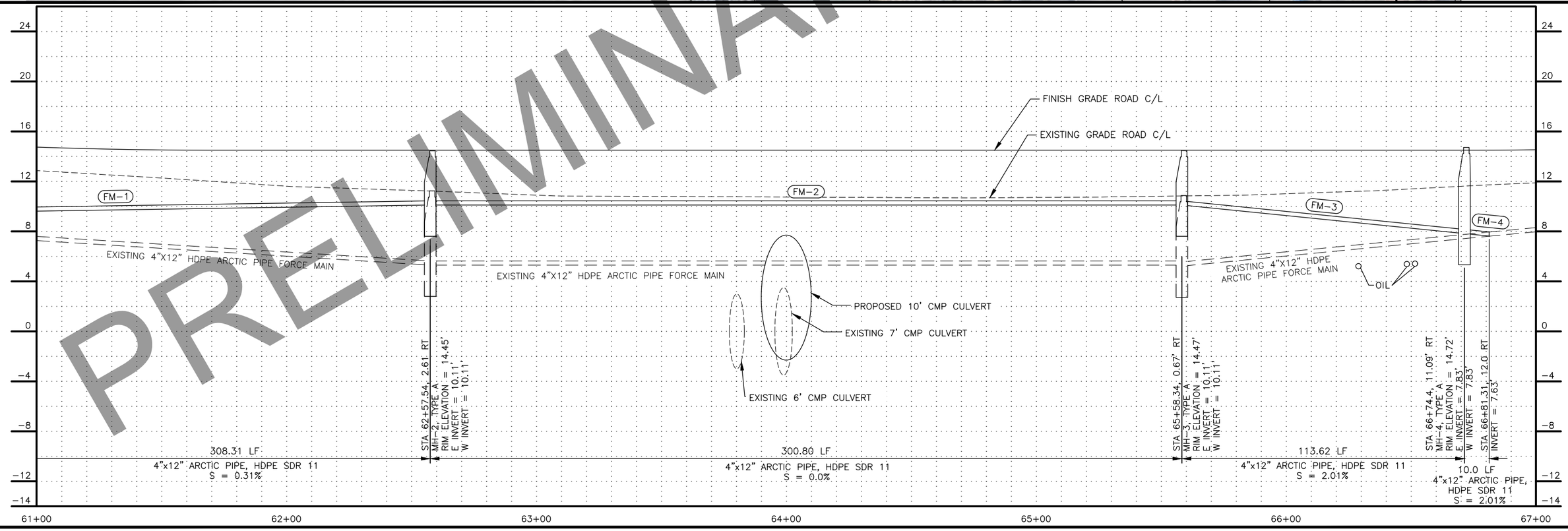
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U12	U18



NOTES:

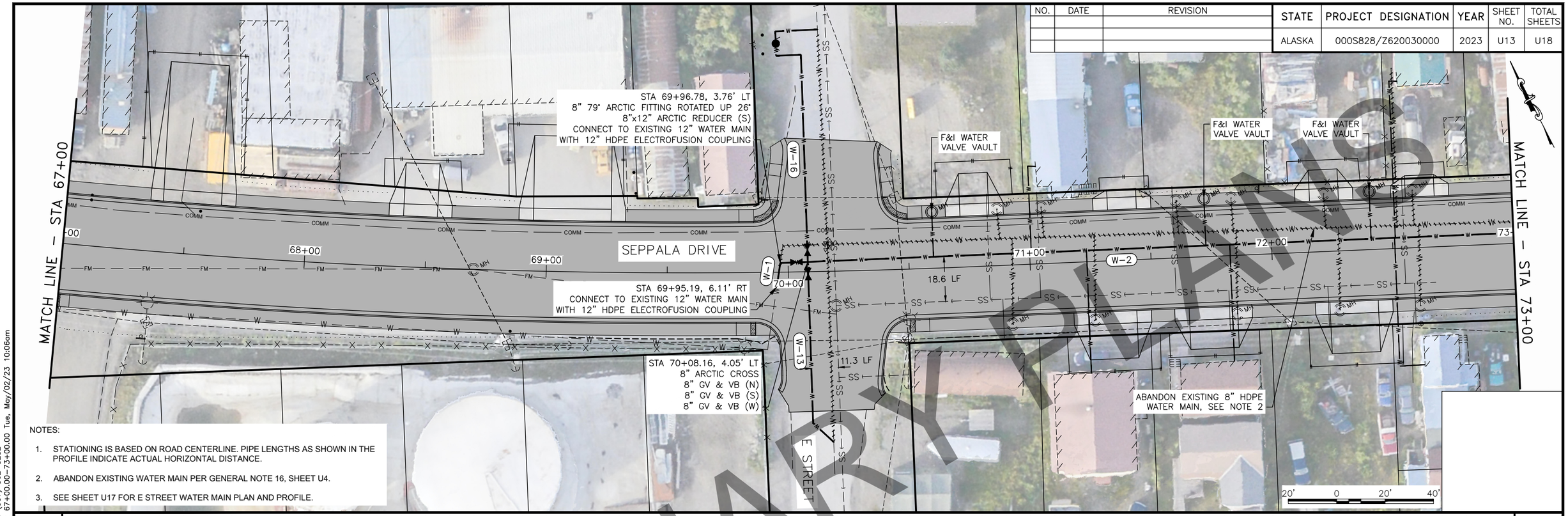
1. STATIONING IS BASE ON ROAD CENTERLINE. PIPE LENGTHS AS SHOWN IN THE PROFILE INDICATE ACTUAL HORIZONTAL DISTANCE.



PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Plan and Profile–U12 61+00.00–67+00.00 Tue, May/02/23 10:04am

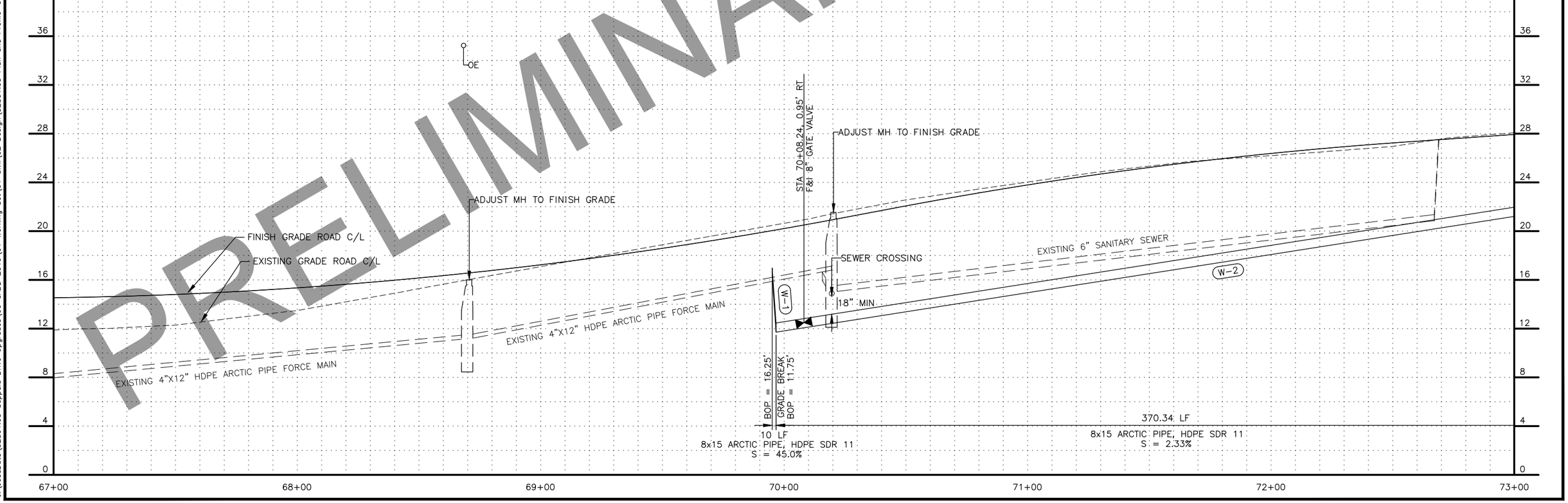
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U13	U18



NOTES:

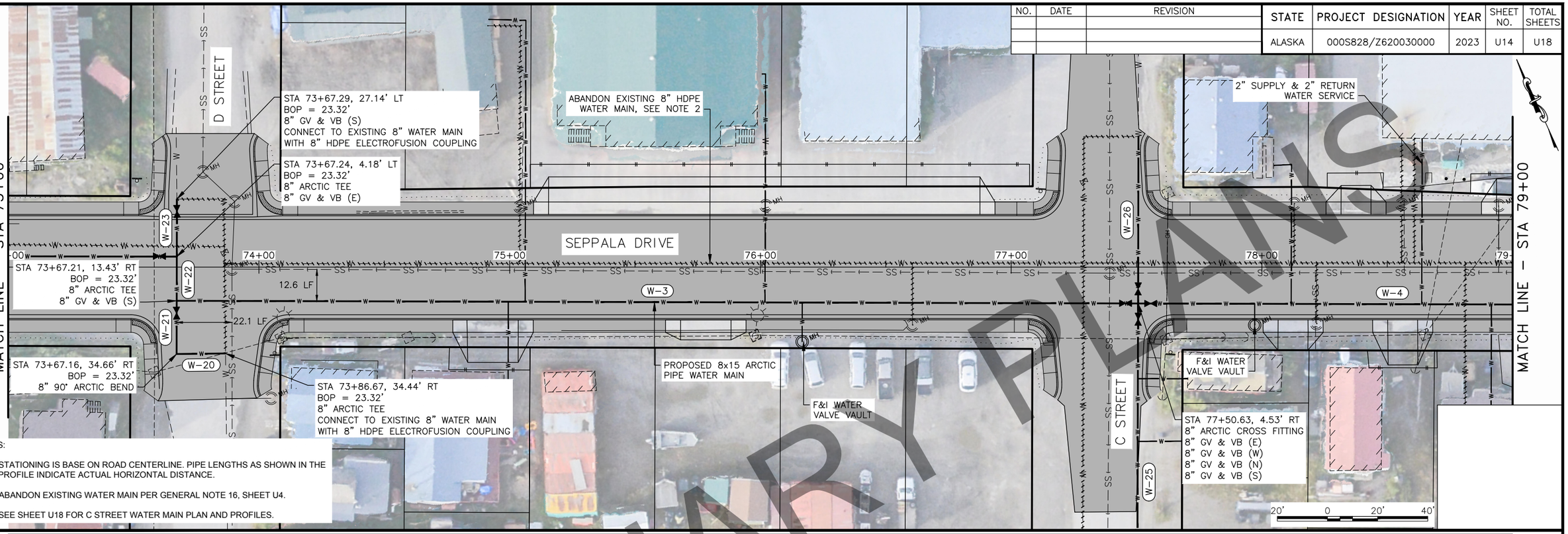
1. STATIONING IS BASED ON ROAD CENTERLINE. PIPE LENGTHS AS SHOWN IN THE PROFILE INDICATE ACTUAL HORIZONTAL DISTANCE.
2. ABANDON EXISTING WATER MAIN PER GENERAL NOTE 16, SHEET U4.
3. SEE SHEET U17 FOR E STREET WATER MAIN PLAN AND PROFILE.



PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
J:\JobsData\32801.05 Seppala Drive Upgrades\00 CADD 2019\01 Working Set\01 Civil\02 Design\32801.05 Plan and Profile-U13 67+00.00-73+00.00 Tue, May/02/23 10:06am

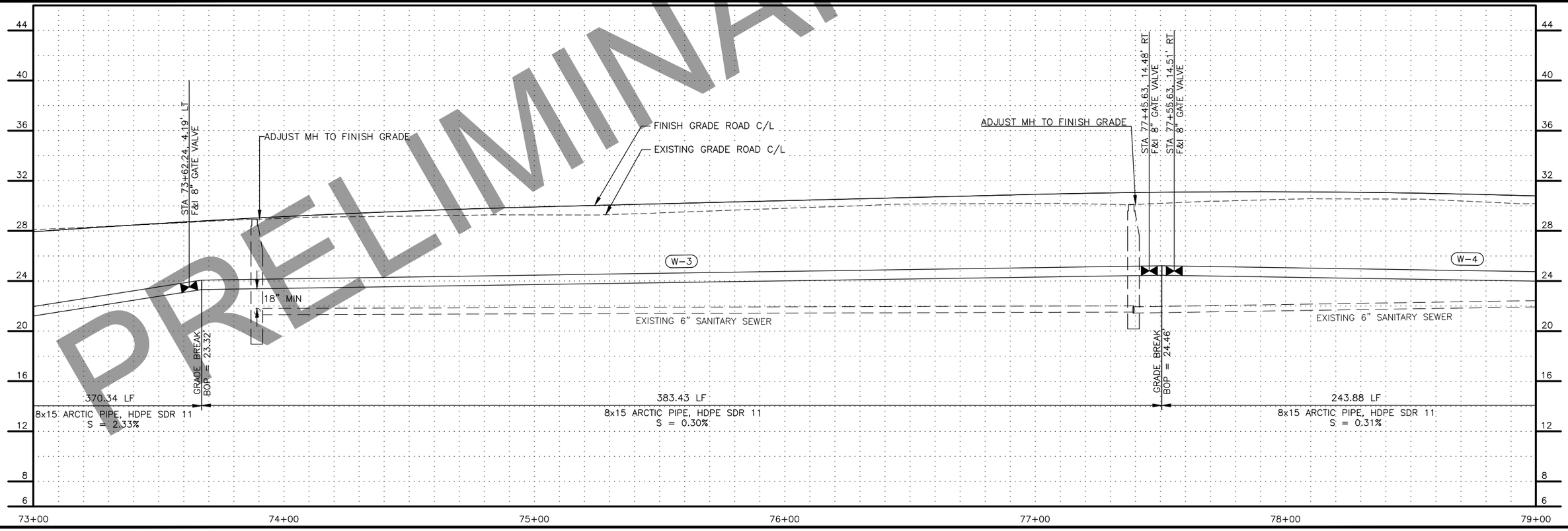
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	000S828/Z620030000	2023	U14	U18



NOTES:

1. STATIONING IS BASE ON ROAD CENTERLINE. PIPE LENGTHS AS SHOWN IN THE PROFILE INDICATE ACTUAL HORIZONTAL DISTANCE.
2. ABANDON EXISTING WATER MAIN PER GENERAL NOTE 16, SHEET U4.
3. SEE SHEET U18 FOR C STREET WATER MAIN PLAN AND PROFILES.



PLANS DEVELOPED BY: CRW ENGINEERING GROUP, INC. 3940 ARCTIC BLVD, STE. 300 ANCHORAGE AK 99503, ANCHORAGE, AK 99503 (907) 562-3252
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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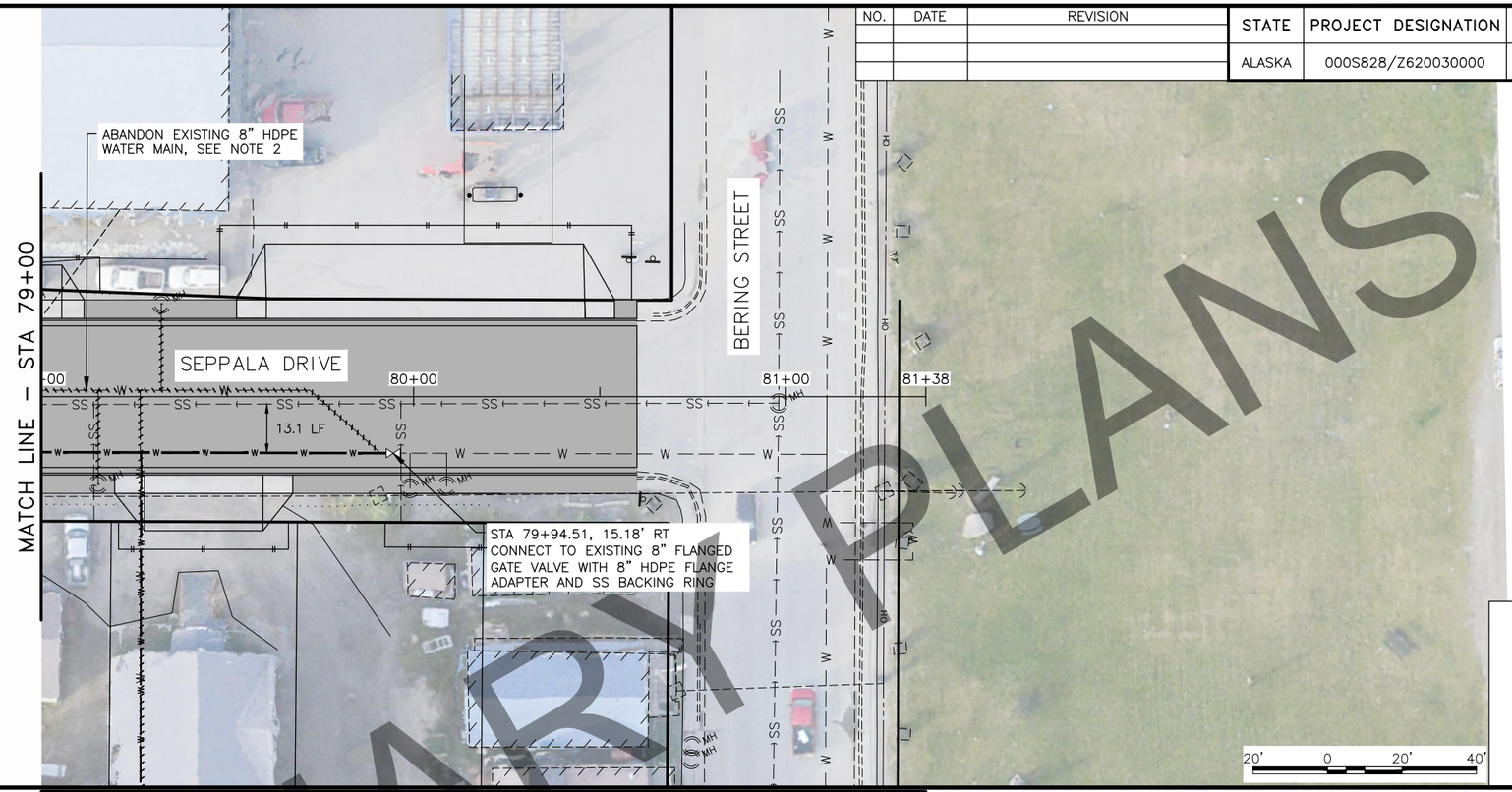
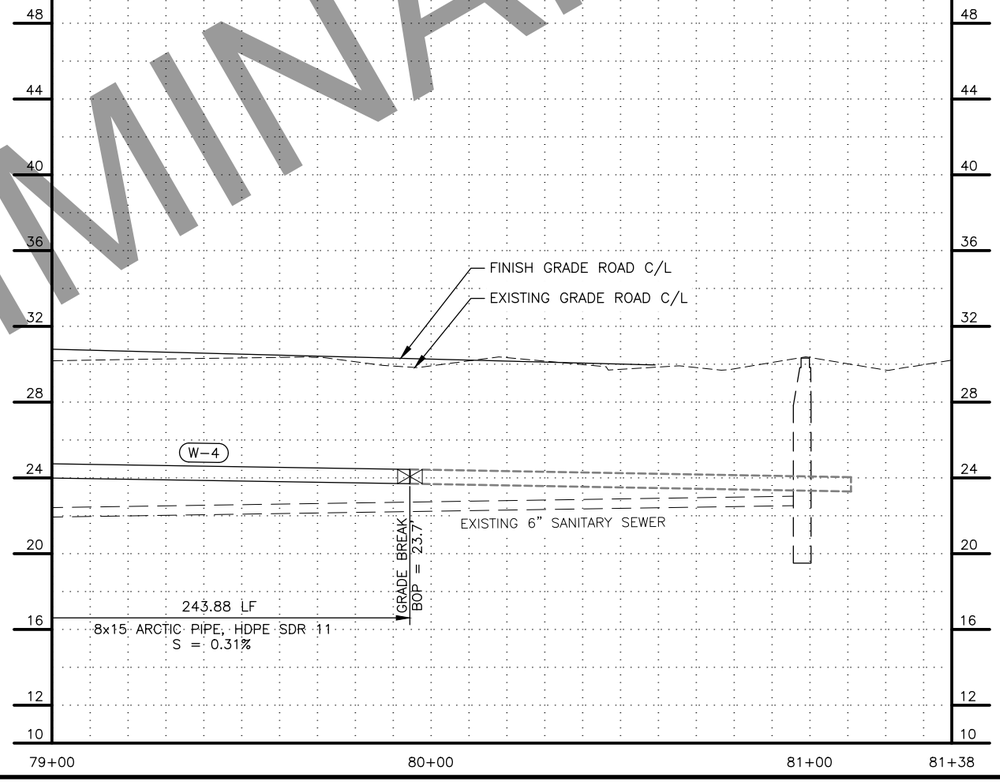


NOTES:

1. STATIONING IS BASE ON ROAD CENTERLINE. PIPE LENGTHS AS SHOWN IN THE PROFILE INDICATE ACTUAL HORIZONTAL DISTANCE.
2. ABANDON EXISTING WATER MAIN PER GENERAL NOTE 16, SHEET U4.



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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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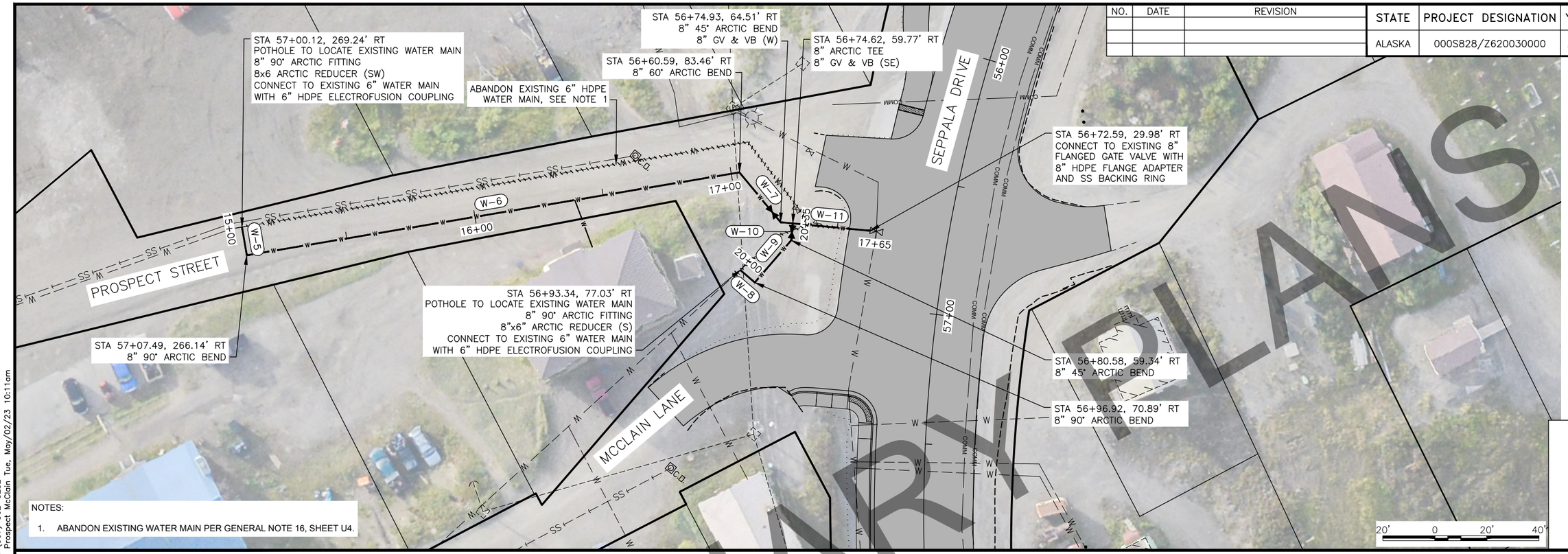
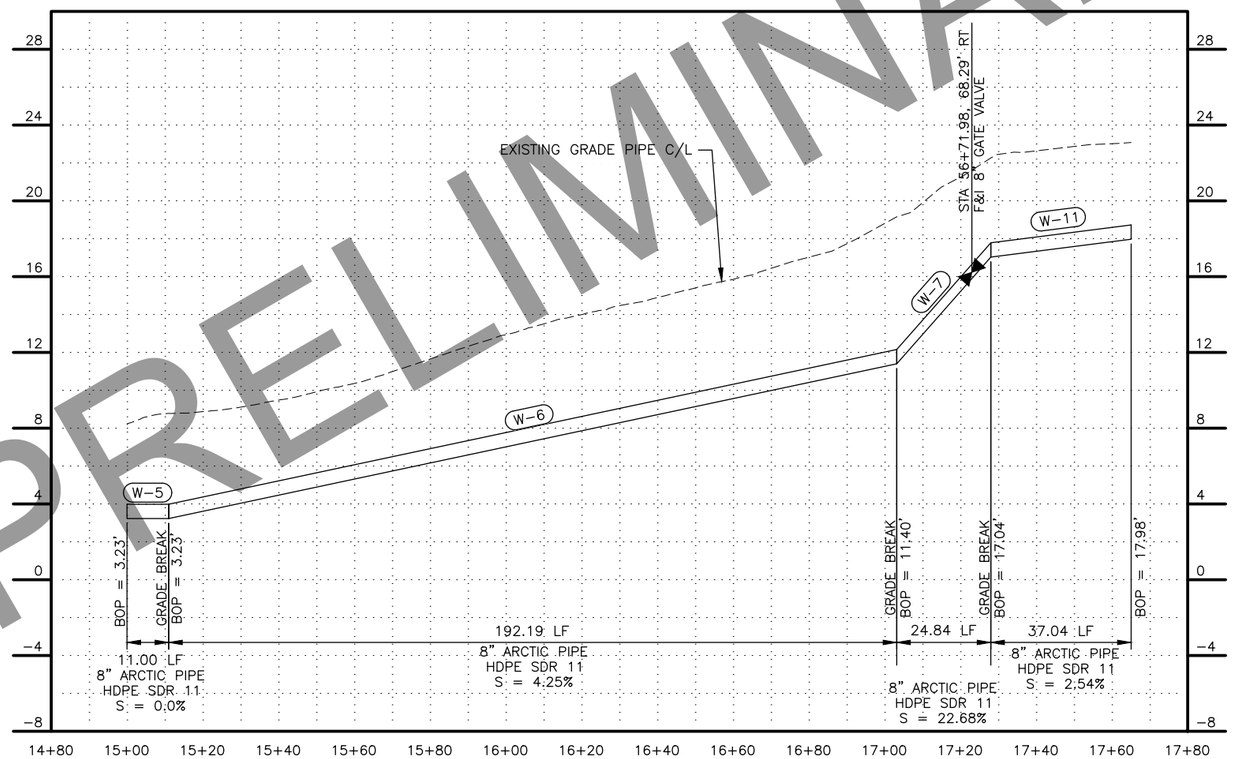
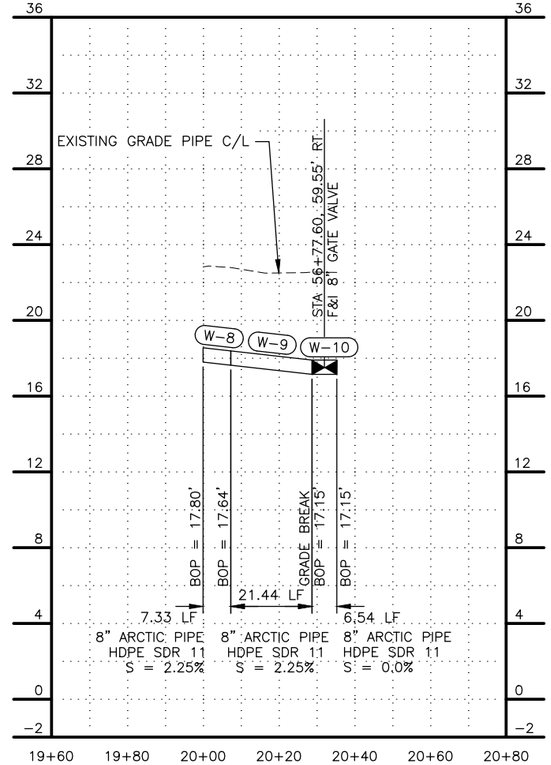


NOTES:

1. ABANDON EXISTING WATER MAIN PER GENERAL NOTE 16, SHEET U4.





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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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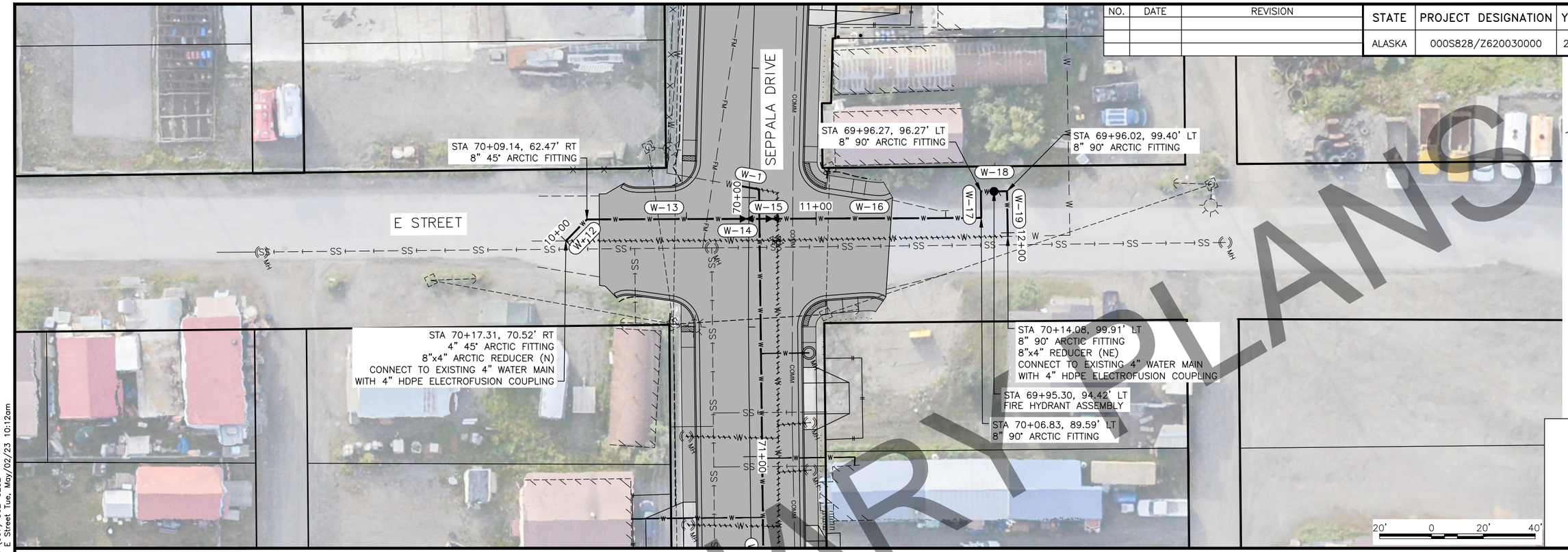

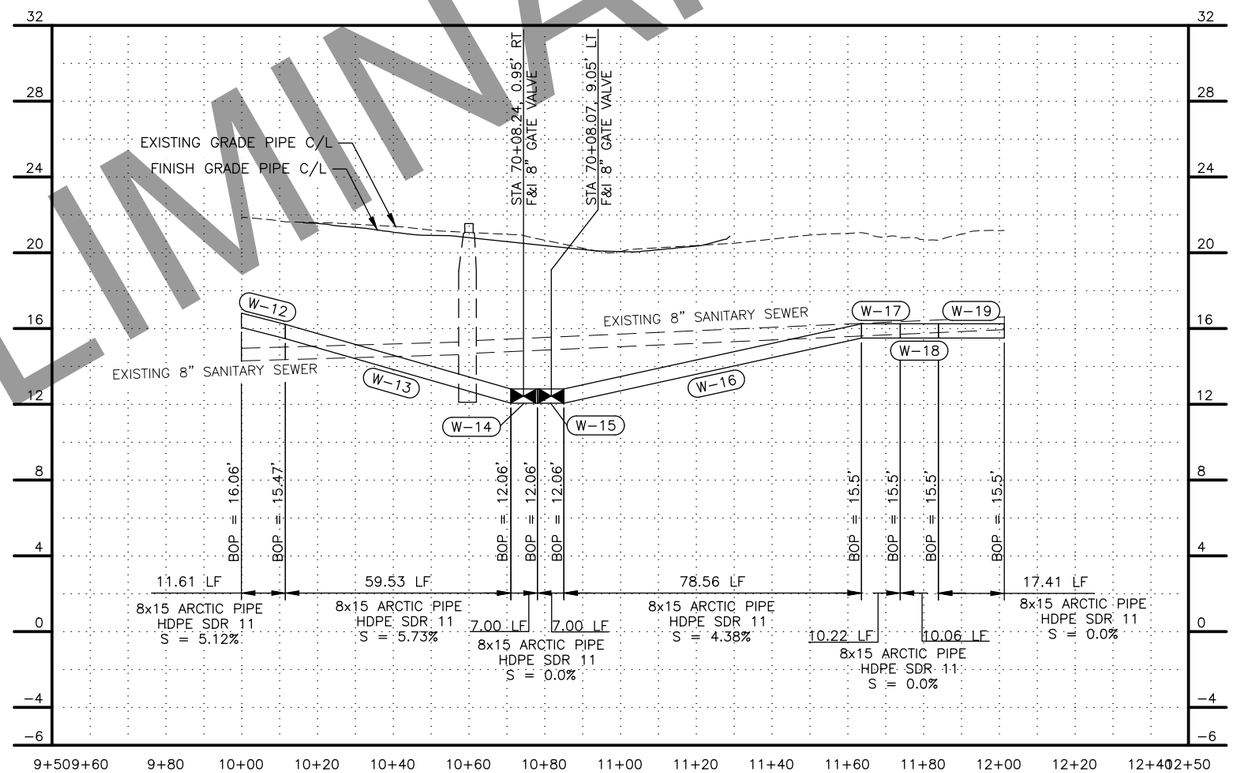

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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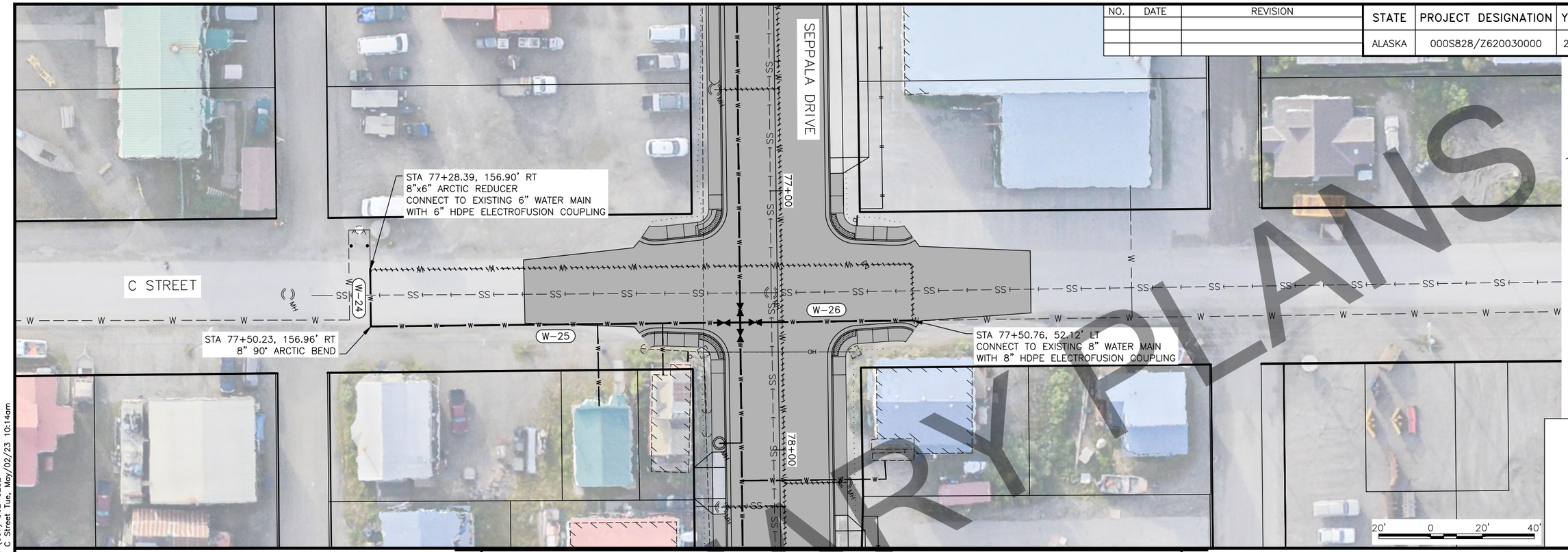

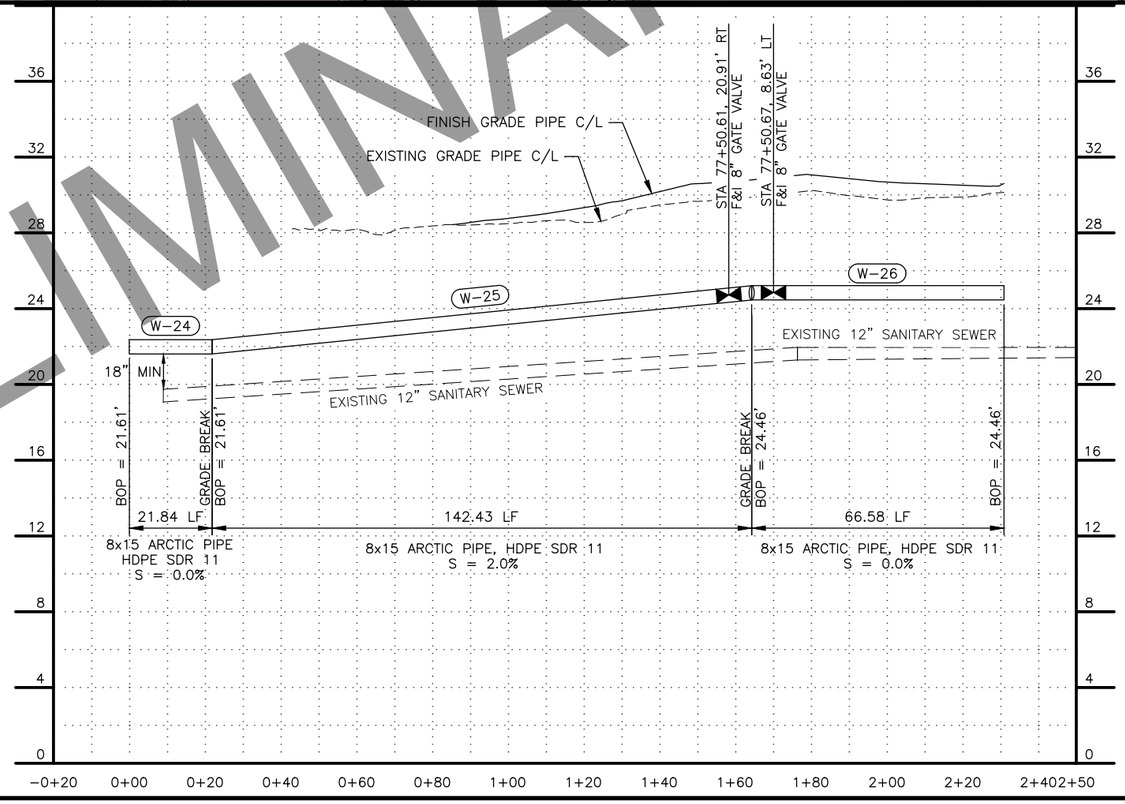

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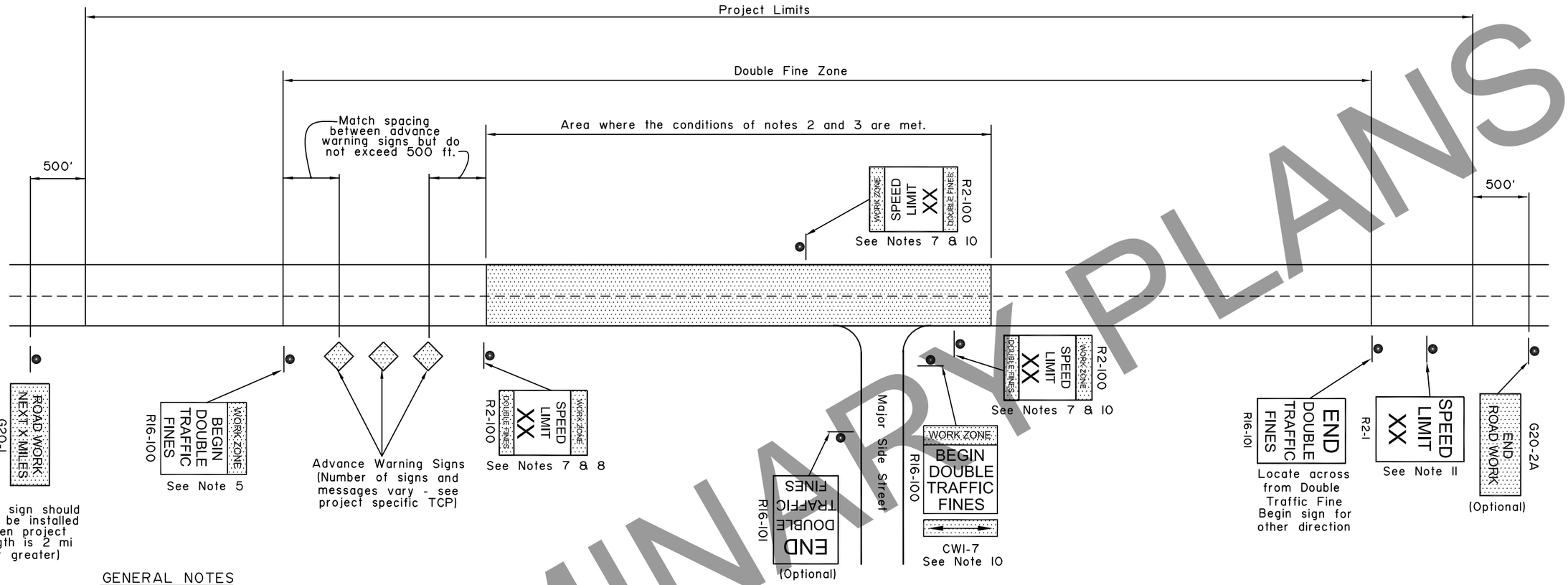


GENERAL NOTES

1. Signs are shown for one direction only (with one exception). Signs for the other direction mirror those shown.

2. Double fine signs shall be used only where one or more of the following conditions exist:
   a. Active work areas (where road workers and/or machines are presently working on or adjacent to a road)
   b. Detours on new temporary roads built for that purpose (this does not include detours on existing streets)
   c. Sections of paved roads where pavement has been removed.
   d. Roads being paved where unmatched asphalt lifts result in a vertical lip between lanes.

3. Double fine signs shall be confined to the areas where the above conditions exist, with the following exceptions:
   a. If the project is 2 miles or shorter in length, the entire project may be posted for double fines when the above conditions exist on any part of the project.
   b. When the above conditions exist at multiple locations separated by less than 2 miles, the locations and the intervening segments may be posted as a single double fine zone.

4. Double fine signs shall be removed or covered when work activity ceases for more than two days and conditions b, c, or d of note 2 are not met.

5. The R16-100 "BEGIN" sign may be used in place of the first advance warning sign. However, when this is done, the appropriate advance warning sign must be reinstalled when the double fine sign is taken down or covered.

6. When a double fine zone is longer than 2 miles, work zone speed limit signs shall be posted at spacings not greater than 2 miles within the double fine zone.

7. "Work zone speed limit signs", as used here, refer either to 1) R2-100 signs or 2) standard R2-1 regulatory speed limit signs with CW20-102 "DOUBLE FINES" plates mounted below.

8. The limit shown on work zone speed limit signs shall be either the existing limit before construction or, if a work zone speed limit order has been approved in accordance with ADOT&PF Procedure 05.05.020 PDR, a reduced limit.

9. All existing regulatory speed limit signs within double fine zones shall either be replaced with R2-100 signs or supplemented with CW20-102 plates.

10. Signs shall be installed at major intersections within the double fine zone to warn entering drivers of double fines. This may be done with a R16-100 sign with a CWI-7 arrow panel on the side street or with two work zone speed limit signs on the main street on either side of the intersection. Use of R16-100 signs on side streets eliminates the need for "Road Work Ahead" signs on those streets. If the speed limit has been reduced, the two work zone speed limit signs are mandatory.

11. At the end of each double fine zone, install an R2-1 sign showing the speed limit for the road beyond the double fine zone.

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V1 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

LOCATION OF DOUBLE TRAFFIC FINE SIGNS

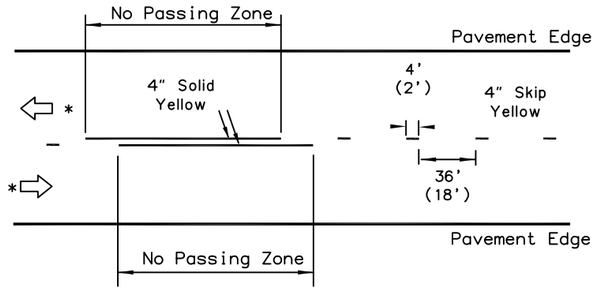
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

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

C-04.12



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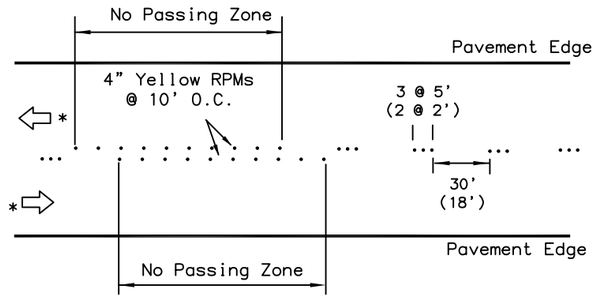
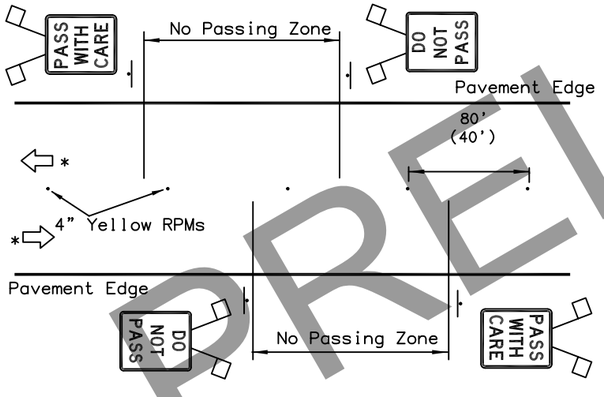


Temporary Raised Pavement Markers

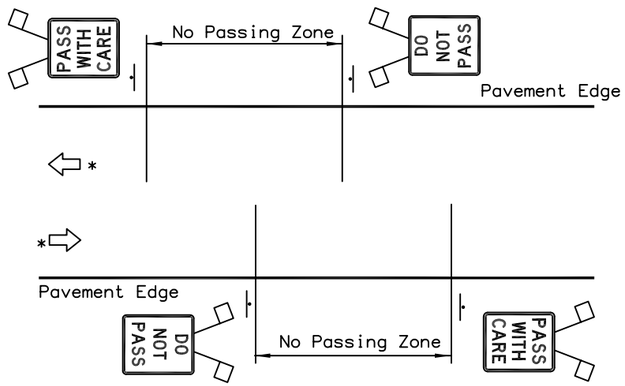
DETAIL A

Two-lane road: No Passing Zones indicated with pavement markings.



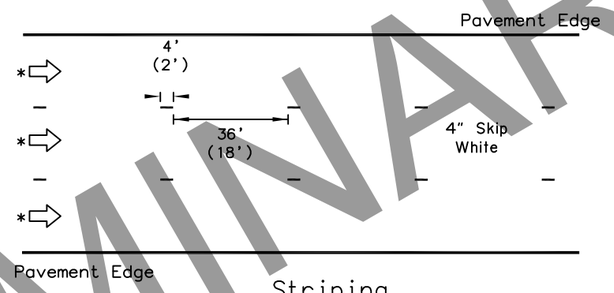
DETAIL B

Two-lane road: No Passing Zones indicated by signs only. Raised pavement markers for centerline delineation.



DETAIL C

Two-lane road: No Passing Zones indicated by signs only (see Note 2c). No centerline delineation.



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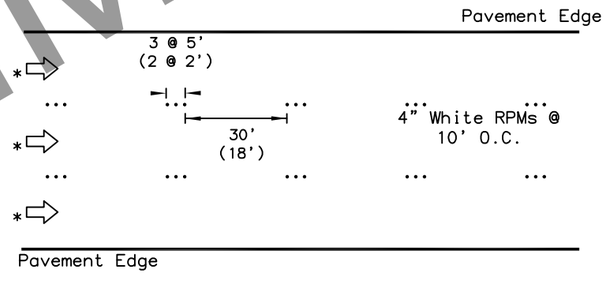


Temporary Raised Pavement Markers

DETAIL D

Multilane one-way road: Lane dividing lines

* Direction of Travel

GENERAL NOTES:

1. Final pavement markings conforming to Part 3 of the Alaska Traffic Manual should be installed before paved roads are open to public travel. If that is not practical, install interim pavement markings as shown on this drawing. Maintain interim pavement markings until final pavement markings are installed.

2. No interim pavement markings are required:
   a. on projects that will not have permanent markings when finished.
   b. in work zones that are open to public travel for no more than one work shift during daytime or for no more than one hour at night.
   c. where DO NOT PASS and PASS WITH CARE signs are installed on two lane roads as shown in Detail C, no pavement markings are required:
      1) for 3 days if seasonal ADT is above 2000, or
      2) for 1 month if seasonal ADT is below 2000.

3. Interim pavement markings should not be in place longer than 14 calendar days before being replaced with permanent markings conforming to Part 3 of the Alaska Traffic Manual unless the Engineer provides written approval.

4. Where R4-1 DO NOT PASS signs are used, install at the beginning of no passing zones and at no more than 1500' spacings within no passing zones.

5. Install high level warning devices on all DO NOT PASS and PASS WITH CARE signs.

6. Offset temporary markings 8"-12" from the future location of permanent markings if applied on the same lift of pavement.

7. Dimensions in parenthesis apply to curves with a radius of 1000 feet or less or where posted speed limit is 30 mph or less.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

INTERIM PAVEMENT MARKINGS

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

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V2 OF V46

C-05.20

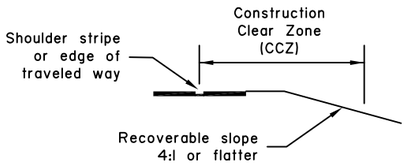


FIGURE 1

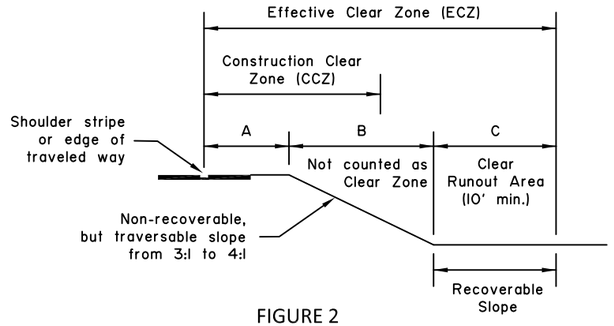


FIGURE 2

Table 1 - Width of Construction Clear Zone (feet)

Hazard	AADT	Posted Speed Limit (MPH)							
		<=30 MPH		35 to 40 MPH		45 to 55 MPH		>=60 MPH	
		6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1
Fill (Fore) & Cut (Back) Slopes	Under 750	5'	5'	6'	8'	8'	12'	12'	16'
	750 - 6,000	6'	10'	8'	12'	14'	18'	20'	26'
	Over 6,000	10'	10'	12'	14'	16'	20'	22'	28'
Fixed Objects	All	15'		30'					

Table 2 - Treatment for Hazards Within Construction Clear Zone

Roadside Condition to be Treated	Category	Treatment
Fill (Fore) Slopes, including trenches	Steeper than 3:1 or water 3 ft. or deeper	Use Table 5 to select from the following two options: 1. Install rigid barrier or guardrail if the condition warrants barrier, or 2. Use drums or Type II barricades if the condition does not warrant barrier.
	3 : 1 to 4 : 1	1. Use drums or Type II barricades if 10 ft. of runout at the bottom of the slope is not clear of obstructions. 2. No traffic control devices are required if 10 ft. of runout at the bottom of the slope is clear of obstructions. 3. If water 3 ft. or deeper is at bottom of slope, use Table 5.
	Flatter than 4 : 1	No traffic control devices are required, except when water 3 ft. or deeper is in construction clear zone use Table 5.
Fixed Objects	All	Install rigid barrier or guardrail if called for by the plans or specifications. Otherwise use SSHC Section 643-3.04.3 - Fixed Objects.

GENERAL NOTES:

1. The "Construction Clear Zone" (CCZ) may be called "Work Zone Clear Zone" or "Clear Zone in Work Zones" in other publications.
2. In the case of conflicts, this Standard Plan has lesser precedence than Section 643 (Traffic Maintenance) of the Standard Specifications for Highway Construction (SSHC).
3. During seasonal shutdown or if construction activiy is scheduled for suspension for 45 days or more, treat hazards within a 30 foot CCZ width or within the permanent design clear zone (CZ) width.
4. These guidelines are not comprehensive and are not intended to limit the use of safety measures.
5. During pilot car operations, keep fixed objects and other hazards, 2 feet or farther, away from the edge of traveled way and delineate with channelizing devices as required by the Engineer.

INSTRUCTIONS FOR USING TABLES 1 THROUGH 5:

Use The following tables to determine how to treat roadside fixed object or slopes (including trenches, berms and moterial stockpiles) in construction clear zones.

TABLE 1: Use to determine whether the hazard in withing the CCZ

TABLE 2: Use to determine the appropriate treatment for hazards within the CCZ. No treatment is required for fixed objects or slopes outside the CCZ.

TABLES 3a and 3b: Use to determine appropriate treatment for pavement edge dropoffs.

TABLE 4: Use to determine barrier flare rates.

TABLE 5: Use to determine whether drums or Type II barricades, or temporary barrier or guardrail, are required on fill slopes or for water hazards.

TABLE 1 NOTES:

1. Measure CCZ from the shoulder stripe. If there is no shoulder stripe, measure from the edge of the traveled way. See Figure 1.
2. If CCZ include or ends on a slope of 3:1 to 4:1, use the Effective Clear Zone (ECZ) that extends beyond the bottom of the slope to proved a clear runout area of 10 foot minimum width. The ECZ width must equal or greater than the CCZ width from Table 1. See Figure 2 and verify that A+C ≥ CCA and C ≥ 10 feet.
3. If a CCZ includes or ends on a slope steeper than 3:1, the top of slope must be delineated by channelizing devices or protected by barrier.
4. The term "fixed objects" is defined in Section 643-1.02 of the SSHC.
5. AADT stands for Average Annual Daily Traffic. Use the higher of the as listed in the plans or the average of June/July/August ADT's, unless otherwise specified by the Engineer.

TABLE 2 NOTES:

1. Eliminate non-traversable slopes (those steeper than 3:1) and fixed objects (as defined in Section 643-1.02 of the SSHC) within the CCZ when practicable. They should only be left in place and treated as treated as shown in this table when elimination is not practicable.
2. Maintain a 2-foot minimum wide lateral buffer space between the edge of traveled way and work areas. This provides an area to install barriers or other delineation by channelizing devices.
3. If necessary to treat multiple hazards on the same road segment (slopes and fixed objects), choose treatments from Table 2 that satisfy the requirements for the most significant of the multiple hazards.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

ROADSIDE SAFETY TREATMENT FOR WORK ZONES

Adopted as an Alaska Standard Plan by: Carolyn M Morehouse

Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 09/15/2022

Last Code and Stds. Review
By: LRG Date: 09/15/2022

Next Code and Standards Review date: 09/15/2032

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V3 OF V46

C-06.00

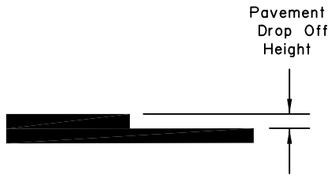


FIGURE 3
Pavement Drop-off Detail

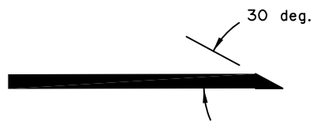


FIGURE 4
Safety Edge Detail

Table 3a - Treatment for Pavement Edge Drop-offs for Posted Speeds > 30 MPH

Nominal Lift Thickness / Height of Pavement Edge Drop-off	Between Active Lanes of traffic moving in same direction	Between Active Lanes of traffic moving in opposing directions	Outside Pavement Edge (if within 3' of traveled way)	Outside Pavement Edge if more than 3' from traveled way and within the CCZ	Across Active Lane, and Entrance and Exit Ramps
0 to 1.0"	No Edge Treatment or Signage Required				
More than 1.0" to 2.0"	**UNEVEN LANE** Signs		**LOW SHOULDER** Signs		Taper Drop-off at slope of 15H:1V or flatter Use BUMP Sign
More than 2.0" to 3.0"	**UNEVEN LANES** Signs - Use Channelizing Devices or Safety Edge	**UNEVEN LANES** Signs - Use Channelizing Devices	**LOW SHOULDER** Signs - Use Channelizing Devices - Consider Safety Edge	**LOW SHOULDER** Signs	
More than 3.0" to 6.0"	**UNEVEN LANES** Signs - Use Channelizing Devices and Use Safety Edge	**UNEVEN LANES** Signs - Use Channelizing Devices	**SHOULDER DROP OFF** Signs - Use Channelizing Devices and Safety Edge; or Use Barrier	**SHOULDER DROP OFF** Signs - Use Channelizing Devices or Barrier	
More than 6"	**Prohibited**		**Barrier** - Installed on traffic side of drop-off	**Channelizing Devices** or **Barrier** according to Table 5	

Table 3b - Sign Numbers

Legend	Number	ATM * Ref.
UNEVEN LANES	W8-11	6F.45
LOW SHOULDER	W8-9	6F.44
SHOULDER DROP OFF (Symbol)	W8-17	6F.44
SHOULDER DROP OFF (Plaque)	W8-17P	6F.44
BUMP	W8-1	2C.28

* ATM = Alaska Traffic Manual

Table 4 - Barrier Flare Rates

Speed (mph)	Flare Rate	
	Rigid	Semi-Rigid
70	20:1	15:1
60	18:1	14:1
55	16:1	12:1
50	14:1	11:1
45	12:1	10:1
40	10:1	8:1
30	8:1	7:1

TABLE 3 NOTES:

1. This table applies to pavement edge drop-offs that are adjacent to traffic and left after the pavement shift ends and for posted speeds > 30 mph. Use engineering judgment for edge treatment for posted speeds ≤30 mph.
2. Use interim pavement markings and signs as required according to Standard Plan C-05 (for all conditions).
3. A Safety Edge is a formed pavement edge taper sloped at approximately 30°, but not more than 35° from horizontal.
4. Use a Safety Edge for longitudinal or diagonal pavement edge drop-offs more than 2 inches within a traveled lane. See Figure 3. Use a Safety Edge on longitudinal joints between lanes as required by Table 3a.
5. The "Across Active Lane, and Entrance and Exit Ramps" column applies to any location where motorists will cross pavement drop-offs (includes transverse construction joints) at an acute angle (45° or more). Taper may be reduced to 6:1 at posted speeds of 30 mph or less.
6. Signage applies to all posted speed for edge drop-offs as shown in Table 3a. For information on signs and locations, see SSHC Section 643-3.04 and the Alaska Traffic Manual (ATM). Signs should be place at the beginning and end points of each paved segment, and in locations between as specified. Also, see Table 3b.
7. "Channelizing Devices" means drums with steady-burn lights, candle, or cones.
8. Treatment for pavement edge drop-offs are in addition to Treatment for Hazards within Construction Clear Zones (CCZs) (i.e. fixed obstacle or slope protection may also be required).

BARRIER TERMINATION AND TABLE 4 NOTES:

1. Terminate portable rigid barrier (concrete or metal) with one of the following methods:
   a) An NCHRP 350 or MASH TL-3 approved end treatment or crash cushion.
   b) An NCHRP 350 or MASH TL-3 approved buried-in-backslope treatment
   c) A Thrie-Beam transition according to Std. Plan G-32 (except attached to a rigid barrier instead of a bridge rail) and terminated with a MASH TL-3 end treatment.
   d) Terminate outside the CCZ by flaring barriers away from the roadway at the rate shown in Table 4 for rigid barriers (maximum 10:1 cross slope in front of the barrier).
   e) Sloped ends may be used to terminate barriers within the CZ when the regulatory (black on white sign) speed limit is 30 mph or below. For speeds more than 30 mph, the Engineer may approve sloped ends if they determine NCHRP 350 or MASH compliant end treatments are impracticable. See Std. Plan G-46 for concrete barrier sloped ends.
2. Terminate temporary W-Beam guardrail with one of the following methods:
   a. With a MASH TL-3 approved end treatment
   b. By burying it in a backslope according to Std. Plan G-16
   c. By flaring the guardrail away from the road at the rate shown in Table 4 for semi-rigid barriers (maximum 10:1 cross slope in from of the guardrail).
   d. Terminate outside the CZ.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

ROADSIDE SAFETY TREATMENT FOR WORK ZONES

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

Adoption Date: 09/15/2022

Last Code and Stds. Review By: LRG Date: 09/15/2022

Next Code and Standards Review date: 09/15/2032

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V4 OF V46

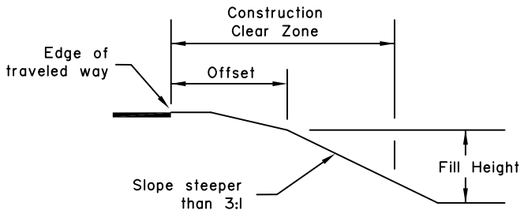


FIGURE 5

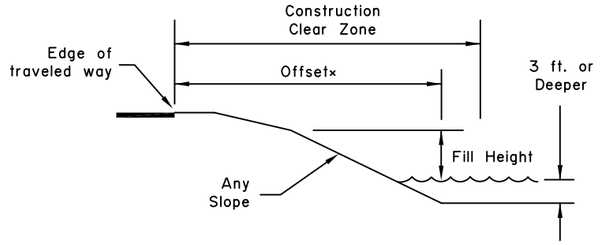


FIGURE 6

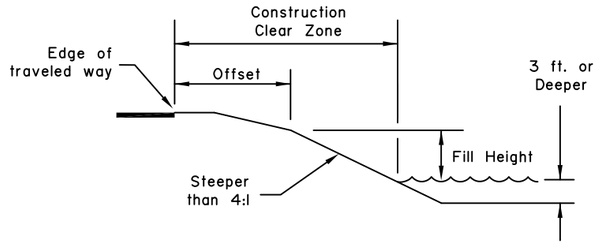


FIGURE 7

Table 5 - Minimum Fill Height at which Temporary Barrier Is Waranted

			Seasonal Traffic Volume - ADT																
			0-750	751-1500			1501-6000				6001-15000				15001+				
Posted WZ Speed Limit	Duration (# days)	Offset (ft)	All Slopes/ Water Condition	slope		Water	slope			Water	slope			Water	slope			Water	
				2.9:1 to 1.1:1	1:1 to Vert.		2.9:1 to 2.1:1	2:1-1.1:1	1:1-Vert.		2.9:1 to 2.1:1	2:1-1.1:1	1:1-Vert.		2.9:1 to 2.1:1	2:1-1.1:1	1:1-Vert.		
30 MPH and lower	4-30	5-10															11'	11'	11'
		3-5											11'	11'					
		0-3																	
	31-100	5-10																	
		3-5							11'	11'			11'	11'		35'	11'	11'	11'
		0-3										35'				31'			
	101+	5-10														35'	11'	11'	11'
		3-5							11'	11'		35'	11'	11'		29'			
		0-3			11'	11'						31'				17'	8'	8'	8'
35 to 45 MPH	4-30	6-12															10'	10'	10'
		3-6											10'	10'					
		0-3														29'			
	31-100	6-12														29'	10'	10'	10'
		3-6							10'	10'		29'	10'	10'					
		0-3														19'	9'	9'	9'
	101+	6-12										29'	10'	10'		27'	10'	10'	10'
		3-6			10'	10'			10'	10'		28'				12'	7'	7'	7'
		0-3						29'				18'	9'	9'		7'	6'	6'	6'
45 to 55 MPH	4-30	9-18															8'	8'	8'
		3-9											8'	8'		13'			
		0-3																	
	31-100	9-18														13'	8'	8'	8'
		3-9							8'	8'		13'	8'	8'			7'	7'	7'
		0-3						13'								7'	6'	6'	6'
	101+	9-18										13'	8'	8'		13'	7'	7'	7'
		3-9			8'	8'		13'	8'	8'		12'	7'	7'	37'	6'	5'	5'	5'
		0-3										7'	6'	6'	23'	5'	3'	3'	3'
60 MPH and above	4-30	13-26															6'	6'	6'
		3-13											6'	6'		10'			
		0-3										10'							
	31-100	13-26														10'	6'	6'	6'
		3-13							6'	6'		10'	6'	6'					
		0-3						10'							40'	6'	5'	5'	5'
	101+	13-26														10'	6'	6'	6'
		3-13			6'	6'		10'	6'	6'		10'	6'	6'	30'	6'	4'	4'	4'
		0-3									34'	6'	5'	5'	10'	3'	1'	1'	1'

TABLE 5 NOTES:

1. Use this table for fill slopes steeper than 3:1 or water hazards that start within the Construction Clear Zone (CCZ). See Figures 5, 6, and 7.
2. Near Lane AADT, as used in this table, means the higher of the AADT listed in the plans or the seasonal Average Daily Traffic (ADT) for June, July, and August in the lane nearest the slope or water hazard during the planned construction period. Assume an even distribution of traffic across lanes - i.e. if there is 6000 one-way AADT on three lanes, use 2000 AADT in each lane.
3. Duration is the estimated number of days traffic will be exposed to the fill (fore) slope or water hazard.
4. To use Table 5, fine the cell that corresponds to the speed limit, duration, offset, traffic volume, and the presence of a slope or water hazard.
   a. If the cell is unshaded, a Temporary Barrier is required when the fill height equals or exceeds the height (in feet) shown in the cell.
   b. If the cell is shaded or fill height is less than the height shown in the cell, use drums or Type II barricades.
5. A water hazard is defined as:
   a. Water 3 feet or deeper within the CCZ, or
   b. Where a slope steeper than 4:1 starts within the CCZ and leads to water 3 feet or deeper.
6. Consider water depth to be the highest level anticipated during the duration period.
7. If both a water hazard and a slope steeper than 3:1 are present, install Temporary Barrier if warranted for either condition.
8. Temporary Barrier is rigid barrier (concrete or metal) or guardrail meeting NCHRP or MASH TL-3, or higher.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

ROADSIDE SAFETY TREATMENT FOR WORK ZONES

Adopted as an Alaska Standard Plan by: Carolyn H Morehouse

Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 09/15/2022

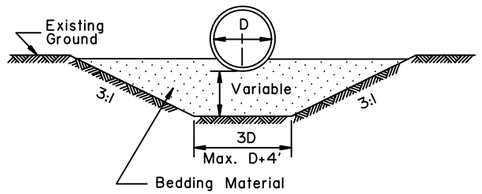
Last Code and Stds. Review By: LRG Date: 09/15/2022

Next Code and Standards Review date: 09/15/2032

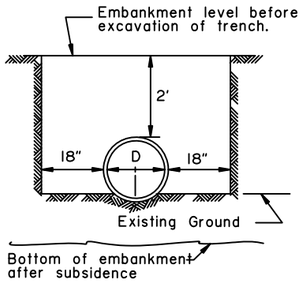
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V5 OF V46

C-06.00

CULVERT PIPE



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



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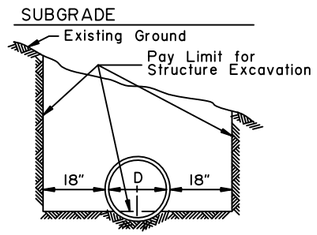

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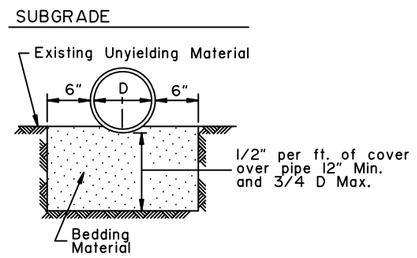
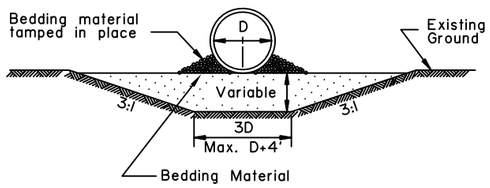
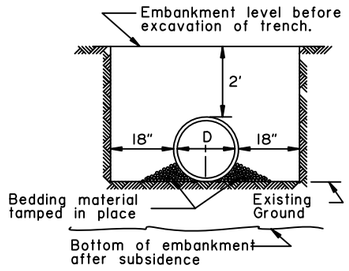


TYPE "D"
ROCK OR UNYIELDING MATERIAL



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



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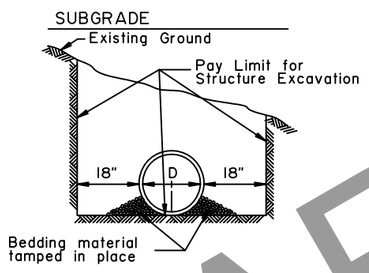

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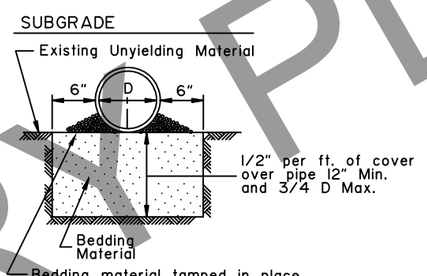
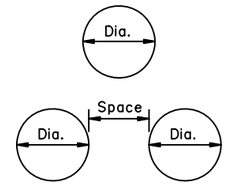


'ALTERNATE' TYPE "D"
ROCK OR UNYIELDING MATERIAL

GENERAL NOTES:

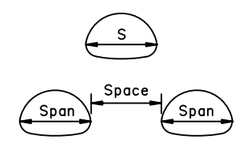
1. Sidefill shall be placed and compacted with care under haunches of pipe and shall be brought up evenly and simultaneously on both sides of pipe to 1 foot above the top of the full length of the pipe.
2. Alternate installation methods may only be used when specified or approved by the Engineer.

D = Nominal Pipe Diameter



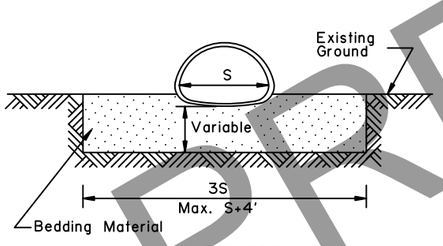
MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Dia. of pipe or 3', whichever is less.

S = Nominal Pipe Arch Span

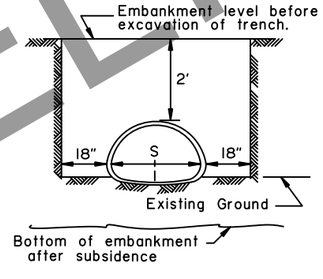


MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Span of pipe arch or 3', whichever is less.

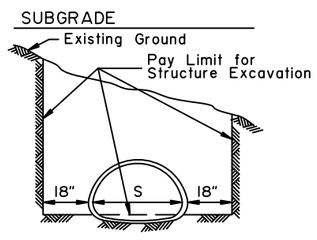
ARCH



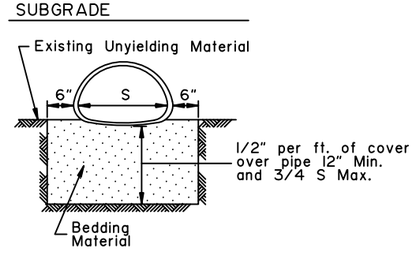
TYPE "A"
FOUNDATION STABILIZATION
To be used in unstable areas as directed by the Engineer.



TYPE "B"



TYPE "C"



TYPE "D"
ROCK OR UNYIELDING MATERIAL

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT PIPE & ARCH INSTALLATION 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

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V6 OF V46

D-01.02

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.

GENERAL NOTES:

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. 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.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. 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.
7. 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".

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

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V7 OF V46

D-04.22

Minimum & Maximum Cover for 2 2/3" x 1/2" Steel 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	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		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)
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		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)
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		12	10	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)	Max. (Ft)
60	12	46	67	87	100	100+	100+	100+
66	12	42	60	79	91	100+	100+	100+
72	12	38	55	73	83	100+	100+	100+
78	12	35	51	67	77	93	100+	100+
84	12	32	47	62	71	86	100+	100+
90	12	30	44	58	67	80	95	100+
96	12	28	41	54	62	75	89	97
102	18	27	39	51	59	71	84	91
108	18	25	37	48	55	67	79	86
114	18	24	35	45	52	63	75	82
120	18	22	33	43	50	60	71	77
126	18	21	31	41	47	57	68	74
132	18	20	30	39	45	54	64	70
138	18	19	28	37	43	52	62	67
144	18	18	27	36	41	50	59	64

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

GENERAL NOTES

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. 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.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. 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.
7. 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".

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.

PROJECT NUMBER:
000S828/Z620030000
SHEET NO.: V8 OF V46

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

D-04.22

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

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.

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V9 OF V46

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

D-04.22

Minimum & Maximum Cover for Aluminum Spiral Rib Circular Pipe*					
Gage		16	14	12	10
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

*¾ x ¾ x 7½ in. Corrugations

Minimum & Maximum Cover for Aluminum Spiral Rib Pipe-Arch*						
Gage			16	14	12	10
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

*¾ x ¾ x 7½ in. Corrugations

ALUMINUM SPIRAL RIB PIPE

STEEL SPIRAL RIB PIPE

Minimum & Maximum Cover for Steel and Aluminized Steel Spiral Rib Circular Pipe*					
Gage		16	14	12	10
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

*¾ x ¾ x 7½ 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

*¾ x ¾ x 7½ in. Corrugations

GENERAL NOTES

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. 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.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. 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.
7. 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".

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska Standard Plan by: Carolyn Morehouse

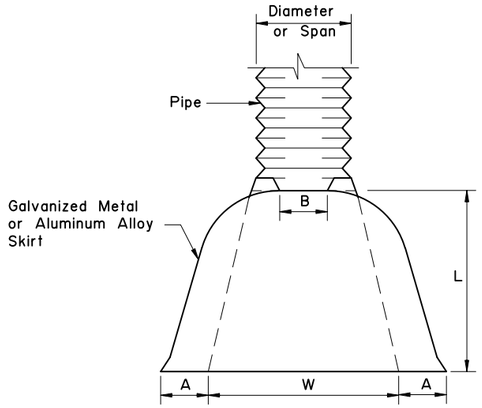
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

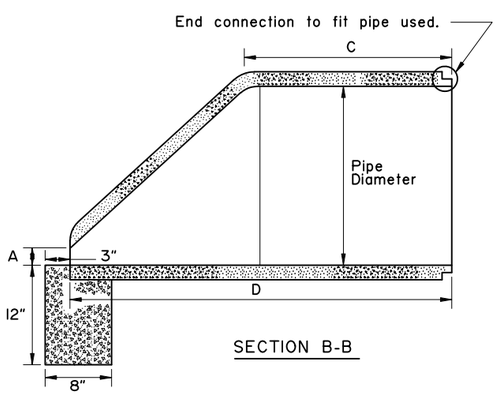
Next Code and Standards Review date: 7/8/2030

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V10 OF V46



PLAN

ROUND AND PIPE ARCH

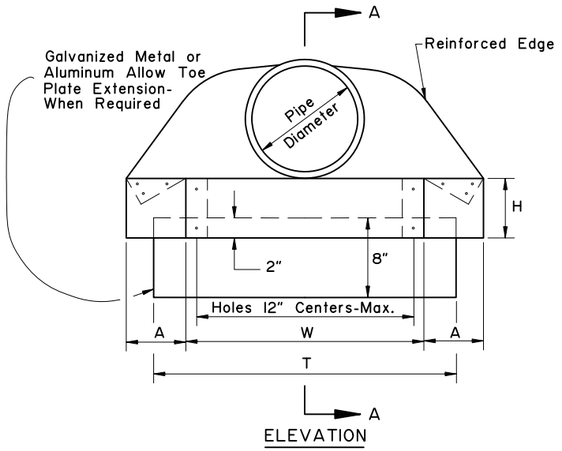


SECTION B-B

MINIMUM DIMENSIONS					
Pipe Diameter	A	B	C	D	E
12"	4"	1 3/4"	24"	46"	24"
18"	9"	2"	25"	50"	36"
24"	9 1/2"	2 1/2"	30"	72"	48"
30"	12"	3"	20"	73"	60"
36"	15"	3 3/8"	35"	97"	72"
42"	21"	3 3/4"	35"	98"	78"
48"	24"	4 1/4"	26"	98"	84"
54"	27"	4 5/8"	33"	99"	82"

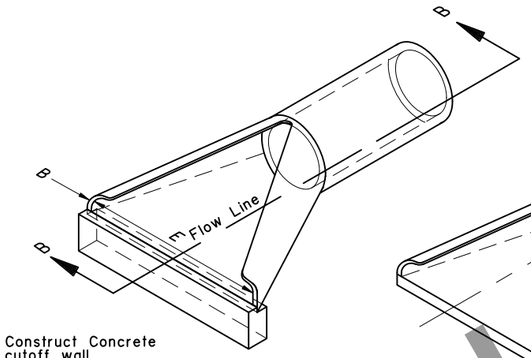
ROUND PIPE									
Pipe Diam. Inches	Thickness For Aluminum	Thk. for Galv. Metal	Dimension Inches A 1" Tol.	B Max.	H 1" Tol.	L 1 1/2" Tol.	W 2" Tol.	T 2" Tol.	Skirt	Approx. Slope
12"	0.060	0.064	6"	6"	6"	21"	24"	34"	1 Pc.	2 1/2
15"	0.060	0.064	7"	8"	6"	26"	30"	40"	1 Pc.	2 1/2
18"	0.060	0.064	8"	10"	6"	31"	36"	46"	1 Pc.	2 1/2
21"	0.060	0.064	9"	12"	6"	36"	42"	52"	1 Pc.	2 1/2
24"	0.075	0.064	10"	13"	6"	41"	48"	58"	1 Pc.	2 1/2
30"	0.075	0.079	12"	16"	8"	51"	60"	70"	1 Pc.	2 1/2
36"	0.105	0.079	14"	19"	9"	60"	72"	94"	2 Pc.	2 1/2
42"	0.105	0.109	16"	22"	11"	69"	84"	106"	2 Pc.	2 1/2
48"	0.105	0.109	18"	27"	12"	78"	90"	112"	2 Pc.	2 1/4
54"	0.105	0.109	18"	30"	12"	84"	102"	122"	2 Pc.	2 1/4
60"	0.135	0.109	18"	33"	12"	87"	114"	134"	3 Pc.	2 1/4
66"	0.135	0.109	18"	36"	12"	87"	120"	142"	3 Pc.	2 1/4
72"	0.135	0.109	18"	39"	12"	87"	126"	146"	3 Pc.	2 1/4
78"	— —	0.109	18"	42"	12"	87"	132"	152"	3 Pc.	1 1/4
84"	— —	0.109	18"	45"	12"	87"	138"	158"	3 Pc.	1 1/6

PIPE-ARCH										
Pipe-Arch Dimension Inches Span	Rise	Thickness for Aluminum	Thk. for Galv. Metal	Dimension Inches A 1" Tol.	B Max.	H 1" Tol.	L 1 1/2" Tol.	W 2" Tol.	T 2" Tol.	Skirt	Approx. Slope
17"	13"	0.060	0.064	7"	9"	6"	19"	30"	40"	1 Pc.	2 1/2
21"	15"	0.060	0.064	7"	10"	6"	23"	36"	46"	1 Pc.	2 1/2
24"	18"	0.060	0.064	8"	12"	6"	28"	42"	52"	1 Pc.	2 1/2
28"	20"	0.075	0.064	9"	14"	6"	32"	48"	58"	1 Pc.	2 1/2
35"	24"	0.075	0.079	10"	16"	6"	39"	60"	70"	1 Pc.	2 1/2
42"	29"	0.105	0.079	12"	18"	8"	46"	75"	85"	1 Pc.	2 1/2
49"	33"	0.105	0.109	13"	21"	9"	53"	85"	103"	2 Pc.	2 1/2
57"	38"	0.105	0.109	18"	26"	12"	63"	90"	114"	2 Pc.	2 1/2
64"	43"	0.105	0.109	18"	30"	12"	70"	102"	130"	2 Pc.	2 1/4
71"	47"	0.135	0.109	18"	33"	12"	77"	114"	144"	3 Pc.	2 1/4
77"	52"	0.135	0.109	18"	36"	12"	84"	120"	158"	3 Pc.	2 1/4
83"	57"	0.135	0.109	18"	39"	12"	90"	126"	170"	3 Pc.	2 1/4

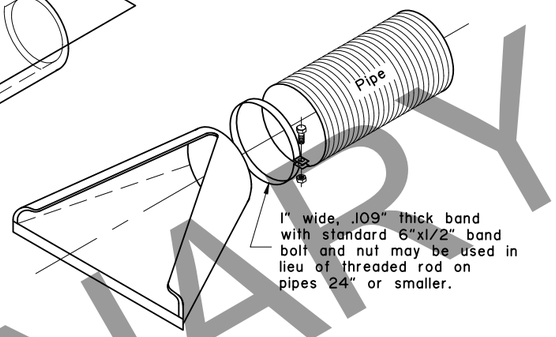


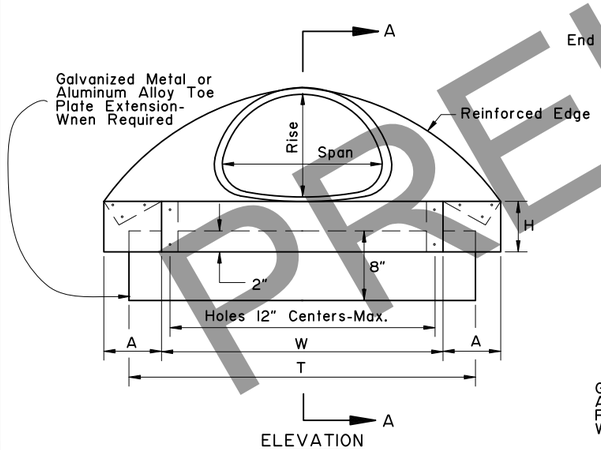
ELEVATION

ROUND PIPE



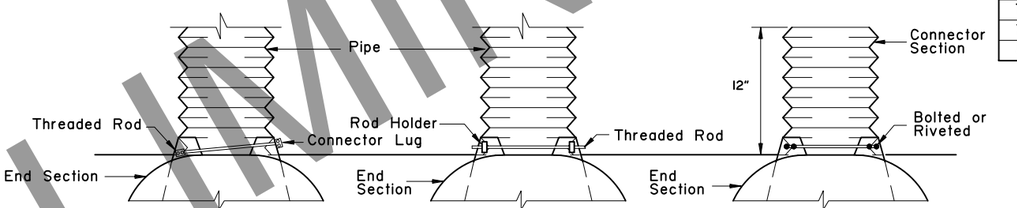
PRECAST CONCRETE END SECTION





ELEVATION

PIPE ARCH

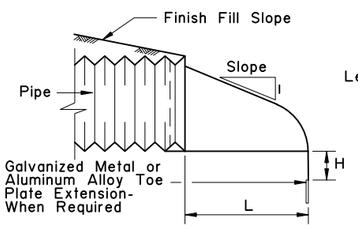


For 12" thru 24" Round Pipe with Annular Corrugations

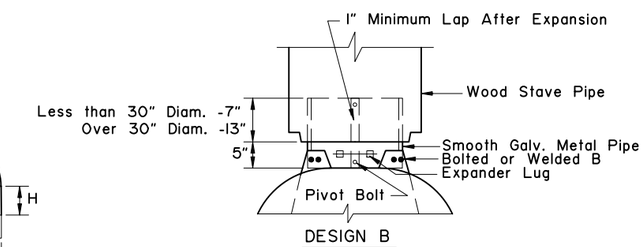
For 30" & 36" Round Pipe and 18"x11" thru 58"x36" Pipe Arch with Annular Corrugations.

For 42" thru 84" Round Pipe and 65"x40" thru 85"x54" Pipe Arch with Annular Corrugations and All Helically Corrugated Pipe and Pipe Arch.

DESIGN A



SECTION A-A



DESIGN B

METAL END SECTION CONNECTED TO WOOD STAVE PIPE

GENERAL NOTES:

1. Toe plate extensions will be required only when provided for on the plans. When required, the toe plate extensions shall be punched with holes to match those in lip of skirt and fastened with 3/8 inch or larger galvanized nuts and bolts and shall be the same gage as the end section.
2. Galvanized Metal or Aluminum Alloy End Sections may be used on Wood Stave and Plastic Pipe.
3. All 3 piece bodies shall have 12 gage sides and 10 gage center panels. Multiple panel bodies shall have lap seams which are to be tightly joined by 3/8" galvanized rivets or bolts.

PROJECT NUMBER:
000S828 / Z620030000
SHEET NO.: V11 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

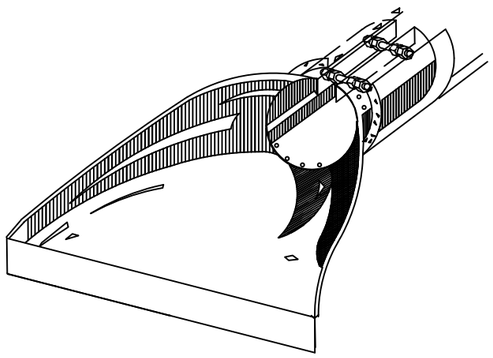
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

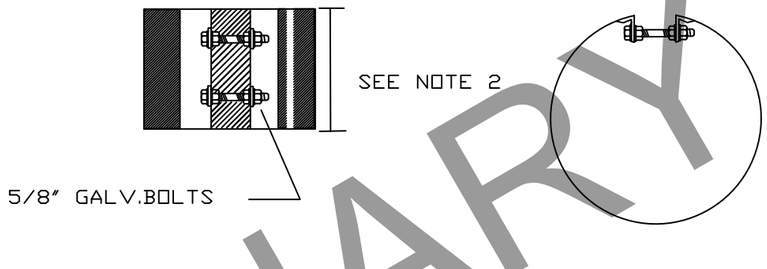
Last Code and Stds. Review
By: Date:

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

D-06.10



FOR CONNECTING CONCRETE PIPE OR CORRUGATED POLYETHYLENE PIPE TO METAL END SECTION.



GENERAL NOTES

1. See general notes on sheet 1 of 3.
2. See sheet 1 of 3 for metal end section dimensions.
3. Insert bolts, washers and rivets shall be galvanized. Insert thickness is the same as the end section.
4. Use culvert inserts only at inlet.

METAL INSERTS FOR USE WITH CORRUGATED PLASTIC PIPE AND METAL END SECTIONS

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

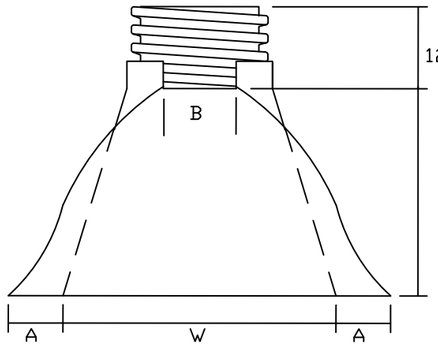
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

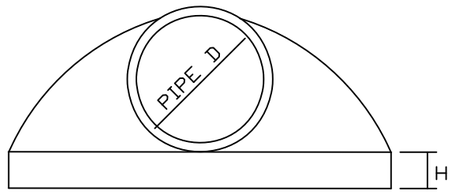
Last Code and Stds. Review
By: Date:

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

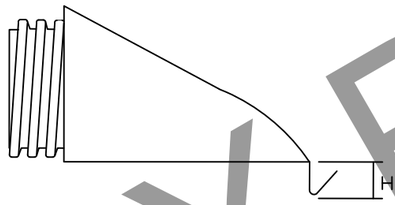
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V12 OF V46



TOP VIEW



END VIEW



SIDE VIEW

PIPE DIAMETER	DIMENSIONS IN MILLIMETERS				
	A(1"±)	B MAX	H(1"±)	L(1/2"±)	W(2"±)
12" and 15"	6 1/2"	10"	6 1/2"	25"	29"
18"	7 1/2"	15"	6 1/2"	32"	35"
24"	7 1/2"	18"	6 1/2"	36"	45"
30"	10 1/2"	N/A	7"	53"	68"
36"	10 1/2"	N/A	7"	53"	68"

PLASTIC END SECTION FOR CORRUGATED PLASTIC PIPE

GENERAL NOTES

1. Plastic flared end sections may be used with HDPE corrugated culvert pipes where noted in project plans or approved by project engineer.
2. Consult manufacturer's recommendations for proper sizing and coupling devices. Recommended fasteners may include connecting bands or cinch ties. Fittings across dimension B may include threaded rods with wing nuts or bolts and washers. plastic welds may be recommended.
3. Align coupling to accomodate pipe corrugations.
4. Metal components e.g. bolts or washers must be galvanized.
5. Attachment of end section should preserve culvert alignment and not impair pipe function. Use end sections only on culvert inlet.
6. Toe plate extensions will be required only when designated on the plans.
7. End sections will not be used on HDPE culvert pipes larger than 36" unless indicated by project plans or approved by the Engineer.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

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

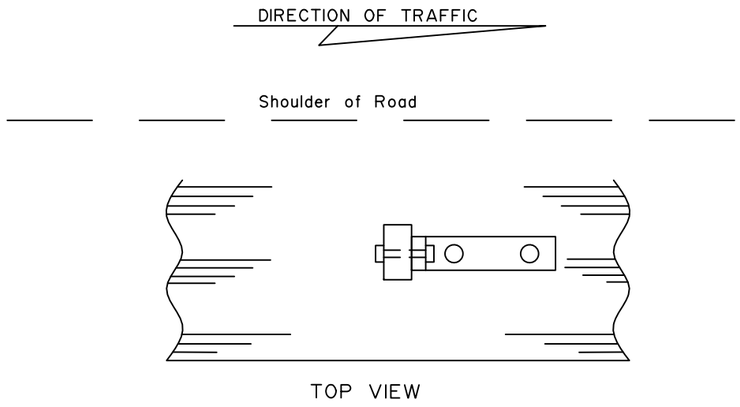
Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

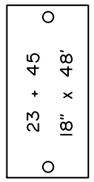
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V13 OF V46

D-06.10



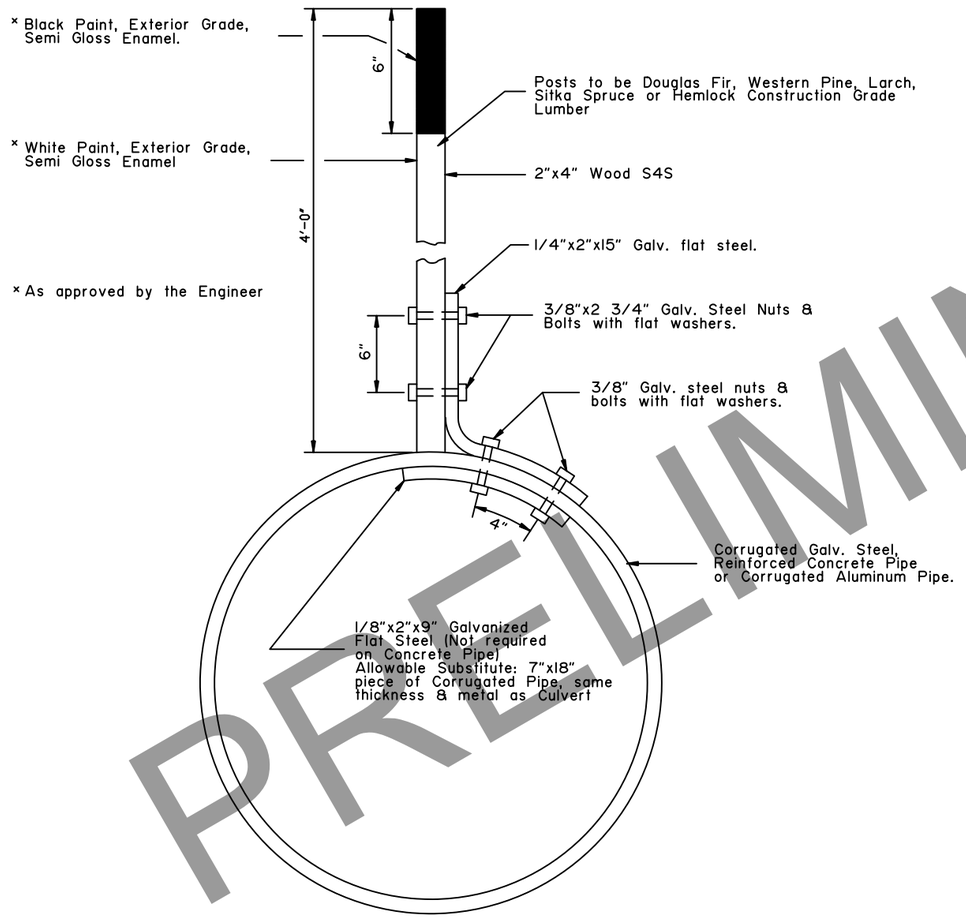
TOP VIEW



Sta. and size of Culvert to be stamped into a 2"x4"x0.064" thick brass plate, fastened, with No. 8 round head brass screws, to the marker post as shown. Plate to be on side of post facing traffic.

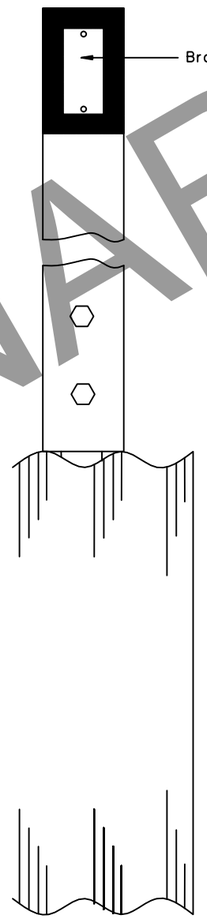
GENERAL NOTES:

1. Culvert marker post shall be installed with galvanized steel hardware meeting the following requirements: Galvanizing for nuts and washers shall meet the requirements of ASTM A-153, Class C. Galvanizing for steel mounting supports shall meet the requirements of MIL-P-26915A, or ASTM A-153, Class C.

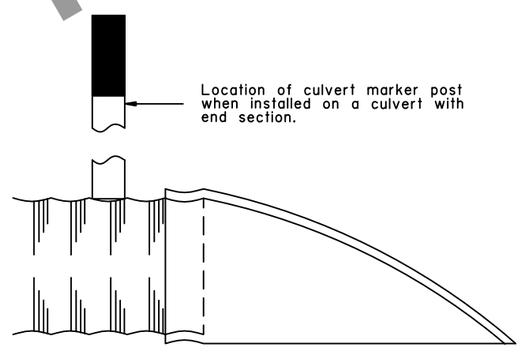


× As approved by the Engineer

END VIEW



SIDE VIEW



END SECTION SIDE VIEW

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT MARKER POST

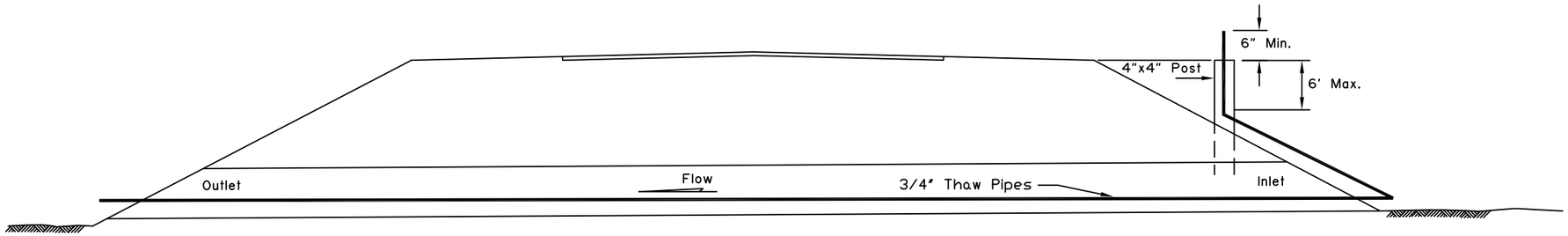
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

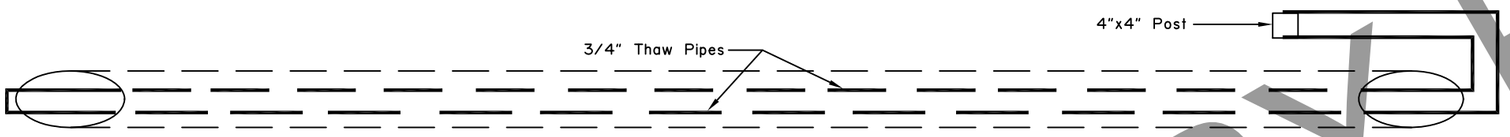
Last Code and Stds. Review
By: Date:

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

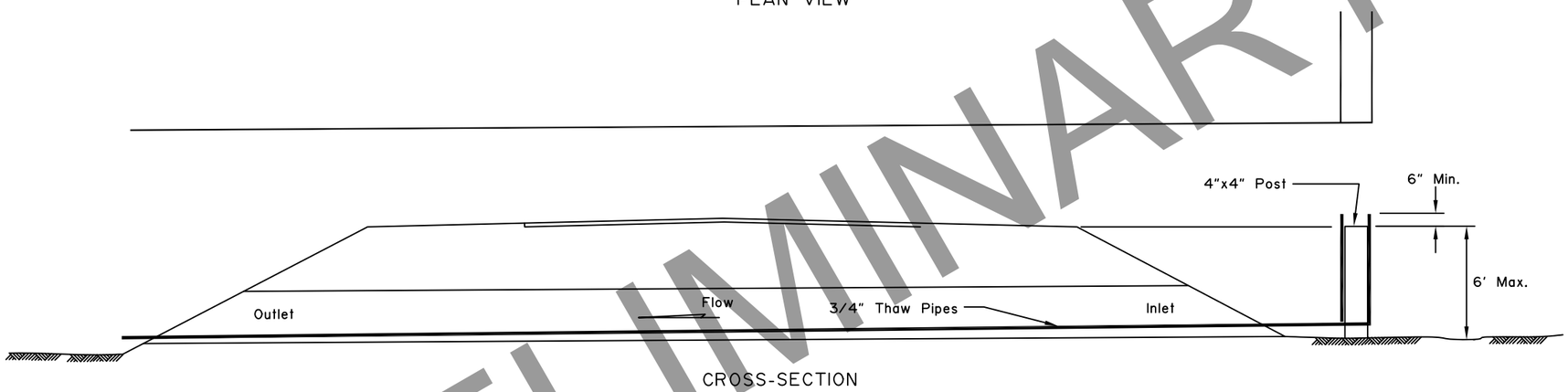
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V14 OF V46



CROSS-SECTION



PLAN VIEW



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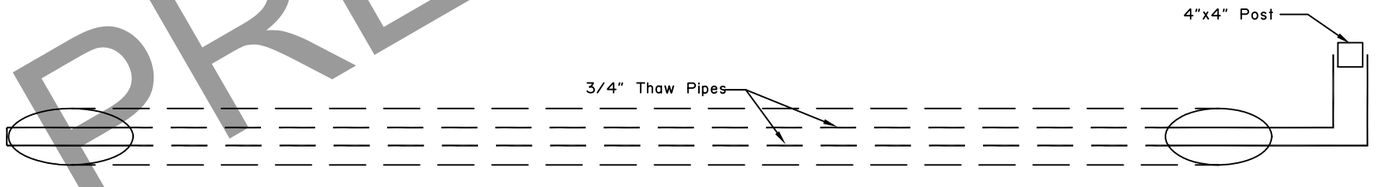

PLAN VIEW

GENERAL NOTES:

1. 3/4" main line and standpipes to be liquid tight and filled with 50-50 antifreeze.
2. Standpipe support posts to be installed not more than 6'-0" below shoulder.
3. Thaw pipes to be attached to culvert at inlet and outlet ends and to post.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT CIRCULATING THAW PIPE

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

Adoption Date: 02/08/2019

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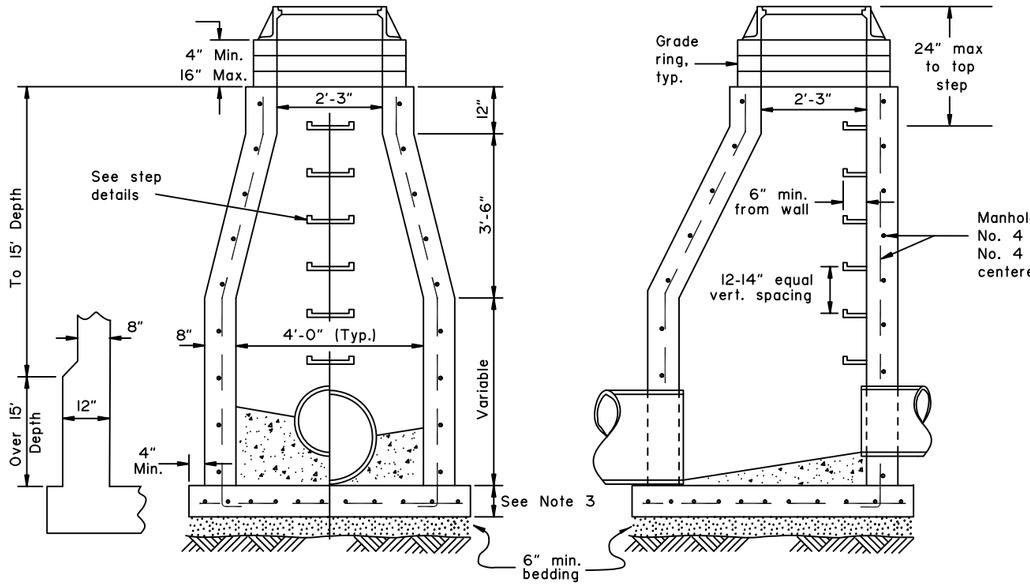
By: Date:

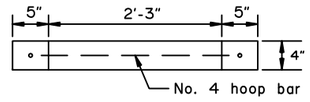
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V15 OF V46

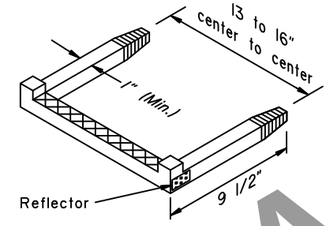
D-11.01



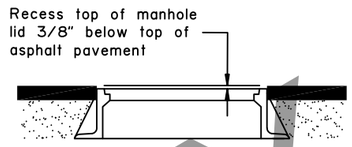
CAST-IN-PLACE MANHOLE



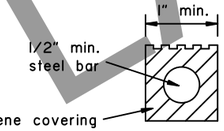
GRADE RING



STEP DETAIL



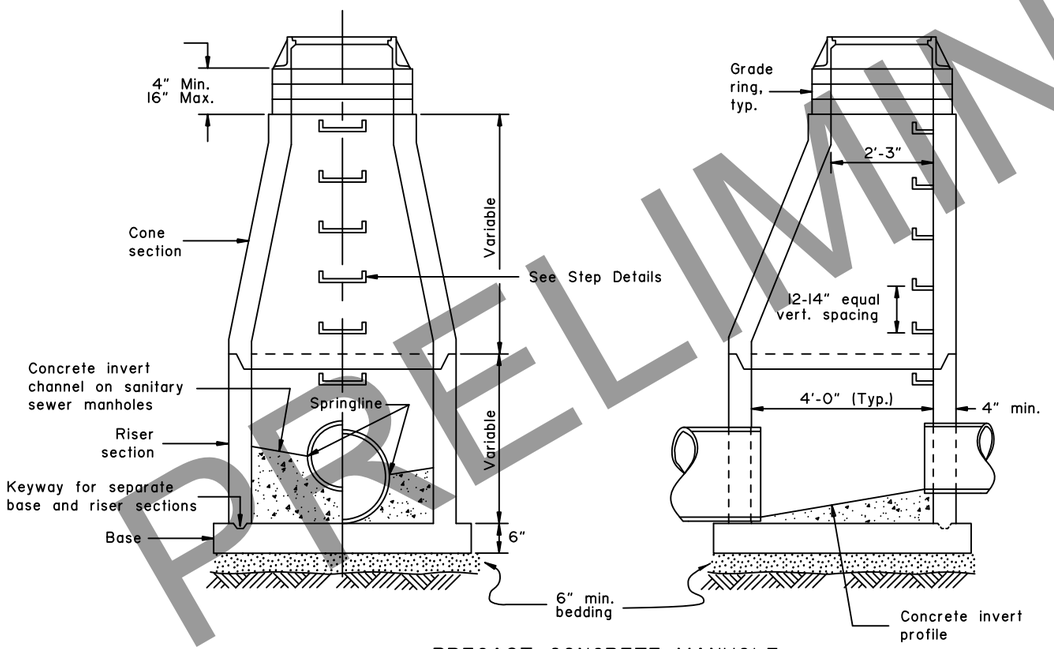
MANHOLE IN PAVEMENT



STEP CROSS SECTION

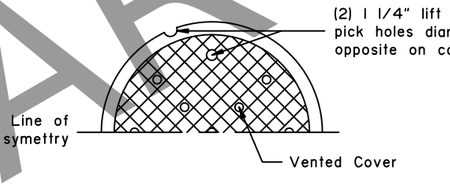
GENERAL NOTES:

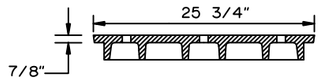
1. Either precast or cast-in-place manholes may be used.
2. Details for manhole frame, cover and step are generic in nature and may vary from shown depending on manufacturer
3. Use 8" thick cast-in-place concrete bases for depths less than 15' and 12" thick bases for depths 15' or greater.
4. Manhole frames shall have a depth of 6" unless otherwise indicated on the plans.
5. Step requirements:
   a. 18" max. vertical clearance to bottom of manhole or concrete invert.
   b. 3" minimum embedment.
   c. 1,500 lb. min. pullout force.
   d. ASTM A-615 grade 60 steel bar.
   e. Injection molded polypropylene covering meeting ASTM D-41010
   f. Slip resistant foot tread with "wings" to prevent feet from sliding off the edge.
   g. Reflectors at step corners
6. Reinforcement for precast manhole sections shall meet AASHTO M 199.



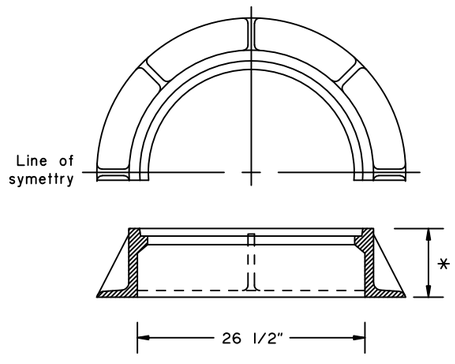
PRECAST CONCRETE MANHOLE

Reinforcement not shown for clarity
See Note 6





MANHOLE COVER



MANHOLE FRAME

MANHOLE FRAME & COVER MINIMUM WEIGHT		
* Depth	6"	380 lbs
	7"	400 lbs
	8"	440 lbs
	9"	470 lbs
	10"	500 lbs

State of Alaska DOT&PF
ALASKA STANDARD PLAN

MANHOLES, FRAME AND COVER

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

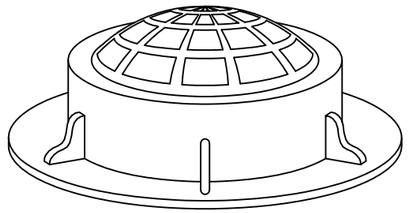
Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

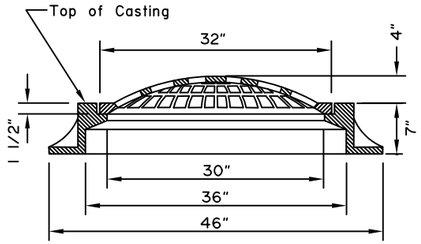
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V16 OF V46

D-20.05

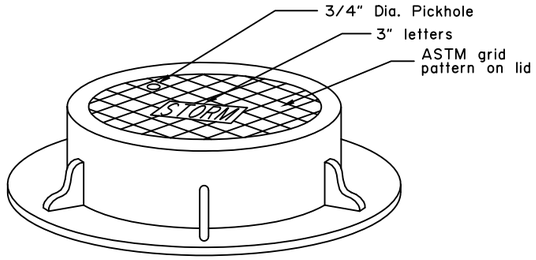


Surround field inlets with a 24" wide rock rubble collar 10" deep, 3" maximum size rock.



FIELD INLET FRAME & GRATE

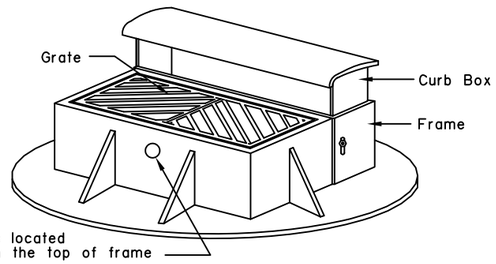
To be supplied for storm drain manholes where field inlets are specified. Field inlet frame and grate shall have a Minimum total weight of 525 lb.



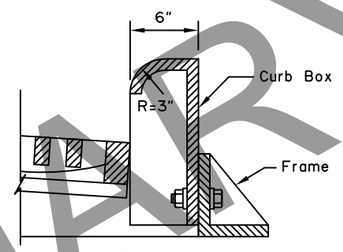
MANHOLE LID FRAME AND GRATE

NOTES:

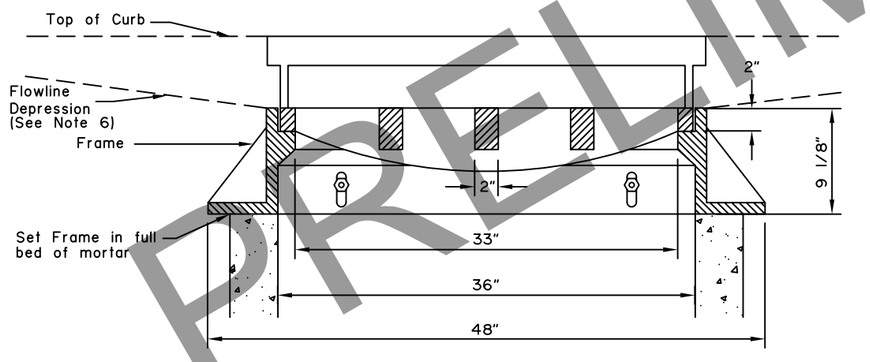
1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers, except that inlet grate shall be within ¼"± of dimensions shown on this drawing.
2. Manhole lids shall be 32" in diameter and may be used with field inlet frames.
3. Type A field inlet frame 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.



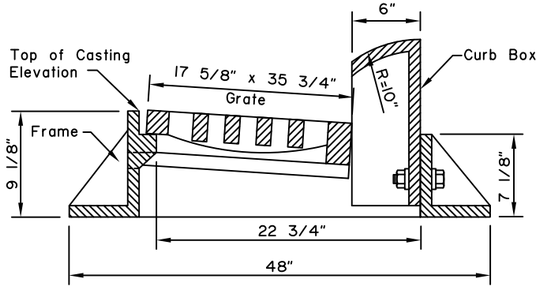
NOTE:
Curb Box, Grate and frame shall have a minimum total weight of 725 lb.



SIDE VIEW
MOUNTABLE CURB AND GUTTER



FRONT VIEW



SIDE VIEW
EXPRESSWAY CURB AND GUTTER

CURB INLET FRAME AND GRATE

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

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

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

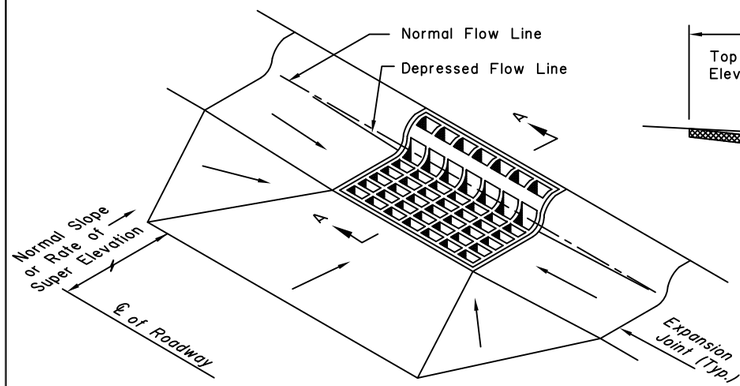
Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

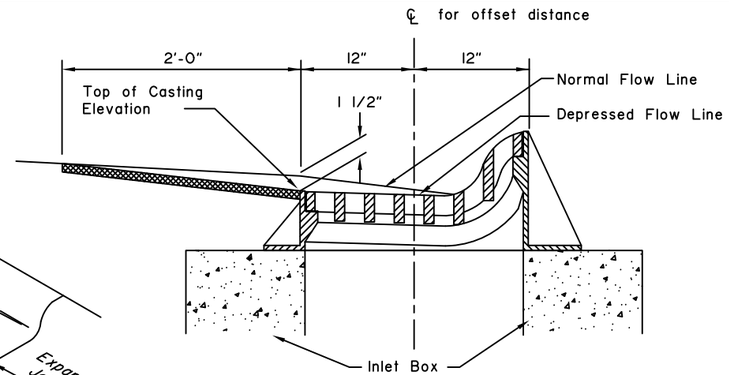
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V17 OF V46 NOT TO SCALE

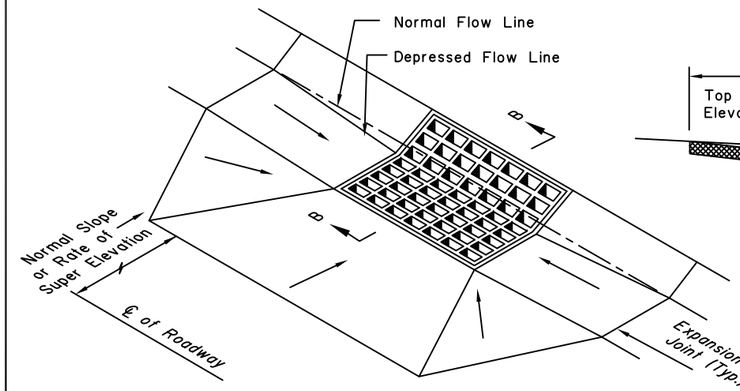
D-22.01



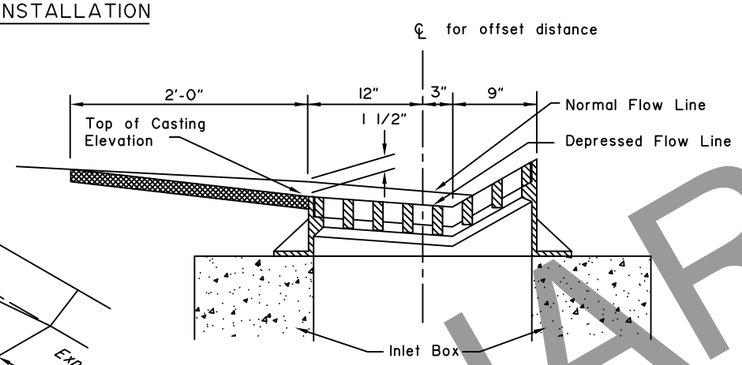
MOUNTABLE CURB INLET INSTALLATION



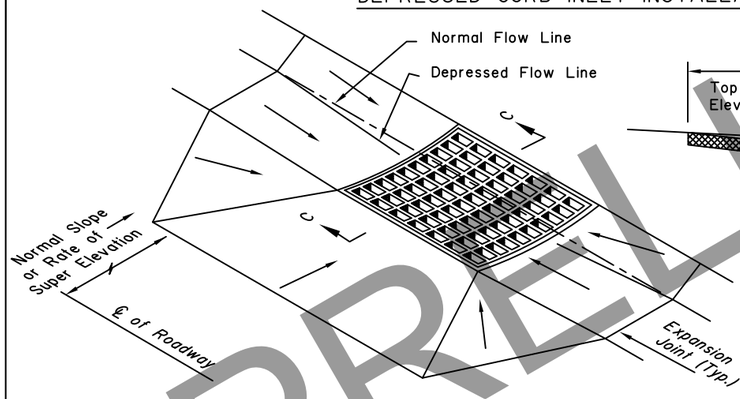
SECTION A-A



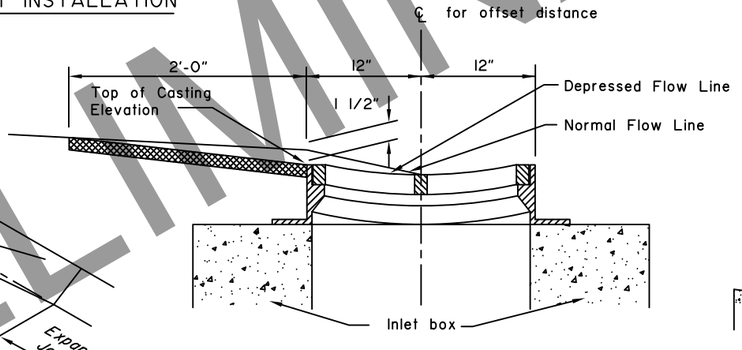
DEPRESSED CURB INLET INSTALLATION



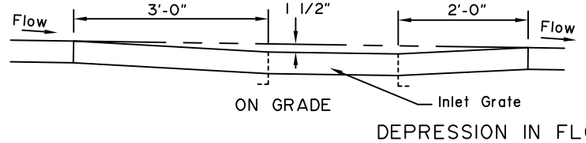
SECTION B-B

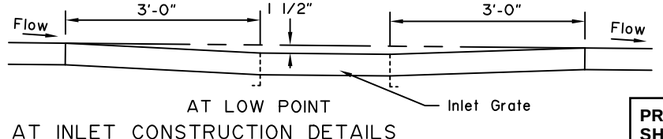


GUTTER INLET INSTALLATION

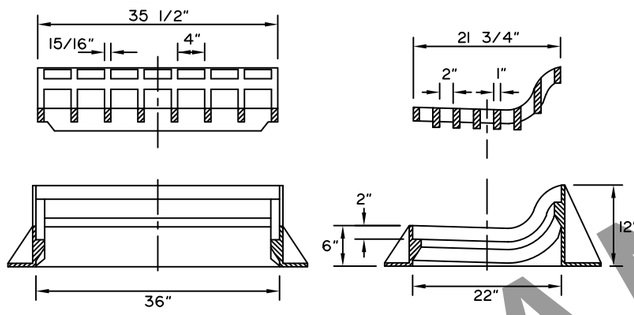


SECTION C-C

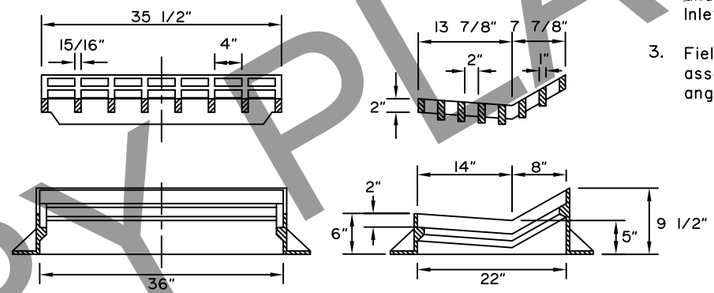




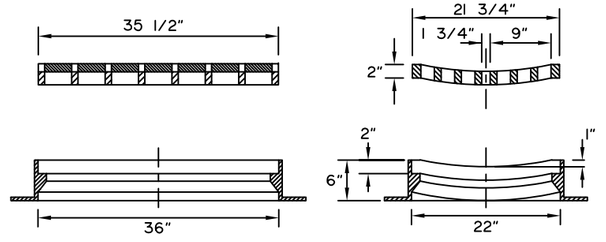
DEPRESSION IN FLOW LINE AT INLET CONSTRUCTION DETAILS



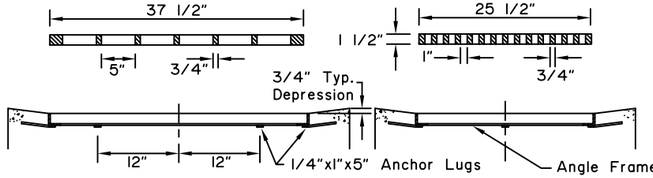
MOUNTABLE CURB INLET FRAME AND GRATE



DEPRESSED CURB INLET FRAME AND GRATE



GUTTER INLET FRAME AND GRATE



NOTE: All Angle Frame shall have Anchor Lugs

FIELD INLET FRAME AND GRATE

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.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

INLET FRAMES AND GRATES

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

Adoption Date: 02/08/2019

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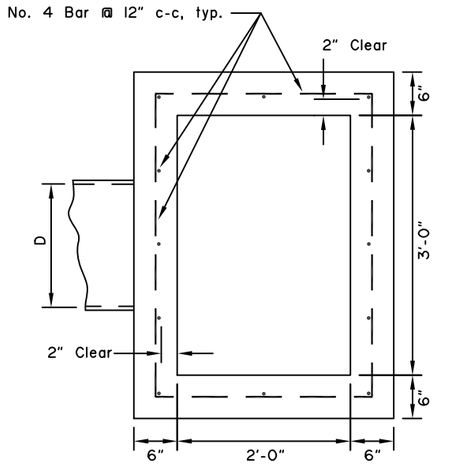
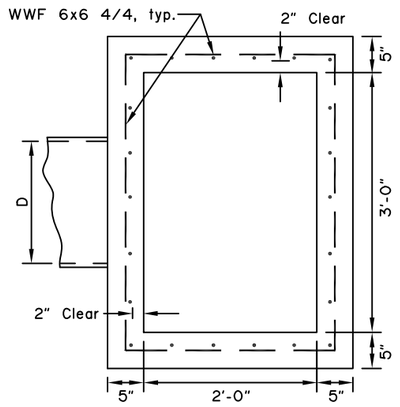
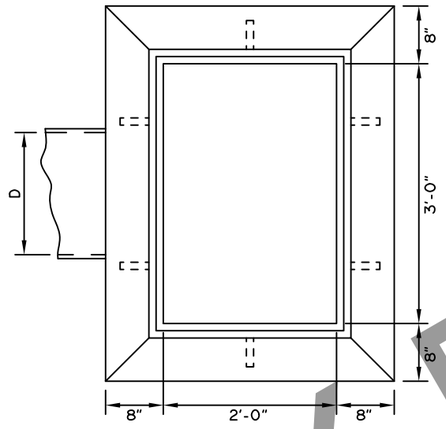
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V18 OF V46

D-24.00

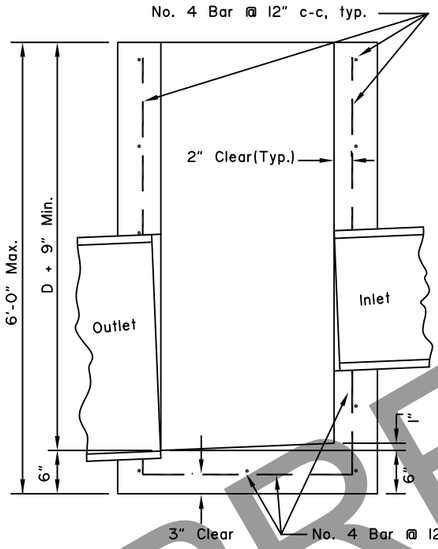




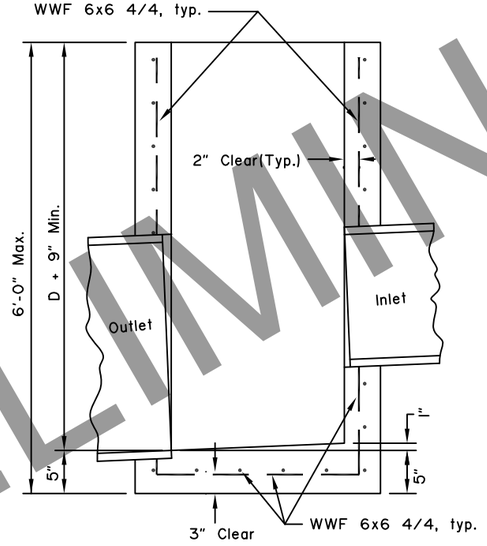


GENERAL NOTES:

1. Install inlet boxes parallel to the curb line.
2. The plans will indicate which inlet boxes require a sump.
3. Shape floors to drain.
4. Use Grade 40 minimum reinforcing steel.
5. The plans will indicate which inlet boxes require sumps.

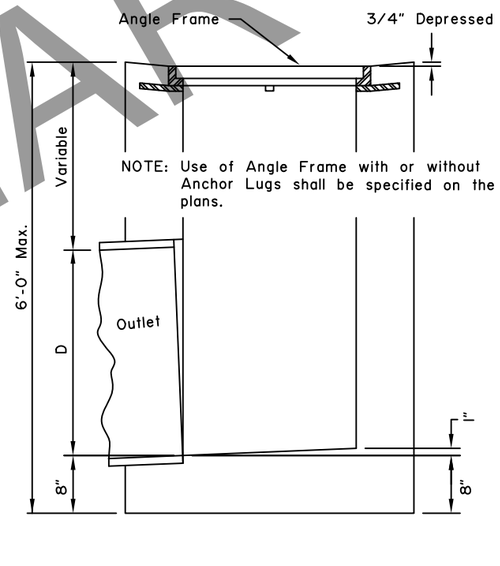


REINFORCED
CAST IN PLACE



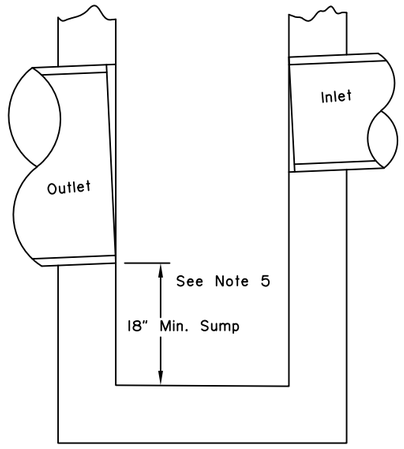
PRECAST

TYPE "A" CONCRETE INLET BOXES



FIELD INLET BOX
CAST* IN PLACE

* May be Precast or Reinforced Cast-In-Place Box.



SUMP DETAIL

State of Alaska DOT&PF
ALASKA STANDARD PLAN

**TYPE "A"
INLET BOX**

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

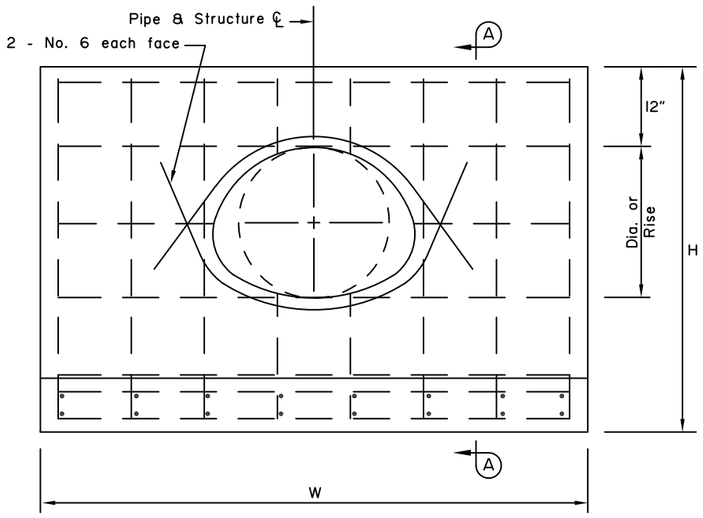
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

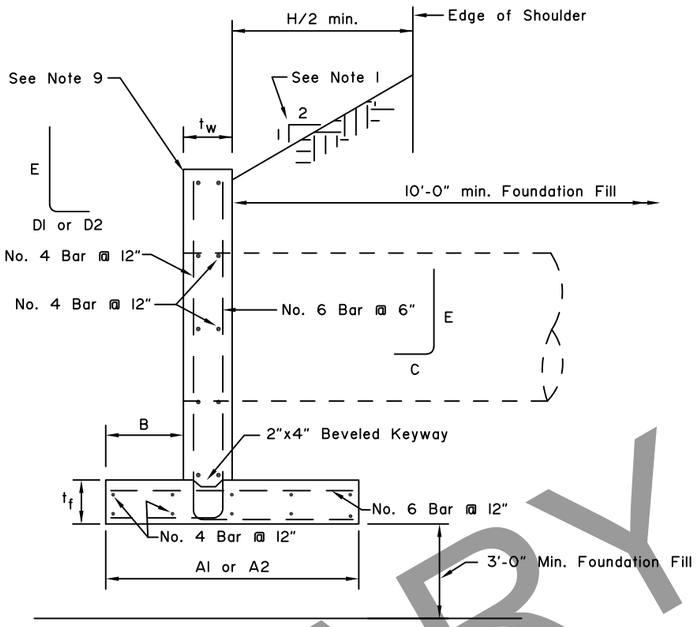
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V19 OF V46 NOT TO SCALE

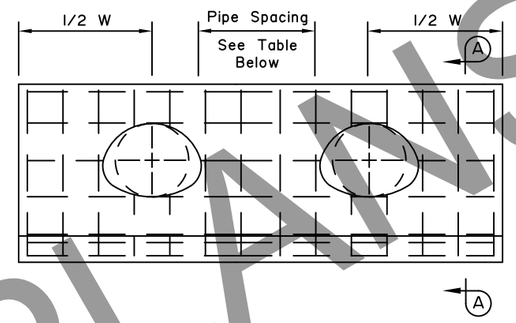
D-26.04



ELEVATION



SECTION A-A



MULTIPLE INSTALLATION

Minimum Space Between Pipes
1/2 Dia. of Pipe or 1/2 Span of Pipe Arch, 24" Min.

CORRUGATED METAL PIPE											✳ SEE NOTE 8
Dia.	W	t_w	t_f	H	A1 ✳	A2 ✳	B	C	D1 ✳	D2 ✳	E
1'-6"	8'-0"	1'-0"	1'-0"	4'-6"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-0"
1'-9"	9'-0"	1'-0"	1'-0"	4'-9"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-3"
2'-0"	9'-6"	1'-0"	1'-0"	5'-0"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-6"
2'-6"	11'-6"	1'-0"	1'-0"	5'-6"	5'-0"	4'-0"	1'-6"	2'-0"	3'-0"	2'-0"	5'-0"
3'-0"	13'-0"	1'-0"	1'-0"	6'-0"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-6"
3'-6"	14'-6"	1'-0"	1'-0"	6'-6"	6'-0"	4'-0"	1'-6"	2'-0"	4'-0"	2'-0"	6'-0"
4'-0"	16'-0"	1'-0"	1'-0"	7'-0"	6'-6"	4'-6"	2'-0"	2'-6"	4'-0"	2'-0"	6'-6"
4'-6"	18'-0"	1'-0"	1'-0"	7'-6"	7'-0"	4'-6"	2'-0"	2'-6"	4'-6"	2'-0"	7'-0"
5'-0"	19'-6"	1'-0"	1'-0"	8'-0"	8'-0"	5'-0"	2'-6"	3'-0"	5'-0"	2'-0"	7'-6"
5'-6"	21'-0"	1'-0"	1'-0"	8'-6"	8'-6"	5'-6"	2'-6"	3'-0"	5'-6"	2'-6"	8'-0"
6'-0"	23'-0"	1'-0"	1'-0"	9'-0"	9'-6"	6'-0"	3'-0"	3'-6"	6'-0"	2'-6"	8'-6"
6'-6"	24'-6"	1'-3"	1'-3"	9'-9"	10'-0"	6'-0"	3'-0"	3'-9"	6'-6"	2'-6"	9'-3"
7'-0"	26'-0"	1'-3"	1'-3"	10'-3"	10'-0"	6'-6"	3'-0"	3'-9"	6'-6"	3'-0"	9'-9"
7'-6"	28'-0"	1'-6"	1'-6"	11'-0"	10'-6"	6'-6"	3'-0"	4'-0"	7'-0"	3'-0"	10'-6"
8'-0"	29'-6"	1'-6"	1'-6"	11'-6"	11'-0"	7'-0"	3'-0"	4'-0"	7'-6"	3'-6"	11'-0"
8'-6"	31'-0"	2'-0"	2'-0"	12'-6"	11'-6"	7'-0"	3'-0"	4'-6"	8'-0"	3'-6"	12'-0"
9'-0"	33'-0"	2'-0"	2'-0"	13'-0"	11'-6"	7'-6"	3'-0"	4'-6"	8'-0"	4'-0"	12'-6"

CORRUGATED METAL PIPE ARCH												✳ SEE NOTE 8
SPAN	RISE	W	tw	tf	H	A1 ✳	A2 ✳	B	C	D1 ✳	D2 ✳	E
1'-5"	1'-1"	6'-6"	1'-0"	1'-0"	4'-1"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	3'-7"
1'-9"	1'-3"	7'-0"	1'-0"	1'-0"	4'-3"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	3'-9"
2'-0"	1'-6"	8'-0"	1'-0"	1'-0"	4'-6"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-0"
2'-4"	1'-8"	8'-6"	1'-0"	1'-0"	4'-8"	4'-0"	4'-0"	1'-6"	2'-0"	2'-0"	2'-0"	4'-2"
2'-11"	2'-0"	9'-6"	1'-0"	1'-0"	5'-0"	4'-6"	4'-0"	1'-6"	2'-0"	2'-6"	2'-0"	4'-6"
3'-6"	2'-5"	11'-0"	1'-0"	1'-0"	5'-5"	5'-0"	4'-0"	1'-6"	2'-0"	3'-0"	2'-0"	4'-11"
4'-1"	2'-9"	12'-0"	1'-0"	1'-0"	5'-9"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-3"
4'-9"	3'-2"	13'-6"	1'-0"	1'-0"	6'-2"	5'-6"	4'-0"	1'-6"	2'-0"	3'-6"	2'-0"	5'-8"
5'-4"	3'-7"	15'-0"	1'-0"	1'-0"	6'-7"	6'-0"	4'-0"	1'-6"	2'-0"	4'-0"	2'-0"	6'-1"
5'-11"	3'-11"	16'-0"	1'-0"	1'-0"	6'-11"	6'-6"	4'-6"	2'-0"	2'-6"	4'-0"	2'-0"	6'-5"
6'-5"	4'-4"	17'-0"	1'-0"	1'-0"	7'-4"	7'-0"	4'-6"	2'-0"	2'-6"	4'-6"	2'-0"	6'-10"
7'-1"	4'-9"	19'-0"	1'-0"	1'-0"	7'-9"	8'-0"	4'-6"	2'-0"	2'-6"	5'-6"	2'-0"	7'-3"

GENERAL NOTES:

1. For use on 2:1 or flatter backfill slopes only.
2. Use Class A concrete.
3. Use epoxy-coated ASTM A706, Grade 60 reinforcing steel fy=60,000 psi.
4. Place reinforcement 3" clear from surface of concrete unless otherwise noted.
5. Chamfer all exposed concrete corners 3/4".
6. If unsuitable foundation material is encountered, remove and backfill with Foundation Fill as directed by the Engineer.
7. Headwalls for skewed culverts to be parallel to road centerline. See plans for dimensions of openings in headwalls for skewed culverts.
8. For backfill soil with:
   ϕ=30°, γ=130 pcf
   Use A1 and D1
   ϕ=34°, γ=135 pcf
   Use A2 and D2
9. See plans for railing requirements at top of wall.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

HEADWALLS CAST-IN-PLACE TYPE II

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

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V20 OF V46

D-30.11

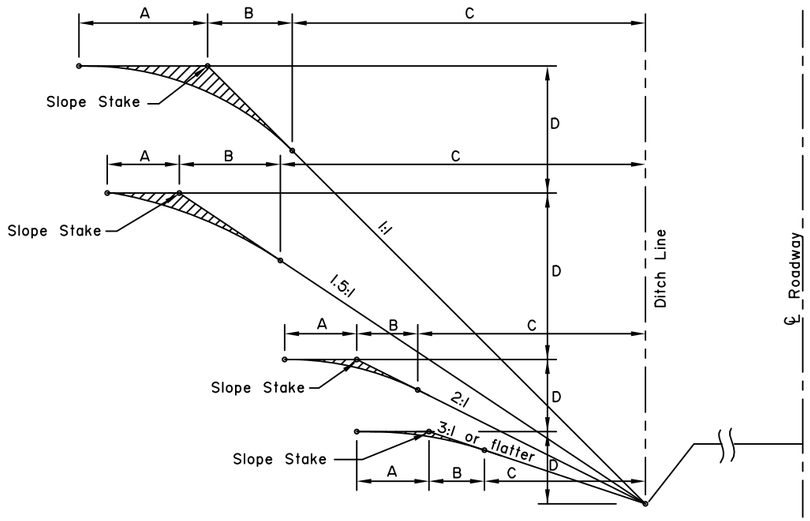


FIG. 1
TYPICAL SECTION OF ROUNDED SLOPES

TABLE OF ROUNDING DIMENSIONS

Rate of Slope	A		B	
	When B's 5.0' or less	When B is more than 5.0'	When D's 15.0' or less	When D is more than 15.0'
3:1 or flatter	B	5.0'	5.0'	5.0'
2:1	B	5.0'	5.0'	D/3
1.5:1	B	5.0'	5.0'	D/3
1:1	B	$\frac{D}{3}$, Max. 10.0'		D/3

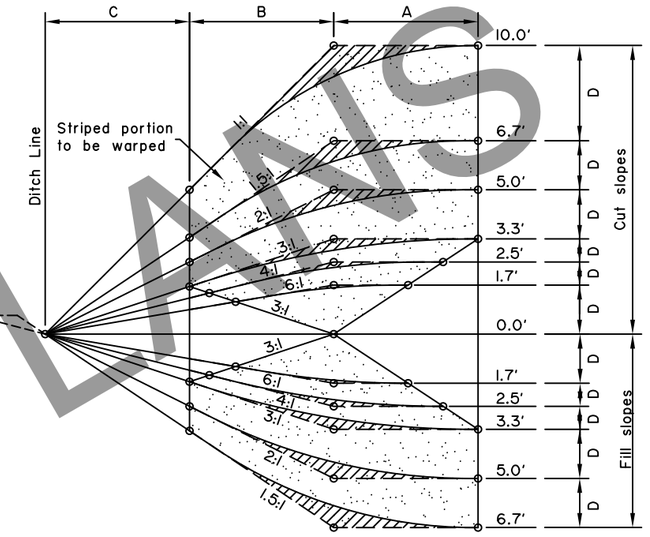


FIG. 4
TYPICAL GRADING FOR WARPING SLOPES

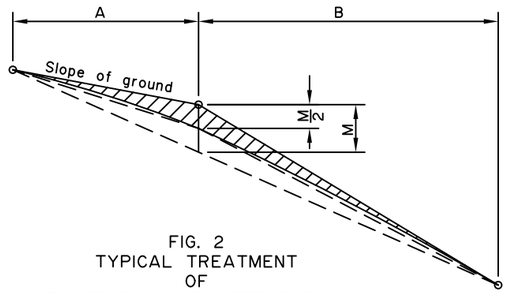


FIG. 2
TYPICAL TREATMENT
OF
POSITIVE SLOPE INTERSECTION

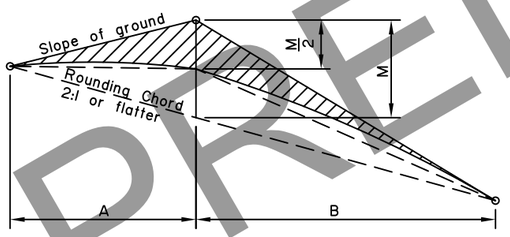


FIG. 3
TYPICAL TREATMENT
OF
NEGATIVE SLOPE INTERSECTION

TYPICAL SLOPE ROUNDING

GENERAL NOTES

1. Cut and fill slopes shall be rounded as shown in fig. 1, 2, and 3 when required by the plans or special provisions. Rounding of fill slopes shall be done in the same manner as shown for cut slopes.

2. Intersections of cut and fill slopes shall be warped as shown in fig. 4 and 5 when required by the plans or special provisions.

3. Warping of cut and fill slopes is for the purpose of attaining a more pleasing appearance and to promote the growth of natural vegetation by causing the fill slope to flow smoothly into the cut slope. The length of slope warping is relatively proportional to the character of the topography, the distance between end limits of warped surfaces being lessended as the terrain steepens and lengthened as the topography flattens out. The procedure as outlined herein is typical and shall be varied to meet special conditions and shall be as staked by the Engineer.

4. SUGGESTED PROCEDURE FOR WARPING SLOPING

   A--Select end points for warping to fit specified slope ratios as follows:-

   (a) The dimensions A, B, and C shall all be constant throughout the full length of warping, E.

   (b) When the average depth of cut or fill is such that the dimension B+C exceeds 10 feet, the ends of warping shall be at points where B+C is 10 feet, provided the warping distance E does not exceed 100 feet. That is, as shown in fig. 4 and 5, warping shall begin at a cut or fill depth of 6.7 feet for 1.5:1 slopes, at 50 feet for 2:1 slopes, etc. if the dimension E exceeds 100 feet, the dimension B+C shall be reduced until the intersections of the prescribed slopes with the natural ground are 100 feet apart.

   (c) When the average depth of cut or fill is such that the distance B+C is between 5 feet and 10 feet, the ends of warping shall be at points where C is 0 feet, but such points shall not be more than 150 feet apart.

   (d) When the average depth of cut or fill is such that the dimension B is less than 5 feet, the ends of warping shall be 200 feet apart.

   B--Set slope stakes at end of warping.

   C--Set additional slope stakes at various intervals between end stakes and at the sames distance from centerline.

   D--Flatten and round warped slopes as shown in figure 4 for each section.

5. A layer of earth overlying a rock cut shall be rounded as far as possible as though the total height of slope were in earth cut.

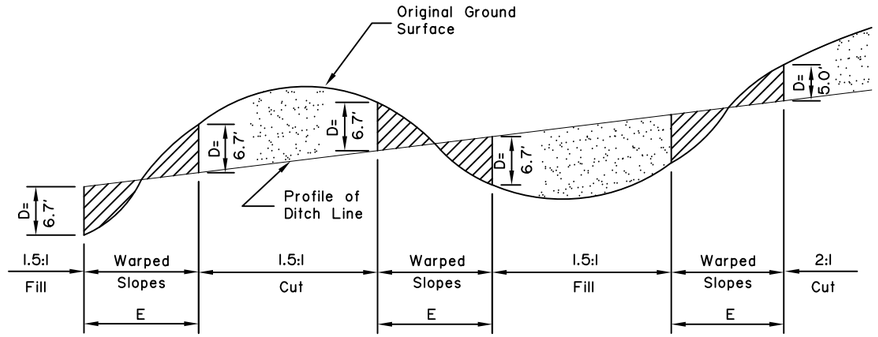


FIG. 5
TYPICAL PROFILE OF WARPED SLOPES

TYPICAL SLOPE WARPING

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SLOPE
ROUNDING AND WARPING

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:

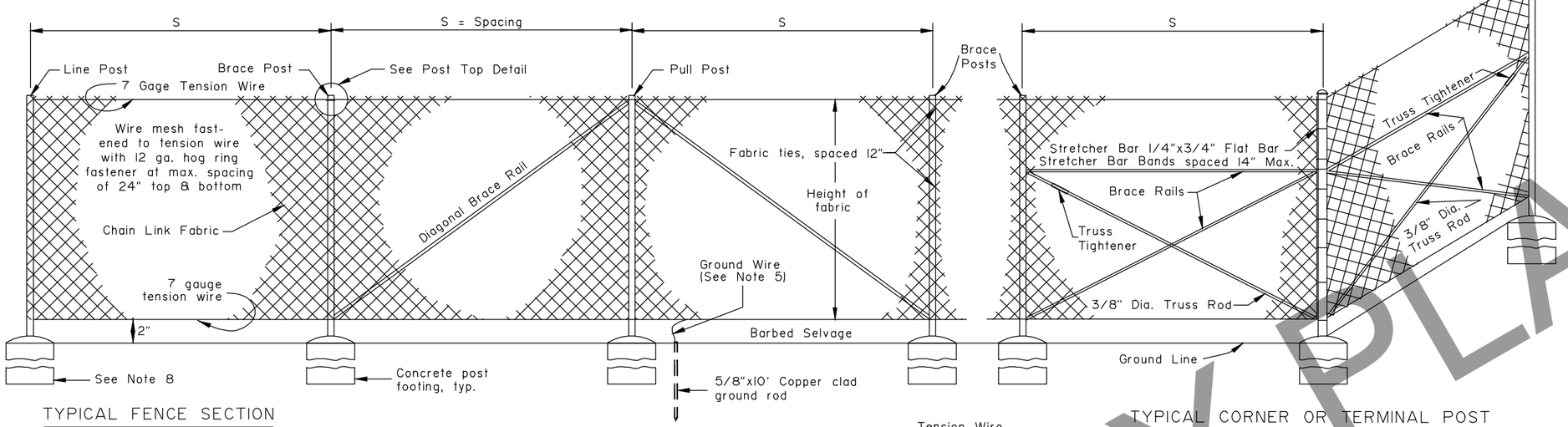
Next Code and Standards Review date: 02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V21 OF V46

E-09.00

NOTE: Pull post shall be spaced at 250' maximum intervals.

Fabric shall be placed on highway side of post.



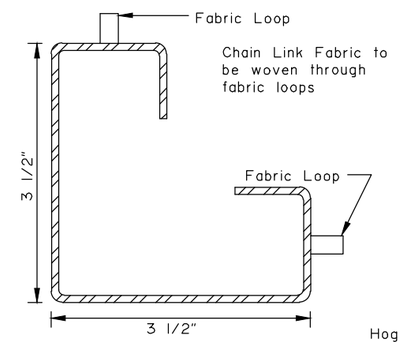
TYPICAL FENCE SECTION

TYPICAL PULL POST

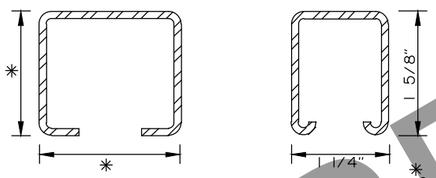
TYPICAL CORNER OR TERMINAL POST

GENERAL NOTES:

1. Use equal pole spacing (S). Maximum pole spacing is 10 feet unless directed otherwise by the Engineer.
2. Securely fasten post tops to post.
3. Securely fasten brace rails and truss rods to post with brace bands.
4. Provide truss rods with a tensioning adjusting mechanism.
5. Attach ground wire to fence fabric with a split bolt.
6. Stretch fabric to a smooth uniform appearance.
7. Details shown indicate general design and dimensions may vary among manufacturers.
8. Set line, pull, corner, and terminal posts in concrete footings unless in muskeg or shown otherwise in the plans.

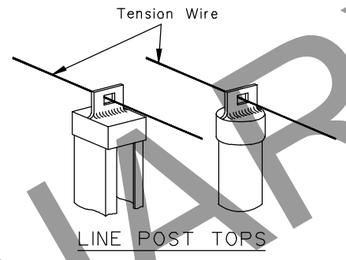


ROLL FORMED POST

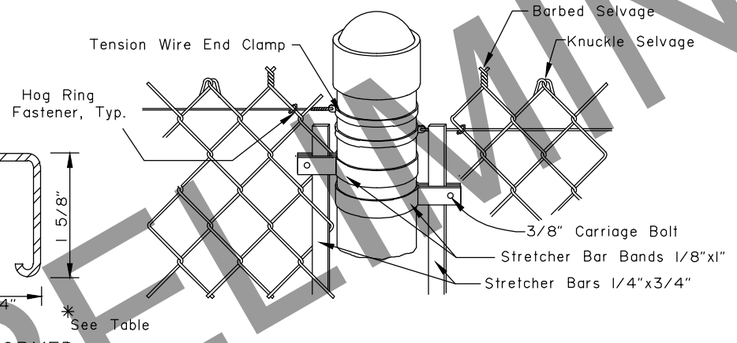


C POST

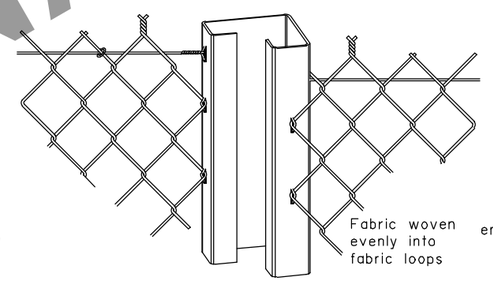
ROLL FORMED BRACE



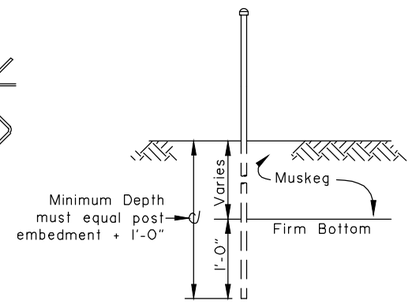
LINE POST TOPS



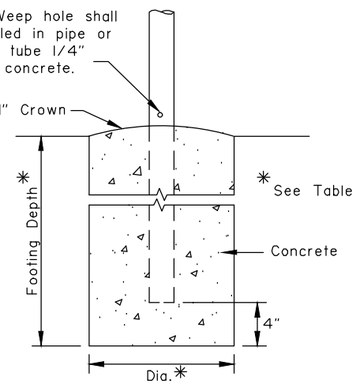
PIPE STYLE POST TOP



ROLL FORMED POST TOP

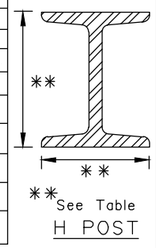


POST SETTING IN MUSKEG AREAS



CONCRETE POST FOOTING

FABRIC HEIGHT	POST								TOP OR BRACE RAIL						ALTERNATE POST	
	END-CORNER-PULL								LINE-BRACE						LINE-BRACE	
	PIPE		SQUARE TUBE		ROLL FORMED		FOOTING		PIPE		C POST		FOOTING		PIPE		ROLL FORMED		H POST		H POST	
	SIZE	WT/FT.	SIZE	WT/FT.	SIZE	WT/FT.	DEPTH	DIA.	SIZE	WT/FT.	SIZE	WT/FT.	DEPTH	DIA.	SIZE	WT/FT.	SIZE	WT/FT.	SIZE	WT/FT.	SIZE	WT/FT.
3'	2"	3.65 #	2" x 2"	4.31 #	3 1/2"x3 1/2"	4.84 #	40"	10"	1 1/2"	2.72 #	1 7/8"x1 5/8"	2.28 #	28"	10"	1 1/4"	2.27 #	1 5/8"	1.35 #	1 1/2"x 1 5/16"	2.27 #	1 7/8"x1 5/8"	2.72 #
4'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5'	2"	3.65 #	2" x 2"	4.31 #	3 1/2"x3 1/2"	4.84 #	40"	10"	1 1/2"	2.72 #	1 7/8"x1 5/8"	2.28 #	28"	10"	"	"	"	"	"	"	1 7/8"x1 5/8"	2.72 #
6'	2 1/2"	5.79 #	2 1/2"x2 1/2"	5.59 #	3 1/2"x3 1/2"	4.84 #	48"	15"	2"	3.65 #	2 1/4"x1 45/64"	2.64 #	40"	12"	"	"	"	"	"	"	2 1/4"x2"	4.1 #
7'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8'	2 1/2"	5.79 #	2 1/2"x2 1/2"	5.59 #	3 1/2"x3 1/2"	4.84 #	48"	15"	2"	3.65 #	2 1/4"x1 45/64"	2.64 #	40"	12"	"	"	"	"	"	"	2 1/4"x2"	4.1 #



PROJECT NUMBER:
000S828 / Z620030000
SHEET NO.: V22 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CHAIN LINK FENCE

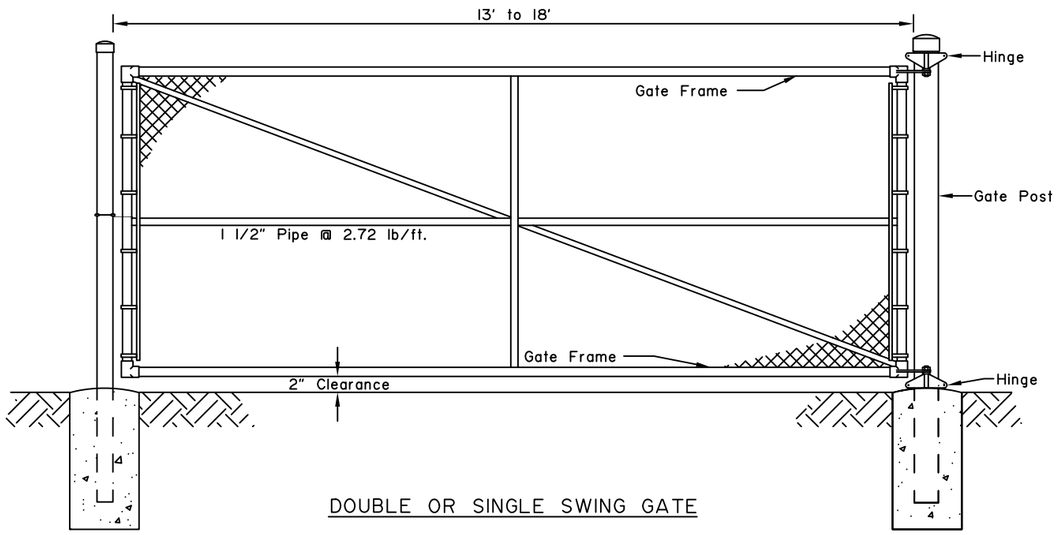
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

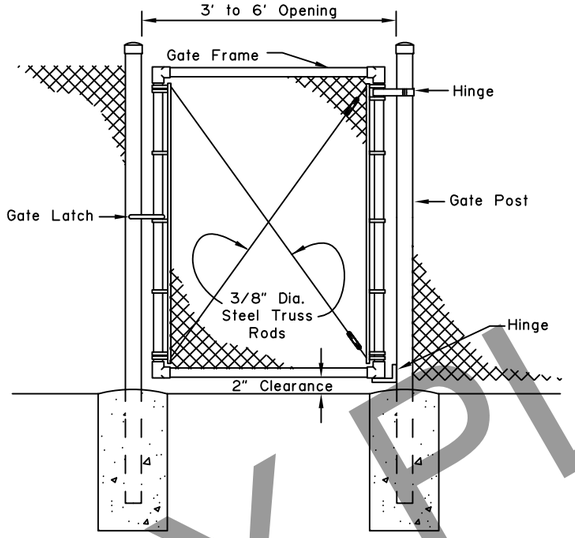
Last Code and Stds. Review
By: KLH Date: 7/8/2020

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

F-01.04



DOUBLE OR SINGLE SWING GATE

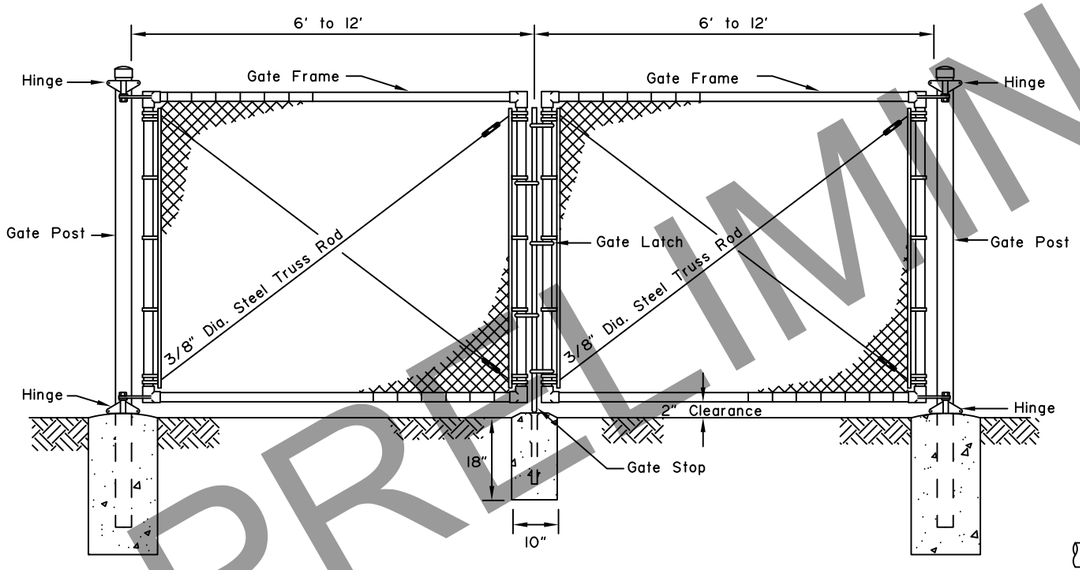


PEDESTRIAN GATE

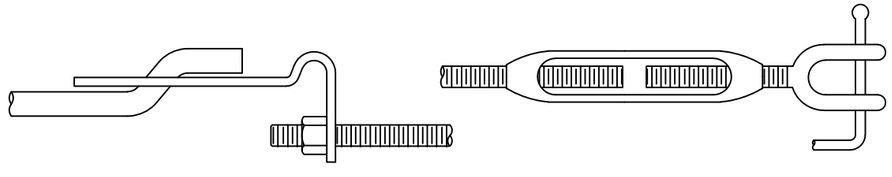
GENERAL NOTES:

1. Details shown are to indicate general design only. Dimensions may vary slightly among the manufacturers.
2. Gate fabric shall be of the same design and height of line fence fabric.
3. Gate fabric shall be furnished with knuckle selvage top and bottom.
4. Concrete footings shall be of the same depth as end posts with a diameter 1 1/2 times larger except as shown for gate stop.
5. Gate frames may be fabricated by welding or riveting and shall be braced to eliminate sagging. Hinges, latches and other gate appurtenances shall be of sufficient strength and design to assure easy trouble free operation.

Gate Fabric Height	Gate Opening: SINGLE GATE	Gate Opening: DOUBLE GATE	GATE POST: ST'D PIPE SIZE	GATE POST: ST'D PIPE WT/FT.	GATE POST: SQUARE TUBE SIZE	GATE POST: SQUARE TUBE WT/FT.	GATE POST: ROLL FORMED SIZE	GATE POST: ROLL FORMED WT/FT.	GATE FRAME: ST'D PIPE SIZE	GATE FRAME: ST'D PIPE WT/FT.	GATE FRAME: SQUARE TUBE SIZE	GATE FRAME: SQUARE TUBE WT/FT.
3' to 5'	3' to 6'	6' to 12'	2"	3.65#	2" x 2"	4.31#	3 1/2"x3 1/2"	5.14#	1 1/2"	2.72#	2" x 2"	4.31#
"	7' to 12'	13' to 24'	2 1/2"	5.79#	2 1/2"x2 1/2"	5.59#	" "	"	"	"	" "	"
"	13' to 18'	25' to 36'	"	"	" "	"	" "	"	"	"	" "	"
6' to 8'	3' to 6'	6' to 12'	2 1/2"	5.79#	2 1/2"x2 1/2"	5.59#	3 1/2"x3 1/2"	5.14#	1 1/2"	2.72#	" "	"
"	7' to 12'	13' to 24'	3 1/2"	9.11#	3 1/2"x3 1/2"	8.14#	———	———	2"	3.65#	" "	"
"	13' to 18'	25' to 36'	6"	18.97#	6" x 6"	18.82#	———	———	"	"	2" x 2"	4.31#



DOUBLE SWING GATE



TYPICAL TRUSS ROD TIGHTENERS

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CHAIN LINK FENCE GATE

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

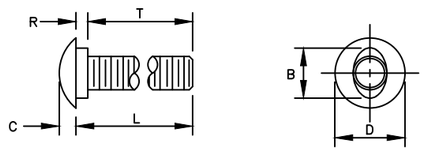
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

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

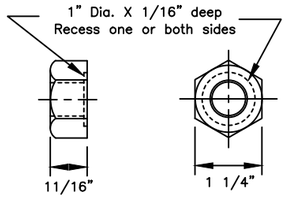
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V23 OF V46

F-03.02

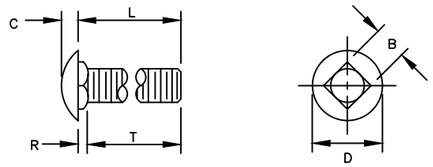


B	C	D	L (Length)	R	T (Thread Length)
15/16"	5/16"	1 5/16" or 1 7/16"	As Required	7/32"	As Required

5/8" BUTTONHEAD BOLT
(FBB01–05)

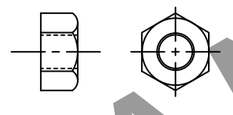


5/8" Dia. RECESSED HEX NUT
(FBB01–05)



B	C	D	L (Length)	R	T (Thread Length)
5/8"	5/16"	1 5/16"	As Required	3/16"	As Required

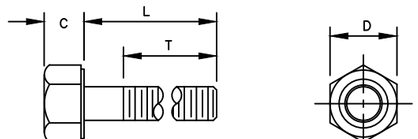
5/8" Dia. CARRIAGE BOLT
(FBC10–20)



STANDARD HEX NUT

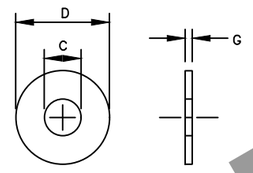
GENERAL NOTES:

1. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.



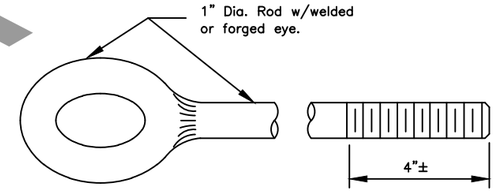
Bolt Size	C	D	L (Length)	T (Thread Length)
5/16"	——	——	1 1/2"	7/8"
5/16"	——	——	1"	1"
3/8"	——	——	7 1/2"	1 1/2"
1/2"	——	——	1 1/2"	1 1/2"
1/2"	——	——	1 1/4"	1 1/4"
5/8" H.S.	5/16"	7/8"	8"	1 1/2"
5/8"–11	——	——	1 1/2"	1 1/2"
3/4"	——	——	1 1/2"	1 1/2"
3/4"	——	——	As Required	2"
3/4" H.S.	15/32"	1 1/4"	2"	1 1/2"

STANDARD HEX BOLTS

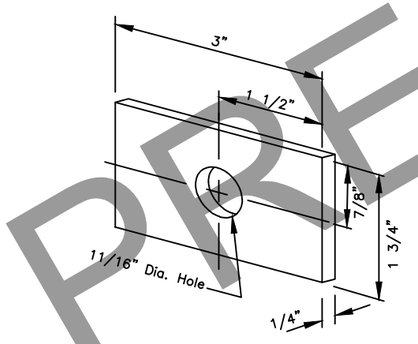


For Bolt ø	C	D	G
3/8"	7/16"	1"	5/64"
1/2"	17/32"	1 1/16"	3/32"
1/2" H.S.	17/32"	1 1/16"	3/32"
5/8"	11/16"	1 3/4"	9/64"
3/4"	13/16"	1 15/32"	9/64"
3/4" H.S.	13/16"	2"	5/32"
1"	1 1/16"	2"	9/64"

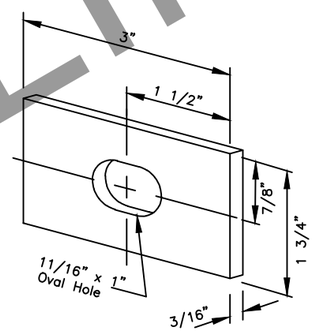
STANDARD STEEL WASHERS



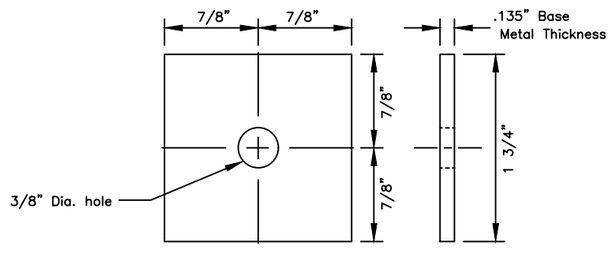
EYE BOLT



FLAT PLATE WASHER



RECTANGULAR POST BOLT WASHER
(FWR03)



SQUARE STEEL WASHER
(FWR01)

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STANDARD GUARDRAIL HARDWARE
(NUTS, BOLTS & WASHERS)

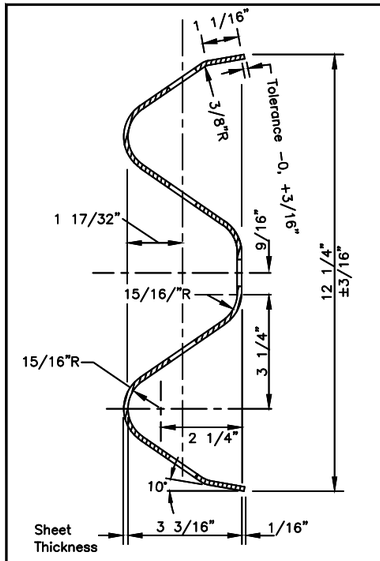
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

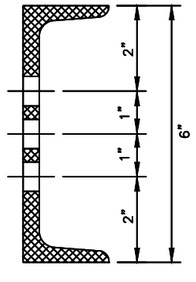
Last Code and Stds. Review
By: KLK Date: 7/8/2020

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

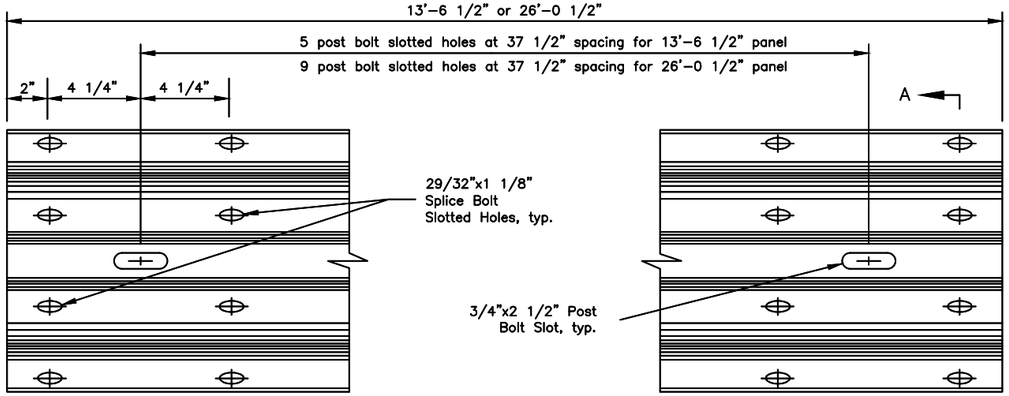
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V24 OF V46



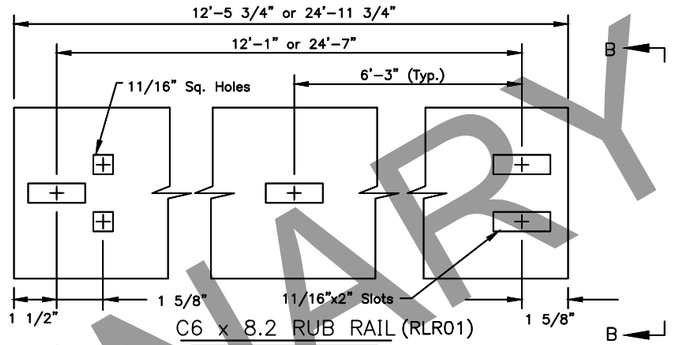
SECTION A–A
(cross section same as RWM02a–b)



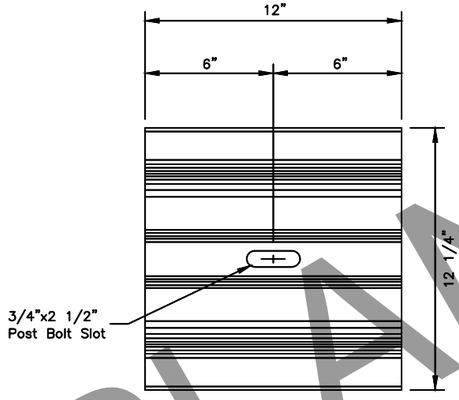
SECTION B–B



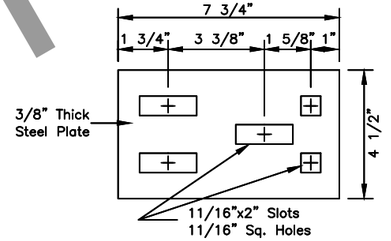
STANDARD W–BEAM PANEL (RWM04a–b)



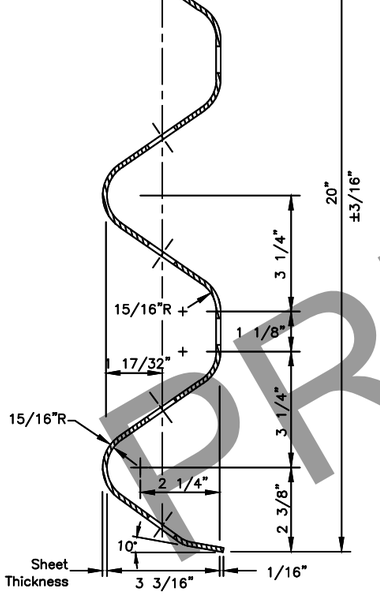
C6 x 8.2 RUB RAIL (RLR01)
ASTM A36 STEEL



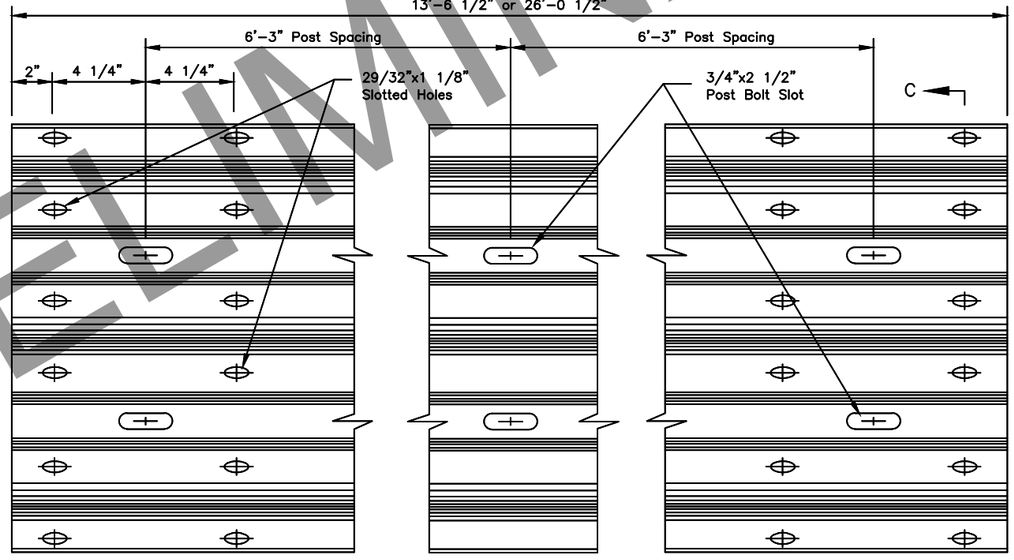
W–BEAM BACKUP PLATE
(RWB01a–b)



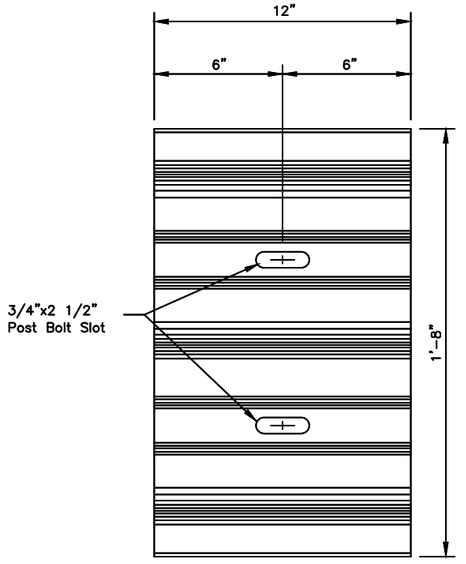
SPLICE PLATE (RLR01)
ASTM A36 STEEL



SECTION C–C
(RTM01a–02b)



STANDARD THRIE BEAM PANEL (RTM01a–02b)



THRIE BEAM BACKUP PLATE
(RTB01a–02b)

GENERAL NOTES:

1. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.
2. Install back–up plates between blockouts and w–beam or thrie–beam rail at intermediate (non–splice) posts when steel blockouts are used but not with wood, rubber, plastic, or other approved blockouts.

PROJECT NUMBER:
000S828/Z620030000
SHEET NO.: V25 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STANDARD GUARDRAIL HARDWARE
(RAILS AND SPLICES)

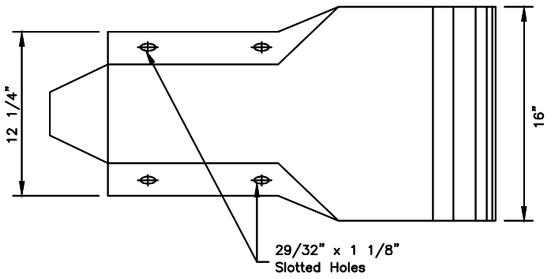
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

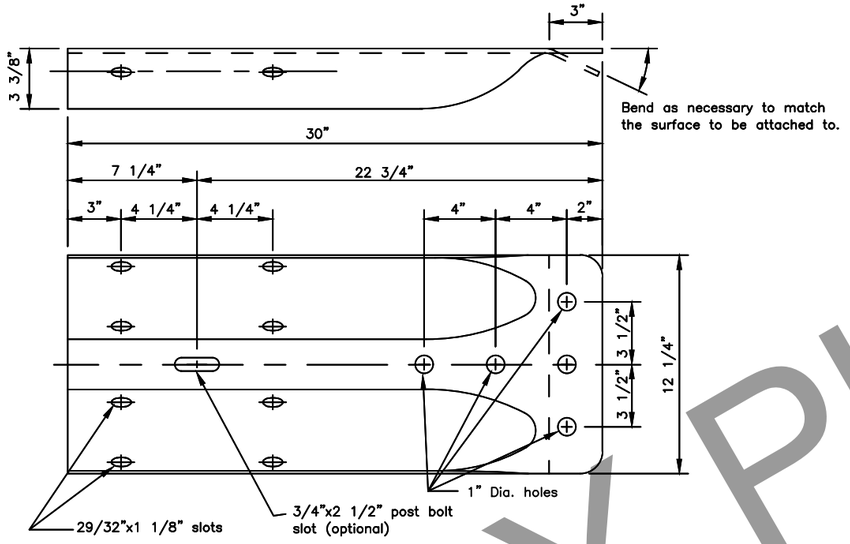
Last Code and Stds. Review
By: KLK Date: 7/8/2020

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

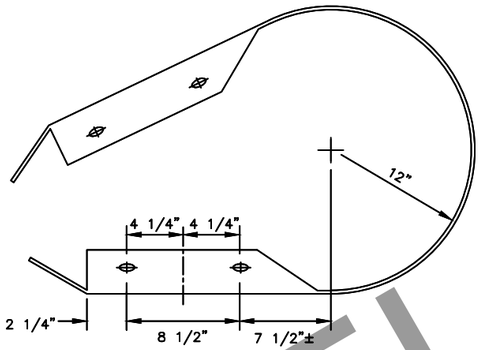
G–00.05



PROFILE

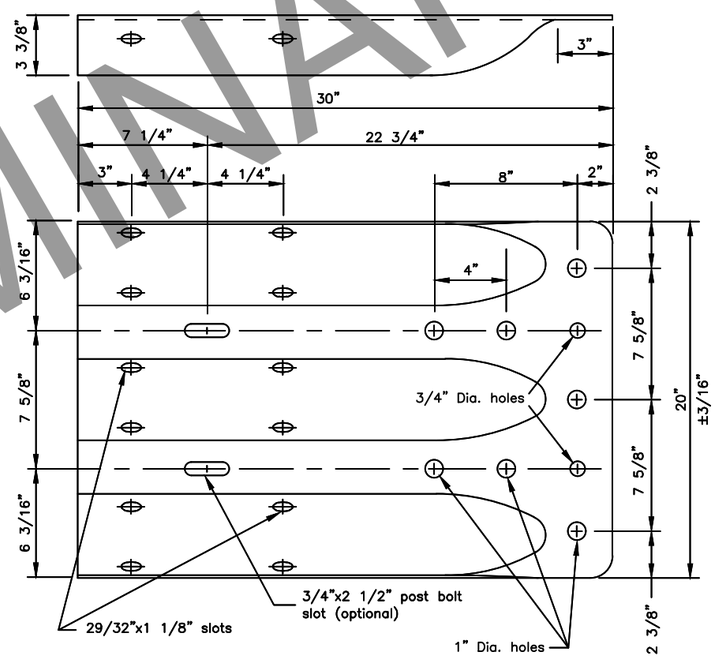


STANDARD W-BEAM TERMINAL CONNECTOR
(RWE02)



W-BEAM PLAN VIEW
*Radius to be specified on the plans

STANDARD W-BEAM END SECTION
(RWE06)



STANDARD THRIE BEAM TERMINAL CONNECTOR
(RTE01b)

GENERAL NOTES:

1. W-Beam and Thrie Beam Terminal Connectors shall conform to AASHTO M 180, Class B, Type II.
2. W-Beam end sections shall conform to AASHTO M 180, Class A, Type II.
3. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STANDARD GUARDRAIL HARDWARE (TERMINAL CONNECTORS)

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

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By: KLK Date: 7/8/2020

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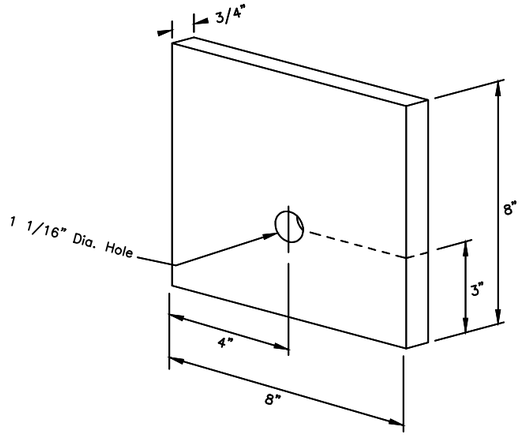
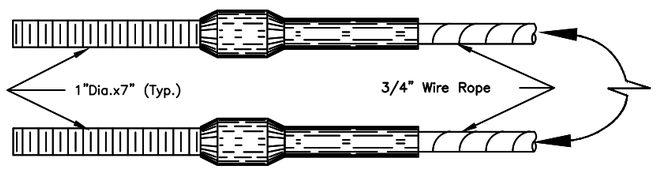
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V26 OF V46

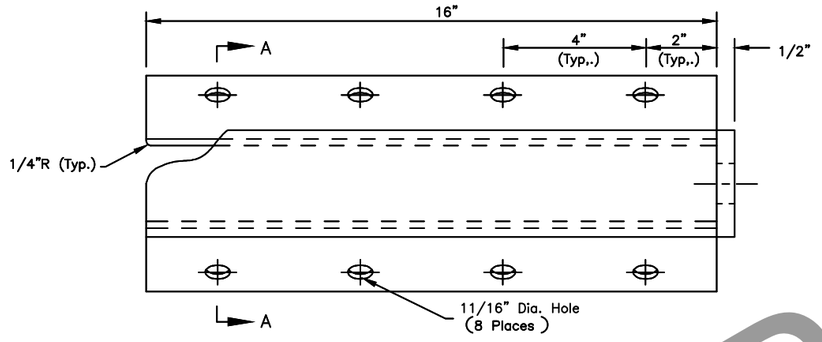
G-00.05



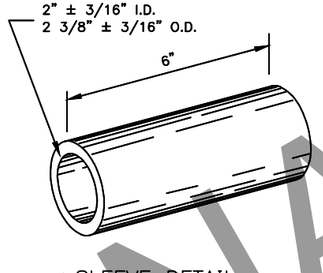
BEARING PLATE for CRT TERMINAL ANCHOR
(FPB01)



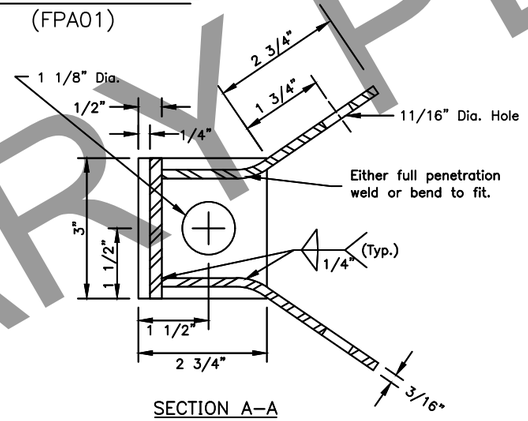
SWAGED FITTING DETAIL
(FCA01–02)



CABLE ANCHOR PLATE
(FPA01)



SLEEVE DETAIL
(FMM02)

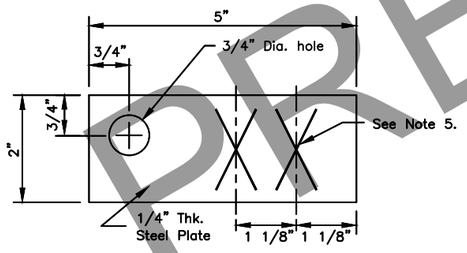


SECTION A–A

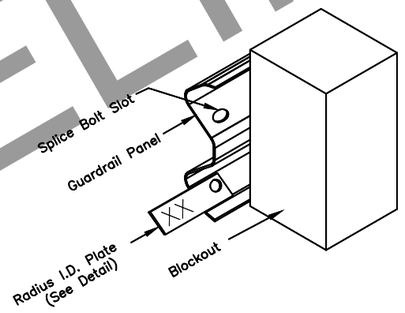
CONTROLLED RELEASE TERMINAL HARDWARE DETAILS

GENERAL NOTES:

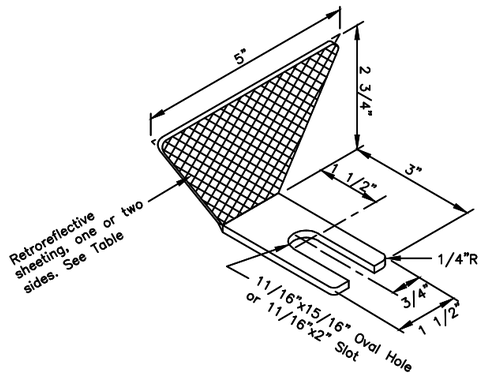
1. Cable Anchor Plate may be formed in single unit or welded fabrication.
2. Anchor Cable Assembly must conform to AASHTO M 30 with Type II Wire Rope.
3. Provide Sleeve for Wood Posts meeting the requirements of ASTM A53 and made of 2–inch galvanized standard pipe. Sleeve shall be a tight, pressed fit in post.
4. Attach radius ID plates to all shop–bent guardrail sections. Bolt the ID plates to the back side of the guardrail panel with the lower splice bolt nearest the P.C. of the radius.
5. Show the Rail bend radius, in feet, as "XX" on the radius ID plate. Digits shall be etched or stamped and have a min. height of 1 1/2" and a max. width of 3/4". Galvanize the plate after the digits are marked.
6. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.



RADIUS I.D. PLATE



RADIUS I.D. PLATE MOUNTING DETAIL



GUARDRAIL REFLECTOR

Guardrail Reflector Table

Type	Color	Reflectorized
A	White	Front & Rear
B	White	Front
C	Yellow	Front
D	Yellow	Front & Rear

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V27 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STANDARD GUARDRAIL HARDWARE (MISCELLANEOUS)

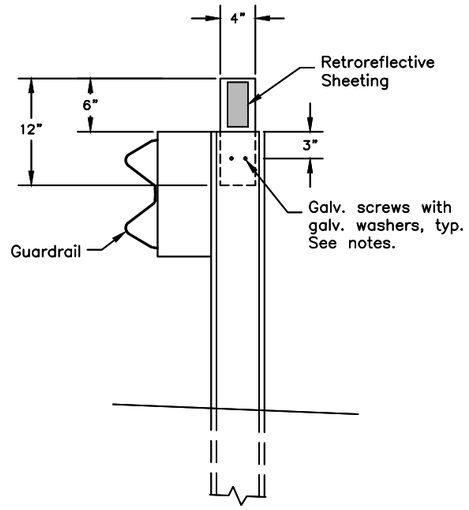
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

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

G–00.05



GUARDRAIL FLEXIBLE DELINEATOR DETAIL

(Steel post shown – similar for wood post)

CONSTRUCTION NOTES

1. Install guardrail flexible delineators where shown on the plans.
2. Install guardrail flexible delineators at 50 foot spacing, unless otherwise noted on the plans. Install not less than 2 delineators per guardrail run.
3. Use 3" x 5" white/yellow/red retroreflective sheeting as required per Standard Plan T–05. Install retroreflective sheeting on both sides of delineator on two–way roads.
4. Attach 4" x 12" flexible delineators to the top of new guardrail posts, on the trailing side of the posts relative to the adjacent lane's direction of travel.
5. Use 2 each 1/4" dia. x 1–1/2" long galvanized lag screws for attaching to wood posts and 2 each 1/4" dia. x 3/4" long galvanized self–drilling fasteners for steel posts. Install a galvanized washer between the fastener head and the flexible delineator.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STANDARD GUARDRAIL HARDWARE (FLEXIBLE DELINEATORS)

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

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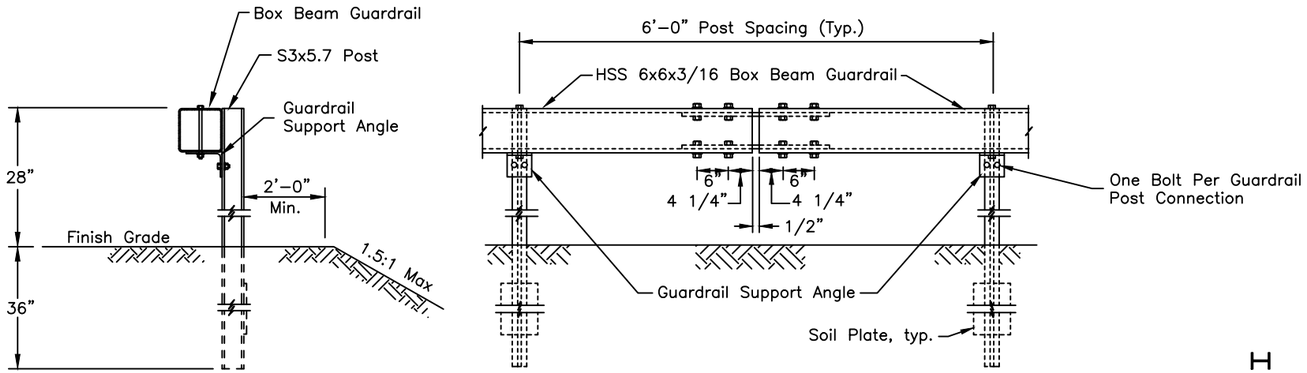
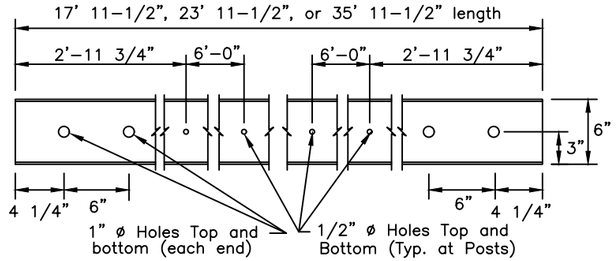
By: KLK Date: 7/8/2020

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

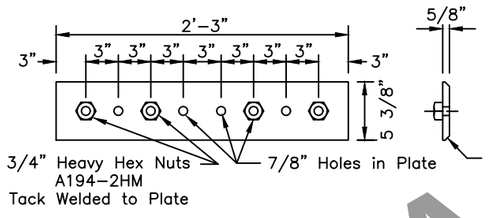
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V28 OF V46



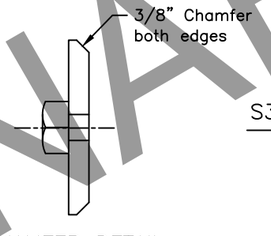
POST INSTALLATION



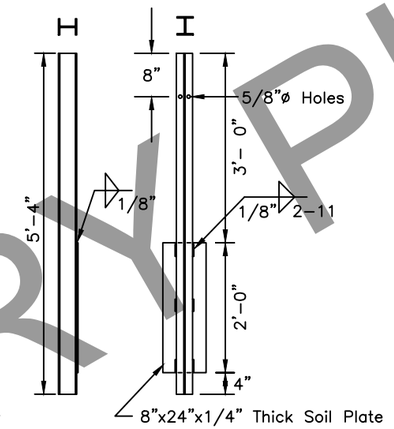
HSS 6x6 x 3/16 BOX BEAM GUARDRAIL



SPLICE PLATE

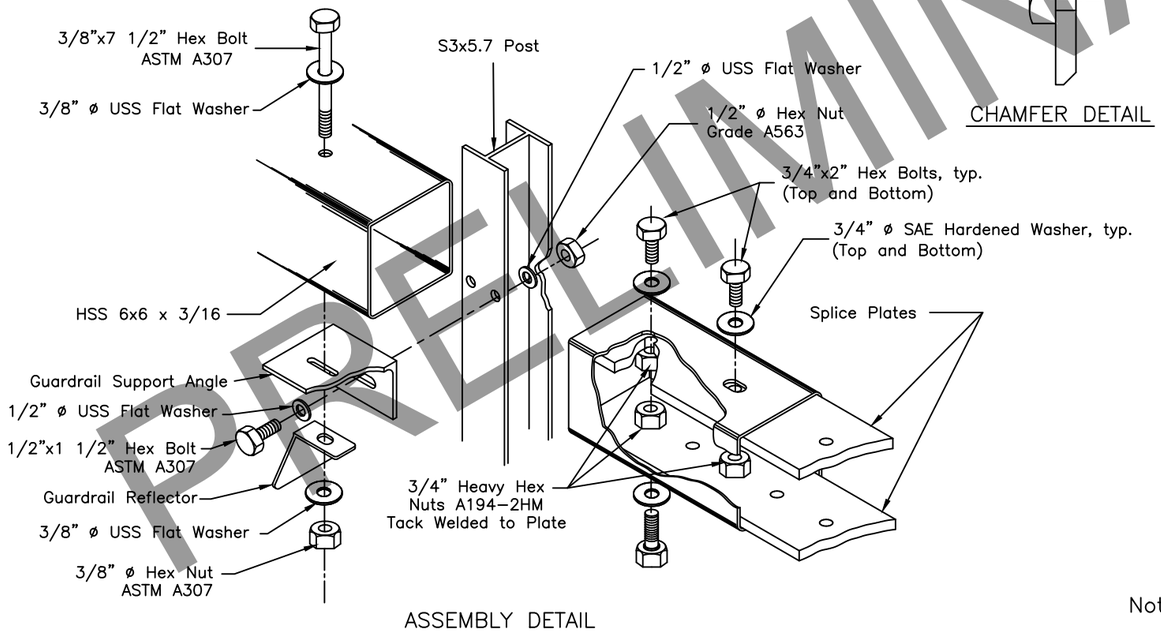


CHAMFER DETAIL

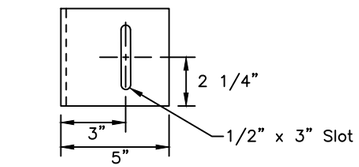


S3x5.7 BOX BEAM GUARDRAIL POST

ASTM A992 Post, ASTM A36 Plate



ASSEMBLY DETAIL



GUARDRAIL SUPPORT ANGLE

L 5 x 3.5 x 3/8 – ASTM A36

Note: Drawing not to scale

CONSTRUCTION NOTES:

1. No fixed objects allowed within 60" of the back of the guardrail post.
2. Shop form guardrail on curves with a radius of less than 717'.
3. Splice plate connections shall meet ASTMF3125, Grade A325 for bolts and A563, Grade A for hex nuts.
4. HSS Steel Tube box beam rail elements shall meet ASTM A500 Grade B.
5. Provide guardrail reflectors conforming to Standard Plan G-00 and Section 606 of the Standard Specifications.
6. Mount guardrail reflectors every 48' on tangents and 24' on curves. Start reflector installation on the first post. Use Type A reflectors unless shown otherwise on the plans.
7. Do not galvanize contact surfaces between the splice plate and the interior HSS tube surface.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

MASH BOX BEAM GUARDRAIL

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

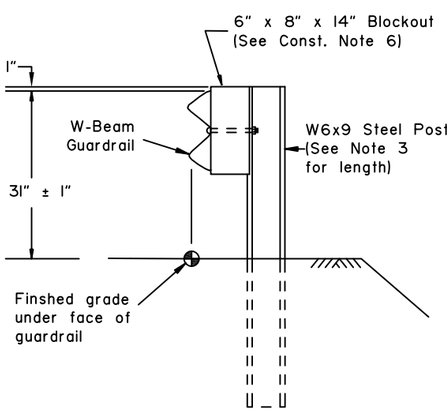
Adoption Date: 07/30/2021

Last Code and Stds. Review By: LRG Date: 07/30/2021

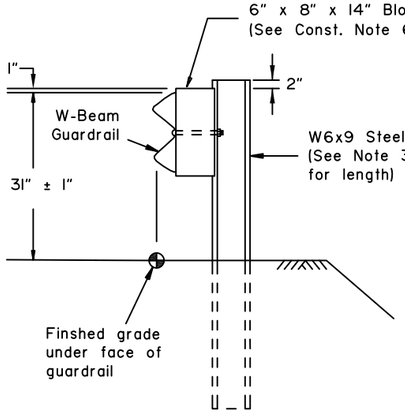
Next Code and Standards Review date: 7/30/2021

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V29 OF V46

G-04.00

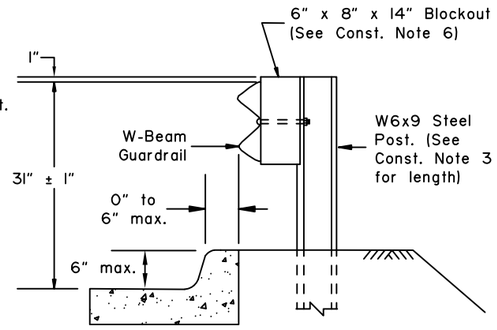


TYPE I POST INSTALLATION

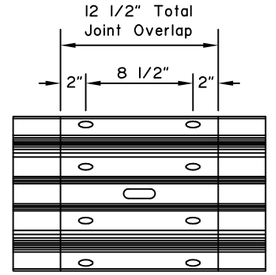


TYPE II POST INSTALLATION

(Facilitates raising rail for future overlays.)

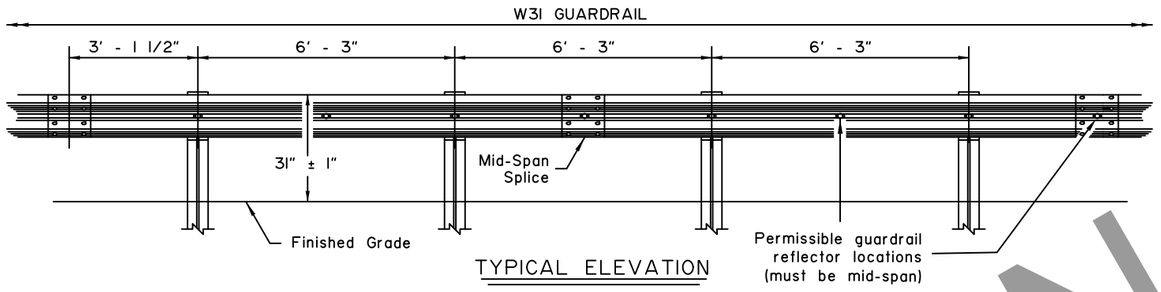


TYPE III POST INSTALLATION

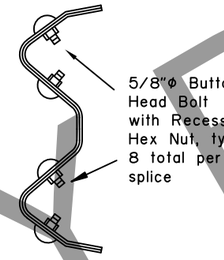


SPLICE DETAIL

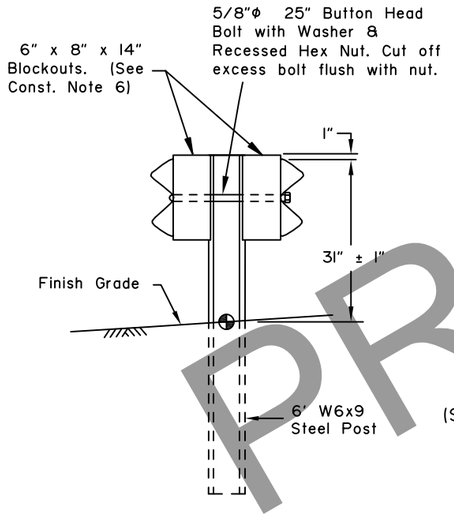
(At mid span between posts only. Bolts not shown for clarity)



TYPICAL ELEVATION



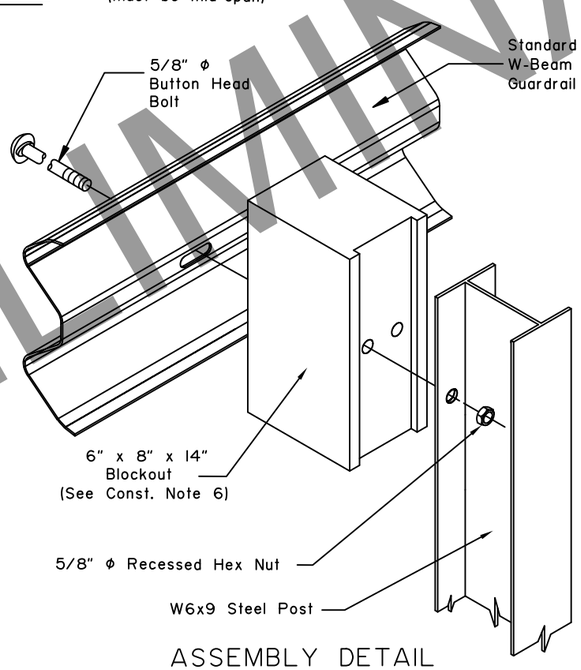
SPLICE CROSS-SECTION



TYPE IV DOUBLE SIDED INSTALLATION

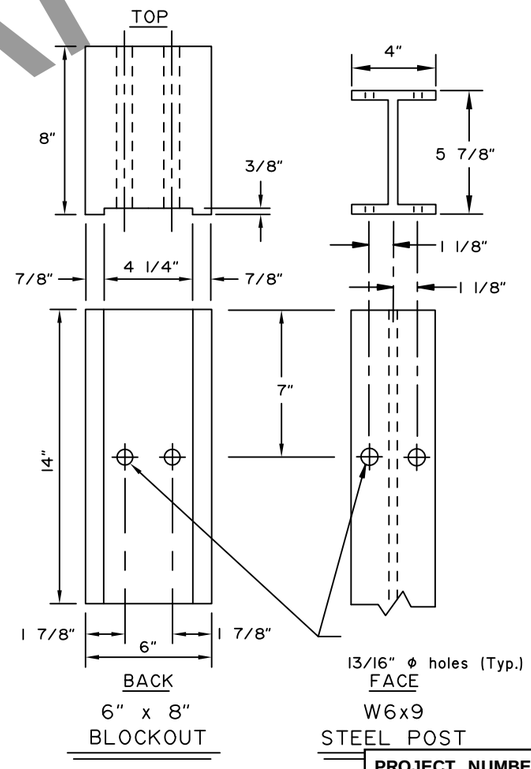
GUARDRAIL REFLECTOR

(See Const. Note 5)



ASSEMBLY DETAIL

(Type I post shown)



BACK

6" x 8" BLOCKOUT

FACE

W6x9 STEEL POST

CONSTRUCTION NOTES:

1. Provide hardware compliant with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware.
2. See Standard Plan G-00 for hardware details not shown on this drawing.
3. See Standard Plan G-10 for post lengths corresponding to different combinations of slope and behind-post embankment width.
4. Typical post spacing is 6'-3" center to center.
5. Attach guardrail reflector to guardrail using a 5/8" button head bolt with 5/8" recessed head hex nut and steel washer at location shown in the Typical Elevation. Install reflectors every 25' on tangents and every 12.5' on curves starting 100' before the P.C. and ending 100' after the P.T.
6. Use wood or synthetic blockouts designed, tested, and passed per MASH for use with steel posts. Either bolt hole on the blockout may be used for attachment.
7. Use a 25 linear foot transition to match differing height of existing or new rail elements and end treatments - see Standard Plan G-11.
8. W6x8.5 steel post may be substituted for W6x9 steel post.
9. Install flexible delineators on guardrail posts when called for in the contract. See Standard Plan G-00 for guardrail flexible delineator details.

DESIGN NOTES:

1. No fixed objects allowed within 36" of the back side of guardrail post.
2. This barrier is acceptable under MASH Tests 3-10 and 3-11.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STEEL POST W31 GUARDRAIL

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*

Carolyn Morehouse, P.E.
Chief Engineer

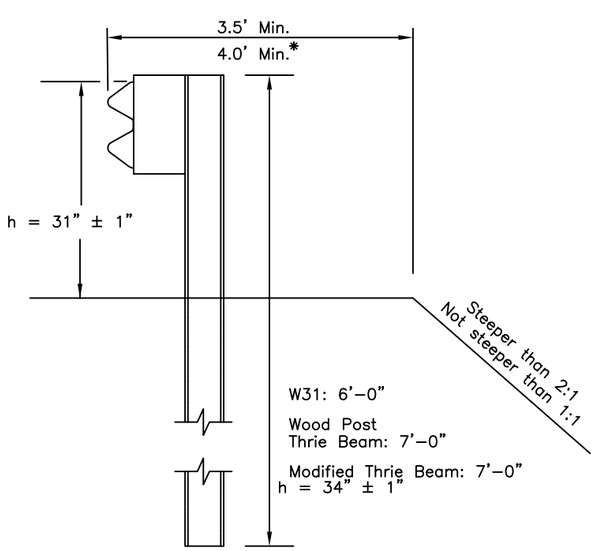
Adoption Date: 05/15/2019

Last Code and Stds. Review By: LRG Date: 5/15/2019

Next Code and Standards Review date: 5/15/2029

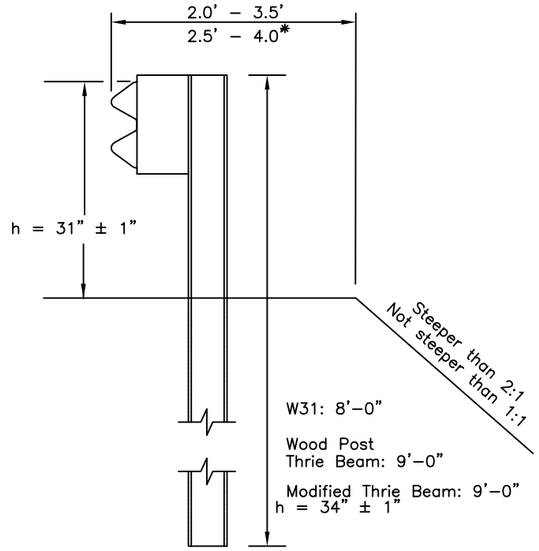
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V30 OF V46

G-05.11S



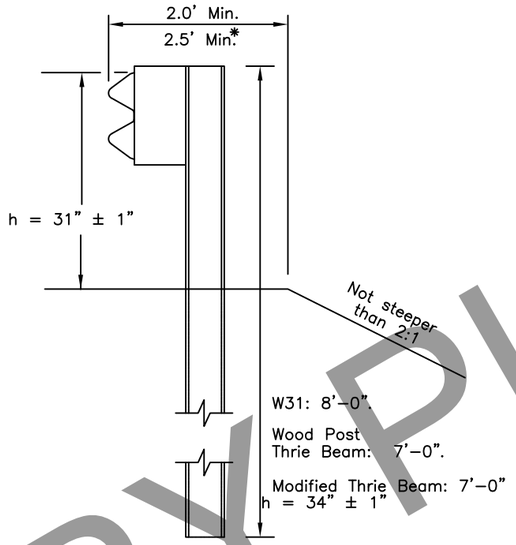
* with Modified Thrie Beam

CASE 1

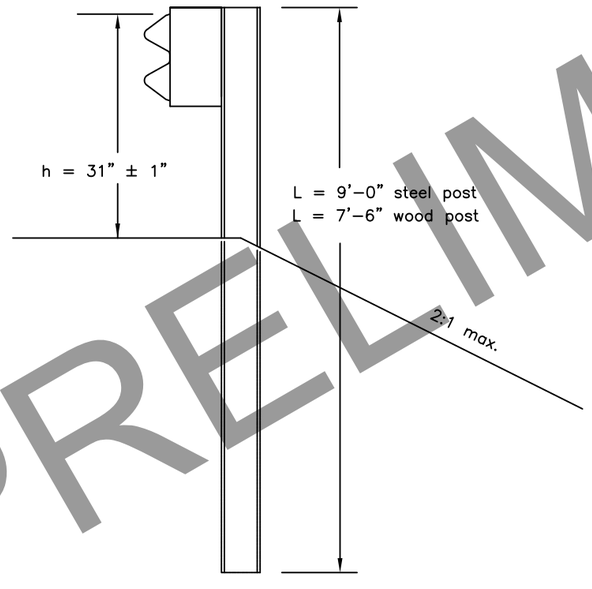


* with Modified Thrie Beam

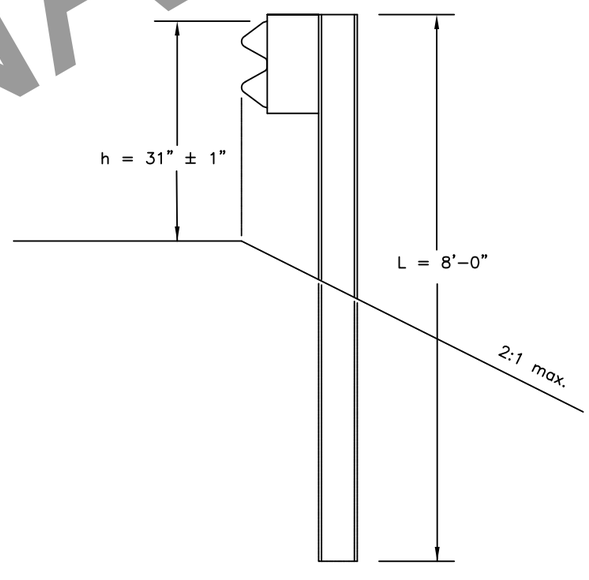
CASE 2



CASE 3



CASE 4
(See Note 5)



CASE 5
(See Note 5)

CONSTRUCTION NOTES:

1. This drawings is to be used for post length determination only. See Plans for slopes and behind–post embankment widths.
2. To determine post length, identify the case that matches site conditions and read the length corresponding to the pertinent guardrail type.
3. These dimensions apply to both curbed and uncurbed section.
4. Case 1, 2 and 3 are shown with steel posts. Wood posts may be substituted when allowed by specifications. Wood Post Thrie Beam installations must use wood posts only.
5. Case 4 and 5 apply to W31 guardrail only.

DESIGN NOTES:

1. No fixed objects allowed within 48" of the back of post for Cases 1, 2, 3, 4, and 5.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

GUARDRAIL POST INSTALLATION

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

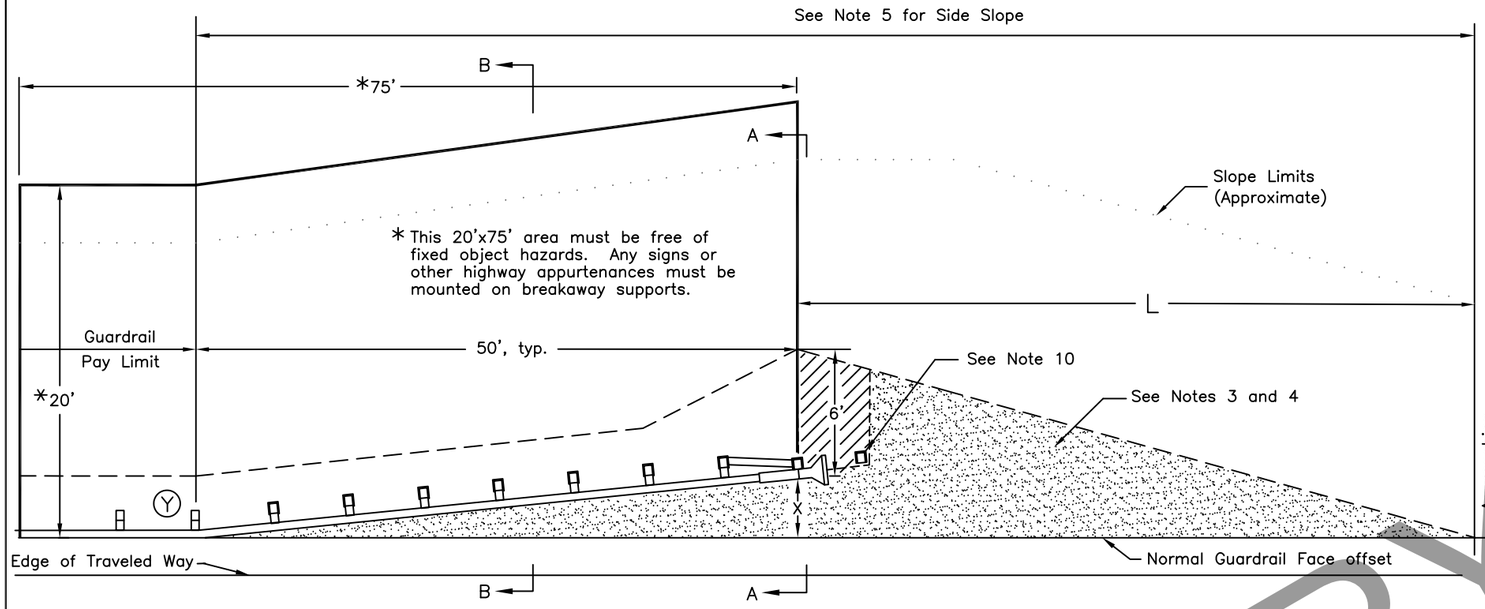
Adoption Date: 09/15/2022

Last Code and Stds. Review
By: LRG Date: 09/15/2022

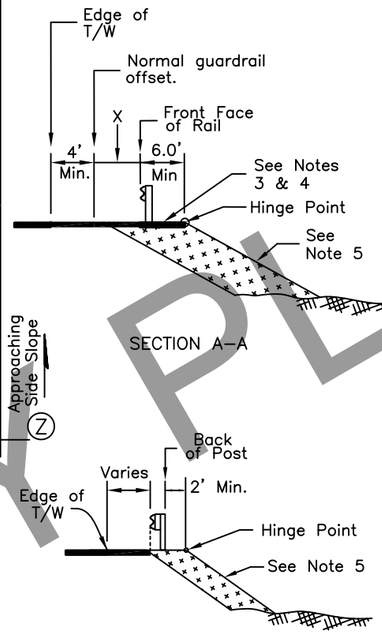
Next Code and Standards Review date:09/15/2032

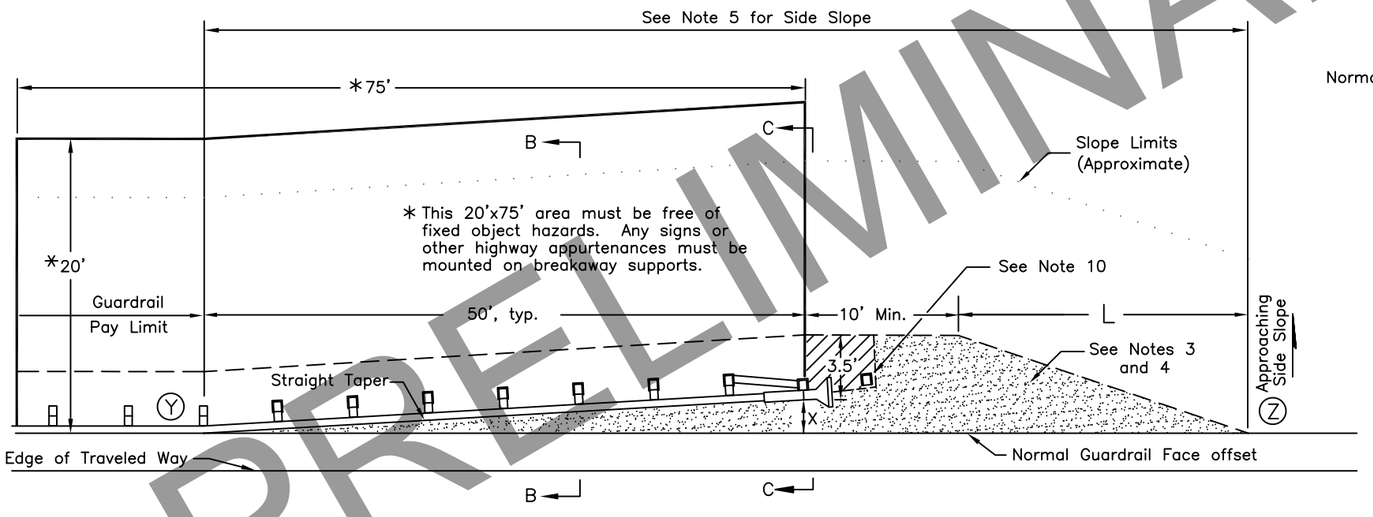
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V31 OF V46

G–10.21



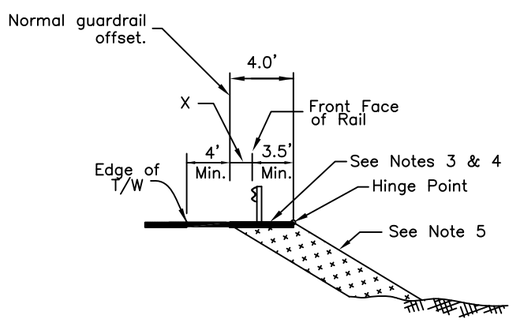
STANDARD GUARDRAIL TERMINAL WIDENING DETAIL





ALTERNATE GUARDRAIL TERMINAL WIDENING DETAIL

(USE ONLY WHEN LIMITED RIGHT–OF–WAY OR LIMITING SITE CONDITIONS MAKE THE STANDARD DETAIL INFEASIBLE)



X= End offset. See manufacturer's information for the range of acceptable end offsets for each MASH compliant terminal.

Taper Lengths (L) for Common End Offsets (X)		
End Offset	Standard Detail	Alternate Detail
0'	24.0'	13.0'
1'	26.0'	17.0'
1.5'	28.0'	19.0'
2'	30.0'	21.0'
2.5'	32.0'	22.0'
4'	37.0'	28.0'
Interpolate if the end offset falls between table values		

GENERAL NOTES

1. This Std. Dwg. applies to all MASH approved guardrail end terminals (GETs). The alternate detail may only be used with parallel or tangent GETs. The terminal details shown are for illustration only – see manufacturer's drawings for actual post, rail, strut, etc. configuration and layout.
2. Use this Std. Widening Detail for all GETs except when limited right–of–way or limiting site conditions make the use of the Std. Widening Detail infeasible. In that case, the alternate detail is permissable.
3. Construct the shaded areas to match the slope of the adjacent shoulder. The slope may be increased to 10:1 if identified in the plans or when approved by the engineer. Match the slope when the shoulder slopes toward the road as well as away from the road.
4. On paved roads, the shaded areas shall be paved. On gravel roads, surface the shaded areas with the same materials used to surface the travel lanes.
5. From point Ⓨ to point Ⓩ make the side slope match the approaching side slope except where it is flatter than 4:1. In that case, the slope may be steepened to 4:1.
6. Attach a flexible marker at the beginning of each GET.
7. The max. allowable height for foundation tubes or other steel components of terminal post breakaway systems is 4" above the surrounding grade.
8. The details on this sheet do not apply to W31 Downstream End Anchors (Std Dwg G–14).
9. The details on this sheet apply to GETs on both the approach and downstream ends on two–way undivided roads and to any downstream MASH compliant GETs.
10. Some MASH GET systems have an additional post/anchor at the approximate location shown. If this post/anchor is present do not pave the diagonally hatched area. If not present, pave the diagonally hatched area also.

PROJECT NUMBER:
000S828 / Z620030000
SHEET NO.: V32 OF V46

State of Alaska DOT&PF
ALASKA STANDARD PLAN

WIDENING FOR GUARDRAIL END TERMINALS

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:

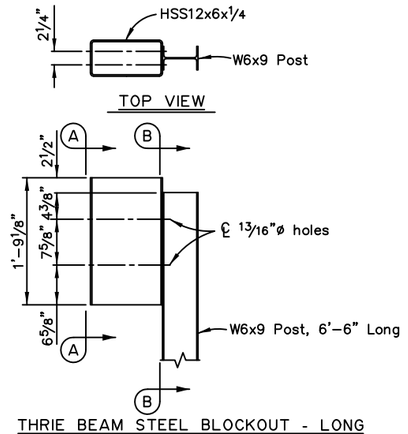
Next Code and Standards Review date:02/08/2029

G–20.12

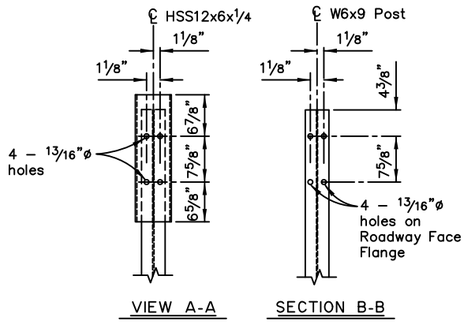
PROJECT NUMBER: 000S828 / Z620030000
SHEET NO.: V33 OF V46

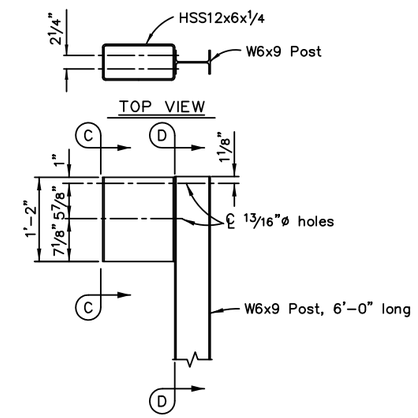
G-32.03

SHEET | of |

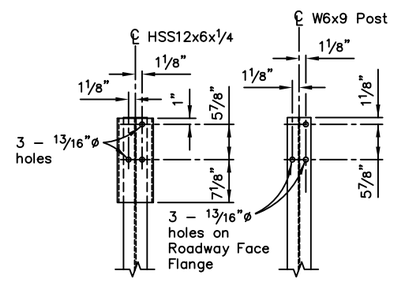


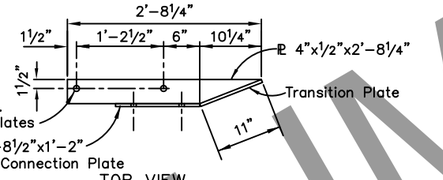
THRIE BEAM STEEL BLOCKOUT - LONG

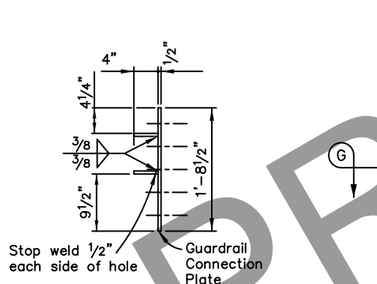


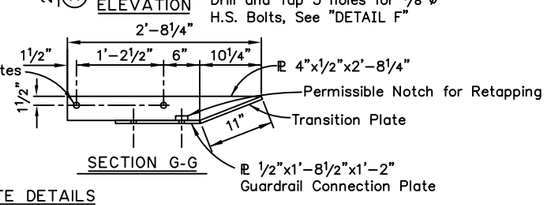


THRIE BEAM STEEL BLOCKOUT - SHORT

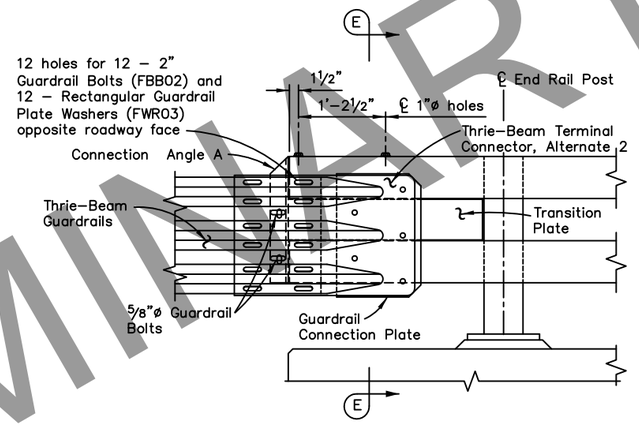




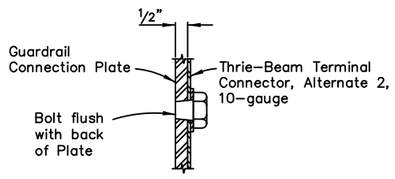




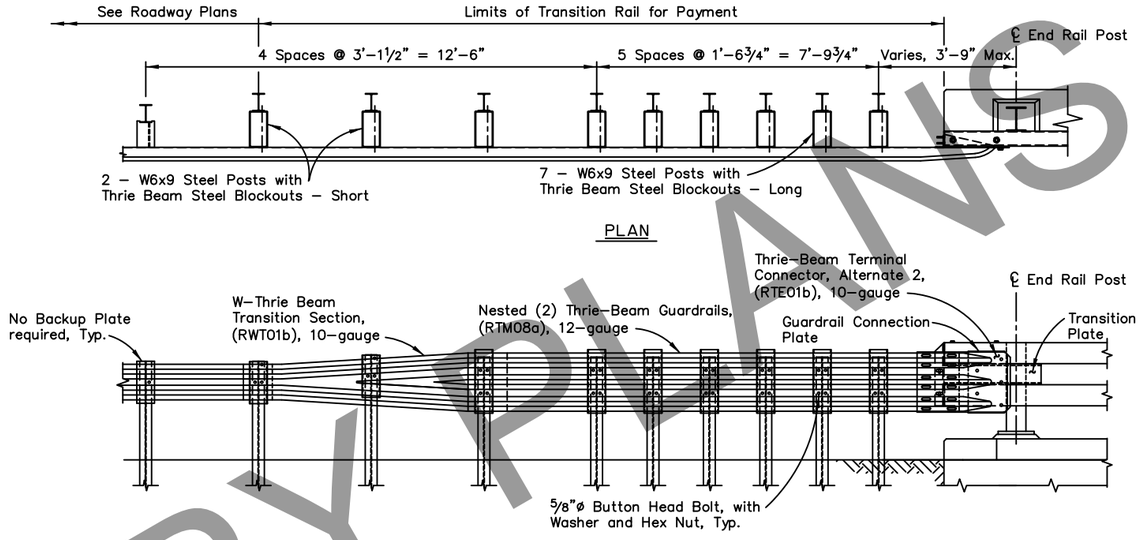
GUARDRAIL CONNECTION PLATE DETAILS

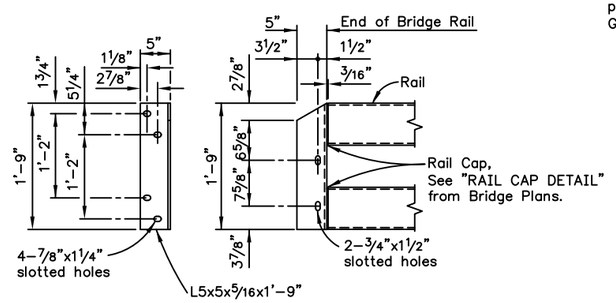


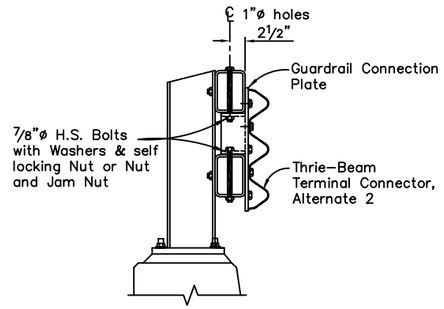
TRANSITION CONNECTION - ELEVATION



DETAIL F







SECTION E-E

NOTES:

1. Conform to G-00, G-05, and G-10 of the Standard Plans for all Thrie Beam Transition details not shown.
2. Thrie Beam Transition part numbers are listed in parentheses () and referenced in the "Task Force 13 Guide to Standardize Roadside Hardware."

No Scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

MASH BRIDGE RAIL THRIE BEAM TRANSITION

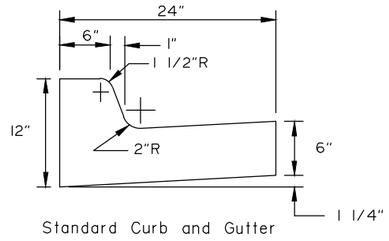
Adopted as an Alaska Standard Plan by: Carolyn H Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 09/15/2022

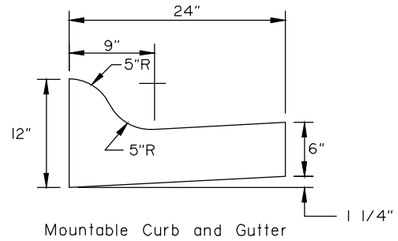
Last Code and Stds. Review By: SEM Date: 07/17/2020

Next Code and Standards Review Date: 07/17/2030

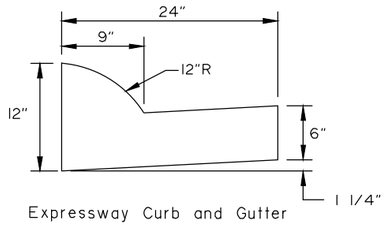
G-32.03



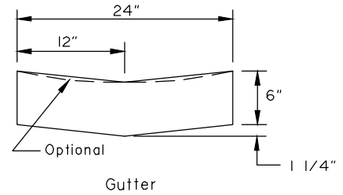
Standard Curb and Gutter



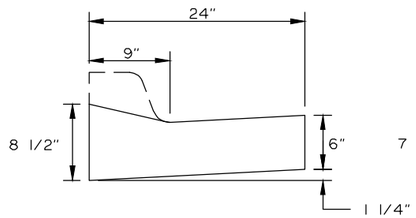
Mountable Curb and Gutter



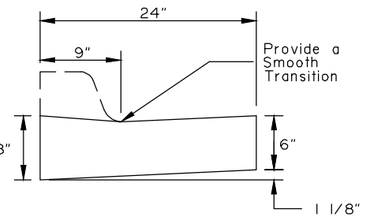
Expressway Curb and Gutter



Gutter

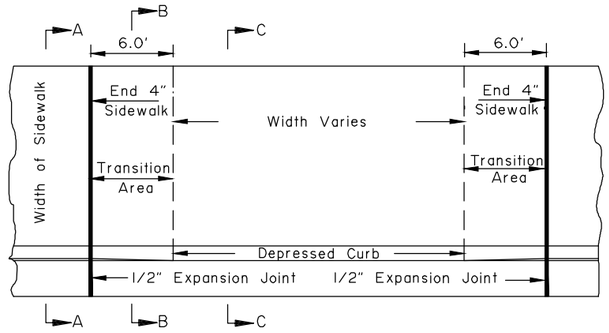


Depressed Curb and Gutter

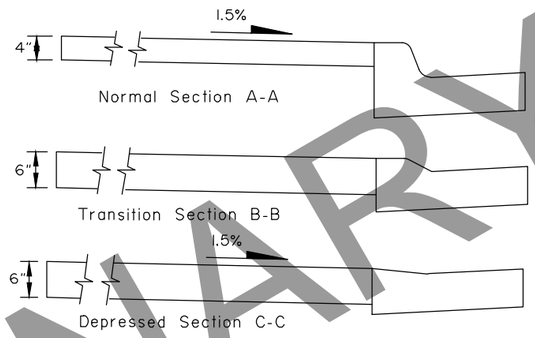


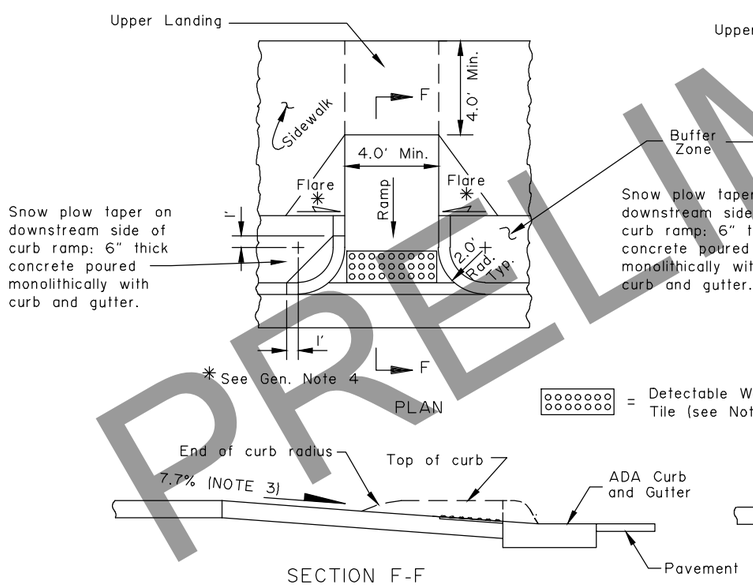
ADA Curb and Gutter

CURB and GUTTER DETAILS

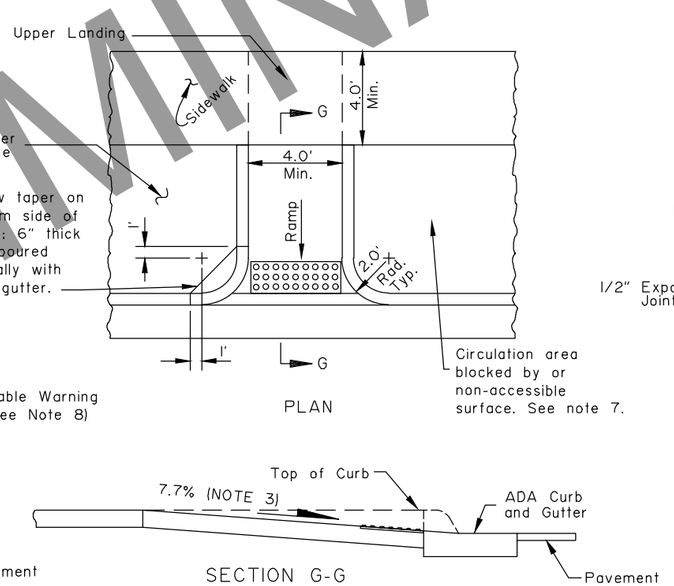


DRIVEWAY CURB CUT DETAILS

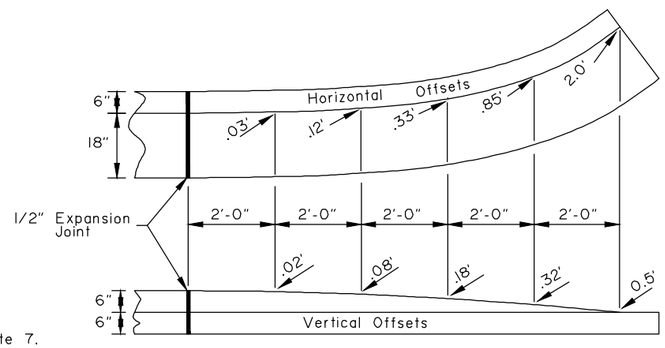




SECTION F-F
Returned Curb Ramp with
Sidewalk for Pedestrians



SECTION G-G
Returned Curb Ramp
for Pedestrians



CURB and GUTTER
TERMINATION TRANSITIONS

Note: Drawing not to scale

CONSTRUCTION NOTES:

1. Use the type of curb and gutter shown on the plans.
2. Construct ramp runs and landings of concrete, regardless of whether the sidewalk is asphalt or concrete.
3. Construct ramp slopes at a 7.7% nominal grade, or flatter. Ramp slopes may be increased to a maximum of 8.3% when site conditions warrant it. Ramp lengths should be increased to keep grades under the 8.3% maximum, but are not required to exceed 15.0 feet. The resulting ramp grade at a 15.0 foot ramp length is acceptable even if it exceeds 8.3%.
4. Construct flare slopes at 8.3% (measured paralllel to the curb line) or flatter, sidewalk cross slopes at 1.5% nominal (1.0% min. and 2.0% max), and ADA Curb and Gutter gutter pan slopes at 4.7% nominal. Construct grade breaks perpendicular to ramp runs.
5. Do not construct flare slopes steeper than 10.0%, sidewalk cross slopes steeper than 2.0% and ADA Curb and Gutter gutter pan slopes steeper than 5.0%. These are the steepest slopes allowed under the 2006 ADA Standards for Transportation Facilities.
6. Provide a coarse broomed finish on ramp runs perpendicular to the ramp slope.
7. When approved by the Engineer, curb returns may be replaced with flares at locations where access to the side of a ramp run is free of poles, utility boxes, other obstructions, or non-accessible surfaces such as a dirt planter strips. See Standard Plan I-22 for flare details.
8. Install 24" wide detectable warning tiles for the full width of the ramp. Provide tiles with truncated domes meeting Section 705.1 of the 2006 ADA Standards for Transportation Facilities. Align truncated dome pattern in the predominant direction of wheelchair travel to permit wheels to roll between domes.
9. Maximum cross slope on upper landings, measured in any direction, is 2.0%. Maximum cross slope on ramps is 2.0% measured perpendicular to the ramp run.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CURB CUT
CURB & GUTTER
AND CURB RAMP DETAILS

Adopted as an Alaska Standard Plan by: Carolyn Morehouse

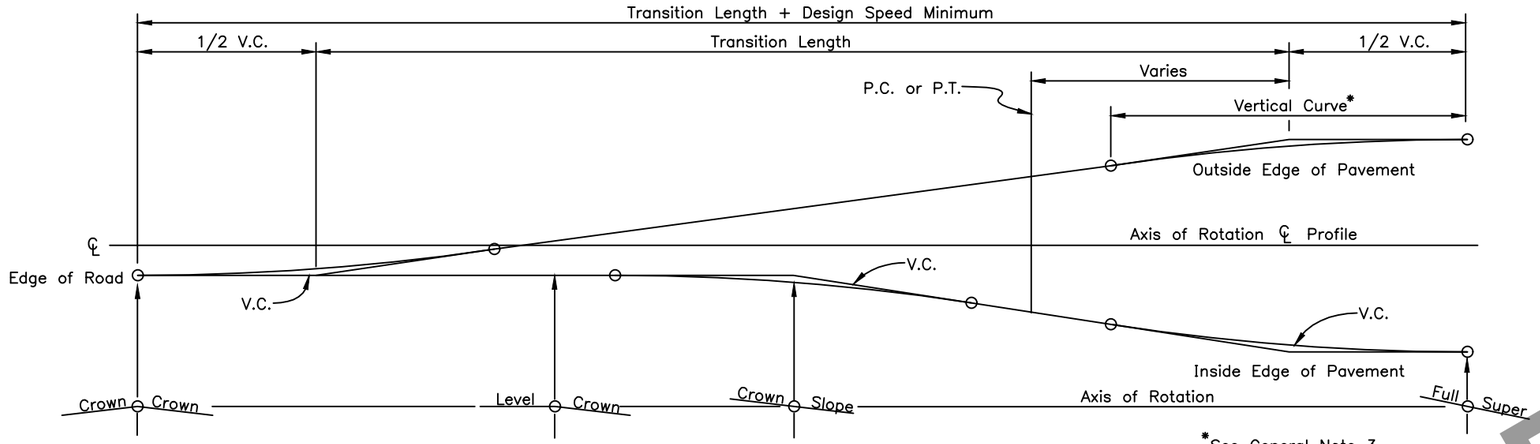
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

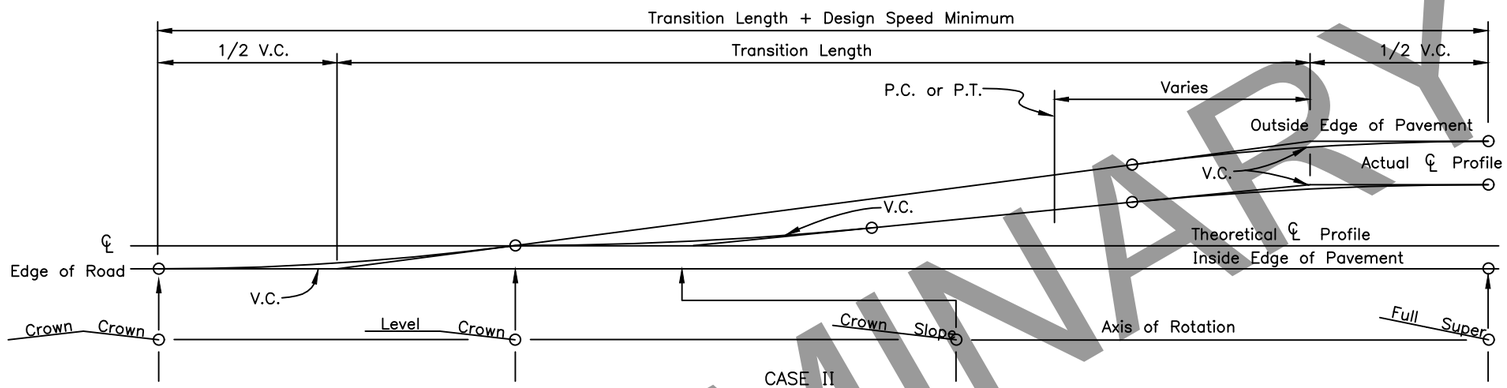
Next Code and Standards Review date: 7/8/2030

I-20.20

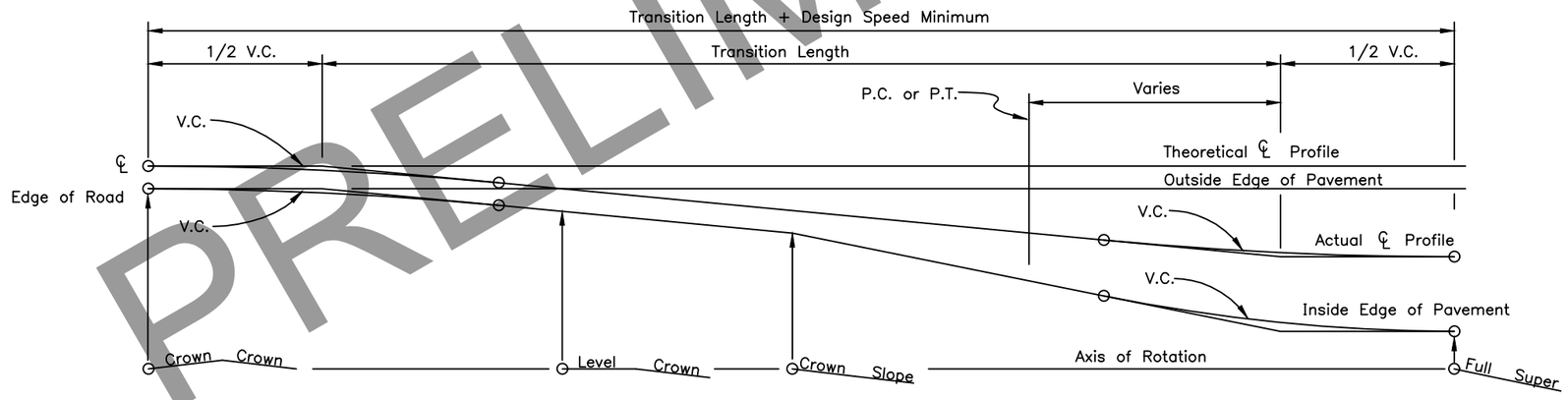


*See General Note 3

CASE I
PAVEMENT REVOLVED ABOUT CENTERLINE



CASE II
PAVEMENT REVOLVED ABOUT INSIDE EDGE
TO BE USED WHERE DRAINAGE IS THE GOVERNING CONSIDERATION



CASE III
PAVEMENT REVOLVED ABOUT OUTSIDE EDGE TO BE
USED WHERE OVERALL APPEARANCE IS THE MAIN CONTROL

GENERAL NOTES:

1. Location of transition length relative to horizontal curves will be shown on the plans or as directed by the Engineer.
2. Widening for guardrail or curvature will not change the location of the axis of rotation.
3. Minimum vertical curve length in feet shall be the numerical value of the design speed in M.P.H.
4. Superelevation shall be built into the subgrade and carried through the shoulders.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SUPERELEVATION TRANSITION

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

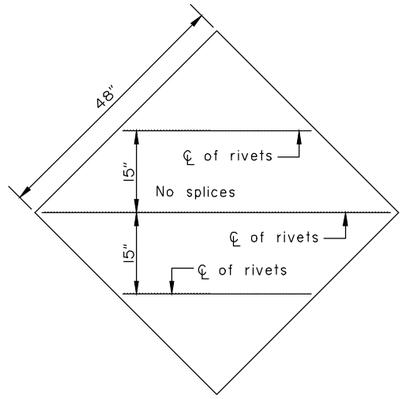
Adoption Date: 7/17/2020

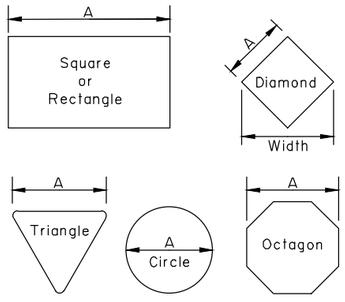
Last Code and Stds. Review
By: KLK Date: 7/8/2020

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

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V35 OF V46

I-81.00

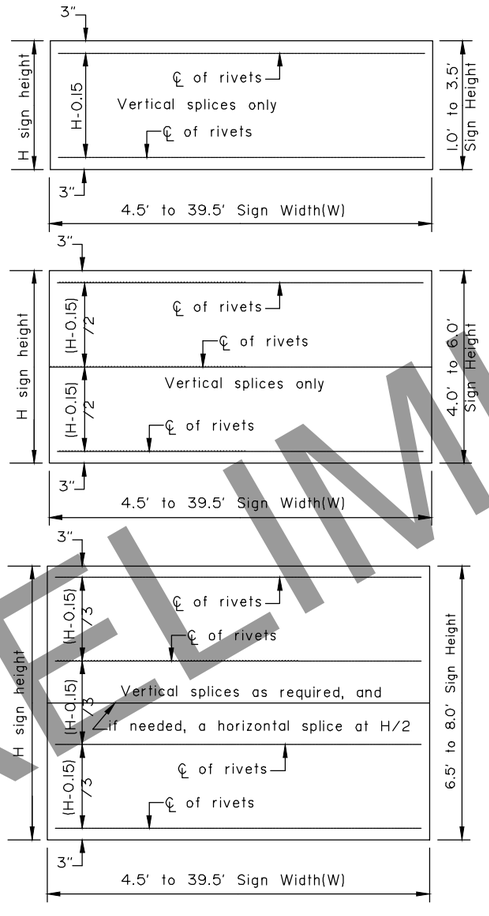




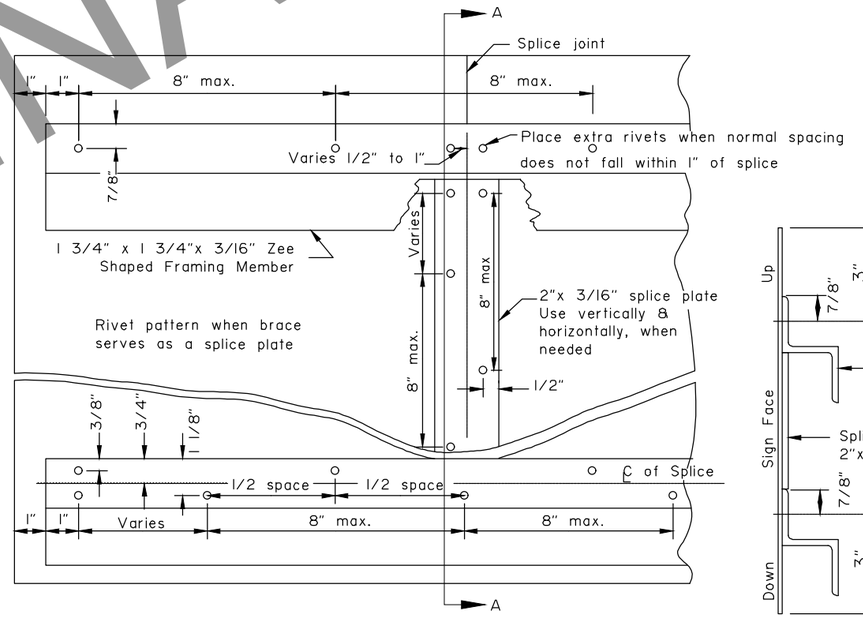
Maximum size unframed signs using 0.125" thick aluminum sheeting.	
Sign Shape	A
Squares, Shields, and Route Markers	48"
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

Install wind framing on all signs that exceed the dimensions listed.

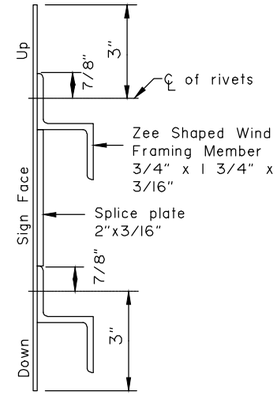
LIGHT SIGNS



WIND FRAMING LOCATIONS



RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE



SECTION A-A

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN FRAMING

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

Adoption Date: 7/17/2020

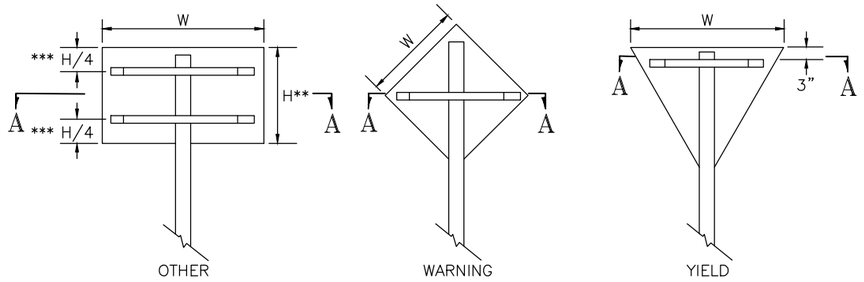
Last Code and Stds. Review
By: WTH Date: 7/8/2020

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

S-00.12

GENERAL NOTES

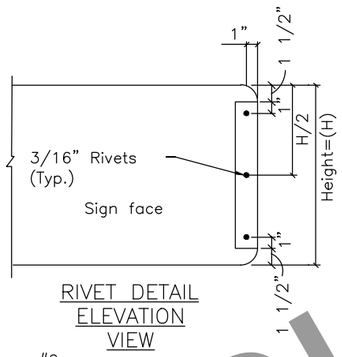
1. See the standard specifications for the aluminum alloys that you may use for sign sheeting and wind framing members.
2. Fabricate all signs from 0.125" thick aluminum sheeting.
3. Sign fabricators may use alternates to the zee shaped framing member with approval of the engineer, if the frame manufacturer certifies their design equals or exceeds the strength of the zee shaped design.
4. Install one piece wind framing members on all signs up to 23.5' wide. Use one splice in each wind frame on all signs wider than 23.5'. Locate splices at least 18" from all posts and panel edges. Stagger splices in adjacent framing members at least 8.0' apart.
5. Attach wind framing members with rivets or with an engineer approved, double sided, high strength, adhesive tape. Clean and handle sheeting and framing members and apply tape in accordance with the tape manufacturer's written instructions. Install two rivets in both ends of each framing member.
6. Use 3/16" diameter rivets conforming to aluminum alloy 6061-T6 for cold driven rivets, or aluminum alloy 6061-T43 for hot driven rivets.
7. Sign fabricators may use sign panels extruded with integral framing with approval of the engineer, if the manufacturer certifies their design equals or exceeds the strength of the 0.125" thick panel with framing attached to it.
8. Frame all signs taller than 8.0' with five wind framing members located (H-0.15)/4 spaces. If needed, make a horizontal splice at the middle wind frame.
9. Do not use round pipes for sign supports.



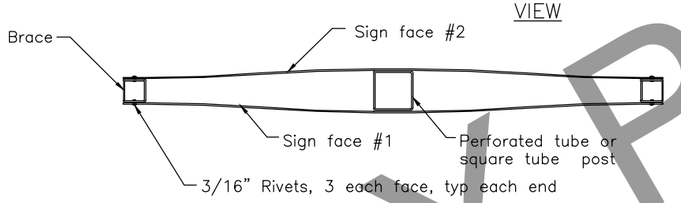
*** Use one brace when H ≤ 18"
Use two braces when 18"< H < 48"
Use three braces when H ≥ 48"

** Position of brace may be varied to match Predrilled mounting holes in panel

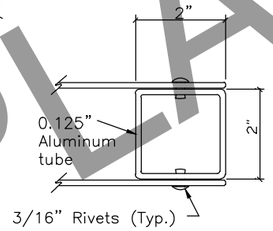
SIGN BRACING PLACEMENT



RIVET DETAIL ELEVATION VIEW

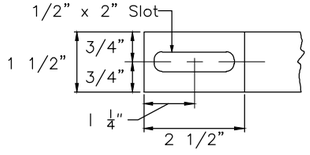


PLAN VIEW

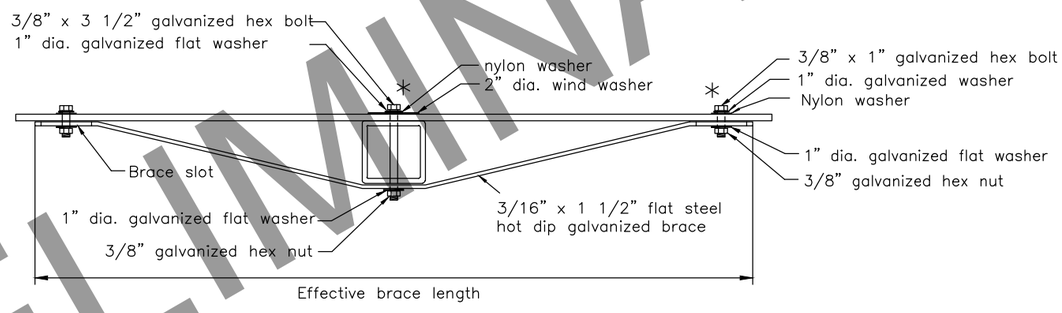


END BRACE DETAIL

SMALL STREET NAME SIGN (D3-1, D3-1A, D3-1D) BRACING DETAILS



DETAIL OF BRACE SLOT
Elevation view



TUBE POST SIGN BRACING SECTION A-A
Plan view

* Adjust location of bracing so that bolts and washers will miss the sign legend

Sign Width(W)	Effective Brace Length		
	Warning	Yield	Other
30"	36"	24"	24"
36"	42"	30"	30"
42"	48"	–	36"
48"	Two posts	36"	42"

< 30" No bracing required and use square tube

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

BRACING FOR SIGNS MOUNTED ON SINGLE POST

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

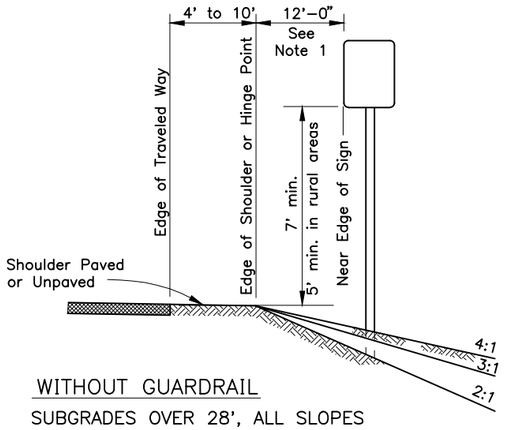
Adoption Date: 7/17/2020

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

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

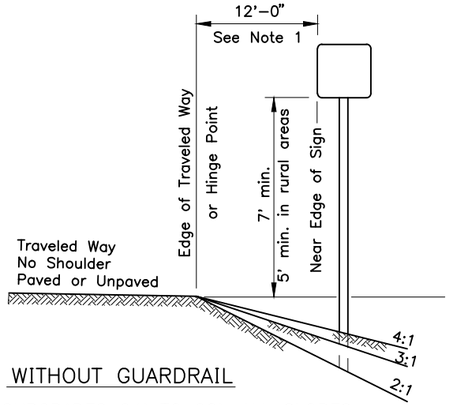
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V37 OF V46

S-01.02



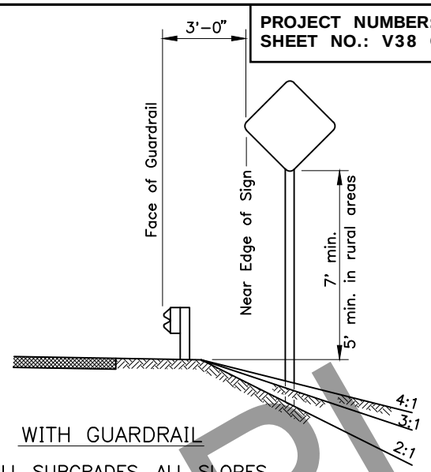
WITHOUT GUARDRAIL

SUBGRADES OVER 28', ALL SLOPES



WITHOUT GUARDRAIL

SUBGRADES 24' TO 28', ALL SLOPES

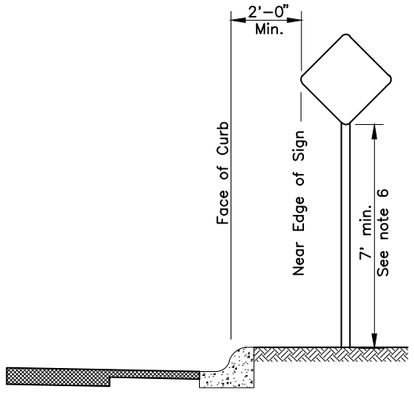


WITH GUARDRAIL

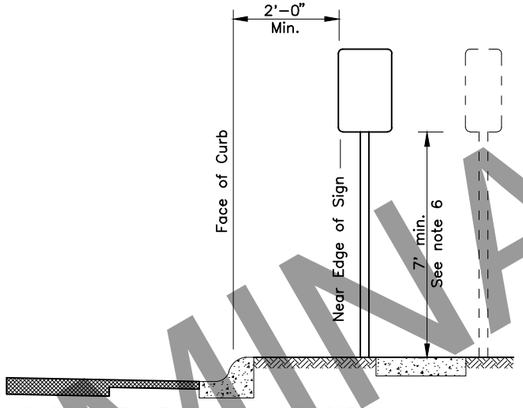
ALL SUBGRADES, ALL SLOPES

GENERAL NOTES

1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6' where shoulder width is 6' or greater.
2. Add 6" to mounting height on unpaved roads.
3. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
4. When signs are placed 30' or more from the edge of traveled way, mount them with the bottom of the sign at least 5' above the road surface at the near edge of the road.
5. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.
6. Minimum mounting height is 7'–0" where parking or pedestrian movements are likely to occur, or where sings extend over sidewalks.
7. For construction signs in rural areas, mounting height shall be 7' minimum.

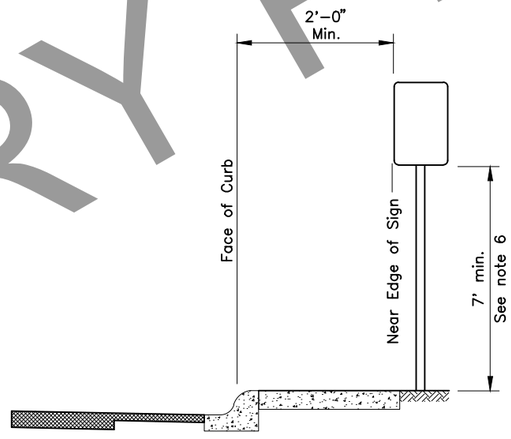


CURB WITHOUT SIDEWALK

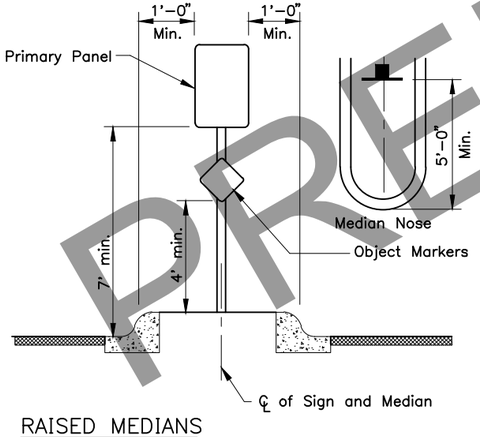


CURB WITH PARKWAY AND SIDEWALK

(If R/W width permits, signs should be placed behind sidewalk.)

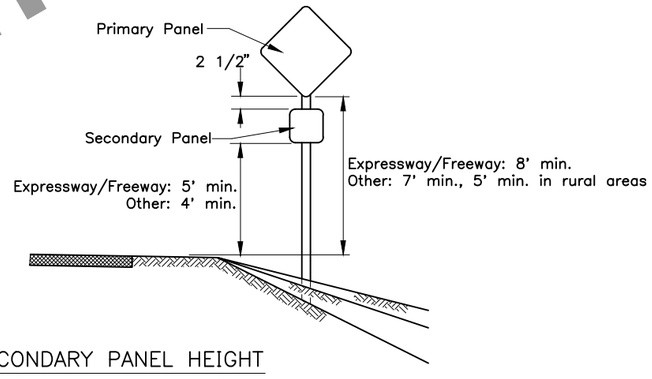


CURB WITH SIDEWALK WITHOUT PARKWAY



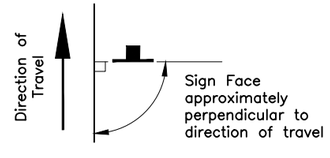
RAISED MEDIANS

Minimum 4' Width for Signing



SECONDARY PANEL HEIGHT

ALL TWO PANEL MOUNTING



SIGN POSITIONING

State of Alaska DOT&PF
ALASKA STANDARD PLAN

POST MOUNTED SIGN
OFFSET AND HEIGHT

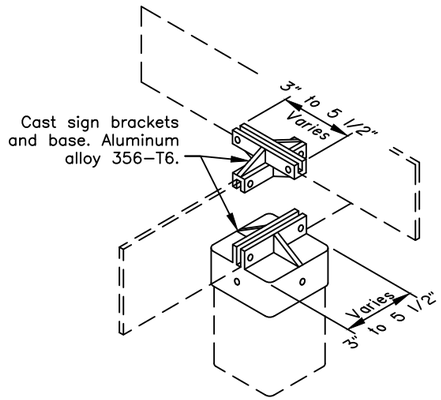
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

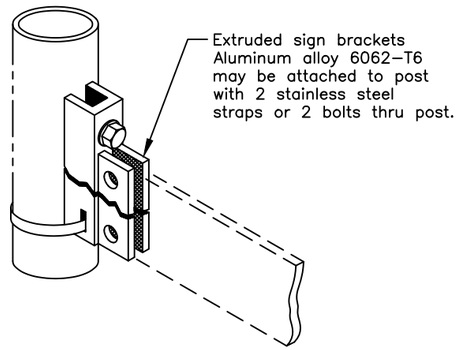
Adoption Date: 7/17/2020

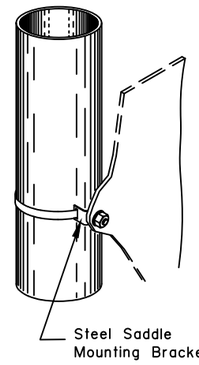
Last Code and Stds. Review
By: KLK Date: 7/8/2020

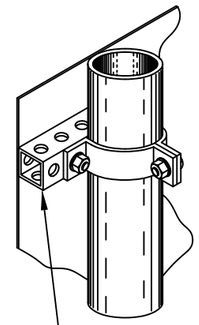
Next Code and Standards Review Date: 7/8/2030

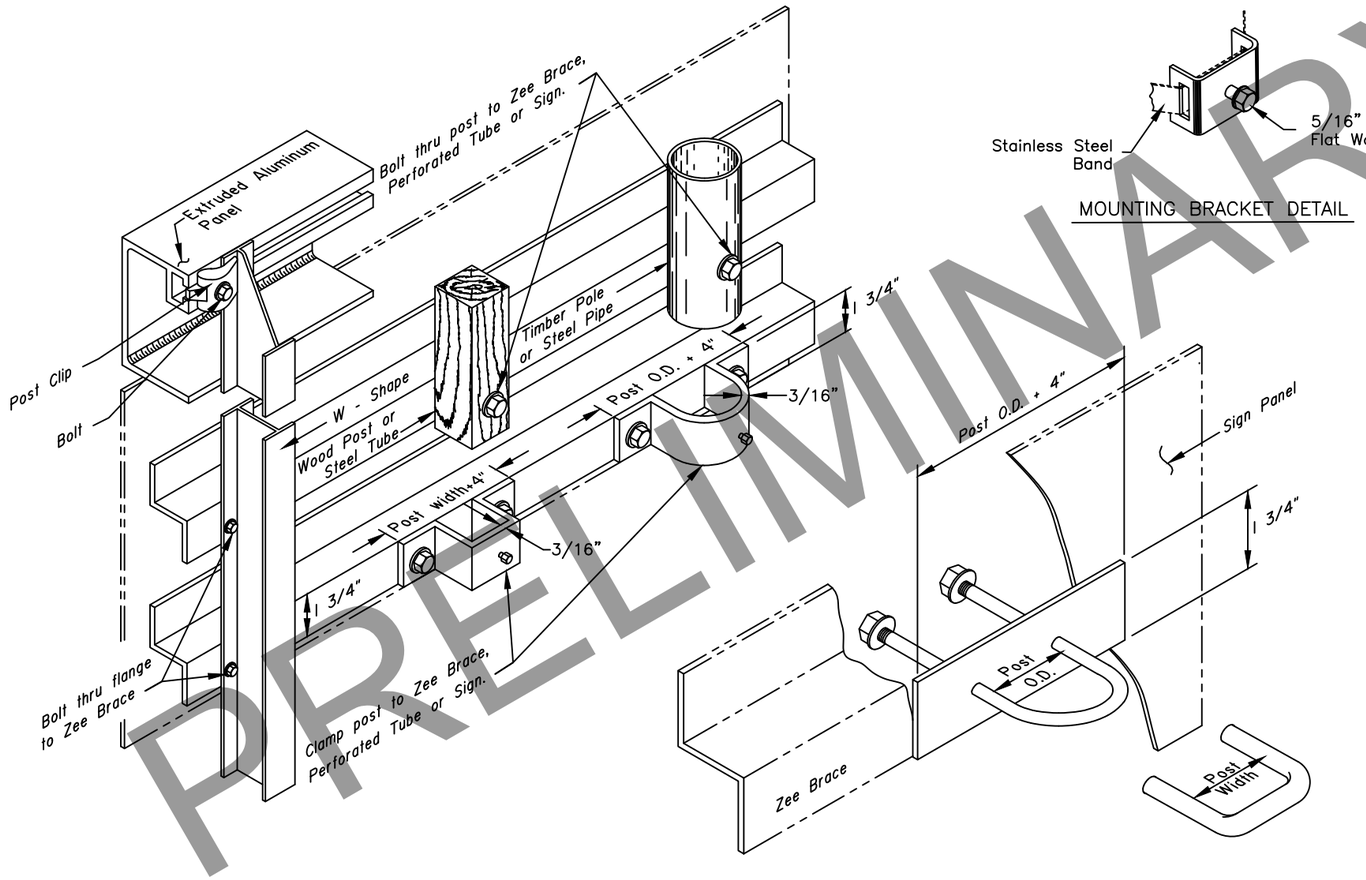
S-05.02



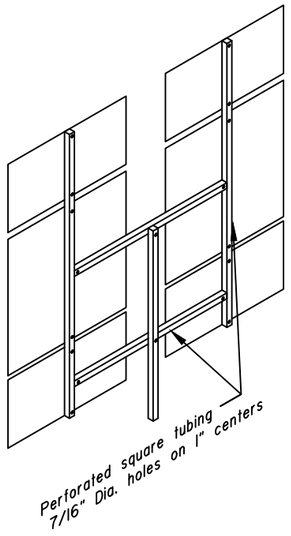








MOUNTING BRACKET DETAIL



CONSTRUCTION NOTES

1. Details shown indicate general design only. Dimensions and design may vary among manufacturers.
2. Install weather tight caps on all pipe and tube post (except perforated tubing).
3. Protect driven sign posts with drive caps during installation.
4. Bolt braces to posts at each point where they cross posts.
5. Install signs with top of post, mounting brackets, etc. with a minimum of 3" below top of sign.
6. Paint all sign mounting fasteners on sign face a color closely matching the sign face.
7. Attach all signs, zees and braces mounted to the posts with 5/16" bolts, nuts and washers.
8. Furnish all aluminum nuts, bolts and washers with anodized finish.

FASTENER SPECIFICATION TABLE
(ALL REFERENCES ARE TO ASTM)

FASTENERS		ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	MACHINE	F468 2024-T4	A307	F593
	CARRIAGE "U"	F468 2024-T4	A307	A276 TYPE 304
NUTS	REGULAR	F467 6061-T6	A563	F594
	LOCKING	F467 2017-T4		
WASHERS		F468 2024-T4	F844	A480
POST CLIP		A356-T6	N/A	N/A

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN TO SIGN POST CONNECTION

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

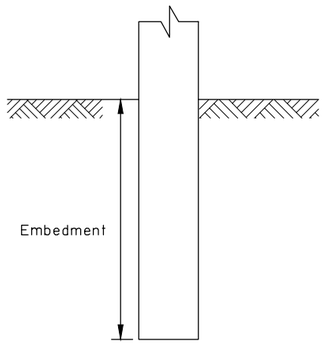
Adoption Date: 07/30/2021

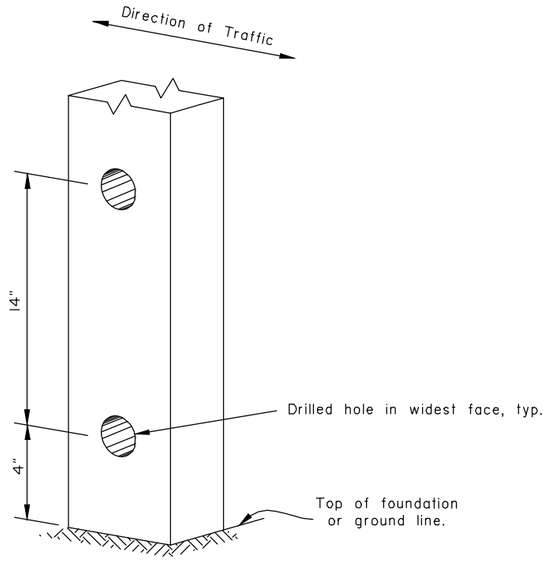
Last Code and Stds. Review By: LRG Date: 07/30/2021

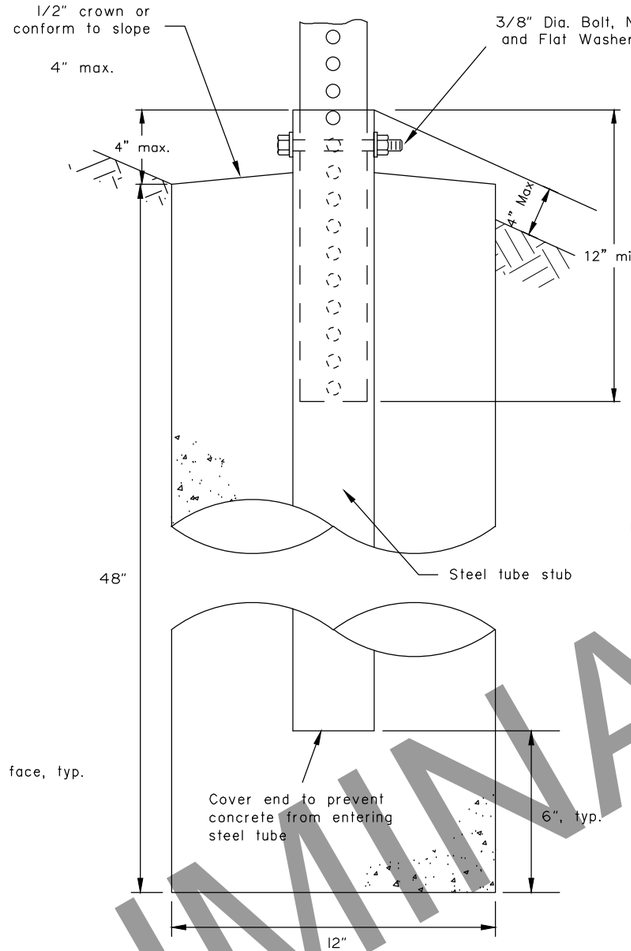
Next Code and Standards Review date: 07/30/2031

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V39 OF V46

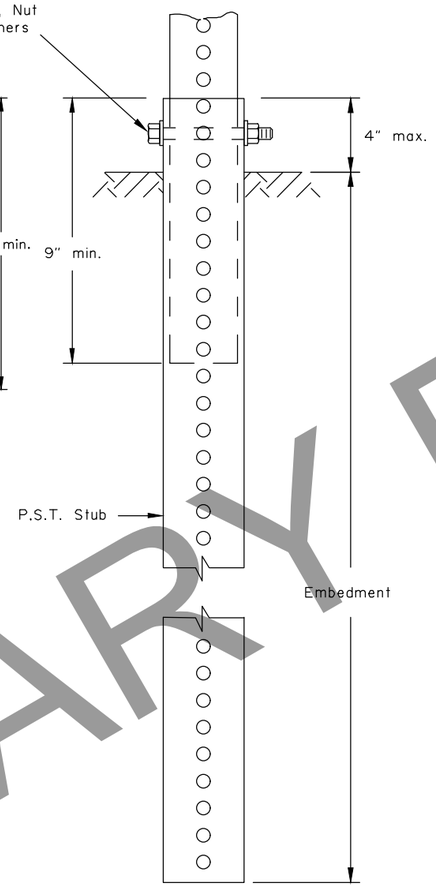
S-20.11







SLEEVE TYPE
CONCRETE FOUNDATION



SLEEVE TYPE*
SOIL EMBEDMENT

GENERAL NOTES:

1. Sign shall be placed symmetrically around posts and refer to Standard Plan S-00 for sign framing details.
2. See plans for type of post, size and embedment type.
3. To maintain crashworthiness, install no more than the number of P.S.T.s or wood posts specified in the tables within 7' of each other.
4. Concrete shall be class B.
5. Do not use the supports on this drawing for multiple support signs if supports are separated by more than 7 feet.
6. Treat all field cuts and field drilled holes in wood posts in accordance with Section 730-2.04 of the Standard Specifications.

SIGN POST SPACING NOTES:

1. Install sign support in accordance with the table below, unless otherwise required by plans or specifications.
2. Exceptions:
   a. Use one post for all E5-1 gore signs, regardless of width.
   b. Use one 2.5" P.S.T. for all STOP signs, with or without street name signs.
3. Supports placed within 7' of each other must be acceptable for that use. See tables below for the sizes of wood posts and P.S.T.s that may be used within 7'. See Manufacturer's documentation for breakaway couplings and tubes that may be used within 7'.
4. See Standard Plan S-31 for frangible couplings, hinges, and foundations for tube and W-shape sign supports.

WOOD SIGN POSTS			
SIZE	HOLE DIA.	EMBEDMENT*	NO. OF POSTS WITHIN 7 Ft. PATH
4"x4"	NONE	4'-1"	2
4"x6"	1 1/2"	5'-3"	2
6"x6"	1 1/2"	4'-9"	1
6"x8"	3"	4'-9"	1

* Embedment depth applies in both strong and weak soil.

WOOD POSTS

PERFORATED STEEL TUBES (P.S.T.)		
POST SIZE	Embedment Depth	No. of P.S.T.s permitted within 7 ft path
1 1/2" x 1 1/2"	4'-8"	2
1 3/4" x 1 3/4"	4'-6"	2
2" x 2"	4'-3"	2
2 1/4" x 2 1/4"	5'-0"	1
2 1/2" x 2 1/2"	4'-6"	1

* Use 3"x3"x3/16" Stub for 2 1/2"x2 1/2" PST Applications.

PERFORATED STEEL TUBE (PST) POSTS

TUBE SIGN POST SPACING								
Sign Width (feet)	No. of Posts	Distance Between Posts	Sign Overhang	Post Type				Notes
				P.S.T.	Wood	Steel Tube	W-Shape	
0.5 to 4.0	1	-	0.5W	X	X	X		See Note 2.
4.5 to 10.0	2	0.6W	0.2W	X	X	X		See Note 3.
10.5 to 11.0	2	6	Varies	X	X	X		See Note 3.
11.5 to 13.0	2	8	Varies				X	
13.5 to 20.0	2	0.6W	0.2W				X	
20.5 to 22.5	3	8	Varies				X	
23.0 to 29.5	3	0.35W	0.15W				X	
30.0 to 31.5	4	8	Varies				X	
32.0 to 40.0	4	0.25W	0.125W				X	

TUBE SIGN POST SPACING

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

LIGHT SIGN STRUCTURE
POST EMBEDMENT

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

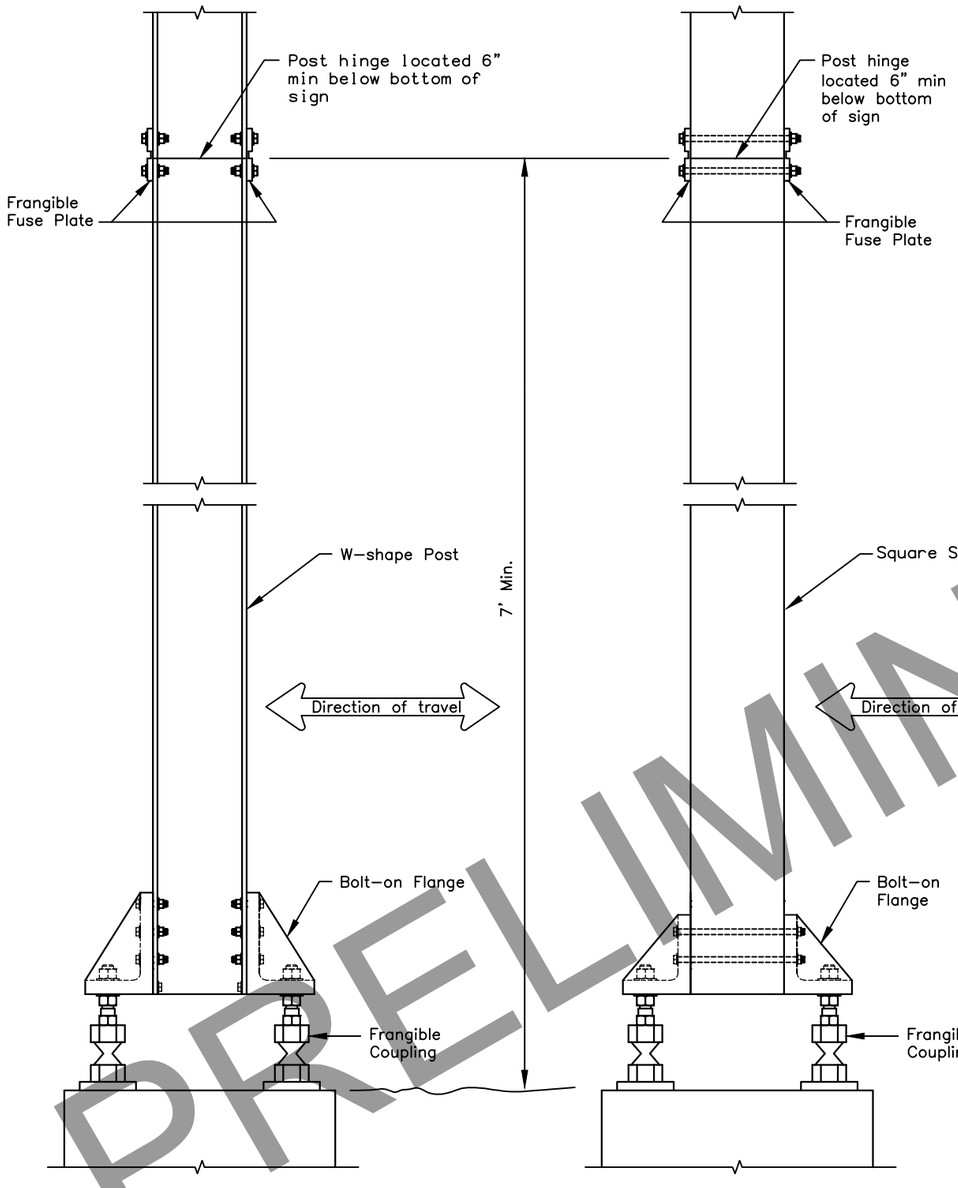
Adoption Date: 7/17/2020

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

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

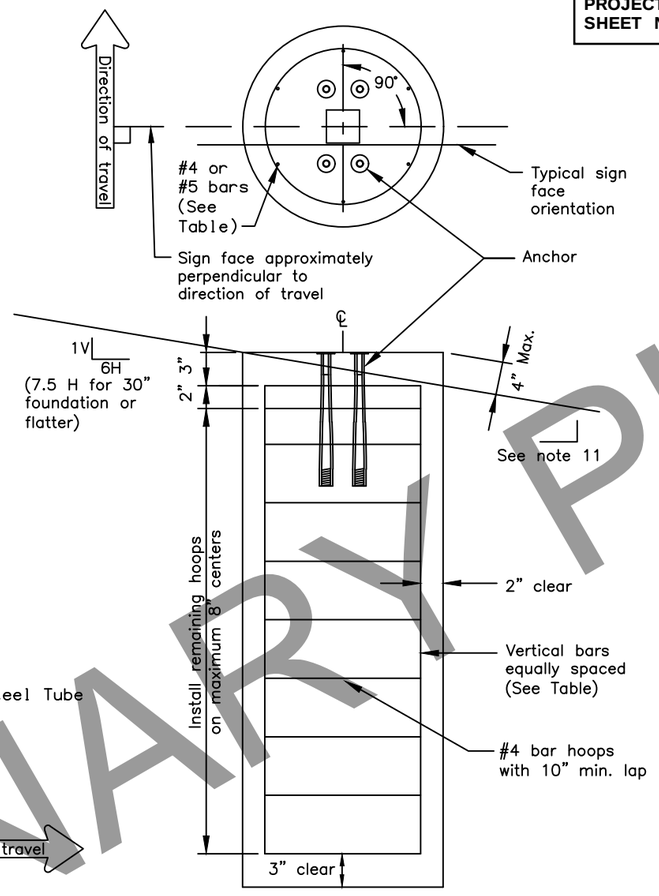
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V40 OF V46

NOTE:
Install hinges when more than one post is used to support a sign. Do not install hinges on single post installations.



FRANGIBLE COUPLING SYSTEM FOR W–SHAPE POST

FRANGIBLE COUPLING SYSTEM FOR SQUARE STEEL TUBES



SIGN POST FOUNDATION
See Table for depth and diameter

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT					
	DIA.	MIN. DEPTH	CY^3 CONC.	VERTICAL BARS			HOOPS		
				QTY.	SIZE	LGTH.	QTY.	SIZE	DIA.
2 1/2" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
3" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
3 1/2" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
4" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
4 1/2" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
5" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 9	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 12	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 15	3'–0"	6'–6"	1.70	8	#11	6'–0"	12	#4	2'–8"
W6 x 30	3'–0"	7'–6"	1.96	8	#11	7'–0"	13	#4	2'–8"

FOUNDATION TABLE

* Foundations sized for use where there are no loose, high moisture, or fine grained soils.

GENERAL NOTES

1. Furnish sign posts with NCHRP 350 compliant frangible couplings designed to break away safely when struck from any direction. There is no MASH compliant device at this time. See SPDR report for more info.
2. Furnish frangible coupling systems with bolt–on flanges.
3. Details on this sheet illustrate only the general components of a frangible coupling system, and are not intended to specify a particular product.
4. Install frangible fuse plates as specified by the manufacturer and hinged joints when multiple posts are used to support a sign. Do not use round pipes.
5. Install the components of the breakaway system, including hinges, in accordance with the written instructions of the system manufacturer.
6. Use Class A, B or W concrete conforming to Sections 501 or 550 of the Standard Specifications. Furnish ASTM A615 grade 60 steel bars for concrete reinforcement conforming to AASHTO M31.
7. Spiral reinforcing steel may be substituted for hoops in concrete foundation. Spiral option shall consist of #3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.
8. Install the concrete anchors using a rigid template. Locate the anchors on centers and within tolerances specified by the manufacturer.
9. Install the anchors in fresh concrete as recommended by the manufacturer. Adjust the template's final position until it is level. Remove and replace all foundations that need more than 2 shims under any 1 coupling or more than a total of 3 shims under any pair of couplings to plumb the post.
10. Drill the holes for attaching brackets before the sign posts are hot dip galvanized. Test fit templates in the holes to ensure the brackets can be installed square to the posts.
11. Special grading detail and/or shielding may be required to maintain 4" maximum clear distance.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN POST BASE AND FOUNDATION

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

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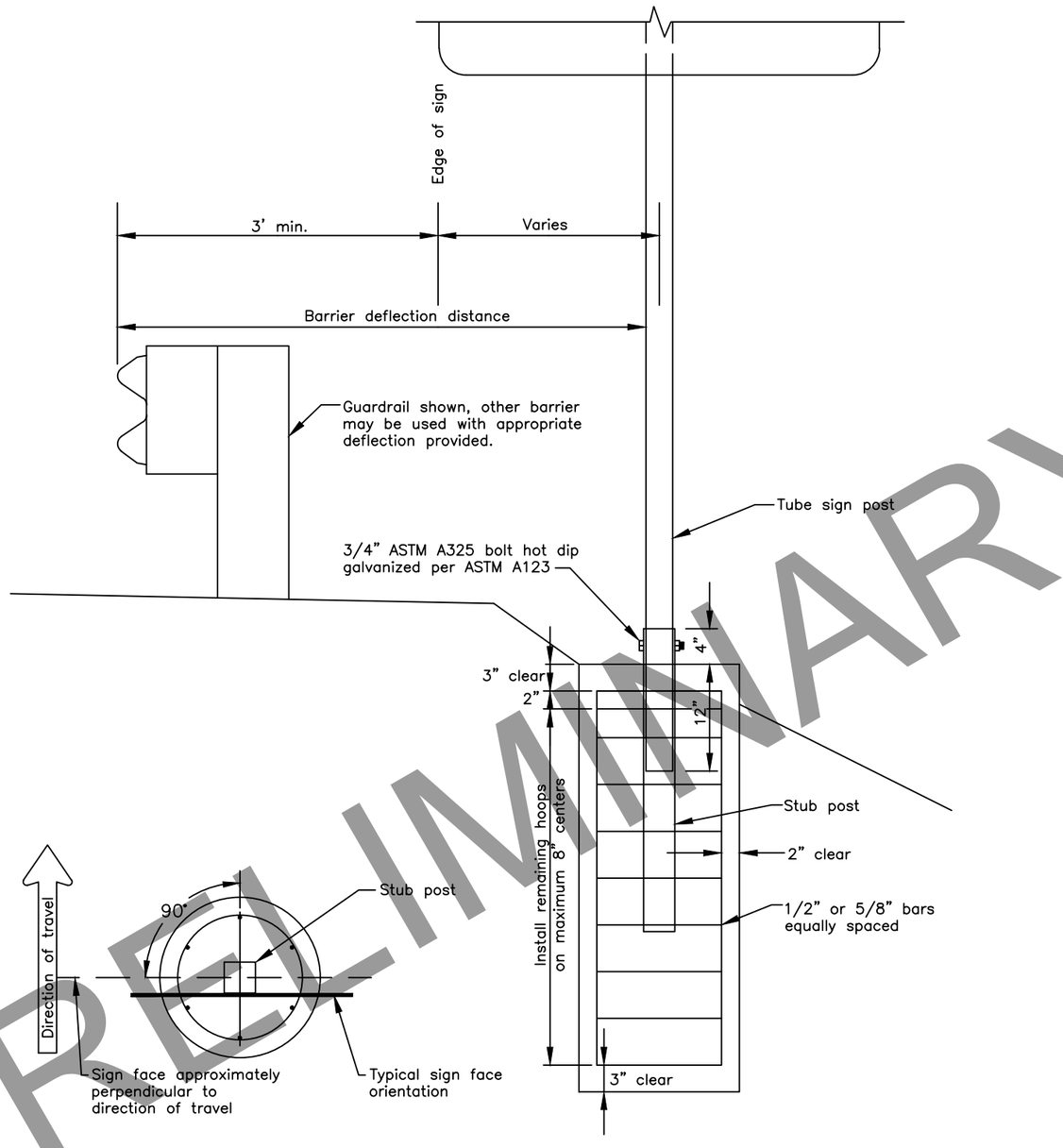
By: KLK, MJM Date: 7/8/2020

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

S-31.02



SIGN POST FOUNDATION
(Plan view)

SIGN POST FOUNDATION
See table for depth and diameter

GENERAL NOTES

1. This is a non–crashworthy sign support. It may only be used at locations shielded by a guardrail, barrier, or wall. It may not be used if the sign post is within 20' of the rail and is closer than 75' from the guardrail end post (measured along the rail). For this case use a breakaway sign support. See Standard Plan G–20.
2. Furnish steel tube sign post and stub post that conform to ASTM A500, grade B, and meet ASTM A123 for hot dip galvanizing.
3. Install tubes and stub post with a 0.1875" wall thickness.
4. For Perforated Tubes use Standard Plan S–30.
5. Spiral reinforcing steel may be substituted for hoops in concrete foundation. Spiral option shall consist of No. 3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.
6. Use Class A, B or W concrete.

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT					STUB POST	
				VERTICAL BARS			HOOPS		SLEEVE	
	DIA.	MIN. DEPTH	C.Y. CONC.	QTY.	SIZE	LGTH.	SIZE	DIA.	SIZE	LGTH.
2 1/2" TUBE	1'–0"	4'–6"	0.13	6	#4	4'–0"	#4	8"	3"	3'
3" TUBE	1'–6"	4'–0"	0.25	7	#5	3'–6"	#4	1'–2"	3 1/2"	3'
3 1/2" TUBE	1'–6"	4'–6"	0.27	7	#5	4'–0"	#4	1'–2"	4"	3'
4" TUBE	2'–6"	4'–0"	0.69	8	#8	3'–6"	#4	2'–2"	4 1/2"	3'
4 1/2" TUBE	2'–6"	4'–6"	0.78	8	#8	4'–0"	#4	2'–2"	5"	3'

* Foundation sized for use where there are no loose, high moisture, or fine grained soil.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN POST BASE AND FOUNDATION BEHIND BARRIER

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

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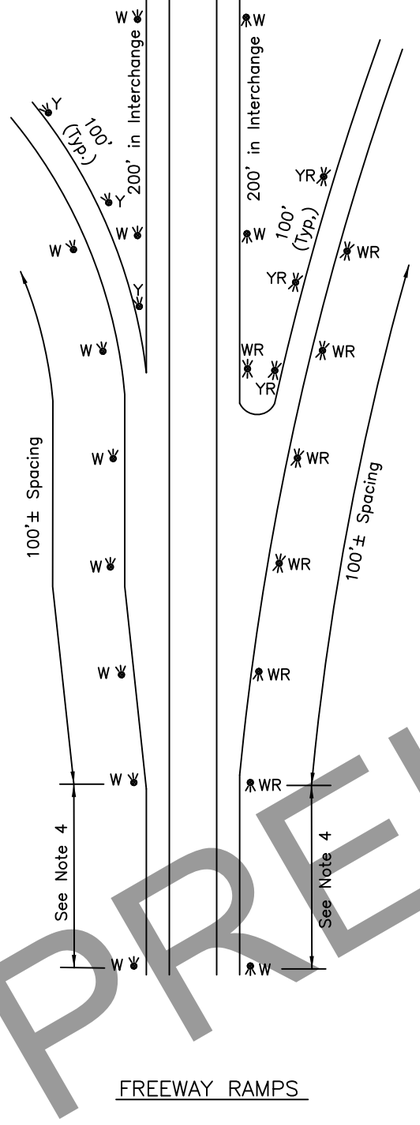
By: KLK Date: 7/8/2020

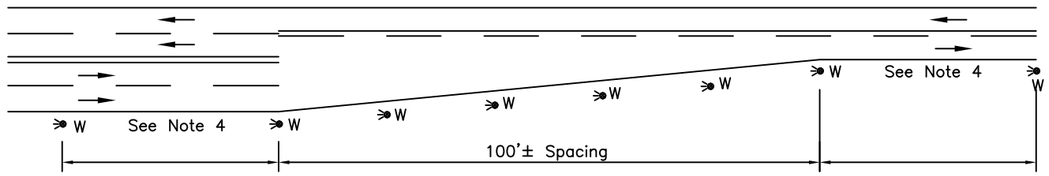
Next Code and Standards Review Date: 7/8/2030

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V42 OF V46

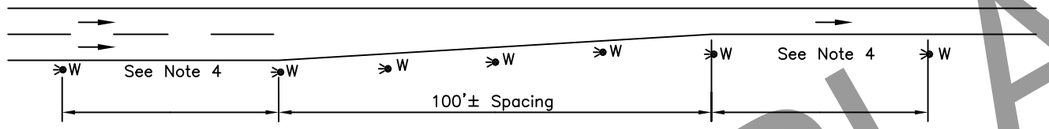
S-32.02



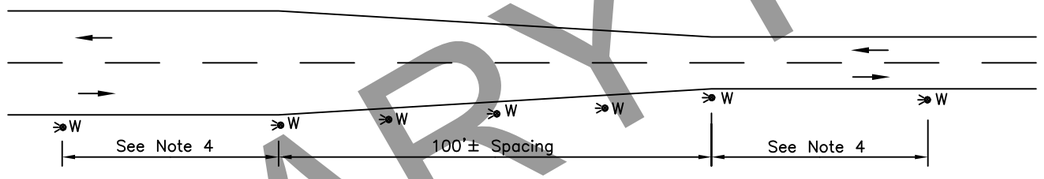
FREEWAY RAMPS



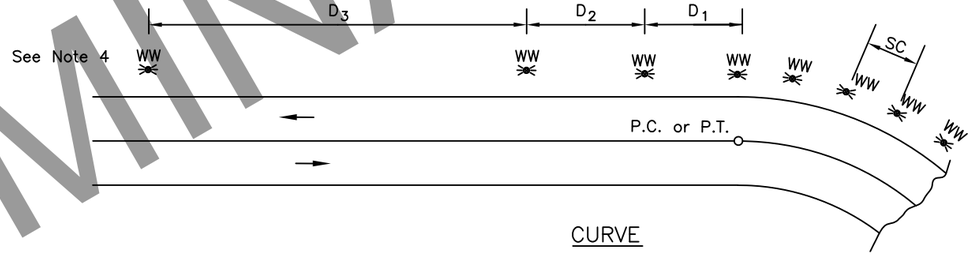
TWO WAY ROAD – LANE REDUCTION CONDITION



ONE WAY ROAD – RIGHT LANE DROP CONDITION
(FOR LEFT LANE DROP CONDITION USE TYPE Y MARKERS)



TWO WAY ROAD – NARROWING CONDITION



CURVE

SPACING ON CURVES				
RADIUS FT	SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVE		
		FIRST	SECOND	THIRD
R	SC	D_1	D_2	D_3
1,000'	90'	160'	270'	300'
900'	85'	155'	250'	300'
800'	80'	145'	240'	300'
700'	75'	135'	225'	300'
600'	70'	125'	210'	300'
500'	65'	115'	195'	300'
400'	55'	100'	165'	300'
300'	50'	90'	150'	300'
250'	40'	70'	120'	240'
180'	35'	65'	105'	210'
115'	25'	55'	90'	180'
50'	20'	35'	60'	120'

GUIDE MARKER REFLECTORS		
TYPE	FRONT COLOR	BACK COLOR
WW	WHITE	WHITE
W	WHITE	--
Y	YELLOW	--
YY	YELLOW	YELLOW
WR	WHITE	RED
YR	YELLOW	RED

GENERAL NOTES

1. Maximum spacing on tapers, speed change lanes, pavement transitions, and ramps should be 100'±.
2. On roads with continuous delineation, adjust existing guide marker locations to tie into these configurations.
3. Marker spacing in table has been rounded for ease of calculation and field layout.
4. Spacing on tangents should be approximately 500', 530' maximum. See table for spacing on curves.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

GUIDE MARKER PLACEMENT

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

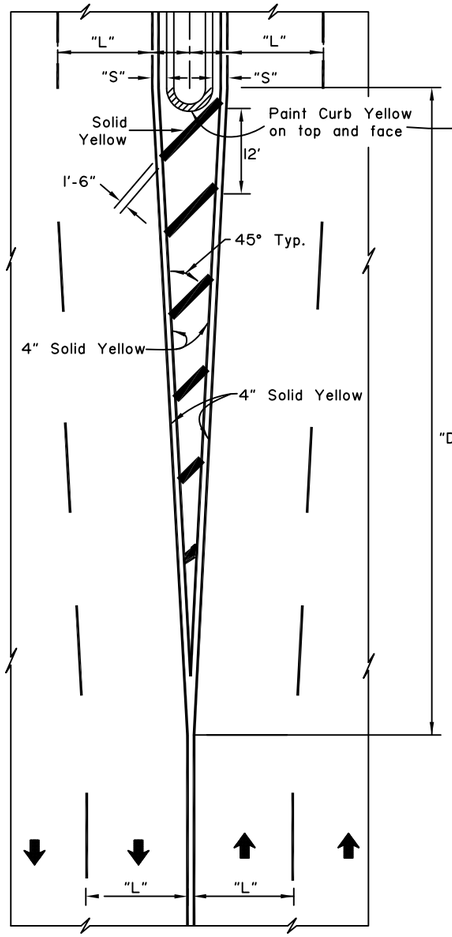
Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

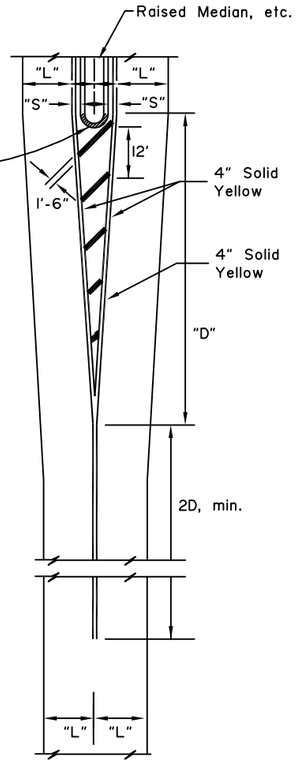
Next Code and Standards Review date:02/08/2029

PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V43 OF V46

T-05.10

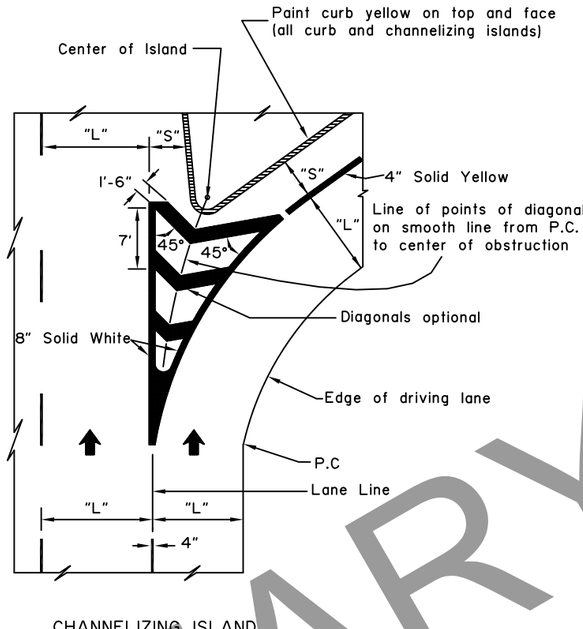


FOUR OR MORE LANES
DRIVE TO RIGHT

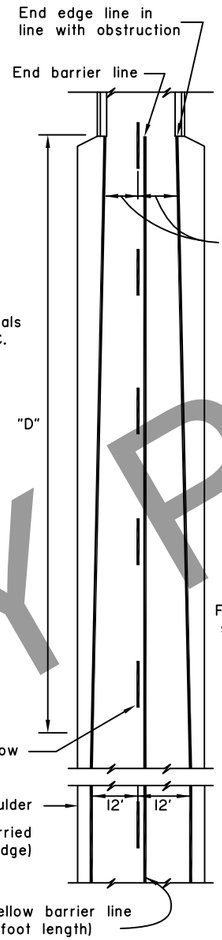


TWO LANES
DRIVE TO RIGHT

White longitudinal and diagonal markers identical to Four Lane Arrangement.

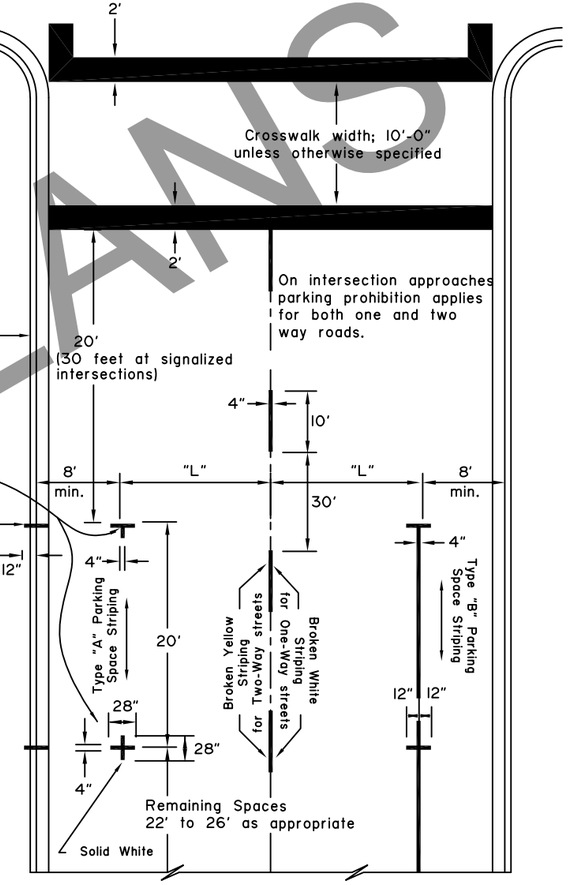


CHANNELIZING ISLAND



Note: On bridges over 24' wide use standard pavement markings. Barrier lines not used unless otherwise required.

EDGE LINE TRANSITION TO NARROW BRIDGE AND APPROACH BARRIER LINE



CENTERLINES FOR TWO LANE TWO WAY URBAN ROADS-PARKING LIMIT LINES

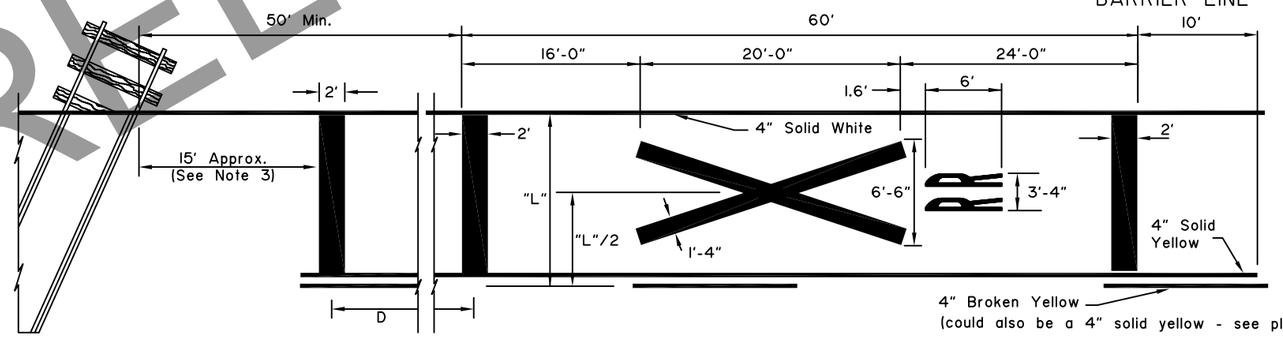
NOTES: "D" = Speed limit (mph) X "S" (offset width in feet) or as indicated on the plans. Minimum "D" = 100 feet urban, 200 feet rural.

APPROACH TO OBSTRUCTIONS

RAILROAD CROSSING NOTES:

1. All markings solid while unless indicated otherwise.
2. On 4-lane roadways place railroad crossing approach markings in each lane of the approach.
3. Locate Stop Bar 15' from railroad track or 8' from gate, if present.
4. Place edge lines and lane lines on a uni-directional approach in a normal manner except that the lane line(s) shall be solid 4" white in lieu of broken for a distance of (D+60') in advance of the stop bands.

POSTED LIMIT	D
30 M.P.H.	225'
40	350'
50	475'
60	625'



APPROACH TO RAILROAD CROSSING ON 2 LANE 2 WAY HIGHWAY

GENERAL NOTES:

1. "S"= offset distance as shown on the plans, otherwise 1 to 2 feet.
2. "L"= driving lane width.
3. See the Alaska Traffic Manual for additional guidance and/or restrictions on the use of traffic control devices.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PAVEMENT MAKING APPLICATIONS

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

Adoption Date: 02/08/2019

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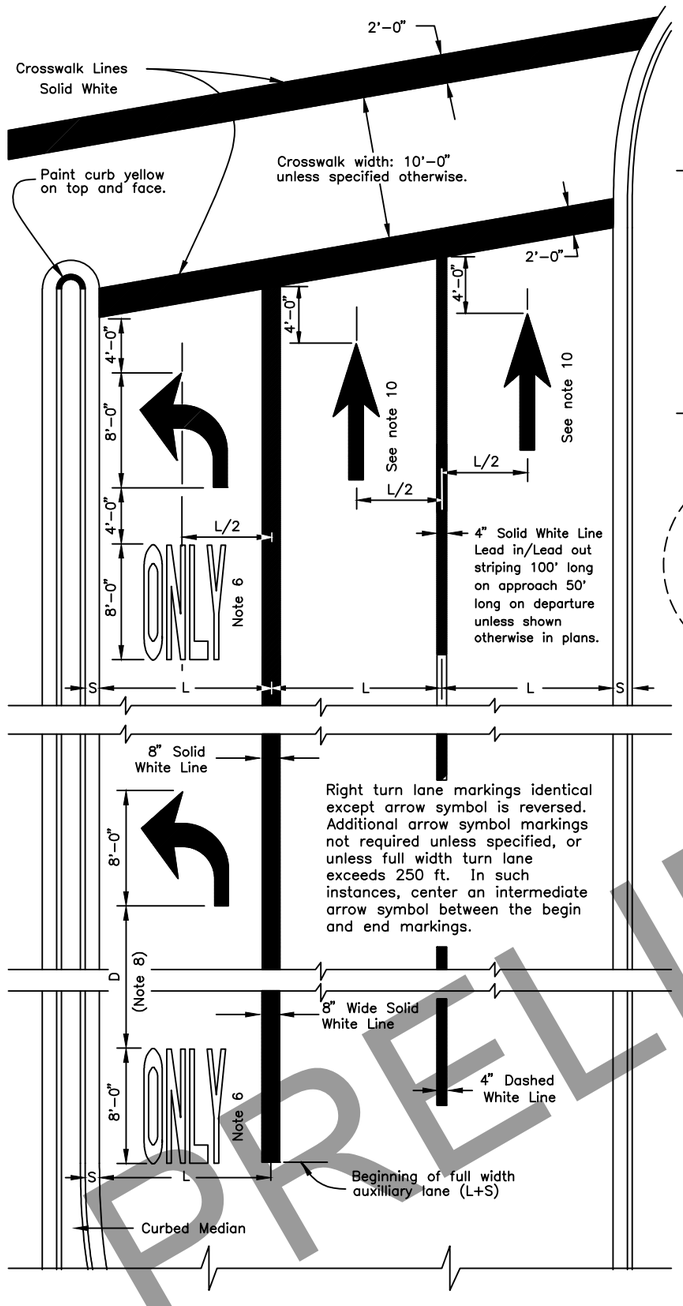
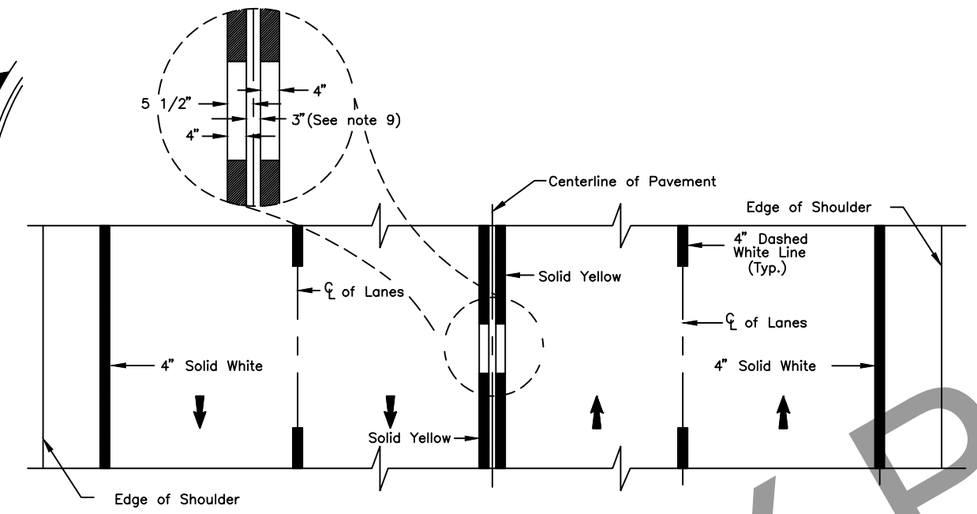
PROJECT NUMBER: 000S828/Z620030000
SHEET NO.: V44 OF V46

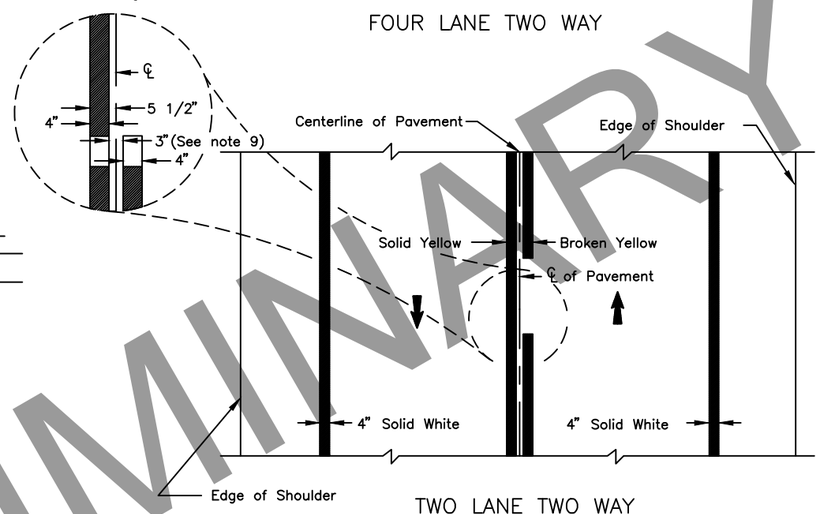
T-20.04



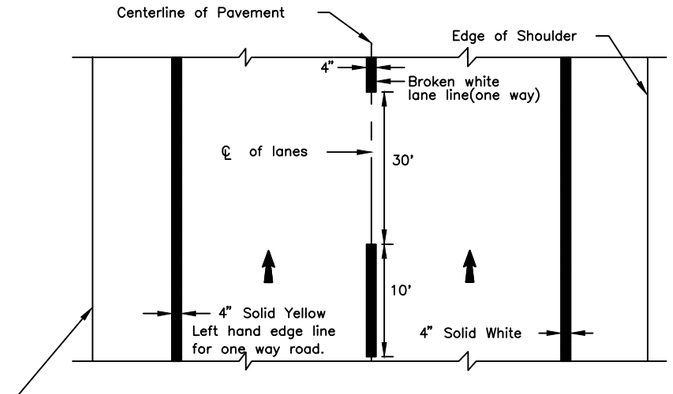
APPROACH TO INTERSECTION



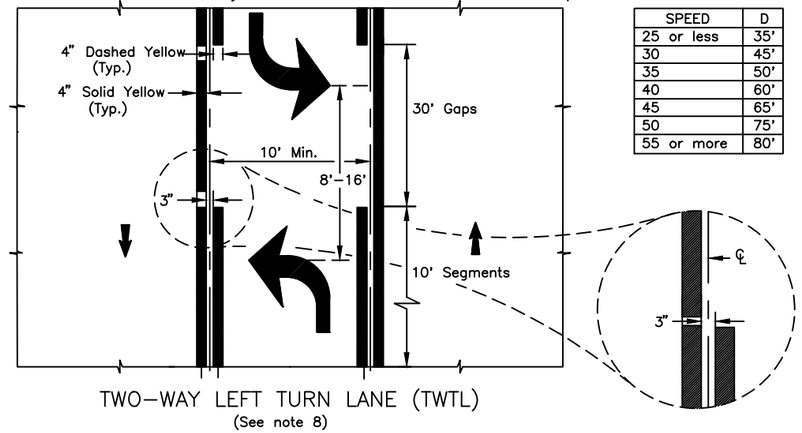
FOUR LANE TWO WAY



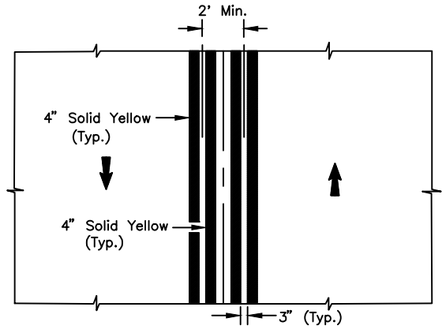
TWO LANE TWO WAY



TWO LANE ONE WAY



TWO–WAY LEFT TURN LANE (TWTL)
(See note 8)



STRIPED MEDIAN

GENERAL NOTES:

1. All markings white unless indicated otherwise.
2. Lengths of stripe and gap for lane and center lines identical.
3. Lane lines for auxiliary lanes are unbroken solid lines.
4. "L" = driving lane width.
5. "S" = shy distance as shown on plans, otherwise 1 to 2 feet.
6. ONLY markings are required where through lanes change to turn lanes. In other cases, apply ONLY markings as indicated on plans.
7. See ALASKA TRAFFIC MANUAL for additional instruction on the use of TRAFFIC CONTROL DEVICES.
8. Adjust distance D between ONLY and Turn Arrow based on SPEED vs. D table. Table may be used for spacing between pairs of TWLT markings.
9. Adjust centerline spacing from 3" up to 5" where recessed pavement markers are required.
10. Arrows and symbols are used for through lanes only when the lane layout deviates from the normal intersection rules, and shall only be used where indicated in the plans.

SPEED	D
25 or less	35'
30	45'
35	50'
40	60'
45	65'
50	75'
55 or more	80'

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PAVEMENT MARKING APPLICATIONS

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

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By:KLK Date: 7/8/2020

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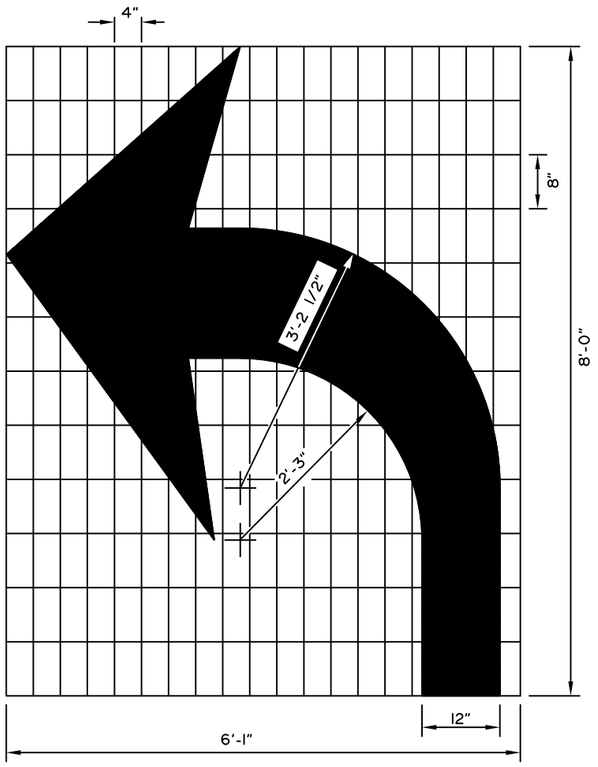
SHEET NO.: V45 OF V46

T-21.04

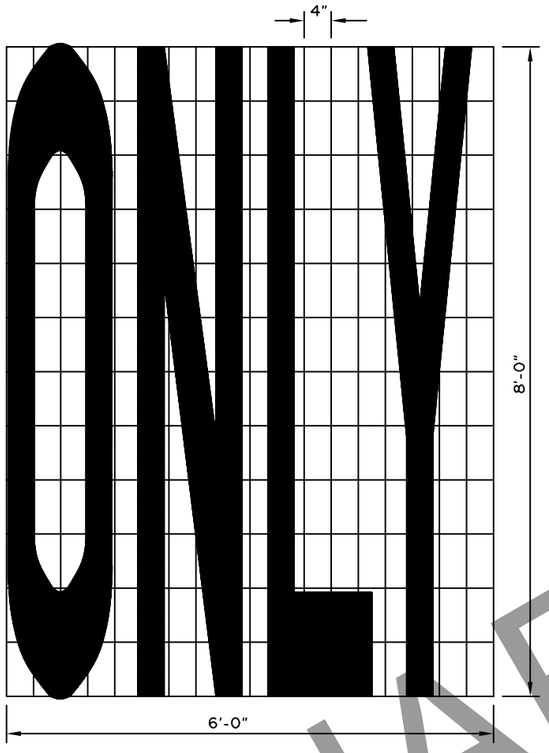
PROJECT NUMBER: 000S828 / Z620030000
SHEET NO.: V46 OF V46

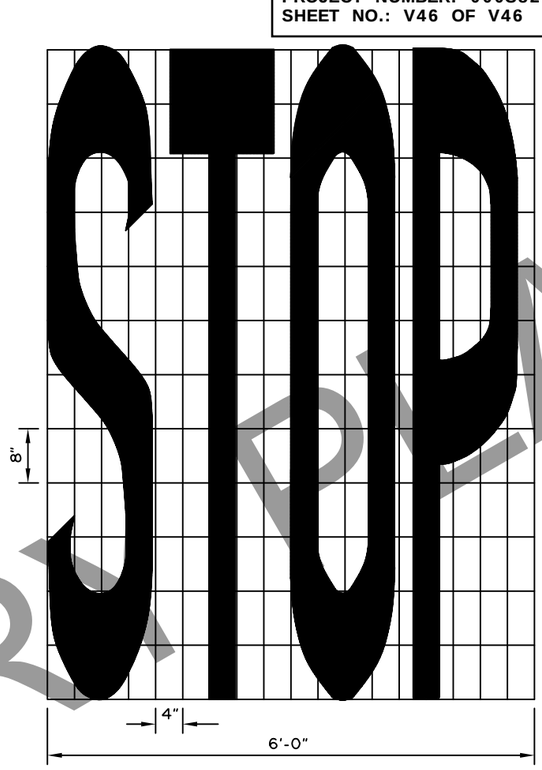
T-22.04

SHEET | of |

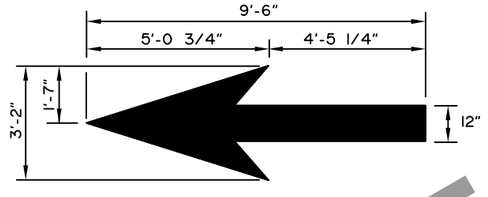


Right turn auxilliary lane usage markings identical except arrow symbol is reversed.

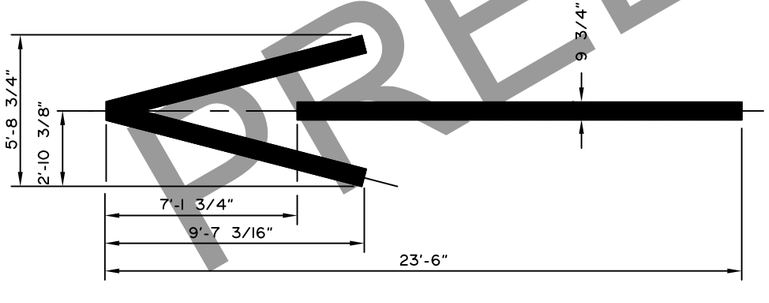




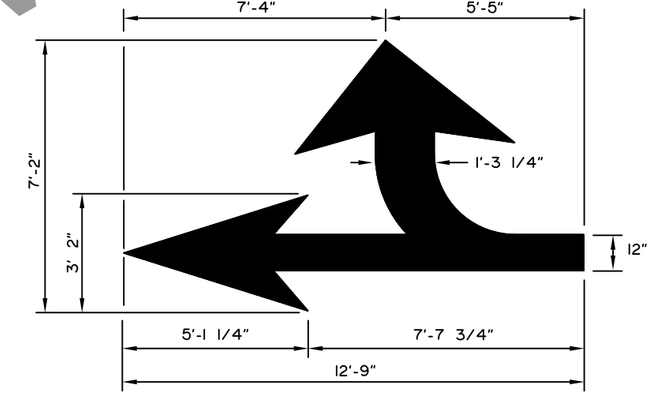
LAYOUT TEMPLATES FOR STENCILS



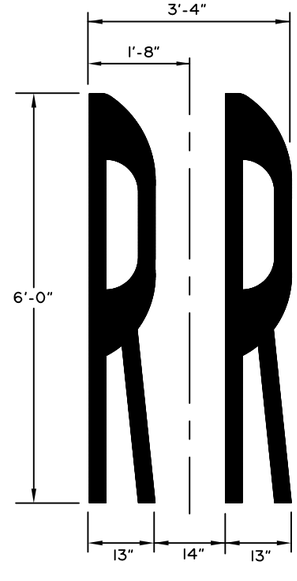
STRAIGHT AHEAD ARROW



WRONG WAY ARROW



COMBINATION ARROW



RAILROAD SYMBOL

GENERAL NOTES:

1. All symbols shown shall be white and reflectorized in accordance with the Special Provisions.
2. See the Alaska Sign Design Specifications (ASDS) for lettering and symbols for pavement marking details not provided on this drawing.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PAVEMENT MARKING SYMBOL DIMENSIONS

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

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T-22.04