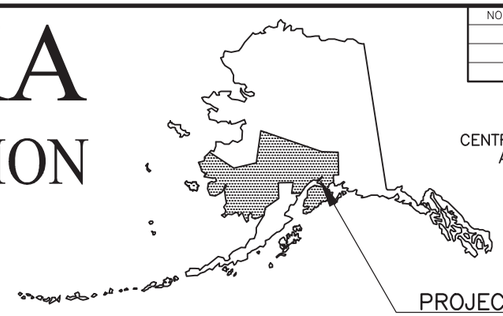
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386		2021	A1	A5
ROUTE ID	2281251X000	MILEPOINT	4.74–6.27		
LATITUDE	61.155540	LONGITUDE	–149.855320		

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



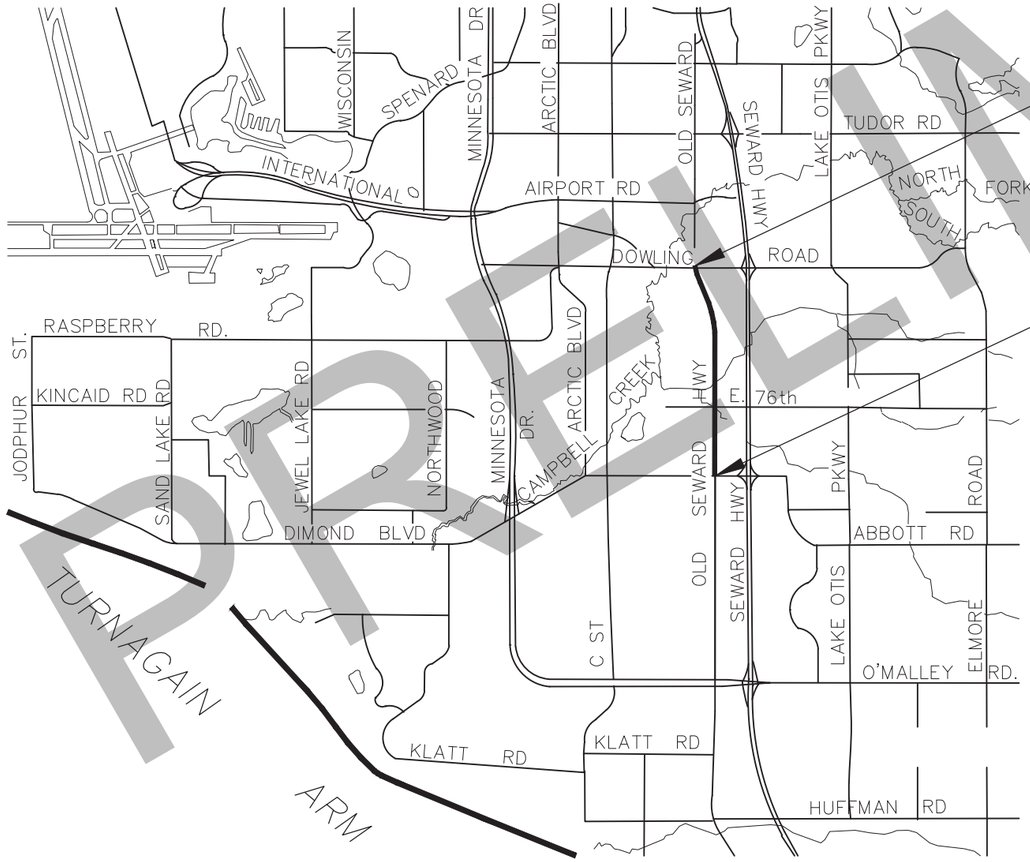
CENTRAL REGION
ALASKA

PROJECT LOCATION
M&O STATION: ANCHORAGE

PROPOSED HIGHWAY PROJECT

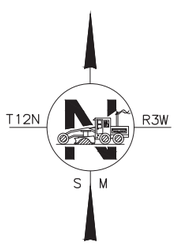
OLD SEWARD HWY: DIMOND BLVD TO DOWLING RD PAVEMENT PRESERVATION PROJECT NO. 0537009/CFHWY00386

PLANING, PAVING, ADA IMPROVEMENTS, ATR, DRAINAGE, SIGNING AND STRIPING



END PROJECT
CDS MPT 6.27
STA. 92+70.10

BEGIN PROJECT
CDS MPT 4.74
STA. 10+29.41



CERTIFICATION
OCTOBER 2020

PROJECT SUMMARY		
ROADWAY	WIDTH	LENGTH
OLD SEWARD HIGHWAY	65 FT	1.6 MILES

DESIGN DESIGNATIONS			
ROADWAY	AADT (2017)	DESIGN SPEED	FUNCTIONAL CLASS
OLD SEWARD HIGHWAY – DIMOND BLVD. TO E 76TH AVE.	18,296	45 MPH	PRINCIPAL ARTERIAL
OLD SEWARD HIGHWAY – E 76TH AVE. TO E 68TH AVE.	20,085	45 MPH	PRINCIPAL ARTERIAL
OLD SEWARD HIGHWAY – E 68TH AVE. TO DOWLING ROAD	23,868	45 MPH	PRINCIPAL ARTERIAL

PLANS DEVELOPED BY: DOWL, LLC

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
4111 AVIATION AVENUE, ANCHORAGE, AK 99502
(907)269–0590

APPROVED:

REGIONAL PRE–CONSTRUCTION ENGINEER DATE

CONCUR:

REGIONAL CONSTRUCTION ENGINEER DATE

DA | DRAFTED | KK | CHECKED | VARIES | DESIGNED | A1 | LAYOUT | 10/7/2020 10:20 PM | DATE/TIME
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	A2	A5

ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC	MPH	MILES PER HOUR
ASP	ALASKA STANDARD PLAN	MPT	MILEPOINT
BOP	BEGINNING OF PROJECT	N	NORTH, NORTHING
BOR	BOTTOM OF RIPRAP	NB	NORTHBOUND
BFE	BOTTOM OF FOOTING ELEVATION	NO.	NUMBER
CAP	CORRUGATED ALUMINUM PIPE	N.T.S.	NOT TO SCALE
CDS	COORDINATED DATA SYSTEM	O.C.	ON CENTER
CFS	CUBIC FOOT PER SECOND	OFF	OFFSET
CL	CENTER LINE	P	PROPOSED PIPE
CLR	CLEAR	P.C.	POINT OF CURVATURE
CY	CUBIC YARD	PE	EXISTING PIPE EXTENSION
DESCR.	DESCRIPTION	P.I.	POINT OF INTERSECTION
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	P.T.	POINT OF TANGENT
DWG	DRAWING	R	CURVE RADIUS
E	EAST, EASTING	ROW	RIGHT OF WAY
EA	EACH	RT	RIGHT OF ALIGNMENT
EG	EDGE OF GRAVEL	S OR SE	SUPERELEVATION
ELEV	ELEVATION	SL	STATION LINE
EOP	END OF PROJECT	SB	SOUTHBOUND
EP	EDGE OF PAVEMENT	SPD	SPECIAL DITCH
EX	EXISTING	SPECS	SPECIFICATIONS
FT	FOOT, FEET	SQ. FT	SQUARE FOOT
FT3	CUBIC FOOT	STA	STATION
H	HORIZONTAL	T	TANGENT
IN	INCH	TWCLTL	TWO WAY CENTER LEFT TURN LANE
L	CURVE LENGTH	TOW	TOP OF WALL ELEVATION
LB	POUND	TYP	TYPICAL
LT	LEFT OF ALIGNMENT	V	VERTICAL
MAX	MAXIMUM	V.C.	VERTICAL CURVE
ME	MATCH EXISTING	V.P.I	VERTICAL POINT OF INTERSECTION
MON	MONUMENT	Δ	DELTA ANGLE

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE RIGHT-OF-WAY. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.

2. THE ROW LINES ARE BASED ON A COMBINATION OF PROJECTS: OLD SEWARD HIGHWAY DIMOND BLVD. TO DOWLING ROAD AND O'MALLEY ROAD TO DIMOND BLVD. RIGHT OF WAY MAP [RS-M-0537(1)/53178], AMATS WEST DOWLING ROAD PHASE I OLD SEWARD HIGHWAY TO 'C' STREET RIGHT OF WAY MAPPING [STP-0532(007)/50898] AND DOWLING ROAD – OLD SEWARD HIGHWAY TO LAKE OTIS PARKWAY [NH-0532(4)/59599]. THE ROW LINES WERE INSERTED USING A COMMON COORDINATE SYSTEM.

3. THE EXISTING FACILITY, AS SHOWN IN THE PLANS, IS BASED ON RECORD DRAWINGS AND HAS BEEN PARTIALLY FIELD VERIFIED. FIELD CONDITIONS MAY NOT BE ACCURATELY REPRESENTED AND/OR MAY HAVE CHANGED. PROPOSED DIMENSIONS ARE APPROXIMATE AND SUBJECT TO ADJUSTMENT AS DIRECTED OR APPROVED BY THE ENGINEER TO ACCOMMODATE EXISTING CONDITIONS.

4. CLEARING LIMITS SHALL BE AS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

5. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATE METHOD APPROVED BY THE ENGINEER.

6. PLACE 4" TOPSOIL AND SEED ON AREAS DISTURBED BY CONSTRUCTION AND AS DIRECTED BY THE ENGINEER.

7. ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE PRIOR TO TOP LIFT OF PAVING.

   IF ANY PAVEMENT PENETRATION REQUIRES GRADE ADJUSTMENT AFTER FINAL LIFT PAVING, AS DETERMINED BY THE ENGINEER, SAW CUT A NEAT LINE ALONG THE PAVEMENT TO BE REMOVED. USE AN INFRARED HEATER TO HEAT THE EXISTING PAVEMENT. EQUIPMENT AND MAXIMUM TEMPERATURE SHALL BE APPROVED BY THE ENGINEER. REPLACE THE REMOVED ASPHALT WITH NEW HOT MIX ASPHALT AND THOROUGHLY COMPACT. SEAL JOINTS, AT LEAST 12 INCHES WIDE CENTERED ON JOINT, USING ASPHALT SYSTEMS GSB-88, OR APPROVED EQUAL, WHILE THE HOT MIX ASPHALT IS CLEAN, FREE OF MOISTURE AND PRIOR TO STRIPING.

   THERE SHALL BE NO PAYMENT FOR ADDITIONAL WORK CAUSED BY FAILURE TO ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE.

8. CONSTRUCT RAMP RUNS, LANDINGS, FLARES, AND SIDEWALK EXTENSIONS SHOWN IN THE PLANS USING 4" CONCRETE REGARDLESS OF WHETHER THE EXISTING SIDEWALK/PATHWAY IS ASPHALT OR CONCRETE, UNLESS NOTED OTHERWISE ON THE PLANS.

9. CONSTRUCT CURB RAMPS TO AVOID IMPACTING SIGNAL POLE FOUNDATIONS. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES WITH TOPSOIL.

10. DETECTABLE WARNING TILES SHALL BE YELLOW.

11. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICES(S), FOR OVERHEAD INSPECTION AND LOCATE WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.

INDEX

THE FOLLOWING ALASKA STANDARD PLANS APPLY TO THIS PROJECT:

C-04.12, C-05.20
I-21.12, I-22.11
S-00.12, S-05.02, S-23.00, S-30.05, S-31.02
T-20.04, T-21.04, T-22.04. T-23.01

THE FOLLOWING CENTRAL REGION STANDARD DETAILS APPLY TO THIS PROJECT:

CR-T-01.20

PROJECT SPECIFIC LEGEND

ASPHALT PATHWAY

CONCRETE SIDEWALK

SPECIFICATION:

CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY DIMOND BLVD TO DOWLING RD PAVEMENT PRESERVATION

INDEX, GENERAL NOTES, AND ABBREVIATIONS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	A3	A5

ROADWAY

	EXISTING	PROPOSED
EDGE OF PAVEMENT		
LIMIT OF CUT SLOPE & FILL SLOPE		CUT / FILL
GRAVEL EDGE		
SIDEWALK AND PATH/TRAIL		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
PARALLEL CURB RAMP PERPENDICULAR CURB RAMP		
UNIDIRECTIONAL CURB RAMP & MID–BLOCK CURB RAMP		
DETECTABLE WARNING TILE		
BRIDGE		
TUNNEL		
GUARDRAIL		
END & PARALLEL END SECTIONS		
ROADWAY OBLITERATION		
FENCE	X X	X X
STONE FENCE		
NOISE BARRIER	====X====X	====X====X
RETAINING WALL		
HEADWALL & WINGWALL		
BOTTOM OF DITCH		
SPECIAL DITCH		
FLAT BOTTOM DITCH		
BERM		
RIPRAP		
BOULDER OR BOULDERS		
PRIVATE SIGN, MAILBOX	MB	MB
POST, BOLLARD		

UTILITIES

	EXISTING	PROPOSED
STORM DRAIN	SD	
STORM DRAIN MANHOLE, CLEANOUT	SD CO	SD CO
CURB INLET CATCH BASIN FIELD INLET CATCH BASIN	FI	FI
PIPE CULVERT WITH END SECTION		
SANITARY SEWER	SS	SS
SANITARY SEWER MANHOLE, CLEANOUT	SS CO	SS CO
SEPTIC VENT, SEWER SERVICE CONNECTION	S	
WATER	W	W
FIRE HYDRANT, VALVE OR RISER		
WELL, WATER SERVICE CONNECTION	W	
NATURAL GAS	G G	
OIL OR GASOLINE PIPELINE	O O	
TANKS (ABOVE GROUND, UNDERGROUND)	U	
ELECTRIC	OE (OVERHEAD) UE (UNDERGROUND) OE&OT (OVERHEAD)	
UTILITY POLE, POLE WITH LUMINAIRE		
GUY POLE, GUY WIRE ANCHOR	GP	
TRANSMISSION TOWER (WOOD, STEEL)		
ELECTRIC PEDESTAL, TRANSFORMER	E	
ELECTRIC MANHOLE, METER	E	
ELECTRIC OUTLET, LANDSCAPE LIGHT		
TELEPHONE	OT (OVERHEAD) UT (UNDERGROUND) UT&TV (UNDERGROUND)	
TELEPHONE MANHOLE, PEDESTAL	T	
FIBER OPTIC	FO	
FIBER OPTIC MANHOLE	FO	
CABLE TV	OTV (OVERHEAD) UTV (UNDERGROUND)	
CABLE TV PEDESTAL, SATELLITE DISH		
UNDERGROUND DUCT, UTILIDOR (ELECTRIC, TELEPHONE, FIBER OPTIC)		
VENT		

TOPOGRAPHY

	EXISTING	EXISTING	PROPOSED
LAKE OR POND, WETLANDS	LAKE/POND	CONTOUR, MAJOR OR MINOR	520
TREE (CONIFER/DECIDUOUS) TREELINE (EDGE OF VEGETATION)		DRAINAGE FLOW	
PLANTER	P	CREEK (CENTERLINE)	
BUILDING OR FOUNDATION		RIVER (EDGE OF WATER)	

TRAFFIC

	EXISTING	PROPOSED
LOAD CENTER		
STATE TRAFFIC, MOA TRAFFIC, & BEACON CONTROLLER ARROW INDICATES DOOR LOCATION		
TYPE 1A, II, III, IV JUNCTION BOX	15 26 37 48	60 ## ## ##
FIBER OPTIC VAULT	F/O 59	F/O #
ELECTROLIER	12 99	78 13
HIGHTOWER	HT#	HT#
SIGNAL POLE WITH MASTARM	49	14
PEDESTRIAN PUSH BUTTON & SIGNAL	68 12	
VEHICULAR SIGNAL	44	
VEHICULAR SIGNAL LEFT & RIGHT	65 124	12
OPTICAL, CAMERA, RADAR, AND GPS DETECTOR	CAM # A RAD # GPS	CAM # A RAD # GPS
LOOP DETECTOR	555	735
COMMUNICATION ANTENNA		
MASTARM BEACON		
RURAL & SCHOOL ZONE BEACON	75 77 124 55 75 65	124 45
LOOP DETECTOR CONDUIT		
SIGNAL CONDUIT	TR	TR
LIGHTING CONDUIT	LTG	LTG
SIGNAL & LIGHTING CONDUIT	T/L	T/L
CONDUIT BORING		
CONDUIT SIZE IN INCHES	2" 1–3C4	2" 1–3C4 CKT BA12 CKT BA13
INTERCONNECT	I/C	I/C
SIGN POST		22

PAVEMENT MARKINGS

	PROPOSED
TRAFFIC PROJECT CENTERLINE	
8" & 4" WHITE SOLID STRIPE	8"W 4"W
4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES	4"W SKIP
8" WHITE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 1' STRIPES AND 3' SPACES	8"W GUIDE SKIP
8" & 4" YELLOW SOLID STRIPE	8"Y 4"Y
4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES	4"Y SKIP
STRIPING CHANGE STATION INTERVAL	+20
2' CROSSWALK OR STOPBAR	24"W (TYP)
LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS	10' 12' (2)–4"Y 3" APART
TYPICAL PAINTED MEDIAN	VARIES 18"Y @ 45°

RIGHT–OF–WAY

	RECOVERED	SET THIS PROJECT
FEDERAL GOV'T SURVEY MONUMENT		
GOV'T CONTROL STATION		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC SECONDARY CORNER		
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
RANDOM CONTROL MONUMENT	RCM	
PRIMARY GPS CONTROL POINT	GPS	
HORIZONTAL CONTROL POINT	CP	
SECONDARY CONTROL POINT	SCP	
VERTICAL BENCHMARK	BM	
TEMPORARY BENCHMARK	TBM	
TOWNSHIP AND RANGE LINES	T13N / T12N R2W R1W	
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
CORPORATE or CITY LIMITS		
EXISTING RIGHT–OF–WAY		
RIGHT–OF–WAY OR EASEMENT REQUIRED		
PROJECT RIGHT–OF–WAY LINE		
EXISTING RIGHT–OF–WAY EASEMENT		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
EXISTING UTILITY EASEMENT		
PROPOSED UTILITY EASEMENT		
EXISTING CENTERLINE		
RAILROAD CENTERLINE		
TEMPORARY CONSTRUCTION EASEMENT		
TEMPORARY CONSTRUCTION PERMIT		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

LEGEND SHEET

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562–2000
#AECL848 – AK

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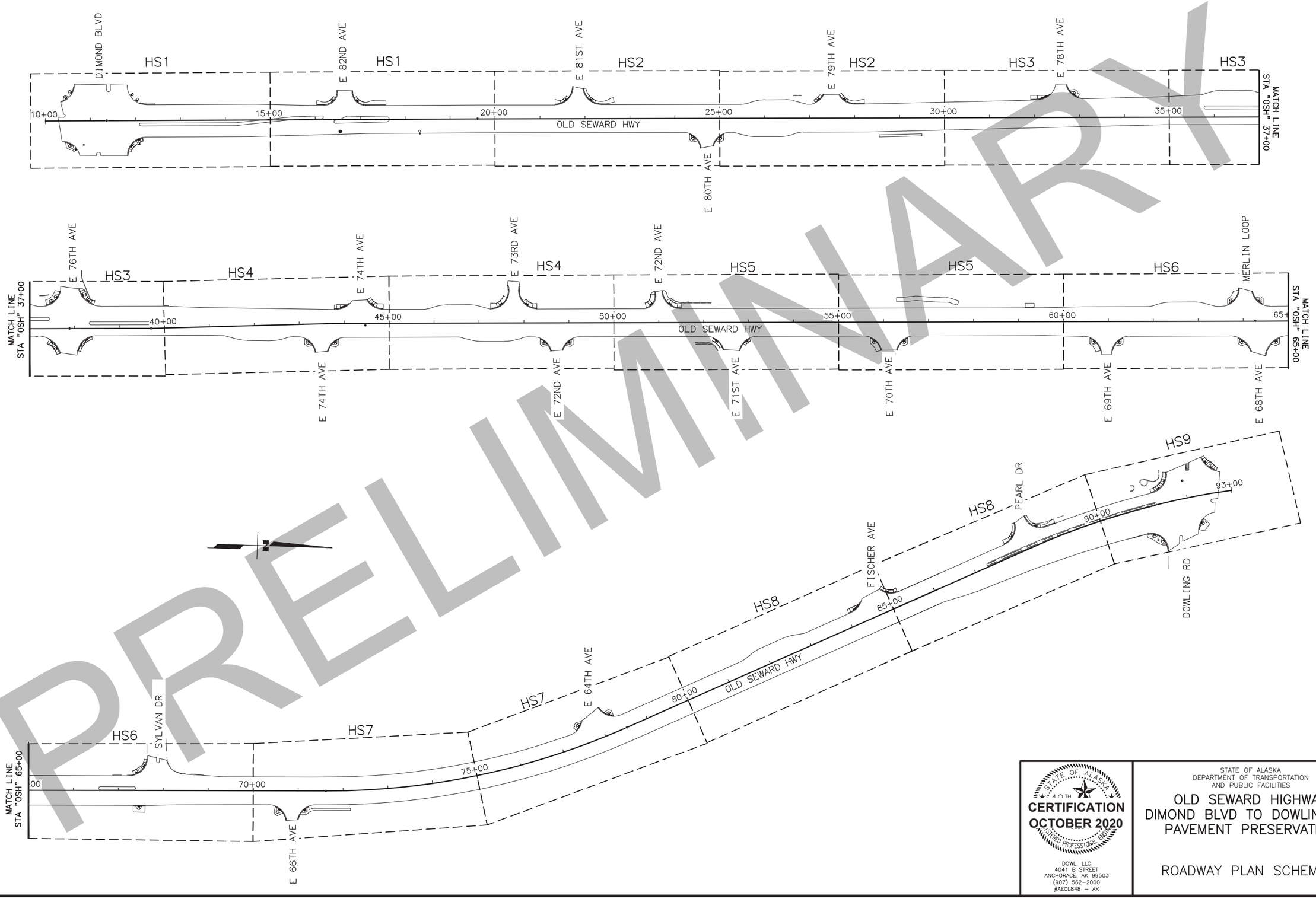
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	A4	A5



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

ROADWAY PLAN SCHEMATIC

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

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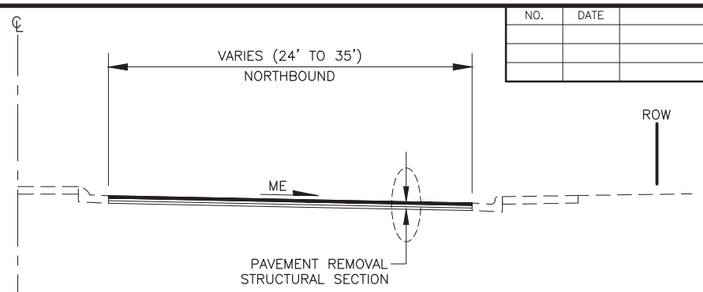
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0537009/CFHWY00386	2021	B1	B1

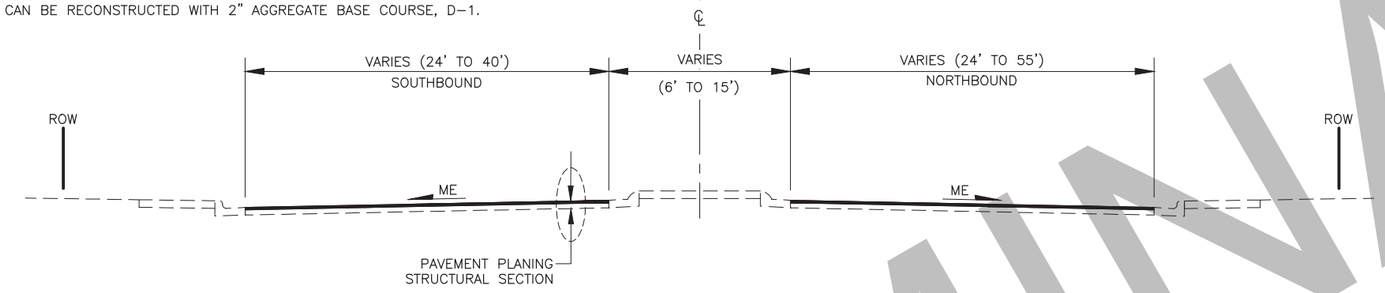
TYPICAL SECTION NOTES:

1. MAINTAIN EXISTING ROADWAY CROSS SLOPE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. CONSTRUCT ASPHALT AT GUTTER PAN LIP SO THERE IS NOT A VERTICAL EDGE GREATER THAN 1/4–IN.
3. MATCH EXISTING PAVEMENT AT BEGINNING AND END OF PROJECT AND AT ALL DRIVEWAYS AND APPROACHES.
4. APPLY STE–1 ASPHALT TACK COAT TO VERTICAL SURFACES AND EXISTING ASPHALT PRIOR TO PAVING.
5. CONTRACTOR SHALL REPLACE ANY DIRECT BURIED WARNING TAPE (OVER EXISTING TRAFFIC SIGNAL AND LIGHTING CONDUITS) THAT GETS DAMAGED DURING EXCAVATION ACTIVITIES.
6. ASPHALT PATHWAY ASSOCIATED WITH CURB RAMP WORK SHALL FOLLOW THE CURB RAMP PATHWAY STRUCTURAL SECTION. CURB RAMPS AND CONCRETE SIDEWALK ASSOCIATED WITH CURB RAMP WORK SHALL FOLLOW THE CURB RAMP SIDEWALK STRUCTURAL SECTION.
7. INCREASE AGGREGATE BASE COURSE, D–1 TO 4" UNDER ALL NEW CURB RAMPS THAT EXTEND BEYOND ORIGINAL FOOTPRINT. CURB RAMPS BEING REPLACED IN EXISTING LOCATION/FOOTPRINT CAN BE RECONSTRUCTED WITH 2" AGGREGATE BASE COURSE, D–1.



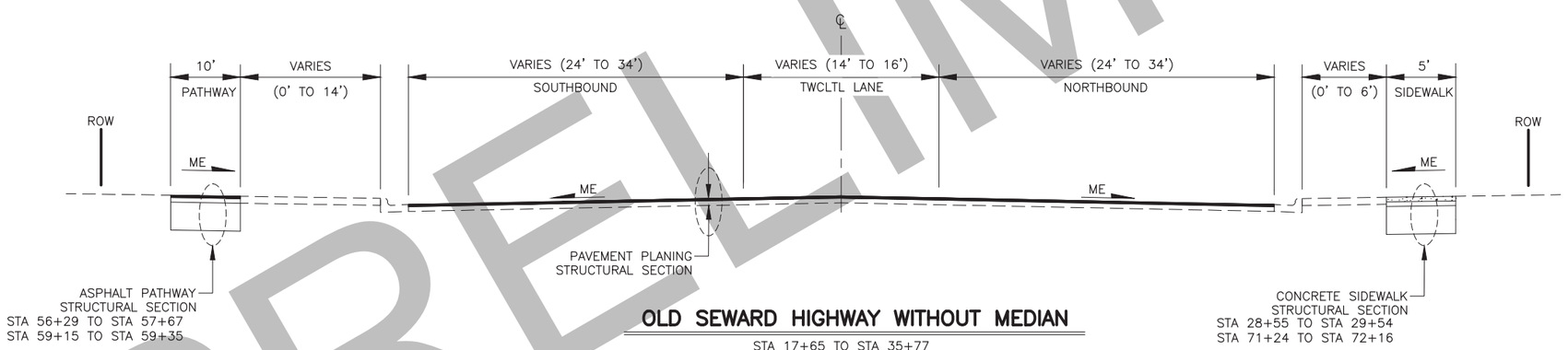
NORTHBOUND LANES EXCEPTION

PAVEMENT REMOVAL STRUCTURAL SECTION
STA 12+08 TO STA 16+90



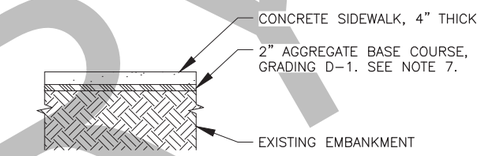
OLD SEWARD HIGHWAY WITH RAISED MEDIAN

STA 10+29 TO STA 17+65
STA 35+77 TO STA 40+04
STA 66+56 TO STA 67+38
STA 87+30 TO STA 92+70

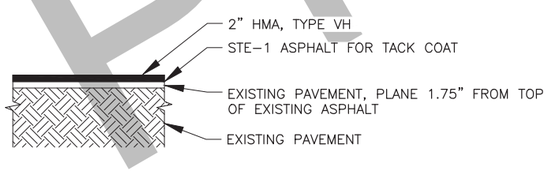


OLD SEWARD HIGHWAY WITHOUT MEDIAN

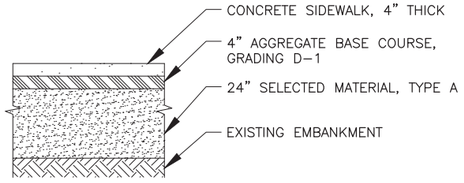
STA 17+65 TO STA 35+77
STA 40+04 TO STA 66+56
STA 67+38 TO STA 87+30



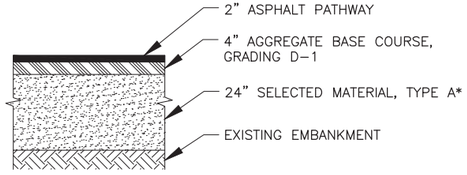
CURB RAMP SIDEWALK STRUCTURAL SECTION



PAVEMENT PLANING STRUCTURAL SECTION

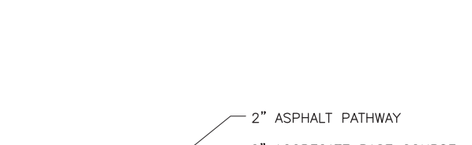


CONCRETE SIDEWALK STRUCTURAL SECTION

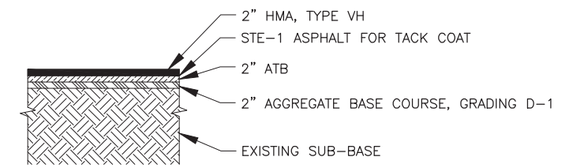


ASPHALT PATHWAY STRUCTURAL SECTION

* PLACE 36" SELECTED MATERIAL, TYPE A FOR PATHWAY WORK ASSOCIATED WITH ATR SITE H2. SEE SHEET HS5



CURB RAMP PATHWAY STRUCTURAL SECTION



PAVEMENT REMOVAL STRUCTURAL SECTION

NOTE: REMOVE FULL DEPTH PAVEMENT. IF EXISTING PAVEMENT SECTION IS THICKER THAN 4", ADJUST AGGREGATE BASE COURSE THICKNESS TO A MAXIMUM OF 6" TO BRING PAVEMENT STRUCTURAL SECTION UP TO ORIGINAL GRADE, OR AS DIRECTED BY THE ENGINEER.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

TYPICAL SECTIONS

STATE OF ALASKA
DOT
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562–2000
#AECL848 – AK

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NO.	DATE	REVISION

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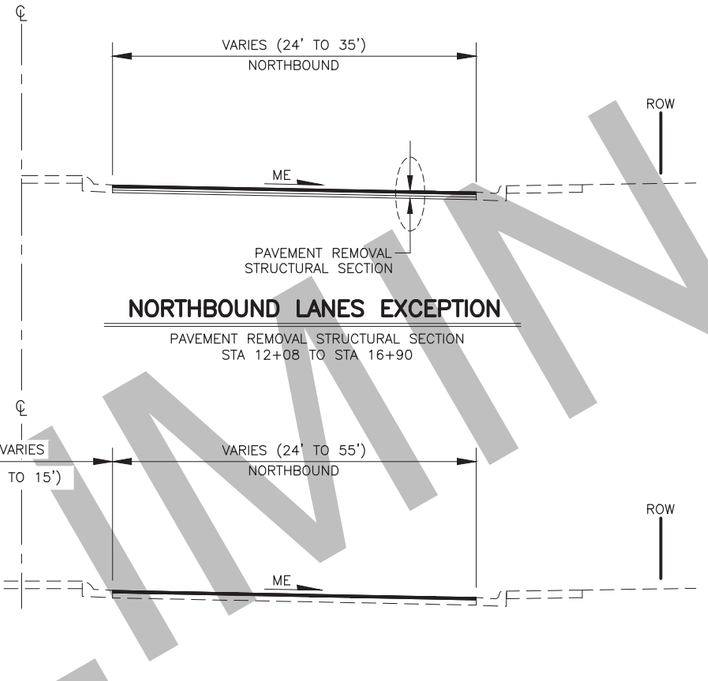
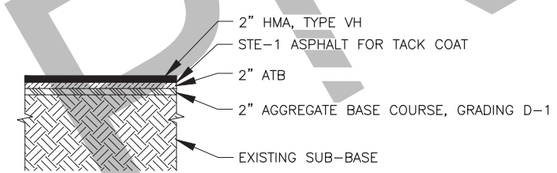


NORTHBOUND LANES EXCEPTION

PAVEMENT REMOVAL STRUCTURAL SECTION
STA 12+08 TO STA 16+90

OLD SEWARD HIGHWAY WITH RAISED MEDIAN

STA 10+29 TO STA 17+65
STA 35+77 TO STA 40+04
STA 66+56 TO STA 67+38
STA 87+30 TO STA 92+70



PAVEMENT REMOVAL STRUCTURAL SECTION

NOTE: REMOVE FULL DEPTH PAVEMENT. IF EXISTING PAVEMENT SECTION IS THICKER THAN 4", ADJUST AGGREGATE BASE COURSE THICKNESS TO A MAXIMUM OF 6" TO BRING PAVEMENT STRUCTURAL SECTION UP TO ORIGINAL GRADE, OR AS DIRECTED BY THE ENGINEER.

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

TYPICAL SECTIONS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
202.0002.0000	REMOVAL OF PAVEMENT	SQUARE YARD	2,300
202.0003.0000	REMOVAL OF SIDEWALK	SQUARE YARD	1,400
202.0007.0000	REMOVAL OF JUNCTION BOX	EACH	4
202.0009.0000	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	2,500
202.2023.0000	PAVEMENT PLANING	SQUARE YARD	74,000
203.0003.0000	UNCLASSIFIED EXCAVATION	CUBIC YARD	337
203.0006.000A	BORROW, TYPE A	TON	466
203.2038.0000	DITCH LINEAR GRADING	STATION	3
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	650
306.0001.0000	ATB	TON	184
306.0002.6440	ASPHALT BINDER, GRADE PG 64-40 E	TON	10
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	TON	22
408.2001.00VH	HMA, TYPE VH	TON	8,000
408.2004.6440	ASPHALT BINDER, GRADE PG 64-40 E	TON	424
408.2008.00VH	HMA PRICE ADJUSTMENT, TYPE VH	CONTINGENT SUM	ALL REQUIRED
408.2015.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	16
604.0012.0000	REPLACE INLET FRAME AND GRATE	EACH	3
606.2001.0000	STEEL BOLLARD, FIXED	EACH	5
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	466
608.0006.0000	CURB RAMP	EACH	64
608.2002.0000	ASPHALT PATHWAY	TON	84
609.0002.0001	CURB AND GUTTER, TYPE 1	LINEAR FOOT	2,500
615.0001.0000	STANDARD SIGN	SQUARE FOOT	268
615.0006.0000	SALVAGE SIGN	EACH	36
618.0002.0000	SEEDING - STANDARD	POUND	45
618.0003.0000	WATER FOR SEEDING	MEGA GALLON	34
618.2002.000B	SEEDING - WETLAND	POUND	6
620.0001.0000	TOPSOIL	SQUARE YARD	4,200
626.2013.0000	ADJUST SANITARY SEWER CLEANOUT	EACH	1
627.0010.0000	ADJUSTMENT OF VALVE BOX	EACH	78
639.2000.0000	APPROACH	EACH	26
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
641.0006.0000	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641.0007.0000	SWPPP MANAGER	LUMP SUM	ALL REQUIRED

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
642.0003.0000	THREE PERSON SURVEY PARTY	HOUR	50
642.0011.0000	ADJUST EXISTING MONUMENT CASE	EACH	9
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
643.0032.0000	FLAGGING	CONTINGENT SUM	ALL REQUIRED
644.0001.0000	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644.2004.0000	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED
645.0001.0000	TRAINING PROGRAM, 1 TRAINEES / APPRENTICES	LABOR HOUR	500
646.0001.0000	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
647.2002.0000	BACKHOE, 4WD, 1 CY BUCKET, 75-HP MINIMUM, 15 FT DEPTH	CONTINGENT SUM	ALL REQUIRED
660.2004.0000	ADJUST JUNCTION BOX	EACH	12
660.2005.001A	JUNCTION BOX, TYPE 1A	EACH	3
660.2008.0000	TRAFFIC LOOP REPLACEMENT	CONTINGENT SUM	ALL REQUIRED
669.2000.0000	TRAFFIC DATA - SITE H2	LUMP SUM	ALL REQUIRED
670.2000.0000	MMA PAVEMENT MARKINGS	LUMP SUM	ALL REQUIRED
682.2000.0000	VAC-TRUCK POTHOLE	CONTINGENT SUM	ALL REQUIRED

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
203.0006.000A	BORROW, TYPE A	144 LB/FT3
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	144 LB/FT3
306.0001.0000	ATB	151 LB/FT3
306.0002.6440	ASPHALT BINDER, GRADE PG 64-40E	5.3% WEIGHT OF 306(1)
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.000334 TON/S.Y.
408.2001.00VH	HMA, TYPE VH	151 LB/FT3
408.2004.6440	ASPHALT BINDER, GRADE PG 64-40E	5.3% WEIGHT OF 408(1H)
608.2002.0000	ASPHALT PATHWAY	151 LB/FT3
618.0003.0000	WATER FOR SEEDING	1.0 GAL/SF

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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

ESTIMATE OF QUANTITIES

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	D1	D5

REMOVAL OF SIDEWALK – 202.0003.0000

SHEET	FROM		TO		AREA (SF)	AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET			
HS1	10+40	54 LT	10+59	65 LT	56	7	CURB RAMP(S)
HS1	10+45	48 RT	10+68	65 RT	191	22	CURB RAMP(S) / SIDEWALK
HS1	11+85	67 RT	12+17	45 RT	321	36	CURB RAMP(S)
HS1	11+90	58 LT	12+08	48 LT	53	6	CURB RAMP(S)
HS1	16+04	34 LT	16+48	65 LT	76	9	CURB RAMP(S) / PATHWAY / SIDEWALK
HS1	16+84	64 LT	17+58	33 LT	75	9	CURB RAMP(S) / PATHWAY / SIDEWALK
HS2	21+34	33 LT	21+72	71 LT	80	9	CURB RAMP(S) / PATHWAY / SIDEWALK
HS2	21+97	67 LT	22+65	37 LT	96	11	CURB RAMP(S) / PATHWAY / SIDEWALK
HS2	24+33	36 RT	24+56	66 RT	328	37	CURB RAMP(S) / SIDEWALK
HS2	24+86	62 RT	25+08	36 RT	302	34	CURB RAMP(S) / SIDEWALK
HS2	27+09	41 LT	27+30	53 LT	87	10	CURB RAMP(S) / PATHWAY / SIDEWALK
HS2	27+66	53 LT	28+22	41 LT	84	10	CURB RAMP(S) / PATHWAY / SIDEWALK
HS2	28+55	37 RT	29+54	35 RT	490	55	SIDEWALK
HS3	31+92	41 LT	32+31	50 LT	262	30	CURB RAMP(S)
HS3	32+72	73 LT	33+00	52 LT	101	12	CURB RAMP(S) / PATHWAY / SIDEWALK
HS3	37+36	63 LT	37+67	82 LT	114	13	CURB RAMP(S) / PATHWAY / SIDEWALK
HS3	37+38	33 RT	37+66	54 RT	330	37	CURB RAMP(S) / SIDEWALK
HS3	38+08	50 RT	38+40	24 RT	229	26	CURB RAMP(S) / SIDEWALK
HS3	38+11	89 LT	38+46	62 LT	348	39	CURB RAMP(S) / SIDEWALK
HS4	43+11	44 RT	43+34	63 RT	251	28	CURB RAMP(S) / SIDEWALK
HS4	43+63	62 RT	43+88	36 RT	316	36	CURB RAMP(S) / SIDEWALK
HS4	43+79	33 LT	44+07	42 LT	178	20	CURB RAMP(S)
HS4	44+52	53 LT	44+87	33 LT	125	14	CURB RAMP(S) / PATHWAY / SIDEWALK
HS4	47+26	33 LT	47+65	74 LT	122	14	CURB RAMP(S) / PATHWAY / SIDEWALK
HS4	47+60	81 LT	48+29	33 LT	124	14	CURB RAMP(S) / PATHWAY / SIDEWALK
HS4	48+36	36 RT	48+59	63 RT	315	36	CURB RAMP(S) / SIDEWALK
HS4	48+87	61 RT	49+09	36 RT	298	34	CURB RAMP(S) / SIDEWALK
HS5	50+72	34 LT	50+92	69 LT	62	7	CURB RAMP(S) / PATHWAY / SIDEWALK
HS5	51+09	71 LT	51+50	33 LT	57	7	CURB RAMP(S) / PATHWAY / SIDEWALK
HS5	52+20	36 RT	52+42	61 RT	296	33	CURB RAMP(S) / SIDEWALK
HS5	52+80	63 RT	53+04	36 RT	316	36	CURB RAMP(S) / SIDEWALK
HS5	55+70	36 RT	55+94	63 RT	317	36	CURB RAMP(S) / SIDEWALK
HS5	56+30	63 RT	56+53	36 RT	315	36	CURB RAMP(S) / SIDEWALK
HS6	60+59	38 RT	60+82	65 RT	316	36	CURB RAMP(S) / SIDEWALK
HS6	61+09	65 RT	61+33	38 RT	316	36	CURB RAMP(S) / SIDEWALK
HS6	63+65	38 LT	63+89	69 LT	55	7	CURB RAMP(S) / PATHWAY / SIDEWALK
HS6	63+88	38 RT	64+15	65 RT	343	39	CURB RAMP(S) / SIDEWALK
HS6	64+22	63 LT	64+44	38 LT	55	7	CURB RAMP(S) / PATHWAY / SIDEWALK
HS6	64+51	73 RT	64+81	38 RT	423	47	CURB RAMP(S) / SIDEWALK
HS6	67+32	44 LT	67+63	69 LT	287	32	CURB RAMP(S) / SIDEWALK
HS6	67+33	35 RT	67+60	35 RT	347	39	CURB RAMP(S) / SIDEWALK
HS7	70+46	50 RT	70+72	62 RT	330	37	CURB RAMP(S) / SIDEWALK
HS7	71+02	60 RT	72+15	39 RT	763	85	CURB RAMP(S) / SIDEWALK
HS7	77+39	44 LT	77+61	53 LT	206	23	CURB RAMP(S) / PATHWAY / SIDEWALK
HS7	78+10	66 LT	78+34	36 LT	145	17	CURB RAMP(S) / PATHWAY / SIDEWALK
HS8	84+05	33 LT	84+34	41 LT	178	20	CURB RAMP(S)
HS8	84+90	54 LT	85+23	33 LT	84	10	CURB RAMP(S) / PATHWAY / SIDEWALK
HS8	87+84	41 LT	88+22	66 LT	97	11	CURB RAMP(S) / PATHWAY / SIDEWALK
HS8	88+51	71 LT	89+05	31 LT	79	9	CURB RAMP(S) / PATHWAY / SIDEWALK
HS9	90+92	60 RT	91+31	92 RT	497	56	CURB RAMP(S) / SIDEWALK
HS9	91+24	37 LT	91+66	66 LT	399	45	CURB RAMP(S) / SIDEWALK
HS9	92+13	74 RT	92+40	66 RT	352	40	CURB RAMP(S) / SIDEWALK
HS9	92+47	84 LT	92+76	56 LT	351	39	CURB RAMP(S) / SIDEWALK
				TOTAL:	1,398	SY	
				PAY ITEM QUANTITY:	1,400	SY	

REMOVAL OF PAVEMENT AND PAVEMENT PLANING – 202.0002.0000, 202.2023.0000

SHEET	FROM		TO		202.0002.0000	202.2023.0000	REMARKS
	STATION	OFFSET	STATION	OFFSET	REMOVAL OF PAVEMENT (SY)	PAVEMENT PLANING (SY)	
HS1	10+00	LT	20+00	LT	0	9,326	SOUTHBOUND
HS1	12+08	24 RT	16+90	19 RT	1,509	0	PAVEMENT REMOVAL SECTION, NORTHBOUND
HS2	20+00	CL	30+00	CL	0	8,441	
HS3	30+00	CL	40+00	CL	0	8,516	
HS4	40+00	CL	50+00	CL	0	8,779	
HS5	50+00	CL	60+00	CL	0	8,331	
HS6	60+00	CL	70+00	CL	0	9,157	
HS7	70+00	CL	80+00	CL	0	8,143	
HS8	80+00	CL	90+00	CL	0	8,556	
HS9	90+00	CL	93+00	CL	0	4,046	
HS1	16+04	34 LT	16+48	65 LT	29	0	PATHWAY
HS1	16+84	64 LT	17+58	33 LT	57	0	PATHWAY
HS2	21+34	33 LT	21+72	71 LT	28	0	PATHWAY
HS2	21+97	67 LT	22+65	37 LT	44	0	PATHWAY
HS2	27+09	41 LT	27+30	53 LT	5	0	PATHWAY
HS2	27+66	53 LT	28+22	41 LT	29	0	PATHWAY
HS3	32+72	73 LT	33+00	52 LT	21	0	PATHWAY
HS3	37+36	63 LT	37+67	82 LT	33	0	PATHWAY
HS4	44+52	53 LT	44+87	33 LT	24	0	PATHWAY
HS4	47+26	33 LT	47+65	74 LT	41	0	PATHWAY
HS4	47+60	81 LT	48+29	33 LT	44	0	PATHWAY
HS5	50+72	34 LT	50+92	69 LT	35	0	PATHWAY
HS5	51+09	71 LT	51+50	33 LT	46	0	PATHWAY
HS5	56+29	45 LT	57+67	47 LT	153	0	PATHWAY
HS5	59+15	33 LT	59+35	33 LT	18	0	PATHWAY
HS6	63+65	38 LT	63+89	69 LT	31	0	PATHWAY
HS6	64+22	63 LT	64+44	38 LT	28	0	PATHWAY
HS7	78+10	66 LT	78+34	36 LT	17	0	PATHWAY
HS8	84+90	54 LT	85+23	33 LT	15	0	PATHWAY
HS8	87+84	41 LT	88+22	66 LT	23	0	PATHWAY
HS8	88+51	71 LT	89+05	31 LT	32	0	PATHWAY
				TOTAL:	2,262	73,295	SY
				PAY ITEM QUANTITY:	2,300	74,000	SY

REMOVAL OF JUNCTION BOX – 202.0007.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	10+46	58 RT	1	
HS3	37+41	24 RT	1	
HS6	67+36	38 RT	1	
HS9	92+18	67 RT	1	
		PAY ITEM QUANTITY:	4	EA

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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SUMMARY TABLES

FILE: C:\CIVIL 3D PROJECTS\2016\24\62720-01\CIVIL\00386_D01_SUM-AWP.DWG
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	D2	D5

CURB AND GUTTER SUMMARY – 202.0009.0000, 609.0002.0001

SHEET	FROM		TO		202.0009.0000	609.0002.0001	REMARKS
	STATION	OFFSET	STATION	OFFSET	REMOVAL OF CURB & GUTTER (LF)	CURB & GUTTER, TYPE 1 (LF)	
HS1	10+43	46 RT	10+64	56 RT	23	23	
HS1	11+81	78 RT	12+16	37 RT	58	58	
HS1	12+10	38 LT	12+44	35 LT	34	34	
HS1	16+04	32 LT	16+50	65 LT	67	67	
HS1	16+82	64 LT	17+58	31 LT	96	96	
HS2	21+34	31 LT	21+74	71 LT	64	64	
HS2	21+95	67 LT	22+48	31 LT	71	71	
HS2	24+33	34 RT	24+58	66 RT	42	42	
HS2	24+84	61 RT	25+08	34 RT	37	37	
HS2	27+12	34 LT	27+32	52 LT	27	27	
HS2	27+65	52 LT	28+22	31 LT	65	65	
HS3	31+92	39 LT	32+36	51 LT	47	47	
HS3	32+70	72 LT	32+97	43 LT	41	41	
HS3	37+39	51 LT	37+69	82 LT	41	41	
HS3	37+43	23 RT	37+68	54 RT	41	41	
HS3	38+07	49 RT	38+38	17 RT	48	48	
HS3	38+09	88 LT	38+42	52 LT	51	51	
HS4	40+01	49 LT	40+11	48 LT	10	10	
HS4	43+12	31 RT	43+36	63 RT	42	42	
HS4	43+61	61 RT	43+87	34 RT	39	39	
HS4	43+79	31 LT	44+12	43 LT	37	37	
HS4	44+50	52 LT	44+87	31 LT	45	45	
HS4	47+26	31 LT	47+67	85 LT	77	77	
HS4	47+88	83 LT	48+29	31 LT	75	75	
HS4	48+37	34 RT	48+61	63 RT	39	39	
HS4	48+85	61 RT	49+08	34 RT	37	37	
HS5	50+73	32 LT	50+94	69 LT	47	47	
HS5	51+07	71 LT	51+50	31 LT	66	66	
HS5	52+21	34 RT	52+44	60 RT	37	37	
HS5	52+78	63 RT	53+03	34 RT	39	39	
HS5	55+71	34 RT	55+96	63 RT	39	39	
HS5	56+28	62 RT	56+53	34 RT	39	39	
HS5	59+15	31 LT	59+35	31 LT	20	20	
HS6	60+60	36 RT	60+84	65 RT	39	39	
HS6	61+07	65 RT	61+32	36 RT	39	39	
HS6	63+66	36 LT	63+91	74 LT	48	48	
HS6	63+89	36 RT	64+18	68 RT	45	45	
HS6	64+19	67 LT	64+44	36 LT	41	41	
HS6	64+49	77 RT	64+80	36 RT	54	54	
HS6	67+33	33 RT	67+60	33 RT	27	27	
HS6	67+34	34 LT	67+65	69 LT	48	48	
HS7	70+50	34 RT	70+75	66 RT	42	42	
HS7	70+98	64 RT	71+23	34 RT	41	41	
HS7	77+43	35 LT	77+63	52 LT	27	27	
HS7	78+08	65 LT	78+33	34 LT	41	41	
HS8	84+05	31 LT	84+40	43 LT	38	38	
HS8	84+87	52 LT	85+23	31 LT	41	41	
HS8	87+84	31 LT	88+24	66 LT	58	58	
HS8	88+49	72 LT	89+05	29 LT	83	83	
HS9	90+92	57 RT	91+32	106 RT	71	71	
HS9	91+23	2 LT	91+30	2 LT	13	7	MEDIAN NOSE OSH
HS9	91+25	28 LT	91+68	65 LT	63	63	
HS9	92+11	59 LT	92+13	66 LT	17	7	MEDIAN NOSE DOWLING
HS9	92+11	74 RT	92+28	51 RT	28	28	
HS9	92+45	83 LT	92+73	47 LT	48	48	
TOTAL:					2,461	2,461	LF
PAY ITEM QUANTITY:					2,500	2,500	LF

DITCH LINEAR GRADING – 203.2038.0000

SHEET	FROM STATION	TO STATION	OFFSET	LENGTH (LF)	REMARKS
E5/HS4	45+16	47+29	LT	215	
E6/HS4	48+24	49+45	LT	122	
			TOTAL:	337	LF
			PAY ITEM QUANTITY:	3.4	STA

ADJUST EXISTING MANHOLE – 604.0004.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	10+38	34 RT	1	STORM DRAIN
HS1	10+50	32 RT	1	STORM SEWER
HS1	12+00	30 RT	1	STORM DRAIN
HS1	13+07	27 RT	1	SEWER SYSTEM
HS1	13+40	27 RT	1	SEWER SYSTEM
HS1	14+37	29 RT	1	STORM DRAIN
HS1	16+56	26 RT	1	SEWER SYSTEM
HS1	16+57	47 LT	1	SEWER SYSTEM
HS2	27+34	38 LT	1	STORM DRAIN
HS3	37+86	14 RT	1	STORM DRAIN
HS3	37+97	44 RT	1	SEWER SYSTEM
HS7	77+74	44 LT	1	STORM DRAIN
HS8	87+66	17 RT	1	STORM DRAIN
HS8	88+96	24 RT	1	STORM DRAIN
HS9	92+47	43 LT	1	SEWER SYSTEM
HS9	92+67	44 LT	1	
PAY ITEM QUANTITY:			16	EA

REPLACE INLET FRAME AND GRATE – 604.0012.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	12+30	35 LT	1	
HS1	17+17	33 LT	1	
HS4	40+06	49 LT	1	
PAY ITEM QUANTITY:			3	EA

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	D3	D5

CONCRETE SIDEWALK, 4 INCHES THICK – 608.0001.0004

SHEET	FROM		TO		AREA (SF)	AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET			
HS1	10+45	48 RT	10+62	57 RT	100	12	
HS1	11+85	67 RT	12+17	45 RT	29	4	
HS2	24+33	36 RT	24+50	50 RT	85	10	
HS2	24+91	50 RT	25+08	36 RT	86	10	
HS2	28+55	37 RT	29+54	35 RT	490	55	
HS3	37+58	52 RT	37+66	54 RT	31	4	
HS3	38+08	50 RT	38+40	24 RT	52	6	
HS3	38+11	89 LT	38+46	62 LT	91	11	
HS4	43+11	33 RT	43+28	47 RT	85	10	
HS4	43+69	49 RT	43+88	36 RT	86	10	
HS4	48+36	48 RT	48+53	50 RT	171	20	
HS4	48+92	50 RT	49+09	36 RT	86	10	
HS5	55+70	36 RT	55+94	63 RT	242	27	
HS5	56+36	50 RT	56+53	36 RT	86	10	
HS6	60+59	38 RT	60+82	65 RT	242	27	
HS6	61+15	52 RT	61+33	38 RT	86	10	
HS6	63+88	38 RT	64+07	51 RT	87	10	
HS6	64+62	51 RT	64+80	50 RT	87	10	
HS6	67+33	35 RT	67+60	35 RT	284	32	
HS7	70+46	50 RT	70+66	50 RT	109	13	
HS7	71+05	52 RT	72+16	39 RT	590	66	
HS9	90+92	59 RT	91+31	92 RT	372	42	
HS9	91+24	37 LT	91+66	66 LT	132	15	
HS9	92+13	74 RT	92+40	66 RT	289	33	
HS9	92+47	84 LT	92+76	54 LT	73	9	
				PAY ITEM QUANTITY:		466	SY

ASPHALT PATHWAY – 608.2002.0000

SHEET	FROM		TO		AREA (SF)	TON	REMARKS
	STATION	OFFSET	STATION	OFFSET			
HS1	16+04	34 LT	16+29	35 LT	151	3	
HS1	17+08	33 LT	17+58	33 LT	378	6	
HS2	21+34	33 LT	21+46	35 LT	92	2	
HS2	21+97	67 LT	22+65	36 LT	387	6	
HS2	27+23	52 LT	27+30	53 LT	24	1	
HS2	27+84	36 LT	28+22	33 LT	219	4	
HS3	32+77	61 LT	33+00	52 LT	111	2	
HS3	37+36	63 LT	37+67	82 LT	283	4	
HS4	44+52	53 LT	44+87	33 LT	185	3	
HS4	47+26	33 LT	47+41	36 LT	135	2	
HS4	48+18	34 LT	48+29	33 LT	86	2	
HS5	50+82	63 LT	50+92	69 LT	41	1	
HS5	51+09	71 LT	51+50	33 LT	250	4	
HS5	56+29	45 LT	57+67	47 LT	1,377	20	
HS5	59+15	33 LT	59+35	33 LT	160	3	
HS6	63+65	38 LT	63+89	69 LT	255	4	
HS6	64+27	52 LT	64+44	38 LT	86	2	
HS6	67+56	64 LT	67+63	69 LT	35	1	
HS7	77+39	44 LT	77+60	51 LT	98	2	
HS7	78+17	51 LT	78+34	36 LT	184	3	
HS8	84+90	54 LT	85+23	33 LT	89	2	
HS8	87+84	33 LT	88+22	66 LT	206	3	
HS8	88+51	71 LT	89+05	31 LT	280	4	
				PAY ITEM QUANTITY:		84	TON

CURB RAMP – 608.0006.0000

SHEET	STATION	OFFSET	TYPE	CURB RAMP (EA)	ASP	DETAIL	REMARKS
HS1	10+46	49 LT	PERPENDICULAR	1	X		
HS1	10+55	52 RT	PERPENDICULAR	1	X		
HS1	10+59	65 LT	PERPENDICULAR	1	X		
HS1	10+67	63 RT	PERPENDICULAR	1	X		
HS1	11+90	56 RT	PARALLEL	1	X		
HS1	11+90	58 LT	PERPENDICULAR	1	X		
HS1	12+03	44 LT	PERPENDICULAR	1	X		
HS1	12+07	42 RT	PARALLEL	1	X		
HS1	16+39	41 LT	PARALLEL	1	X		
HS1	16+93	41 LT	PARALLEL	1	X		
HS2	21+57	41 LT	PARALLEL	1	X		
HS2	22+12	41 LT	PARALLEL	1	X		
HS2	24+42	42 RT	PERPENDICULAR	1	X		
HS2	24+99	42 RT	PERPENDICULAR	1	X		
HS2	27+20	41 LT	PARALLEL	1	X		
HS2	27+77	41 LT	PARALLEL	1	X		
HS3	32+22	44 LT	UNIDIRECTIONAL	1		X	
HS3	32+86	52 LT	PERPENDICULAR	1	X		
HS3	37+49	29 RT	PARALLEL	1	X		
HS3	37+50	58 LT	PERPENDICULAR	1	X		
HS3	37+60	42 RT	PARALLEL	1	X		
HS3	37+61	69 LT	PERPENDICULAR	1	X		
HS3	38+14	37 RT	PARALLEL	1	X		
HS3	38+17	75 LT	PARALLEL	1	X		
HS3	38+26	25 RT	PARALLEL	1	X		
HS3	38+30	61 LT	PARALLEL	1	X		
HS4	43+21	39 RT	PERPENDICULAR	1	X		
HS4	43+77	41 RT	PERPENDICULAR	1	X		
HS4	43+98	36 LT	UNIDIRECTIONAL	1		X	
HS4	44+63	41 LT	PARALLEL	1	X		
HS4	47+49	41 LT	PARALLEL	1	X		
HS4	48+05	41 LT	PARALLEL	1	X		
HS4	48+45	42 RT	PERPENDICULAR	1	X		
HS4	49+00	42 RT	PERPENDICULAR	1	X		
HS5	50+83	40 LT	PARALLEL	1	X		
HS5	51+24	41 LT	PARALLEL	1	X		
HS5	52+30	42 RT	PARALLEL	1	X		
HS5	52+94	42 RT	PARALLEL	1	X		
HS5	55+80	42 RT	PERPENDICULAR	1	X		
HS5	56+44	42 RT	PERPENDICULAR	1	X		
HS6	60+68	44 RT	PERPENDICULAR	1	X		
HS6	61+23	44 RT	PERPENDICULAR	1	X		
HS6	63+75	44 LT	PERPENDICULAR	1	X		
HS6	63+98	44 RT	PERPENDICULAR	1	X		
HS6	64+35	44 LT	PERPENDICULAR	1	X		
HS6	64+71	44 RT	PERPENDICULAR	1	X		
HS6	67+42	39 LT	PARALLEL	1	X		
HS6	67+45	35 RT	PERPENDICULAR	1	X		
HS6	67+58	54 LT	PARALLEL	1	X		
HS7	70+59	42 RT	PERPENDICULAR	1	X		
HS7	71+14	42 RT	PERPENDICULAR	1	X		
HS7	77+52	42 LT	PERPENDICULAR	1	X		
HS7	78+24	42 LT	PERPENDICULAR	1	X		
HS8	84+25	36 LT	UNIDIRECTIONAL	1		X	
HS8	85+01	41 LT	PARALLEL	1	X		
HS8	88+07	41 LT	PARALLEL	1	X		
HS8	88+63	40 LT	PARALLEL	1	X		

CURB RAMP – 608.0006.0000 (CONTINUED)

SHEET	STATION	OFFSET	TYPE	CURB RAMP (EA)	ASP	DETAIL	REMARKS
HS9	91+10	63 RT	PERPENDICULAR	1	X		
HS9	91+28	81 RT	PERPENDICULAR	1	X		
HS9	91+42	33 LT	PARALLEL	1	X		
HS9	91+59	47 LT	PARALLEL	1	X		
HS9	92+21	60 RT	PERPENDICULAR	1	X		
HS9	92+51	71 LT	PARALLEL	1	X		
HS9	92+62	57 LT	PARALLEL	1	X		
			PAY ITEM QUANTITY:	64	EA		

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SUMMARY TABLES

DATE/TIME | 10/4/2020 5:19 PM | LAYOUT | D3 | DESIGNED | FC | CHECKED | KLK | DRAFTED | AAS
FILE | C:\CIVIL 3D PROJECTS\2016\24\62720-01\CIVIL\00386_D01_SUM-AWP.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	D4	D5

SEEDING – STANDARD – 618.0002.0000

SHEET	FROM		TO		AREA (SF)	MSF	POUND (LB)	REMARKS
	STATION	OFFSET	STATION	OFFSET				
HS1	11+91	69 RT	12+17	45 RT	40	0.04	0.060	CURB RAMP(S) / SIDEWALK
HS1	16+04	42 LT	16+43	65 LT	132	0.13	0.198	CURB RAMP(S) / PATHWAY
HS1	16+90	64 LT	17+58	41 LT	158	0.16	0.237	CURB RAMP(S) / PATHWAY
HS2	21+34	43 LT	21+67	71 LT	173	0.17	0.259	CURB RAMP(S) / PATHWAY
HS2	22+02	68 LT	22+63	47 LT	75	0.07	0.112	CURB RAMP(S) / PATHWAY
HS2	24+33	41 RT	24+52	67 RT	208	0.21	0.311	CURB RAMP(S) / SIDEWALK
HS2	24+86	62 RT	25+03	52 RT	142	0.14	0.213	CURB RAMP(S) / SIDEWALK
HS2	27+09	41 LT	27+25	56 LT	47	0.05	0.070	CURB RAMP(S) / PATHWAY
HS2	27+71	55 LT	28+22	41 LT	56	0.06	0.085	CURB RAMP(S) / PATHWAY
HS2	28+55	37 RT	29+54	35 RT	199	0.20	0.298	SIDEWALK
HS3	31+92	49 LT	32+34	53 LT	43	0.04	0.064	CURB RAMP(S)
HS3	32+79	75 LT	33+00	52 LT	133	0.13	0.200	CURB RAMP(S) / PATHWAY
HS3	37+35	33 RT	37+55	57 RT	31	0.03	0.046	CURB RAMP(S) / SIDEWALK
HS3	37+36	63 LT	37+57	84 LT	91	0.09	0.136	CURB RAMP(S) / SIDEWALK
HS3	38+16	90 LT	38+46	62 LT	45	0.05	0.068	CURB RAMP(S) / SIDEWALK
HS4	43+11	38 RT	43+28	64 RT	128	0.13	0.192	CURB RAMP(S) / SIDEWALK
HS4	43+88	65 RT	43+88	47 RT	178	0.18	0.267	CURB RAMP(S) / SIDEWALK
HS4	44+59	57 LT	44+87	43 LT	34	0.03	0.051	CURB RAMP(S) / PATHWAY
HS4	44+67	53 LT	47+47	73 LT	11,176	11.18	16.763	BIOFILTRATION DITCH, SIDES
HS4	47+26	45 LT	47+57	74 LT	170	0.17	0.255	CURB RAMP(S) / PATHWAY
HS4	47+97	80 LT	48+29	43 LT	303	0.30	0.454	CURB RAMP(S) / PATHWAY
HS4–HS5	48+16	70 LT	50+77	68 LT	13,259	13.26	19.889	BIOFILTRATION DITCH, SIDES
HS4	48+36	41 RT	48+49	65 RT	186	0.19	0.278	CURB RAMP(S) / SIDEWALK
HS4	48+97	64 RT	49+09	48 RT	158	0.16	0.237	CURB RAMP(S) / SIDEWALK
HS5	50+70	44 LT	50+87	69 LT	34	0.03	0.050	CURB RAMP(S) / PATHWAY
HS5	51+13	71 LT	51+19	60 LT	13	0.01	0.020	CURB RAMP(S) / PATHWAY
HS5	52+20	41 RT	52+32	64 RT	125	0.13	0.188	CURB RAMP(S) / SIDEWALK
HS5	52+91	65 RT	53+04	40 RT	186	0.19	0.279	CURB RAMP(S) / SIDEWALK
HS5	56+29	45 LT	57+63	38 LT	268	0.27	0.402	PATHWAY
HS5	56+30	63 RT	56+53	41 RT	195	0.20	0.293	CURB RAMP(S) / SIDEWALK
HS5	59+15	43 LT	59+35	43 LT	20	0.02	0.030	PATHWAY
HS6	61+20	67 RT	61+32	48 RT	180	0.18	0.270	CURB RAMP(S) / SIDEWALK
HS6	63+65	50 LT	63+84	68 LT	29	0.03	0.043	CURB RAMP(S) / SIDEWALK
HS6	63+89	49 RT	64+05	69 RT	209	0.21	0.313	CURB RAMP(S) / SIDEWALK
HS6	64+32	66 LT	64+44	50 LT	161	0.16	0.242	CURB RAMP(S) / SIDEWALK
HS6	64+62	75 RT	64+81	43 RT	300	0.30	0.451	CURB RAMP(S) / SIDEWALK
HS6	67+32	44 LT	67+58	70 LT	37	0.04	0.056	CURB RAMP(S) / PATHWAY
HS6	67+33	48 RT	67+60	48 RT	26	0.03	0.040	CURB RAMP(S) / SIDEWALK
HS7	70+46	50 RT	70+60	60 RT	134	0.13	0.201	CURB RAMP(S) / SIDEWALK
HS7	71+12	63 RT	72+15	44 RT	328	0.33	0.492	CURB RAMP(S) / SIDEWALK
HS7	77+39	44 LT	77+55	58 LT	55	0.06	0.083	CURB RAMP(S) / PATHWAY
HS7	78+19	68 LT	78+34	48 LT	156	0.16	0.234	CURB RAMP(S) / PATHWAY
HS9	90+90	63 RT	91+22	96 RT	32	0.03	0.048	CURB RAMP(S) / SIDEWALK
HS9	92+52	85 LT	92+76	54 LT	40	0.04	0.060	CURB RAMP(S) / SIDEWALK
						PAY ITEM QUANTITY:	45	LB

SEEDING – WETLAND – 618.2002.000B

SHEET	FROM		TO		AREA (SF)	MSF	POUND (LB)	REMARKS
	STATION	OFFSET	STATION	OFFSET				
E5	45+13	61 LT	47+33	70 LT	2,222	2.22	3	BIOFILTRATION DITCH, BOTTOM
E6	48+23	59 LT	50+62	68 LT	2,063	2.06	3	BIOFILTRATION DITCH, BOTTOM
						PAY ITEM QUANTITY:	6	LB

TOPSOIL – 620.0001.0000

SHEET	FROM		TO		AREA (SF)	AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET			
HS1	11+91	69 RT	12+17	45 RT	40	5	CURB RAMP(S) / SIDEWALK
HS1	16+04	42 LT	16+43	65 LT	132	16	CURB RAMP(S) / PATHWAY
HS1	16+90	64 LT	17+58	41 LT	158	19	CURB RAMP(S) / PATHWAY
HS2	21+34	43 LT	21+67	71 LT	173	21	CURB RAMP(S) / PATHWAY
HS2	22+02	68 LT	22+63	47 LT	75	9	CURB RAMP(S) / PATHWAY
HS2	24+33	41 RT	24+52	67 RT	208	25	CURB RAMP(S) / SIDEWALK
HS2	24+86	62 RT	25+03	52 RT	142	17	CURB RAMP(S) / SIDEWALK
HS2	27+09	41 LT	27+25	56 LT	47	6	CURB RAMP(S) / PATHWAY
HS2	27+71	55 LT	28+22	41 LT	56	7	CURB RAMP(S) / PATHWAY
HS2	28+55	37 RT	29+54	35 RT	199	24	SIDEWALK
HS3	31+92	49 LT	32+34	53 LT	43	5	CURB RAMP(S)
HS3	32+79	75 LT	33+00	52 LT	133	16	CURB RAMP(S) / PATHWAY
HS3	37+35	33 RT	37+55	57 RT	31	4	CURB RAMP(S) / SIDEWALK
HS3	37+36	63 LT	37+57	84 LT	91	11	CURB RAMP(S) / SIDEWALK
HS3	38+16	90 LT	38+46	62 LT	45	6	CURB RAMP(S) / SIDEWALK
HS4	43+11	38 RT	43+28	64 RT	128	16	CURB RAMP(S) / SIDEWALK
HS4	43+88	65 RT	43+88	47 RT	178	22	CURB RAMP(S) / SIDEWALK
HS4	44+59	57 LT	44+87	43 LT	34	4	CURB RAMP(S) / PATHWAY
HS4	44+67	53 LT	47+47	73 LT	11,176	1,366	BIOFILTRATION DITCH, SIDES
HS4	45+13	61 LT	47+33	70 LT	2,222	272	BIOFILTRATION DITCH, BOTTOM
HS4	47+26	45 LT	47+57	74 LT	170	19	CURB RAMP(S) / PATHWAY
HS4	47+97	80 LT	48+29	43 LT	303	34	CURB RAMP(S) / PATHWAY
HS4–HS5	48+16	70 LT	50+77	68 LT	13,259	1,621	BIOFILTRATION DITCH, SIDES
HS4–HS5	48+23	59 LT	50+62	68 LT	2,063	252	BIOFILTRATION DITCH, BOTTOM
HS4	48+36	41 RT	48+49	65 RT	186	23	CURB RAMP(S) / SIDEWALK
HS4	48+97	64 RT	49+09	48 RT	158	19	CURB RAMP(S) / SIDEWALK
HS5	50+70	44 LT	50+87	69 LT	34	4	CURB RAMP(S) / PATHWAY
HS5	51+13	71 LT	51+19	60 LT	13	2	CURB RAMP(S) / PATHWAY
HS5	52+20	41 RT	52+32	64 RT	125	15	CURB RAMP(S) / SIDEWALK
HS5	52+91	65 RT	53+04	40 RT	186	23	CURB RAMP(S) / SIDEWALK
HS5	56+29	45 LT	57+63	38 LT	268	33	PATHWAY
HS5	56+30	63 RT	56+53	41 RT	195	24	CURB RAMP(S) / SIDEWALK
HS5	59+15	43 LT	59+35	43 LT	20	2	PATHWAY
HS6	61+20	67 RT	61+32	48 RT	180	22	CURB RAMP(S) / SIDEWALK
HS6	63+65	50 LT	63+84	68 LT	29	4	CURB RAMP(S) / SIDEWALK
HS6	63+89	49 RT	64+05	69 RT	209	26	CURB RAMP(S) / SIDEWALK
HS6	64+32	66 LT	64+44	50 LT	161	20	CURB RAMP(S) / SIDEWALK
HS6	64+62	75 RT	64+81	43 RT	300	37	CURB RAMP(S) / SIDEWALK
HS6	67+32	44 LT	67+58	70 LT	37	5	CURB RAMP(S) / PATHWAY
HS6	67+33	48 RT	67+60	48 RT	26	3	CURB RAMP(S) / SIDEWALK
HS7	70+46	50 RT	70+60	60 RT	134	16	CURB RAMP(S) / SIDEWALK
HS7	71+12	63 RT	72+15	44 RT	328	40	CURB RAMP(S) / SIDEWALK
HS7	77+39	44 LT	77+55	58 LT	55	7	CURB RAMP(S) / PATHWAY
HS7	78+19	68 LT	78+34	48 LT	156	19	CURB RAMP(S) / PATHWAY
HS9	90+90	63 RT	91+22	96 RT	32	4	CURB RAMP(S) / SIDEWALK
HS9	92+52	85 LT	92+76	54 LT	40	5	CURB RAMP(S) / SIDEWALK
						TOTAL:	4,148	SY
						PAY ITEM QUANTITY:	4,150	SY

ADJUST SANITARY SEWER CLEANOUT – 626.2013.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	18+32	26 RT	1	
		PAY ITEM QUANTITY:	1	EA

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SUMMARY TABLES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	D5	D5

ADJUSTMENT OF VALVE BOX – 627.0010.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	10+85	53 RT	1	WORK BY OTHERS (ENSTAR)
HS1	12+80	27 LT	1	
HS1	13+80	27 LT	1	
HS1	13+81	27 LT	1	
HS1	14+02	28 LT	1	
HS1	14+45	28 LT	1	
HS1	16+29	27 LT	1	
HS1	16+71	31 LT	1	
HS2	20+50	26 LT	1	
HS2	21+74	26 LT	1	
HS2	21+98	29 LT	1	
HS2	22+01	50 LT	1	
HS2	23+40	7 LT	1	
HS2	23+94	29 LT	1	
HS2	26+27	28 LT	1	
HS2	27+20	28 LT	1	
HS2	27+55	30 LT	1	
HS2	27+60	50 LT	1	
HS2	29+65	32 LT	1	
HS3	31+26	27 LT	1	
HS3	32+30	30 LT	1	
HS3	32+42	54 LT	1	
HS3	32+50	35 LT	1	
HS3	33+30	25 LT	1	
HS3	35+00	37 LT	1	
HS3	35+40	37 LT	1	
HS3	35+00	37 LT	1	
HS3	35+40	37 LT	1	
HS3	35+42	40 LT	1	
HS3	38+05	40 LT	1	
HS3	39+64	32 LT	1	
HS3	39+95	32 LT	1	
HS4	41+36	27 LT	1	
HS4	41+85	25 LT	1	
HS4	42+20	25 LT	1	
HS4	44+09	20 LT	1	
HS4	44+25	17 LT	1	
HS4	48+27	23 RT	1	
HS4	49+24	18 RT	1	
HS5	50+26	25 RT	1	
HS5	51+15	23 RT	1	
HS5	51+49	25 RT	1	
HS5	52+37	20 RT	1	
HS5	52+72	23 RT	1	
HS5	53+75	25 RT	1	
HS5	54+78	28 RT	1	
HS5	56+27	18 RT	1	
HS5	57+49	17 RT	1	
HS6	61+10	22 RT	1	
HS6	61+26	19 RT	1	
HS6	62+59	26 RT	1	
HS6	63+57	9 RT	1	
HS6	63+66	14 RT	1	
HS6	64+44	19 RT	1	
HS6	64+44	30 RT	1	
HS6	66+84	24 RT	1	

ADJUSTMENT OF VALVE BOX – 627.0010.0000 (CONTINUED)

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS6	67+32	18 RT	1	
HS6	68+07	18 RT	1	
HS6	68+07	38 LT	1	
HS6	68+79	17 RT	1	
HS7	70+09	18 RT	1	
HS7	71+25	17 RT	1	
HS7	71+67	18 RT	1	
HS7	71+83	15 RT	1	
HS7	72+64	19 RT	1	
HS7	73+61	23 RT	1	
HS7	75+10	22 RT	1	
HS7	75+38	8 LT	1	
HS7	75+38	15 LT	1	
HS7	79+78	13 LT	1	
HS8	81+68	16 LT	1	
HS8	81+78	11 LT	1	
HS8	83+50	15 LT	1	
HS8	84+40	30 LT	1	
HS8	84+61	51 LT	1	
HS8	88+44	53 LT	1	
HS9	91+50	30 LT	1	
HS9	91+97	66 RT	1	
HS9	92+01	58 RT	1	
HS9	92+23	56 LT	1	
HS9	92+25	65 RT	1	
PAY ITEM QUANTITY:			78	EA

APPROACH – 639.2000.0000

SHEET	STATION	OFFSET	TYPE			RADIUS (LF)	WIDTH (LF)	REMARKS
			PUBLIC (EA)	RES. (EA)	COMM. (EA)			
HS1	11+24	LT	1			43	118	DIMOND BOULEVARD
HS1	11+29	RT	1			VARIES	105	DIMOND BOULEVARD
HS1	16+66	LT	1			30	32	E 82ND
HS2	21+85	LT	1			41	21	E 81ST
HS2	24+71	RT	1			41	23	E 80TH
HS2	27+48	LT	1			41	23	E 79TH
HS3	32+60	LT	1			41	21	E 78TH
HS3	37+88	RT	1			VARIES	35	E 76TH
HS3	37+89	LT	1			VARIES	38	E 76TH
HS4	43+48	RT	1			41	23	E 74TH
HS4	44+35	LT	1			41	21	E 74TH
HS4	47+77	LT	1			41	21	E 73RD
HS4	48+73	RT	1			41	21	E 72ND
HS5	51+00	LT	1			VARIES	13	E 72ND
HS5	52+62	RT	1			41	31	E 71ST
HS5	56+12	RT	1			41	31	E 70TH
HS6	60+96	RT	1			VARIES	21	E 69TH
HS6	64+03	LT	1			41	25	MERLIN LOOP
HS6	64+35	RT	1			51	28	E 68TH
HS6	67+85	LT	1			VARIES	40	SYLVAN DRIVE
HS7	70+86	RT	1			41	23	E 66TH
HS7	77+97	LT	1			VARIES	29	E 64TH
HS8	84+70	LT	1			41	31	FISCHER AVENUE
HS8	88+39	LT	1			VARIES	25	PEARL DRIVE
HS9	91+65	RT	1			VARIES	66	E DOWLING ROAD
HS9	92+15	LT	1			VARIES	75	E DOWLING ROAD
PAY ITEM QUANTITY:			26	–	–	EA		

ADJUST EXISTING MONUMENT CASE – 642.0011.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	11+36	0 RT	1	
HS1	19+61	0 RT	1	
HS3	37+87	0 RT	1	
HS3	39+70	0 RT	1	
HS4	44+47	4 RT	1	
HS6	64+26	1 LT	1	
HS7	71+61	0 RT	1	
HS7	78+51	0 RT	1	
HS9	91+97	39 LT	1	
PAY ITEM QUANTITY:			9	EA

ADJUST JUNCTION BOX – 660.2004.0000

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	12+07	51 RT	1	TYPE 2
HS1	12+11	50 RT	1	TYPE 1A
HS3	37+51	73 LT	1	TYPE 2
HS3	37+57	57 RT	1	TYPE 2
HS3	38+11	48 RT	1	TYPE 1A
HS3	38+28	76 LT	1	TYPE 3
HS3	38+34	28 RT	1	TYPE 2
HS3	38+42	56 LT	1	TYPE 1A
HS6	67+38	46 LT	1	TYPE 2
HS8	88+70	40 LT	1	TYPE 2
HS9	90+97	64 RT	1	TYPE 2
HS9	91+11	72 RT	1	TYPE 2
PAY ITEM QUANTITY:			12	EA

JUNCTION BOX, TYPE 1A – 660.2005.001A

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
HS1	10+46	58 RT	1	
HS6	67+36	38 RT	1	
HS9	92+18	67 RT	1	
PAY ITEM QUANTITY:			3	EA

STATE OF ALASKA
50TH
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NOVEMBER
2020
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SUMMARY TABLES

DATE/TIME 11/25/2020 9:09 AM | LAYOUT D5 | DESIGNED FC | CHECKED KLK | DRAFTED AAS
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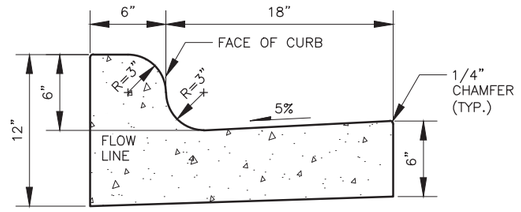
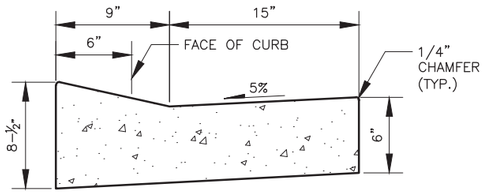
NO.	DATE	REVISION

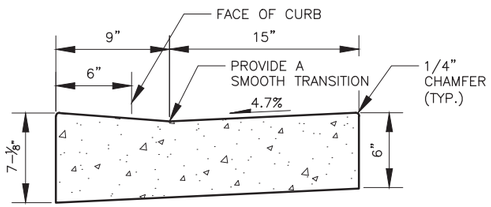
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	E1	E6



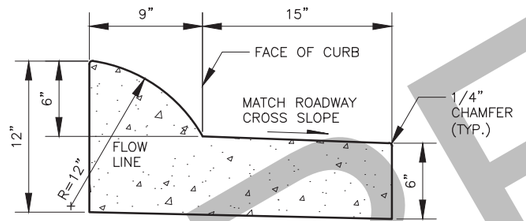
6" MOUNTABLE CURB & GUTTER



DEPRESSED CURB & GUTTER (CURB CUT)



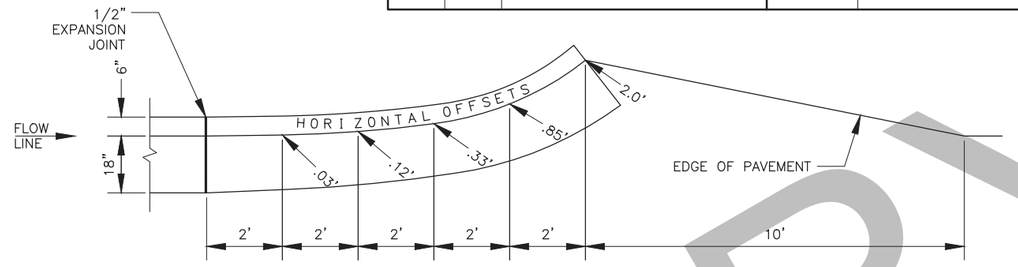
ADA CURB & GUTTER



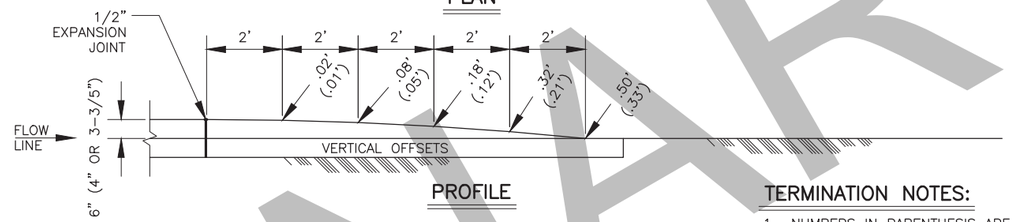
EXPRESSWAY CURB & GUTTER (MEDIAN)

CURB NOTES:

1. MOUNTABLE AND DEPRESSED GUTTER PANS SHALL MATCH THE ROADWAY CROSS SLOPE IN THE HIGH SIDE OF SUPER ELEVATED AREAS.
2. USE THE ADA CURB & GUTTER FOR ALL CURB RAMPS.
3. WHERE SIDEWALK/PATHWAY IS REMOVED AND NO SIDEWALK/PATHWAY OR RAMP ARE TO BE CONSTRUCTED, RE-GRADE AS NECESSARY TO PROVIDE POSITIVE DRAINAGE AND PLACE TOPSOIL AND SEED.
4. REMOVE AND CONSTRUCT SIDEWALK AND CURB AND GUTTER TO THE NEAREST EXISTING JOINT.
5. CONSTRUCT CURB AND GUTTER TO MATCH EXISTING CURB AND GUTTER LOCATION AND RADII.



PLAN

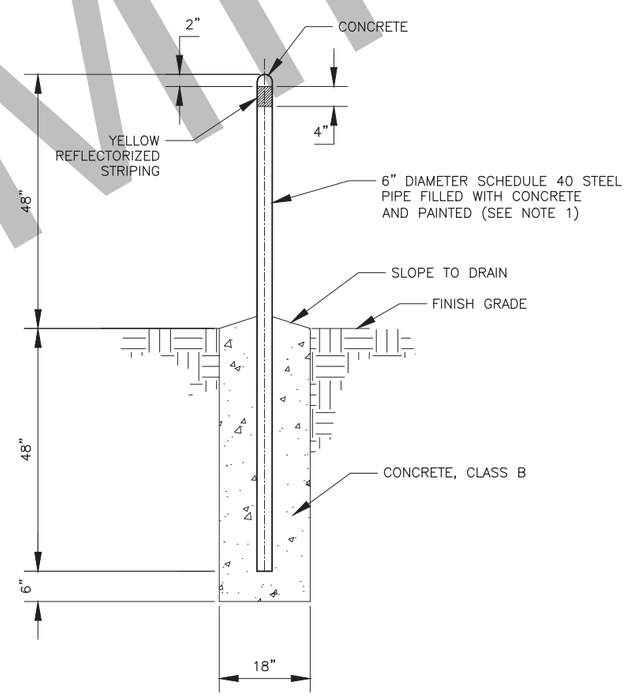


PROFILE

CURB & GUTTER TERMINATION TRANSITIONS

TERMINATION NOTES:

1. NUMBERS IN PARENTHESIS ARE FOR 4 INCH MOUNTABLE AND LOW PROFILE CURB & GUTTER.



STEEL BOLLARD

BOLLARD NOTES:

1. POSTS SHALL BE PRIMED AND RECEIVE TWO COATS MINIMUM OF DARK GREEN POWDER COAT PAINT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TOPCOAT WITH TWO COATS YELLOW CARBOLNE 139 UNLESS GUARD POST COVER OR SLEEVE IS INSTALLED.

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

CURB & GUTTER AND MISCELLANEOUS DETAILS

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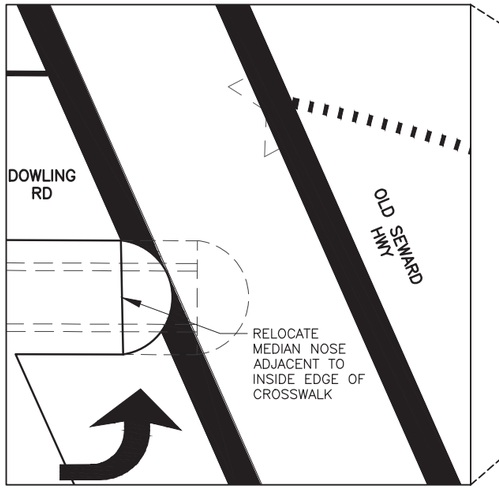
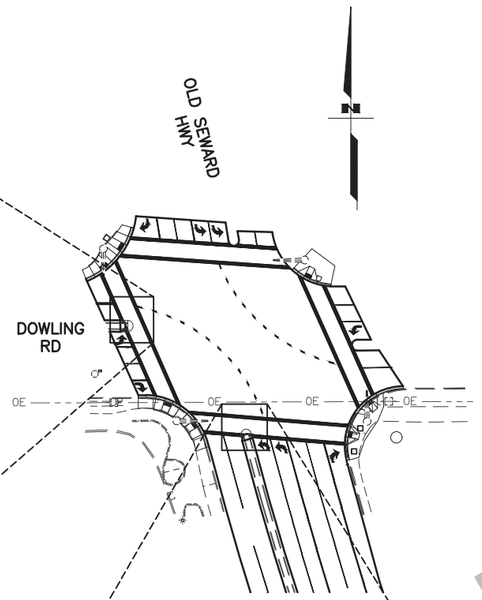
NO.	DATE	REVISION

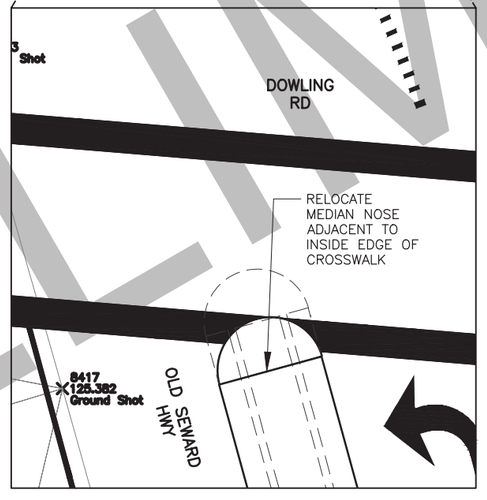
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	E2	E6



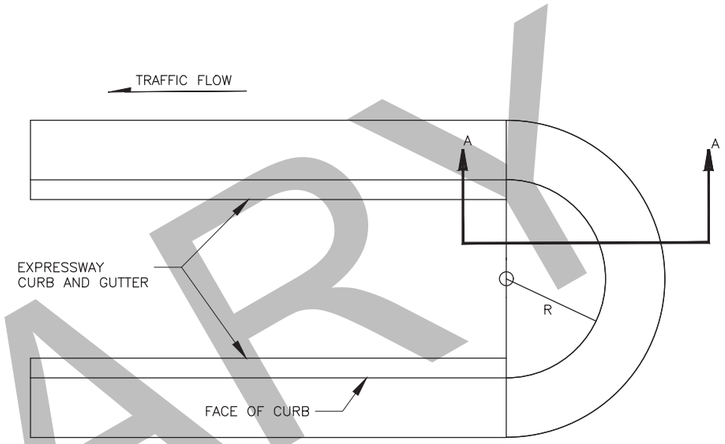
MEDIAN CROSSING
STA. 92+11 LT
SCALE: 1" = 50'



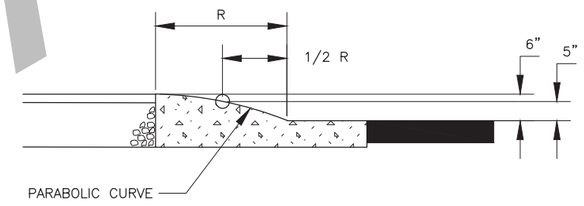
PLAN
SCALE: 1" = 50'



MEDIAN CROSSING
STA. 92+23 CL
SCALE: 1" = 50'



PLAN



SECTION A–A

MEDIAN NOSE DETAIL

MEDIAN NOTES:

1. MEDIAN NOSE SHALL BE PAINTED WITH YELLOW REFLECTORIZED PAINT. SHAPING AND PAINTING SHALL BE SUBSIDIARY.

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STATE OF ALASKA
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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

MEDIAN DETAILS

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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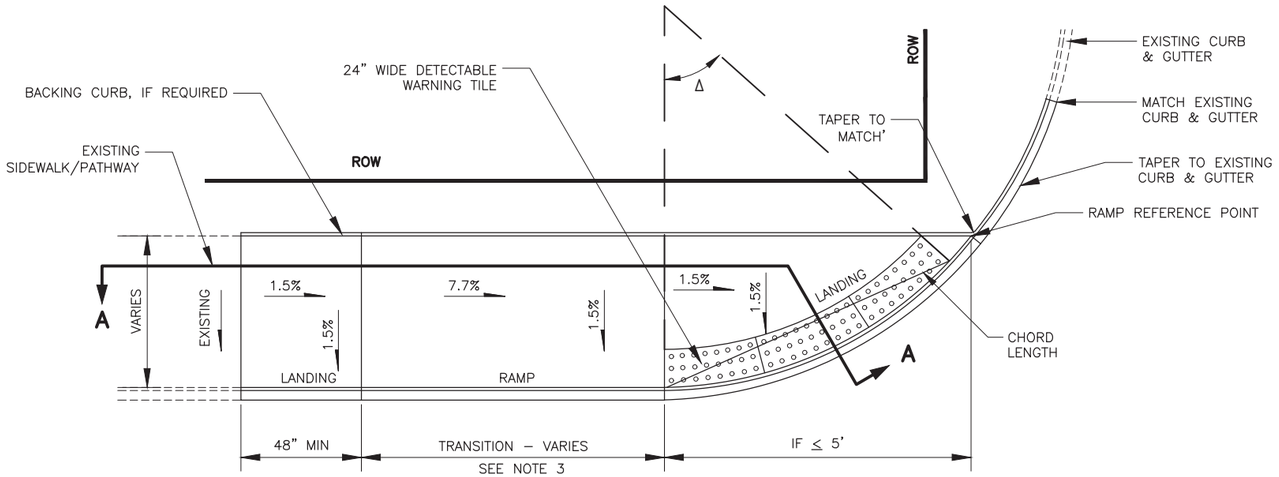
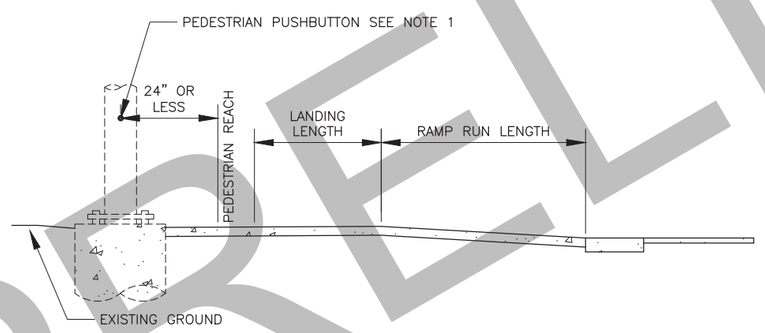


DIRECTIONAL CURB RAMP

RADIAL DETECTABLE WARNING TILE SCHEDULE					
SHEET	STATION	OFFSET	TBC RADIUS	TBC ARC LENGTH	INNER ARC LENGTH
HS3	32+18	LT	38.9'	13.6'	13.0'
HS4	43+95	LT	38.8'	13.6'	13.0'
HS8	84+23	LT	38.8'	13.6'	13.0'

DIRECTIONAL CURB RAMP NOTES:

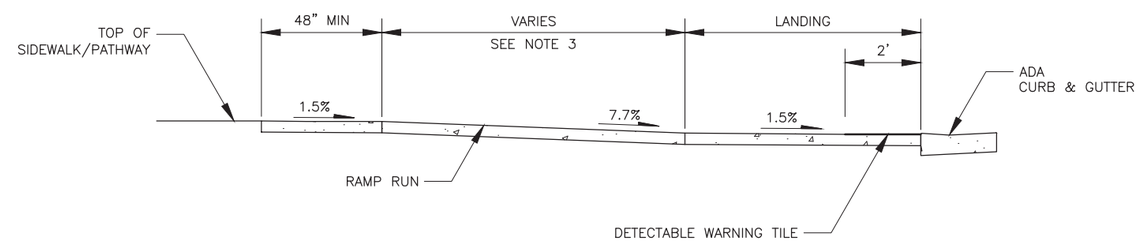
1. SEE PLANS FOR RAMP TYPE AT SPECIFIC LOCATION. SEE STRIPING PLANS FOR CROSSWALK LAYOUT.
2. CONSTRUCT RAMP RUNS AND LANDINGS OF 4" THICK (MIN.) CONCRETE, REGARDLESS OF WHETHER THE SIDEWALK IS ASPHALT OR CONCRETE.
3. CONSTRUCT RAMP SLOPES AT 7.7% (5.0% MIN. AND 8.3% MAX.). IF SITE CONDITIONS WARRANT IT, RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER THE 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15'. THE RESULTING RAMP GRADE AT A 15' RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
4. CONSTRUCT SIDEWALK CROSS–SLOPES AT 1.5% (1.0% MIN. AND 2.0% MAX.).
5. CONSTRUCT GRADE BREAKS PERPENDICULAR TO RAMP RUNS.
6. PROVIDE A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE CURB ON RAMP RUNS AND UPPER LANDINGS AND PARALLEL TO THE CURB ON LOWER LANDINGS.
7. INSTALL 24" DETECTABLE WARNING TILES MEETING SECTION 705.1 OF THE 2006 ADA STANDARDS FOR TRANSPORTATION FACILITIES FOR THE FULL WIDTH OF THE RAMP. ALIGN TRUNCATED DOME PATTERN IN THE PREDOMINANT DIRECTION OF WHEELCHAIR TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
8. DRAINAGE INLETS SHOULD NOT BE LOCATED WITHIN MARKED CROSSWALKS OR, IF CROSSWALKS ARE NOT MARKED, INLETS SHOULD NOT BE LOCATED WITHIN THE AREA A STANDARD MARKED CROSSWALK WOULD ENCLOSE. IF THAT IS UNAVOIDABLE, INSTALL ACCESSIBLE GRATES WITH OPENINGS NO GREATER THAN 1/2 INCH IN ANY DIRECTION.
8. LENGTH OF LANDING:
   a. IF A CONSTRAINT EXISTS AT BACK OF SIDEWALK THAT INHIBITS TURNING, LENGTH OF LANDING IS 60".
   b. IF NO CONSTRAINT EXISTS, LENGTH OF LANDING IS 48".



PEDESTRIAN PUSHBUTTON ACCESS

PUSHBOTTON NOTES:

1. IN A CURB RAMP RETROFIT, PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT MAY BE UP TO 46 INCHES ON CENTER ABOVE THE CLEAR SPACE SURFACE. ADJUST PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT IF CURB RAMP RECONSTRUCTION RESULTS IN PUSHBUTTON MOUNTING HEIGHT OF MORE THAN 46 INCHES, AS DIRECTED BY THE ENGINEER. RELOCATION AND ADJUSTMENT OF PEDESTRIAN PUSHBUTTON IS SUBSIDIARY TO BID ITEM 608(6) CURB RAMPS. PRIOR TO SUCH WORK, CONTRACTOR SHALL COORDINATE WITH MOA SIGNAL ELECTRONICS SHOP.
2. WHEN INSTALLING NEW CURB RAMPS AND BACKING CURB, ENSURE ACCESS IS RETAINED TO FOUNDATION BASE PLATE NUTS AND BOLTS. IF EXISTING SIGNAL POLE FOUNDATION IS COVERED WITH SOILS, REMOVE AND EXPOSE FOUNDATION AND ANCHOR BOLTS. THIS WORK IS SUBSIDIARY TO CURB RAMP, PAY ITEM 608(7).



SECTION A–A

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

CURB RAMP DETAILS

DATE/TIME 10/7/2020 10:12 PM | LAYOUT E3 | DESIGNED -- | CHECKED -- | DRAFTED --
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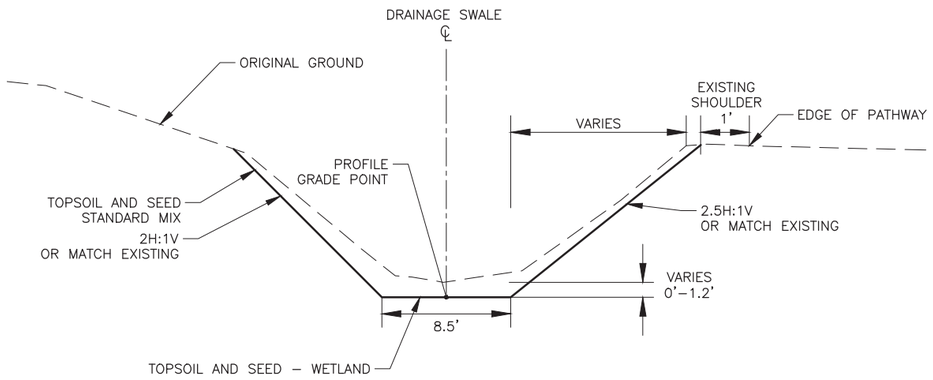
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0537009/CFHWY00386	2021	E4	E6

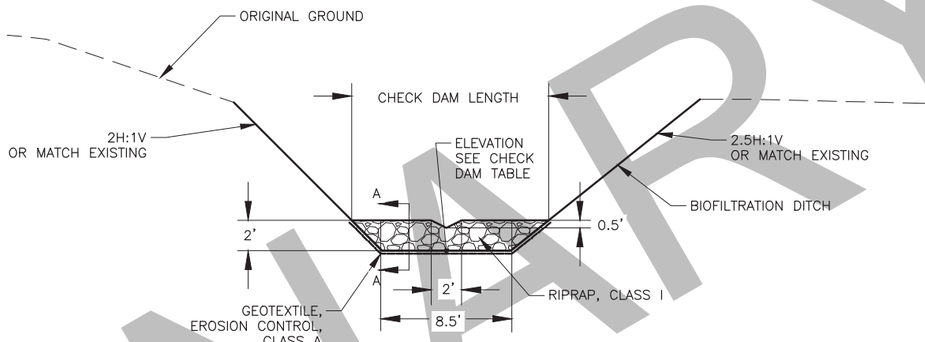


BIOFILTRATION DITCH - TYPICAL

"0SH" 45+16.4 TO "0SH" 47+28.9
"0SH" 48+23.8 TO "0SH" 49+44.7
NTS

BIOFILTRATION DITCH NOTES:

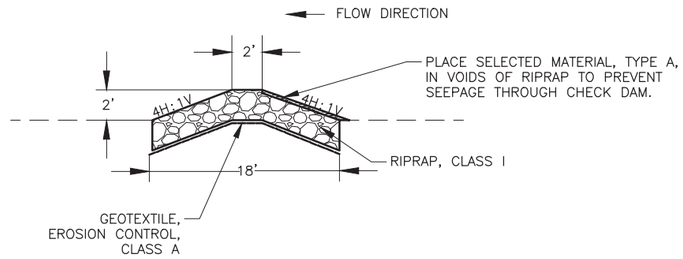
1. IN AREAS OF STEEP SLOPES (2V:1H OR STEEPER), SLOPE STABILIZATION MAY BE REQUIRED ON DITCH SIDE SLOPES AS DIRECTED BY THE ENGINEER.



CHECK DAM ELEVATION

NTS

CHECK DAM LOCATION TABLE				
POINT	STATION	OFFSET	ELEVATION	LENGTH
CD-1	SEE LOCATIONS ON SHEETS E5 AND 36		94.20	18'
CD-2			96.27	18'
CD-3			105.36	18'



CHECK DAM SECTION A-A

NTS

STATE OF ALASKA
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CERTIFICATION OCTOBER 2020

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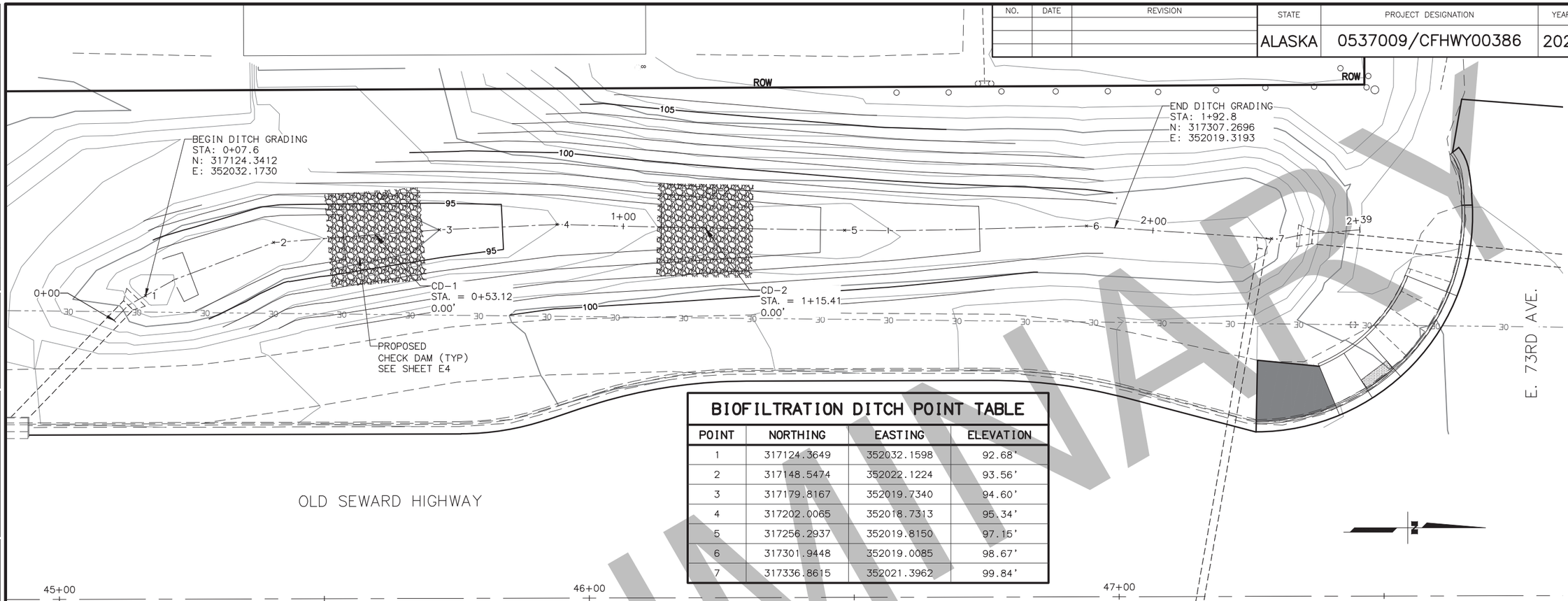
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

DITCH LINEAR GRADING DETAILS

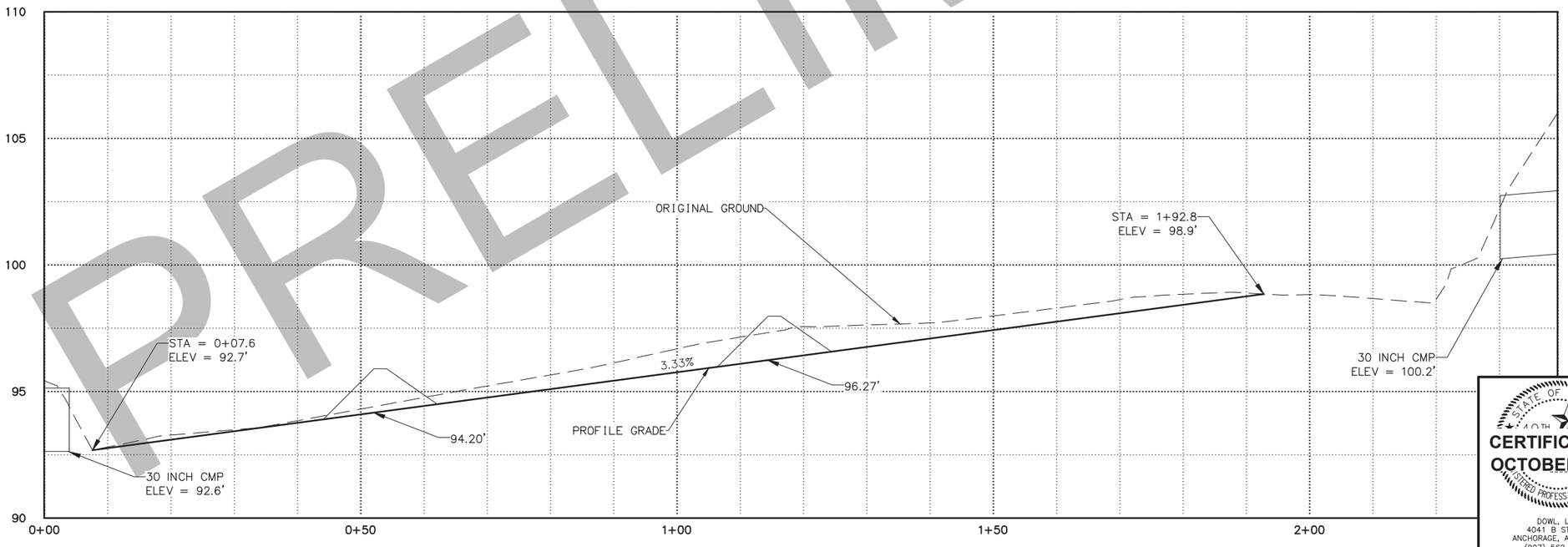
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	E5	E6



BIOFILTRATION DITCH POINT TABLE

POINT	NORTHING	EASTING	ELEVATION
1	317124.3649	352032.1598	92.68'
2	317148.5474	352022.1224	93.56'
3	317179.8167	352019.7340	94.60'
4	317202.0065	352018.7313	95.34'
5	317256.2937	352019.8150	97.15'
6	317301.9448	352019.0085	98.67'
7	317336.8615	352021.3962	99.84'



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

BIOFILTRATION SWALE PLAN AND PROFILE

STATE OF ALASKA
APPROVED
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

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DATE/TIME 10/7/2020 10:13 PM | LAYOUT E5 | DESIGNED -- | CHECKED -- | DRAFTED --

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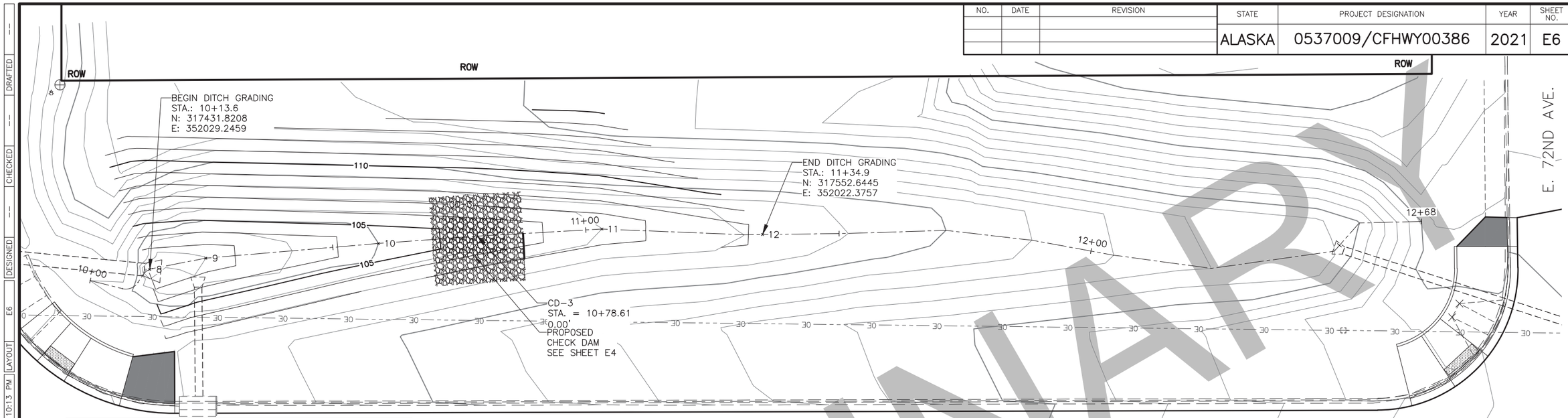
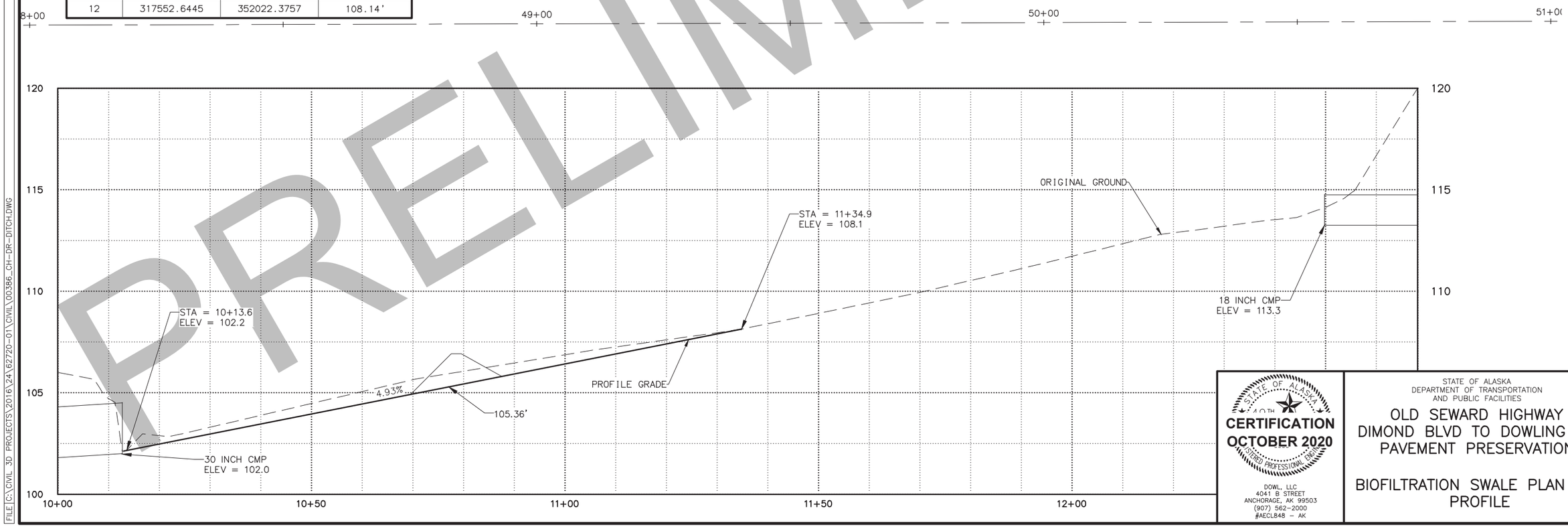
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	E6	E6



BIOFILTRATION DITCH POINT TABLE

POINT	NORTHING	EASTING	ELEVATION
8	317431.8014	352029.2454	102.16'
9	317442.8191	352027.0391	102.71'
10	317476.9150	352024.1357	104.40'
11	317520.9576	352021.2998	106.58'
12	317552.6445	352022.3757	108.14'



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
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STATE OF ALASKA
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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

BIOFILTRATION SWALE PLAN AND PROFILE

DATE/TIME | 10/7/2020 10:13 PM | LAYOUT | E6 | DESIGNED | -- | CHECKED | -- | DRAFTED | --

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	H1	H6

SIGNING & STRIPING NOTES:

1. ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.

2. USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
   A. PT MEANS A PERFORATED STEEL TUBE.
   B. T MEANS A SQUARE STEEL TUBE.
   C. P MEANS A ROUND STEEL PIPE.
   D. W MEANS A WIDE FLANGE BEAM.
   E. POPL MEANS A POLE PLATE INSTALLED PER ITS ALASKA STANDARD PLAN S-23.

3. FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.

4. FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.

5. FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD PLAN S-30. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.

6. FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.

7. ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.

8. FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.

9. SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.

10. FOR ALL FINAL PAVEMENT MARKINGS USE METHYLMETHACRYLATE MATERIALS. LONGITUDINAL, TRANSVERSE AND SYMBOL MARKINGS SHALL BE INLAID AND GORE STRIPES SHALL BE SURFACE APPLIED AS SPECIFIED IN SECTION 670 OF THE SPECIFICATIONS.

11. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.

12. IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.

13. WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING IN ACCORDANCE WITH SUBSECTION 670-3.04 TO THE EXTENT OF STRIPING LIMITS.

FOUNDATIONS NOTES:

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).

2. JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, AND DRAINAGE COLLECTION AREAS.

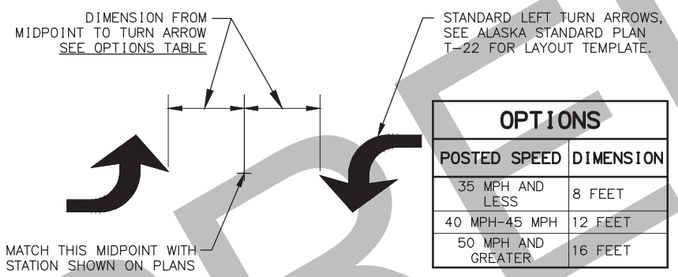
3. INSTALL LOAD CENTER AND TRAFFIC CONTROLLER FOUNDATIONS WITHIN 1-DEGREE OF PLUMB.

4. INSTALL ANCHOR BOLTS IN CAST FOUNDATIONS TO BE WITHIN 1:48 OF PLUMB.

5. TOPSOIL AND SEED ANY DISTURBED AREAS.

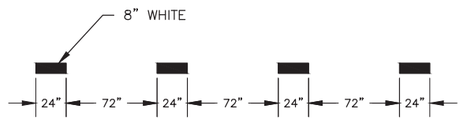
ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE	NB	NORTH BOUND
CAM	CAMERA	OMNI	OMNI DIRECTIONAL ANTENNA
EB	EAST BOUND	P#	TRAFFIC SIGNAL POLE #
GND	GROUND	PE	PHOTOELECTRIC CELL
HDPE	HIGH DENSITY POLYETHYLENE CONDUIT	PED B ##	PEDESTRIAN PUSH BUTTON #
HEAD	VEHICULAR SIGNAL HEAD	PEDI	PEDESTRIAN SIGNAL HEAD
SIG	SIGNAL	PRE #	PREEMPTION #
I/C	INTERCONNECT	PRE CON #	PREEMPTION CONFIRMATION LIGHT #
INTX	INTERSECTION	RAD	RADAR
INTX L	INTERSECTION LIGHTING	RMC	RIGID METAL CONDUIT
LC	LOAD CENTER	SB	SOUTH BOUND
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT	TC	TRAFFIC CONTROLLER
LTG	LIGHTING	WB	WEST BOUND
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	YAGI	DIRECTIONAL ANTENNA



OPTIONS	
POSTED SPEED	DIMENSION
35 MPH AND LESS	8 FEET
40 MPH-45 MPH	12 FEET
50 MPH AND GREATER	16 FEET

TWO WAY LEFT TURN ARROW DETAIL



LONGITUDINAL LANE MARKINGS (LLM) – TYPICAL

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

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY DIMOND BLVD TO DOWLING RD PAVEMENT PRESERVATION

TRAFFIC LEGEND AND NOTES

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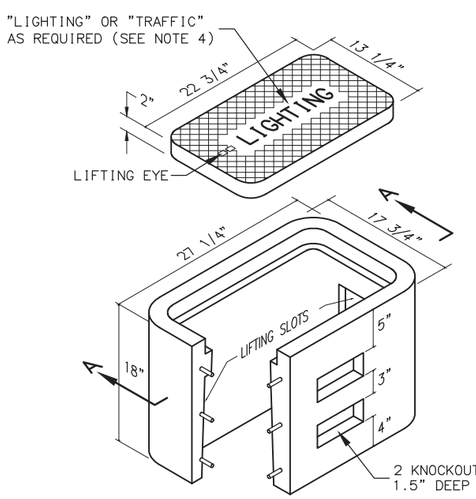
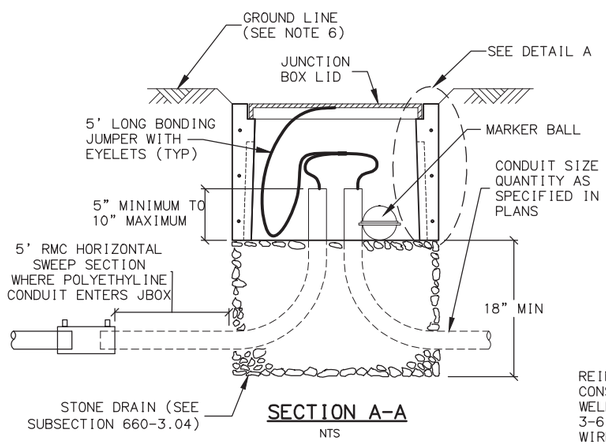
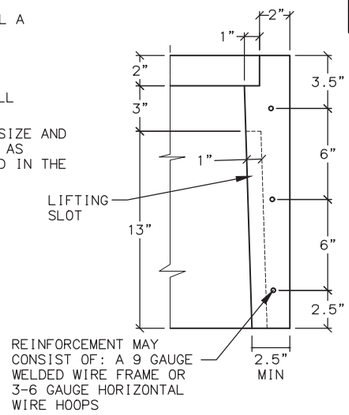
			ALASKA	0537009/CFHWY00386	2021	H2	H6





SECTION A-A
NTS

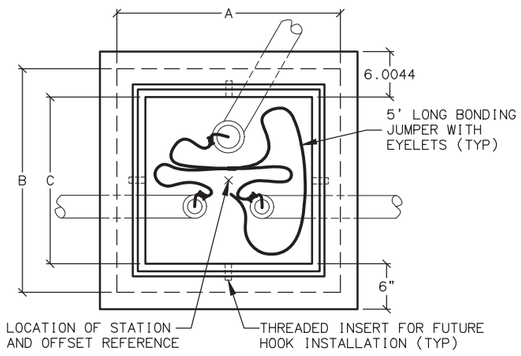


DETAIL A

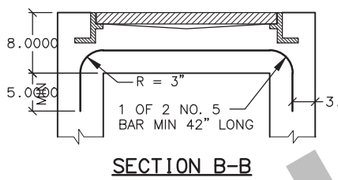
TYPE IA JUNCTION BOX

NOTES:

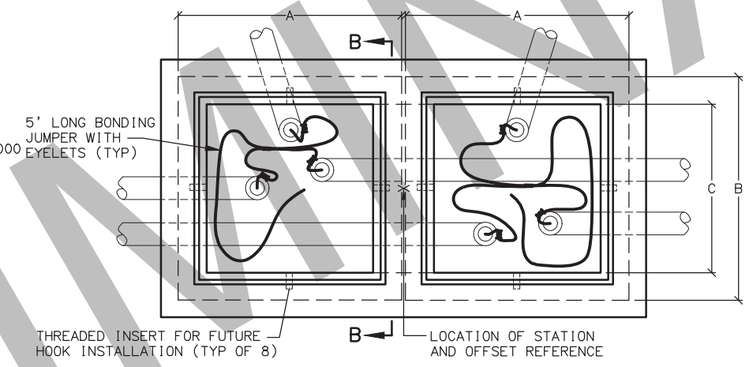
1. AVOID INSTALLING TYPE IA JUNCTION BOXES IN DRIVEWAYS OR IN LOCATIONS SUBJECT TO USE BY HEAVY TRUCKS. INSTALL JUNCTION BOXES ONLY AT THE LATERAL LOCATIONS ALLOWED IN SUBSECTION 660–3.04.
2. FURNISH TYPE II, III AND IV JUNCTION BOXES WITH CAST IRON FRAMES AND LIDS THAT WEIGH A MINIMUM OF 210 POUNDS AND ARE RATED FOR HEAVY TRAFFIC LOADS IN COMPLIANCE WITH AASHTO M306. FURNISH TYPE IA JUNCTION BOXES WITH CAST IRON LIDS THAT WEIGH A MINIMUM OF 50 POUNDS.
3. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN. SYNTHETIC STRUCTURAL FIBER–REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER MAY BE ADDED FOR STRENGTH.
4. FOR JUNCTION BOXES THAT CONTAIN ILLUMINATION CONDUCTORS EXCLUSIVELY, FURNISH LIDS WITH THE WORD "LIGHTING" INSCRIBED INTO THEM. FOR OTHER JUNCTION BOXES, FURNISH LIDS WITH THE WORD "TRAFFIC" INSCRIBED INTO THEM.
5. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703–2.10.
6. SET THE TOPS OF JUNCTION BOXES WITH THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE:
   - 1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES
   - 1/4" IN PEDESTRIAN FACILITIES
   - 2" IN ALL OTHER AREAS
7. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660–3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS OR STAINLESS STEEL HARDWARE.
8. INSTALL LOOP DETECTOR TAILS THROUGH ONE OF THE KNOCKOUTS OF TYPE 1A JUNCTION BOXES. AFTER SETTING THE BOXES TO GRADE, INSTALL GROUT IN THE GAPS THAT REMAIN IN THE KNOCKOUT.
9. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
10. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660–3.04.
11. PRIOR TO INSTALLATION MARK ALL JUNCTION BOX LOCATIONS WITH A WIRE STAFF VINYL FLAG. THE FLAG SHALL BE RED IN COLOR AND MINIMUM 4–INCHES TALL BY 5–INCHES WIDE. THE WIRE STAFF SHALL BE 21–INCHES IN LENGTH AND CONSTRUCTED OF MINIMUM 15.5 GAUGE STEEL.
12. WHERE MODIFIED TYPE II JUNCTION BOXES ARE REQUIRED FOR DETECTOR LOOP TAIL INSTALLATIONS, ADD ONE(1) ADDITIONAL 5" DEEP X 3" HIGH X 18" WIDE KNOCKOUT 12" BELOW TOP OF JUNCTION BOX.



PLAN



SECTION B-B



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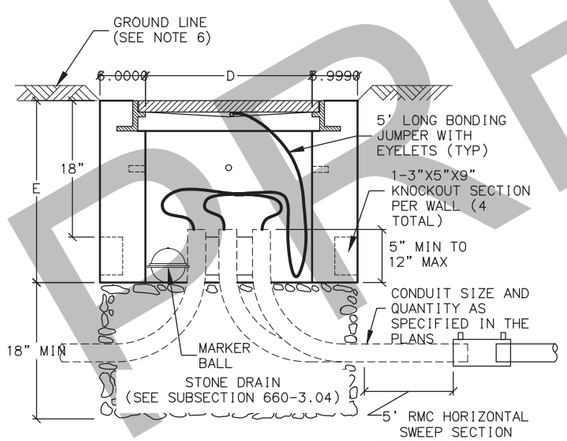
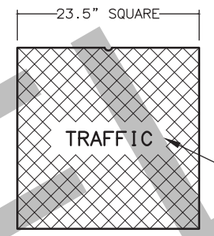
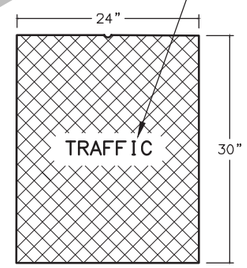


TYPE II JUNCTION BOX
ELEVATION
NTS

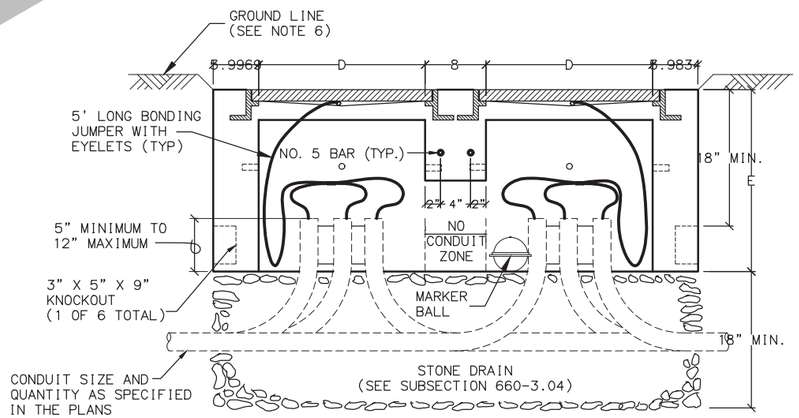


LID FOR TYPE II & III J-BOXES

"LIGHTING" OR "TRAFFIC" AS REQUIRED (SEE NOTE 4)



LID FOR TYPE IV J-BOXES



TYPE III/IV JUNCTION BOX
ELEVATION (TYPE III LAYOUT DEPICTED)

J-BOX DIMENSIONS

J-BOX TYPE	DIMENSIONS				
	A (MAX.)	B (MAX.)	C (MIN.)	D (MIN.)	E (MIN.)
II	29 1/2"	29 1/2"	22"	22"	24"
III	29 1/2"	29 1/2"	22"	22"	24"
IV	30"	36"	30"	24"	30"

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STATE OF ALASKA
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OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

JUNCTION BOX DETAILS

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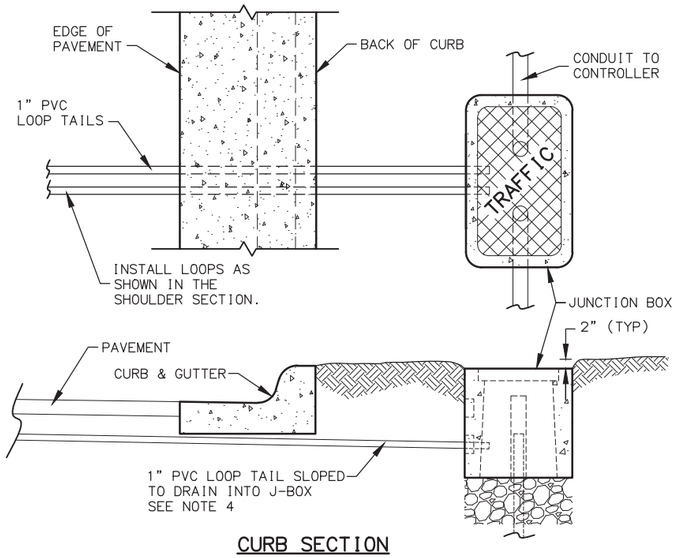
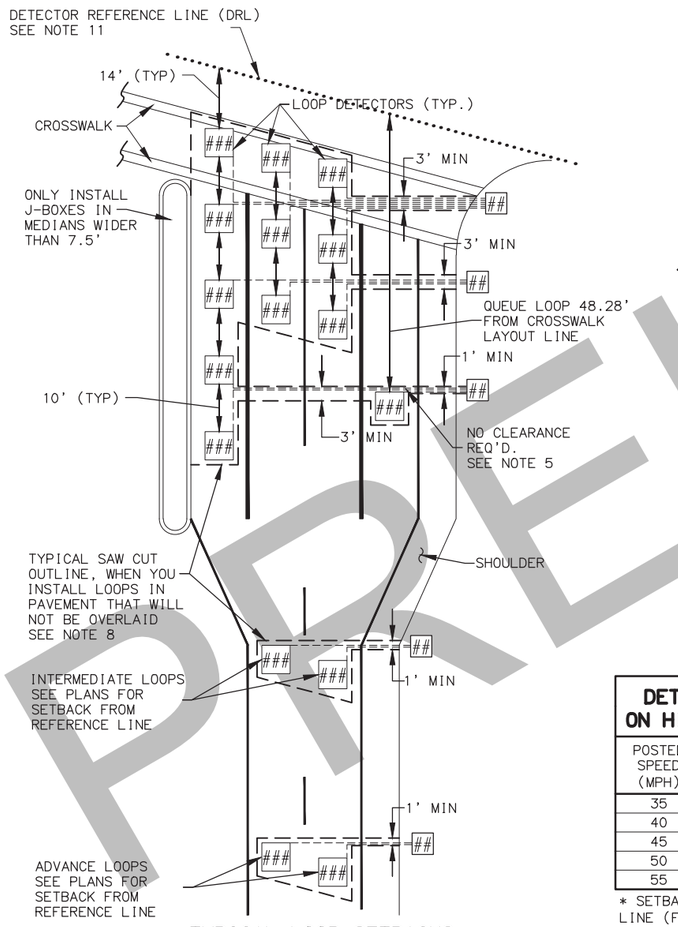
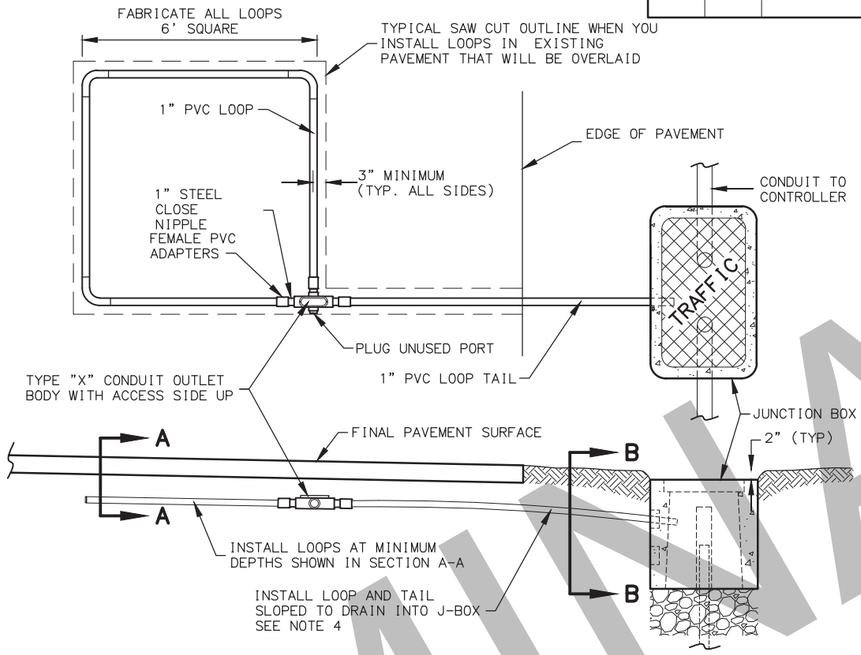


CURB SECTION

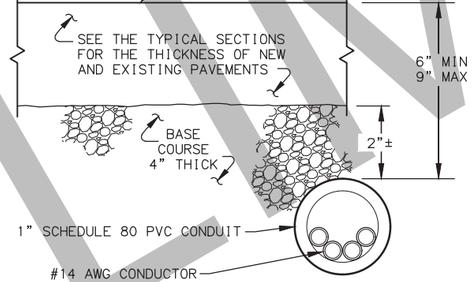


TYPICAL LOOP SETBACKS

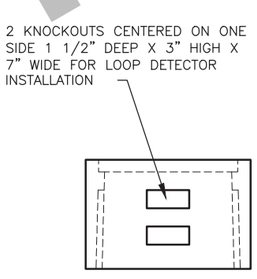
MEASURE THE SETBACKS FROM THE DRL LAYOUT LINE ALONG THE CENTER OF EACH LANE



SHOULDER SECTION



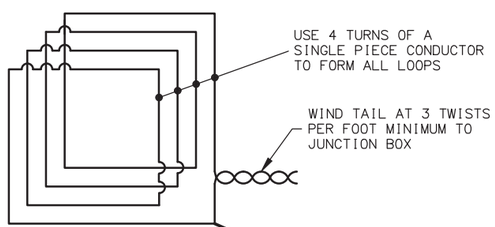
SECTION A-A



SECTION B-B

DETECTOR LOOP SPACING ON HIGH SPEED APPROACHES		
POSTED SPEED (MPH)	ADVANCED LOOP *	INTERMEDIATE LOOP *
35	255	170
40	285	190
45	330	210
50	355	235
55	385	255

* SETBACK FROM DETECTOR REFERENCE LINE (FEET)



LOOP WIRING DETAIL

TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

NOTES:

1. EACH LOOP DETECTOR SHALL CONSIST OF A SINGLE PIECE OF #14 AWG CONDUCTOR INSTALLED IN ONE INCH SCHEDULE 80 PVC CONDUIT. BUILD ALL LOOPS 6.0 FEET SQUARE, SOLVENT WELDING ALL PVC TO PVC JOINTS. USE TYPE X OUTLET BODIES MADE OF HOT DIP GALVANIZED STEEL TO JOIN THE LOOPS AND TAILS.
2. INSTALL 4 TURNS OF CONDUCTOR IN ALL LOOPS AND PROVIDE TAILS THAT EXTEND TO THE JUNCTION BOX SPECIFIED ON THE PLANS. USE #14 AWG CONDUCTOR IN A POLYETHYLENE TUBE CONFORMING TO IMSA SPECIFICATION 51-5. WIND THE TAIL CONDUCTORS TOGETHER AT A RATE OF 3 TWISTS PER FOOT.
3. INSTALL ALL LOOP DETECTORS BEFORE OVERLAYING THE EXISTING PAVEMENT OR PAVING THE NEW ROADWAY.
4. INSTALL ALL LOOP DETECTORS SLOPED TO DRAIN INTO THE JUNCTION BOX THE LOOP TAIL ENTERS. IF YOU CAN NOT INSTALL THE LOOP TO DRAIN INTO THE J-BOX, DRILL FIVE 1/4" WEEP HOLES ON 1 FOOT CENTERS IN THE UNDERSIDE OF THE CONDUIT AT THE LOW SPOT.
5. YOU MAY INSTALL A LOOP TAIL IMMEDIATELY ADJACENT TO A LOOP AND OTHER LOOP TAILS. LOOP TAILS SHALL NOT CROSS LOOP CONDUITS.
6. TEST ALL LOOP DETECTORS FOR CONTINUITY AND INSULATION INTEGRITY BEFORE SEALING THE LOOPS UNDER THE FINAL LIFT OF ASPHALT. PROVIDE THE ENGINEER A WRITTEN RECORD OF FIELD TESTING INCLUDING; CONTINUITY, INSULATION RESISTANCE AND INDUCTANCE TESTS AS REQUIRED IN SECTION 660-3.01(7) OF THE STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.
7. WHEN INSTALLING LOOP DETECTORS IN EXISTING PAVEMENT, CUT THE ASPHALT WITH A SAW AND REMOVE ALL ASPHALT WITHIN THE SAW CUT. MATCH EXISTING PAVEMENT THICKNESS WHEN REPAIRING THE CUTOUT.
8. WHERE EXISTING PAVEMENT WILL NOT BE OVERLAID, CUT THE PAVEMENT WITH A SAW AS FOLLOWS:
   A. REMOVE ALL PAVEMENT FROM THE LENGTH OF THE FIVE LOOP PRESENCE FIELDS.
   B. ENCLOSE ALL LOOPS THAT ENTER A COMMON JUNCTION BOX WITHIN A TRAPEZOIDAL SAW CUT.
   C. CUT TO WITHIN 1 FOOT OF THE LANE AND EDGE LINES, PRESERVING THESE PAVEMENT MARKINGS;
   D. REMOVE THE ASPHALT TO THE LIP OF THE GUTTER WHERE THERE ARE NO EDGE LINES;
   E. CUT ACROSS LANE LINES WHEN LOOPS IN ADJACENT LANES ARE SIDE BY SIDE;
   F. CUT TRENCHES CROSSING A LANE A MINIMUM OF 3 FEET WIDE; AND
   G. CUT TRENCHES CROSSING A SHOULDER A MINIMUM 1 FOOT WIDE.
9. HEAT AND TACK COAT THE EDGES OF EXISTING PAVEMENT BEFORE PAVING THE CUTOUTS. COMPACT THE ASPHALT MIXTURE WITH A SELF-PROPELLED STEEL WHEELED ROLLER. FURNISH ASPHALT MIX THAT CONFORMS TO SECTION 401 OF THE SPECIFICATIONS, AND IS APPROVED BY THE ENGINEER.
10. MAINTAIN THE REPLACEMENT ASPHALT MIX ABOVE A TEMPERATURE OF 225°F UNTIL THE TIME OF APPLICATION; IF NECESSARY, STORE THE MIX IN AN INSULATED BOX TO MAINTAIN THIS MINIMUM TEMPERATURE.
11. TO ESTABLISH DETECTOR REFERENCE LINE, LAYOUT A LINE PARALLEL TO THE CROSS STREET CENTER LINE, STARTING AT THE CURB RETURN TO THE RIGHT OF THE APPROACH.
12. ENSURE DEPTH OF BASE COURSE AT LOOP LOCATIONS IS A MINIMUM OF 4 INCHES. EXCAVATION AND INSTALLATION OF ADDITIONAL BASE COURSE NECESSARY TO MEET THIS REQUIREMENT IN EXISTING ROAD SECTIONS SHALL BE SUBSIDIARY TO TRAFFIC LOOP PAY ITEM.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY DIMOND BLVD TO DOWLING RD PAVEMENT PRESERVATION

LOOP DETECTOR DETAILS

CERTIFICATION OCTOBER 2020

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

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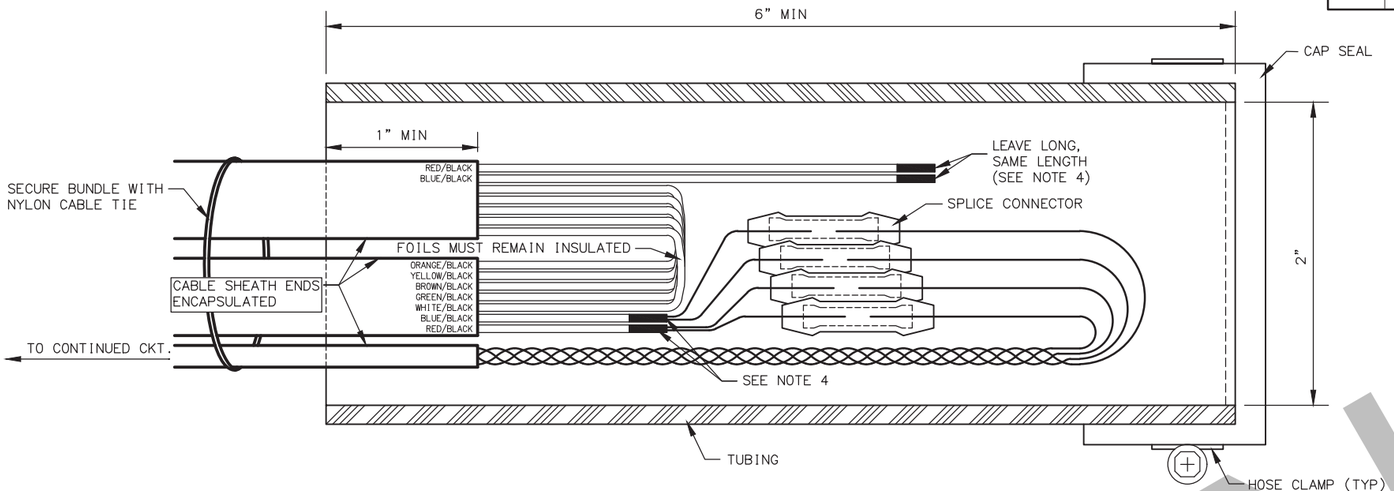
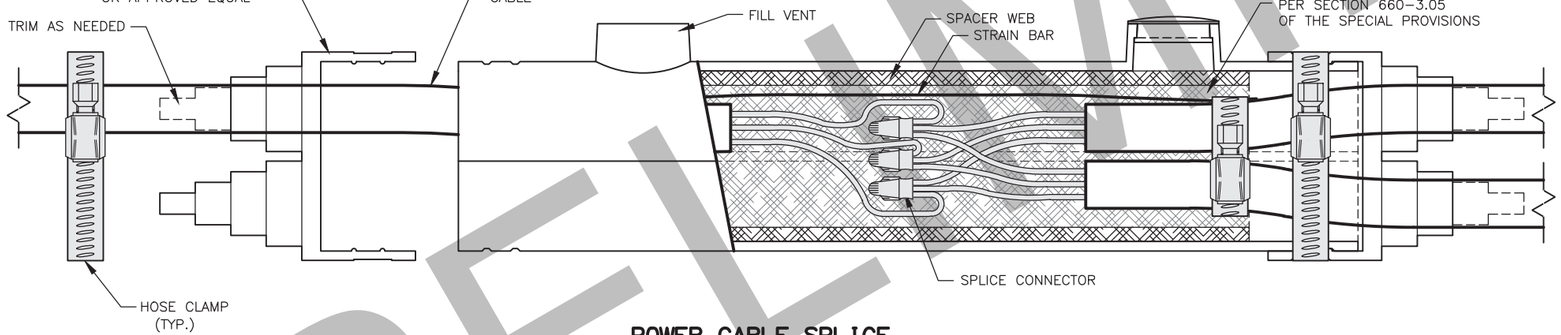
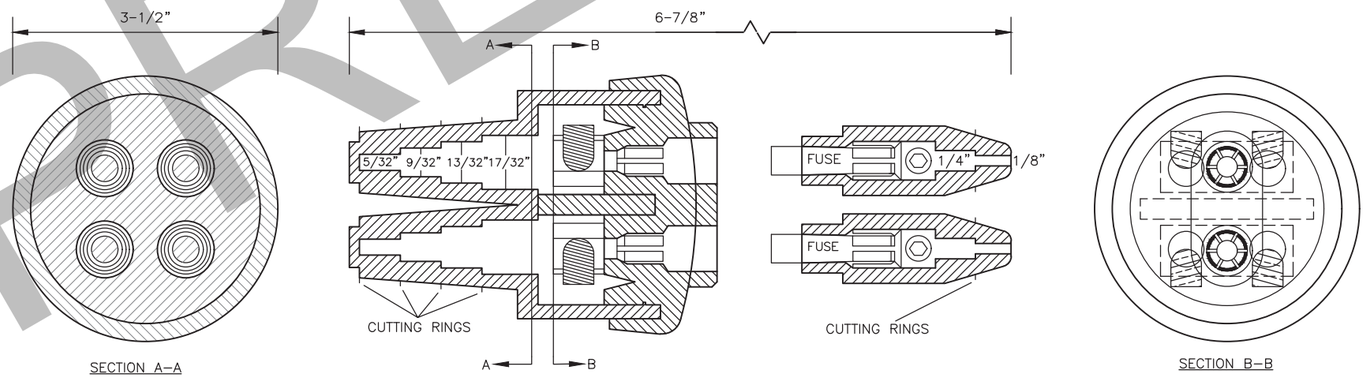


LOOP LEAD-IN SPLICE



POWER CABLE SPLICE



DOUBLE FUSED CONNECTOR

NOTES:

LOOP LEAD-IN SPLICE

1. FABRICATE LOOP LEAD-IN SPLICE IN THE FIELD AS SHOWN.
2. CAP SEAL ONE END AND COMPLETELY FILL OPEN END WITH RE-ENTERABLE ENCAPSULATION COMPOUND TO EDGE OF TUBING.
3. LEAVE A MINIMUM OF 1/2" CLEARANCE BETWEEN THE ENCLOSURE AND THE SPLICE AT BOTH ENDS OF THE TUBING.
4. EXPOSE FOIL AND DRAIN WIRES, SEAL WITH HEAT SHRINK TUBING (TYP).
5. INSTALL SPLICE CONNECTORS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

POWER CABLE SPLICE

6. SECURE CABLE/CONNECTOR BUNDLE WITH HOSE CLAMPS AS SHOWN.

MATERIAL PROPERTIES

LOOP LEAD-IN SPLICE	
TUBING	PER SECTION 660-3.05
CAP SEAL	FERNCO QWIK CAP #QC-102, OR APPROVED EQUAL
HOSE CLAMP	STAINLESS STEEL
SPLICE CONNECTOR	ML56-16, OR APPROVED EQUAL
COMPOUND	RE-ENTERABLE ENCAPSULATION
POWER CABLE SPLICE	
SPLICE KIT	3M MODEL 78R, OR APPROVED EQUAL
SPLICE CONNECTOR	SCOTCHLOCK G, R, OR Y SPRING CONNECTOR, OR APPROVED EQUAL
HOSE CLAMP	(4)- STAINLESS STEEL
EPOXY RESIN	PER SECTION 660-3.05
DOUBLE FUSED CONNECTOR	
DOUBLE FUSED CONNECTOR	SEC-1791-DF-1, OR APPROVED EQUAL
FUSES	(2) - COMPATIBLE 10-AMP

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PAVEMENT PRESERVATION

SPLICE DETAILS

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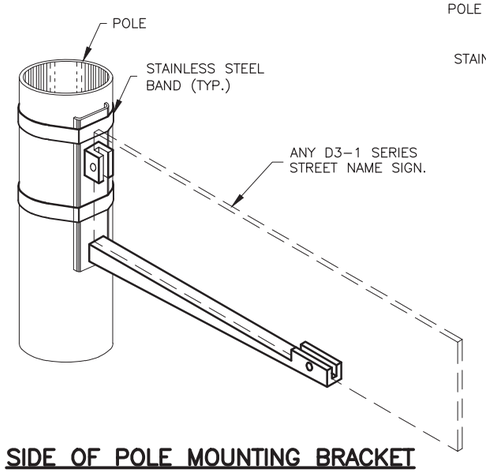
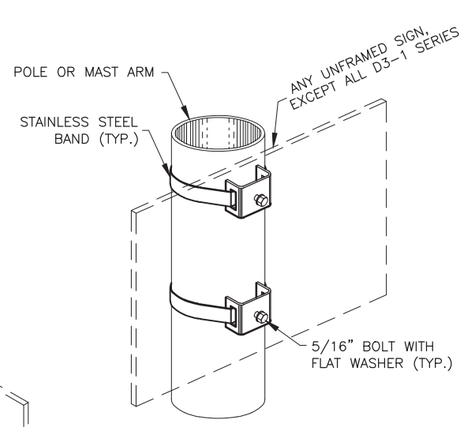
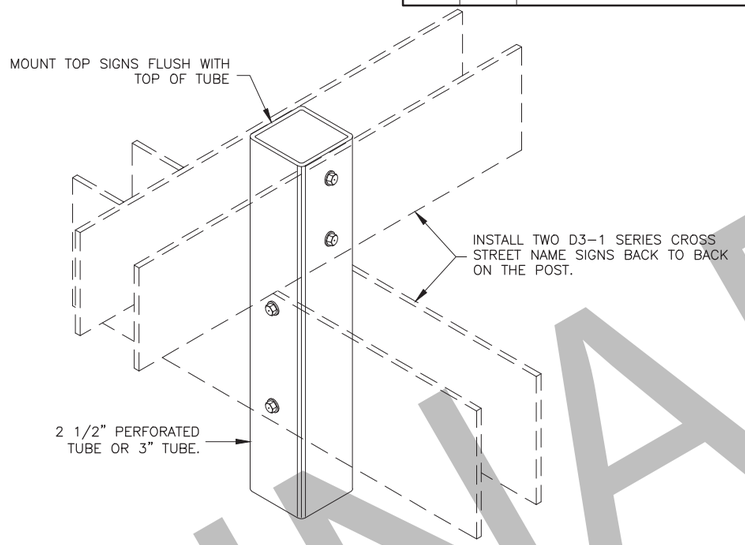


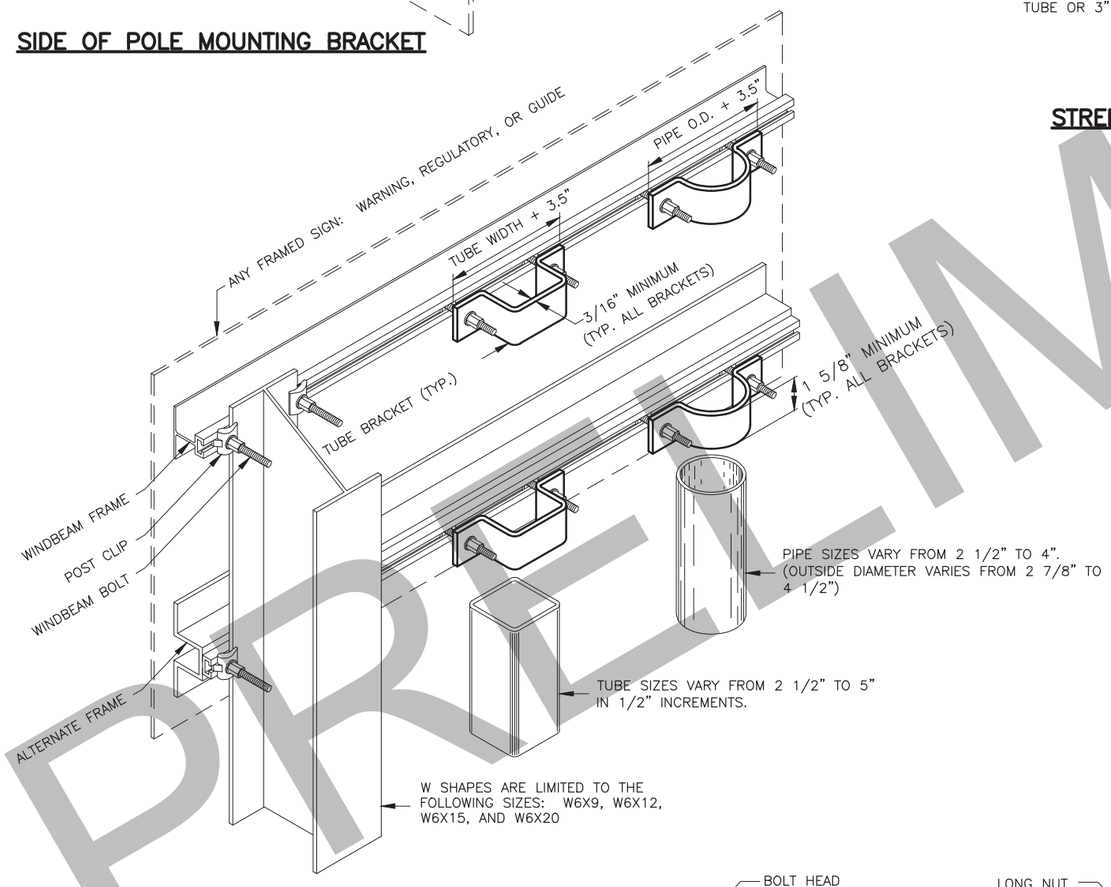
SIDE OF POLE MOUNTING BRACKET



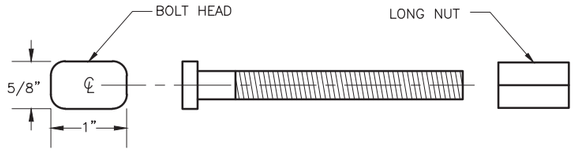
SADDLE BRACKETS



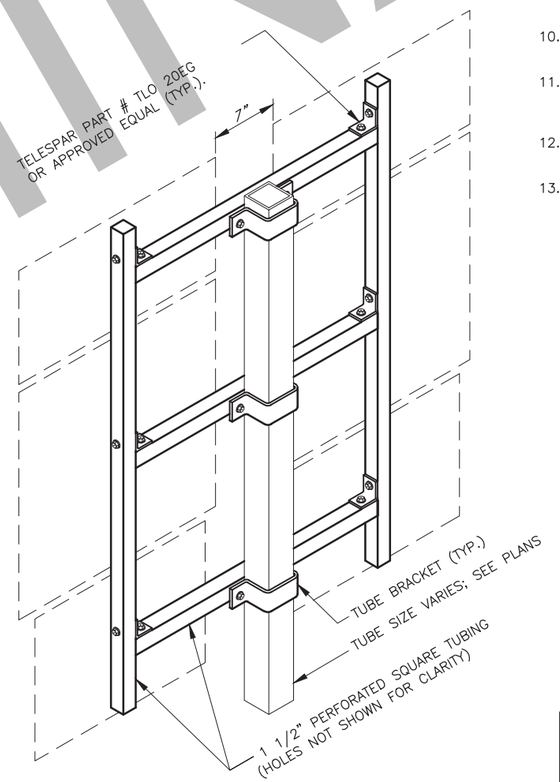
STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



3/8" WINDBEAM BOLT AND LONG NUT



ROUTE MARKER TREE

NOTES:

1. EXCEPT FOR POLES AND MASTARMS, ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. ATTACH THEM TO POLES AND MASTARMS WITH TWO SADDLES.
4. ATTACH BRACKETS TO POLES AND MASTARMS WITH DOUBLE WRAPS OF 3/4" WIDE BY 0.020" THICK STAINLESS STEEL BANDING MATERIAL. TIGHTEN EACH BAND UNTIL IT STOPS MOVING THROUGH THE BUCKLE.
5. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
6. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
7. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
8. ATTACH FRAMED SIGNS TO POLES AND MASTARMS USING POLE PLATES INSTALLED ACCORDING TO ALASKA STANDARD PLAN S-23.
9. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
10. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS, EXCEPT FOR THE D3-1 STREET NAME SIGNS.
11. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
12. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
13. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

FASTENER SPECIFICATION TABLE

FASTENERS		STEEL	STAINLESS STEEL
BOLTS		ASTM A 307	ASTM F 593
NUTS	REGULAR	ASTM A 563	ASTM F 594
	LOCK		
WASHERS		ASTM A 36	ASTM A 480
POST CLIPS			

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN ATTACHMENT DETAILS

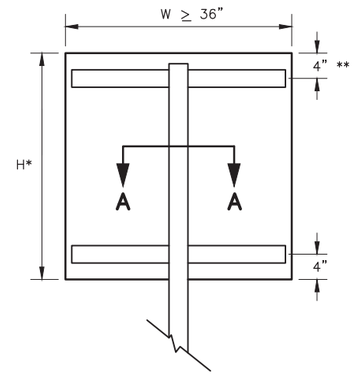
STATE OF ALASKA
10TH
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

FILE [C:\CIVIL 3D PROJECTS\2016\24\62720-01\CIVIL\00386_H01_DELT.DWG | DATE/TIME 10/7/2020 10:19 PM | LAYOUT H5 | DESIGNED -- | CHECKED -- | DRAFTED --

NO.	DATE	REVISION

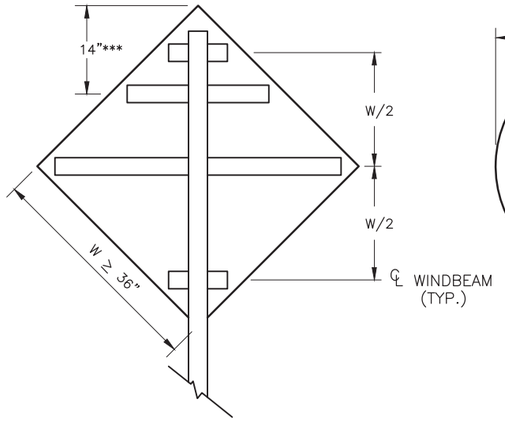
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	H6	H6



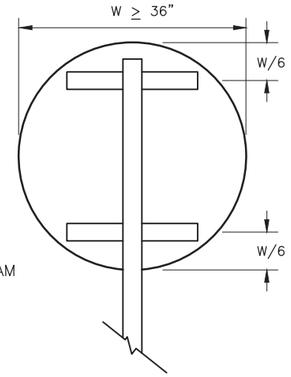
RECTANGLES AND TRAPEZOIDS

* WHEN H > 42 INCHES, INSTALL A 3RD WINDBEAM CENTERED ON THE SIGN.

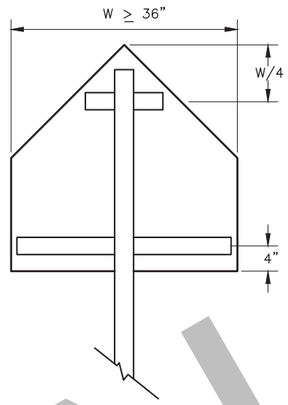
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".

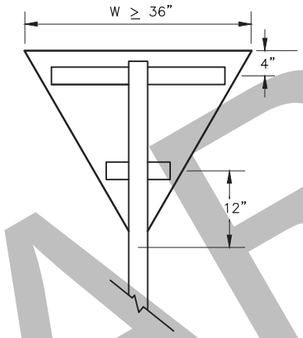


*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.



ROUNDS AND OCTAGONS



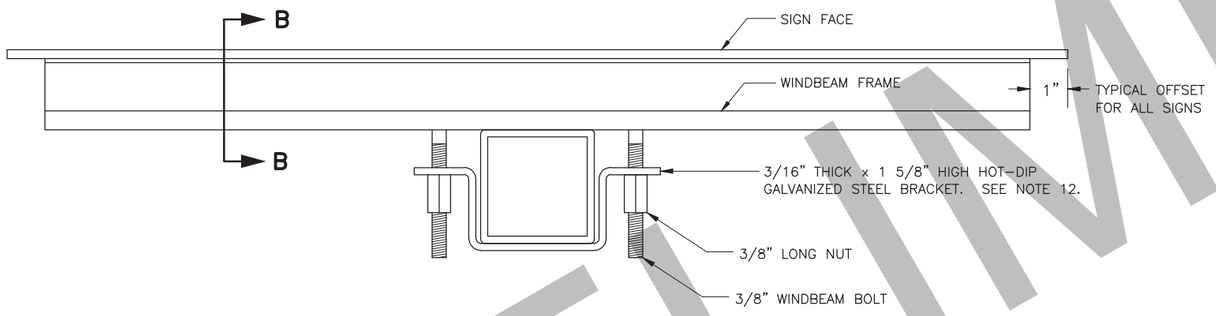


NOTES:

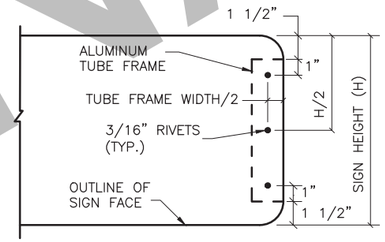
1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
4. THIS DRAWING DEPICTS THE WINDBEAM FRAMING AND ATTACHMENT SYSTEM. ATTACH SIGNS FRAMED WITH ZEE SHAPED FRAMING ACCORDING TO REGIONAL DRAWING "SIGN ATTACHMENT DETAILS", USING "U" SHAPED BRACKETS AND TWO BOLTS WITH NUTS.
5. THE ENGINEER MAY APPROVE OTHER FRAMING MEMBERS. SUBMIT DOCUMENTS THAT DETAIL THE FRAME'S CROSS SECTION AND STRENGTH, AND METHOD OF ATTACHING THE FRAME TO A POST.
6. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
7. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
8. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
9. WITH THE ADHESIVE TAPE, INSTALL TWO RIVETS IN BOTH ENDS OF EACH FRAMING MEMBER, AND ATTACH THE FRAMING MEMBERS TO THE SIGN PANELS ACCORDING TO THE TAPE MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING:
   A. THE CLEANING AND HANDLING OF THE SIGN PANELS AND FRAMING MEMBERS.
   B. THE APPLICATION OF THE ADHESIVE TAPE.
10. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
11. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
12. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.

WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

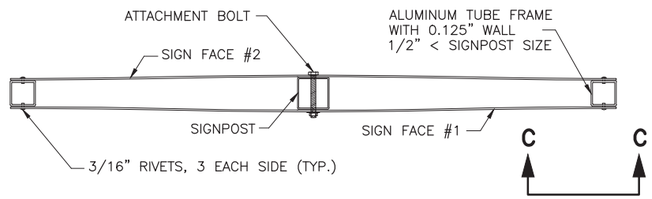
ELEVATION VIEW



SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

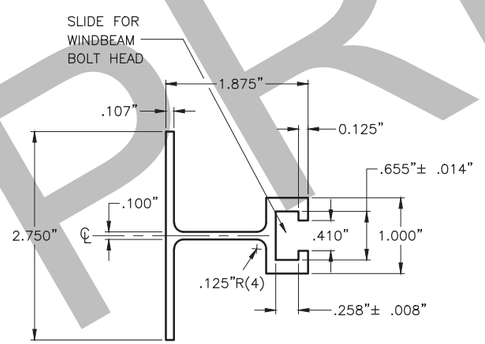


VIEW C - C

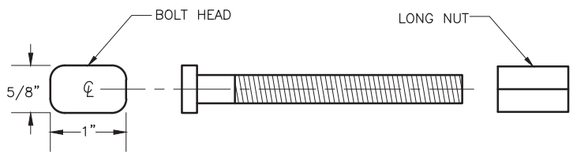


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY DIMOND BLVD TO DOWLING RD PAVEMENT PRESERVATION

LIGHT SIGN FRAMING AND ATTACHMENT DETAILS

STATE OF ALASKA 49TH
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

FILE C:\CIVIL 3D PROJECTS\2016\24\62720-01\CIVIL\00386_H01_DELT.DWG
DATE/TIME 10/7/2020 10:19 PM | LAYOUT H6 | DESIGNED -- | CHECKED -- | DRAFTED --

EXISTING BACKING CURB TO REMAIN. PLACE BOLLARDS IN FRONT OF TRAFFIC CONTROLLER FOUNDATION WHILE STILL MAINTAINING 4' CLEAR PATH AROUND CURB RAMP. MAINTAIN MIN. 1.5' CLEARANCE BETWEEN CONTROLLER FOUNDATION AND BOLLARDS AND 2' MIN BETWEEN INTERCONNECT CABINET

BEGIN PROJECT
STA. 10+29.41
MATCH EXISTING PAVEMENT
N 313637.6890
E 352110.0828

MATCH STRIPING

REMOVE AND REPLACE TYPE 1A J-BOX

ADJUST J-BOX. CONSTRUCT CURB RAMP BACKING CURB BETWEEN J-BOXES.

DIMOND BLVD.

OLD SEWARD HIGHWAY

MATCH LINE STA. 15+00

REMOVE EXISTING CURB CUT AND REPLACE WITH PATHWAY AND 6" MOUNTABLE CURB AND GUTTER

E. 82ND AVE.

STOP

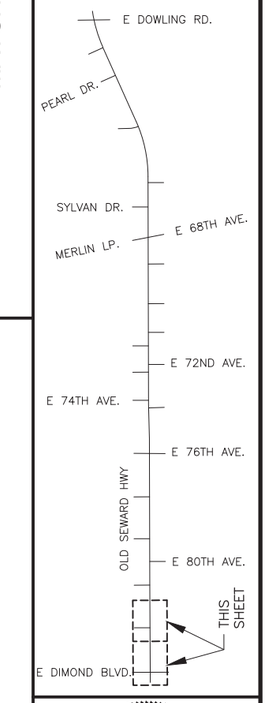
END

CENTER LANE ONLY

(2)-4"Y 3" APART

18"Y @ 45° (TYP)

MATCH LINE STA. 20+00



SHEET NO.	TOTAL SHEETS
HS1	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/ CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 10+00 TO STA. 20+00

DATE/TIME 10/4/2020 3:24 PM | LAYOUT HS1 | DESIGNED FC | CHECKED -- | DRAFTED AAS
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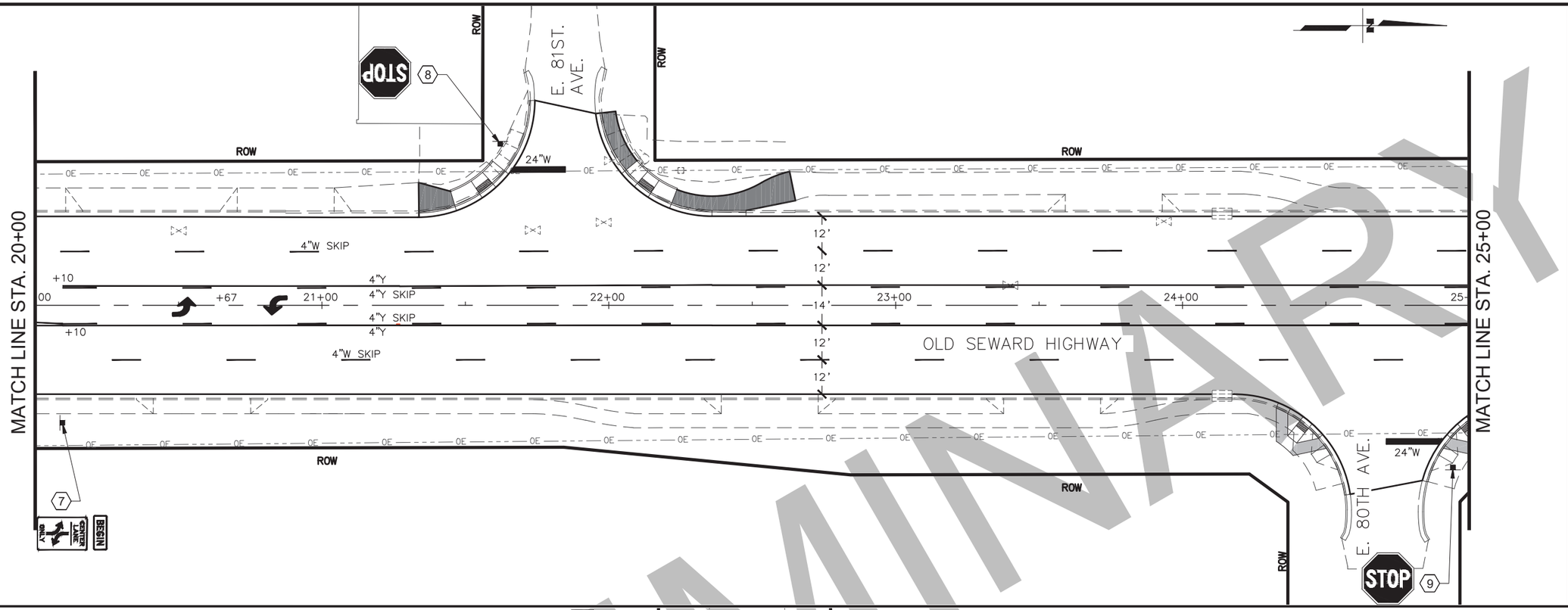
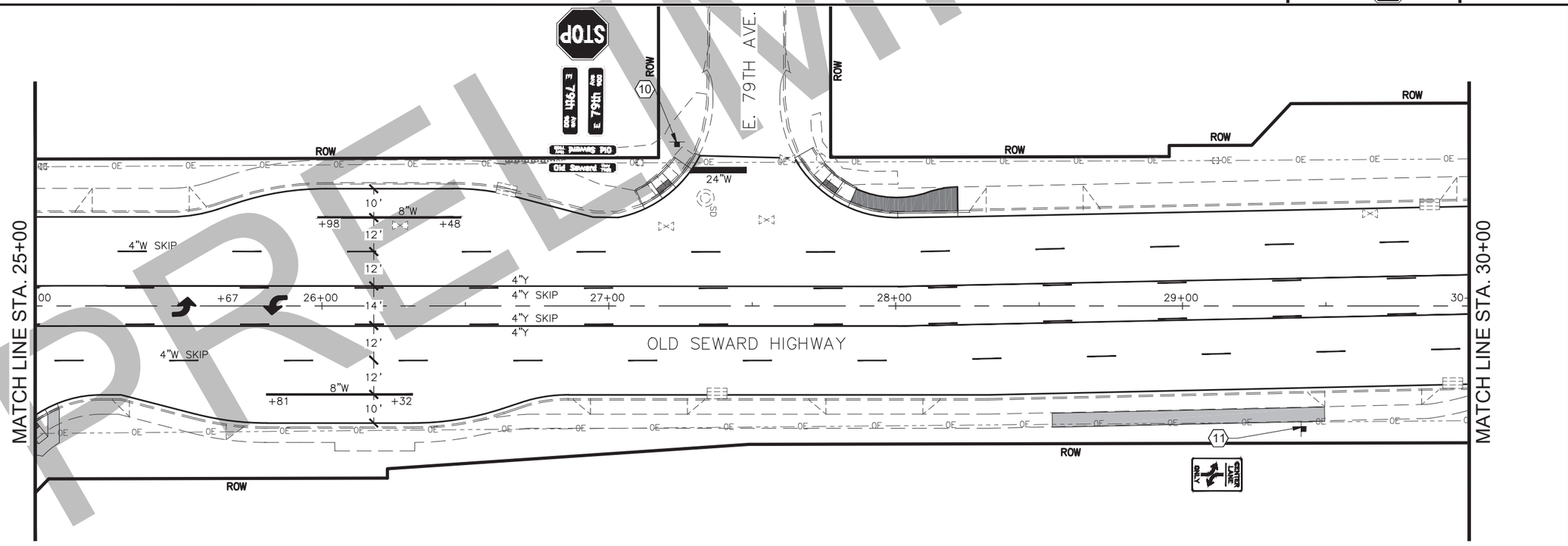
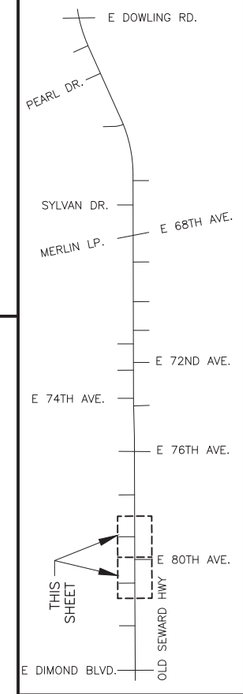




SHEET NO.	TOTAL SHEETS
HS2	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 20+00 TO STA.
30+00

DATE/TIME | 10/4/2020 3:24 PM | LAYOUT | HS2 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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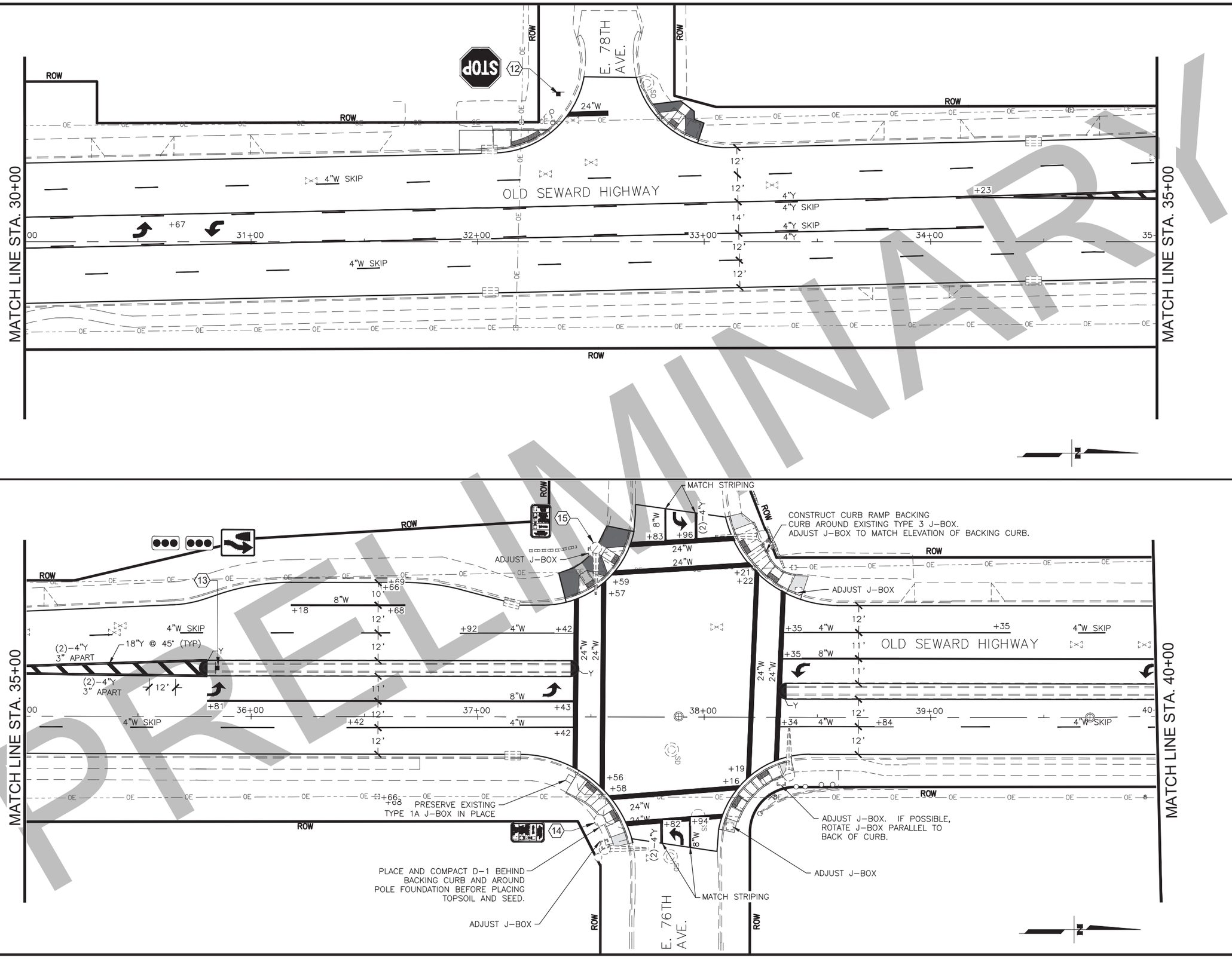
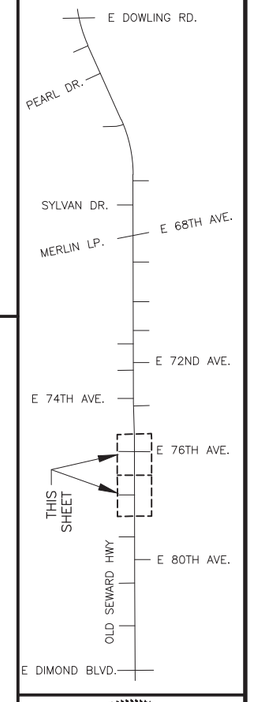


SHEET NO.	TOTAL SHEETS
HS3	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION

0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA

CERTIFICATION

OCTOBER 2020

REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 30+00 TO STA.
40+00

DATE/TIME | 10/26/2020 3:15 PM | LAYOUT | HS3 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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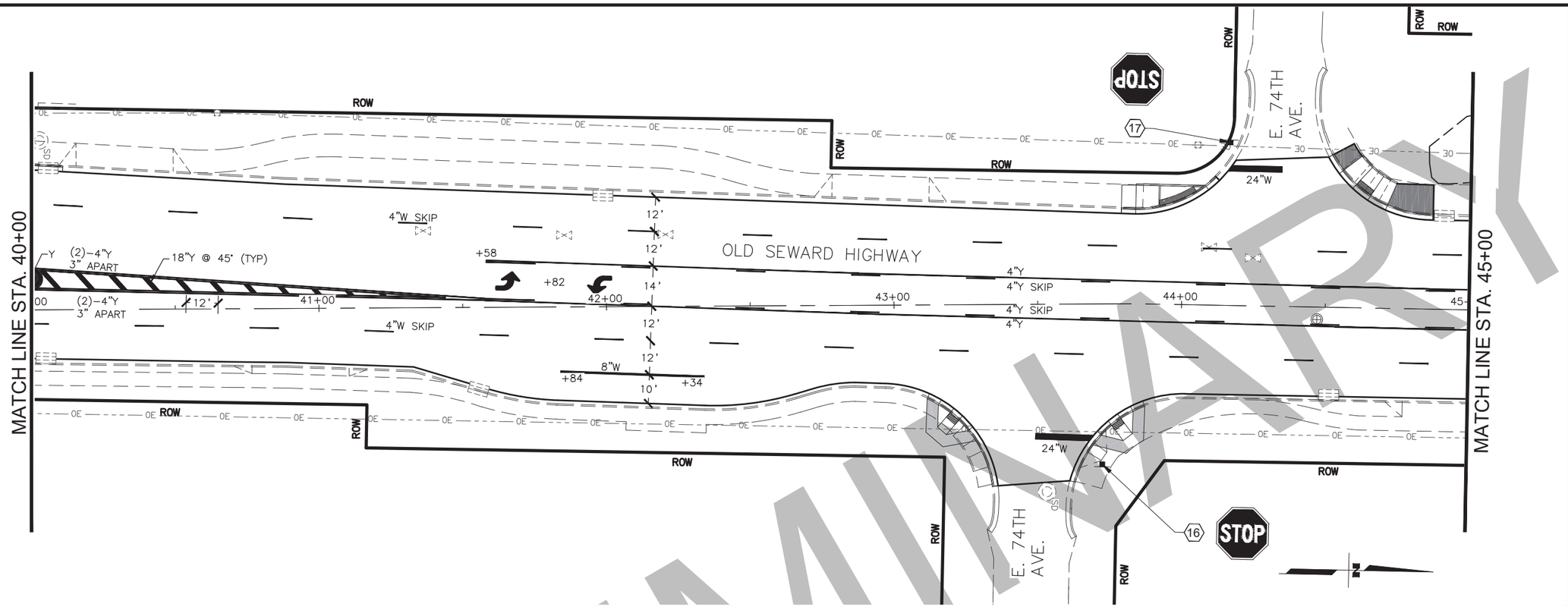
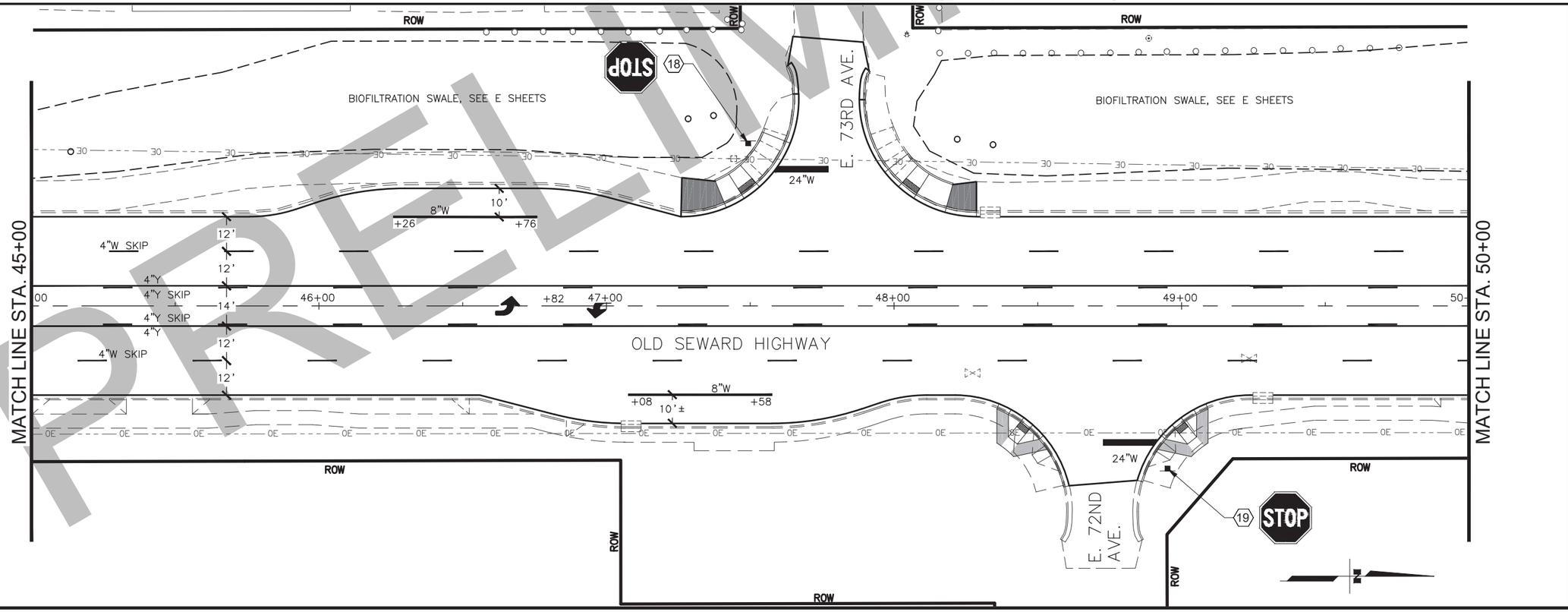
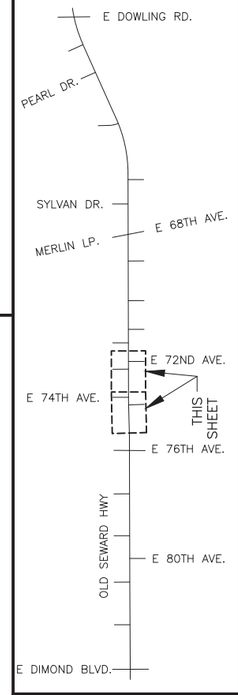




SHEET NO.	TOTAL SHEETS
HS4	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 40+00 TO STA.
50+00

DATE/TIME | 10/4/2020 3:24 PM | LAYOUT | HS4 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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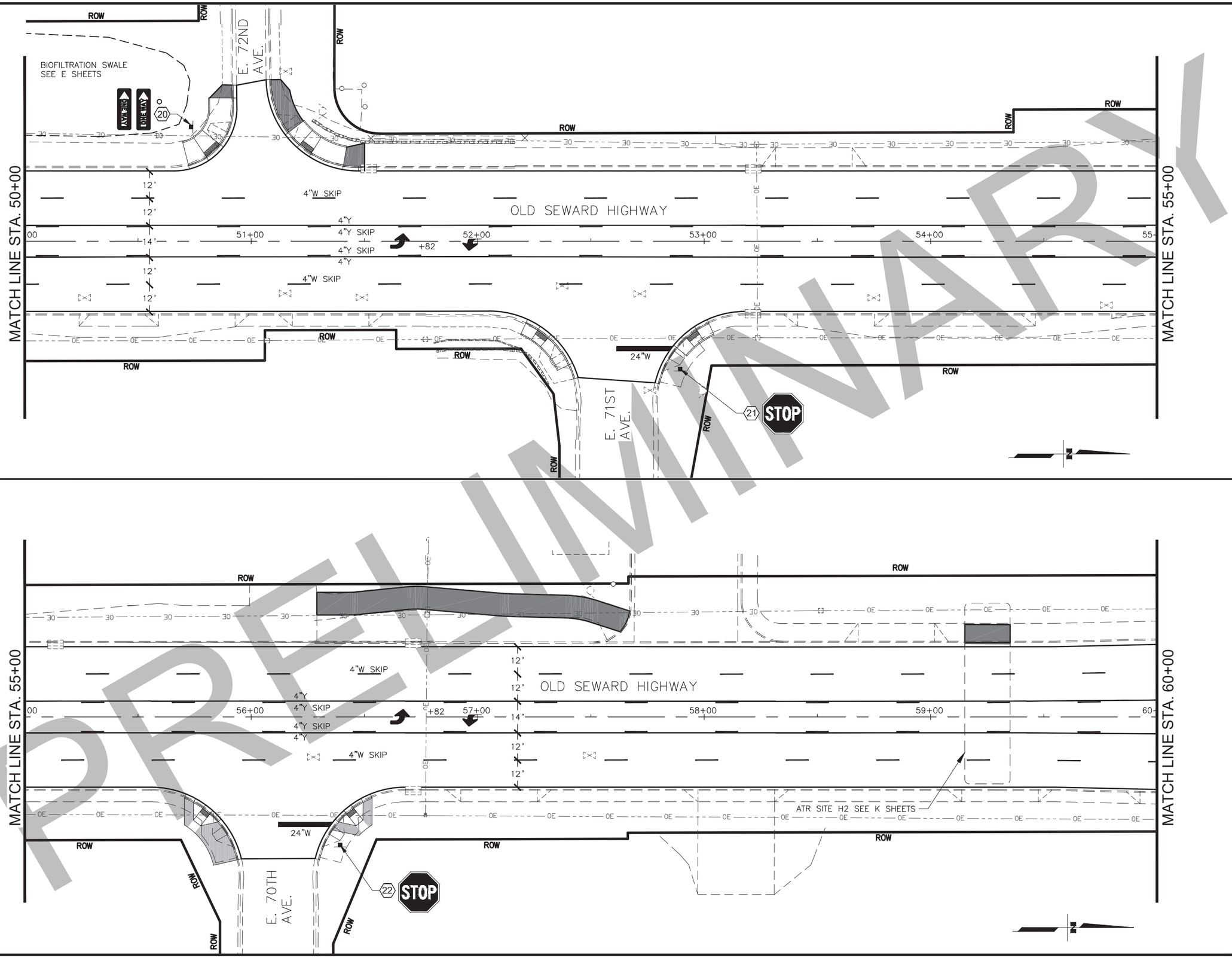


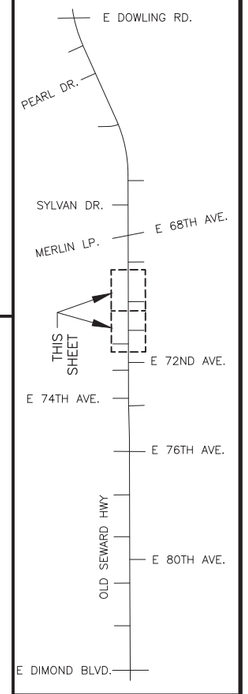
PRELIMINARY

SHEET NO.	TOTAL SHEETS
HS5	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION

0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 50+00 TO STA.
60+00

DATE/TIME | 10/4/2020 3:24 PM | LAYOUT | HS5 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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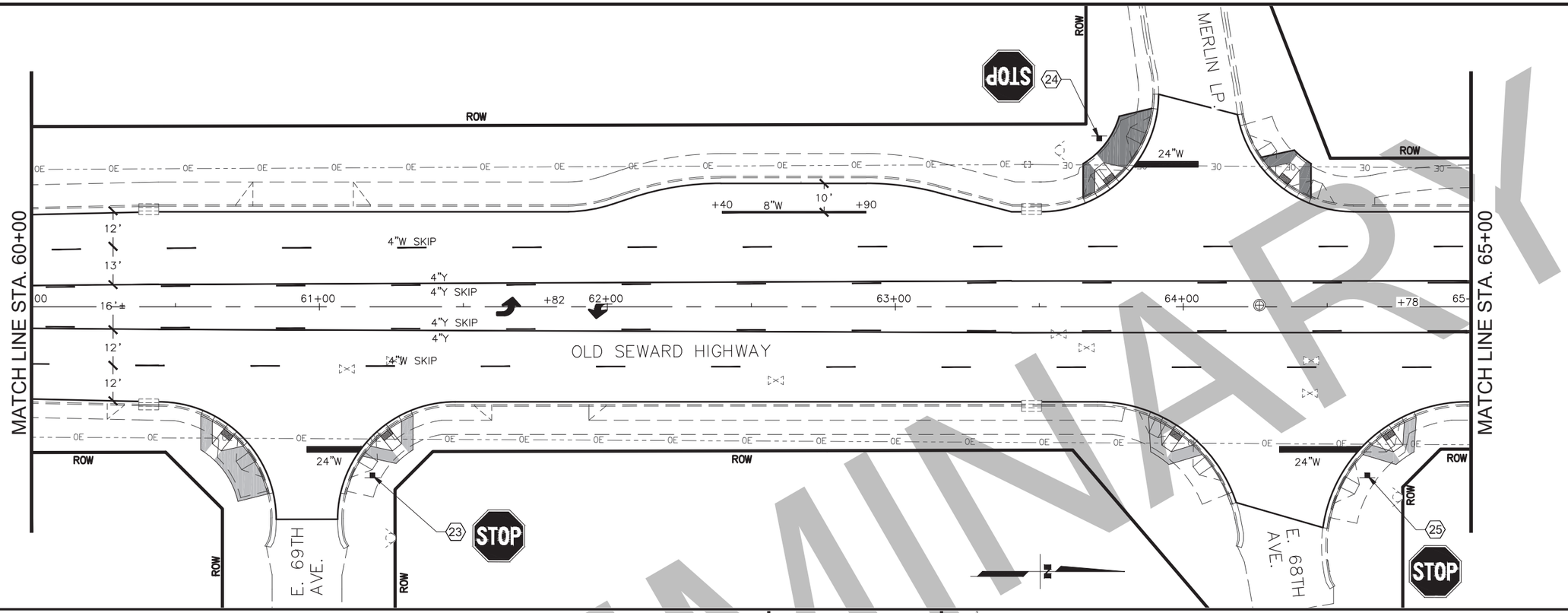
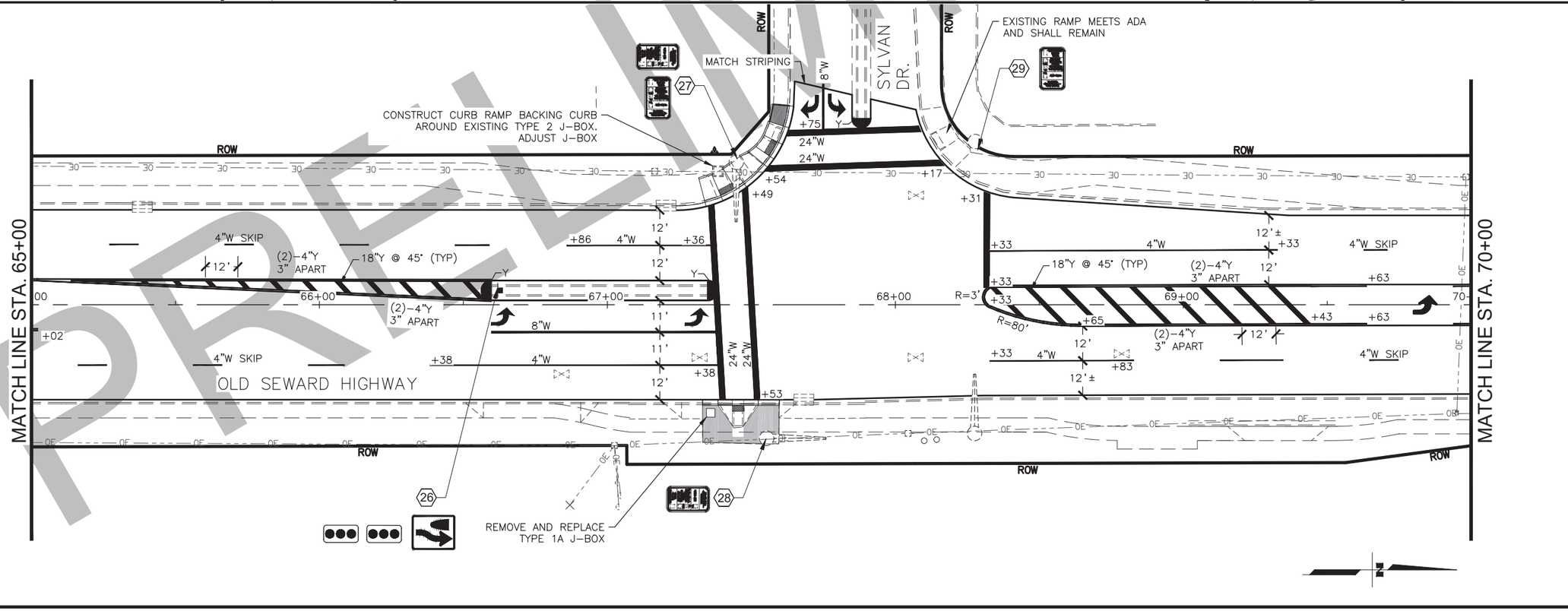
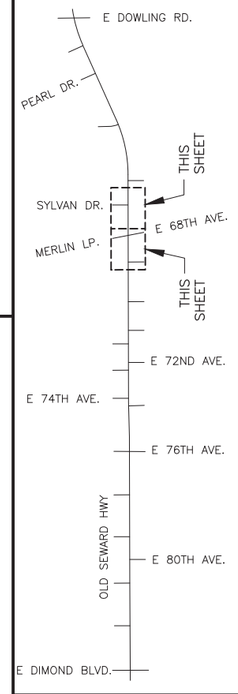




SHEET NO.	TOTAL SHEETS
HS6	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
REGISTERED PROFESSIONAL ENGINEER
CERTIFICATION
OCTOBER 2020

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 60+00 TO STA. 70+00

DATE/TIME | 10/4/2020 3:24 PM | LAYOUT | HS6 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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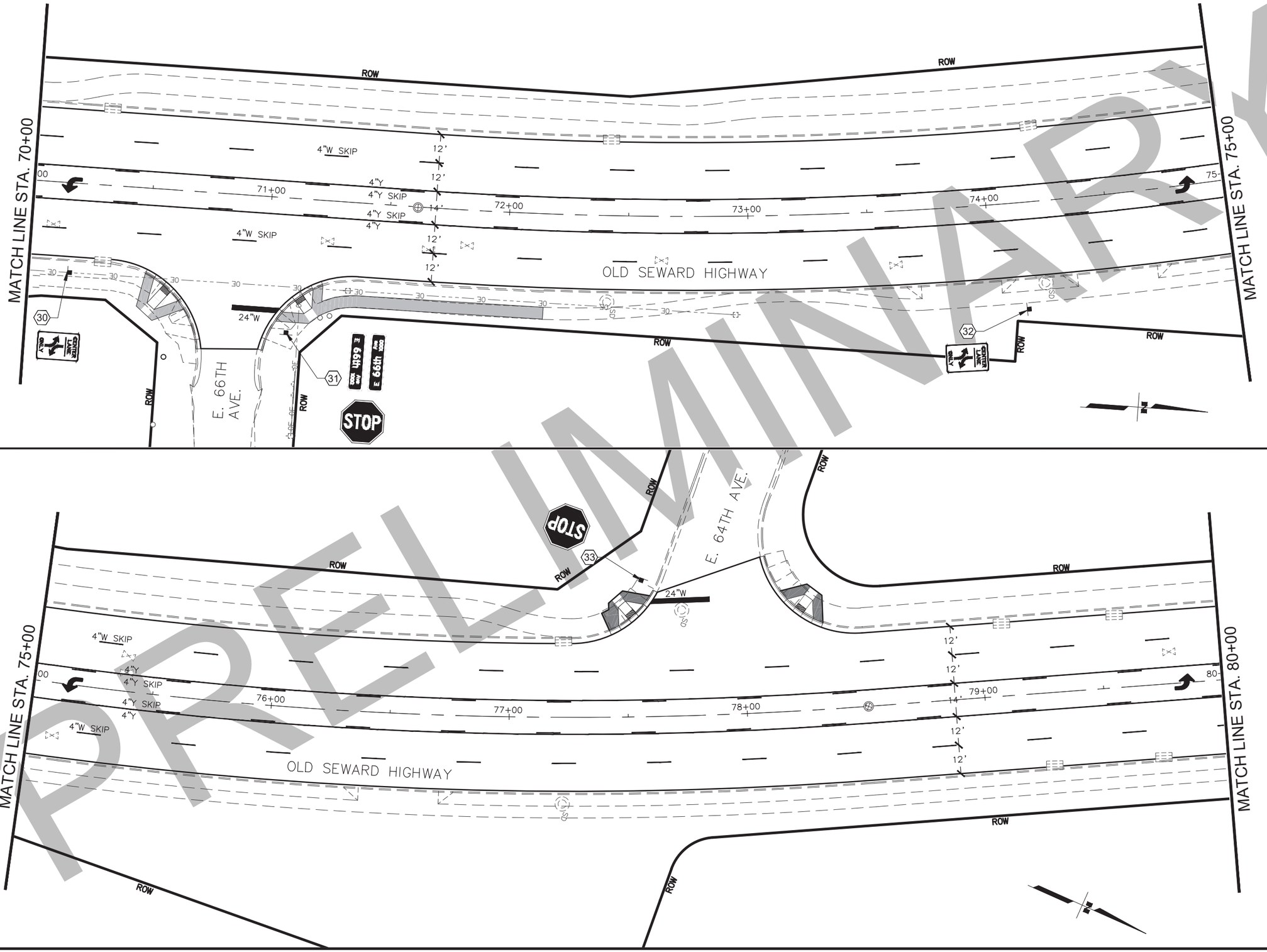

SHEET NO.	TOTAL SHEETS
HS7	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION

0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

CERTIFICATION
OCTOBER 2020

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 70+00 TO STA. 80+00

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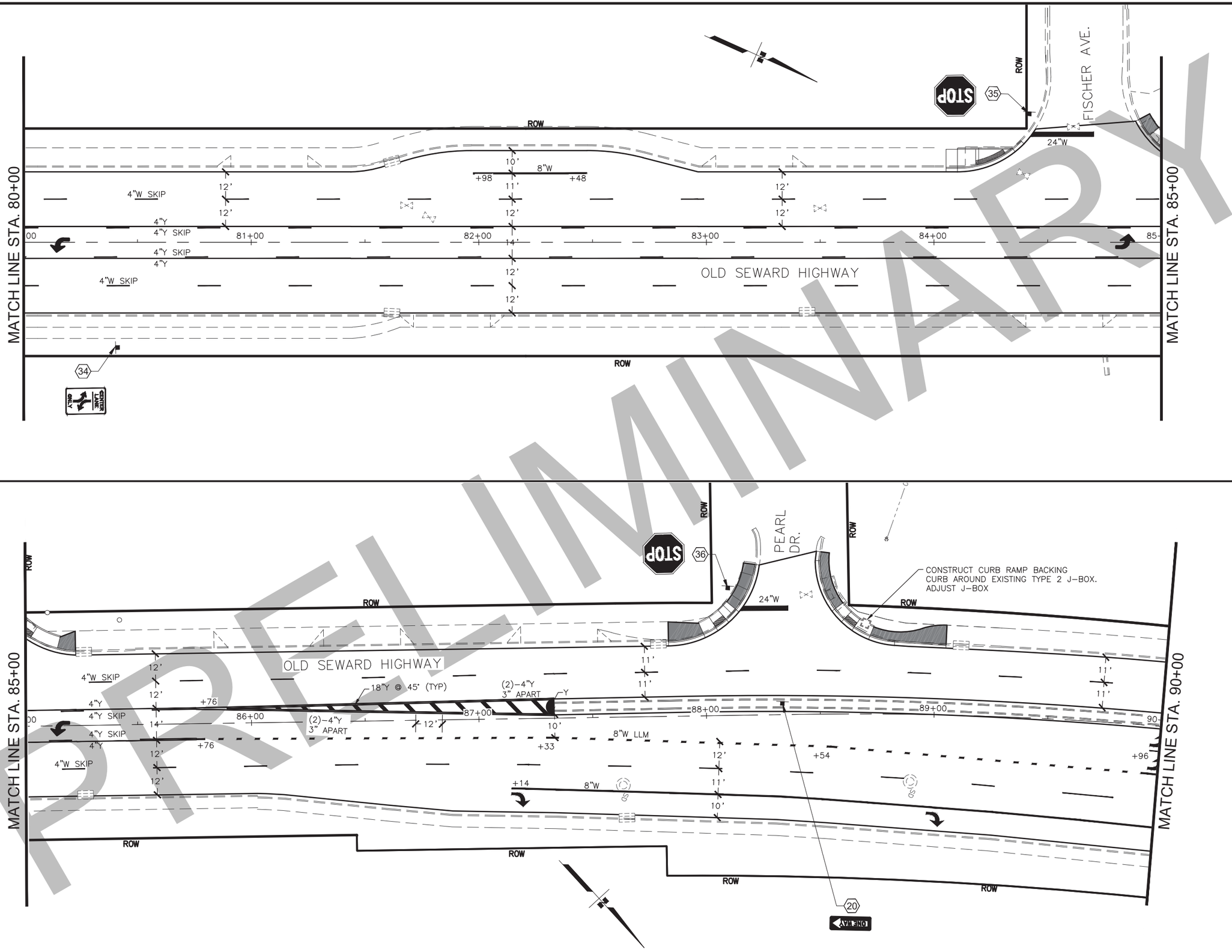
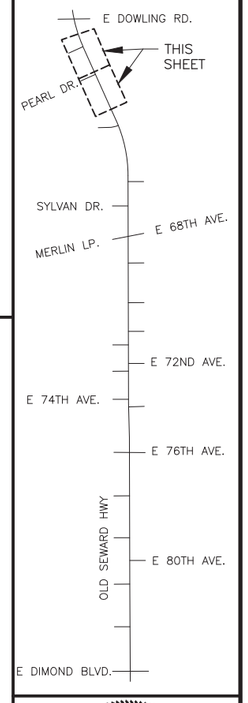


SHEET NO.	TOTAL SHEETS
HS8	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
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ANCHORAGE, AK 99503
(907) 562-2000
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 80+00 TO STA.
90+00

DATE/TIME | 10/4/2020 3:24 PM | LAYOUT | HS8 | DESIGNED | FC | CHECKED | -- | DRAFTED | AAS

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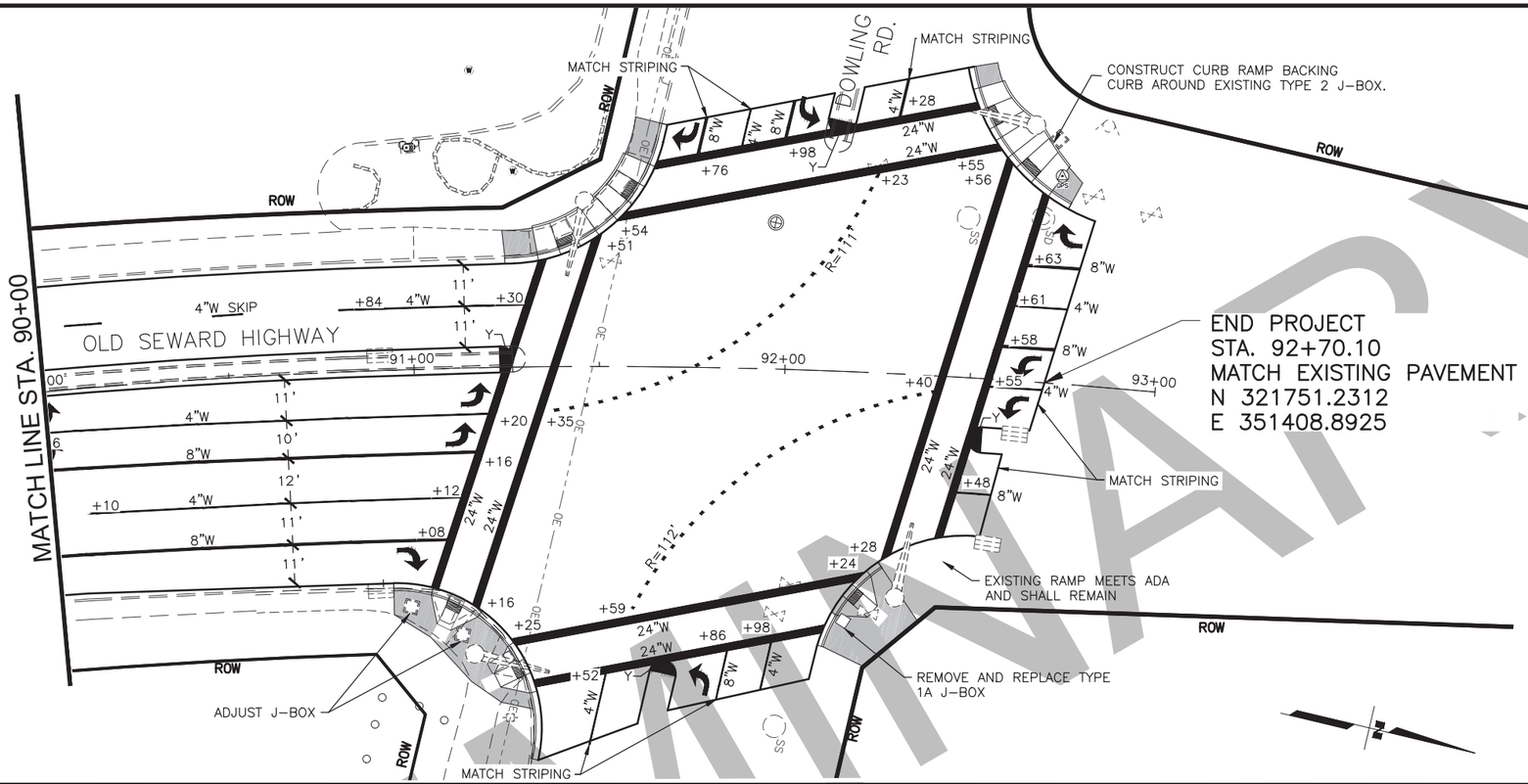
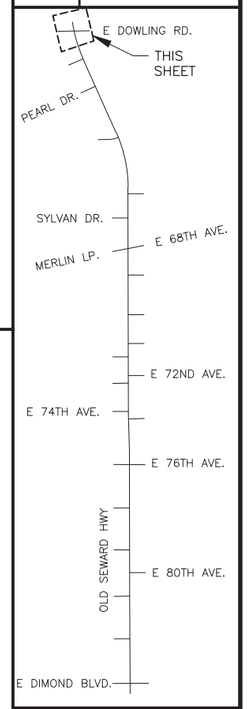


SHEET NO.	TOTAL SHEETS
HS9	HS17
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
0537009/
CFHWY00386

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
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(907) 562-2000
#AECL848 - AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 90+00 TO STA. 93+00

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS10	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS1	1	10+36	LT	R10-3E (R)		9	15	0.94	E	N/A		X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON
HS1	2	12+10	RT	R10-3E (L)		9	15	0.94	S	N/A		X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON
HS1	3	16+39	LT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-101	82ND AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	82ND AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R6-1R	ONE WAY	–	–	–	W		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1		36	36	9.00	W		X		
HS1	4	16+68	CL	R3-2		36	18	4.50	W	1, 2.5"X2.5" PT	X		
HS1	5	17+56	CL	R4-7		24	30	5.00	N	1, 3.0"X3.0" T		X	
				OM2-1V		6	12	0.50	N			X	
				OM2-1V		6	12	0.50	S			X	
HS1	6	19+14	LT	R3-9DP		30	12	2.50	N	N/A		X	MOUNT ON EXISTING ELECTROLIER AND ABOVE R3-9B SIGN
				R3-9B		24	36	6.00	N			X	MOUNT ON EXISTING ELECTROLIER
HS2	7	20+10	RT	R3-9CP		30	12	2.50	S	1, 3.0"X3.0" T		X	MOUNT ABOVE R3-9B SIGN
				R3-9B		24	36	6.00	S			X	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

CERTIFICATION
OCTOBER 2020

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS11	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS2	8	21+62	LT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	81ST AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	81ST AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				W14-1AR	DEAD END	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				W14-1AL	DEAD END	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	W		X		
HS2	9	24+94	RT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	80TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	80TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	E		X		
HS2	10	27+24	LT	D3-101	Old Seward Hwy 7900	48	8	2.67	E	1, 2.5"X2.5" PT	X		
				D3-101	Old Seward Hwy 7900	48	8	2.67	W		X		
				D3-101	E 79th Ave 900	48	12	4.00	N		X		
				D3-101	E 79th Ave 900	48	12	4.00	S		X		
				R1-1	STOP	36	36	9.00	W		X		
HS2	11	29+41	RT	R3-9B	CENTER LANE ONLY	24	36	6.00	S	1, 3.0"X3.0" T		X	
HS3	12	32+36	LT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	78TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	78TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	W		X		

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS12	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS3	13	35+85	LT	R4–7		24	30	5.00	S	1, 2.5"X2.5" PT		X	
				OM2–1V		6	12	0.50	S			X	
				OM2–1V		6	12	0.50	N			X	
HS3	14	37+52	RT	R10–3E (R)		9	15	0.94	N	N/A		X	MOUNT ON EXISTING PEDESTRIAN POLE ABOVE PEDESTRIAN BUTTON
HS3	15	37+57	LT	R10–3E (R)		9	15	0.94	E	N/A		X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON
HS4	16	43+72	RT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–100A	74TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–100A	74TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1		36	36	9.00	E		X		
HS4	17	44+16	LT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–100A	74TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–100A	74TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1		36	36	9.00	W		X		
HS4	18	47+49	LT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–100A	73RD AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–100A	73RD AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1		36	36	9.00	W		X		

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562–2000
#AECL848 – AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS13	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS4	19	48+95	RT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	72ND AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	72ND AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	E		X		
HS5	20	50+73	LT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	72ND AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	72ND AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R6-1R	ONE WAY	36	18	4.50	N		X		
				R6-1L	ONE WAY	36	18	4.50	S		X		
HS5	21	52+89	RT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	71ST AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	71ST AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	E		X		
HS5	22	56+39	RT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	70TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	70TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1	STOP	36	36	9.00	E		X		

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

STATE OF ALASKA
10TH
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS14	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS6	23	61+18	RT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–100A	69TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–100A	69TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1	STOP	36	36	9.00	E		X		
HS6	24	63+71	LT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–100A	MERLIN LP	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–100A	MERLIN LP	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1	STOP	36	36	9.00	W		X		
HS6	25	64+64	RT	D3–101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3–101	68TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3–101	68TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1–1	STOP	36	36	9.00	E		X		
HS6	26	66+60	LT	R4–7		24	30	5.00	S	1, 2.5"X2.5" PT		X	REINSTALL EXISTING SIGN ON NEW POST
				OM2–1V		6	12	0.50	S			X	
				OM2–1V		6	12	0.50	N			X	
HS6	27	67+45	LT	R10–3E (L)		9	15	0.94	N	N/A		X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON
				R10–3E (R)		9	15	0.94	E			X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON
HS6	28	67+45	RT	R10–3E (R)		9	15	0.94	N	N/A		X	MOUNT ON EXISTING SIGNAL POLE ABOVE PEDESTRIAN BUTTON

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

DRAFTED | CHECKED | DESIGNED | HS14 | LAYOUT | 10/4/2020 3:25 PM | DATE/TIME
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS15	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SF)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAME YES	FRAME NO	REMARKS
HS6	29	68+29	LT	R10-3E (L)		9	15	0.94	E	N/A		X	MOUNT ON EXISTING PEDESTRIAN POLE ABOVE PEDESTRIAN BUTTON
HS7	30	70+16	RT	R3-9B		24	36	6.00	S	1, 3.0"X3.0" T		X	
HS7	31	71+10	RT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-101		48	12	4.00	N		X		
				D3-101		48	12	4.00	S		X		
				R1-1		36	36	9.00	E		X		
HS7	32	74+14	RT	R3-9B		24	36	6.00	S	1, 3.0"X3.0" T		X	
HS7	33	77+56	LT	D3-101	OLD SEWARD HWY	–	–	–	E/W	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN PRINTED DOUBLE SIDED AND REUSE EXISTING "TOP MOUNT BRACKET" TO SECURE ON NEW POST
				D3-100A	64TH AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-100A	64TH AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1		36	36	9.00	W		X		
HS8	34	80+40	RT	R3-9B		24	36	6.00	S	1, 3.0"X3.0" T		X	
HS8	35	84+42	LT	D3-101	OLD SEWARD HWY	–	–	–	E	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	OLD SEWARD HWY	–	–	–	W		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	FISCHER AVE	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	FISCHER AVE	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1		36	36	9.00	W		X		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

STATE OF ALASKA
ALOTH
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
#AECL848 – AK

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS16	HS17

STANDARD SIGN – 615.0001.0000

SHEET NO.	POST NO.	STATION	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (SF)	SIGN FACES	POSTS	FRAME		REMARKS
						WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
HS8	36	88+10	LT	D3-101	OLD SEWARD HWY	–	–	–	E	1, 2.5"X2.5" PT	–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	OLD SEWARD HWY	–	–	–	W		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	PEARL DR	–	–	–	N		–	–	REINSTALL EXISTING SIGN ON NEW POST
				D3-101	PEARL DR	–	–	–	S		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R6-1R	ONE WAY	–	–	–	W		–	–	REINSTALL EXISTING SIGN ON NEW POST
				R1-1		36	36	9.00	W		X		
HS8	37	88+33	LT	R6-1R		36	18	4.50		1, 2.5"X2.5" PT		X	

STATE OF ALASKA
CERTIFICATION
OCTOBER 2020
REGISTERED PROFESSIONAL ENGINEER

DOWL, LLC
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

FILE | C:\CIVIL 3D PROJECTS\2016\24\62720-01\CIVIL\00386_HS01_SIGN-STRP.DWG
DATE/TIME | 10/4/2020 3:25 PM
LAYOUT | HS16
DESIGNED | CHECKED | DRAFTED

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	HS17	HS17

SALVAGE SIGN - 615.0006.0000

SHEET	TYPE	STATION	CL REF	OFFSET	REMARKS
HS1	R10-3E (R)	10+36	LT	61'	PEDESTRIAN SIGNAL
HS1	R10-3E (L)	12+10	RT	51'	PEDESTRIAN SIGNAL
HS1	R1-1	16+43	LT	65'	STOP
HS1	R3-2	16+68	–	0'	NO LEFT TURN
	R6-1R				ONE-WAY
HS1	R3-9b	17+47	RT	47'	CENTER LANE LEFT TURN ONLY
HS1	OM2-1V	17+56	–	0'	OBJECT MARKER
	R4-7				KEEP RIGHT
HS1	M4-6	19+14	LT	44'	OBJECT MARKER
	R3-9b				CENTER LANE LEFT TURN ONLY
HS2	R1-1	21+65	LT	63'	STOP
	D3-1				
	D3-1				
HS2	R1-1	24+93	RT	66	STOP
	D3-1				
	D3-1				
HS2	D3-1	27+28	LT	24'	
	D3-1				PEDESTRIAN SIGNAL
	R1-1				STOP
HS2	R3-9b	29+41	RT	41'	CENTER LANE LEFT TURN ONLY
HS3	R1-1	32+40	LT	66'	STOP
	D3-1				
	D3-1				
HS3	OM1-1	35+85	LT	22'	OBJECT MARKER
	R4-7				KEEP RIGHT
	R4-7a				KEEP RIGHT PLAQUE
HS3	R10-3E (R)	37+52	RT	40'	PEDESTRIAN SIGNAL
HS3	R10-3E (R)	37+57	LT	78'	PEDESTRIAN SIGNAL
HS4	R1-1	43+72	RT	69'	STOP
	D3-1				
	D3-1				
HS4	R1-1	44+19	LT	62'	STOP
	D3-1				
	D3-1				
HS4	R1-1	47+48	LT	55'	STOP
	D3-1				
	D3-1				
HS4	R1-1	48+97	RT	66'	STOP
	D3-1				
	D3-1				
HS5	D3-1	50+73	LT	56'	
	D3-1				
	R6-1R				ONE-WAY
HS5	D3-1	52+90	RT	68'	
	D3-1				
	R1-1				STOP
HS5	D3-1	56+38	RT	67'	
	D3-1				
	R1-1				STOP
HS6	D3-1	61+21	RT	66'	
	D3-1				
	R1-1				STOP

SALVAGE SIGN - 615.0006.0000

SHEET	TYPE	STATION	CL REF	OFFSET	REMARKS
HS6	D3-1	63+83	LT	74'	
	D3-1				
	R1-1				STOP
HS6	D3-1	64+60	RT	78'	
	D3-1				
	R1-1				STOP
HS6	R4-7	66+60	LT	5'	KEEP RIGHT
HS6	R10-3E (L)	67+45	LT	6'	PEDESTRIAN SIGNAL
	R10-3E (R)				PEDESTRIAN SIGNAL
HS6	R10-3E (R)	68+45	RT	46'	PEDESTRIAN SIGNAL
HS6	R10-3E (L)	68+29	LT	54'	PEDESTRIAN SIGNAL
HS7	R3-9b	70+16	RT	37'	CENTER LANE LEFT TURN ONLY
HS7	D3-1	71+14	RT	65'	
	D3-1				
	R1-1				STOP
HS7	R3-9b	74+14	RT	45'	CENTER LANE LEFT TURN ONLY
HS7	D3-1	77+53	LT	57'	
	D3-1				
	R1-1				STOP
HS8	R3-9b	80+40	RT	46'	CENTER LANE LEFT TURN ONLY
HS8	D3-1	84+42	LT	57'	
	D3-1				
	R1-1				STOP
HS8	D3-1	88+17	LT	54'	
	D3-1				
	R1-1				STOP
	R6-1R				ONE-WAY

STATE OF ALASKA
10TH
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

SIGN SUMMARY

DRAFTED | CHECKED | DESIGNED | HS17 | LAYOUT | 10/4/2020 3:25 PM | DATE/TIME
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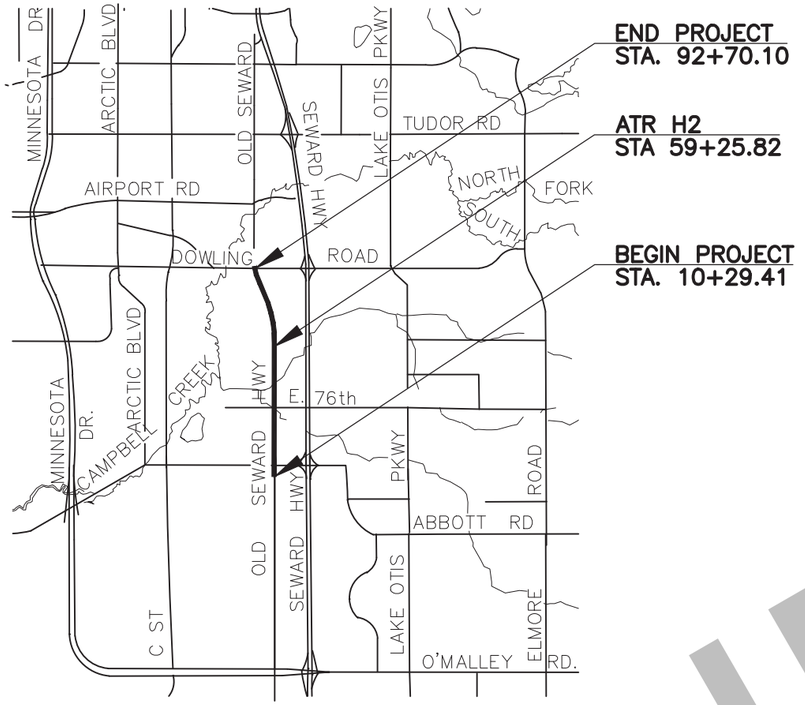
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0537009/CFHWY00386	2021	K1	K3



SITE PLAN

DRAWING SHEET INDEX

SHEET NUMBER	DESCRIPTION
K1	ATR SITE PLAN AND NOTES
K2	ATR SITE H2 LAYOUT, CONDUIT & CONDUCTOR SCHEDULE, AND WIRING DIAGRAM
K3	ATR DETAILS

REFERENCE SPECIFICATIONS:

CONSTRUCT WIRING ACCORDING TO SPECIFICATION SECTION 660 SIGNALS AND LIGHTING, EXCEPT WHERE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS. CONFORM TO SPECIFICATION SUBSECTIONS 660-3.03 CONDUIT, 660-3.04 JUNCTION BOXES, 660-3.05 WIRING, 660-3.06 BONDING AND GROUNDING, AND 660-3.01.7 FIELD TESTS, EXCEPT AS MODIFIED BY SECTION 669 AUTOMATED TRAFFIC RECORDERS.

PAVEMENT NOTE:

FOR SECTIONS THAT REQUIRE REMOVAL AND REPLACEMENT OF PAVEMENT, AFTER PLANING, SAWCUT EXISTING PAVEMENT AND APPLY TACK COAT TO PAVEMENT EDGES. IF NECESSARY, PREPARE THE AREA WITH AGGREGATE BASE COURSE BEFORE LAYING HMA. USE ONE 2" THICK LIFT OF HMA, TYPE VH , WITH TACK COAT APPLIED BETWEEN NEW LIFT OF HMA AND EXISTING ASPHALT.

GENERAL NOTES:

1. WORK AND MATERIALS SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, ALASKA DOT&PF STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND LOCAL AMENDMENTS.
2. USE ONLY RMC OR IMC CONDUIT FOR SENSOR TAILS AND LEAD-INS. OFFSET DIMENSIONS ARE APPROXIMATE AND TO BE DETERMINED BY ENGINEER.
3. LOCATION COORDINATES ARE APPROXIMATE TO IDENTIFY GENERAL LOCATION OF ATR SITES.
4. ALL PAVEMENT SENSORS TO BE INSTALLED PER PLAN SHEET DIAGRAMS AND DIMENSIONS WITHIN RIGHT-OF-WAY AS SHOWN.
5. EVERY EFFORT HAS BEEN MADE TO MAKE THE INFORMATION CONTAINED IN THESE DOCUMENTS COMPLETE AND ACCURATE. HOWEVER THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.

INDUCTIVE LOOPS

ALL INDUCTIVE LOOPS SHALL BE WOUND IN THE SAME DIRECTION WITH THE STARTING LEAD MARKED "S" PER SECTION 660-3.05.13.

LEAD-IN WIRES FOR EACH LOOP SHALL BE IN SEPARATE CONDUITS TO THE FIRST JUNCTION BOX. THESE CONDUITS SHALL BE SEPARATED FROM OTHER LOOPS BY A MINIMUM OF 12 INCHES.

INDUCTIVE LOOPS SHALL BE INSTALLED IMMEDIATELY PRIOR TO PAVING THIS SECTION OF ROADWAY. FINAL LIFT ASPHALT PAVEMENT SHALL BE SMOOTH OVER ALL INDUCTIVE LOOPS AND WITHOUT TRANSVERSE SEAMS, JOINTS, OR ROUGHNESS WITHIN 50 FEET OF THE LOOPS.

LABELS

ALL CABLES SHALL BE LABELED AT BOTH ENDS AND AT EVERY JUNCTION BOX THROUGH WHICH THE CABLES PASS, PER SPECIFICATION SECTION 660-3.05.13.

ALL WIRE PAIRS SHALL BE LABELED AT THE TERMINAL BLOCK AND AT ANY LOOSE ENDS.

THE FOLLOWING CONVENTIONS SHALL APPLY TO DESIGNATING AND LABELING CABLES AND WIRE PAIRS:

LANES: TRAFFIC LANES AND THEIR RESPECTIVE LOOPS AND SENSORS SHALL BE LABELED FROM THE OUTSIDE EDGE OF THE ROAD TOWARD THE CENTER AS FOLLOWS:

A	B	C	D		D	C	B	A

TERMINAL BLOCKS: WIRES FROM SENSORS PLACED IN LANES WHICH ARE CLOSEST TO THE CONTROL BOX SHALL BE PLACED AT THE LEFT OR AT THE TOP OF THE TERMINAL BLOCK, DEPENDING ON ORIENTATION.

WIRES FOR INDUCTIVE LOOPS, SENSORS AND RESERVES ARE LABELED AS FOLLOWS:

PnDLc

WHERE:

P	IS THE PREFIX: V TRAFFIC VOLUME LOOP H VEHICLE CLASSIFICATION / SPEED LOOP GL AUTOMATIC VEHICLE CLASSIFICATION (AVC) LOOP GP AUTOMATIC VEHICLE CLASSIFICATION PIEZO
n	NUMBER SUFFIX FOR MULTIPLE LOOPS IN THE SAME LANE
D	DIRECTION (N,S,E,W, NE,SE,SW,NW)
L	IS THE PREFIX FOR ROAD DESIGNATION L – LANE* R – RAMP** SR – SPUR RAMP** LP – LOOP** LR – LOOP RAMP** • ROADS AND HIGHWAYS ** – INTERCHANGES
c	IS THE SUFFIX FOR LANE DESIGNATION (A, B, C, D)
⟨X⟩	CONDUIT REFERENCE NUMBER
[X]	NOTE REFERENCE NUMBER
RMC	RIGID METAL CONDUIT, GALVANIZED
IMC	INTERMEDIATE METAL CONDUIT
(#/K#)	– DETAIL NO. – DRAWN ON SHEET #

ATR ASSEMBLIES SCHEDULE

RECORDER ASSEMBLY	SITE LOCATION	COUNT SITE NUMBER	PAVEMENT	# OF LANES	# OF NEW PRESENCE LOOPS	# OF NEW PIEZO SENSORS	JUNCTION BOXES AND CONDUIT	CONTROL CABINET	CABINET FOUNDATION	ELECTRICAL LOAD CENTER	TEMPERATURE PROBE AND SENSORS TA & TG	ELECTRICAL AND TELEPHONE SERVICES	REMARKS
H2	OLD SEWARD HIGHWAY STA 59+25.82	52959000	PLANE AND OVERLAY	4	4	0	REPLACE	REPLACE	REPLACE	N/A	N/A	N/A	REPLACE CONDUIT, WIRING AND LOOPS AT EXISTING LOCATION

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

OLD SEWARD HIGHWAY
DIMOND BLVD TO DOWLING RD
PAVEMENT PRESERVATION

ATR SITE PLAN AND NOTES

DATE/TIME | 10/7/2020 9:18 PM | LAYOUT | K1 | DESIGNED | -- | CHECKED | -- | DRAFTED | --
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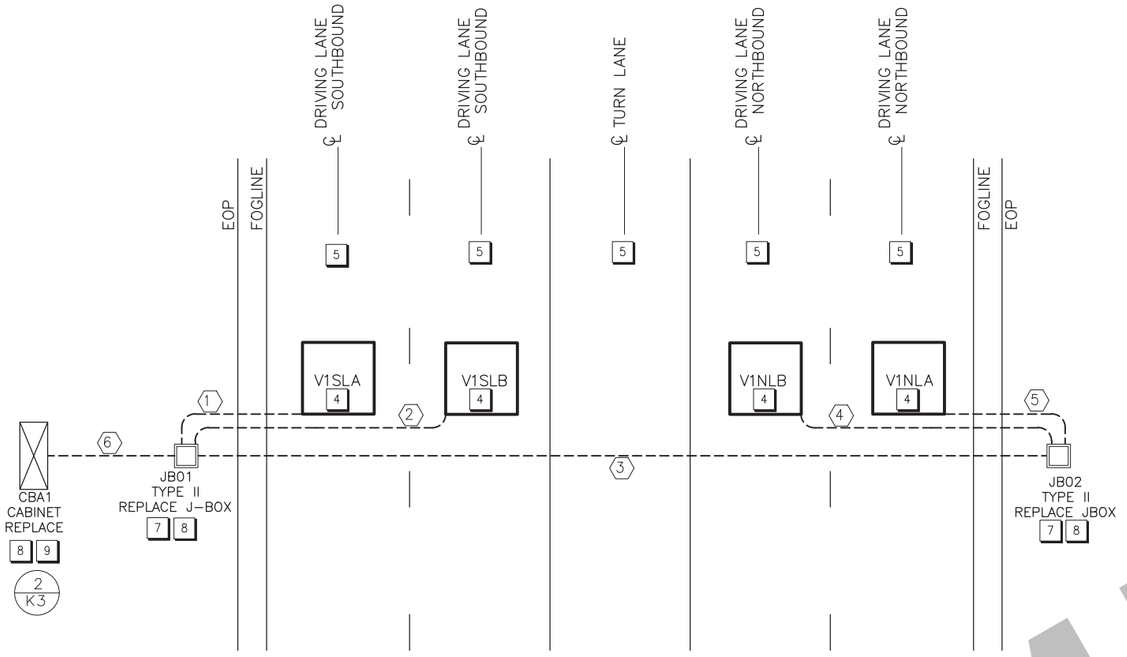
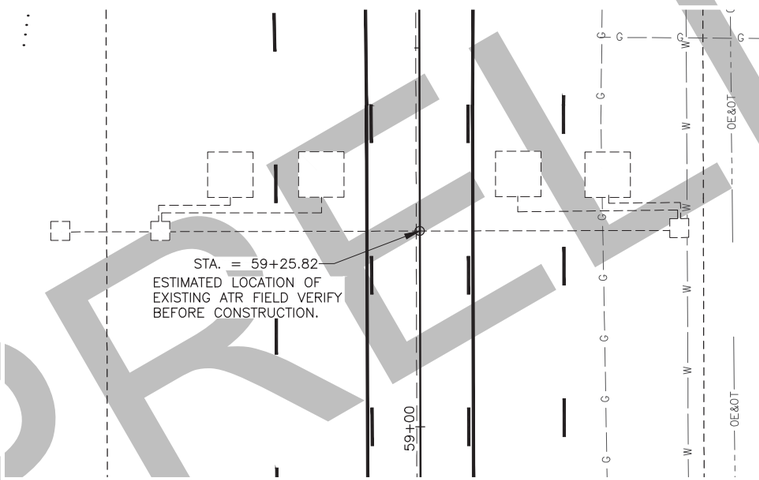


SENSOR, J-BOX AND CABINET LAYOUT



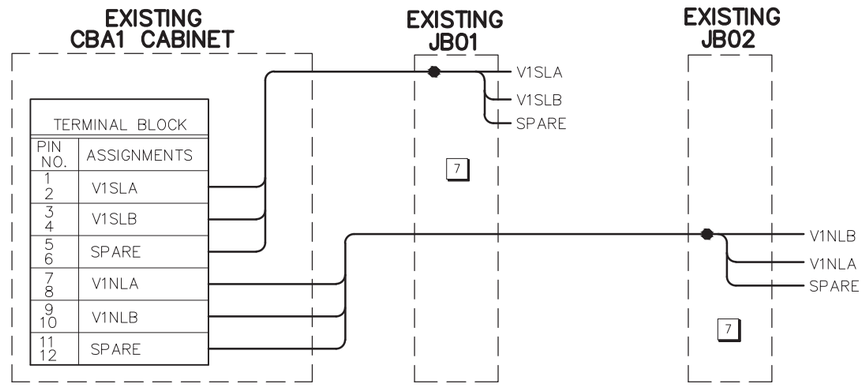
EXISTING ATR H2
STATION 59+25.82

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT NUMBER	SIZE (INCHES)	FROM	TO	CABLE QUANTITY	CABLE TYPE	REMARKS
1	1	V1SLA	JB01	1	1 PR. #14	REPLACE EXISTING LOOP WIRING
2	1	V1SLB	JB01	1	1 PR. #14	REPLACE EXISTING LOOP WIRING
3	2	JB02	JB01	1	3 PR. #18	REPLACE EXISTING LOOP WIRING
4	1	V1NLB	JB02	1	1 PR. #14	REPLACE EXISTING LOOP WIRING
5	1	V1NLA	JB02	1	1 PR. #14	REPLACE EXISTING LOOP WIRING
6	2	JB01	CBA1	2	3 PR. #18	REPLACE EXISTING LOOP WIRING

INSTALLATION NOTES

1. ALL PVC CONDUIT AND FITTINGS SHALL BE 1 INCH SCHEDULE 80.
2. INSTALL 1/2 INCH PREFORMED BITUMINOUS JOINT MATERIAL BETWEEN J-BOX AND PAVEMENT WHEN J-BOXES ARE LOCATED IMMEDIATELY ADJACENT TO A SIDEWALK OR ROAD SURFACE.
3. PROVIDE GROUNDING BUSHINGS ON ALL CONDUITS. GROUND WITH A MINIMUM #6 BARE CU.
4. INSTALL ALL LOOP DETECTORS PRIOR TO OVERLAYING PAVEMENT. SEE DETAILS ON SHEET H4.
5. LOOPS TO BE CENTERED IN LANE.
6. MINIMUM SPACING BETWEEN TAIL AND LOOP OR PIEZO IS 1 FOOT. SENSOR TAILS SHALL NOT CROSS EACH OTHER.
7. SPLICE LOOP WIRING IN J-BOX TO MULTI-PAIR CABLE USING NON RE-ENTERABLE, WET LOCATION SPLICE. SEE DETAIL: 1/K3
8. EXISTING J-BOXES AND CABINET TO BE REPLACED.
9. CABINET DOOR TO OPEN AWAY FROM ROADWAY.
10. SEE SHEET H2 AND H4 FOR JUNCTION BOX DETAILS.



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ATR SITE H2 LAYOUT, CONDUIT & CONDUCTOR SCHEDULE, AND WIRING DIAGRAM

DATE/TIME 10/7/2020 9:29 PM | LAYOUT K2 | DESIGNED -- | CHECKED -- | DRAFTED --
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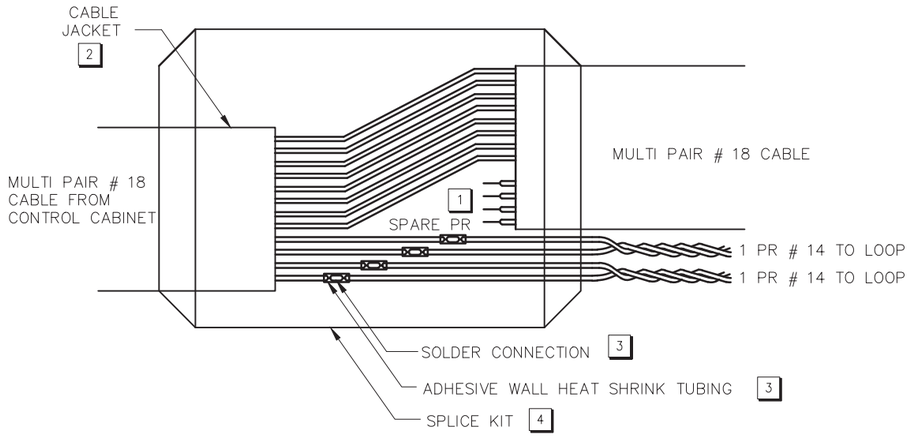
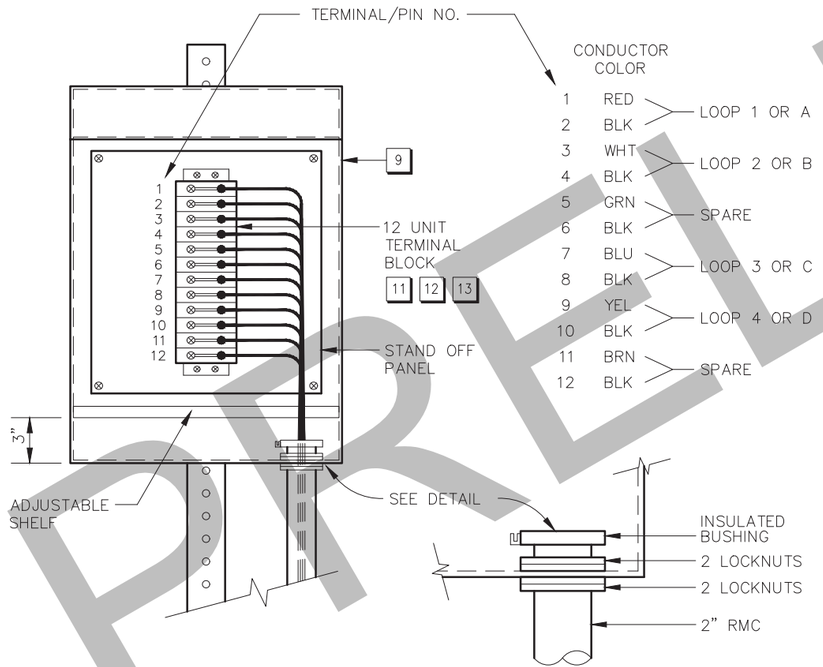
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0537009/CFHWY00386	2021	K3	K3



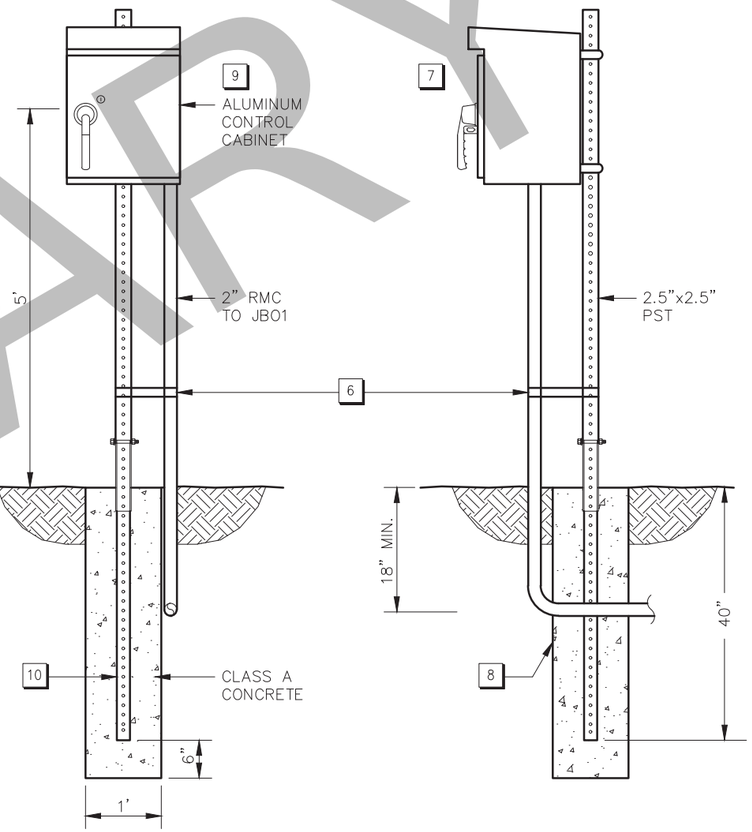
1 / K3 **TYPICAL SPLICE DETAIL**



2 / K3 **CABINET TYPE CBA1**
FRONT VIEW, DOOR OPEN

NOTES:

1. TERMINATE ALL SPARES WITHIN THE SPLICE BODY.
2. SPLICE BODY TO ENCLOSE ALL CABLE JACKETS.
3. STAGGER SPLICE POINTS. USE NON INSULATED COMPRESSION BUTT CONNECTORS. SOLDER CONNECTIONS. ENCLOSE EXPOSED CONDUCTORS IN ADHESIVE WALL HEAT SHRINK TUBING.
4. USE A NONREENTERABLE, WET LOCATION, COMMERCIAL SPLICE KIT 3M TYPE 82-F1 OR EQUIVALENT AS APPROVED BY THE ENGINEER.
5. SEAL END OF CONDUIT WITH 3M TYPE LOOP SEALANT OR EQUIVALENT AS APPROVED BY THE ENGINEER.
6. CONTRACTOR SHALL SECURE AND SUPPORT CONDUIT PER NEC 344.30.
7. CONTROLLER CABINET DOOR TO OPEN AWAY FROM THE ROADWAY.
8. INSTALL FOUNDATION IN SELECT MATERIAL, TYPE A. THE CONTRACTOR SHALL EXCAVATE AND BACKFILL WITH GRAVEL 2 FEET BELOW AND SURROUNDING THE FOUNDATION. VERIFY LOCATION WITH ENGINEER PRIOR TO INSTALLATION.
9. CABINET TO BE EQUAL TO OR BETTER THAN HOFFMAN SINGLE DOOR ALUMINUM ENCLOSURE: CATALOG NUMBER A30H2412ALLP WITH NEMA 3R RATING, CORBIN LOCK, EQUIPMENT MOUNTING PANEL AND ADJUSTING SHELF.
10. SLEEVE TYPE CONCRETE FOUNDATION. SEE STANDARD PLAN S-30.05, PERFORATED STEEL TUBE (PST) POST.
11. TERMINATE ALL CONDUCTORS TO TERMINAL BLOCK. TERMINATE ALL CONDUCTORS WITH CRIMPED AND SOLDERED SPADE TYPE TERMINALS.
12. TY-RAPS TO PROVIDE STRAIN RELIEF FOR INCOMING CONDUCTORS.
13. LABEL SENSOR LEADS:
    USE THE INDUCTIVE LOOP DESIGNATION FOR IDENTIFICATION, SUCH AS "V1SLA"



FRONT ELEVATION

SIDE ELEVATION

3 / K3 **CABINET TYPE CBA1 DETAIL**

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ATR DETAILS

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DATE/TIME 10/4/2020 5:31 PM | LAYOUT K3 | DESIGNED -- | CHECKED -- | DRAFTED --