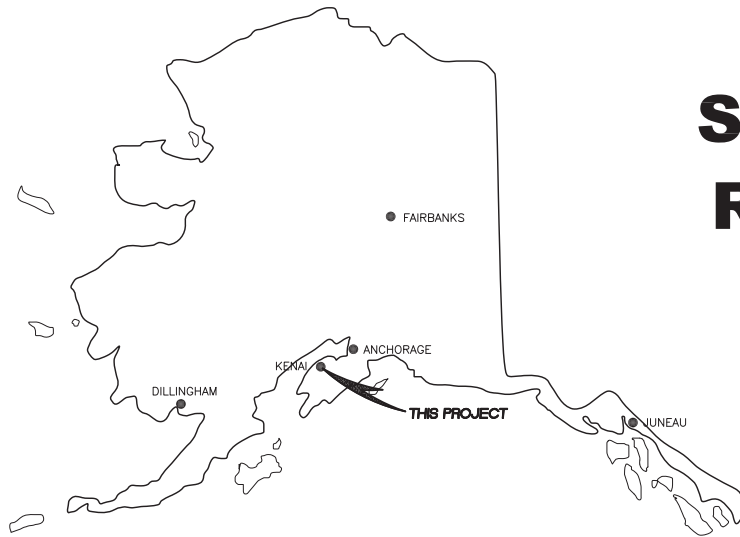


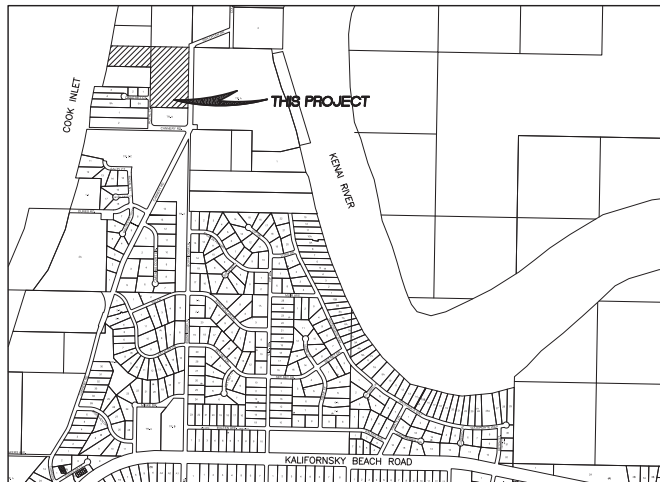


NO.	REVISION	DATE

CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BROADWAY, SUITE 11  
KENAI, ALASKA 99551  
TEL: (907) 283-9583  
NELSONENGINEER@ALASKA.NET



# SOUTH BEACH ACCESS ROAD CONSTRUCTION PERMIT REVIEW SET



**LOCATION MAP**  
SCALE: 1" = 1000' (22X34), 1" = 2000' (11X17) NORTH

## DRAWING INDEX

DRAWING	SHEET
TITLE SHEET AND LOCATION MAP	C1
LEGEND, ABBREVIATIONS, AND GENERAL NOTES	C2
SITE LAYOUT/SHEET INDEX/CONTROL	C3
SOUTH BEACH ACCESS ROAD - PLAN AND PROFILE STA. 10+00 TO 14+50	C4
SOUTH BEACH ACCESS ROAD - PLAN AND PROFILE STA. 14+50 TO 17+50	C5
SOUTH BEACH ACCESS ROAD - PLAN AND PROFILE STA. 24+00 TO 28+00	C6
SOUTH BEACH ACCESS ROAD - PLAN AND PROFILE STA. 28+00 TO 34+00	C7
TYPICAL ROAD SECTION	C8
UPLAND FENCE PLAN AND DETAILS	C9
ELECTRICAL CABLE AND CONDUIT PLAN	C10
ENLARGED ELECTRICAL PLAN AND DETAILS	C11

SOUTH BEACH ACCESS ROAD  
CITY OF KENAI  
TITLE SHEET AND LOCATION MAP

POA-2014-502, Cook Inlet  
Sheet 1 of 11  
February 13, 2015  
City of Kenai

PROJECT NO.  
1429  
DRAWN BY:  
MZO  
CHECKED BY:  
WJN  
DATE: 12/16/2014  
SCALE: NOTED  
HORIZ. NOTED  
VERT. NOTED  
SHEET: **C1**  
1 OF 11

## LEGEND

EXISTING	PROPOSED	
---	---	CENTERLINE
—101—	—101—	CONTOUR LINES
---	---	EDGE OF ASPHALT
---	---	PROPERTY LINE/EDGE OF R.O.W./EASEMENT
---	---	ROAD SHOULDER
---	---	TOE OF SLOPE
---	---	TOP OF SLOPE
~~~~~		TREELINE
— GAS —		UTILITY – GAS
— OHE —		UTILITY – OVERHEAD ELECTRIC
— UGE —	— UGE —	UTILITY – UNDERGROUND ELECTRIC
		WETLANDS BOUNDARY LINE
□	□	GRAVEL ROAD
□	□	WETLANDS
—	—	CULVERT
■		ELECTRICAL METER
⊕		MONUMENT/TEST HOLE
⊙		POWER POLE
●		REBAR
✂		TREE

## ABBREVIATIONS

AC	ASPHALT CONCRETE, ACRE	MIN	MINIMUM
ADA	AMERICAN DISABILITIES ACT	MKR	MARKER POST
ALUM	ALUMINUM	MON	MONUMENT
APPROX	APPROXIMATE	N	NORTH
AVG	AVERAGE	NFS	NON FROST SUSCEPTIBLE
BLDG	BUILDING	NIC	NOT IN CONTRACT
BOP	BOTTOM OF PIPE	NTS	NOT TO SCALE
C.O.	CLEANOUT	OC	ON CENTER
CIP	CAST IRON PIPE	OFF	OFFSET
CL	CENTER LINE, CLASS	OHE	OVERHEAD ELECTRIC
CMP	CORRUGATED METAL PIPE	PI	POINT OF INTERSECTION
CNTR	CENTER	PL	PROPERTY LINE
CONC	CONCRETE	PP	POWER POLE
CP	CONTROL POINT	PT	PRESSURE TREATED
DIA	DIAMETER	PVMT	PAVEMENT
DW	DRIVEWAY	R	RADIUS, RECORD
DWG	DRAWING	REQ'D	REQUIRED
E	EAST, ELECTRIC	RG	RAIN GARDEN
EA	EACH	ROW	RIGHT-OF-WAY
EG	EXISTING GROUND	S	SOUTH
EL, ELEV	ELEVATION	S/W	SIDEWALK
EOP	END OF PROJECT	SW	SWALE
EP	EDGE OF PAVEMENT	SH	SHOULDER
ESMT	EASEMENT	SS	SANITARY SEWER/SEWER SERVICE
EXIST	EXISTING	SSLS	SANITARY SEWER LIFT STATION
FF	FINISH FLOOR	SSMH	SANITARY SEWER MANHOLE STATION
FG	FINISH GRADE		
FT	FOOT, FEET		
GD	GROUND		
GR	GRADE	STA	STATION
HYD	HYDRANT	TBC	TOP BACK OF CURB
INV	INVERT	TC	TOP OF CONCRETE
L	LENGTH	TP	TEST PIT
LF	LINEAR FEET	TYP	TYPICAL
LT	LEFT	W	WATER, WEST
MAX	MAXIMUM	WS	WATER SERVICE
ME	MATCH EXISTING		

## GENERAL NOTES

1. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. ACTUAL DEPTH, NUMBER AND LOCATION UNKNOWN. BURIED UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, IDENTIFYING, AND WORKING AROUND ALL UTILITIES WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE OWNER. CALL FOR LOCATES PRIOR TO EXCAVATION, ALASKA DIGLINE 1-800-478-3121. CITY OF KENAI DOES NOT PARTICIPATE IN THE ALASKA DIGLINE. CONTRACTOR SHALL CONTACT CITY OF KENAI PUBLIC WORKS AT 907-283-8236 FOR WATER/SEWER/STREET LIGHT UTILITY LOCATES.

2. THE FOLLOWING ALASKA STATUTES APPLY TO WORK NEAR OVERHEAD ELECTRIC LINES:  
AS 18.60.670 PROHIBITION AGAINST PLACEMENT OF EQUIPMENT NEAR ELECTRICAL LINE AND CONDUCTORS.

(1) PLACE ANY TYPE OF TOOL, EQUIPMENT, MACHINERY, OR MATERIAL THAT IS CAPABLE OF LATERAL, VERTICAL, OR SWINGING MOTION, WITHIN 10 FEET OF A HIGH VOLTAGE OVERHEAD ELECTRICAL LINE OR CONDUCTOR.

(2) STORE, OPERATE, ERECT, MAINTAIN, MOVE, OR TRANSPORT TOOLS, MACHINERY, EQUIPMENT, SUPPLIES, MATERIALS, APPARATUS, BUILDINGS, OR OTHER STRUCTURES WITHIN 10 FEET OF A HIGH VOLTAGE OVERHEAD ELECTRICAL LINE OR CONDUCTOR.

AS 18.60.680 ANY WORK WITHIN MINIMUM DISTANCE STATED ABOVE SHALL REQUIRE CONTACT WITH HEA TO INSTALL TEMPORARY MECHANICAL BARRIERS, TEMPORARY DE-ENERGIZATION AND GROUNDING, OR TEMPORARY RAISING OF CONDUCTORS.

3. IF NOT DETAILED IN THESE DRAWINGS AND SPECIFICATIONS, ALL APPLICABLE CONSTRUCTION SHALL BE BUILT IN ACCORDANCE WITH MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS (M.A.S.S.), LATEST EDITION. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER M.A.S.S.
4. CONTRACTOR IS REQUIRED TO FIND ALL PROPERTY PINS/MONUMENTS WITHIN PROJECT AREA AND PROTECT OR REPLACE AFTER CONSTRUCTION IS COMPLETE.
5. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH SCHEDULE D SEED PER M.A.S.S., LATEST EDITION.
6. CONTOURS SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES AND SHOULD ONLY BE USED AS A REPRESENTATION OF EXISTING GRADES. SURVEYED ELEVATIONS ARE SHOWN ON THE PIPE PROFILES.
7. CLEARING LIMITS SHALL BE TO 22' EACH SIDE OF THE ROAD CENTERLINE, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
8. CONTRACTOR SHALL ADHERE TO LOCAL REQUIREMENTS FOR NOISE, HOURS OF OPERATION, AND DUST CONTROL.
9. PRIOR TO DOING ANY WORK WITHIN THE CITY OF KENAI'S RIGHT-OF-WAYS, CONTRACTOR SHALL CONTACT PUBLIC WORKS DEPARTMENT AT 907-283-8236. CONTRACTOR SHALL OBTAIN A YEARLY EXCAVATION PERMIT AND AN INDIVIDUAL PROJECT APPLICATION.
10. CONTRACTOR SHALL OBTAIN DETOUR PERMIT FROM THE CITY OF KENAI PRIOR TO STARTING WORK WITHIN THE CITY OF KENAI'S RIGHT-OF-WAYS. VEHICULAR ACCESS SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE CONSTRUCTION OF THE PROJECT.



NO.	REVISION	DATE

CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BIDARCA ST  
KENAI, ALASKA 99551  
TEL: (907) 283-9589  
NELSONENGINEER@ALASKA.NET



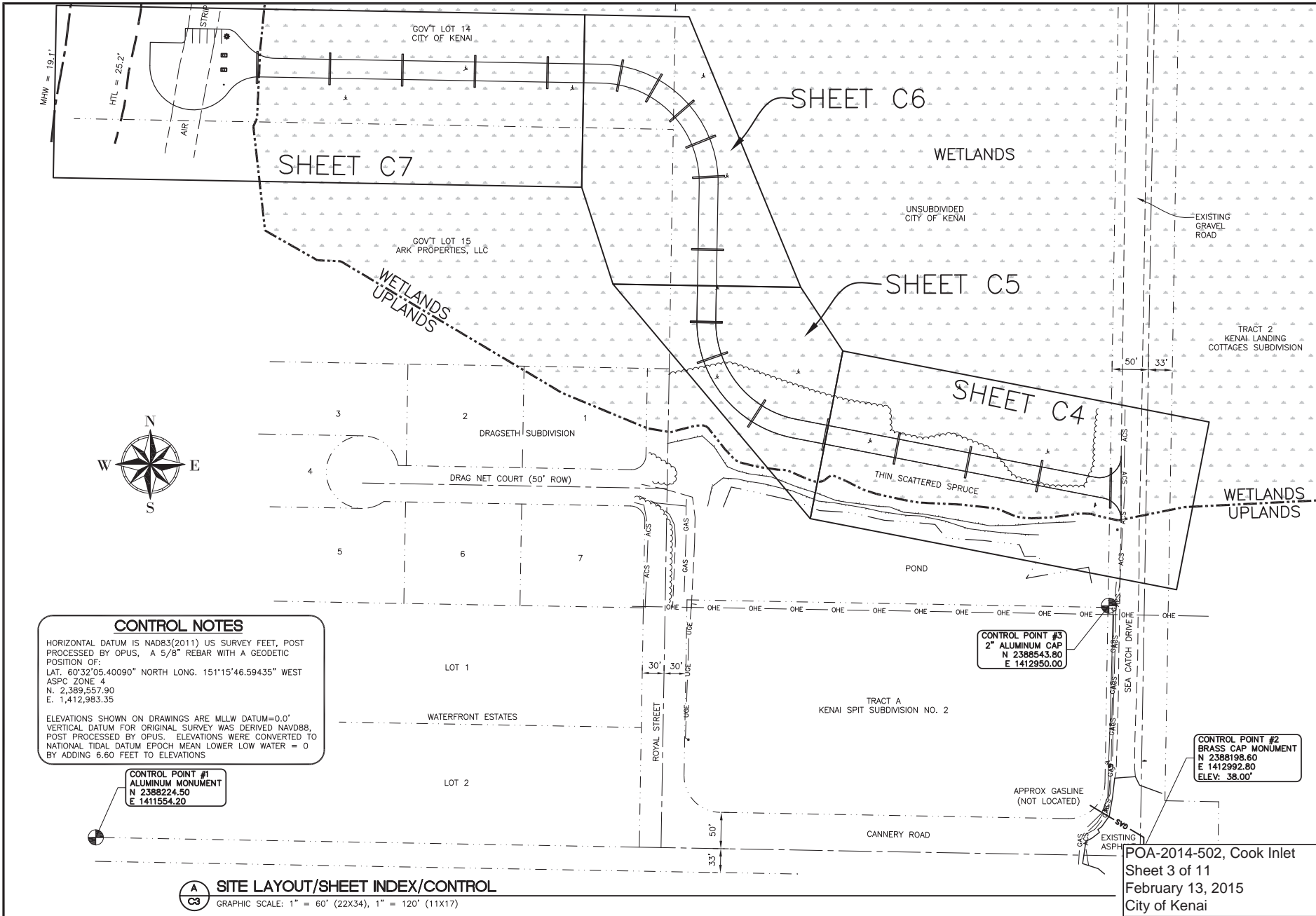
SOUTH BEACH ACCESS ROAD  
CITY OF KENAI  
LEGEND, ABBREVIATIONS, AND NOTES

PROJECT NO.  
1429  
DRAWN BY:  
MZO  
CHECKED BY:  
WJN

DATE: 12/16/2014  
SCALES: NOTED  
HORIZ. NOTED  
VERT. NOTED  
SHEET: C2

2 OF 11

POA-2014-502, Cook Inlet  
Sheet 2 of 11  
February 13, 2015  
City of Kenai



**CONTROL NOTES**  
 HORIZONTAL DATUM IS NAD83(2011) US SURVEY FEET, POST PROCESSED BY OPUS, A 5/8" REBAR WITH A GEODETIC POSITION OF:  
 LAT. 60°32'05.40090" NORTH LONG. 151°15'46.59435" WEST  
 ASPC ZONE 4  
 N. 2,389,557.90  
 E. 1,412,983.35  
 ELEVATIONS SHOWN ON DRAWINGS ARE MLLW DATUM=0.0'  
 VERTICAL DATUM FOR ORIGINAL SURVEY WAS DERIVED NAVD88, POST PROCESSED BY OPUS. ELEVATIONS WERE CONVERTED TO NATIONAL TIDAL DATUM EPOCH MEAN LOWER LOW WATER = 0' BY ADDING 6.60 FEET TO ELEVATIONS

**CONTROL POINT #1**  
 ALUMINUM MONUMENT  
 N 2388224.50  
 E 1411554.20

**CONTROL POINT #3**  
 2" ALUMINUM CAP  
 N 2388543.80  
 E 1412950.00

**CONTROL POINT #2**  
 BRASS CAP MONUMENT  
 N 2388198.60  
 E 1412992.80  
 ELEV: 38.00'

**A** **C3** **SITE LAYOUT/SHEET INDEX/CONTROL**  
 GRAPHIC SCALE: 1" = 60' (22X34), 1" = 120' (11X17)



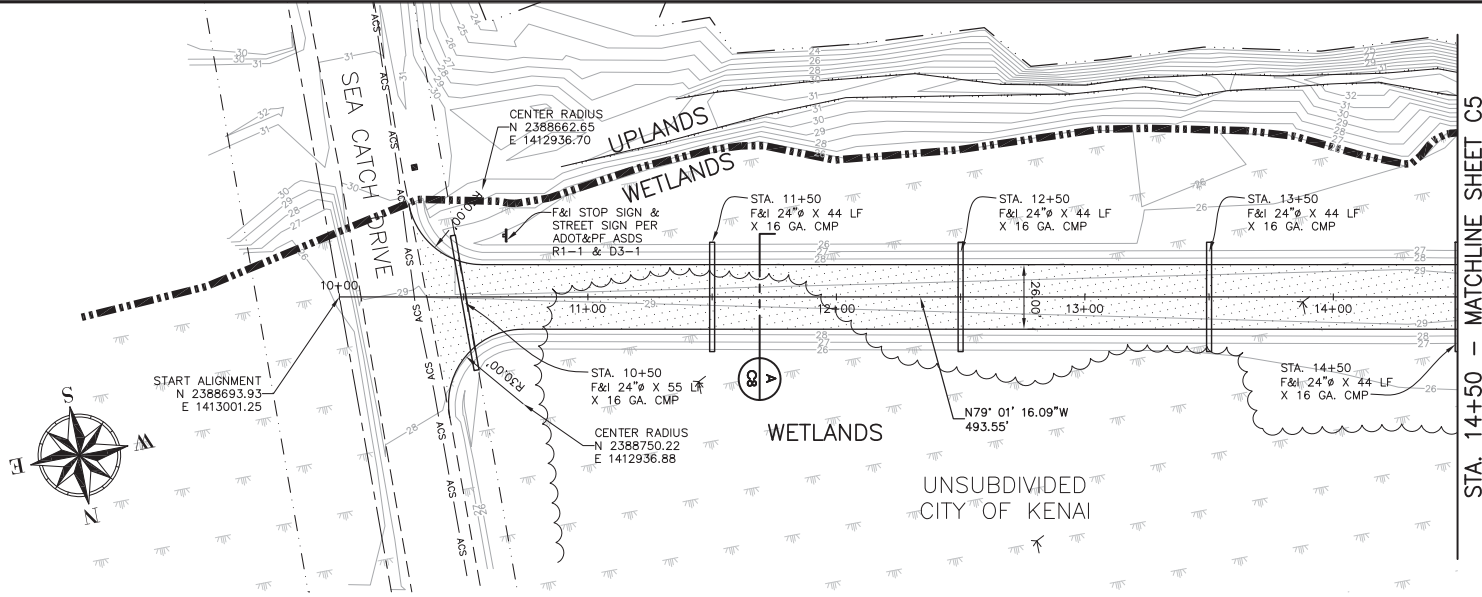
NO.	REVISION	DATE

**CONSULTING ENGINEERS**  
 STRUCTURAL/CIVIL  
 155 BIDARCA ST  
 KENAI, ALASKA 99541  
 TEL. (907) 283-9583  
 NELS@ENGINEER@ALASKA.NET

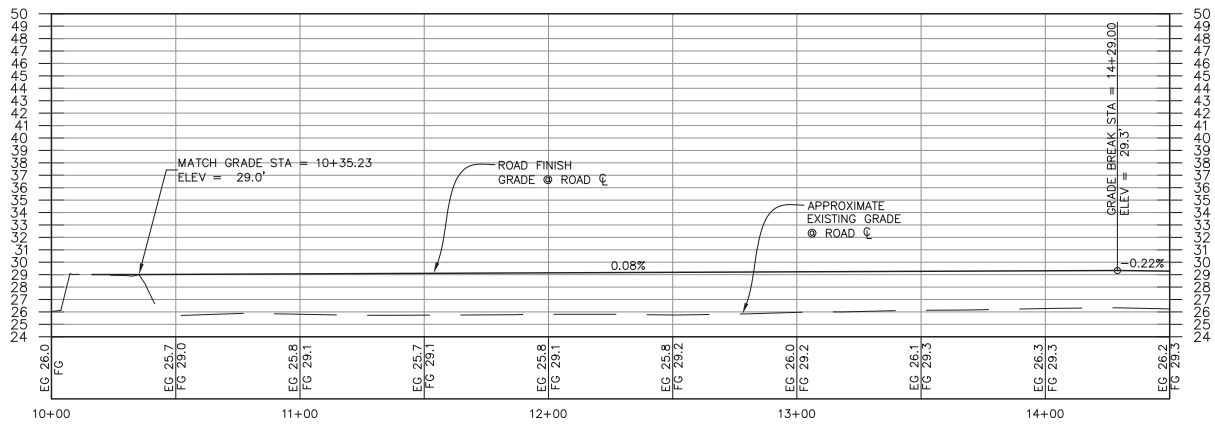
**SOUTH BEACH ACCESS ROAD**  
 CITY OF KENAI  
 SITE LAYOUT/SHEET INDEX/CONTROL

PROJECT NO. 1429  
 DRAWN BY: MZD  
 CHECKED BY: WJN  
 DATE: 12/16/2014  
 SCALES: NOTED  
 HORIZ. NOTED  
 VERT. NOTED  
 SHEET: **C3**  
 3 OF 11

POA-2014-502, Cook Inlet  
 Sheet 3 of 11  
 February 13, 2015  
 City of Kenai



**A**  
**C4** SOUTH BEACH ACCESS ROAD PLAN - STA. 10+00 TO 14+50  
GRAPHIC SCALE: 1" = 25' (22X34), 1" = 50' (11X17)



**B**  
**C4** SOUTH BEACH ACCESS ROAD PROFILE - STA. 10+00 TO 14+50  
HORIZONTAL SCALE: 1" = 25' (22X34), 1" = 50' (11X17); VERTICAL SCALE: 1" = 5' (22X34), 1" = 10' (11X17)

POA-2014-502, Cook Inlet  
Sheet 4 of 11  
February 13, 2015  
City of Kenai



NO.	REVISION	DATE

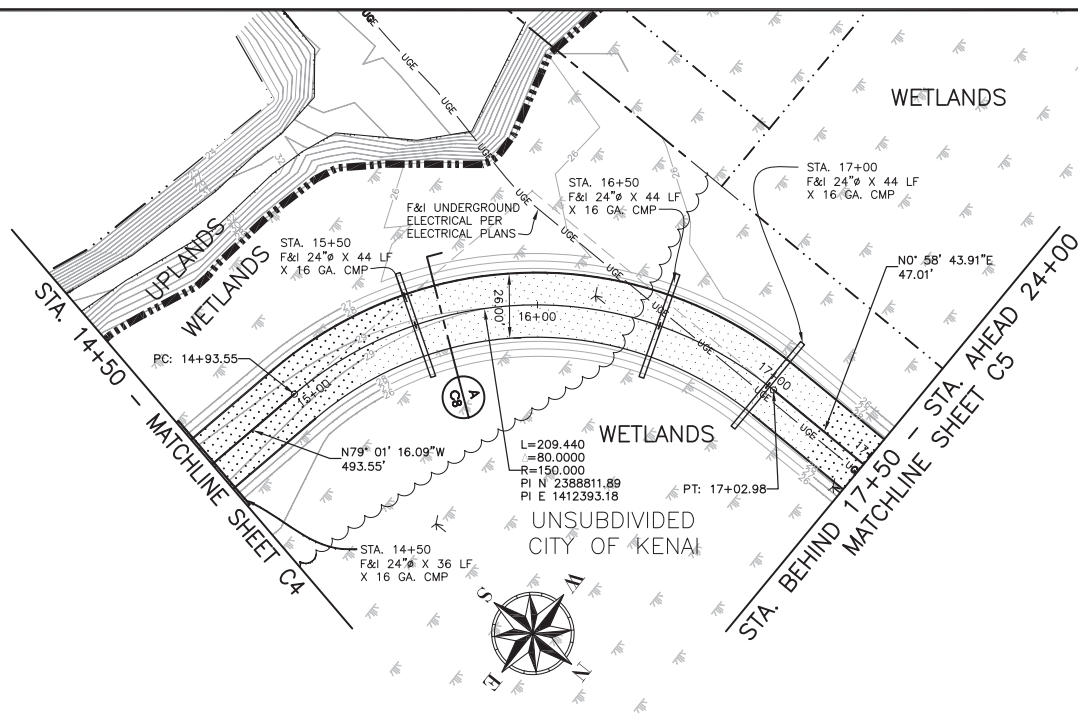
CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BROADWAY  
SEASIDE, ALASKA 99581  
TEL: (907) 283-9583  
NELSONENGINEER@ALASKA.NET



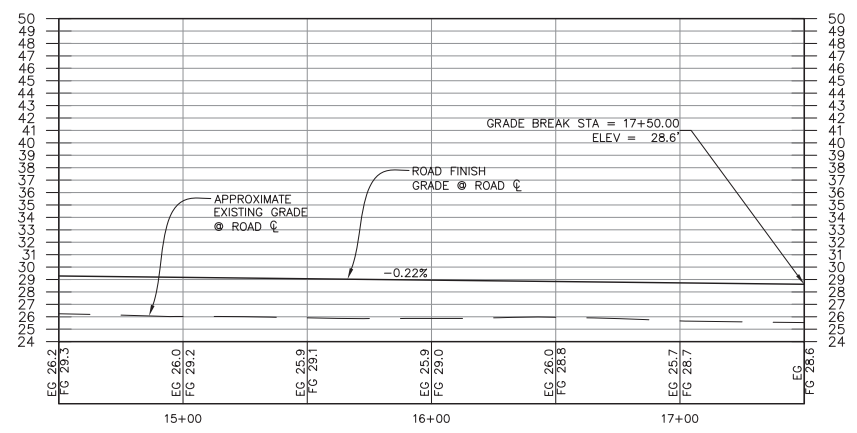
SOUTH BEACH ACCESS ROAD  
CITY OF KENAI  
BEACH ACCESS - PLAN AND PROFILE

PROJECT NO.  
1429  
DRAWN BY:  
MZO  
CHECKED BY:  
WJN

DATE: 12/16/2014  
SCALES: NOTED  
HORIZ. NOTED  
VERT. NOTED  
SHEET: **C4**



**A SOUTH BEACH ACCESS ROAD PLAN - STA. 14+50 TO 17+50**  
 GRAPHIC SCALE: 1" = 25' (22X34), 1" = 50' (11X17)



**B SOUTH BEACH ACCESS ROAD PROFILE - STA. 14+50 TO 17+50**  
 HORIZONTAL SCALE: 1" = 25' (22X34), 1" = 50' (11X17); VERTICAL SCALE: 1" = 5' (22X34), 1" = 10' (11X17)



NO.	REVISION	DATE

CONSULTING ENGINEERS  
 STRUCTURAL/CIVIL  
 155 BROADWAY, SUITE 11  
 ANCHORAGE, ALASKA 99501  
 TEL: (907) 263-9583  
 NELSONENGINEER@ALASKA.NET

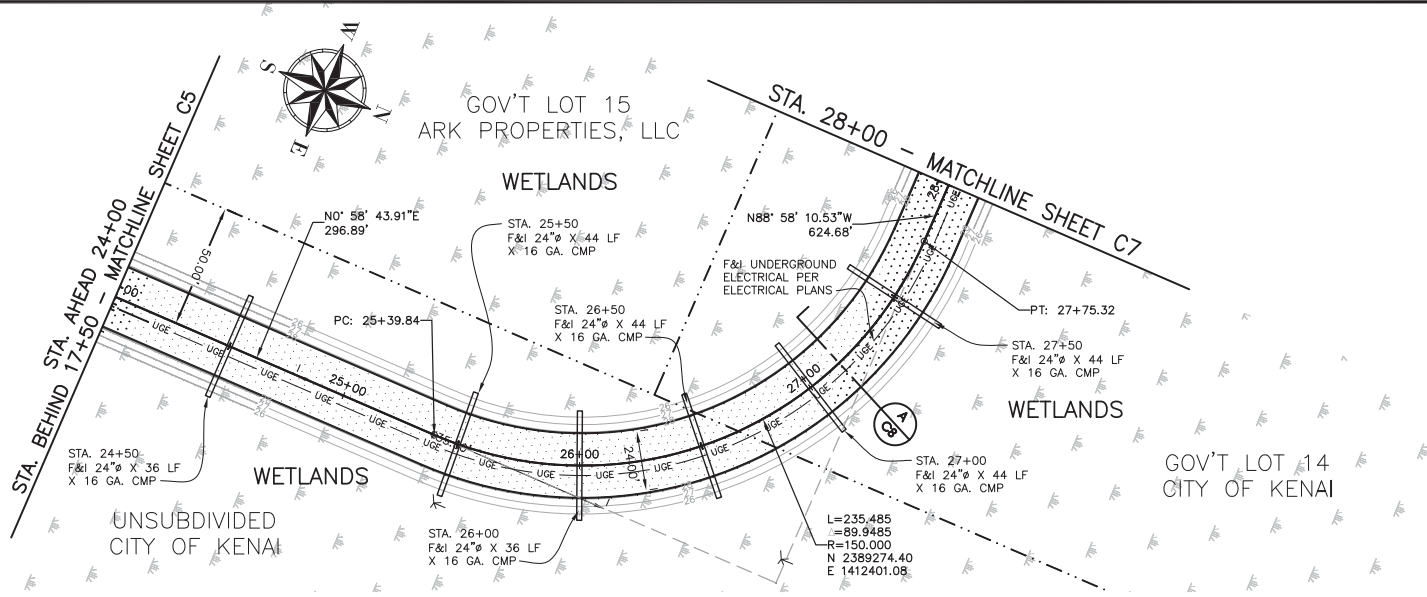
NELSON  
ENGINEERING

**SOUTH BEACH ACCESS ROAD**  
 CITY OF KENAI  
 BEACH ACCESS - PLAN AND PROFILE

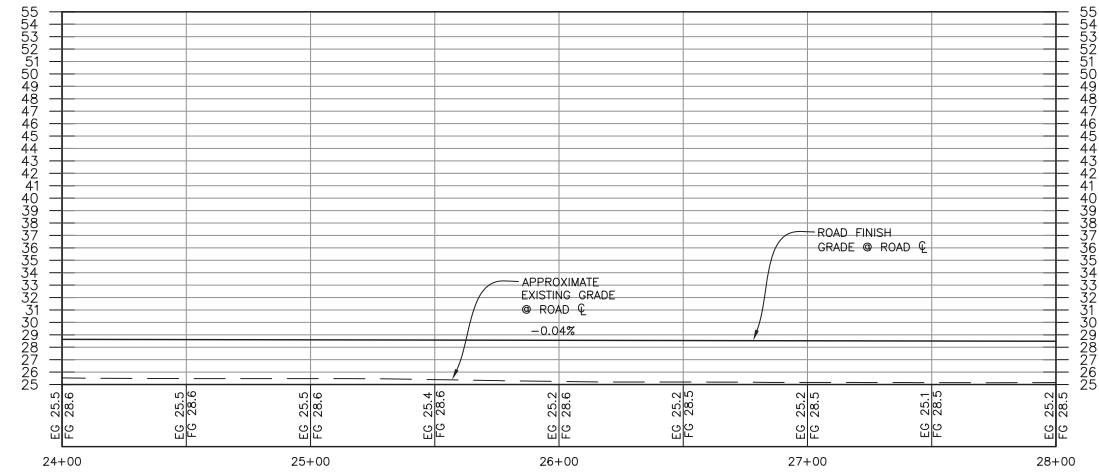
PROJECT NO.  
1429  
 DRAWN BY:  
MZD  
 CHECKED BY:  
WJN

DATE: 12/16/2014  
 SCALES: NOTED  
 HORIZ. NOTED  
 VERT. NOTED  
 SHEET: **C5**

POA-2014-502, Cook Inlet  
 Sheet 5 of 11  
 February 13, 2015  
 City of Kenai



**A**  
**C6** SOUTH BEACH ACCESS ROAD PLAN - STA. 24+00 TO 28+00  
GRAPHIC SCALE: 1" = 25' (22X34), 1" = 50' (11X17)



**B**  
**C6** SOUTH BEACH ACCESS ROAD PROFILE - STA. 24+00 TO 28+00  
HORIZONTAL SCALE: 1" = 25' (22X34), 1" = 50' (11X17); VERTICAL SCALE: 1" = 5' (22X34), 1" = 10' (11X17)



NO.	REVISION	DATE

CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BIDARCA ST  
KENAI, ALASKA 99541  
TEL. (907) 283-9583  
NELSONENGINEER@ALASKA.NET



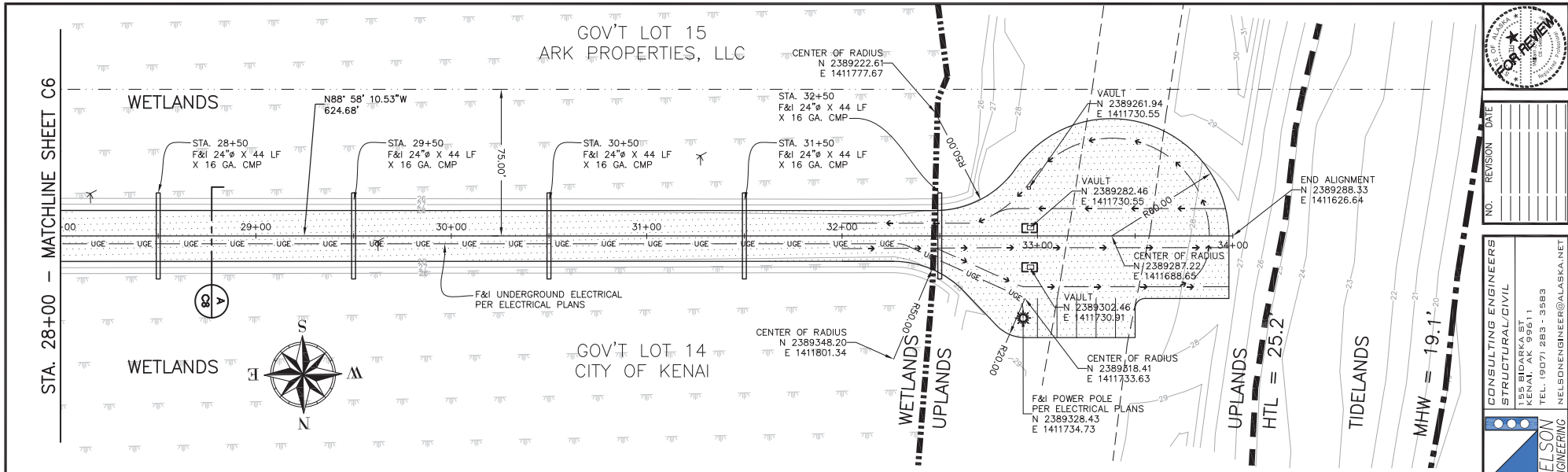
SOUTH BEACH ACCESS ROAD  
CITY OF KENAI  
BEACH ACCESS - PLAN AND PROFILE

PROJECT NO.  
1429  
DRAWN BY:  
MZD  
CHECKED BY:  
WJN

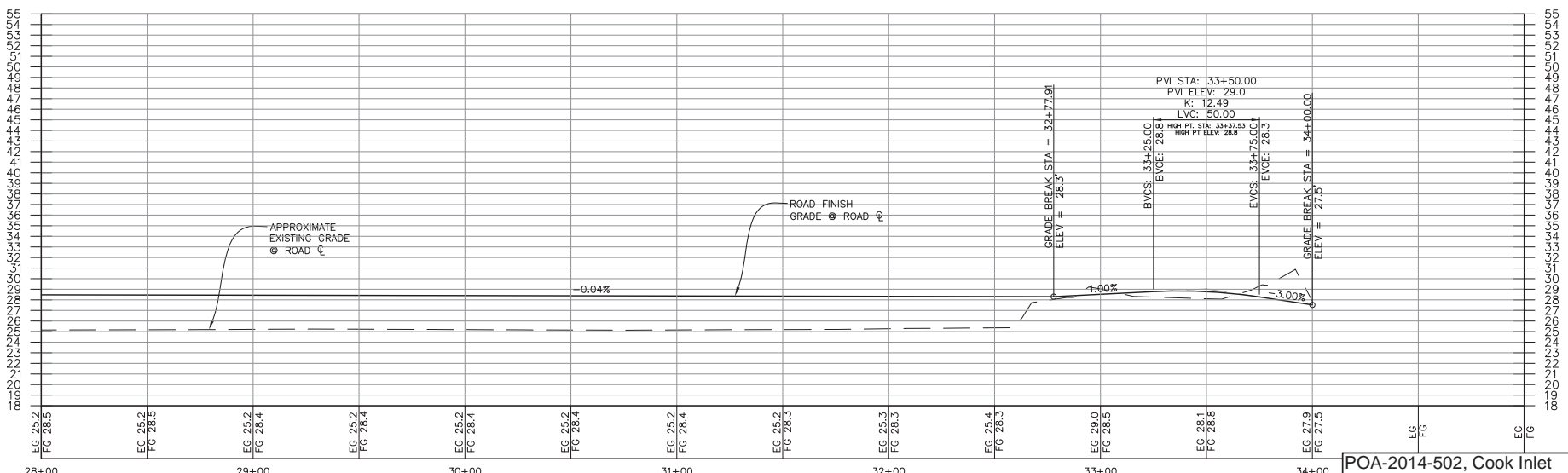
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SCALES: NOTED  
HORIZ. NOTED  
VERT. NOTED  
SHEET: **C6**  
6 OF 11

POA-2014-502, Cook Inlet  
Sheet 6 of 11  
February 13, 2015  
City of Kenai





**A** SOUTH BEACH ACCESS ROAD PLAN - STA. 28+00 TO 34+00  
 GRAPHIC SCALE: 1" = 25' (22X34), 1" = 50' (11X17)



**B** SOUTH BEACH ACCESS ROAD PROFILE - STA. 28+00 TO 34+00  
 HORIZONTAL SCALE: 1" = 25' (22X34), 1" = 50' (11X17); VERTICAL SCALE: 1" = 5' (22X34), 1" = 10' (11X17)

POA-2014-502, Cook Inlet  
 Sheet 7 of 11  
 February 13, 2015  
 City of Kenai

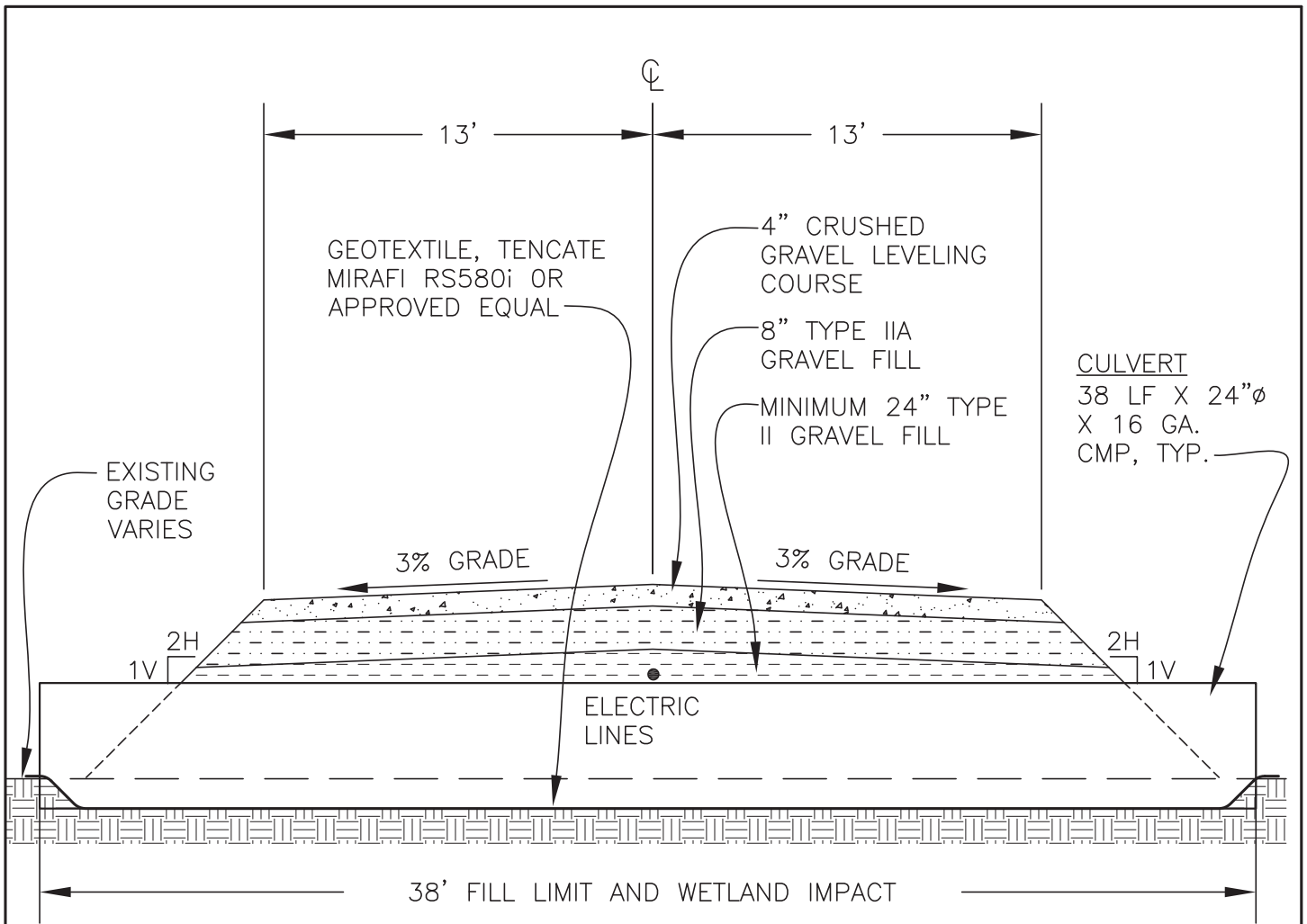


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CONSULTING ENGINEERS  
 STRUCTURAL/CIVIL  
 155 BIRDARCO ST  
 ANCHORAGE, ALASKA 99501  
 TEL: (907) 263-9583  
 NELSONENGINEER@ALASKA.NET  
**NELSON**  
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**SOUTH BEACH ACCESS ROAD**  
 CITY OF KENAI  
 BEACH ACCESS - PLAN AND PROFILE

PROJECT NO. 1429  
 DRAWN BY: MZD  
 CHECKED BY: WJN  
 DATE: 12/16/2014  
 SCALES: NOTED  
 HORIZ. NOTED  
 VERT. NOTED  
 SHEET: C7  
 7 OF 11



- TYPICAL ROAD SECTION NOTES**
1. PLACE GEOTEXTILE DIRECTLY ON EXISTING GROUND AND OVERLAPPED A MINIMUM OF 36".
  2. PLACE ALL GRAVEL FILL IN LOOSE LIFTS NOT EXCEEDING 12" THICKNESS AND COMPACT TO 95% OF MAXIMUM DRY DENSITY.
  3. INITIAL 2' LIFT OF FILL MAY BE PLACED ON GEOTEXTILE PRIOR TO COMPACTING.

A  
4

**SOUTH BEACH ACCESS ROAD - RD SECTION**

GRAPHIC SCALE: NTS

**DESCRIPTION: SOUTH BEACH ACCESS ROAD**

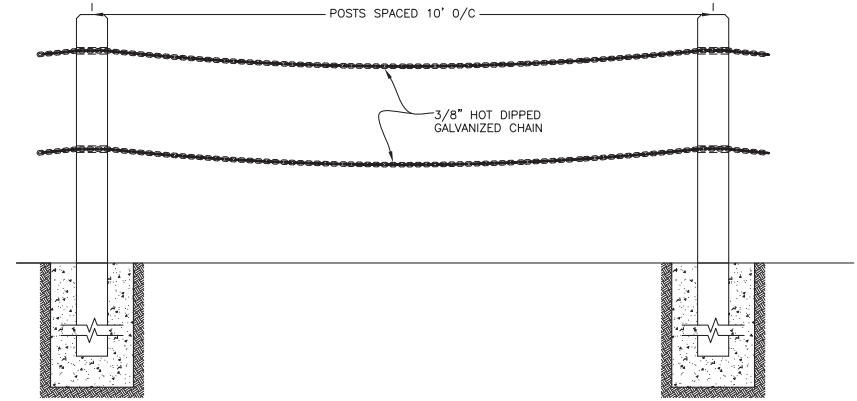
**WETLANDS IMPACT  
TYPICAL ROAD SECTION**

POA-2014-502, Cook Inlet  
Sheet 8 of 11  
February 13, 2015  
City of Kenai

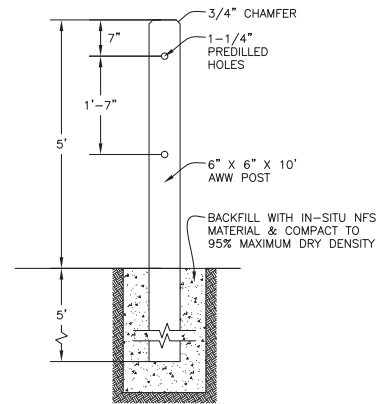




**A**  
**C9** UPLAND FENCE PLAN  
GRAPHIC SCALE: NTS



**FRONT VIEW**



**SIDE VIEW**

- FENCE NOTES**
1. 6" X 6" X 10' AWW POST WITH 3/4" CHAMFER ON ONE END
  2. INCISED TREATMENT OK & COLOR TO BE BROWN
  3. #2 OR BETTER HEM-FIR
  4. 0.60 PCF TREATMENT
  5. PRE-DRILLED 1-1/4" HOLES SPACED AS SHOWN. HOLES & CHAMFER ON ONE END SHALL BE DRILLED AND CUT PRIOR TO WOOD TREATMENT.
  6. LOCATE FENCE IN UPLAND ZONE AS DIRECTED BY THE ENGINEER.

**B**  
**C9** UPLAND FENCE DETAILS  
GRAPHIC SCALE: NTS

POA-2014-502, Cook Inlet  
Sheet 9 of 11  
February 13, 2015  
City of Kenai



NO.	REVISION	DATE

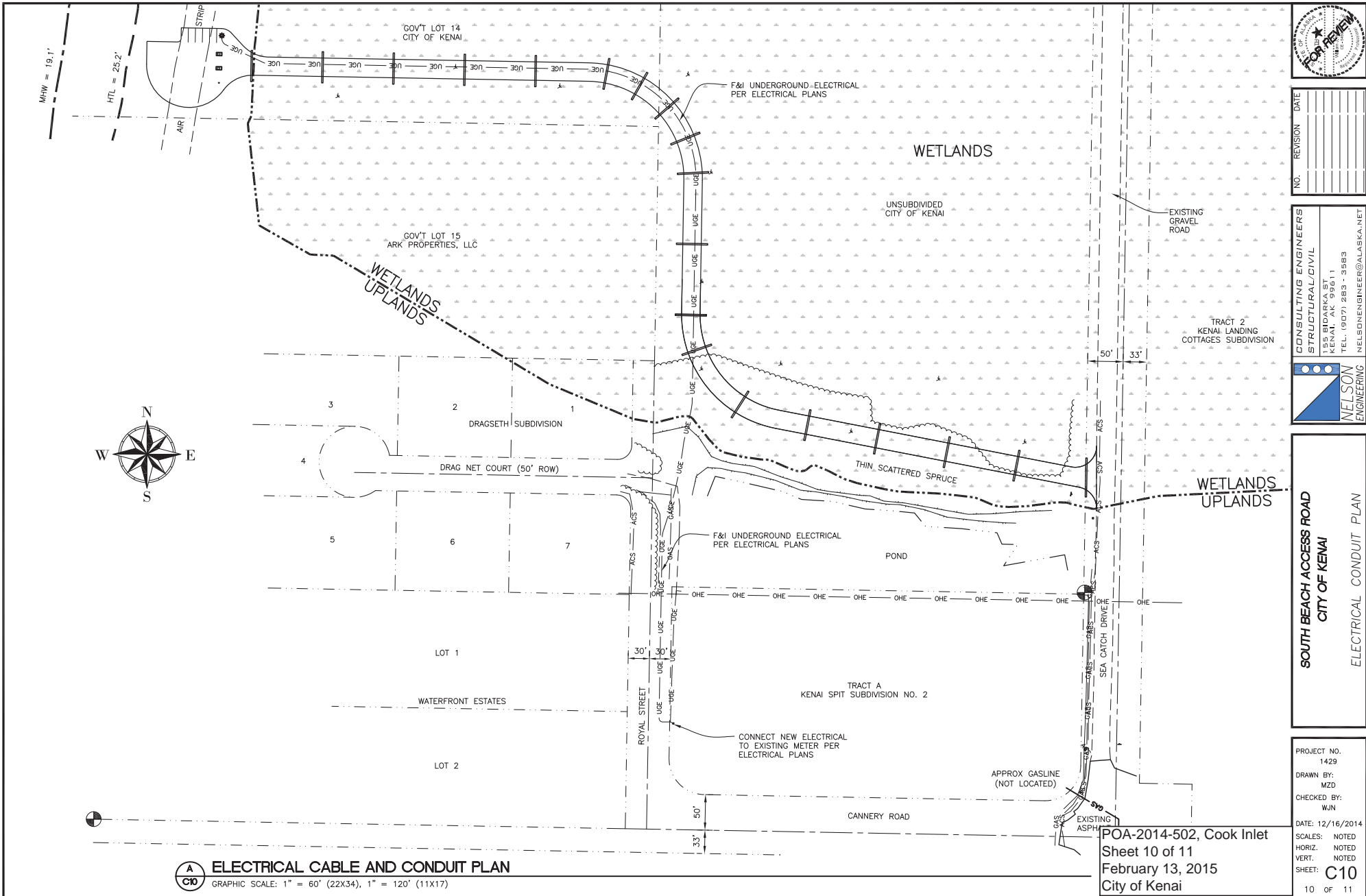
CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 MIDMARK ST  
KENAI, ALASKA 99581  
TEL: (907) 263-9583  
NELSONENGINEER@ALASKA.NET



**SOUTH BEACH ACCESS ROAD**  
**CITY OF KENAI**  
**UPLAND FENCE PLAN AND DETAILS**

PROJECT NO.  
1429  
DRAWN BY:  
MZD  
CHECKED BY:  
WJN

DATE: 12/16/2014  
SCALE: NOTED  
HORIZ: NOTED  
VERT: NOTED  
SHEET: **C9**



**A**  
**C10** **ELECTRICAL CABLE AND CONDUIT PLAN**  
GRAPHIC SCALE: 1" = 60' (22X34), 1" = 120' (11X17)



NO.	REVISION	DATE

CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BIRDARCO SET  
KENAI, ALASKA 99541  
TEL: (907) 263-9583  
NELSON  
ENGINEERING  
NELSONENGINEER@ALASKA.NET

**SOUTH BEACH ACCESS ROAD**  
**CITY OF KENAI**  
**ELECTRICAL CONDUIT PLAN**

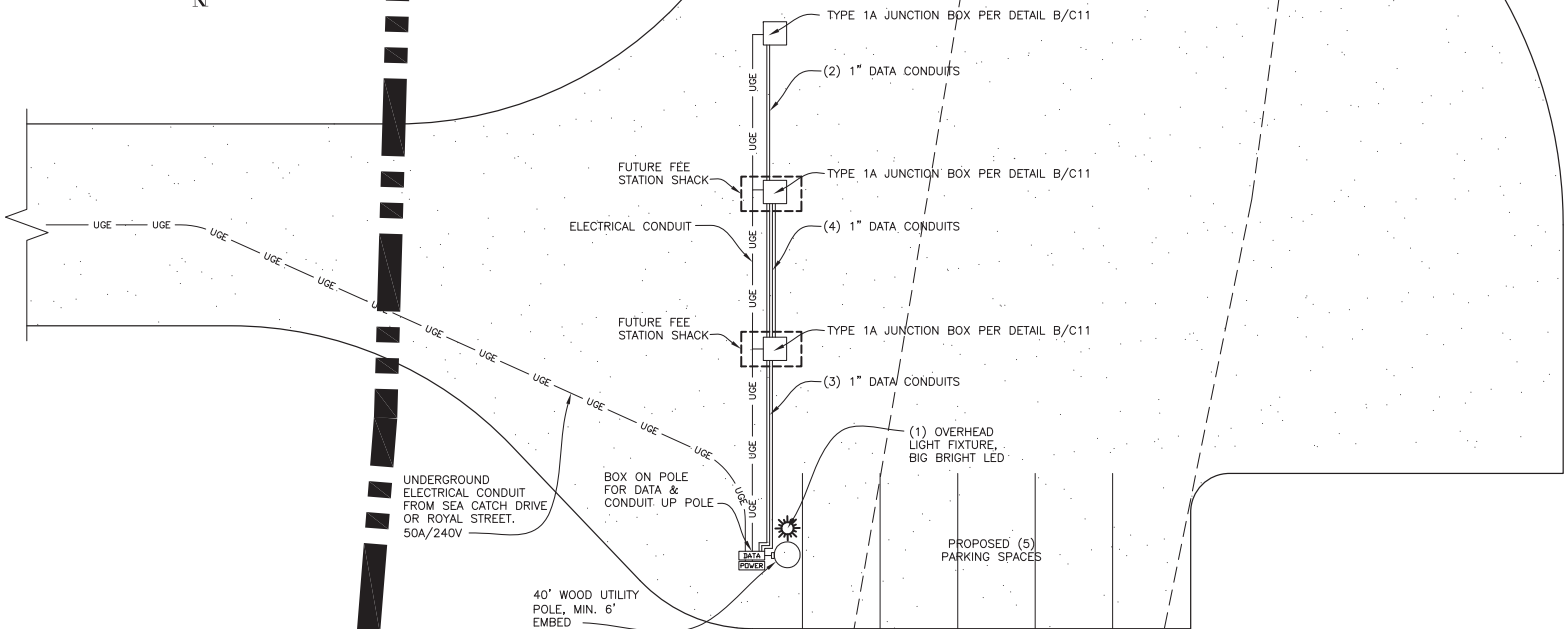
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DRAWN BY:	MZD
CHECKED BY:	WJN
DATE:	12/16/2014
SCALES:	NOTED
HORIZ.:	NOTED
VERT.:	NOTED
SHEET:	<b>C10</b>
	10 OF 11

POA-2014-502, Cook Inlet  
Sheet 10 of 11  
February 13, 2015  
City of Kenai

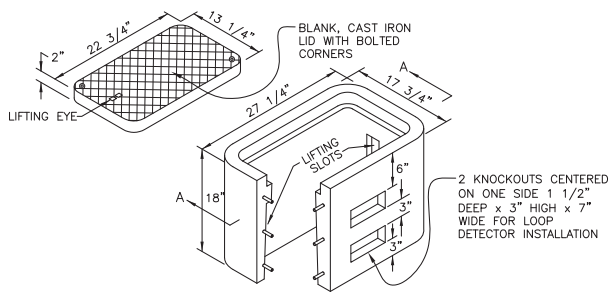


WETLANDS  
UPLANDS

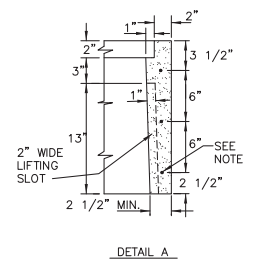
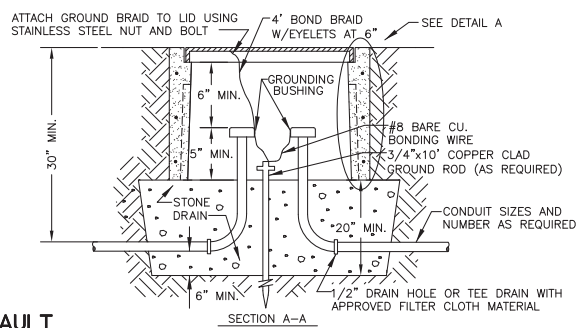
EXISTING AIRSTRIP



**A ENLARGED CIVIL ELECTRICAL PLAN**  
GRAPHIC SCALE: 1" = 8' (22X34), 1" = 16' (11X17)



**B TYPICAL TYPE 1A JUNCTION BOX VAULT**  
GRAPHIC SCALE: NTS



NOTE: REINFORCEMENT MAY CONSIST OF:  
1. 9 GAGE WELDED WIRE FRAME.  
2. 3-6 GAGE HORIZONTAL WIRE LOOPS.  
3. SYNTHETIC FIBER REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER.

POA-2014-502, Cook Inlet  
Sheet 11 of 11  
February 13, 2015  
City of Kenai

HTL = 25.2'  
UPLANDS  
TIDELANDS



NO.	REVISION	DATE

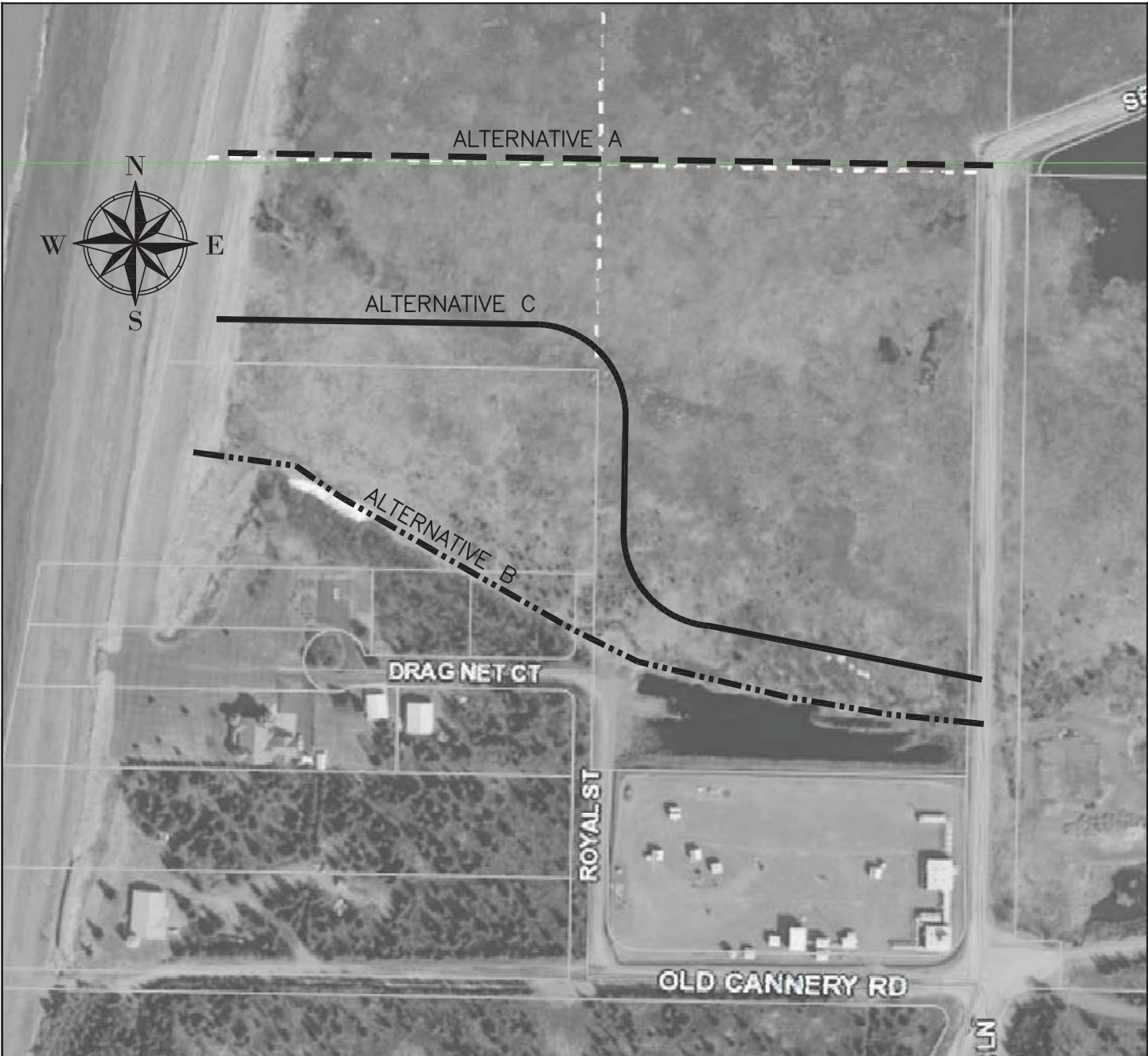
CONSULTING ENGINEERS  
STRUCTURAL/CIVIL  
155 BROADWAY, SUITE 111  
KENAI, ALASKA 99551  
TEL: (907) 283-9583  
NELSONENGINEER@ALASKA.NET

NELSON  
ENGINEERING

SOUTH BEACH ACCESS ROAD  
CITY OF KENAI  
ENLARGED ELECTRICAL PLAN & DETAILS

PROJECT NO. 1429  
DRAWN BY: MZD  
CHECKED BY: WJN

DATE: 12/16/2014  
SCALES: NOTED  
HORIZ. NOTED  
VERT. NOTED  
SHEET: C11  
11 OF 11



**LEGEND**

-  ALTERNATIVE A
-  ALTERNATIVE B
-  ALTERNATIVE C – (PREFERRED)

**A**  
**2** **PROPOSED ALTERNATIVE ALIGNMENT**

GRAPHIC SCALE: 1" = 250'



**DESCRIPTION: SOUTH BEACH ACCESS ROAD**

**PROPOSED ALTERNATIVE ALIGNMENT**

**LOCALGOVT: CITY OF KENAI**  
**APPLICANT: CITY OF KENAI**  
**AGENT: SOLSTICE ALASKA CONSULTING**

POA-2014-502, Cook Inlet  
Figure 1 of 1  
February 13, 2015  
City of Kenai