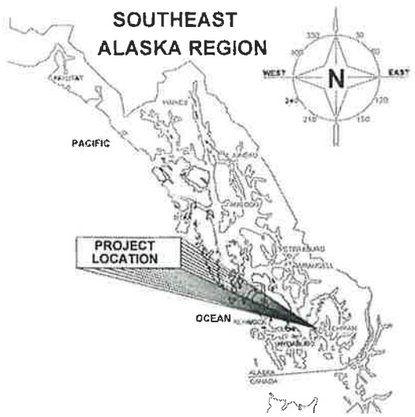
State of Alaska

Department of Transportation and Public Facilities Southeast Region

The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.

Cody Sutton

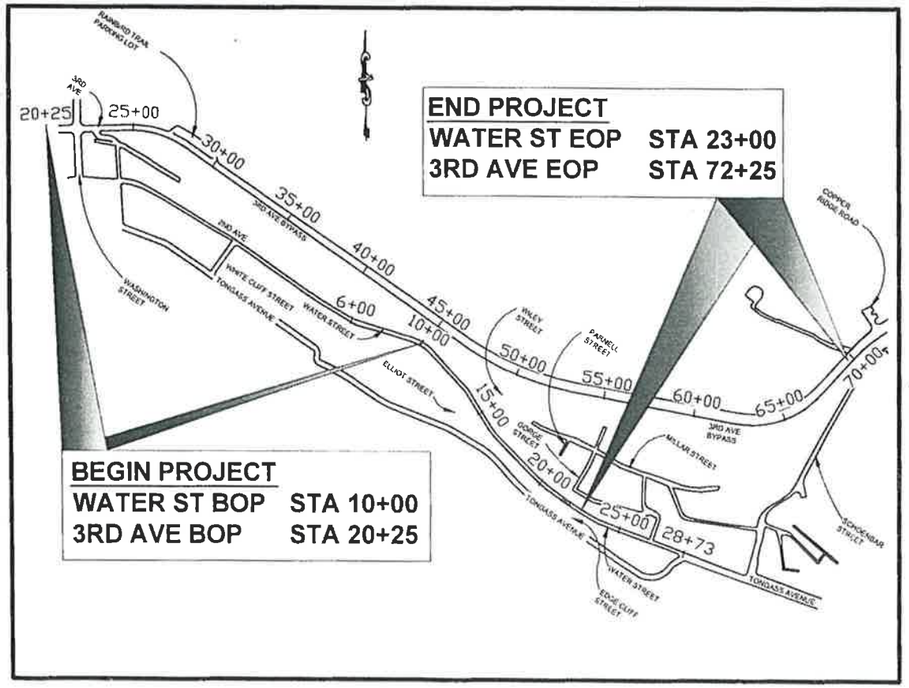


KETCHIKAN, ALASKA
WATER STREET

February 2, 2015

KETCHIKAN ADVANCE WATER STREET TRUNK RELOCATION
PROJECT NO BR-000S(735)~~69548~~ [redacted]

PROJECT NUMBER IS: 69548



VICINITY MAP

DESIGN DESIGNATION (WATER STREET)

FUNCTIONAL CLASS: URBAN LOCAL

ADT 2010	=	726
ADT 2034	=	818
DHV (10.7%) 2010	=	60
DHV (10.7%) 2034	=	70
% T	=	5.5
V	=	25
ESAL	=	50,000

DESIGN DESIGNATION (3RD AVENUE)

FUNCTIONAL CLASS: ARTERIAL

ADT 2012	=	4085
ADT 2023	=	4600
DHV (10.7%) 2012	=	230
DHV (10.7%) 2023	=	460
% T	=	5.5
V	=	35
ESAL	=	<500,000

PROJECT SUMMARY (WATER STREET)

CDS ROUTE NO	=	291404
CDS MILEPOINT		MP 0.035 TO MP 0.574
LENGTH OF PROJECT	=	1300 FT
LENGTH OF BRIDGE	=	981 FT
LENGTH OF PAVING	=	1300 FT
WIDTH OF PAVING	=	18 FT

PROJECT SUMMARY (3RD AVENUE)

CDS ROUTE NO	=	291433
CDS MILEPOINT		MP 0.035 TO MP 0.574
LENGTH OF PROJECT	=	4900 FT

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	G-00.02	G-46.11
C-04.12	G-04.10S	
L-30.10	G-04.10W	
T-05.10	G-10.01	
U-03.00	G-27.11	
	G-28.00	

INDEX

Asbuilt Plans

Project Engineer: Mandi Bolshakoff

Contractor: City Electric

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. [signature] Date 1/15/16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-A01(AUR).DWG TAB:A01
Tuesday, October 22, 2013 3:40:59 PM
PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

STATE OF ALASKA * 49TH * David Pyatt CE-13269 REGISTERED PROFESSIONAL ENGINEER

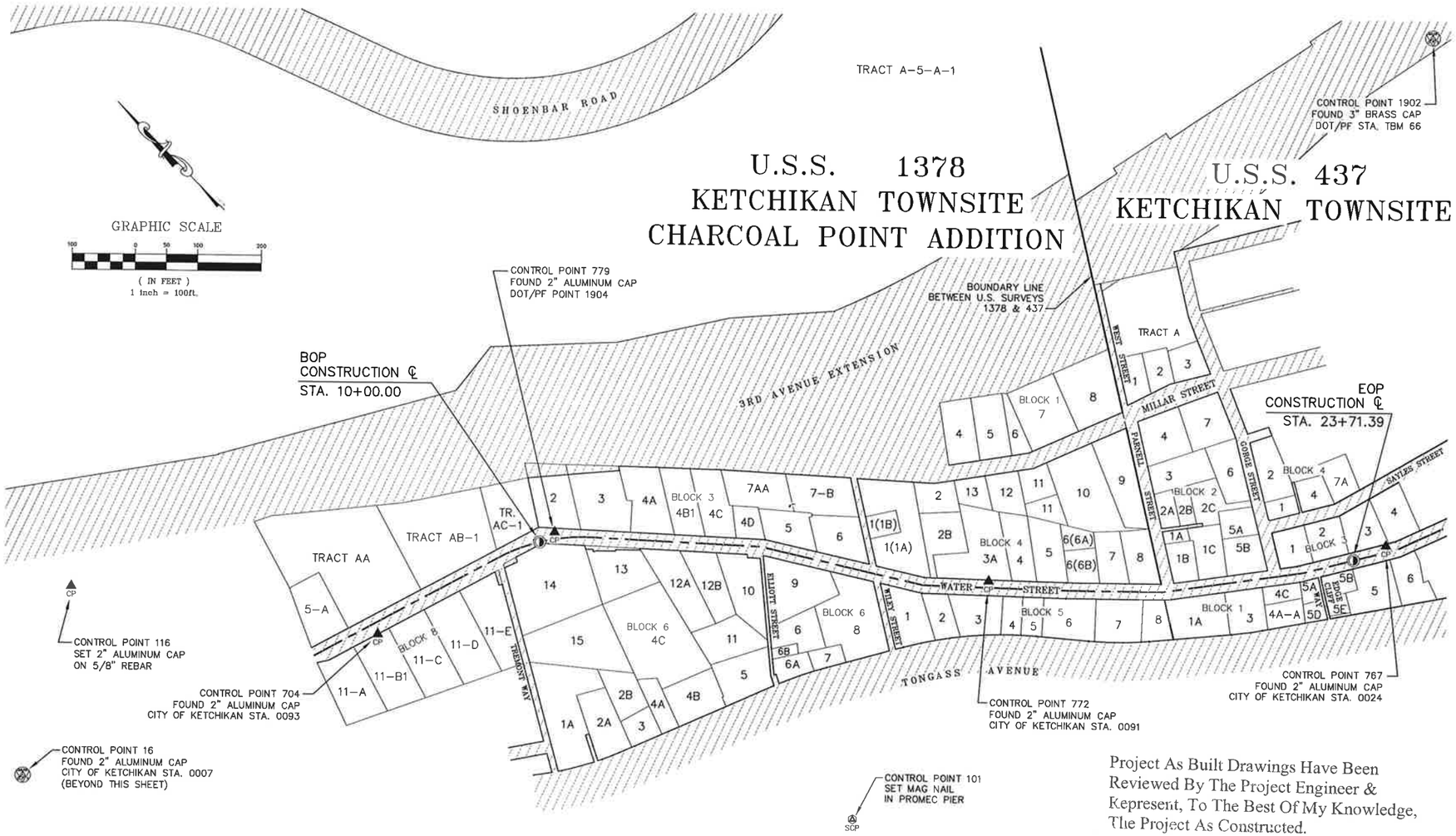
APPROVED: [signature] 9/2/14
REGIONAL PRE-CONSTRUCTION ENGINEER L. PAT CARROLL, P.E. DATE

APPROVED: [signature] 9/2/14
DIRECTOR OF DESIGN AND CONSTRUCTION, SOUTHEAST REGION CHUCK CORREA, P.E.

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
ALASKA	BR-000S(735) ~ 69548	2014	A01	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

VERTICAL CONTROL STATEMENT

Historical Basis of Vertical Control Statement:
KGB control monument 1015 (Tongass Ave. Project point No. 3012), a DOH monument in a case in front of 2324 Tongass Ave. was held as the Basis of Vertical Control with an elevation of 21.90' above MLLW from the Ketchikan Gateway Borough Control Network of 1984 (KGBCN84).

Historical Vertical Control Note:
KGBCN84 monument 1015 is also Monument "I", a Tongass Avenue centerline monument originally depicted on "Coordinate Map of Ketchikan, Alaska", Plat V1-112 (see note Basis of Bearing). The monument no longer exists. Much of Tongass Avenue has experienced recent re-construction.

Basis of Vertical Control:
Basis of Vertical Control is vertical datum KGBCN84. DOT&PF drawing "tongass_ave09.dwg" shows point nos. 1648-1650, along Tongass Avenue, near this project and with KGBCN84 elevations. 1648-1650 are R&M Eng. Ketchikan monuments TA-19, TA-20 & TA-21, respectively. All three 2" aluminum cap monuments were recovered and examined for relative elevations with respect to record. Station TA-21 (1650) was held for elevation: Elev. = 21.94'. Note: additional stations shown in "tongass_ave09.dwg" southeast of TA-19 (1648) and within the project arena were not found and are assumed destroyed by recent construction.

Station	Measured Elev.	Record Elev.
TA-21 (1650)	21.940'	21.940' (Held)
TA-20 (1649)	21.764'	21.760'
TA-19 (1648)	21.530'	21.540'

Elevations were transferred to primary horizontal control and benchmarks using differential levels. Topography and planimetrics were measured using optical instrumentation and trigonometric methods.

NOTES

1. Whether listed or not, All monuments or property markers, corners, or accessories, which will be disturbed or buried, shall be referenced or re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).
2. ROW location is shown for orientation purpose only. Refer to AKDOT ROW Maps for ROW information.
3. Horizontal and Vertical Control must be field verified by the contractor. Discrepancies of note will be reported to the contracting agency.

LEGEND

DOT&PF GPS CONTROL	PRIMARY PROPERTY MONUMENT
PRIMARY PROJECT CONTROL (CP)	SECONDARY PROPERTY MONUMENT
SECONDARY PROJECT CONTROL (SCP)	CONSTRUCTION ℄ (NOT SET)
BLM/GLO MONUMENT	SURVEY POINT NUMBER (123)

SURVEYOR'S CERTIFICATE

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska, and that this plat was made by me or under my direct supervision. I declare that this plat is based on information compiled from record data and controlled by recovered monuments, and that all dimensions and other details are correct.

Randal H. Brinker 8/28/14

RANDAL H. BRINKER, L.S. 8852 Date

HORIZONTAL CONTROL STATEMENT

Control Methodology:
Primary horizontal control was established using Static GPS techniques with Trimble dual frequency receivers. The GPS vectors were adjusted by simultaneous least squares methods using Trimble Business Center software. All vectors were constrained to DOT&PF Control Stations #1902 and #16. Note: A free adjustment, holding #1902 produced a radial error at #16 of 0.020' (5 ppm).

Coordinate System:
This project is located entirely within the "Gravina" coordinate system; a U.S. Survey Feet, local grid established by State of Alaska, Department of Transportation and Public Facilities, Southeast Region, Right-of-Way Section, for a select, specific area of Ketchikan, Alaska. All measurements, dimensions, coordinates and elevations on this map are in U.S. Survey Feet as related to, and associated with Gravina Grid.

Basis of Coordinates:
Basis of Coordinates is Point "TBM-66" (a 3" diameter domed brass disk grouted flush on a bedrock outcrop along the southerly side of 3rd Avenue Extension). Said point has Gravina Grid coordinates of 89745.1673 N, 104488.6036 E. (DOT reference point #1902.)

Basis of Bearings:
Basis of Bearings is the "Ketchikan Gateway Borough Control Network of 1984" (KGBCN84) NAD27 bearing between monuments "J" and "I" (KGBCN84 pt. nos. 1014 & 1015). Monuments "J" and "I" are Tongass Avenue monuments originally depicted on "Coordinate Map of Ketchikan, Alaska", Plat V1-112. Said KGBCN84 NAD27 bearing between monuments "J" and "I" is S88°29'20"W.

Translation Parameters:
To convert Alaska State Plane Zone 1, NAD83(CORS96)(EPOCH: 2003.0000), U.S Survey Feet coordinates to the local project U.S. Survey Feet coordinates:
Step 1: Scale by 1.000099310 (1/.9999007) (base point 0,0).
Step 2: Rotate -00°00'18" (base point 0,0).
Step 3: Translate using -1199866.83352 N, -3000134.77840 E.
To convert local project coordinates to Alaska State Plane Zone 1, NAD83(CORS96)- (EPOCH: 2003.0000), U.S. Survey Feet coordinates:
Step 1: Scale by .9999007 (base point 0,0).
Step 2: Rotate +00°00'18" (base point 0,0).
Step 3: Translate using +1199485.89702 N, +2999941.55133 E.

PROJECT PRIMARY CONTROL POINTS

POINT	LOCAL COORDINATES		AKSPC ZONE 1		GEOGRAPHIC COORDINATES		ELEVATION
	NORTHING	EASTING	NORTHING	EASTING	NORTH LATITUDE	WEST LONGITUDE	
16	90429.1907	100406.7659	1289897.3465	3100346.2371	55° 20' 57.87348"	131° 40' 31.30090"	
101	89506.0125	102969.0892	1288974.0364	3102908.2254	55° 20' 48.04424"	131° 39' 47.46419"	22.28
116	90634.5691	102342.0505	1290102.5356	3102281.3474	55° 20' 59.34278"	131° 39' 57.73657"	
704	90240.4331	102635.4499	1289708.4131	3102574.6834	55° 20' 55.37555"	131° 39' 52.86230"	136.80
767	89225.4608	103874.0745	1288693.4336	3103813.0963	55° 20' 45.01992"	131° 39' 31.95998"	74.84
772	89624.4952	103386.3961	1289092.4709	3103325.5012	55° 20' 49.09154"	131° 39' 40.18970"	92.68
779	90159.7076	102948.6286	1289627.6683	3102887.8239	55° 20' 54.49028"	131° 39' 47.48828"	128.80
1902	89745.1673	104488.6036	1289213.0348	3104427.6098	55° 20' 49.96293"	131° 39' 21.07280"	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB
DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SURVEY CONTROL SHEET

TAB: A04 Thursday, August 28, 2014 12:31:14 PM HANK BRINKER

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735)	2014	A04	78

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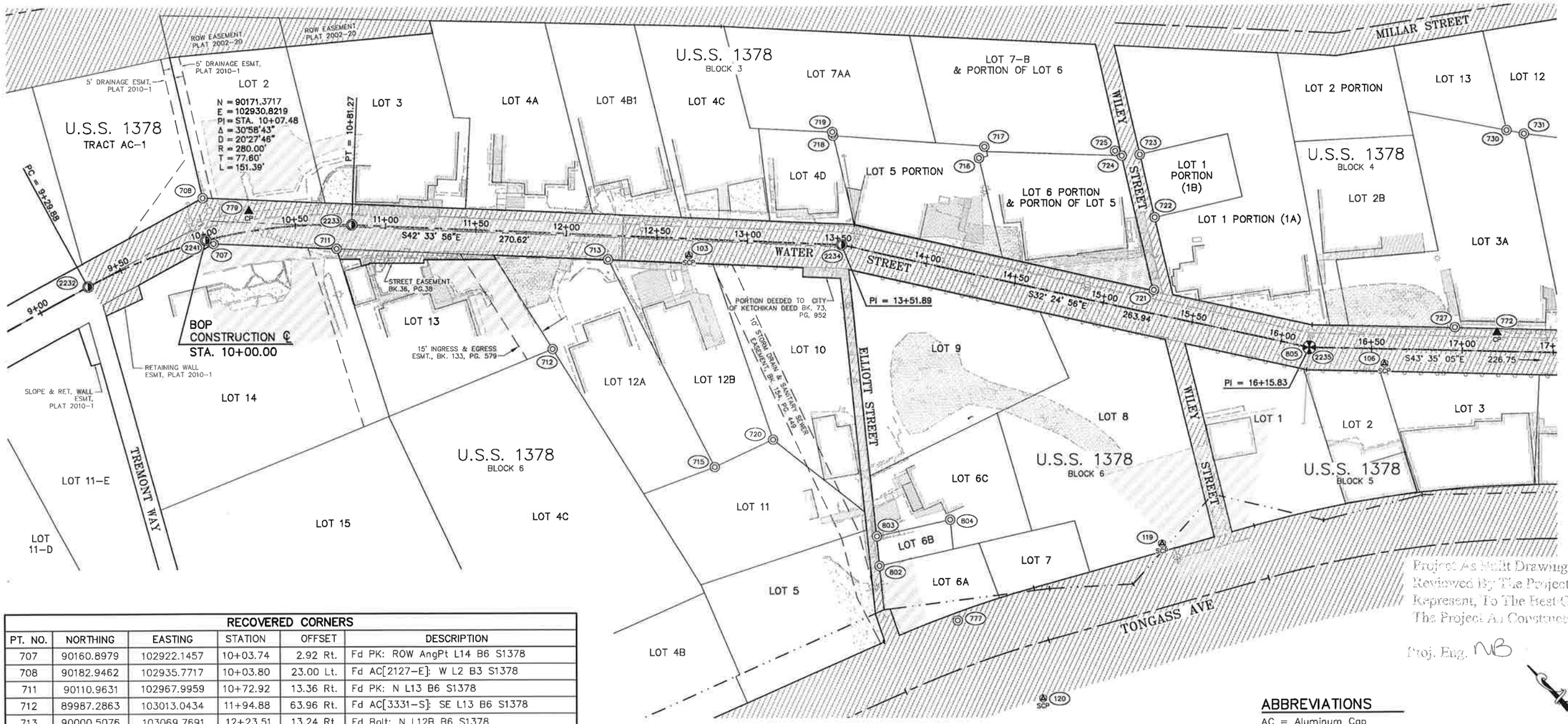

RECOVERED CORNERS					
PT. NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
707	90160.8979	102922.1457	10+03.74	2.92 Rt.	Fd PK: ROW AngPt L14 B6 S1378
708	90182.9462	102935.7717	10+03.80	23.00 Lt.	Fd AC[2127-E]: W L2 B3 S1378
711	90110.9631	102967.9959	10+72.92	13.36 Rt.	Fd PK: N L13 B6 S1378
712	89987.2863	103013.0434	11+94.88	63.96 Rt.	Fd AC[3331-S]: SE L13 B6 S1378
713	90000.5076	103069.7691	12+23.51	13.24 Rt.	Fd Bolt: N L12B B6 S1378
715	89877.9560	103029.9934	12+86.86	125.44 Rt.	Fd PC[4110-S]: SE 12A B6 S1378
720	89865.8062	103063.5305	13+18.50	108.95 Rt.	Fd Rbr: SE 12B B6 S1378
719	89962.4293	103206.8921	13+44.31	61.99 Lt.	Fd PC[3408-S]: E L4D B3 S1378
718	89960.6878	103205.7150	13+44.80	59.95 Lt.	Fd PC[3408-S]: N L5 B3 S1378
803	89787.5449	103066.0335	14+05.63	152.97 Rt.	Fd Nail/Washer[6269-S]: N L6B B6 S1378
802	89775.0241	103055.4475	14+10.52	168.62 Rt.	Fd Rbr: N L6A S1378
716	89894.7884	103253.9246	14+15.82	63.13 Lt.	Fd Rbr: NNW L6 B3 S1378
717	89897.1232	103260.5275	14+17.38	69.96 Lt.	Fd IP: E L5 B3 S1378
804	89765.2997	103101.1812	14+43.25	135.23 Rt.	Fd PlgTk: E L6B B6 S1378
777	89723.8986	103065.5515	14+59.10	187.50 Rt.	Fd AC[3491-S]: WC2 C1 TRE ATS 1641
725	89844.4545	103309.7335	14+88.22	83.26 Lt.	Fd IP: S L7B B3 S1378
724	89839.9281	103310.4230	14+92.41	81.42 Lt.	Fd Rbr: E L6 B3 S1378
723	89833.4241	103317.8035	15+01.86	84.16 Lt.	Fd PC[3248-S]: N L1B B4 S1378
722	89803.1136	103299.0295	15+17.39	52.06 Lt.	Fd PC[3248-S]: W L1B B4 S1378
721	89775.1845	103270.3755	15+25.60	12.90 Lt.	Fd PK: S L6 B3 S1378
805	89692.1009	103307.8478	16+15.83	0.00 Rt,	Fd BC[GLO]: CL Water Street PI
727	89642.9834	103372.1650	16+95.75	12.73 Lt.	Fd PC: ROW L3A B4 S1378
730	89699.7260	103469.0986	17+21.47	122.06 Lt.	Fd IP: S L13 B4 S1378
731	89691.6394	103474.4735	17+31.04	120.38 Lt.	Fd IP: N L4 B4 S1378

PROJECT CONTROL POINTS						
PT. NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
779	90159.7076	102948.6286	10+26.08	10.86 Lt.	128.80	Fd AC[DOT]: DOT Pt.No. 1904
103	89970.5539	103102.8251	12+67.93	9.16 Rt.		Set MAG: CP103
120	89659.1832	103067.3977	15+14.72	220.63 Rt.	21.90	Set Survey Spike: CP120
119	89673.1207	103174.1836	15+60.20	123.01 Rt.	21.74	Set MAG: CP119
106	89656.3965	103330.5564	16+57.35	8.17 Rt.		Set MAG: CP106
772	89624.4952	103386.3961	17+18.95	10.29 Lt.	92.68	Fd AC [COK]: Pt. No. 0091

CONSTRUCTION CENTERLINE ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2232	90193.3525	102856.4058	9+29.88	0.00 Rt.	Not Set: Construction CL PC
2241	90165.3212	102920.4758	10+00.00	0.00 Rt.	Not Set: Construction CL BOP
2233	90114.2229	102983.3094	10+81.27	0.00 Rt.	Not Set: Construction CL PT
2234	89914.9125	103166.3630	13+51.89	0.00 Rt.	Not Set: Construction CL PI
2235	89692.1009	103307.8478	16+15.83	0.00 Rt.	Not Set: Construction CL PI (see no. 805)

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

ABBREVIATIONS

AC = Aluminum Cap
BC = Brass Cap
GLO = General Land Office
IP = Iron Pipe
MAG = Mag Nail
PC = Plastic Cap
PK = PK Nail
PlgTk = Lead Plug with Tack
POR = Portion
Rbr = Rebar
SI = Street Intersection

GRAPHIC SCALE

30 0 15 30 60
(IN FEET)
1 inch = 30ft.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB
DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SURVEY CONTROL SHEET

TAB: A05 Thursday, August 28, 2014 12:25:06 PM HANK BRINKER

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-000S(735)	2014	A05	73

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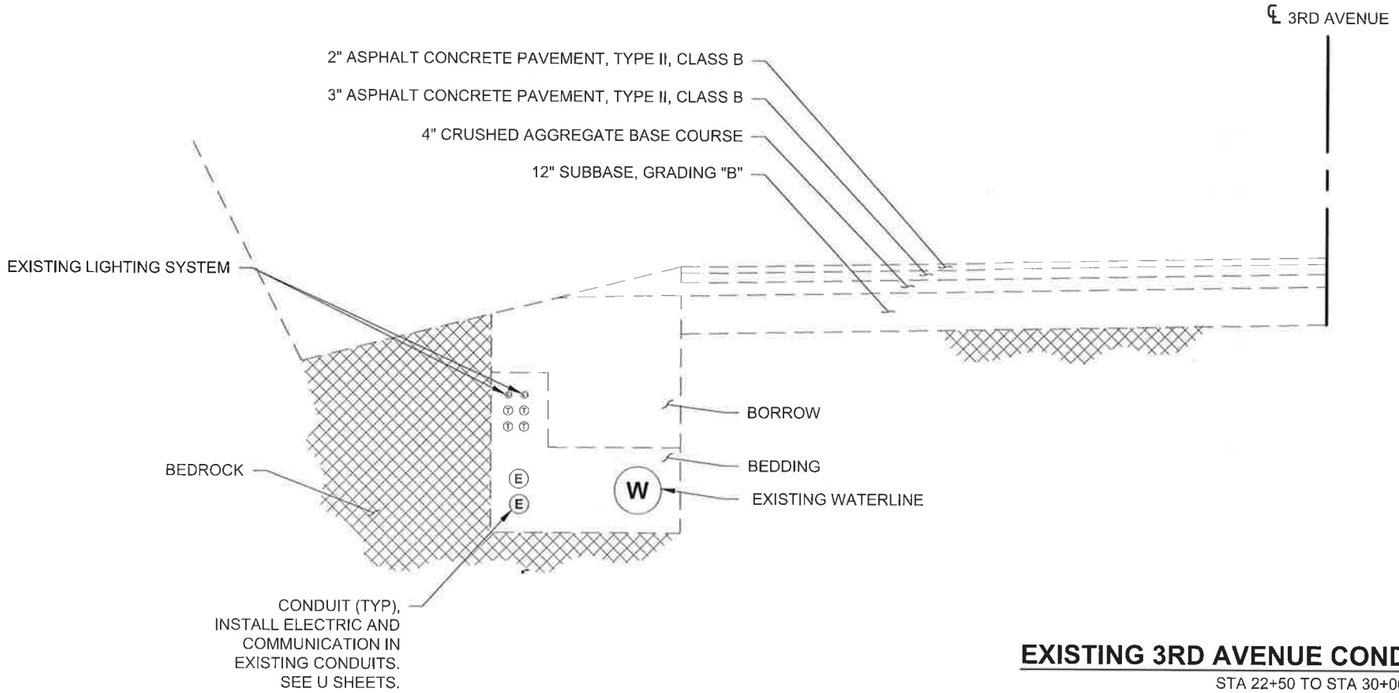
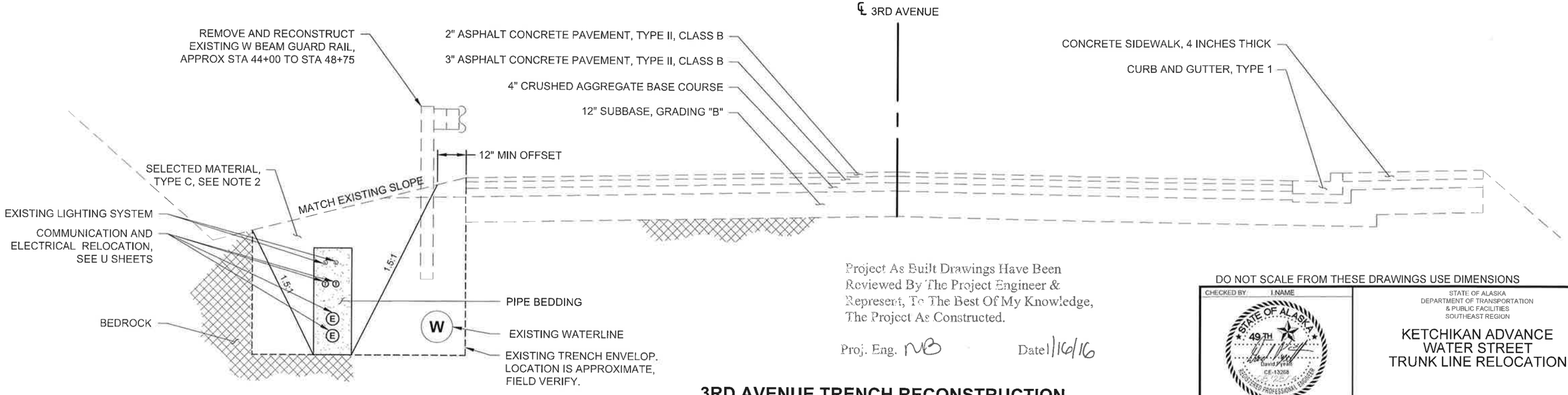


EXISTING 3RD AVENUE CONDUITS / TRENCH

STA 22+50 TO STA 30+00

NOTES:

1) THERE IS AN EXISTING UTILITY TRENCH THAT WAS CONSTRUCTED (2003) ALONG THE LEFT SIDE OF 3RD AVENUE. CONDUITS WERE INSTALLED FOR A PORTION OF THE LENGTH. THIS PROJECT COMPLETES THE RELOCATION OF UTILITIES TO 3RD AVENUE.
2) ALL EXCAVATION WILL BE PERFORMED USING MECHANICAL METHODS, BLASTING WILL NOT BE PERMITTED.
3) REPLACE ANY REMOVED OR DISTURBED MATERIALS WITH EXISTING MATERIAL PRIOR TO IMPORTING MATERIAL PER THE PROJECT SPECIFICATIONS.
4) PROVIDE TRENCH SHORING OR SUPPORT SYSTEM TO ENSURE THE TRENCH WIDTH DOES NOT DAMAGE THE EXISTING ROADWAY.
5) EXISTING LIGHTING SYSTEM TO REMAIN AND WILL NEED TO BE TEMPORARY PULLED TO THE SIDE OF TRENCH, PROTECTED, AND WORKED AROUND.
6) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.
7) SEE SHEET E01 FOR SIDEWALK DETAIL.



3RD AVENUE TRENCH RECONSTRUCTION

STA 30+00 TO STA 69+25

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION
STATE OF ALASKA 49TH David J Yeaw CE-13258 REGISTERED PROFESSIONAL ENGINEER	KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
DESIGNED BY: I.NAME DRAWN BY: I.NAME	**TYPICAL SECTIONS**
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-B SHEETS(AUR)	PLOT DATE: 8/28/2014 12:05 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	B01	78

202 (2) REMOVAL OF PAVEMENT

SHEET	STATION RANGE			AREA (SY)	REMARKS
~~U02~~	~~3RD AVE 28+00~~			~~5~~	~~FIRE HYDRANT ACCESS~~
U03	3RD AVE 37+00			7.05	FIRE HYDRANT ACCESS
U03	3RD AVE 41+80			5.6	FIRE HYDRANT ACCESS
U04	3RD AVE 47+00			5.23	FIRE HYDRANT ACCESS
U04	3RD AVE 52+00			6.19	FIRE HYDRANT ACCESS
U05	3RD AVE 66+00			4.26	FIRE HYDRANT ACCESS
U05	3RD AVE 70+50			25.7	3RD AVENUE CROSSING
	" " 70+00	Lt.		2.21	FIRE Hydrant
			SUBTOTAL		
			CONTINGENCY (20%)		
			TOTAL	81.49	

202 (3) REMOVAL OF SIDEWALK

SHEET	STATION RANGE			AREA (SY)	REMARKS
U05	3RD AVE 70+40		3RD AVE 70+60	12.6	3RD AVENUE CROSSING
	52+50	Lt.		5.9	
			SUBTOTAL		
			CONTINGENCY (100%)		
			TOTAL	18.41	

202 (9) REMOVAL OF CURB AND GUTTER

SHEET	STATION RANGE			LENGTH (LF)	REMARKS
U05	3RD AVE 70+40		3RD AVE 70+60	20.10	3RD AVENUE CROSSING
			SUBTOTAL		
			CONTINGENCY (50%)		
			TOTAL	20.10	

204 (2) STRUCTURE TRENCH EXCAVATION

SHEET	STATION RANGE			LENGTH (LF)	REMARKS
U02	3RD AVE 30+00		3RD AVE 32+75	275	
U03	3RD AVE 32+75		3RD AVE 45+00	1,225	
U04	3RD AVE 45+00		3RD AVE 58+60	1,360	
U05	3RD AVE 58+60		3RD AVE 69+20	1,060	
U05				220	3RD AVENUE CROSSING TO RISER POLE
			SUBTOTAL		
			CONTINGENCY (5%)		
			TOTAL	4,265	

301 (1) AGGREGATE BASE COURSE

SHEET	STATION RANGE			TON	REMARKS
U02	3RD AVE 28+00			1	FIRE HYDRANT ACCESS
U03	3RD AVE 37+00			1	FIRE HYDRANT ACCESS
U03	3RD AVE 41+80			1	FIRE HYDRANT ACCESS
U04	3RD AVE 47+00			1	FIRE HYDRANT ACCESS
U04	3RD AVE 52+00			1	FIRE HYDRANT ACCESS
U05	3RD AVE 66+00			1	FIRE HYDRANT ACCESS
U05	3RD AVE 69+20			10	3RD AVENUE CROSSING
			SUBTOTAL	16	
			CONTINGENCY (25%)	4	
			TOTAL	20	

401 (1) ASPHALT CONCRETE, TYPE II; CLASS B

SHEET	STATION RANGE			TON	REMARKS
~~U02~~	~~3RD AVE 28+00~~			~~2.5~~	~~FIRE HYDRANT ACCESS~~
U03	3RD AVE 37+00			2.5	FIRE HYDRANT ACCESS
U03	3RD AVE 41+80			2.5	FIRE HYDRANT ACCESS
U04	3RD AVE 47+00			2.5	FIRE HYDRANT ACCESS
U04	3RD AVE 52+00			2.5	FIRE HYDRANT ACCESS
U05	3RD AVE 66+00			2.5	FIRE HYDRANT ACCESS
U05	3RD AVE 70+50			10	3RD AVENUE CROSSING
	69+75	Lt.			Approach
	70+00	Lt.			HYDRANT
			SUBTOTAL	25	
			CONTINGENCY (20%)	5	
			TOTAL	30	

Project As Built Drawings Have Been
Reviewed By The Project Engineer &
Represent, To The Best Of My Knowledge,
The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME

STATE OF ALASKA
49TH
David Pratt
CE-13268
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION

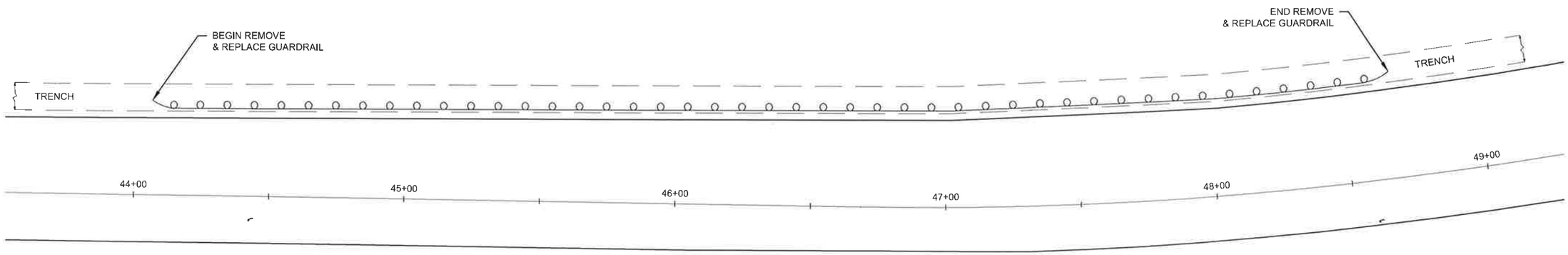
SUMMARY TABLES

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVILVACAD\ADV UTILITY RELO\1744.00-D SHEETS(AUR)

PLOT DATE: 8/28/2014 12:05 PM

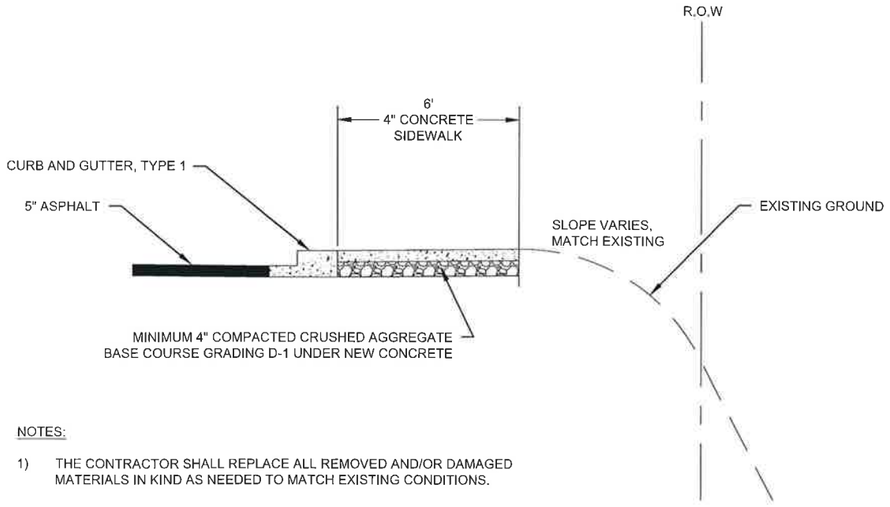
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735) ~ 69548	2014	D01	78



REMOVE & REPLACE GUARDRAIL

3RD AVE STA 44+00 TO STA 48+75

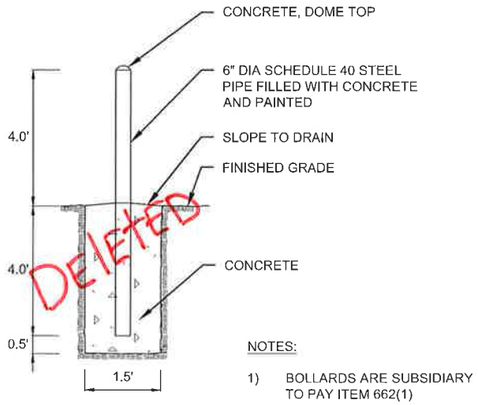


NOTES:

1) THE CONTRACTOR SHALL REPLACE ALL REMOVED AND/OR DAMAGED MATERIALS IN KIND AS NEEDED TO MATCH EXISTING CONDITIONS.

SIDEWALK AND CURB AND GUTTER REPLACEMENT SECTION

3RD AVE STA 69+10 TO STA 69+30



NOTES:

1) BOLLARDS ARE SUBSIDIARY TO PAY ITEM 662(1)

~~BOLLARD DETAIL~~

Project As Built Drawings Have Been
Reviewed By The Project Engineer &
Represent, To The Best Of My Knowledge,
The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION
DESIGNED BY: I.NAME	KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
DRAWN BY: I.NAME	**DETAILS**

STATE OF ALASKA 49TH David Pratt CE-13268 REGISTERED PROFESSIONAL ENGINEER

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-E SHEETS(AUR)

PLOT DATE: 8/28/2014 12:06 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	E01	78

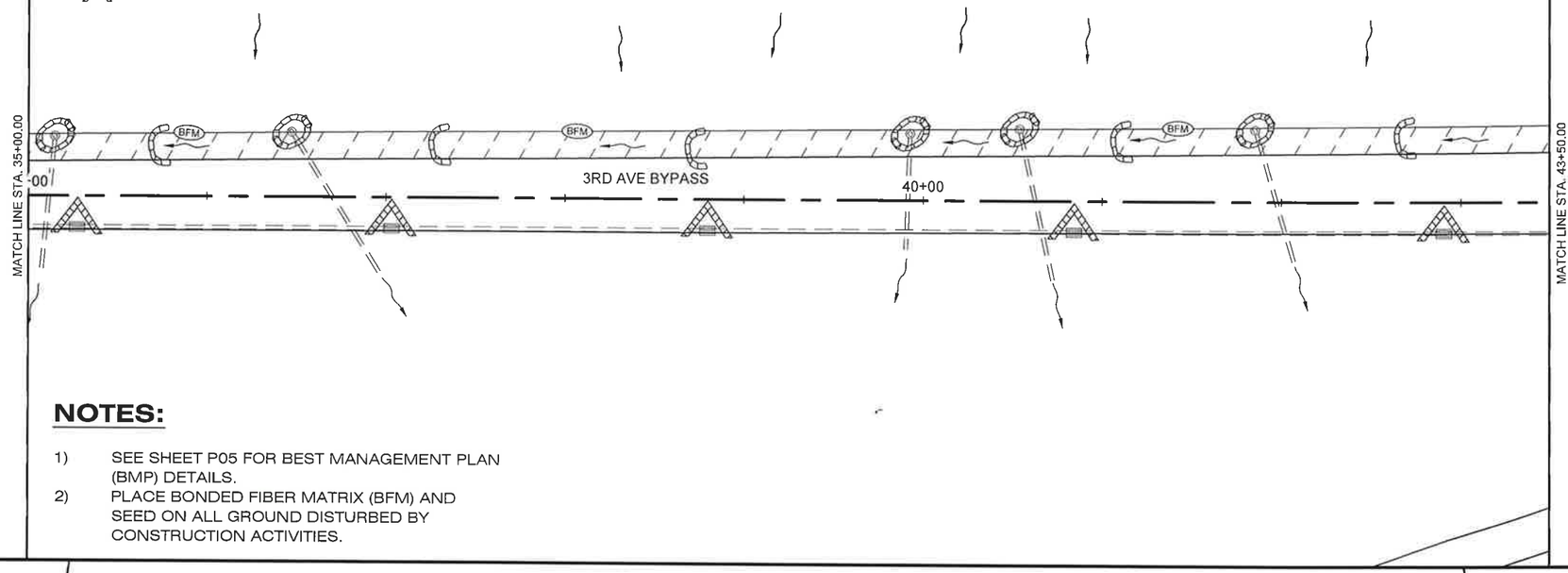
LEGEND

DISTURBED AREA

BFM — BONDED FIBER MATRIX

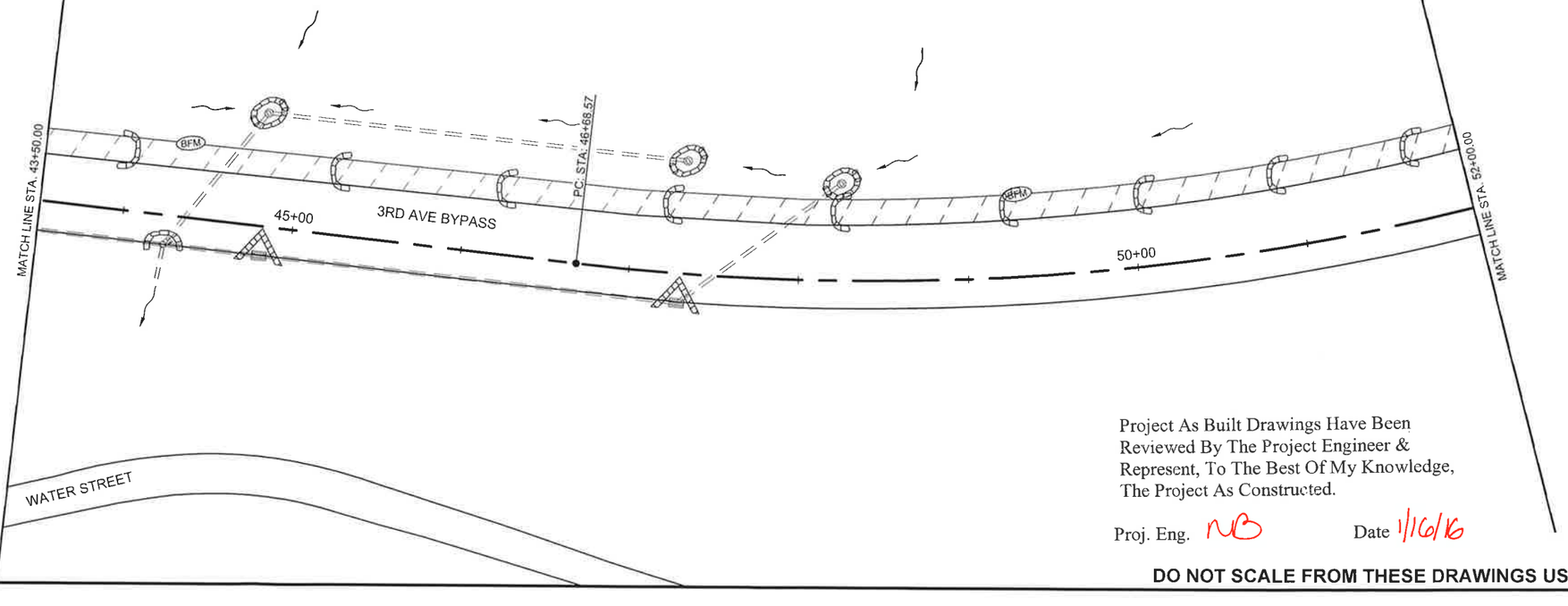
FIBER ROLL

INLET PROTECTION



NOTES:

1) SEE SHEET P05 FOR BEST MANAGEMENT PLAN (BMP) DETAILS.
2) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-P SHEETS(AUR).DWG

RYAN REDICK

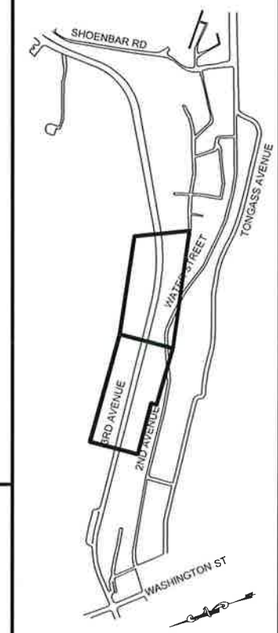
TAB: P02 8/29/2014 3:55 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: I.NAME

STATE OF ALASKA 49TH David Wyeatt CE-12068 REGISTERED PROFESSIONAL ENGINEER 8/29/14

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

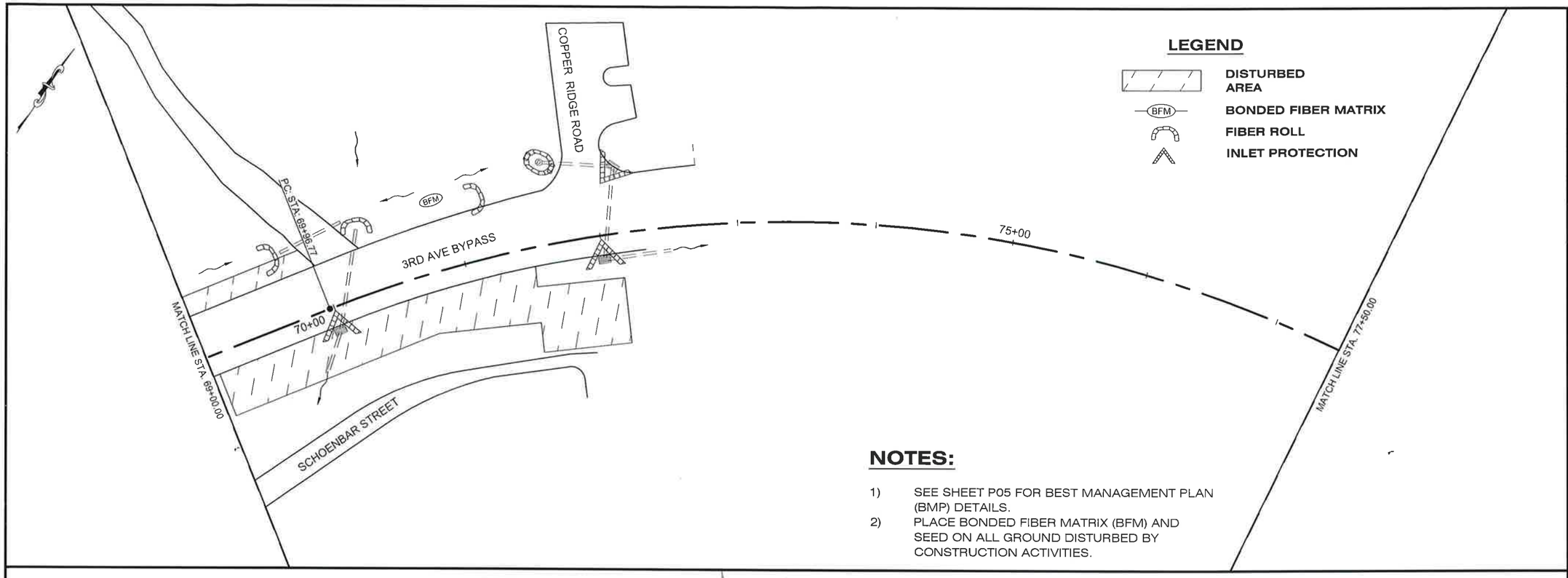
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION

EROSION SEDIMENT CONTROL PLAN

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
P02	73



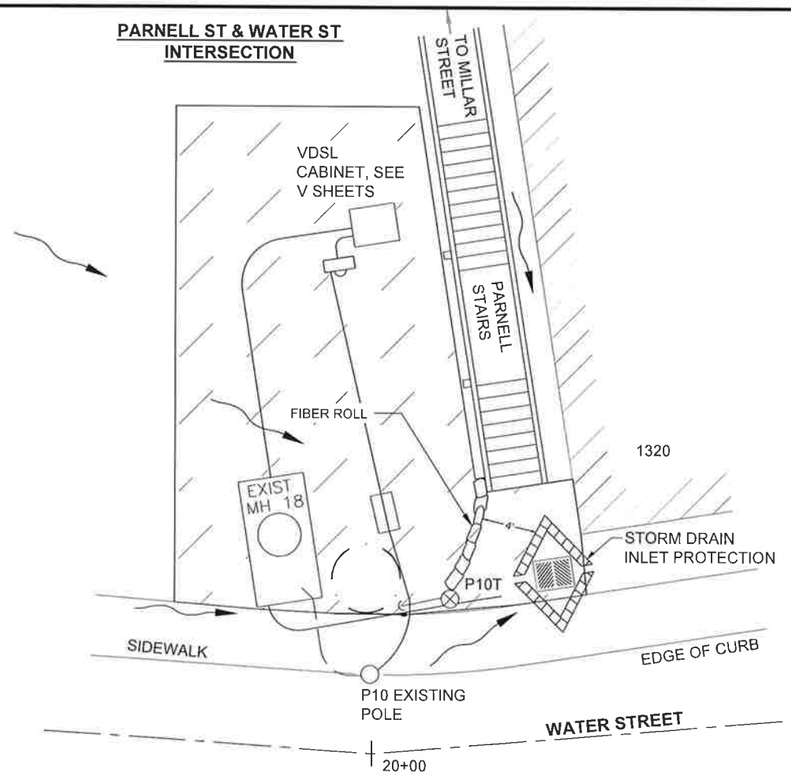
LEGEND

- DISTURBED AREA
- BFM — BONDED FIBER MATRIX
- FIBER ROLL
- INLET PROTECTION

NOTES:

1) SEE SHEET P05 FOR BEST MANAGEMENT PLAN (BMP) DETAILS.
2) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.

PARNELL ST & WATER ST INTERSECTION



0' 120' 240'

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-P SHEETS(AUR).DWG

RYAN REDICK

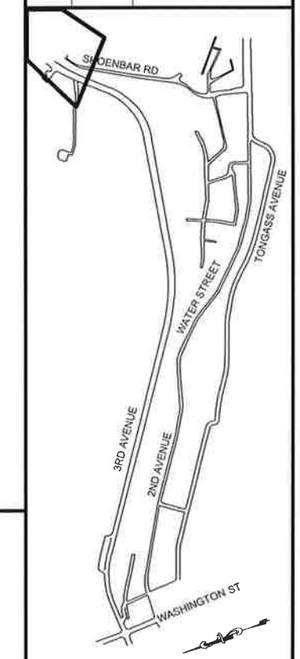
TAB: P04 8/29/2014 3:55 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: I.NAME

STATE OF ALASKA 49TH David Pyratt CE-12268 8/29/14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

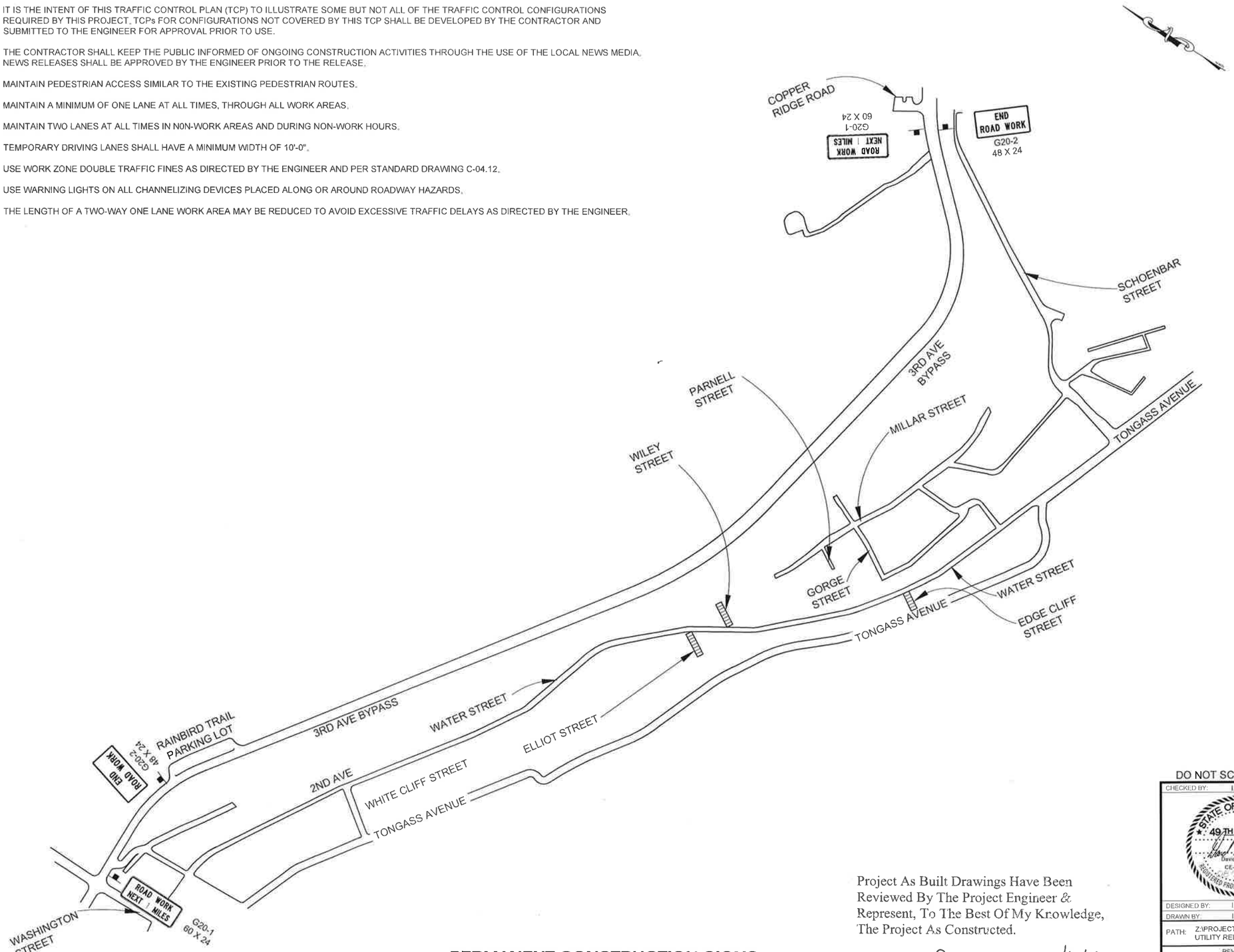
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION

EROSION SEDIMENT CONTROL PLAN

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
P04	78

TRAFFIC CONTROL NOTES

1) IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS REQUIRED BY THIS PROJECT. TCPs FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
2) THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF ONGOING CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE RELEASE.
3) MAINTAIN PEDESTRIAN ACCESS SIMILAR TO THE EXISTING PEDESTRIAN ROUTES.
4) MAINTAIN A MINIMUM OF ONE LANE AT ALL TIMES, THROUGH ALL WORK AREAS.
5) MAINTAIN TWO LANES AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORK HOURS.
6) TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
7) USE WORK ZONE DOUBLE TRAFFIC FINES AS DIRECTED BY THE ENGINEER AND PER STANDARD DRAWING C-04.12.
8) USE WARNING LIGHTS ON ALL CHANNELIZING DEVICES PLACED ALONG OR AROUND ROADWAY HAZARDS.
9) THE LENGTH OF A TWO-WAY ONE LANE WORK AREA MAY BE REDUCED TO AVOID EXCESSIVE TRAFFIC DELAYS AS DIRECTED BY THE ENGINEER.



PERMANENT CONSTRUCTION SIGNS

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME
DESIGNED BY: I.NAME
DRAWN BY: I.NAME

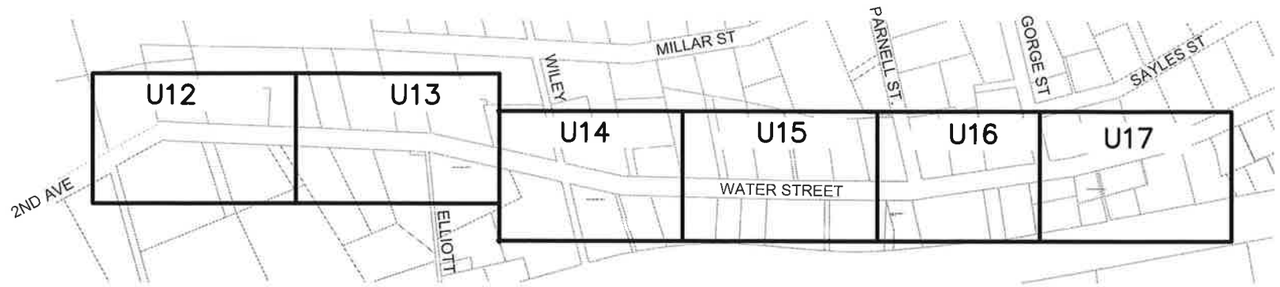
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION

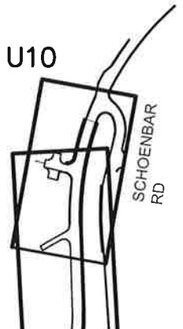
TRAFFIC CONTROL PLAN

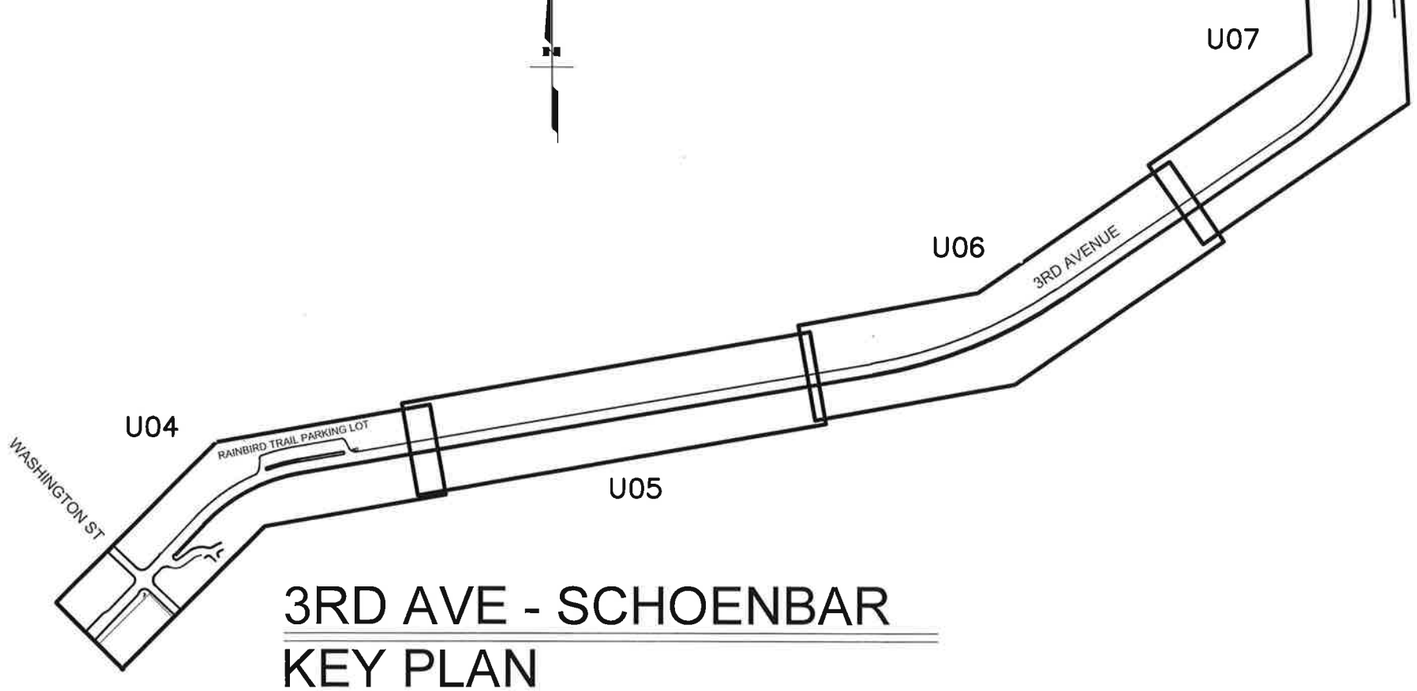
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-T SHEETS(AUR)
PLOT DATE: 8/28/2014 12:07 PM

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO	DATE	DESCRIPTION	BR-000S(735) ~ 69548	2014	T01	78



WATER STREET BRIDGE
KEY PLAN





3RD AVE - SCHOENBAR
KEY PLAN

Project As Built Drawings Have Been
Reviewed By The Project Engineer &
Represent, To The Best Of My Knowledge,
The Project As Constructed.

Proj. Eng. KCN Date 1/16/15

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: TED	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION
STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER	KETCHIKAN -WATER STREET: BRIDGE PROJECT #69548 ADVANCE UTILITY RELOCATION
DESIGNED BY: KCN	**UTILITY KEY PLAN**
DRAWN BY: KCN	
PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG	
TAB:	

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~69548	2014	U01	78

INSTALL UNDERGROUND CONDUITS RUN IN EXISTING TRENCH FROM RAINBIRD PARKING LOT TO 3RD AVE CROSSING, NEW TRENCH ACROSS 3RD TO SCHOENBAR ISLAND. CONDUITS INCLUDE
662(1) = 6"C FOR NEW 34.5KV UNDERGROUND CIRCUIT.
(1) 6" SPARE FOR FUTURE ELECTRIC CIRCUIT
662(2) = (1) 4"C SPARE KPU-T
662(3) = (2) 4"C SPARE KPU-T & 1 4" KPU-E

EXISTING RUN (2) 6"C, (4) 4", & (2) 2" FROM KPU RISER POLE P1W ON WASHINGTON STREET TO RAINBIRD PARKING LOT.

EXISTING PULL BOXES, SEE U04, U11, U19

RAINBIRD TRAIL PARKING LOT

AFTER THE NEW 35KV CIRCUIT IS ENERGIZED, REMOVE THE 34.5KV LINE FROM P1M TO POLE P10, REMOVE THE CROSSARMS FROM P1M AND P10. REMOVE INSULATORS FROM P10B.

NEW UNDERGROUND CIRCUIT:
6"C W/ (3) 350MCM 35KV CABLES & 6"C SPARE RUN IN EXISTING 6" FROM WASHINGTON P1R TO RAINBIRD & NEW CONDUITS RAINBIRD TO SHOENBAR P2R

INSTALL KPU SCHOENBAR RISER POLE P2SR, INSTALL NEW (2) 6"C ONE W/ NEW 34.5KV UNDERGROUND CABLING. TIE INTO EXISTING 34.5KV AERIAL DISTRIBUTION AT POLE P2S.

NEW UNDERGROUND 34.5KV CUT NEW TRENCH ACROSS 3RD AVE & SCHOENBAR ISLAND

LIBRARY
COPPER RIDGE ROAD
SCHOENBAR ISLAND, SEE U10
FOREST AVE
P1S
GRAVEL PIT
EXISTING KPU-T CABINETS INSTALL PULL BOX W/ NEW CONDUITS, VDSL HARDWARE IN EXISTING CABINET, NEW CABLING IN EXIST CONDUIT, AND RESPLICE AERIAL TERMINALS, SEE V SHEETS
P2S
P2SR
P3S
SCHOENBAR ROAD
EXISTING KPU AERIAL 34.5KV SUBTRANSMISSION LINE ALONG SCHOENBAR RD, LINE RUNS TO POLE P10 AT THE BASE OF PARNELL, THEN WEST ON WATER STREET.
3RD AVE BYPASS
MILLAR STREET
GORGE STREET
PARNELL STREET
WILEY STAIRS
DUNTON ST
P1M
P10B
SAYLES ST
LUND STREET
TONGASS AVENUE
WATER STREET
NEW P10T
P11
P13
P12
P10A
P11A
P10G
P10
P9
P8
P7
P7G
ELLIOT STREET
P6
P5
POLE P1 & P2
POLE P4
P0
P3
WATER STREET
EXISTING 34.5KV AERIAL TO WATER STREET
WEST 3RD AVE
2ND AVE
WHITE CLIFF STREET
AUSTIN STREET
TONGASS AVENUE
START OF NEW 35KV CIRCUIT AT EXISTING WASHINGTON STREET KPU RISER POLE, P1W
3RD AVE
P1W
EXISTING KPU 34.5KV AERIAL TO BETHE SUBSTATION
WASHINGTON
EXISTING 34.5KV AERIAL TO RISER POLE AT PLAZA MALL (WASHINGTON & TONGASS)
PARNELL VDSL CABINET
BEGINNING OF BRIDGE
Water Street Bridge Trestle Construction
END OF BRIDGE
EDGE CLIFF STREET

EXISTING OVERHEAD POLE LINE ALONG WATER STREET:

A DEADENDS AND GUYS AT POLE P1 AND P10
B COMMUNICATION GUYS AT POLES P3 AND P12
C JUMPER 12.47KV TO TOP TIER (FORMERLY 34.5KV) AT POLES P1 AND P10
REMOVE EXISTING 12.47KV TIER P3-P10 CROSSARMS, CONDUCTORS P1-P10.
D MOVE 120/240V DISTRIBUTION, SYSTEM NEUTRAL, STREET LIGHTS, TRANSFORMERS UP POLES P4-P11. EXTEND OVHD SERVICE DROPS AS NEEDED.
E
F INSTALL NEW VDSL CABINET AT PARNELL AND INSTALL HARDWARE IN EXISTING SCHOENBAR VDSL CABINET
G INSTALL NEW STRAND P3-P10 & P10T-P12,
H RELOCATE KPU-T FIBER OPTIC DISTRIBUTION CABLE P3-P10. INSTALL NEW FIBER DROPS AND ONTs TO THE HOME. DEMO COPPER SERVICE DROPS & NIDs.
I REMOVE EXISTING KPU-T COPPER DISTRIBUTION UNDERBRIDGE AND AERIAL P3-P12.
J COORD W/ GCI TO HAVE THEM RAISE THEIR INFRASTRUCTURE & DROPS P3-P13

SEE V SHEETS FOR ADDITIONAL COMM WIRING INCLUDING NEW VDSL CABINET AT PARNELL STAIRS AND NEW HARDWARE IN SCHOENBAR VDSL CABINET WITH CABLE TO P2S PULLED IN EXISTING CONDUIT

1 ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"

N
PLAN NORTH
0 8' 16'

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: TED
DESIGNED BY: KCN
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION
PROJECT #69548

ELECTRICAL SITE PLAN

PATH: C:\USERS\KCN12_000\DOCUMENTS\G-KNEE\2013\WSB DESIGN13\DWG\G-NTP9 TRUNK RELOCATION\W3B AUR U03 OVERALL PLAN.DWG
TAB: U03
KCN12_000

REVISIONS NO	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2014	U03	78

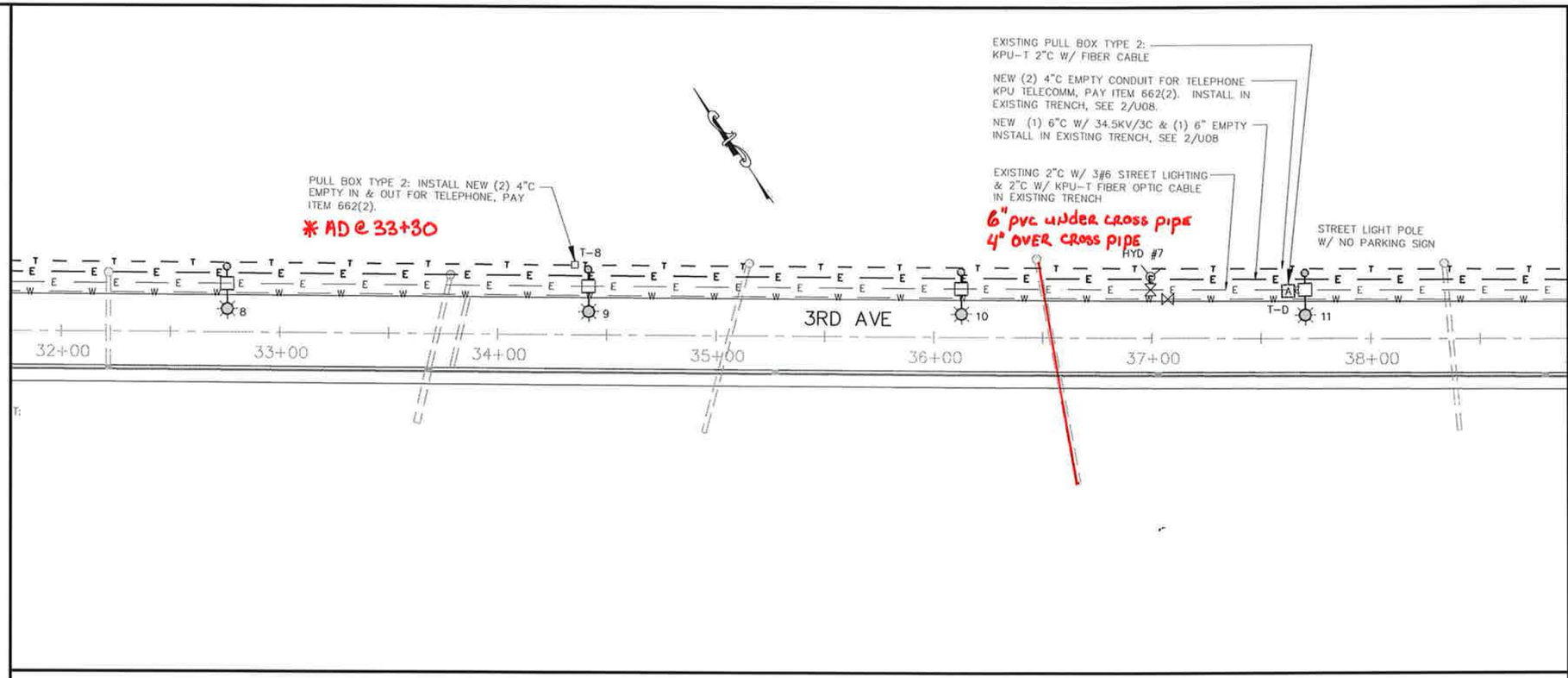
GENERAL NOTES:

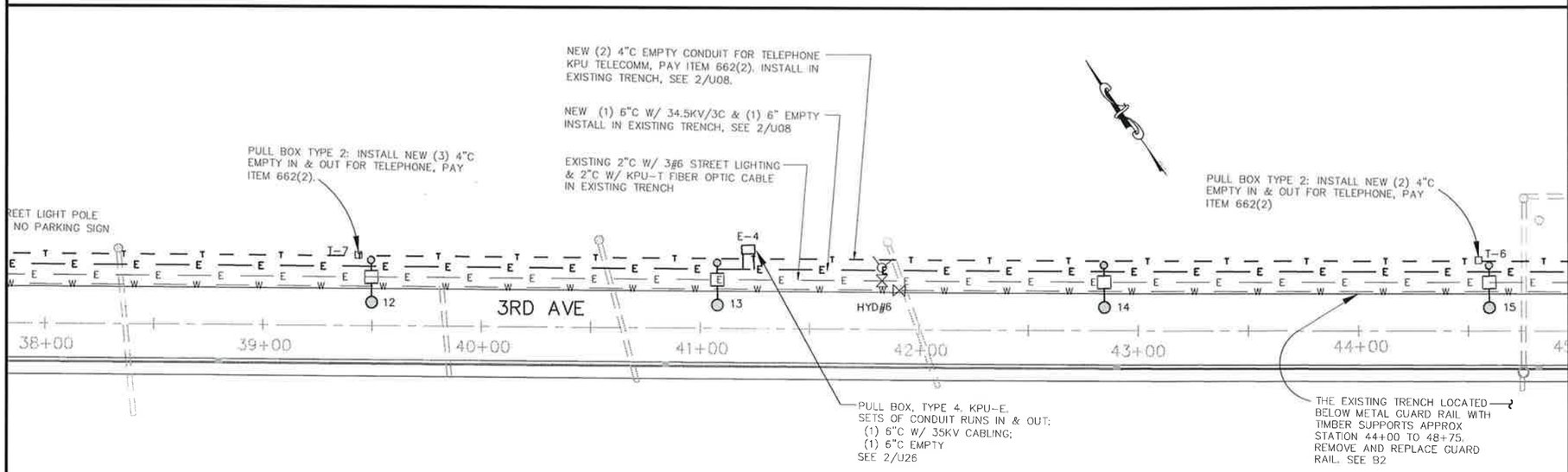
A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3/C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1.02





Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KCN Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

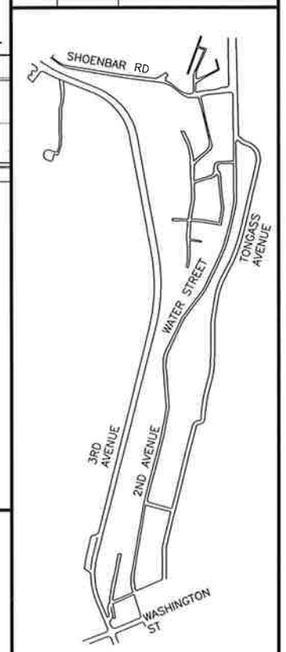
PATH: XXX

KCN12_000
TAB: U05 8/28/2014 10:45 AM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U05	78

GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

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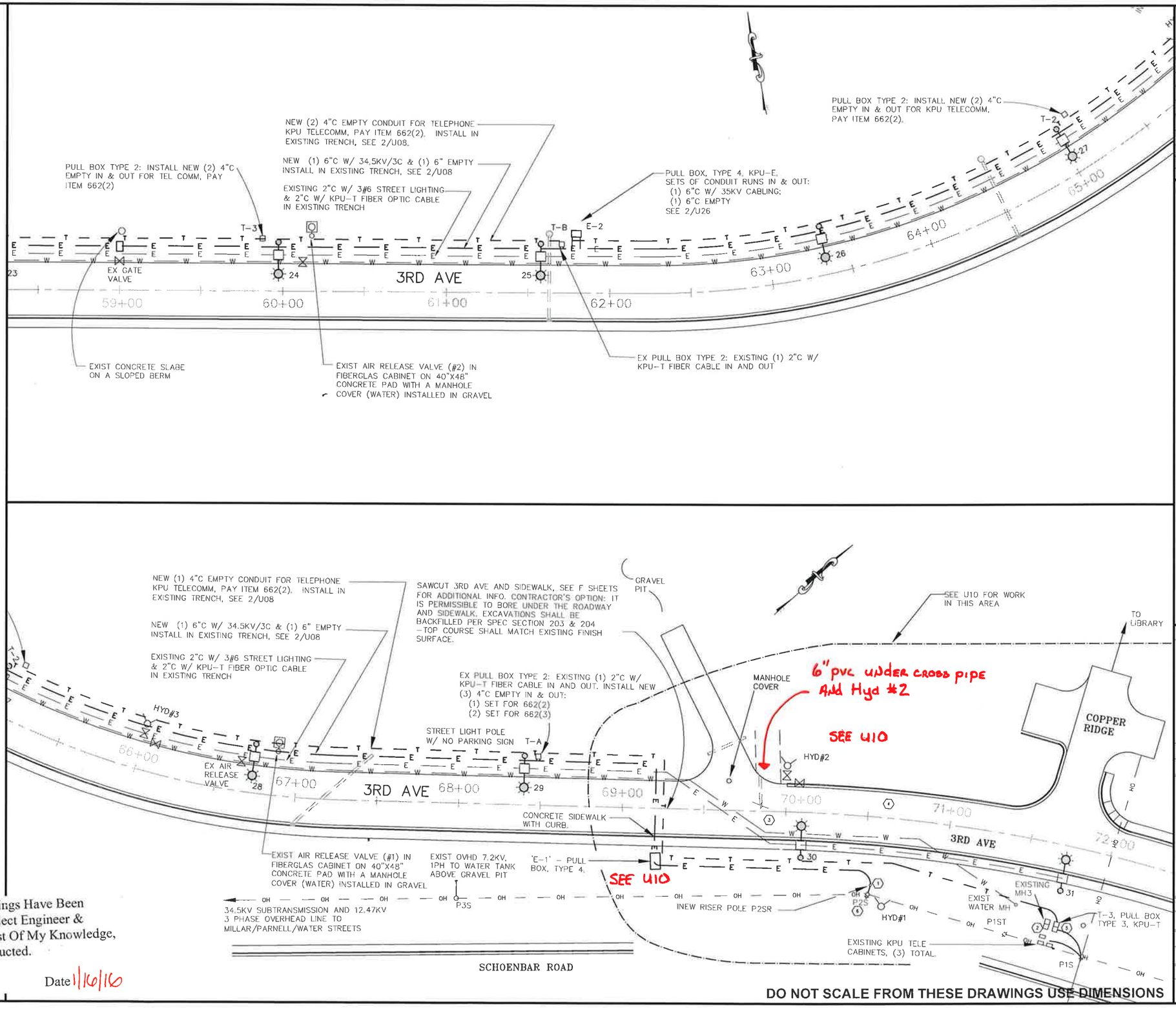
D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1.02

ELECTRICAL NOTES:

1. INSTALL 35KV RISER POLE P2SR PER KPU DETAIL AND TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES. INSTALL AERIAL CONDUCTOR TO CONNECT TO EXISTING POLE P2SC.
2. EXISTING MANHOLE MH3 (KPU-T) WITH EXISTING 2"C W/ FIBER CABLE FROM WASHINGTON RISER POLE AND (3) 4"C TO POLE P1S.
3. LOCATION OF THE STREET LIGHTING CIRCUIT CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
4. LOCATION OF THE WATER LINE CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
5. INSTALL NEW PULL BOX AND INSTALL (3) SETS OF CONDUITS IN AND OUT OF BOX: (1) 4"C FOR 662(2) & (2) 4"C FOR 662(3). CONDUITS TERMINATING ON P1S SHALL MATCH EXISTING RISER CONDUIT INSTALLATION.
6. INSTALL NEW CROSSARM W/ 34.5KV HARDWARE AND 34.5KV 3 PHASE OVERHEAD CONDUCTORS CONNECTING TO POLE P2SR.



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

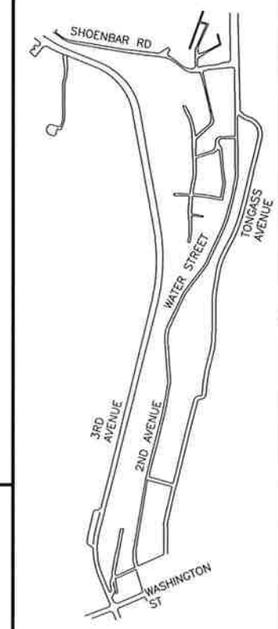
PATH: XXX

KCN12_000
TAB: U07 8/28/2014 10:45 AM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

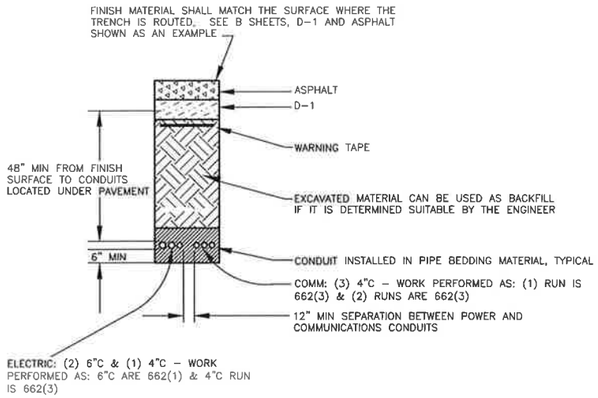
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U07	78



DETAIL NOTES:

A LOCATE THE 3RD AVE CROSSINGS OF THE WATER LINE AND STREET LIGHTING CIRCUIT AND KPU-T FIBER OPTIC LINE. AVOID EXISTING EXISTING UNDERGROUND PIPING AND CONDUIT RUNS IN THE SCHOENBAR ISLAND AREA. HAND DIGGING MAY BE REQUIRED.

B SEE SPEC 205 REQUIREMENTS FOR THE MAX. LENGTH OF TRENCH THAT CAN BE OPEN. DEWATERING REQUIREMENTS.

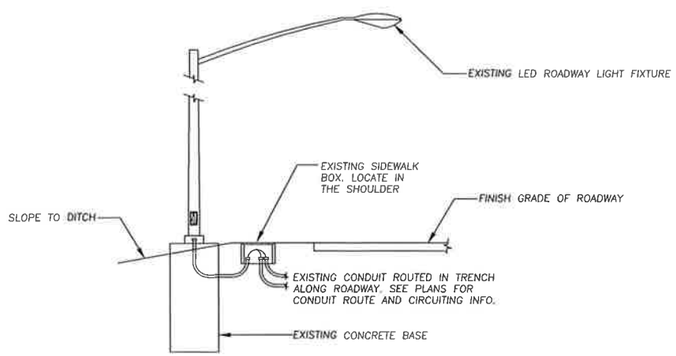
1 TRENCH DETAIL - 3RD AVE CROSSING + SCHOENBAR

NO SCALE

THIS DETAIL IS SIMILAR FOR THE TRENCH TO THE PULL BOXES IN THE 3RD AVE WORK (SHEETS U04-U07) AND VOSL CABINET AT PARNELL STAIRS (SHEET U20).

2 EXISTING TRENCH CONSTRUCTION

NO SCALE



3 EXISTING LIGHT POLE DETAIL -3RD AVE.

NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: XXX

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TAB: U09 8/28/2014 10:46 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

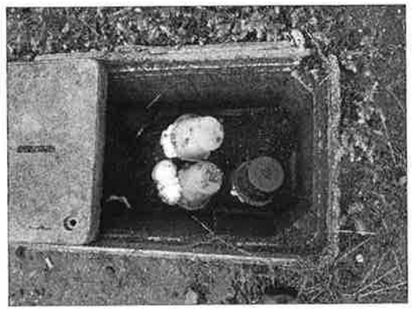
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69534

3rd AVE DETAILS

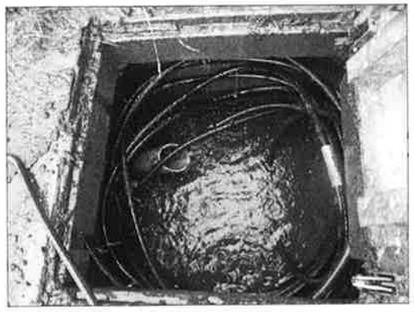
PROJECT DESIGNATION
BR-000S(735) ~ 69354

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U09	78

(3) 4"PVC EMPTY FROM WASHINGTON STREET RISER POLE



(1) 4"PVC W/KPU-T FIBER CABLE (LEFT SIDE OF BOX) FROM WASHINGTON STREET RISER POLE. THE FIBER CONTINUES IN 2"C (RIGHT SIDE OF BOX) TO MANHOLE 3 AT SCHOENBAR ISLAND.

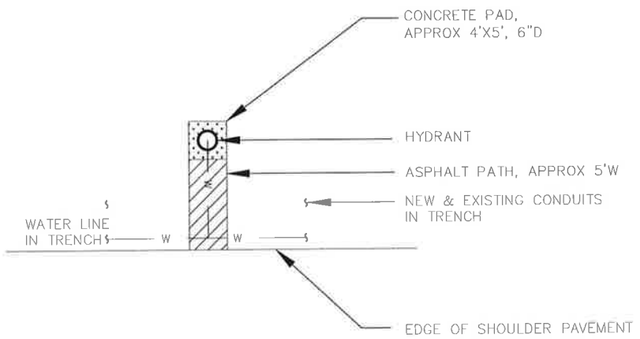


1 EXISTING PULL BOXES AT RAINBIRD

NO SCALE

SEE 3/U11 FOR ADDITIONAL INFO

A = EXISTING BERM AROUND CATCH BASIN. REMOVE AND REPLACE AFTER EXCAVATION OF EXISTING TRENCH. NOTE PER AS-BUILT DRAWINGS: THE EDGE OF THE EXISTING TRENCH & EXISTING WATER LINE IS LOCATED EVEN WITH THE EDGE OF THE SHOULDER



2 EXISTING HYDRANT DETAIL -3RD AVE.

NO SCALE

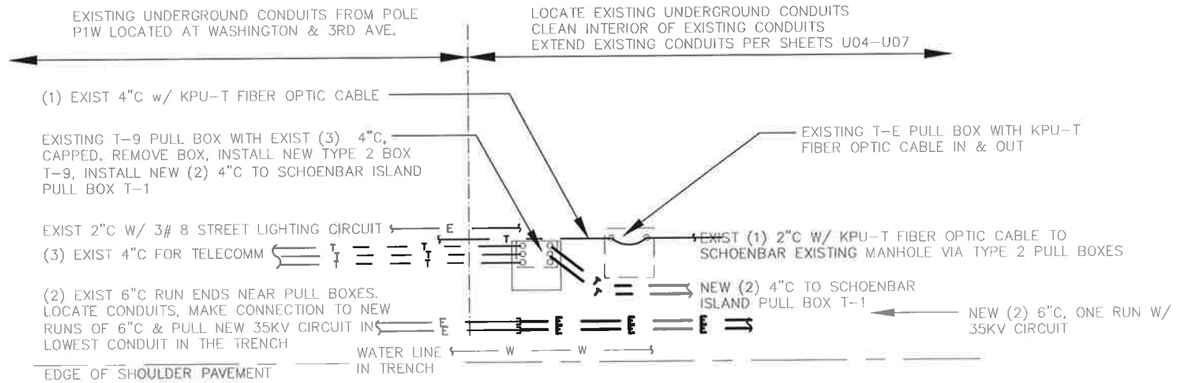
DETAIL NOTES:

A THE DETAIL SHOWS GENERAL LAYOUT INFO FOR INSTALLING NEW CONDUITS AT LOCATIONS WITH HYDRANTS. PATCH SURFACES TO MATCH EXISTING.

B HAND DIG IN TRENCH TO EXPOSE WATER LINE PIPING AND VALVES FEEDING THE HYDRANT. SUPPORT EXISTING PIPING AND CONDUITS. ROUTE NEW CONDUITS TO AVOID EXISTING PIPING, VALVES, EQUIPMENT AND CONDUITS

C FIELD CONFIRM EXISTING CONDITIONS PRIOR TO EXCAVATING. COORDINATE INSTALLATION WITH WATER DEPT.

D THE DETAIL IS SIMILAR AT LOCATIONS WITH FIBERGLASS CABINETS



3 3RD AVE. RAINBIRD PULL BOXES - PLAN VIEW

NO SCALE

DETAIL NOTES:

A THE DETAIL SHOWS GENERAL LAYOUT INFO FOR INSTALLING NEW CONDUITS AND PULL BOX NEAR THE RAINBIRD PARKING LOT NEAR STATION 30+00. PATCH SURFACES TO MATCH EXISTING.

B HAND DIG IN TRENCH TO EXPOSE WATER LINE PIPING AND (2) 6"CONDUITS. SUPPORT EXISTING PIPING AND CONDUITS. ROUTE NEW CONDUITS TO AVOID EXISTING PIPING, VALVES, EQUIPMENT AND CONDUITS

C FIELD CONFIRM EXISTING CONDITIONS PRIOR TO EXCAVATING. COORDINATE INSTALLATION WITH WATER DEPT.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: XXX

KCN12_000
TAB: U11 8/28/2014 10:46 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

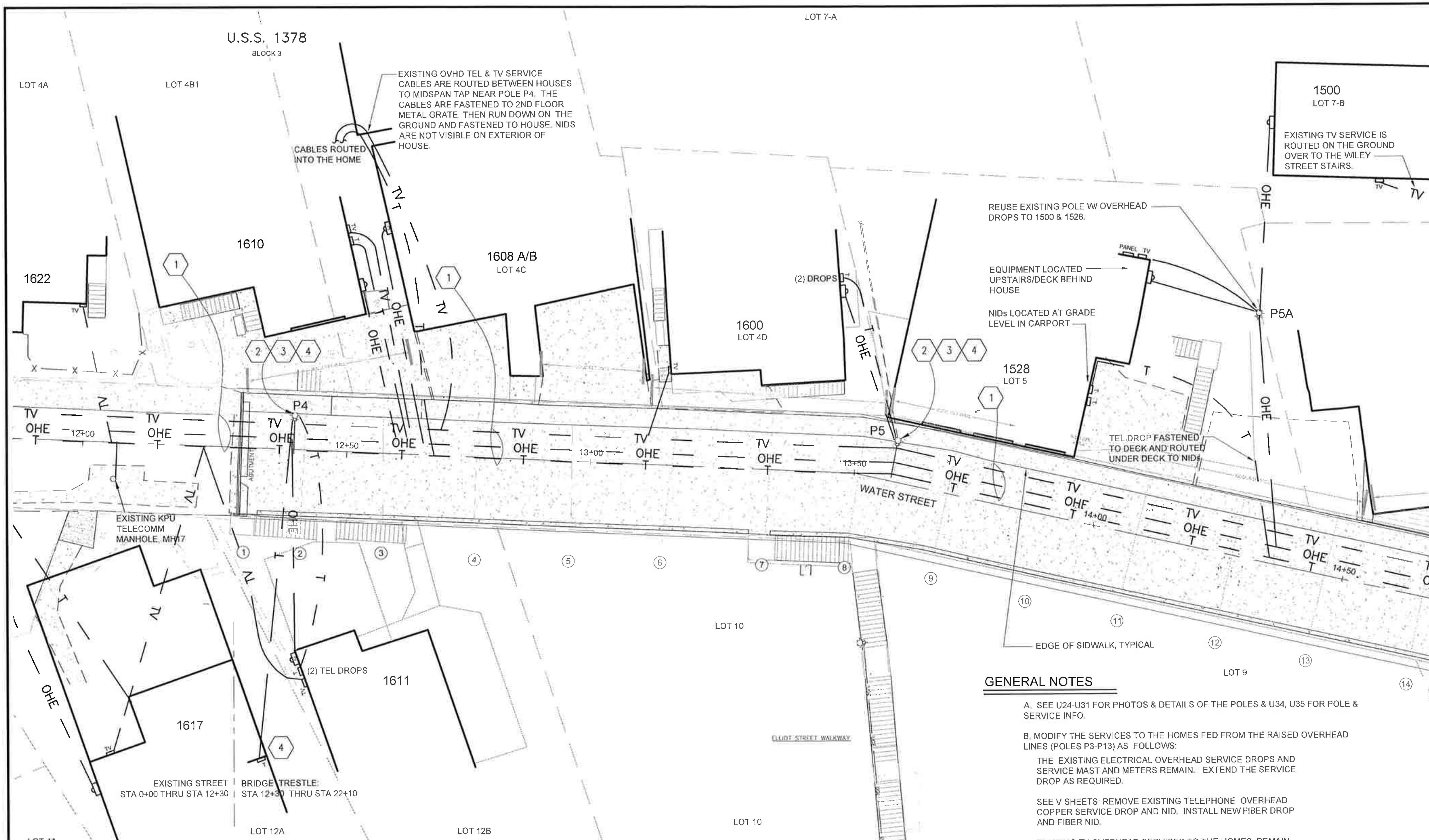
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69534

3rd AVE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U11	78



ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.

2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.

3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P2 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.

4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

5. 1617 HAS AN ADDITION BEING CONSTRUCTED IN FRONT OF THE EXISTING HOUSE. CONFIRM LOCATION OF THE METER AND NIDS

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG
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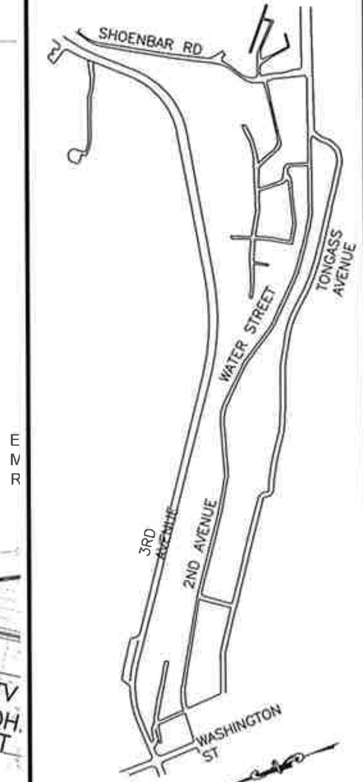
TAB: U13

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

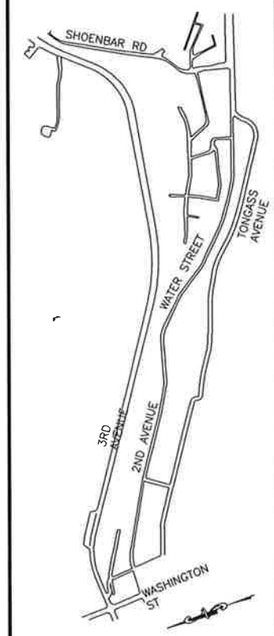
DESIGNED BY: KCN
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION	
BR-000S(735) ~69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U13	78



PLAN LEGEND

ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P4 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

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PATH: C:\USERS\KCN12_000\DOCUMENTS\M-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG

KCN12_000

TAB: U15

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 B-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

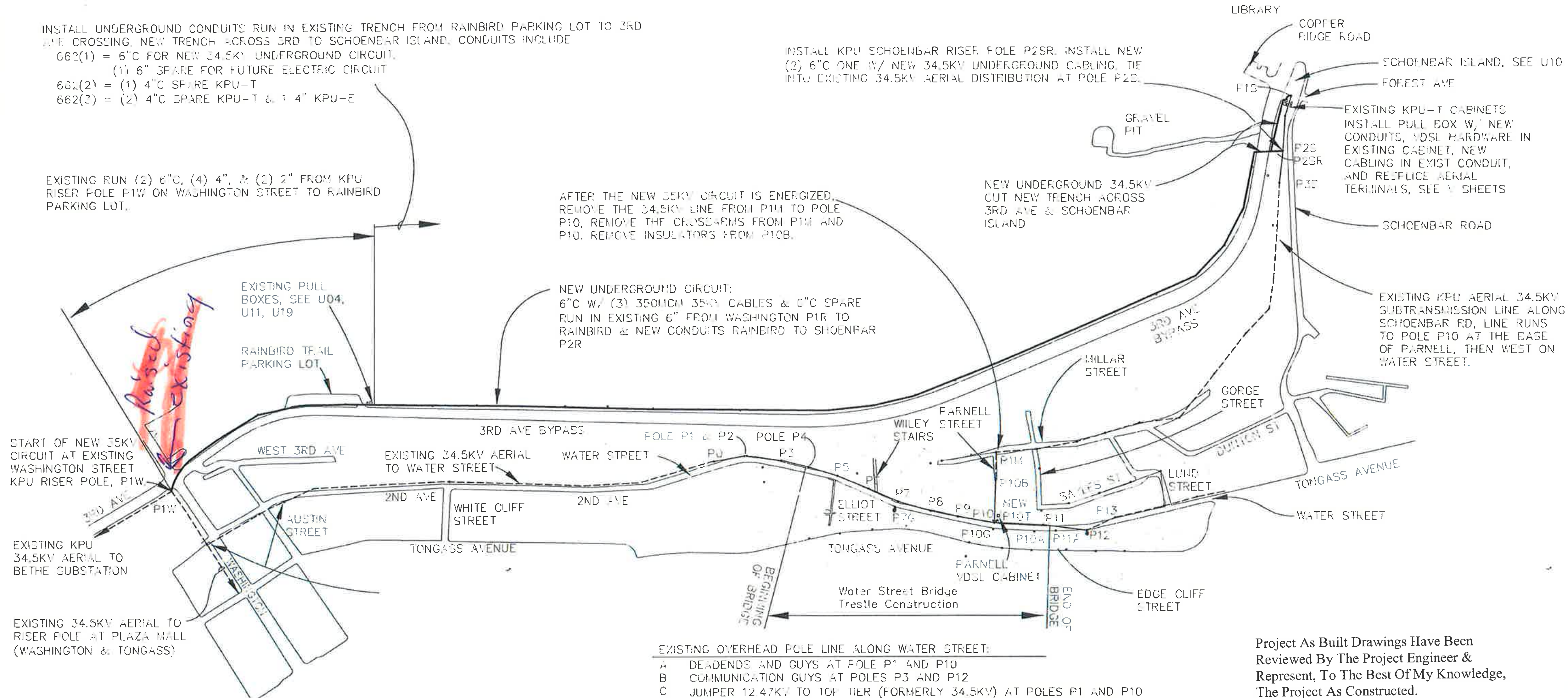
KETCHIKAN ADVANCE
WATER STREET TUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION

BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U15	78



INSTALL UNDERGROUND CONDUITS RUN IN EXISTING TRENCH FROM RAINBIRD PARKING LOT TO 3RD AVE CROSSING, NEW TRENCH ACROSS 3RD TO SCHOENBAR ISLAND. CONDUITS INCLUDE
662(1) = 6"C FOR NEW 34.5KV UNDERGROUND CIRCUIT.
(1) 6" SPARE FOR FUTURE ELECTRIC CIRCUIT
662(2) = (1) 4"C SPARE KPU-T
662(3) = (2) 4"C SPARE KPU-T & 1 4" KPU-E
EXISTING RUN (2) 6"C, (4) 4", & (2) 2" FROM KPU RISER POLE P1W ON WASHINGTON STREET TO RAINBIRD PARKING LOT.
AFTER THE NEW 35KV CIRCUIT IS ENERGIZED, REMOVE THE 34.5KV LINE FROM P1M TO POLE P10, REMOVE THE CROSSARMS FROM P1M AND P10. REMOVE INSULATORS FROM P10B.
INSTALL KPU SCHOENBAR RISER POLE P2SR. INSTALL NEW (2) 6"C ONE W/ NEW 34.5KV UNDERGROUND CABLING. TIE INTO EXISTING 34.5KV AERIAL DISTRIBUTION AT POLE P2S.
LIBRARY
COPPER RIDGE ROAD
SCHOENBAR ISLAND, SEE U10
FOREST AVE
P1S
GRAVEL PIT
EXISTING KPU-T CABINETS INSTALL PULL BOX W/ NEW CONDUITS, VDSL HARDWARE IN EXISTING CABINET, NEW CABLING IN EXIST CONDUIT, AND REPLICE AERIAL TERMINALS, SEE V SHEETS
P2S
P2SR
P3S
NEW UNDERGROUND 34.5KV CUT NEW TRENCH ACROSS 3RD AVE & SCHOENBAR ISLAND
SCHOENBAR ROAD
EXISTING KPU AERIAL 34.5KV SUBTRANSMISSION LINE ALONG SCHOENBAR RD, LINE RUNS TO POLE P10 AT THE BASE OF PARNELL, THEN WEST ON WATER STREET.
EXISTING PULL BOXES, SEE U04, U11, U19
NEW UNDERGROUND CIRCUIT: 6"C W/ (3) 350MCM 35KV CABLES & 6"C SPARE RUN IN EXISTING 6" FROM WASHINGTON P1R TO RAINBIRD & NEW CONDUITS RAINBIRD TO SHOENBAR P2R
RAINBIRD TRAIL PARKING LOT
Raised Existing
3RD AVE BYPASS
MILLAR STREET
GORGE STREET
PARNELL STREET
WILEY STAIRS
START OF NEW 35KV CIRCUIT AT EXISTING WASHINGTON STREET KPU RISER POLE, P1W.
WEST 3RD AVE
EXISTING 34.5KV AERIAL TO WATER STREET
WATER STREET
POLE P1 & P2
POLE P4
P0
P3
P5
P6
P7
P8
P9
P10
P7S
P1M
P10B
NEW P10T
P11
P13
P12
P10C
P10A
P11A
SAYLES ST
LUND STREET
DUNTON ST
TONGASS AVENUE
WATER STREET
3RD AVE
P1W
2ND AVE
WHITE CLIFF STREET
2ND AVE
AUSTIN STREET
ELLIOT STREET
TONGASS AVENUE
TONGASS AVENUE
EXISTING KPU 34.5KV AERIAL TO BETHE SUBSTATION
WASHINGTON
EXISTING 34.5KV AERIAL TO RISER POLE AT PLAZA MALL (WASHINGTON & TONGASS)
PARNELL VDSL CABINET
BEGINNING OF BRIDGE
END OF BRIDGE
Water Street Bridge Trestle Construction
EDGE CLIFF STREET

EXISTING OVERHEAD POLE LINE ALONG WATER STREET:

A DEADENDS AND GUYS AT POLE P1 AND P10
B COMMUNICATION GUYS AT POLES P3 AND P12
C JUMPER 12.47KV TO TOP TIER (FORMERLY 34.5KV) AT POLES P1 AND P10
REMOVE EXISTING 12.47KV TIER P3-P10 CROSSARMS, CONDUCTORS P1-P10.
D MOVE 120/240V DISTRIBUTION, SYSTEM NEUTRAL, STREET LIGHTS, TRANSFORMERS UP POLES P4-P11. EXTEND OVHD SERVICE DROPS AS
E NEEDED.
F INSTALL NEW VDSL CABINET AT PARNELL AND INSTALL HARDWARE IN EXISTING SCHOENBAR VDSL CABINET
G INSTALL NEW STRAND P3-P10 & P10T-P12.
H RELOCATE KPU-T FIBER OPTIC DISTRIBUTION CABLE P3-P10. INSTALL NEW FIBER DROPS AND ONTs TO THE HOME. DEMO COPPER SERVICE DROPS & NIDs.
I REMOVE EXISTING KPU-T COPPER DISTRIBUTION UNDERBRIDGE AND AERIAL P3-P12.
J COORD W/ GCI TO HAVE THEM RAISE THEIR INFRASTRUCTURE & DROPS P3-P13

SEE V SHEETS FOR ADDITIONAL COMM WIRING INCLUDING NEW VDSL CABINET AT PARNELL STAIRS AND NEW HARDWARE IN SCHOENBAR VDSL CABINET WITH CABLE TO P2S PULLED IN EXISTING CONDUIT

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

(1) ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"

N PLAN NORTH

0 8' 16'

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT #69548

ELECTRICAL SITE PLAN

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\15\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U03 OVERALL PLAN.DWG
TAB: U03 KCN12_000

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
NO	DATE	DESCRIPTION	BR-000S(735)	2014	U03	78

GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

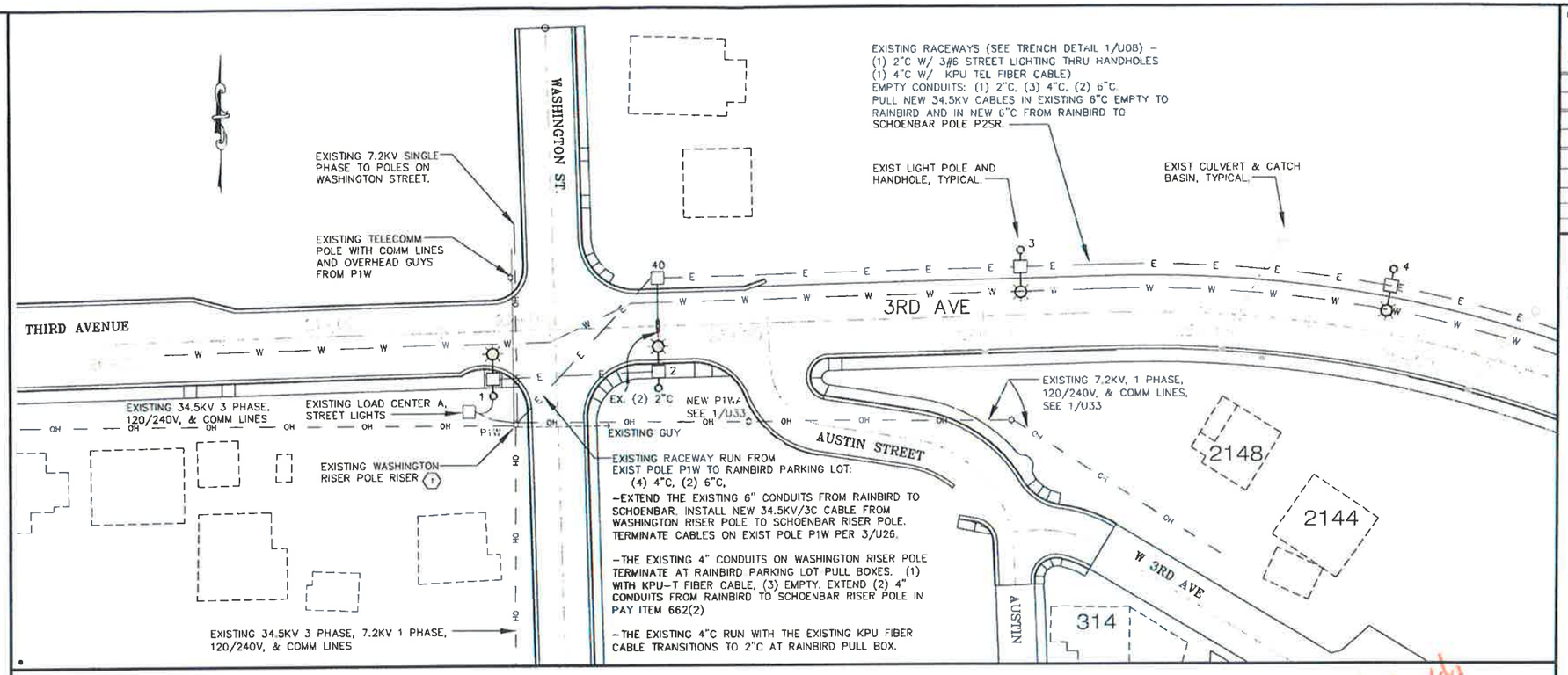
B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR. ADD (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3 C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

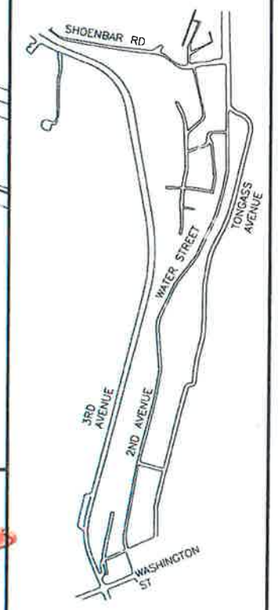
C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U08. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U2C, U16 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 652-1.02

ELECTRICAL NOTES:

1. INSTALL 35KV RISER POLE PER KPU DETAIL (5/U26) AND TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES TO THE AERIAL 35KV SUBTRANSMISSION CIRCUIT LOCATED ON THE TOP TIER OF THE POLE. DISCONNECT (3) EXISTING JUMPERS AND ASSOCIATED CONNECTORS AT 2ND AND WASHINGTON WHICH CONNECT THE WASHINGTON STREET AND WATER STREET AVE 35KV AERIAL LINES SEE U03.
2. EXISTING TRENCH FROM RAINBIRD TO WASHINGTON STREET RISER POLE P1W SEE DETAIL 1/U08.
3. EXISTING TRENCH FROM RAINBIRD TO SCHOENBAR. SEE DETAIL 2/U08.
4. THE EXISTING 2"C W/ THE STREET LIGHTING CIRCUIT BYPASSES THE EXISTING PULL BOXES. THE (2) 6"C EMPTY FROM THE WASHINGTON STREET RISER POLE P1W TERMINATE NEAR THE EXISTING PULL BOXES. –LOCATE THE ENDS OF THE CONDUITS AND EXTEND THE TWO RUNS TO SCHOENBAR RISER POLE P2SR.





PLAN LEGEND

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH XXX

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TAB U04 8/28/2014 10:45 AM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON EE-7455 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U04	78

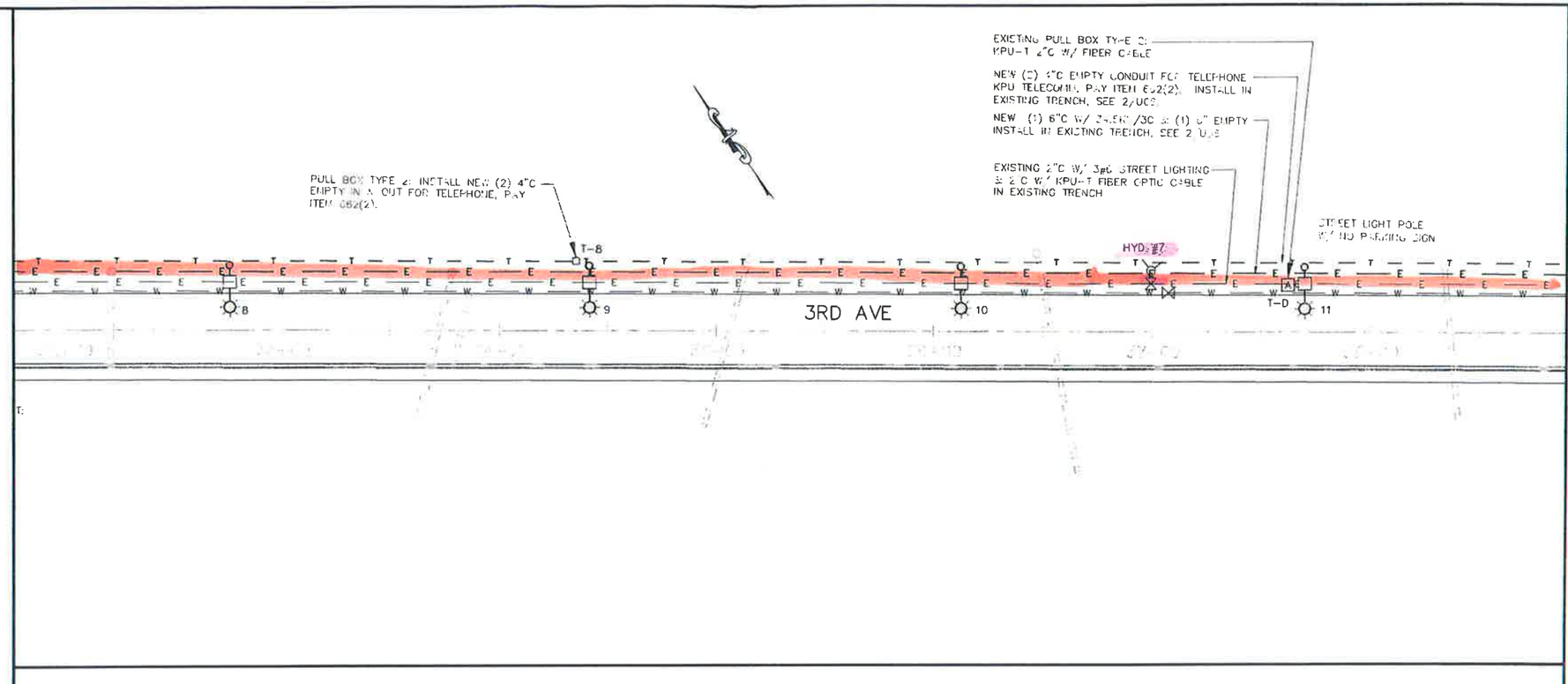
GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JEDX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JEDX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3/C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U13 & U10 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1.02



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH XXX

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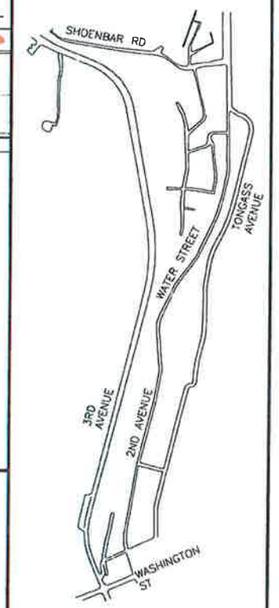
TAB U05 8/28/2014 10:45 AM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON 12-7155 8-31-16 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY KCN

DRAWN BY KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U05	78

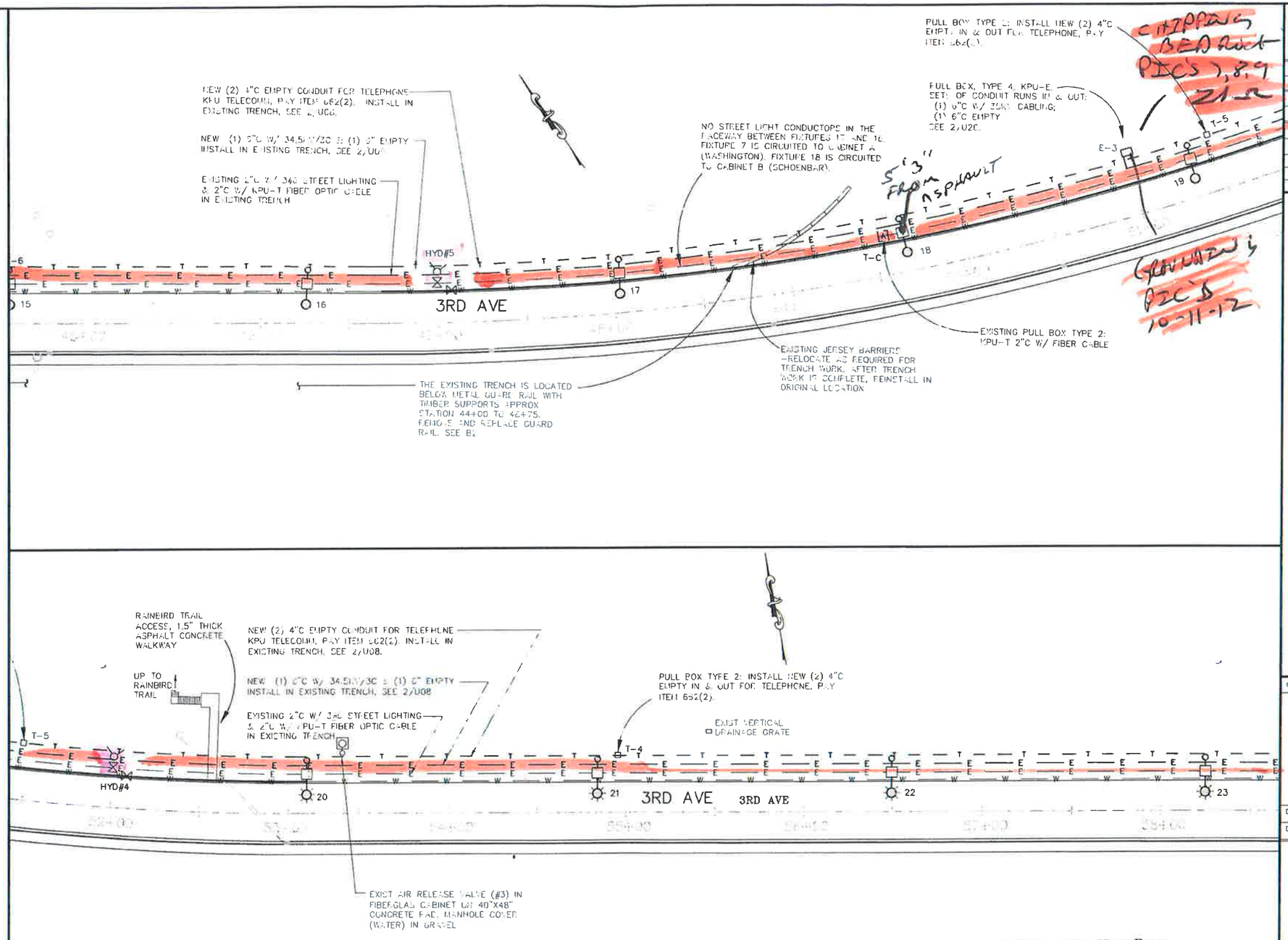
GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #750MCM 35KV 3 C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 24.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS. SEE SPEC 602-1.02



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH XXX

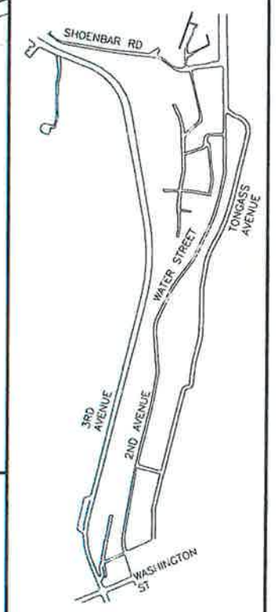
KCN12_000
TAB U06 8/28/2014 10:46 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY KCN

DRAWN BY KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U06	78

GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

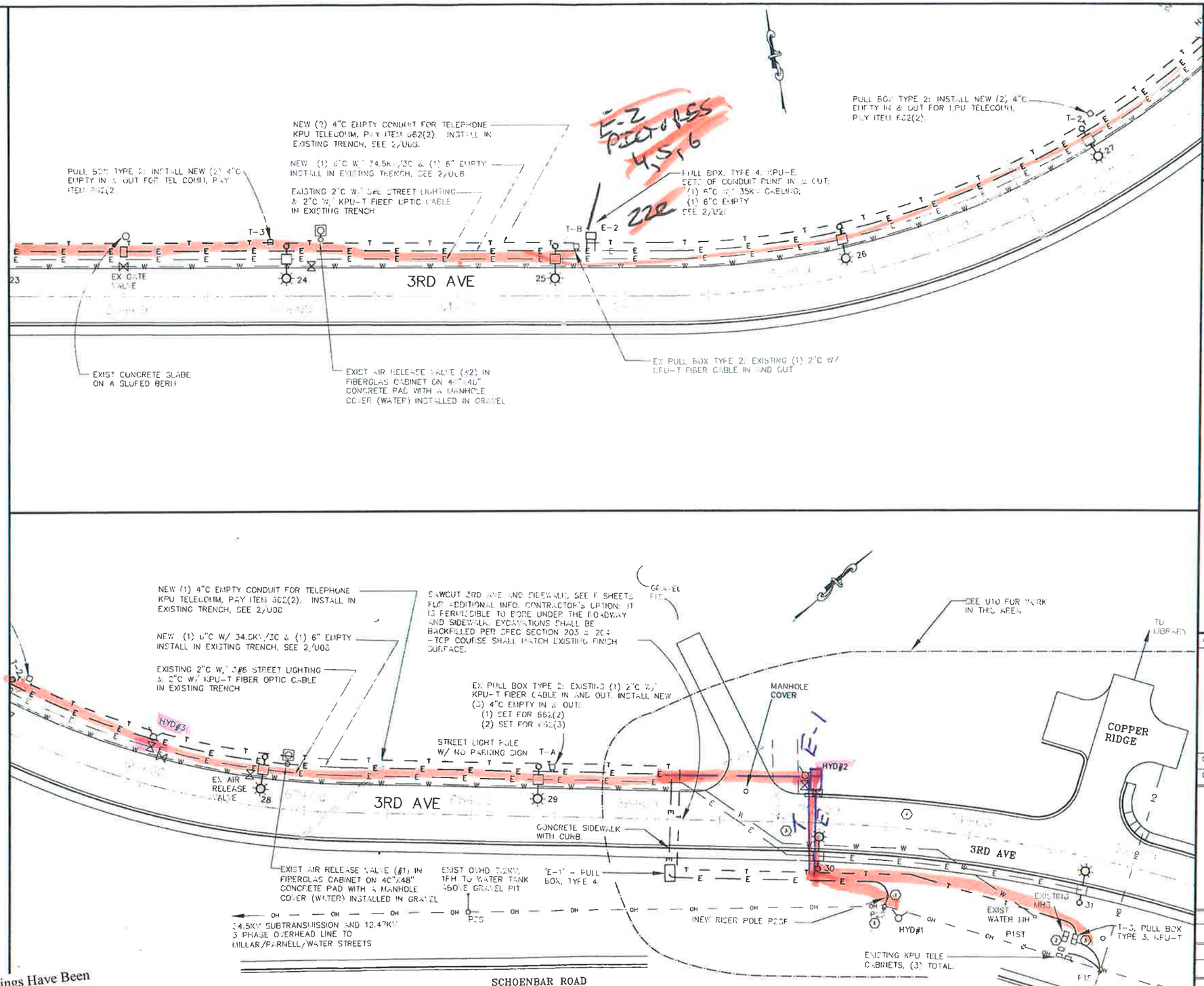
B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3/C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1.02

ELECTRICAL NOTES:

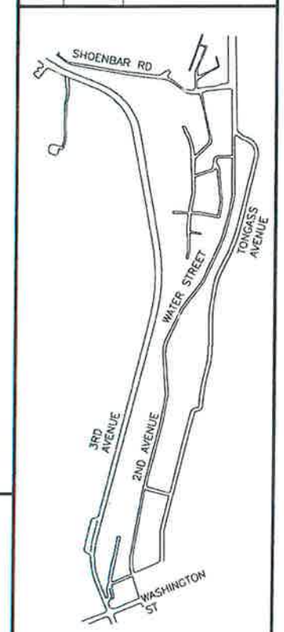
1. INSTALL 35KV RISER POLE P2SP PER KPU DETAIL AND TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES. INSTALL AERIAL CONDUCTOR TO CONNECT TO EXISTING POLE P2SC.
2. EXISTING MANHOLE MH3 (KPU-T) WITH EXISTING 2"C W/ FIBER CABLE FROM WASHINGTON RISER POLE AND (3) 4"C TO POLE P1S.
3. LOCATION OF THE STREET LIGHTING CIRCUIT CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
4. LOCATION OF THE WATER LINE CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
5. INSTALL NEW PULL BOX AND INSTALL (3) SETS OF CONDUITS IN AND OUT OF BOX: (1) 4"C FOR 662(2) & (2) 4"C FOR 662(3). CONDUITS TERMINATING ON P1S SHALL MATCH EXISTING RISER CONDUIT INSTALLATION.
6. INSTALL NEW CROSSARM W/ 34.5KV HARDWARE AND 34.5KV 3 PHASE OVERHEAD CONDUCTORS CONNECTING TO POLE P2SR.



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/15

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN LEGEND

PATH XXX

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TAB U07 8/28/2014 10:45 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

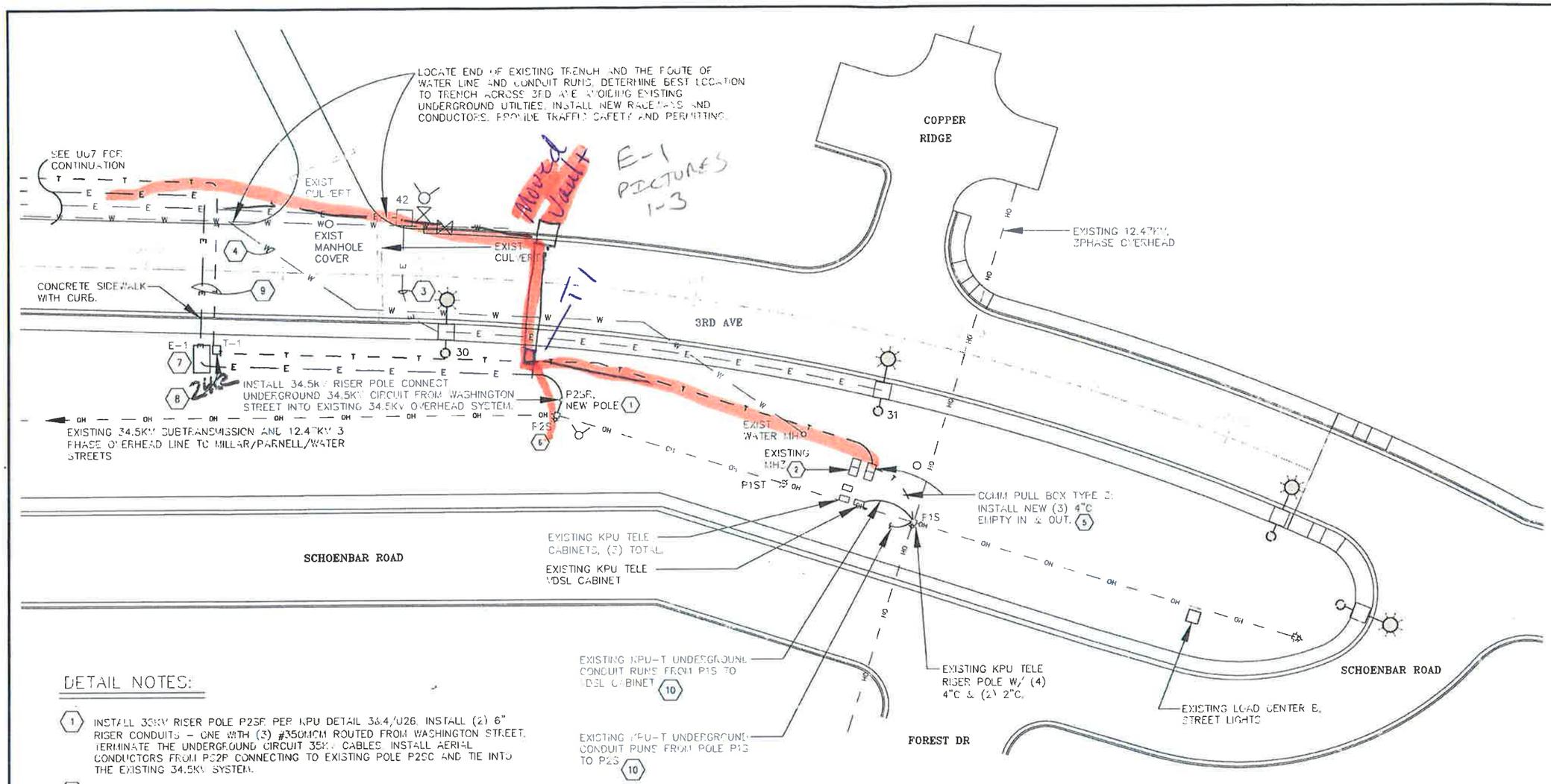
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U07	78



DETAIL NOTES:

1. INSTALL 35KV RISER POLE P2SR PER KPU DETAIL 3&4/U26. INSTALL (2) 6" RISER CONDUITS – ONE WITH (3) #350MCM ROUTED FROM WASHINGTON STREET. TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES. INSTALL AERIAL CONDUCTORS FROM P2SP CONNECTING TO EXISTING POLE P2SC AND TIE INTO THE EXISTING 34.5KV SYSTEM.
2. EXISTING KPU-T MANHOLE (MH3) WITH EXISTING 2"C W/ FIBER CABLE FROM WASHINGTON RISER POLE AND (3) 4"C TO POLE P1S.
3. LOCATION OF THE STREET LIGHTING CIRCUIT CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION.
4. LOCATION OF THE WATER LINE CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
5. INSTALL NEW PULL BOX AND INSTALL (3) SETS OF CONDUITS IN AND OUT OF BOX: (1) 4"C FOR 662(2) & (2) 4"C FOR 662(3). THE CONDUITS TERMINATING ON P1S SHALL MATCH EXISTING RISER CONDUIT INSTALLATION.
6. INSTALL NEW CROSSARM W/ 34.5KV DEADEND HARDWARE AND 34.5KV 3 PHASE OVERHEAD CONDUCTORS CONNECTING TO NEW RISER POLE P2S. ALSO JUMPER NEW OVERHEAD CONDUCTORS TO THE EXISTING 34.5KV LINE LOCATED ON THE TOP TIER OF P2S.
7. PULL BOX, TYPE 4 FOR ELECTRIC (KPU-E). SETS OF CONDUIT RUNS IN & OUT:
   (1) 6"C W/ 35KV CABLING;
   (1) 6"C EMPTY
   (1) 4"C EMPTY, WORK IN 662(3)
8. PULL BOX, TYPE 2 FOR TELECOMM: INSTALL NEW (3) 4"C EMPTY IN & OUT:
   (1) SET FOR 662(2)
   (2) SET FOR 662(3)
9. SAWCUT 3RD AVE AND SIDEWALK, SEE 1/U09 & F SHEETS FOR ADDITIONAL INFO. CONTRACTOR'S OPTION: IT IS PERMISSIBLE TO BORE UNDER THE ROADWAY AND SIDEWALK. EXCAVATIONS SHALL BE BACKFILLED PER SPEC SECTION 203 & 204 – TOP COURSE SHALL MATCH EXISTING FINISH SURFACE.
10. INSTALL NEW 25 PAIR CABLE IN EXISTING CONDUIT FROM EXISTING XDSL CABINET TO POLE P2S. TERMINATE IN CABINET AND NEW AERIAL TERMINAL ON POLE P2S. SEE X SHEETS.

1 SCHOENBAR ISLAND PLAN
SCALE: 1" = 20'

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH XXX

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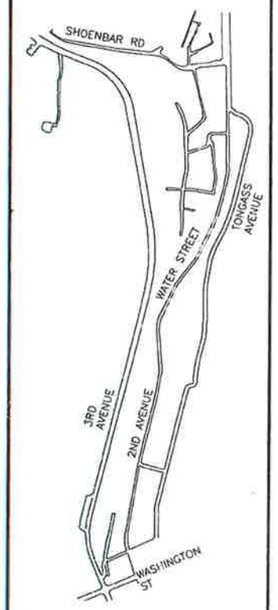
TAB U10 8/26/2014 10:57 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON CE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY KCN

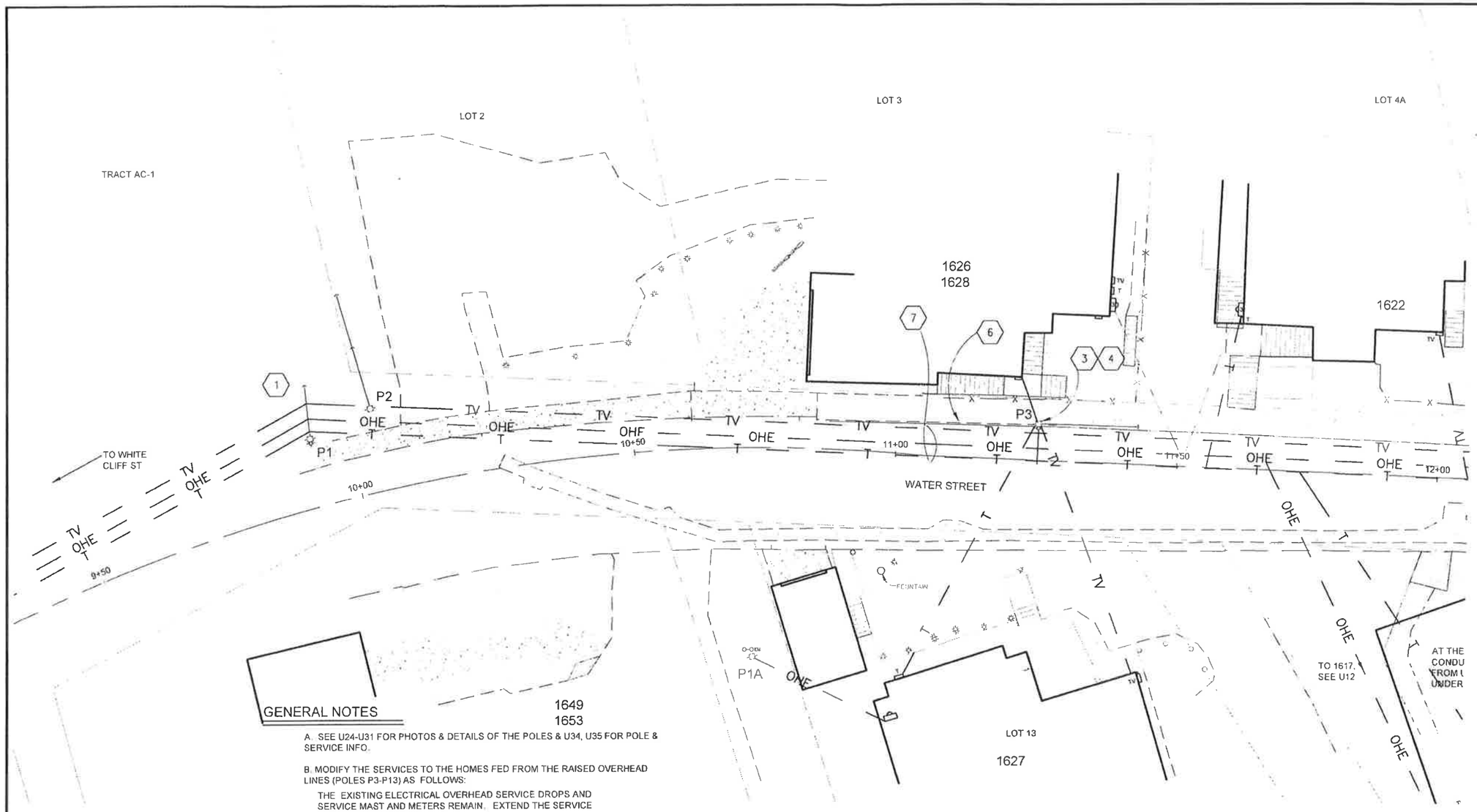
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69534

SCHOENBAR PLAN

PROJECT DESIGNATION	
BR-000S(735) ~ 69354	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U10	78



GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

ELECTRICAL NOTES

1. AFTER NEW 3RD AVE 34.5KV UNDERGROUND CIRCUIT IS ENERGIZED: REMOVE THE 12.47KV CONDUCTORS BETWEEN P1 TO P10 AND THEIR CROSSARMS ON P2-P9. REMOVE EXISTING 34.5KV POST TOP INSTALLATION AND INSTALL 34.5KV DOUBLE DEADEND WITH NO JUMPERS. REMOVE EXISTING 12.47KV POST TOP INSTALLATION AND INSTALL 12.47KV DEADEND ON THE UPHILL SIDE OF THE POLE. INSTALL 12.47KV AND 35KV GUYS. ON THE UPHILL SIDE OF THE POLE JUMPER THE 12.47KV DISTRIBUTION TO THE DEENERGIZED 34.5KV TOP TIER A
2. NOTE NOT USED
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P4 TO P10 AND NEW COMM CROSSARMS INSTALLED FROM POLE P4 TO P11 - SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.
5. EXISTING OVERHEAD INSTALLATION: 34.5KV 3 PHASE, 12.47KV 3 PHASE, 120/240V FOR STREET LIGHTS AND HOMES, GCI & KPU-T CABLING, TYPICAL. REMOVE 12.47KV CONDUCTORS. ADJUST SERVICE DROPS TO THE HOMES.
6. INSTALL NEW GUY FOR KPU-T FIBER OPTIC LINE.
7. EXISTING OVERHEAD INSTALLATION: 34.5KV 3 PHASE, 12.47KV 3 PHASE. GCI & KPU-T CABLING, TYPICAL. REMOVE 12.47KV CONDUCTORS.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U8 1-12-17 BRIDGE.DWG

KCN12_000

TAB U12

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

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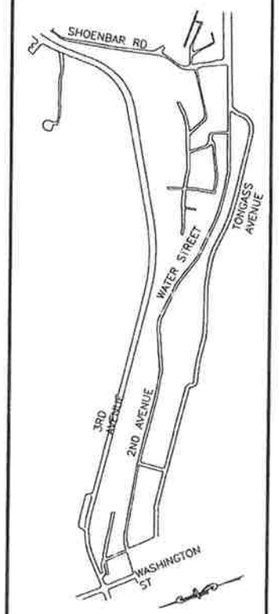


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

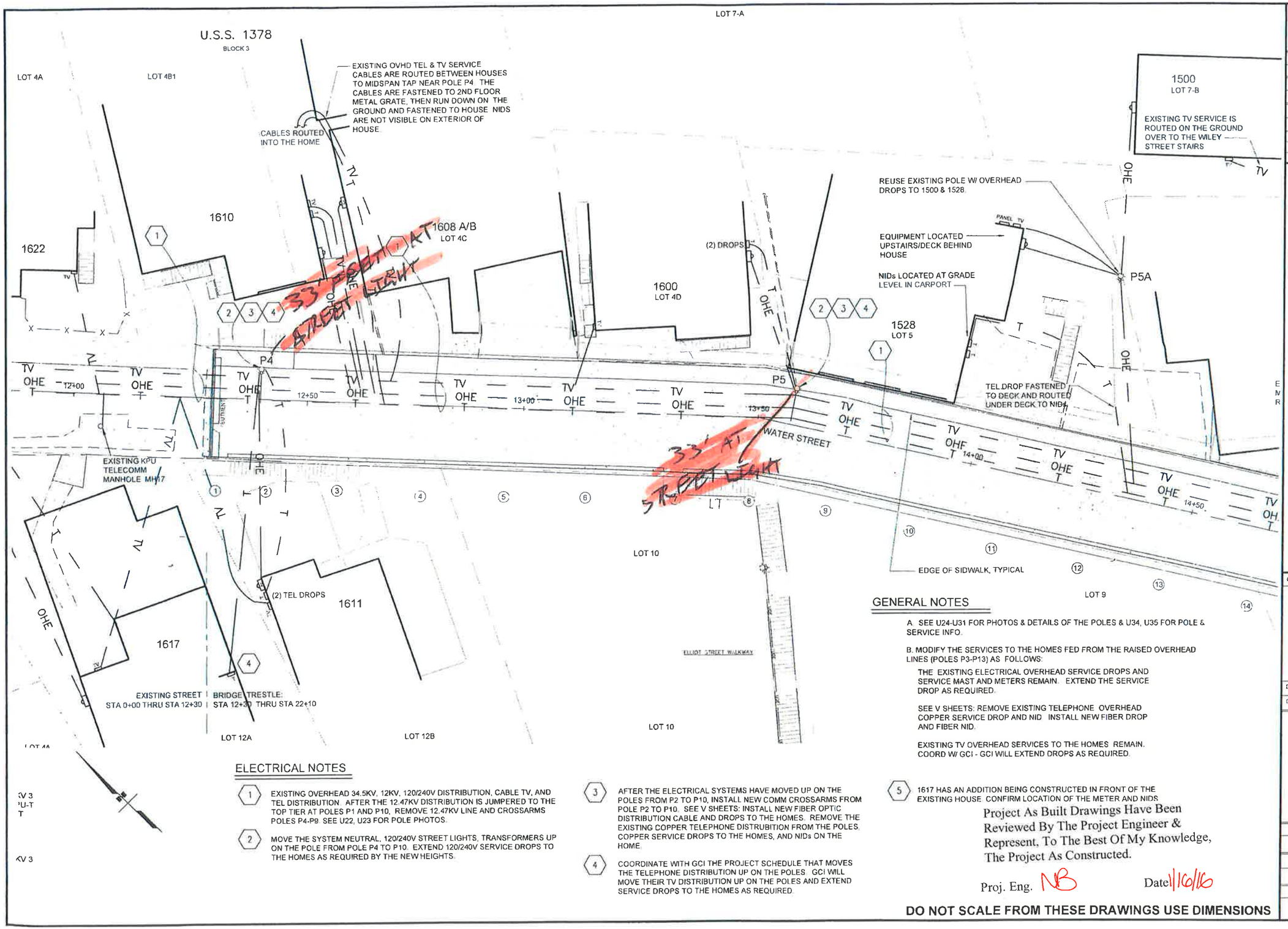
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNKLINE RELOCATION
PROJECT #69548

UTILITY PLAN WATER ST. ELECTRIC

PROJECT DESIGNATION: BR-000S(735) ~69458

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U12	78



ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P2 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES. COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.
5. 1617 HAS AN ADDITION BEING CONSTRUCTED IN FRONT OF THE EXISTING HOUSE. CONFIRM LOCATION OF THE METER AND NIDS.

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

P:\TH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP2 TRUNK RELOCATION\WSB AUR U01+12.17 BRIDGE.DWG

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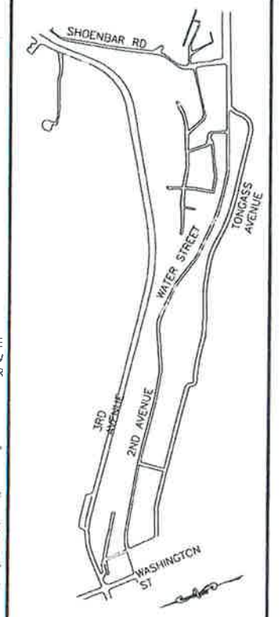
TAB U13

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY TEO

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY KCN

DRAWN BY KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

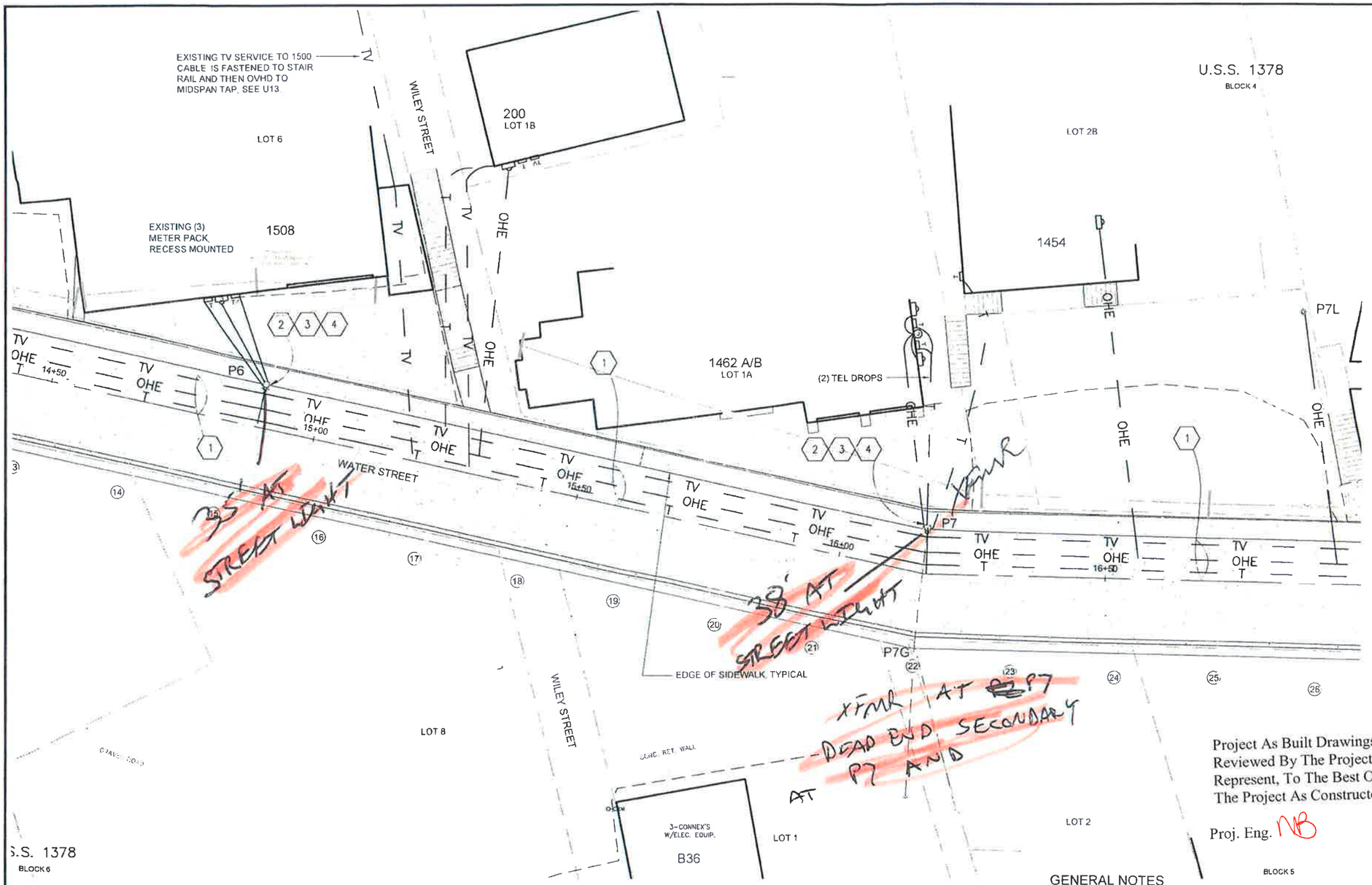
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION

BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U13	78



ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P4 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2012 WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG

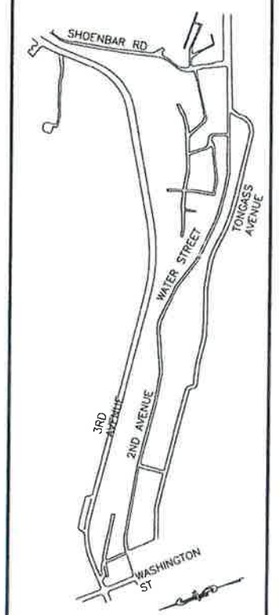
KCN12_000

TAB U14

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY TED

STATE OF ALASKA 49th KEITH NELSON CE-7855 6-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

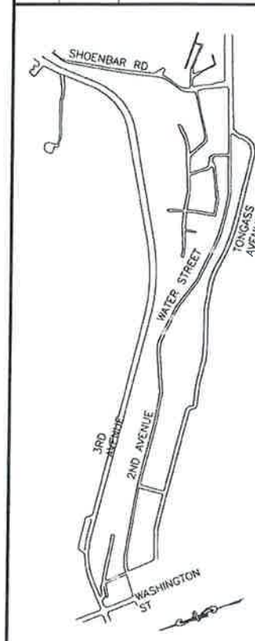
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION

BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U14	78



PLAN LEGEND

ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P4 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\9-KNEE\2013\WSB DESIGN13\DWG\9-NTP8 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG
KCN12_000
TAB: U15

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER 9-27-14

DESIGNED BY: KCN
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION	
BR-000S(735) ~69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U15	78

Ketchikan Advance Water Street Truck Line Relocation Project #69548

As– Built Pole Photos

P0

P1 & P2

P3

P4

P5

P6

P7

P8

P9

P10

P10

P11

Mid Span Height

Pole	to	Pole	
10	9	KPU GCI	26' 6" 26'6"
9	8	KPU GCI	25' 6" 26' 10"
8	7	KPU GCI	26' 2" 25'
7	6	KPU GCI	26' 2" 25' 9"
6	5	KPU KPU * GCI	25' 2" 26' 6" 24' 9"
5	4	KPU GCI	25' 1" 24' 3"
4	3	KPU GCI	26' 26' 8"

* Measurement taken at pole

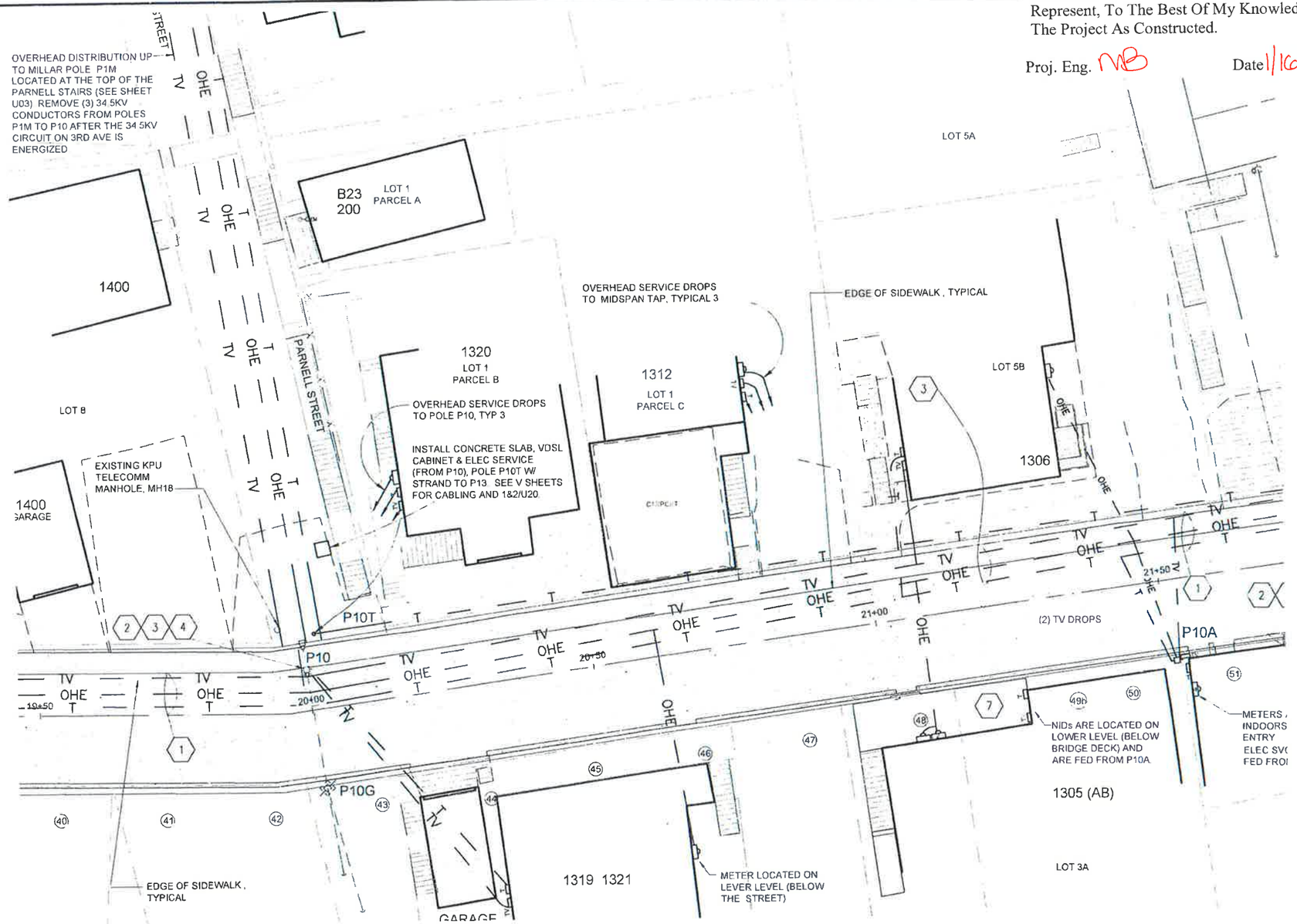
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

Total Sheets 78

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/19/16



ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE BETWEEN P3-P10 AND CROSSARMS ON POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P3 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P2 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

GENERAL NOTES

A. SEE U FOR PHOTOS OF THE POLES.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (P3-P13) AS FOLLOWS:
THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\B-KNEE\2013\WSB DESIGN13\DWG\S.MTP3 TRUNK RELOCATION\WSB AUR U01+12.17 BRIDGE.DWG

KCN12_000

TAB U16

ADDENDUM NUMBER

ATTACHMENT NUMBER

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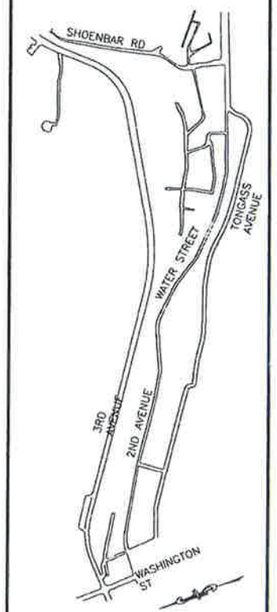


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EX-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

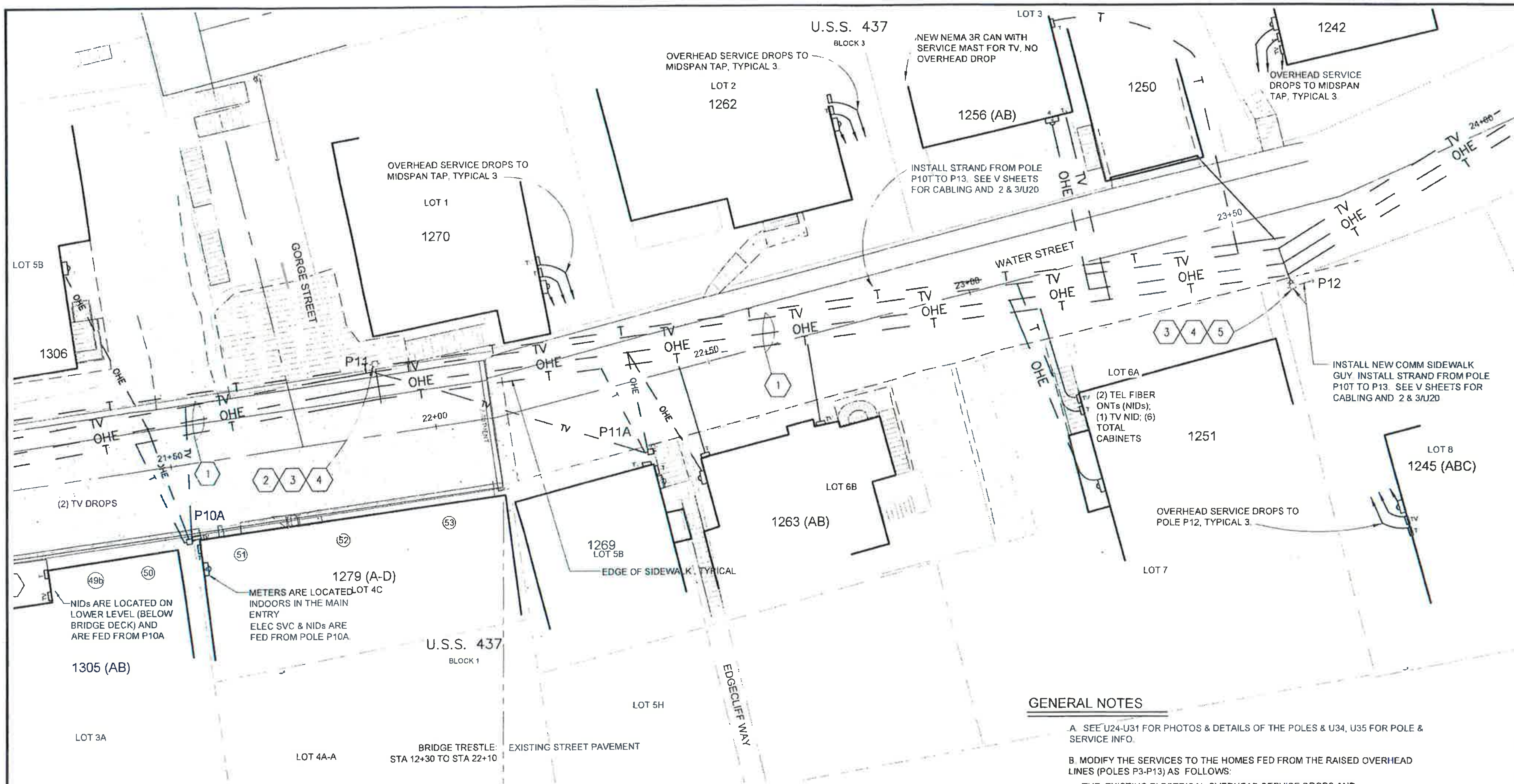
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION	
BR-000S(735) ~69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U16	78



GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

ELECTRICAL NOTES

(1) EXISTING OVERHEAD MOUNTED ON ALLEY ARMS: 12.47KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, INSTALL 120/240V AND COMM SYSTEMS HIGHER ON THE POLE., WHEN THEY ARE OPERATIONAL DEMO THE EXISTING SYSTEMS. SEE U22, U23 FOR POLE PHOTOS.

(2) INSTALL NEW 120/240V CROSSARM, SYSTEM NEUTRAL, 120/240V DISTRIBUTION UP ON THE POLE AT POLE P11. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.

(3) AFTER THE 120/240V SYSTEMS HAVE MOVED UP ON THE POLE P11, INSTALL NEW COMM CROSSARM. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES, NEW 900 PAIR CU. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBUTION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.

(4) COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

(5) EXISTING OVERHEAD MOUNTED ON ALLEY ARMS: 12.47KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, INSTALL COMM SYSTEMS HIGHER ON THE POLE. WHEN THEY ARE OPERATIONAL DEMO THE EXISTING SYSTEMS. SEE U23 FOR POLE PHOTOS.

(6) INSTALL NEW COMM CROSSARM DOUBLE ARM 10 PIN ALLEY. SEE V SHEETS FOR RAISING EXISTING COPPER & FIBER OPTIC CABLES, INSTALL NEW 900 PAIR, ADJUST TEL SERVICE DROPS

DISTRIBUTION CABLE AND DROPS TO THE HOMES, NEW 900 PAIR CU. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FRO...

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB U17

ADDENDUM NUMBER

ATTACHMENT NUMBER

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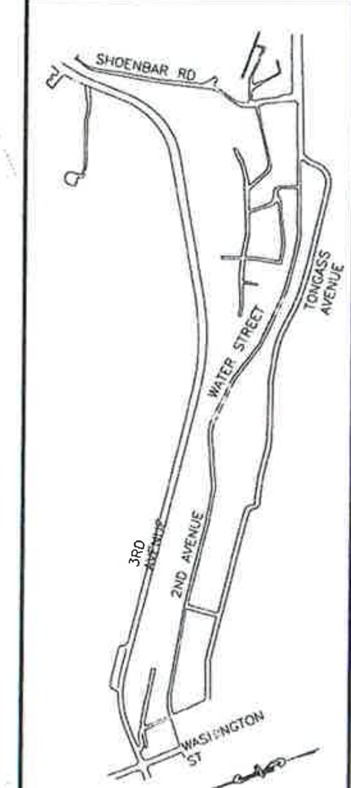


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

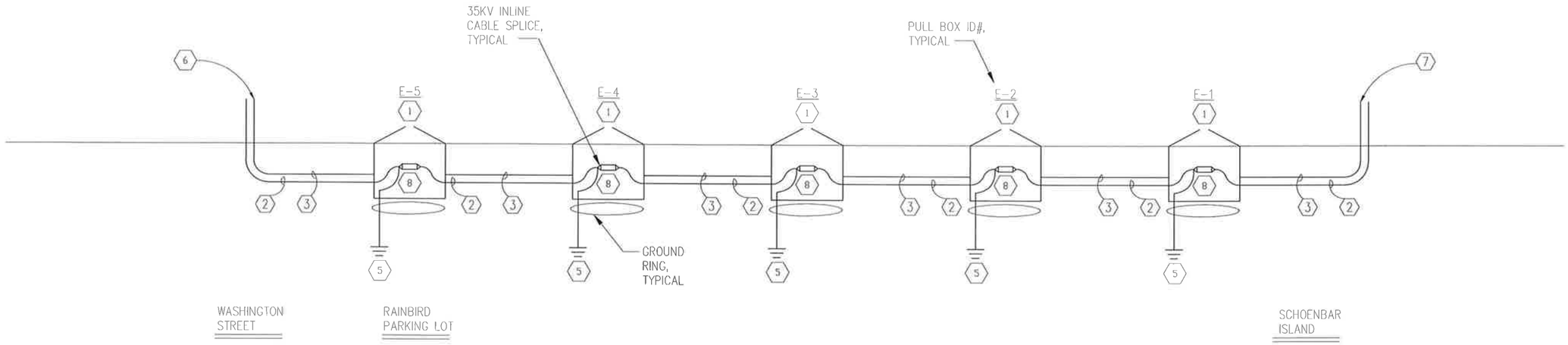
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION: BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U17	78



1 ELECTRICAL 35KV ONE LINE DIAGRAM -3RD AVENUE

NO SCALE

DETAIL GENERAL NOTES:

A COORDINATE THE ENTIRE 34.5KV CABLE INSTALLATION INCLUDING CONNECTIONS TO THE EXISTING OVERHEAD 35KV SYSTEM WITH KPU.

B SEE U04–U07 & U10 FOR EQUIPMENT LOCATIONS.

DETAIL ELECTRICAL NOTES

1. TYPE 4 PULL BOX, ELECTRICAL 4'X6'X 3'D, SEE 3/U26
2. NEW (1) 6"PVC SCH80 W/ (3) 3350MCM 35KV CABLES WITH CONCENTRIC NEUTRAL
3. NEW (1) 6"PVC SCH80 WITH PULL STRINGS AND LABELS, SPARE CONDUIT
4. NOTE NOT USED
5. INSTALL NEW GROUNDING ELECTRODE SYSTEM: GROUND ROD, #4/0 BARE CU CONNECTED TO GROUND RING LOOPED AROUND THE PERIMETER OF THE BOX. TIE THE 35KV CONDUCTOR'S CONCENTRIC NEUTRALS TOGETHER AND CONNECT THEM TO THE GROUND ELECTRODE SYSTEM W/ #4 BARE CU, SEE 2/U26 FOR ADDITIONAL DETAIL.
6. (2) 6"PVC EXISTING CONDUITS ON RISER POLE P1W ON STANDOFF BRACKETS. EXTEND ONE CONDUIT, PULL NEW (3) 3350MCM 35KV CABLES WITH CONCENTRIC NEUTRAL AND CONNECT INTO EXISTING 35KV OVERHEAD DISTRIBUTION SYSTEM. SEE 35KV RISER POLE DETAIL. THE OTHER 6" CONDUIT SHALL HAVE TWO FULL STICKS OF CONDUIT INSTALLED ON THE EXISTING BRACKET AND CAPPED. SEE U04 FOR LOCATION & 2/U21 FOR PHOTO OF EXISTING P1W INSTALLATION.
7. INSTALL CONDUITS ON NEW RISER POLE P2SR MOUNTED ON STANDOFF BRACKETS. THE CONDUIT WITH CONDUCTORS: TERMINATE HV CABLE PER 35KV RISER POLE DETAIL. THE OTHER 6" CONDUIT SHALL HAVE TWO FULL STICKS OF CONDUIT INSTALLED ON THE BRACKET AND CAPPED.
8. INSTALL INLINE SPLICE & COLD SEAL ON EACH CABLE IN PULL BOX. SUPPORT FINISHED CABLE INSTALLATION IN THE PULL BOX

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-AITP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000

TAB: U18

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

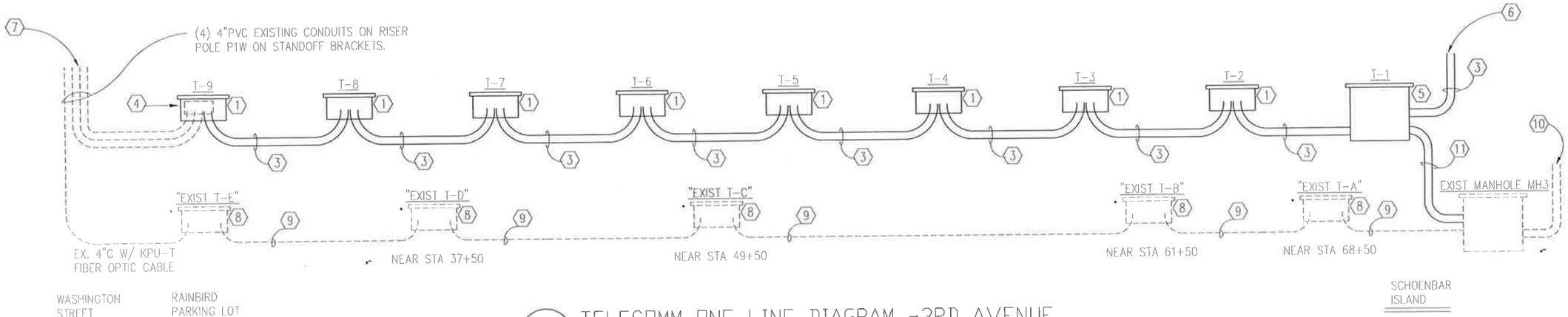
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

ELECTRICAL ONE LINE DIAGRAM

PROJECT DESIGNATION

BR000(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U18	78



1 TELECOMM ONE LINE DIAGRAM -3RD AVENUE

NO SCALE

DETAIL ELECTRICAL NOTES

1. TYPE 2 TELECOM PULL BOX
2. NOTE NOT USED
3. NEW (2) 4"PVC SCH80 INSTALL AS 662(2) WITH PULL STRINGS AND LABELS.
4. REMOVE EXISTING PB T-F QUARZITE HANDHOLE, INSTALL NEW TYPE 2 PULL BOX.
5. TYPE 3 TELECOM PULL BOX
6. INSTALL CONDUITS ON TELECOMM RISER POLE P1S MOUNTED ON NEW STANDOFF BRACKETS. SEE U10 FOR LOCATION & 3/U21 FOR PHOTO OF EXISTING INSTALLATION.
7. (3) 4"PVC EXISTING CONDUITS ON RISER POLE P1W ON STANDOFF BRACKETS. SEE U04 FOR LOCATION & 2/U21 FOR PHOTO OF EXISTING INSTALLATION.
8. EXISTING TYPE 3 TELECOM PULL BOX
9. EXISTING 2"PVC EXISTING CONDUIT W/ KPU-T FIBER OPTIC CABLE (WASHINGTON ST TO SCHOENBAR)
10. EXISTING CONDUITS ON TELECOMM RISER POLE P1S.
11. (2) 4"PVC SCH80 CONNECT EXIST MANHOLE MH3 TO NEW T-1 PULL BOX.

DETAIL GENERAL NOTES:

A COORDINATE THE RACEWAY SYSTEM INSTALLATION WITH KPU-T.

B SEE U04-U07 & U10 FOR EQUIPMENT LOCATIONS.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWGS-NTP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000

TAB: U19

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

TELECOMM ONE LINE DIAGRAM

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U19	78

Ketchikan Advance Water Street
Truck Line Relocation

Project #69548

Electrical Vault E-1 70+50 LT

Electrical Vault E-1 70+50 LT

Electrical Vault E-4 41+25 LT

Electrical Vault E-2 62+80 LT

Electrical Vault E-2 62+80 LT

Electrical Vault E-4 41+25 LT

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

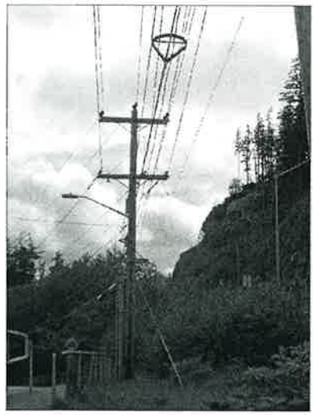
Electrical Vault E-3 51+00 LT

Electrical Vault E-3 51+00 LT

Electrical Vault E-5 30+60 LT

Electrical Vault E-5 30+60 LT

Total Sheets 78



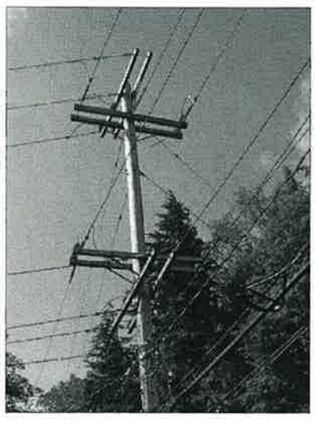
INSTALL NEW CROSS BUCK ARMS (SIMILAR TO EXISTING P1W INSTALLATION) FOR CONNECTING 34.5KV, THREE PHASE TO THE NEW P2SR RISER POLE.

1 POLE P2S
NONE

2 POLE P1W
NONE

INSTALL NEW 4" CONDUITS (EMPTY) ON STANDOFF BRACKETS FOR TELECOMM FOR FUTURE USE; MATCH EXISTING INSTALLATION. THE NEW CONDUIT RUNS ARE FROM THE NEW PULL BOX TO THE POLE.

3 POLE P1S
NONE
A = EXISTING KPU-T VDSL CABINET



4 POLE P1M
NONE
MILLAR STREET AT THE TOP OF PARNELL STAIRS

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 11/16/16

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KCN12_000

TAB: U21

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE PHOTOS

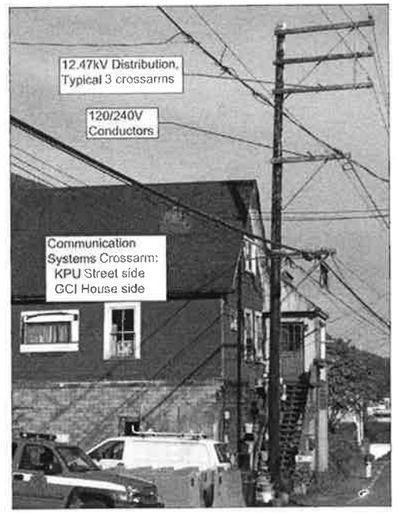
PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U21	78

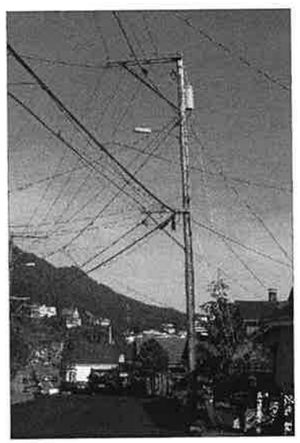
1 POLE P8
NO SCALE

2 POLE P9
NO SCALE

3 POLE P10
NO SCALE

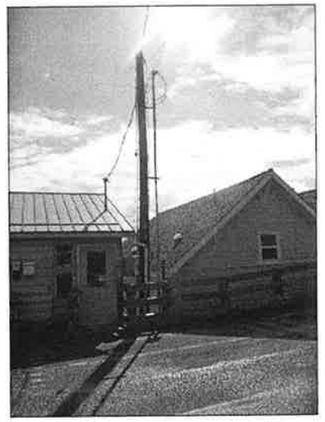


4 POLE P11
NO SCALE



5 POLE P12
NO SCALE

6 POLE P13
NO SCALE



7 POLE P10A
NO SCALE

8 POLE P11A
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB: U23

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

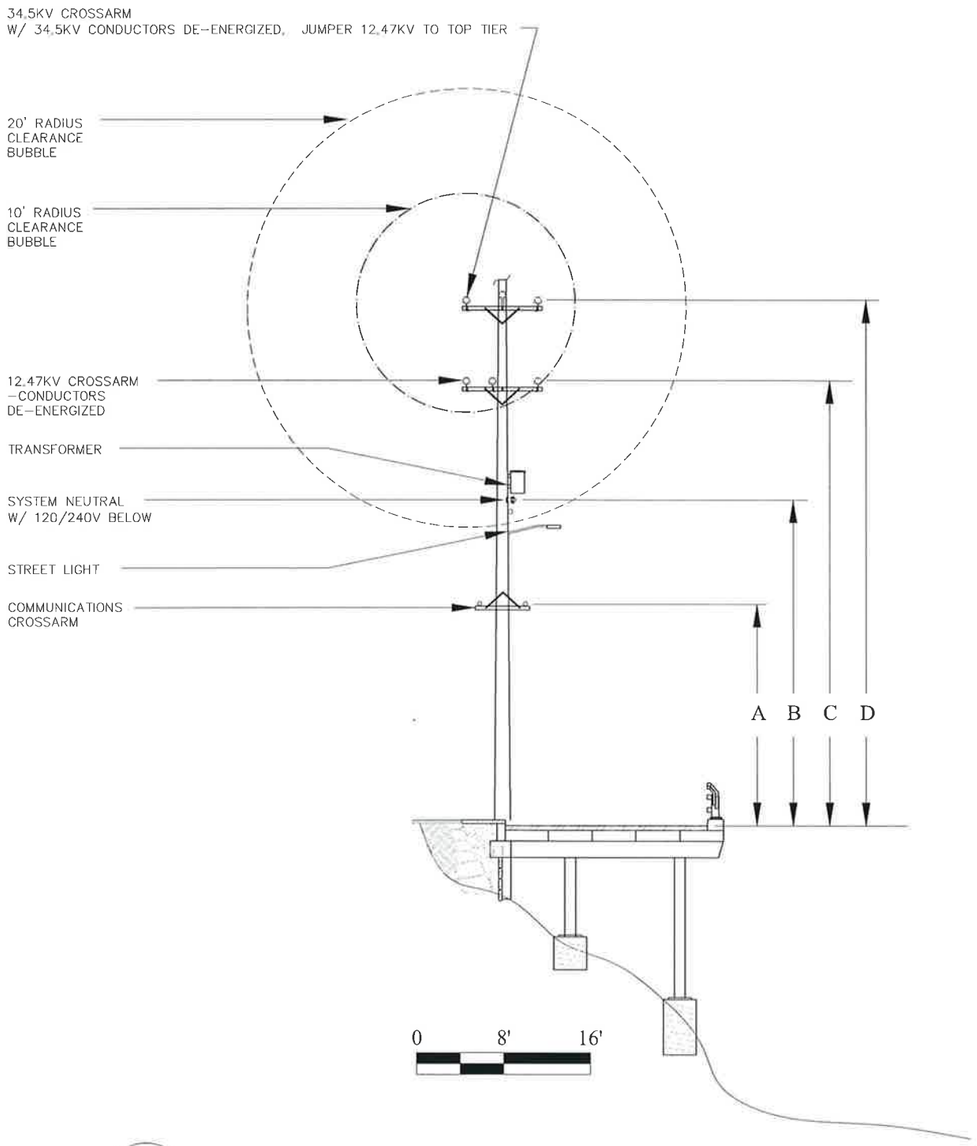
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U23	78

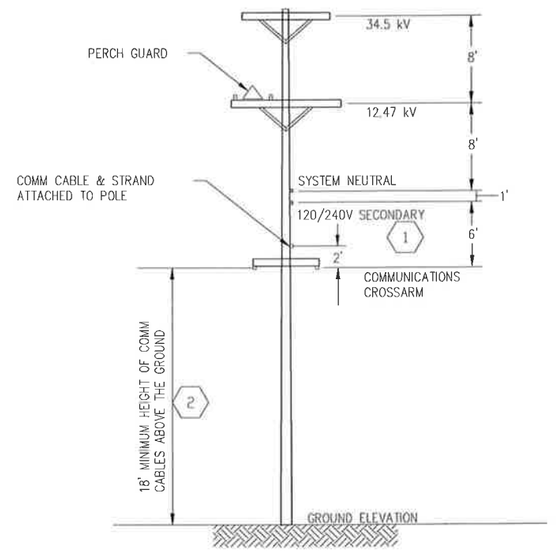


1 OSHA CLEARANCE BUBBLE @ POLE P10

SCALE: 1/4" = 1'-0"

EXISTING INSTALLATION

Conductor Heights Above The Street			
	At Pole P10	Midspan P9-P10	Midspan P10-P11
A (Communication Lines)	19'-10"	15'-10"	16'-11"
B (System Neutral)	33'-8"	28'-4"	27'-6"
C (12.47kV)	40'-8"		
D (34.5kV)	48'-8"		



THE DETAIL SHOWS THE GENERAL FRAMING REQUIREMENTS FOR KPU POWER POLES.

2 KPU GENERAL FRAMING GUIDE

NO SCALE

ELECTRICAL NOTES

1. ALONG WATER STREET WHERE THE OVERHEAD SYSTEM IS BEING RAISED, THE MINIMUM DISTANCE BETWEEN ANY OF THE COMM LINES AND THE 120/240V DISTRIBUTION SYSTEM IS 48"
2. RAISE THE COMM LINES ALONG WATER STREET TO THE MAXIMUM LEVEL WHILE MAINTAINING 48" SEPARATION BETWEEN ANY OF THE COMM LINES AND THE 120/240V DISTRIBUTION SYSTEM

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represen, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KN\EE\2013\WSB DESIGN\13\DWGS-NTP3 TRUNK RELOCATION\WSB AUR U18-35 FOTO3 POLES.DWG

KCN12_000

TAB: U25

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN -ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

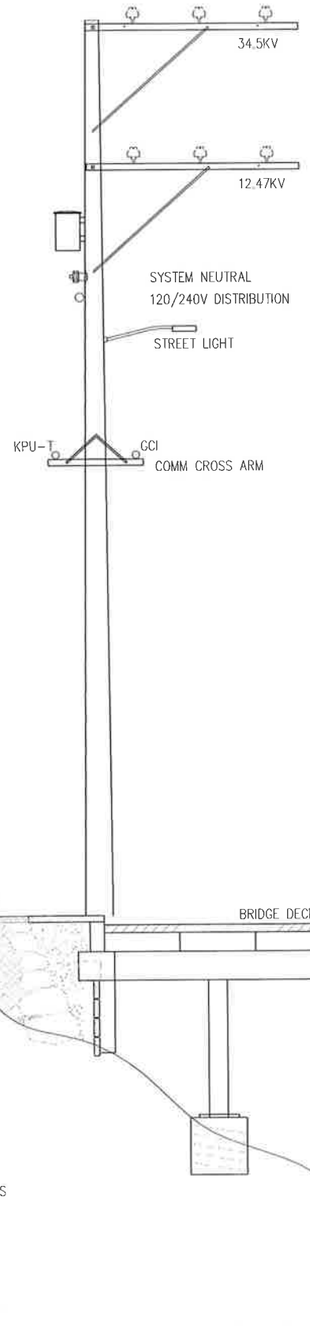
POLE DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69548

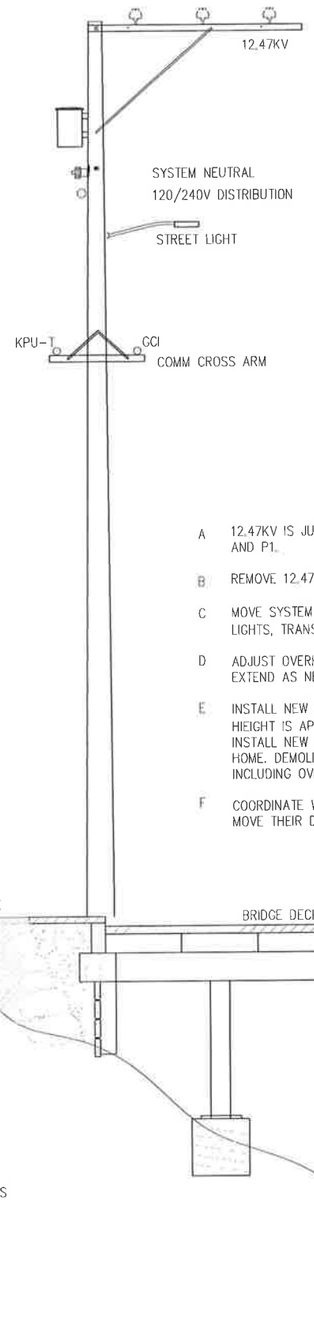
STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U25	78



POLE P5 SHOWN. INSTALLATION IS SIMILAR FOR POLE P3-P6

1 EXISTING POWER POLE -ALLEY ARM CONSTRUCTION
NO SCALE



POLE P5 SHOWN. INSTALLATION IS SIMILAR FOR POLE P3-P6

2 REVISED POWER POLE -ALLEY ARM CONSTRUCTION
NO SCALE

A 12.47KV IS JUMPERED UP TO THE TOP TIER AT POLE P10 AND P1.

B REMOVE 12.47KV ALLEY ARM AND CONDUCTORS.

C MOVE SYSTEM NEUTRAL, 120/240V DISTRIBUTION, STREET LIGHTS, TRANSFORMERS UP APPROXIMATE 8'

D ADJUST OVERHEAD ELECTRICAL DROPS TO THE HOMES, EXTEND AS NECESSARY.

E INSTALL NEW COMM ARM AND KPU-T DISTRIBUTION. NEW HIEIGHT IS APPROX 8' HIGHER THAN EXISTING COMM ARM. INSTALL NEW NID AND OVERHEAD FIBER DROPS TO EACH HOME. DEMOLISH EXISTING COPPER DISTRIBUTION SYSTEM INCLUDING OVERHEAD DROPS AND NIDs.

F COORDINATE WITH WORK SCHEDULE WITH GCI – GCI WILL MOVE THEIR DISTRIBUTION UP TO THE NEW COMM ARM.

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KCN12_000
TAB: U27

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/16/16

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

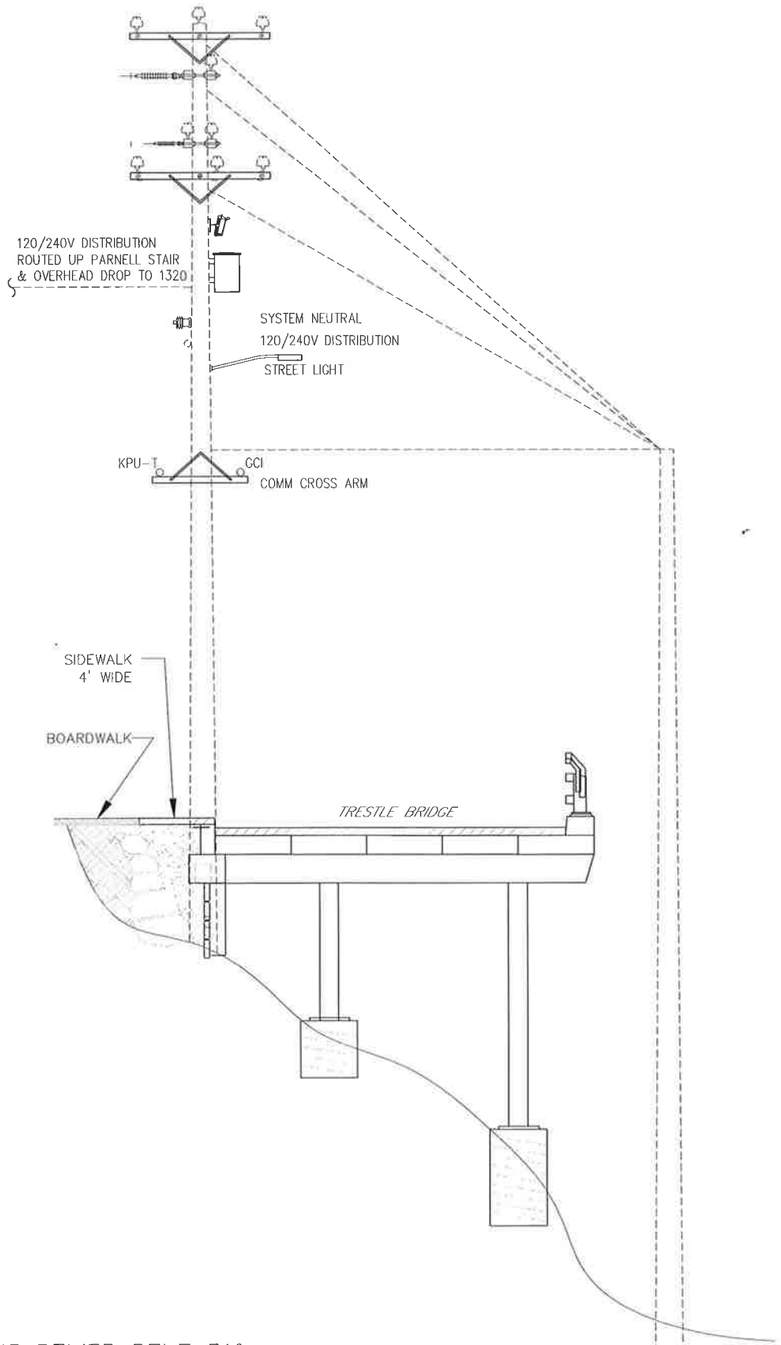
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN -ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

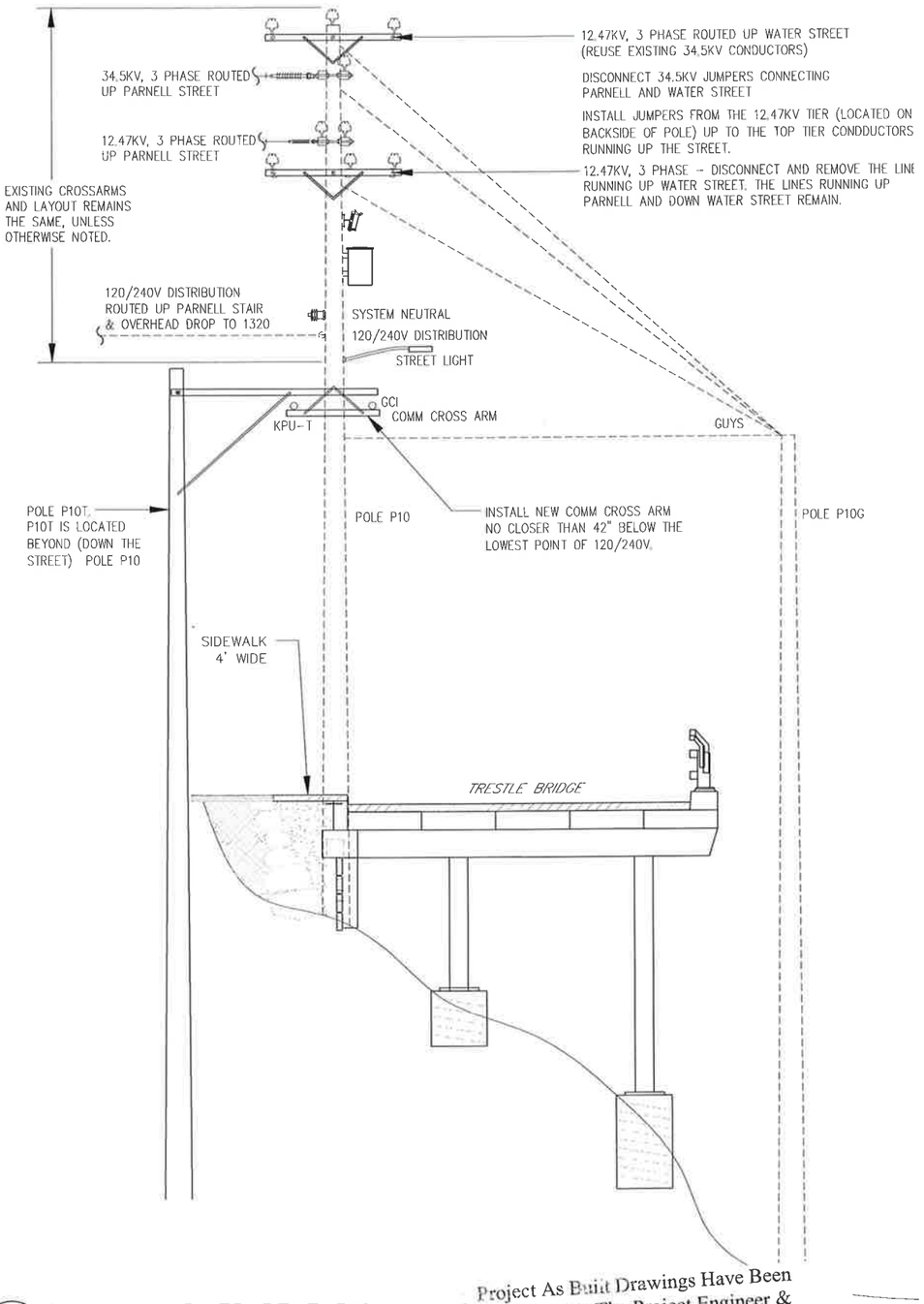
POLE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U27	78



1 EXISTING POWER POLE P10
NO SCALE



12.47KV, 3 PHASE ROUTED UP WATER STREET
(REUSE EXISTING 34.5KV CONDUCTORS)

DISCONNECT 34.5KV JUMPERS CONNECTING
PARNELL AND WATER STREET

INSTALL JUMPERS FROM THE 12.47KV TIER (LOCATED ON
BACKSIDE OF POLE) UP TO THE TOP TIER CONDDUCTORS
RUNNING UP THE STREET.

12.47KV, 3 PHASE – DISCONNECT AND REMOVE THE LINE
RUNNING UP WATER STREET. THE LINES RUNNING UP
PARNELL AND DOWN WATER STREET REMAIN.

INSTALL NEW COMM CROSS ARM
NO CLOSER THAN 42" BELOW THE
LOWEST POINT OF 120/240V.

2 REVISED POWER POLE P10
NO SCALE

Project As Built Drawings Have Been
Reviewed By The Project Engineer &
Represent, To The Best Of My Knowledge,
The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\6-KNE\2013WSB DESIGN13\DWG\6-NTP9 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000

TAB: U29

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA
49th
KEITH NELSON
EE-7655
6-27-14
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

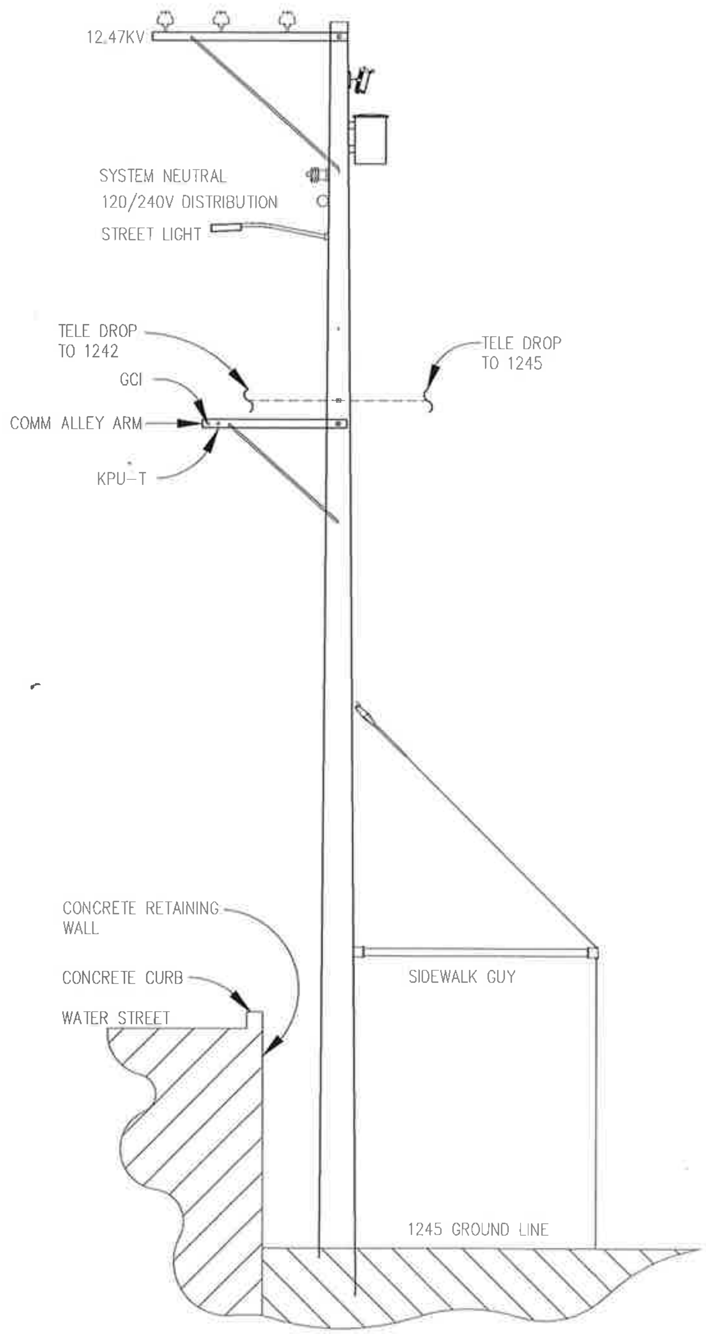
KETCHIKAN -ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE DETAILS

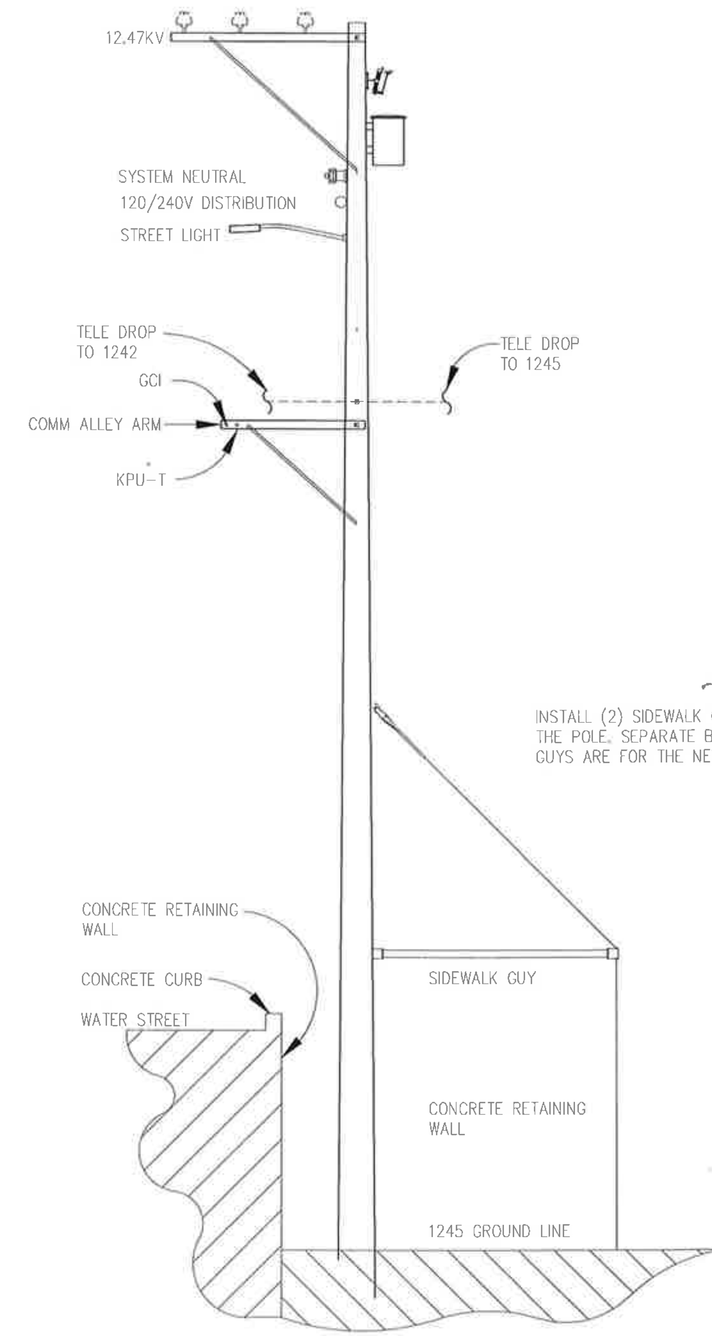
PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U29	78



1 EXISTING POWER POLE P12
NO SCALE



AFTER THE NEW COMM ALLEY ARM (SEE DETAIL 2 THIS SHEET), NEW STRAND, TELECOM DISTRIBUTION AND GUYS ARE INSTALLED, DISCONNECT AND REMOVE THE EXISTING INSTALLATION.

INSTALL (2) SIDEWALK GUYS ON DOWN STREET SIDE OF THE POLE, SEPARATE BY AT 10 DEGREES. THE NEW GUYS ARE FOR THE NEW TELE STRAND CABLE

2 REVISED POWER POLE P12
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB: U31

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA · 49th · Keith Nelson · KEITH NELSON EE-7855 6-27-14 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

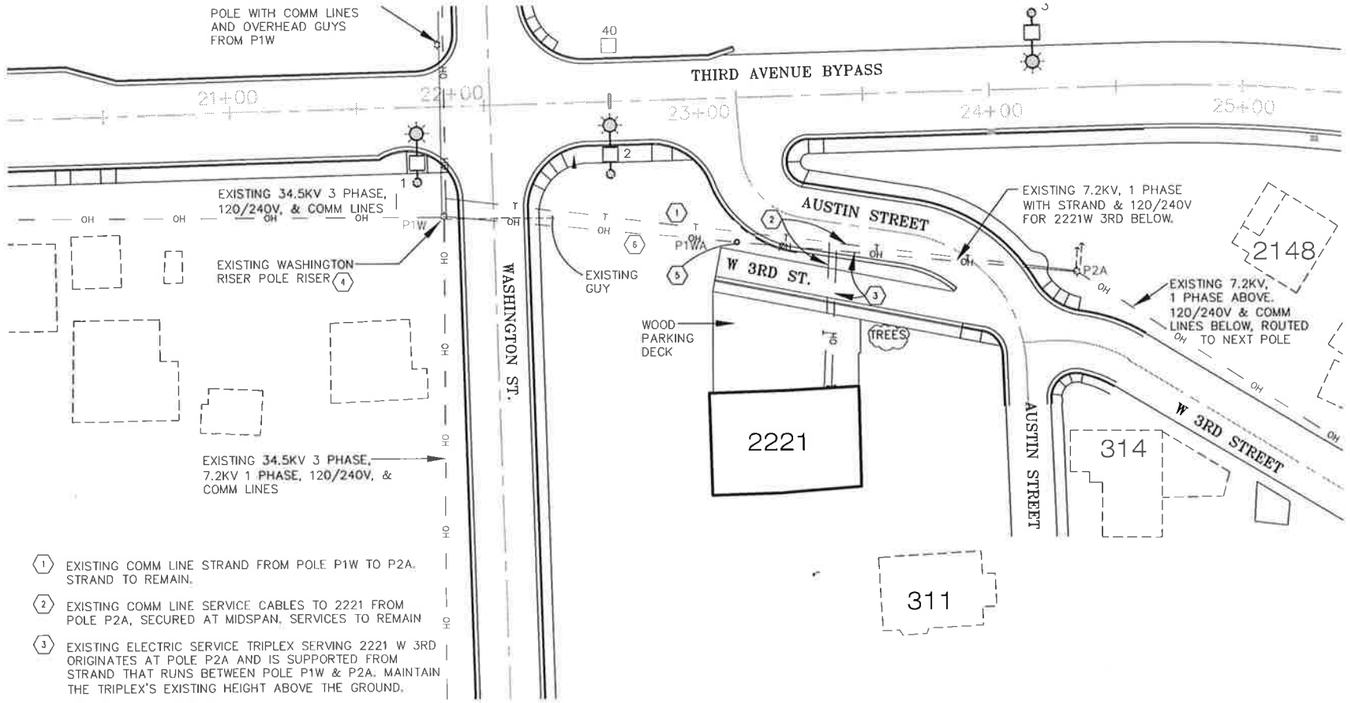
KETCHIKAN -ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U31	78

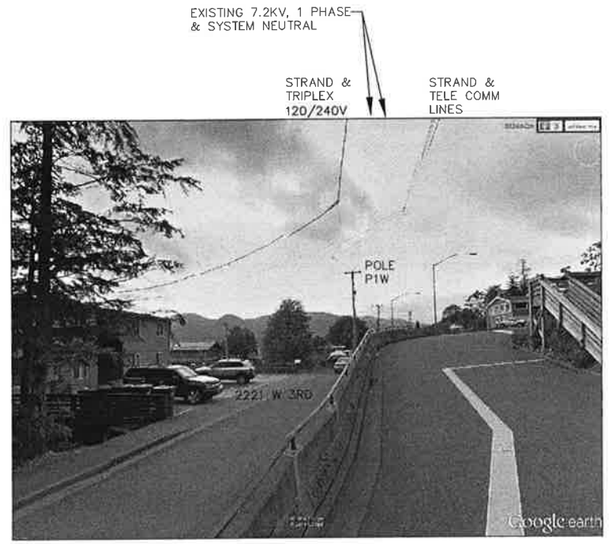


1. EXISTING COMM LINE STRAND FROM POLE P1W TO P2A. STRAND TO REMAIN.
2. EXISTING COMM LINE SERVICE CABLES TO 2221 FROM POLE P2A, SECURED AT MIDSPAN. SERVICES TO REMAIN
3. EXISTING ELECTRIC SERVICE TRIPLEX SERVING 2221 W 3RD ORIGINATES AT POLE P2A AND IS SUPPORTED FROM STRAND THAT RUNS BETWEEN POLE P1W & P2A. MAINTAIN THE TRIPLEX'S EXISTING HEIGHT ABOVE THE GROUND.
4. LOWER THE EXISTING EQUIPMENT AND LINES ON POLE P1W AS REQUIRED TO INSTALL NEW 35KV RISER MATERIALS, SEE U04.
5. **INSTALL NEW POLE P1WA AND ATTACH EXISTING: 7.2KV (1 PHASE), SYSTEM NEUTRAL, AND STRAND TO THE NEW POLE SO AS TO MAINTAIN THE EXISTING** 2221 W 3RD SERVICE DROP'S HEIGHT ABOVE THE GROUND. COORDINATE LOCATION OF POLE, TENSION/SAG AND ATTACHMENT REQUIREMENTS WITH KPU PRIOR TO INSTALLATION.
6. EXISTING STRAND LINE FROM POLE P1W TO P2A FOR ELECTRICAL SERVICE TO 2221 W 3RD. EXISTING 7.2KV 1 PHASE AND SYSTEM NEUTRAL ARE LOCATED ABOVE THE STRAND LINE. REUSE EXISTING CONDUCTORS AND STRAND: LOWER THEIR LOCATION ON POLE P1W (INSTALL SPLICES ONLY IF NEEDED), FASTEN TO NEW POLE P1WA, ADJUST SAG & TENSION TO MATCH EXISTING OR AS DIRECTED BY KPU.

AT THE TIME THIS DRAWING SET WAS ISSUED FOR BID, KPU-E WAS GOING TO PERFORM THE WORK TO INSTALL NEW POLE P1WA AND REVISE THE SERVICE TO 2221 W 3RD AVE AS SHOWN ON THIS DETAIL AND THE ASSOCIATED WORK ON POLE P1W, SEE U04. FOR THE BID PHASE, ASSUME THIS WORK WILL BE COMPLETED BEFORE THE ADVANCE RELOCATION CONTRACT IS ISSUED. FIELD CONFIRM THAT THE INSTALLATION IS COMPLETE PRIOR TO THE START OF CONSTRUCTION. NOTE ANY ISSUES WITH THE ENGINEER AT THAT TIME.

1 NEW POLE P1WA FOR SERVICE TO 2221 W 3RD
SCALE: 1" = 30'

SEE 2/U32 FRO ADDITIONAL INFO



2 SERVICE TO 2221 W 3RD
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

ELECTRICAL DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U33	78

					Information for the Existing Installation								
Pole	KPU #	Height	Class	Xfm	Xfm #	Xfm Phas	RUS Xfm	Street Light	Guy	34.5kV	12.47kV	120/240V Distribution	Comments
0	T-111	60	2	50	3023			Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
1	1334-B3-1	60	2	N				Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV double crossarm, post top insulators. Install deadend insulators; remove post top insulators; jumper the 12.47kV top tier back down to middle tier
2	1334-B3-?	?	2	N				N	Y	336MCM ACSR	4/0 CU WP		Telecomm pole; no power
3		60	2	N				Y	Y	336MCM ACSR	4/0 CU WP		Exist. 34.5 & 12.47kV alley arms; pole located on a raised sidewalk; install comm guy line.
4	1342-D3-2	60	2	50	1404	B	G39	Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
5		60	2	N				Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
6	1342-C4-4	60	2	N				Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
7	E00465	60	2	50	1405	C	G39	Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV double crossarm, post top insulators
7G													Guy Pole for P7 with guys over the roadway
8	1342-B4-5	55	2	N				Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Ex. 34.5 & 12.47kV double crossarm, post top insulators; hydrant uphill
9	1342-B4-4	55	2	25	2110	A	G39	Y	N	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Ex. 34.5 & 12.47kV double crossarm, post top insulators; hydrant uphill
10	1342-B4-3	70	2	50	3536	NA	G39	Y	3	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Exist. 34.5 & 12.47kV double crossarm deadends; (2) riser conduits up hill side; Tel count 4, TV 3, FO 2Jumper 12.47kV to the top tier. Install 120/240V service to VDSL cabinet. Install new conduits from manhole MH2.
10G	E00461		2										Guy Pole for P10 with guy over the roadway
10T	New Pole	45	2	N		NA		N	Y				Install new temporary telephone pole with sidewalk guy & 900 pair CU cable down Water Street & 200 pair up Parnell Stairs;
10A				N				N	Y			#1/0 Triplex	Service pole; Mid tap 120/240 to 1305 lands on pole; 1279 direct to svc mast; GCI & KPU-Tel drops on pole for both houses
11	T-117	50	2	N				N	N		4/0 CU WP	#4/0 Triplex	Alley arms: (3) 12.47kV, (1) 120/240V & (1) Comm.
11A	T-278			N				Y	N			#1/0 Triplex	Square wood service pole; (House address 102/103 services are fed from Tongass St)
12	2116	65	2	75	3762	A	G39	Y	2		4/0 CU WP	#4/0 Triplex	Tangent Pole -Opposite side of road; New sidewalk guy for communications
P1W	1241-A5-2	60	2	10	1507		G39	Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Washington 34.5kV riser pole; install 35kV riser assembly
P1S	E00462	65	2	N				Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Schoenbar telecomm riser pole; install new 4" comm riser conduits from pull box T-1.
P2S		60	2	Y				Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Schoenbar telecomm riser pole. New 34.5kV crossarm, connect 34.5kV 3 phase to P2SR
P2SR	New Pole	60	2	N						336MCM ACSR			New 34.5kV riser pole; connect new 3rd Ave 34.5kV underground circuit into overhead system.
P1M			2	N				Y	Y	336MCM ACSR	4/0 CU WP	#4/0 Triplex	Millar Street at top Parnell Stairs

ISNSTALL POLE CAPS ON ALL NEW POLES P10T, P2SR

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\3\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U35-35 FOTOS POLES.DWG

KCN12_000

TAB: U35

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN -ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

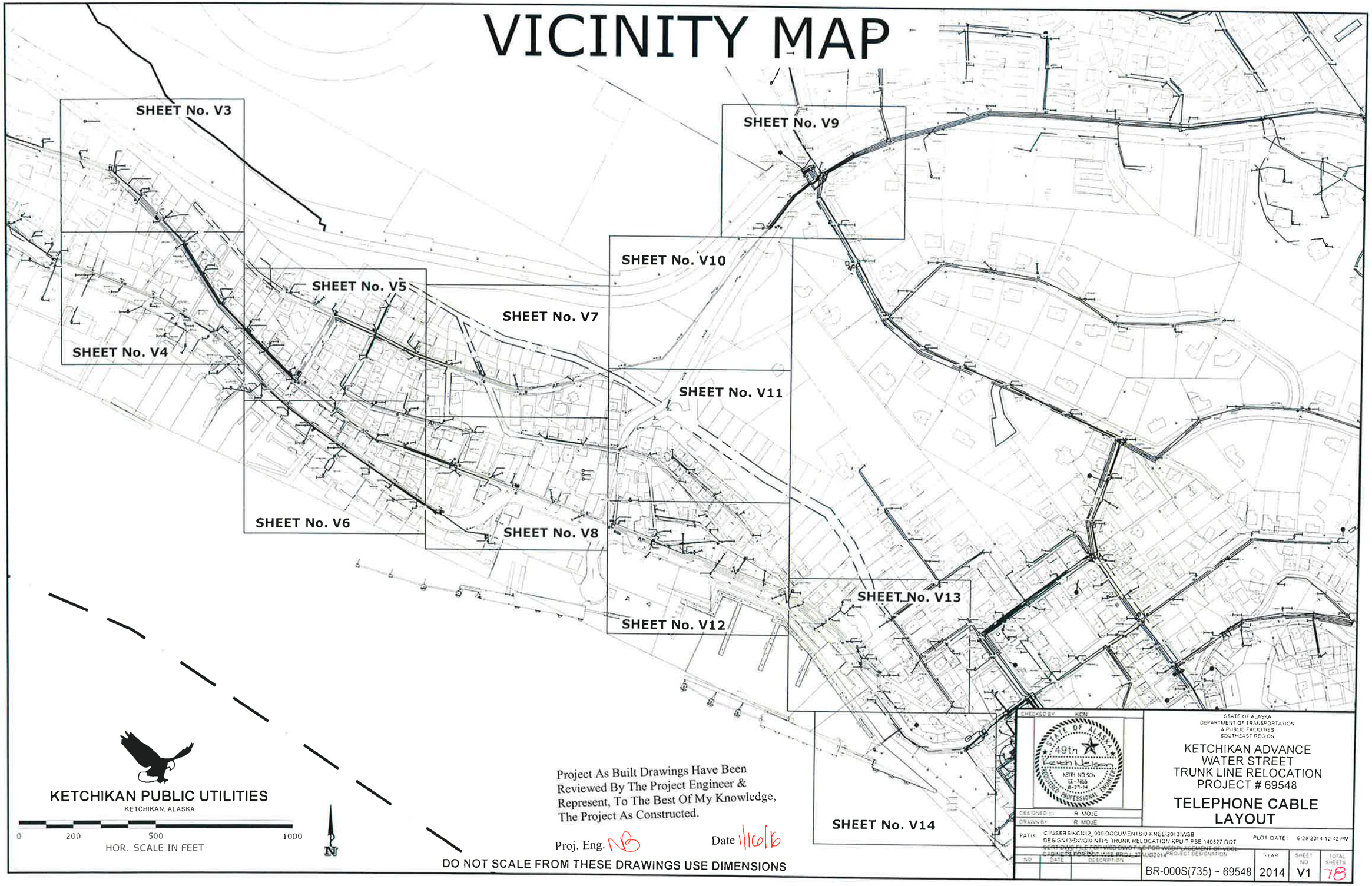
POLE INFORMATION

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U35	78

VICINITY MAP



KETCHIKAN PUBLIC UTILITIES
KETCHIKAN, ALASKA

0 200 500 1000
HOR. SCALE IN FEET

N

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY KCN
DESIGNED BY R. MOJE
DRAWN BY R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PATH: C:\USERS\KCN12_000\DOCUMENTS\0 KNEE\2013.WSB DESIGN13\DWG\0 NTPS TRUNK RELOCATION\KPU-T PSE 140827 DOT DEPT DWG FILE FOR WEB.DWG FILE FOR WEB PLACEMENT OF VSEL CABLE FS FOR DOT WEB.PRO 27AUG2014 PROJECT DESIGNATION

PLOT DATE: 8/28/2014 12:42 PM

NO	DATE	DESCRIPTION		YEAR	SHEET NO	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	V1	78

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL INSTALL NEW 2-ADTRAN VDSL SYSTEM & REMOVE THE FOLLOWING EXISTING VARIOUS AERIAL & UG TEL. CABLE FACILITIES FOR THE REHABILITATION OF WATER STREET BRIDGE:
   a) AERIAL FIBER OPTIC CABLE, 48FOC, FWAT,37-60+24D'd;
   b) AERIAL COPPER CABLE AEF100PR-26GA, K37,801-900;
   c) UG COPPER CABLE AEB50-22, T02,1-25+51-75
   d) UG COPPER CABLE AE1200-26, K37,1-800+100D'd+901-1075+125D'd, AND
   e) UG COPPER CABLE AE1800-26, C03,1-1800.
2. NO REMOVAL/MIGRATION OF EXISTING TELEPHONE COPPER AND FIBER CABLES OR SERVICES SHALL BE DONE UNLESS THE PROPOSED VDSL SYSTEM AT PARNELL ST AND BEAR VALLEY ARE IN FULL OPERATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT A PAD MOUNT OF 72"x30" AT PARNELL ST AND TO INSTALL ADTRAN VDSL CABINET TA5000 ~~INCLUDING PLACEMENT OF 1 EACH 17"x30" (TIER 22) HANDHOLE~~ AS SHOWN IN PROPOSED VDSL LOCATION DETAIL, PRINT V18.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO SET UP THE PROPOSED VDSL CABINET TA5000 SHELL & ITS ELECTRONIC DEVICES AT PARNELL ST INCLUDING TERMINATION OF PROPOSED 600 COPPER PAIRS INTO VDSL TERMINATION BLOCK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL ELECTRONIC VDSL CARDS IN EXISTING CABINET SHELL AT SCHOENBAR RD & 3RD AVENUE BYPASS. UPON INSTALLATION OF ADTRAN ELECTONIC CARDS, THE CONTRACTOR SHALL DO THE CUTOVER OF ALL EXISTING ACTIVE LINES SERVING BEAR VALLEY HOMES FROM EXISTING COPPER CABLE C03, WHICH IS TO BE REMOVED, INTO NEW VDSL SYSTEM, CABINET X021.
6. THE CONTRACTOR SHALL INSTALL NEW POWER METER AND SHALL BE RESPONSIBLE TO COORDINATE W/ KPU ELECTRIC ABOUT INSTALLATION STANDARDS & ITS PROPER LOCATION.
7. THE CONTRACTOR SHALL INSTALL NEW 45' POLE AT PARNELL ST CORNER WATER ST INCLUDING ITS PROPOSED RISER PIPES.
8. THE CONTRACTOR SHALL INSTALL VARIOUS SIZES OF NEW CONDUITS FROM NEW VDSL CABINET THROUGH EX. MH-18 ~~& NEW HH (17"x30")~~ TO NEW 45' POLE RISER. SEE NEW VDSL LOCATION ON PRINT V18.
9. THE CONTRACTOR SHALL INSTALL NEW 16M STRAND WIRE FROM POLE 1334-B4-1 TO 1341-D4-5 AT A HEIGHT OF 26' MIN TO 30' MAX ALONG WATER ST.
10. THE CONTRACTOR SHALL CONSTRUCT 1 EACH OF 16M DOWN GUY ON POLE 1334-B4-1 AND 2-EACH OF 16M SIDEWALK GUY ON POLE 1341-D4-5 ALONG WATER ST. SEE PRINTS V16 & V17.
11. THE CONTRACTOR SHALL RE-LASH (DOUBLE LASH) EXISTING FIBER CABLE 48FOC, F02, AT A NEW HEIGHT OF 26' (MIN) TO 30' (MAX) CLEARANCE AND TO MAKE 150' SPLICE LOOPS ON POLES 1334-A4-1 & 1334-A5-4 AT WATER ST AFTER THE CABLE IS CUT AT SCHOENBAR ROAD, AS SHOWN ON PRINT V16, TO SPLICE IN NEW 6-PORT FIBER TERMINALS.
12. THE CONTRACTOR SHALL INSTALL 8 EACH OF NEW 6-PORT FIBER POLE TERMINAL AND SPLICE INTO EXISTING FIBER CABLE 48FOC, F02, AS SHOWN ON PRINTS V16 TO V17.
13. THE CONTRACTOR SHALL INSTALL 1500' NEW AIR PIPE AS SHOWN ON PRINTS V15 TO V17. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO SPLICE IN THE NEW AIR PIPE TO EXISTING CABLE PRESSURIZATION SYSTEM INCLUDING THE TESTING. **THE CONTRACTOR SHALL COORDINATE WITH KEN BERRY, KPU-TELECOM SPLICE HEAD CREW, OF ANY ATTACHMENT TO EXISTING KPU-TELECOM CABLE PRESSURIZATION SYSTEM.**
14. DUE TO CONSTRUCTION, AS A TEMP. SERVICE TO WATER STREET BRIDGE RESIDENTS, THE CONTRACTOR SHALL INSTALL NEW FIBER DROPS & ONT (30 UNITS, PER TABLE V2) TO ALL ACTIVE COPPER CUSTOMERS IN THE VICINITY TO CONVERT THEIR SERVICE TO FIBER PER V16 & V17. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO REMOVE THEIR EX. COPPER DROPS & NIDS (21 UNITS), SEE CONST. NOTE No. 25. **THE CONTRACTOR SHALL COORDINATE WITH JOHN BECK, KPU-TELECOM OSP FOREMAN, ABOUT KPU-TELECOM GUIDELINES IN THE INSTALLATION OF FIBER DROPS.**
15. THE CONTRACTOR SHALL COORDINATE WITH KPU-TELECOM INSPECTOR IN TRANSFERRING EXISTING TELEPHONE AERIAL CABLE FACILITIES FROM A HEIGHT OF 18-FOOT CLEARANCE TO A NEW HEIGHT OF 26- TO 30-FOOT HIGH AT WATER ST. **THE CONTRACTOR SHALL ALSO REPLACE EXISTING COPPER & FIBER DROPS FROM EX. 18-FOOT HIGH EXISTING TERMINALS TO NEW HEIGHT OF COPPER & FIBER TERMINALS.**
16. THE CONTRACTOR SHALL COORDINATE WITH KPU-TELECOM BEFORE MIGRATING/CONVERTING ANY TELEPHONE SERVICE TO NEW SERVICE BOTH IN VDSL OR FIBER SYSTEM INCLUDING SERVICE DROPS REMOVAL. THAT THERE <u>SHALL BE NO SERVICE INTERRUPTIONS</u> IN THE AREA.

   KPU-TELECOM STAFF TO BE CONTACTED FOR MAINTENANCE WINDOW:
   a) KEITH WADLEY - PLANT MANAGER
   b) JOHN BECK - OSP FOREMAN
   c) CARYN HOMAN - ISP FORMAN
   d) JEFF HENDRICKSON - SENIOR C.O.N.T.
   e) KEN BERRY - SPLICER HEAD CREW
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE REMOVAL OF CUT CABLES (BOTH COPPER & FIBER) BUT NOT LIMITED TO SERVICE DROPWIRES, STRAND WIRES AND OTHER POLE LINE HARDWARES.
18. THE CONTRACTOR SHALL SPLICE THE FOLLOWING (AS CALL OUT IN PRINTS V3-V17 FROM BOAT 1 TO 60):
   a) SPLICING OF NEW UG COPPER CABLES (900PR-24, 600PR-24G, AND 200PR-24GA) IN MH-18,
   b) SPLICING OF NEW 200PR-24 CABLE TO EXISTING COPPER CABLES AT MILLAR ST CORNER PARNELL ST,
   c) RE-SPLICING OF ALL EXISTING COPPER CABLES AND TERMINALS WHICH ARE AFFECTED BY CUTOVER FROM EXISTING K37 COPPER CABINET TO NEW X019 VDSL CABINET
   d) RE-SPLICING OF EXISTING FIBER CABLE, F02, AT SCHOENBAR RD AFTER THE CUT,
   e) SPLICING OF NEW LONG TAIL FIBER TERMINALS (6-PORT) INTO EXISTING 48FOC, F02, ALONG WATER STREET.
19. ALL NEW INSTALLED TELEPHONE FACILITIES INCLUDING ALL NEW SPLICED CABLES (COPPER & FIBER) SHALL BE DONE PER KPU-TELECOM STANDARD.
20. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND TEST IN THE FIELD ALL CABLE PAIRS/COUNTS IF THERE'S NO ACTIVE WORKER(S) IN THE CABLE BEFORE CUTTING IT OFF FOR REMOVAL.
21. THE CONTRACTOR SHALL INSTALL NEW DOUBLE ARM 10-PIN ALLEY ON THE FOLLOWING POLES (SEE PRINT V17):
   a) PROPOSED 45' HIGH POLE AT PARNELL AND WATER STREETS;
   b) POLE 1342-A4-3 AT WATER AND GORGE STREETS; AND
   c) POLE 1341-D4-5 IN FRONT OF 1251 WATER STREET.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONVERSION OF SERVICE DROPS OF HOUSES ALONG WATER STREET BRIDGE FROM COPPER TO FIBER AS MENTIONED IN CONST. NOTE No. 26 & TABLE V2, RESPECTIVELY. ALL DROPS FED FROM EXISTING COPPER TERMINAL OF CABLE K37 WILL BE REMOVED AND NEW FIBER DROPS WILL BE INSTALL FROM FIBER CABLE F02 AS SHOWN ON PRINTS V16 & V17. THIS INCLUDES THE MIGRATION OF EXISTING FIBER DROPS FROM FWAT CABLE TO F02.
23. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PERFORM A CABLE (COPPER & FIBER) TESTING WITH KPU-TELECOM INSPECTOR AND A 100% PASSED ON CABLE TESTING SHALL BE SUBMITTED TO KPU-TELECOM FOR ACCEPTANCE & APPROVAL OF THE PROJECT INCLUDING REDLINE AS-BUILT PLANS SIGNED BY THE KPU-TELECOM INSPECTOR, CONTRACTOR MANAGER AND DOT PROJECT ENGINEER/REPRESENTATIVE.
24. WHERE NEW CABLE LENGTHS ARE CALLED OUT, THIS IS A PRELIMINARY LENGTH - ADD 10% SPARE LENGTH FOR ESTIMATING PURPOSES. PROVIDE ACTUAL CABLE LENGTH AS REQUIRED FOR CONSTRUCTION.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EX. 6-PAIR COPPER SERVICE DROPS FROM THE FOLLOWING ADDRESS PER TERMINAL NO.:
   a. **TWTR-1626 ON POLE 1334-B4-1:**
      1) 1628 WATER STREET
      2) 1626 WATER STREET
      3) 1627 WATER STREET
      4) 1622 WATER STREET APT. MID
   b. **TWTR-1610 ON POLE 1334-A4-2:**
      1) 1617 WATER STREET
      2) 1611 WATER STREET
      3) 1610 WATER STREET
      4) 1608 WATER STREET APT. UPR
   c. **TWTR-1600 ON POLE 1334-A4-1:**
      1) 1600 WATER STREET
      2) 1528 WATER STREET
   d. **TWTR-1508 ON POLE 1334-A5-5:**
      1) 1508 WATER STREET APT. UPR 2
      2) 200 WILEY STREET
   e. **TWTR-1462 ON POLE 1334-A5-4:**
      1) 1462 WATER STREET APT. UPR
      2) 1454 WATER STREET
   f. **TWTR-1446 ON POLE 1342-B4-5:**
      1) 1442 WATER STREET
   g. **TWTR-1418 ON POLE 1342-B4-4:**
      1) 1426 WATER STREET
      2) 1418 WATER STREET
   h. **TWTR-1400 ON POLE 1342-B4-3 (WHICH IS TO BE REMOVED):**
      1) 1412 WATER STREET
      2) 1400 WATER STREET
      3) 1320 WATER STREET
      4) 1321 WATER STREET
26. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PLACEMENT OF FIBER DROPS FROM NEW TERMINALS TO ALL HOUSES INDICATED ON TABLE V2. THIS WORKS INCLUDE THE INSTALLATION OF ONT (OPTICAL NETWORK TERMINAL) PER ADDRESS TO TERMINATE THE FIBER DROP.
27. FROM ONT, KPU TELECOM WILL BE RESPONSIBLE TO MIGRATE THE SERVICES TO HOUSE NUMBERS SHOWN ON TABLE V2.
28. FOR INFORMATION ONLY, DOT & KPU TELECOM WILL ADDRESS THE CONNECTIVITY BETWEEN MH-17 & MH-18 IN THE NEXT PHASE OF THE PROJECT (WATER SHEET BRIDGE).
29. SEE NOTE IN NOMENCLATURE FOR THE WORD "PROP." OR "PROPOSED".

NOMENCLATURE

NOTE: ALL STATEMENTS WITH THE WORD "PROP." OR "PROPOSED" IN THIS ENG'G. PLAN MEAN NEW AND NEED TO BE INSTALLED.

PROP. POLE TERM. 2421.1 FWTR-1626 | 6P | 41-44 +2D'd

TERMINAL SYMBOL; BOLD LINE MEANS PROPOSED

2421.1: A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 1 MEANS FIBER SYSTEM

PROP. POLE TERM.: A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE INSTALLED

FWTR-1626: ASSIGNED TERMINAL NUMBER; THE VERY FIRST LETTER "F" MEANS FIBER

6P: NUMBER OF TERMINAL FIBER PORT

41-44+2D'd: FIBER COUNTS 41 TO 44 TO BE SPLICED INTO THE TERMINAL & 2 PORTS WOULD NOT BE USED

PROP. POLE TERM. 2421.2 TWTR-1320 | 25 | 17D'd+ 393-400

2421.2: A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 2 MEANS COPPER SYSTEM

PROP. POLE TERM.: A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE USED

TWTR-1320: PROPOSED ASSIGNED TERMINAL NUMBER; THE VERY FIRST LETTER "T" MEANS COPPER

25: A 25-PAIR COPPER TERMINAL

17D'd+393-400: 17 PAIRS DEAD MEANS WILL NOT BE USED & COPPER PAIRS 393 TO 400 TO BE SPLICED INTO THE TERMINAL

(P)—: SYMBOL FOR CABLE PLUG STUB

[FWTR-1626 | 4 | 53-56] TO BE REMOVED: EX. TERMINAL TO BE REMOVED OR TAKEN DOWN

[2422.2 AE1800-26 (16M) C03,1-1800] TO BE REMOVED

AE1800-26: EXISTING CABLE SIZE & GAUGE TO BE REMOVED

(16M): MESSENGER WIRE SIZE WHERE CABLE IS PRESENTLY LASHED

C03,1-1800: C03 IS CABLE NUMBER & 1-1800 WORKING PAIRS

[ ]: BOLD BRACKETS MEANS FOR REMOVAL

MB AEF25-24 [K37,251-268+D'd] X019,20D'd+171-175

MB AEF25-24: TYPE OF EXISTING CABLE, SIZE & GAUGE TO BE RE-SPLICED TO NEW CABLE NUMBER OR PAIRS

[K37,251-268+D'd]: EXISTING CABLE NUMBER & PAIRS TO BE CHANGED

X019,20D'd+171-175: PROP. CABLE NUMBER & PAIRS TO BE USED

8/11/15 - Approval:
KPU: [signature]
DOT: [signature]
CONT: [signature]

TABLE V2 - COVERED ADDRESSES PER NEW & EXISTING FIBER TERMINAL

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1626 (6-PORT) F02, 41-46	POLE 1334-B4-1 ALONG WATER STREET	1628 WATER STREET
		1626 WATER STREET
		1627 WATER STREET
		1622-A WATER STREET
		1622-B WATER STREET
		1622-C WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1610 (6-PORT) F02, 35-40+2D'd F02, 15-19+ 1 D'd	POLE 1334-A4-2 ALONG WATER STREET	1617 WATER STREET
		1611 WATER STREET
		1610 WATER STREET
		1608-A WATER STREET
		1608-B WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1600 (6-PORT) F02, 45-48+4D'd F02, 47-48+ 4 D'd	POLE 1334-A4-1 ALONG WATER STREET	1600 WATER STREET
		1528 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1508 (6-PORT) F02, 33-36+2D'd F02, 20-23+ 2 D'd	POLE 1334-A5-5 ALONG WATER STREET	1508-A WATER STREET
		1508-B WATER STREET
		200 WILEY STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1462 (6-PORT) F02, 25-28+2D'd F02, 24+ 1-3+ 2 D'd	POLE 1334-A5-4 ALONG WATER STREET	1462-A WATER STREET
		1462-B WATER STREET
		1454 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1446 (6-PORT) F02, 29-32+2D'd F02, 37-39+ 3 D'd	POLE 1342-B4-5 ALONG WATER STREET	1446-A WATER STREET
		1446-B WATER STREET
		1442 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1418 (6-PORT) F02, 21-24+2D'd F02, 9-12+ 2 D'd	POLE 1342-B4-4 ALONG WATER STREET	1426 WATER STREET
		1418 WATER STREET
		1418.5 WATER STREET
		1412 WATER

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1400 (6-PORT) F02, 17-20+2D'd F02, 4-8+ 1 D'd	NEW POLE 45' ALONG WATER STREET	1412 WATER STREET 1312 WATER
		1320 WATER STREET
		1321 WATER STREET
		NEW VDSL CABINET

EXISTING TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FP4R-0302 (4-PORT) FWAT, 1D'd+146 +155-156	POLE 1342-A4-1 ALONG PARNELL STREET	210 PARNELL STREET
		1400 WATER STREET

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT.DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ 69548.DWG

TAB: V2 Thursday, August 28, 2014 12:37:26 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- (120') EXISTING FIBER SLACK LOOP
- (120') PROP. FIBER SLACK LOOP
- F120-002 305+45 | 42 | 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+45 | 25 | 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY KCN

STATE OF ALASKA 49th Keith Nelson KEITH NELSON CE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION

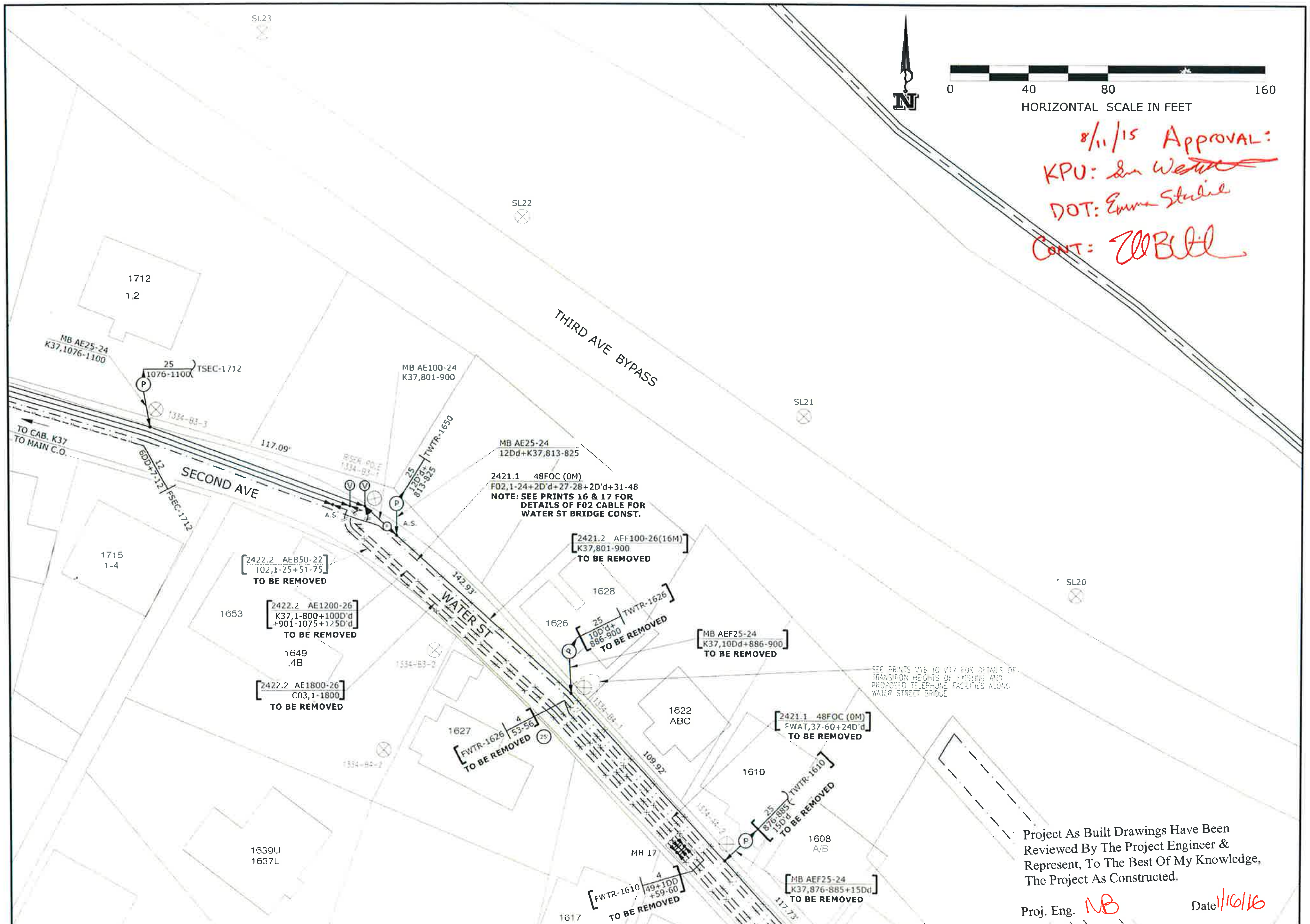
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V2	78



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TAB V3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

NO.	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th — KEITH NELSON EE-7655 8-27-14 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

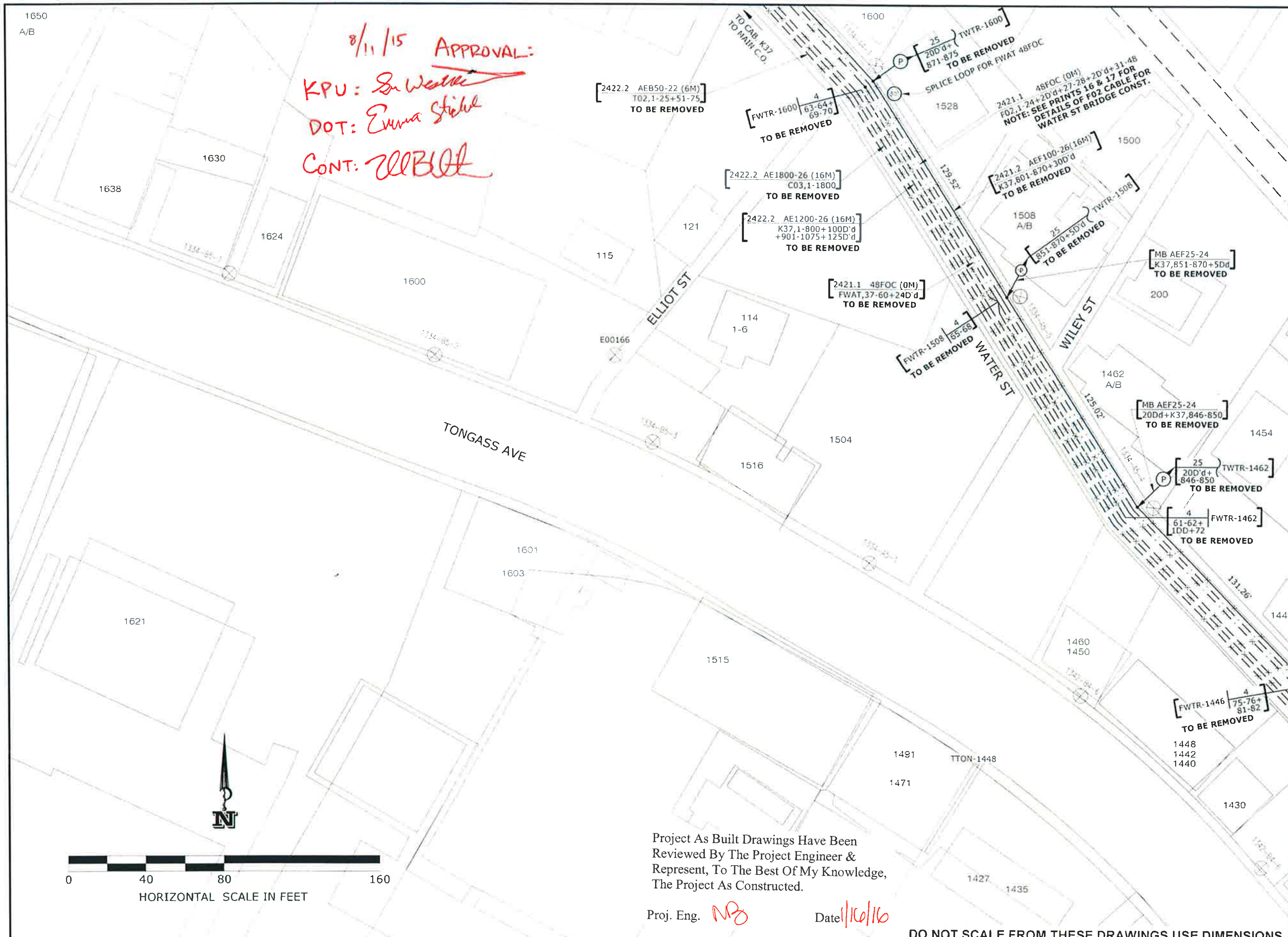
DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V3	78



8/11/15 APPROVAL:

KPU: [signature]

DOT: Emma [signature]

CONT: [signature]

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. [signature] Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB V4 Thursday, August 28, 2014 12:49:21 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON CE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

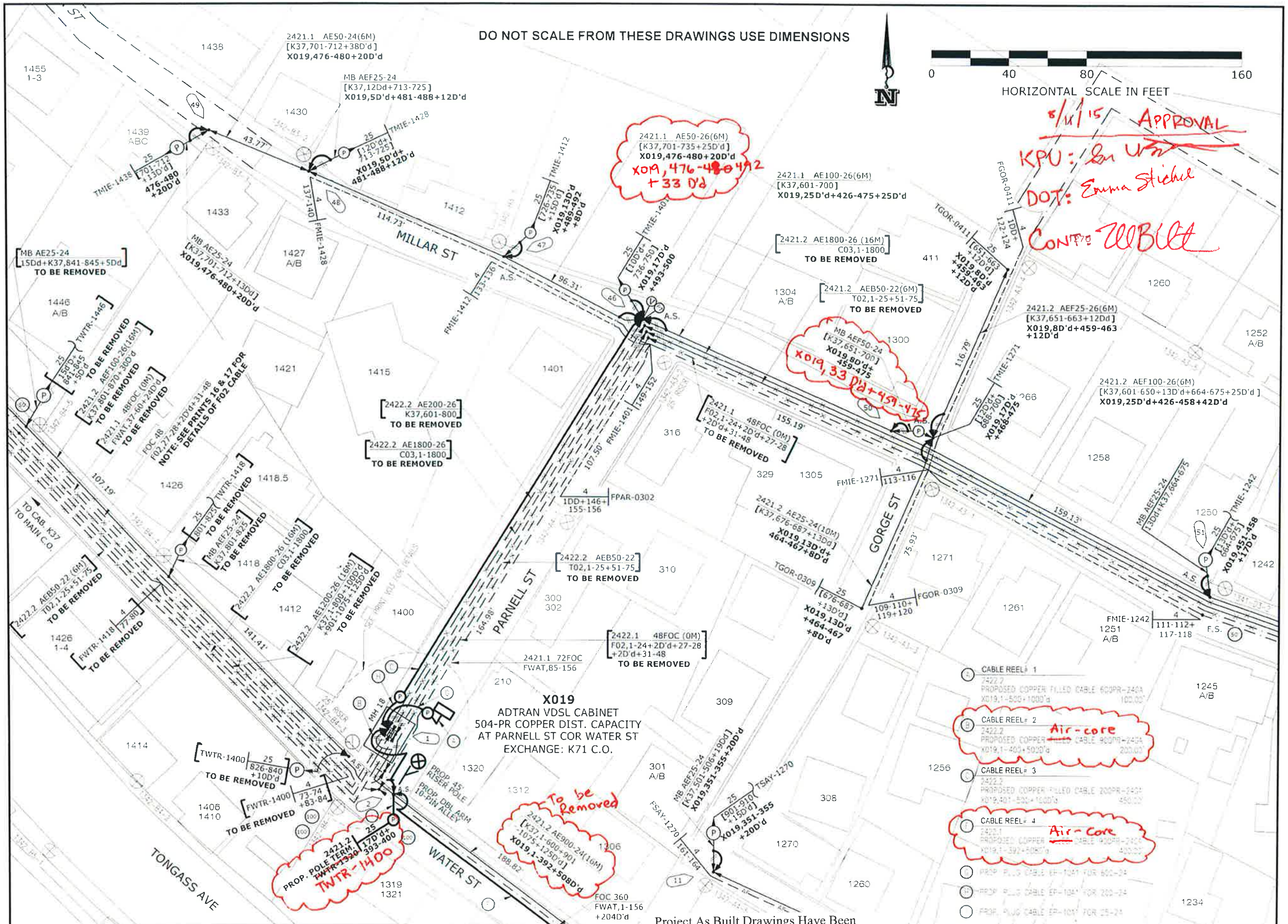
DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V4	78


DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS
N
0 40 80 160
HORIZONTAL SCALE IN FEET
8/11/15 APPROVAL
KPU:
DOT: Emma Stickel
CONT:
MILLAR ST
PARNELL ST
GORGE ST
WATER ST
TONGASS AVE
X019
ADTRAN VDSL CABINET
504-PR COPPER DIST. CAPACITY
AT PARNELL ST COR WATER ST
EXCHANGE: K71 C.O.
2421.1 AE50-24(6M)
[K37,701-712+38D'd]
X019,476-480+20D'd
MB AEF25-24
[K37,12Dd+713-725]
X019,5D'd+481-488+12D'd
2421.1 AE50-26(6M)
[K37,701-735+25D'd]
X019,476-480+20D'd
X019,476-492 +33 D'd
2421.1 AE100-26(6M)
[K37,601-700]
X019,25D'd+426-475+25D'd
2421.2 AE1800-26 (16M)
C03,1-1800
TO BE REMOVED
2421.2 AEB50-22(6M)
T02,1-25+51-75
TO BE REMOVED
2421.2 AEF25-26(6M)
[K37,651-663+12Dd]
X019,8D'd+459-463 +12D'd
2421.2 AEF100-26(6M)
[K37,601-650+13D'd+664-675+25D'd]
X019,25D'd+426-458+42D'd
X019,33 D'd+459-475
MB AE25-24
[15Dd+K37,841-845+5Dd]
TO BE REMOVED
2422.2 AE200-26
K37,601-800
TO BE REMOVED
2422.2 AE1800-26
C03,1-1800
TO BE REMOVED
2422.2 AEB50-22
T02,1-25+51-75
TO BE REMOVED
2422.1 48FOC (0M)
F02,1-24+2D'd+27-28 +2D'd+31-48
TO BE REMOVED
2421.1 72FOC
FWAT,85-156
NOTE: SEE PRINTS 16 & 17 FOR DETAILS OF F02 CABLE
PROP. 45' RISER POLE
PROP. DBL ARM 10-PIN ALLEY
PROP. POLE TERM. TWTR-1400
To be Removed
2421.2 AE900-24(16M)
[K37,1-600+901-1075+1250'd]
X019,1-392+508D'd
FOC 360
FWAT,1-156 +204D'd
TO CAB. K37 TO MAIN C.O.
CABLE REEL# 1
PROPOSED COPPER FILLED CABLE 600PR-24GA
CABLE REEL# 2
Air-core
CABLE REEL# 3
PROPOSED COPPER FILLED CABLE 200PR-24GA
CABLE REEL# 4
Air-Core

PLAN LEGEND

- PROP. AERIAL FOC
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- PROP. AERIAL COPPER CA
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CHECKED BY KCN

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

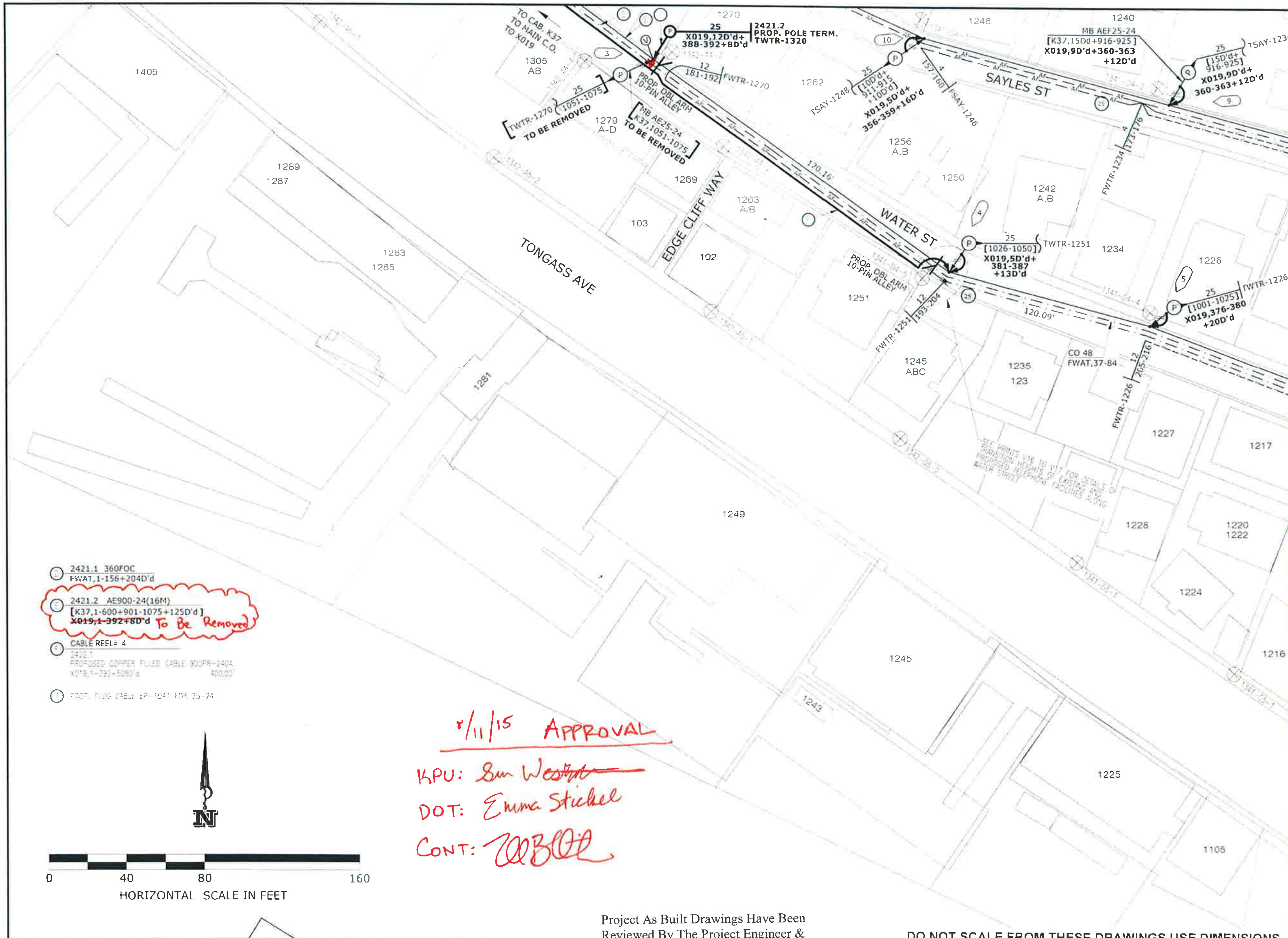
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V5	78

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16



8/11/15 APPROVAL

KPU: [signature]

DOT: Emma Stickel

CONT: [signature]

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\REPLACEMENT OF VDSL CABLETS FOR DOT\WSB PROP STRAND.DWG

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

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- EXISTING POLE
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- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
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- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT # 69548

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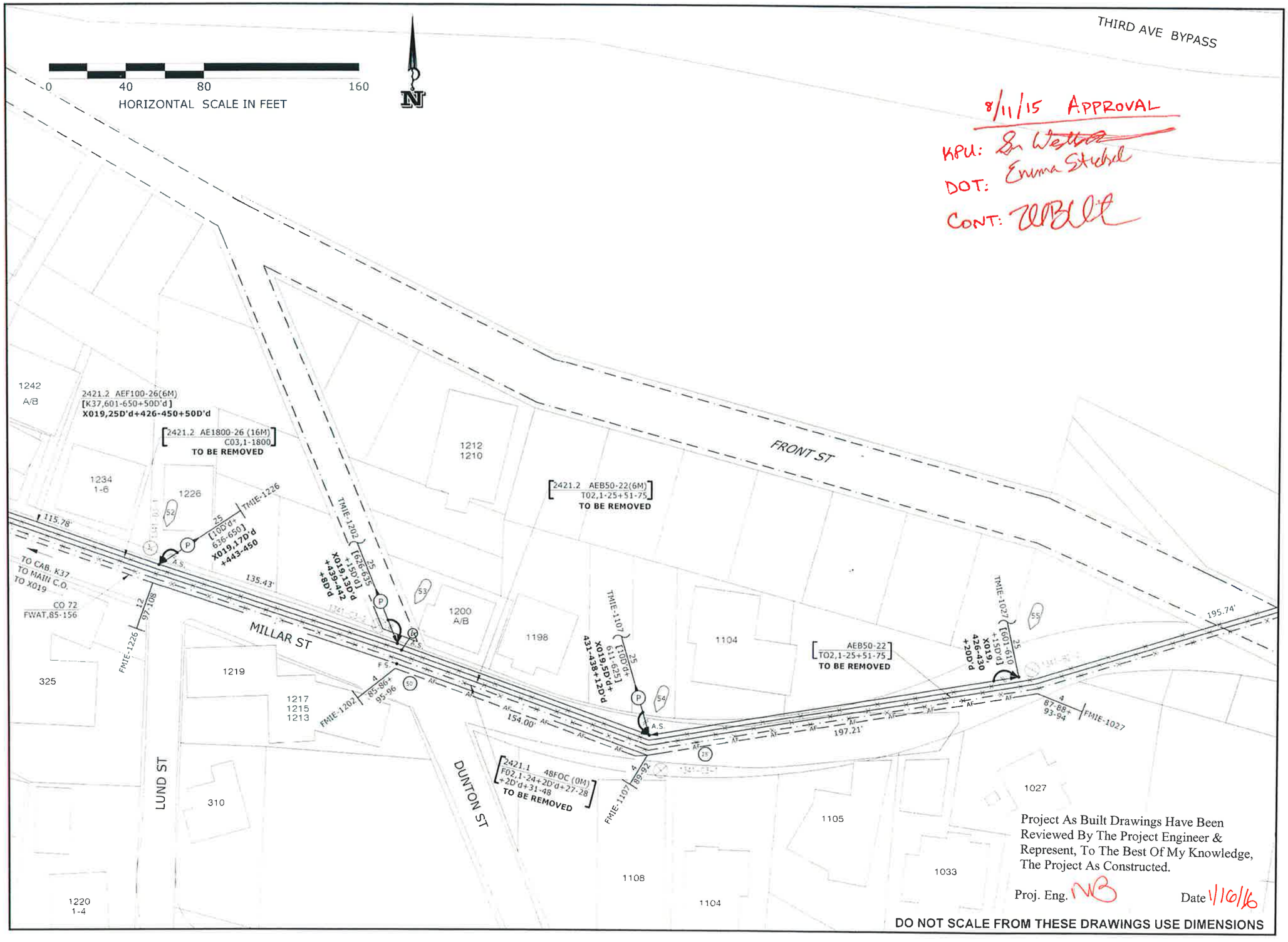
V6	78

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16



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TAB V7 Thursday, October 30, 2014 11:49:37 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- F120-002 | 4P 305+45 | 49-52 EX. AER. FIBER TERMINAL
- T120-002 | 25 305+48 | 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA
49th
KEITH NELSON
EE-7635
8-27-14
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R. MOJE

DRAWN BY R. MOJE

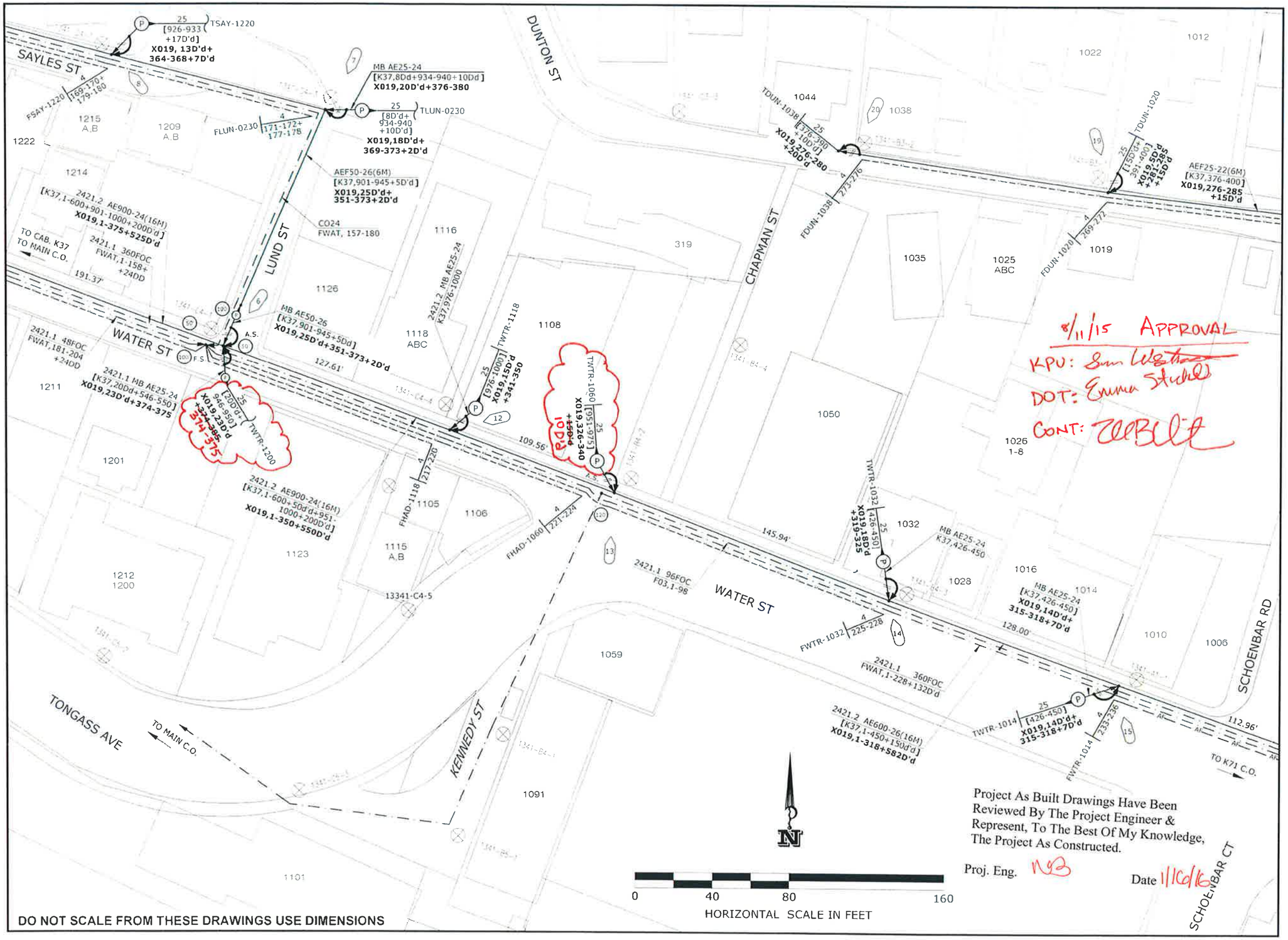
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V7	78



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TAB V8 Thursday, November 03, 2016 12:49:43 PM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FDC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-16 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

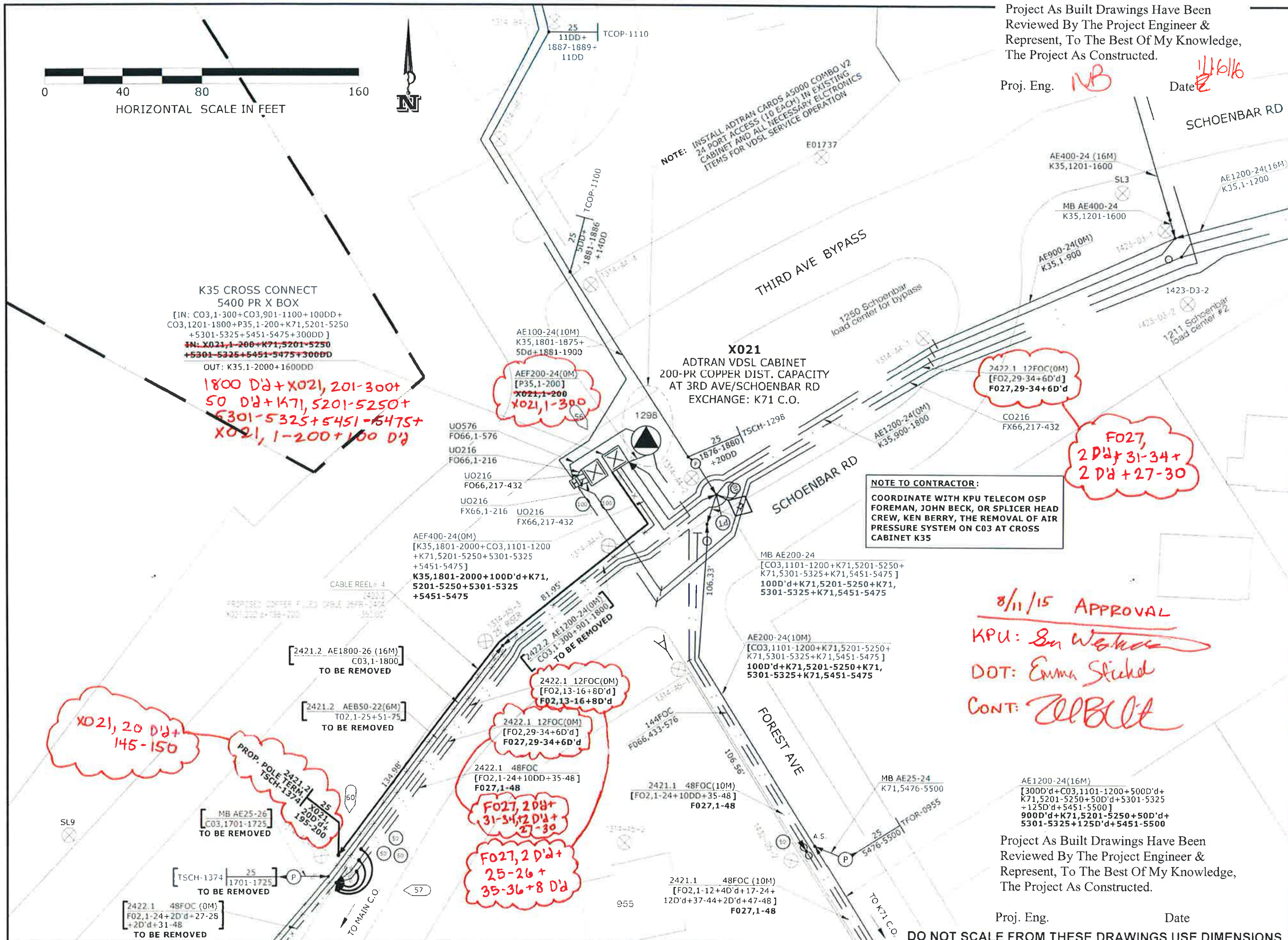
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V8	78



0 40 80 160
HORIZONTAL SCALE IN FEET
N
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.
Proj. Eng. NB Date 1/16/16
SCHOENBAR RD
THIRD AVE BYPASS
NOTE: INSTALL ADTRAN CARDS A5000 COMBO V2 24 PORT ACCESS (10 EACH) IN EXISTING CABINET AND ALL NECESSARY ELECTRONICS ITEMS FOR VDSL SERVICE OPERATION
TCOP-1110
25
11DD+
1887-1889+
11DD
TCOP-1100
25
50DD+
1881-1886
+14DD
E01737
AE400-24 (16M)
K35,1201-1600
SL3
MB AE400-24
K35,1201-1600
AE1200-24(16M)
K35,1-1200
AE900-24(0M)
K35,1-900
1423-D3-2
1250 Schoenbar load center for bypass
1211 Schoenbar load center #2
K35 CROSS CONNECT
5400 PR X BOX
[IN: C03,1-300+C03,901-1100+100DD+ C03,1201-1800+P35,1-200+K71,5201-5250 +5301-5325+5451-5475+300DD]
IN: X021,1-200+K71,5201-5250 +5301-5325+5451-5475+300DD
OUT: K35,1-2000+1600DD
1800 D'd+X021, 201-300+ 50 D'd+K71, 5201-5250+ 5301-5325+5451-5475+ X021, 1-200+100 D'd
AE100-24(10M)
K35,1801-1875+
5Dd+1881-1900
AEF200-24(0M)
[P35,1-200]
X021,1-200
X021, 1-300
X021
ADTRAN VDSL CABINET
200-PR COPPER DIST. CAPACITY
AT 3RD AVE/SCHOENBAR RD
EXCHANGE: K71 C.O.
1298
25
1876-1880
+20DD
TSCH-1298
AE1200-24(0M)
K35,900-1800
2422.1 12FOC(0M)
[F02,29-34+6D'd]
F027,29-34+6D'd
CO216
FX66,217-432
F027, 2 D'd+31-34+ 2 D'd+27-30
UO576
FO66,1-576
UO216
FO66,1-216
UO216
FO66,217-432
UO216
FX66,1-216
UO216
FX66,217-432
NOTE TO CONTRACTOR:
COORDINATE WITH KPU TELECOM OSP FOREMAN, JOHN BECK, OR SPLICER HEAD CREW, KEN BERRY, THE REMOVAL OF AIR PRESSURE SYSTEM ON C03 AT CROSS CABINET K35
AEF400-24(0M)
[K35,1801-2000+C03,1101-1200 +K71,5201-5250+5301-5325 +5451-5475]
K35,1801-2000+100D'd+K71, 5201-5250+5301-5325 +5451-5475
MB AE200-24
[C03,1101-1200+K71,5201-5250+ K71,5301-5325+K71,5451-5475]
100D'd+K71,5201-5250+K71, 5301-5325+K71,5451-5475
106.33'
81.95'
CABLE REEL# 4
8/11/15 APPROVAL
KPU:
DOT:
CONT:
2422.2 AE1200-24(0M)
C03,1-300+901-1800
TO BE REMOVED
[2421.2 AE1800-26 (16M)]
C03,1-1800
TO BE REMOVED
AE200-24(10M)
[C03,1101-1200+K71,5201-5250+ K71,5301-5325+K71,5451-5475]
100D'd+K71,5201-5250+K71, 5301-5325+K71,5451-5475
2422.1 12FOC(0M)
[F02,13-16+8D'd]
F02,13-16+8D'd
[2421.2 AEB50-22(6M)]
T02,1-25+51-75
TO BE REMOVED
X021, 20 D'd+ 145-150
2422.1 12FOC(0M)
[F02,29-34+6D'd]
F027,29-34+6D'd
144FOC
FO66,433-576
FOREST AVE
2422.1 48FOC
[F02,1-24+10DD+35-48]
F027,1-48
F027, 2 D'd+ 31-34+2 D'd+ 27-30
F027, 2 D'd+ 25-26+ 35-36+8 D'd
PROP. POLE TERM. 2421.2 TSCH-1374
25
X021, 200 D'd+ 195-200
134.98'
SL9
MB AE25-26
[C03,1701-1725]
TO BE REMOVED
TSCH-1374
25
1701-1725
TO BE REMOVED
[2422.1 48FOC (0M)]
F02,1-24+2D'd+27-28 +2D'd+31-48
TO BE REMOVED
TO MAIN C.O
955
2421.1 48FOC(10M)
[F02,1-24+10DD+35-48]
F027,1-48
106.56'
MB AE25-24
K71,5476-5500
25
5476-5500
TFOR-0955
2421.1 48FOC (10M)
[F02,1-12+4D'd+17-24+ 12D'd+37-44+2D'd+47-48]
F027,1-48
TO K71 C.O.
AE1200-24(16M)
[300D'd+C03,1101-1200+500D'd+ K71,5201-5250+50D'd+5301-5325 +125D'd+5451-5500]
900D'd+K71,5201-5250+50D'd+ 5301-5325+125D'd+5451-5500
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.
Proj. Eng. Date
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X ARM TO BE REMOVED
EX. POLE & EX. SINGLE X ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON CE-7655 8-21-14 PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

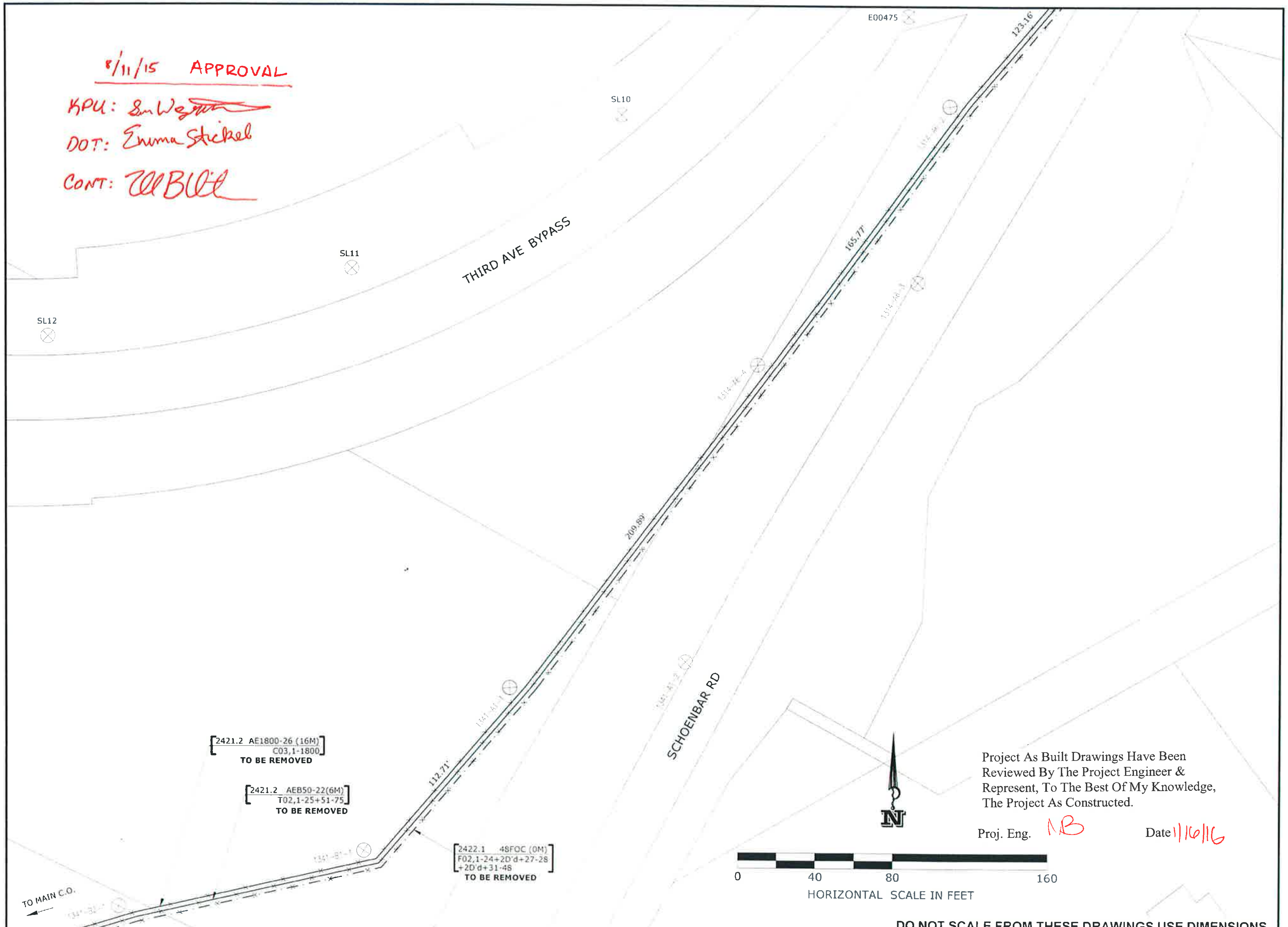
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V9	78



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TAB V10 Thursday, August 28, 2014 12:39:26 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON CE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R. MOJE

DRAWN BY R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

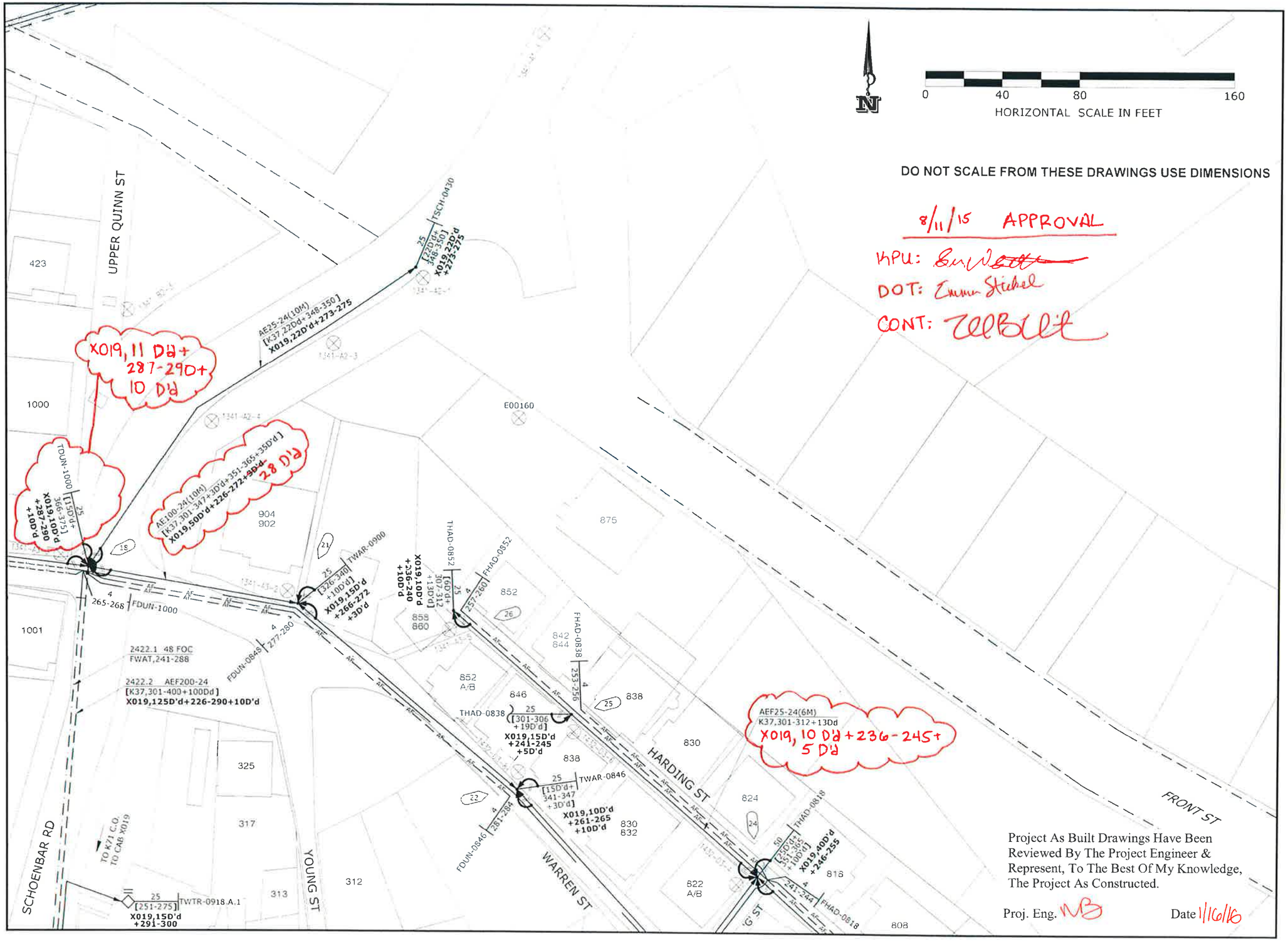
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V10	78



0 40 80 160

HORIZONTAL SCALE IN FEET

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

8/11/15 APPROVAL

KPU:

DOT: Emma Stichel

CONT:

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

PATH C:\USERS\KCN12_000\DOCUMENTS\0.KNEE 2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT.DWG FILE FOR WSB\DWG FILE FOR WSB PLACEMENT OF VDSL CABINETS FOR

TAB V11 Thursday, November 26, 2015 3:39:36 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

NO.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 9-21-16 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R. MOJE

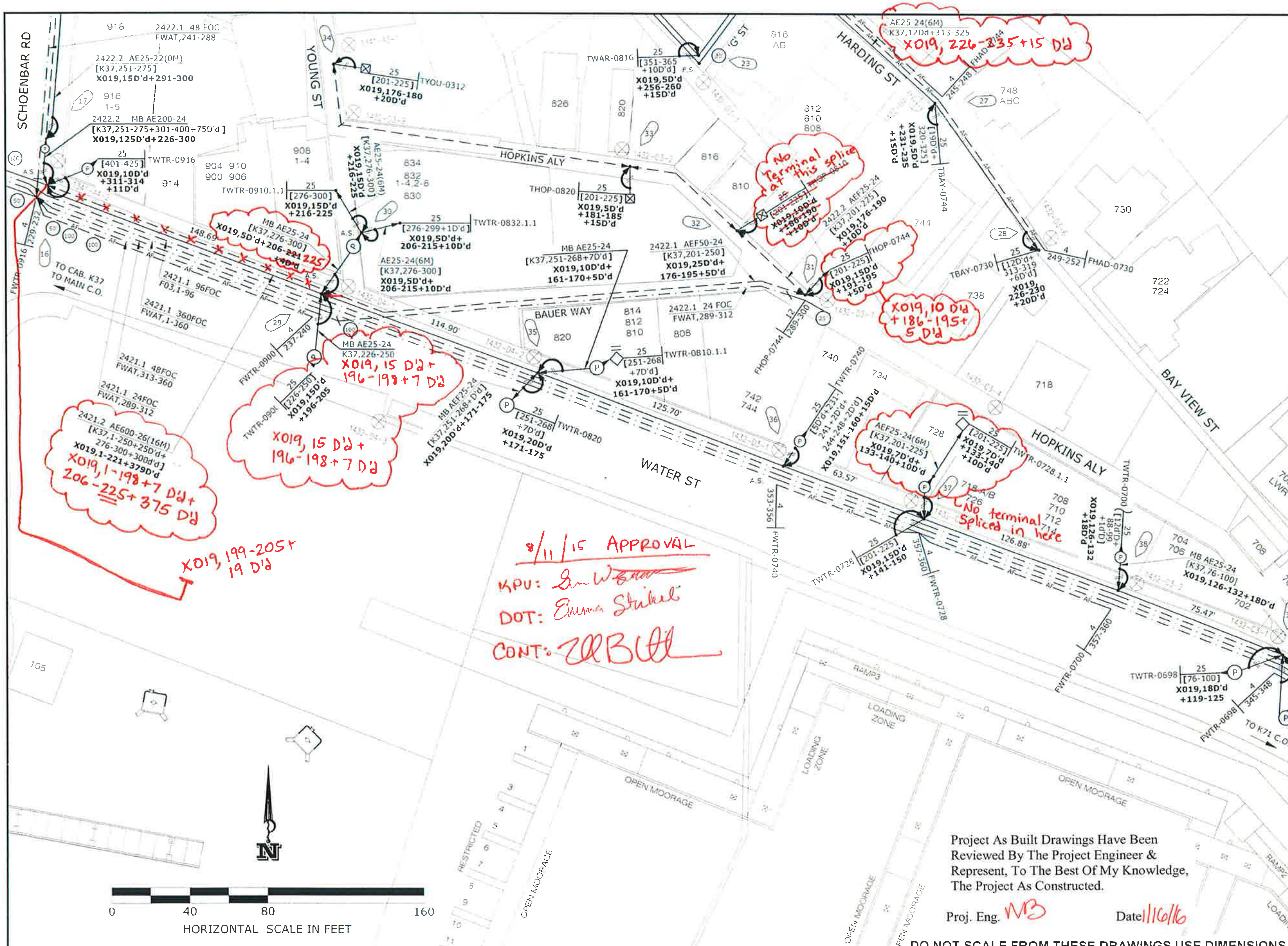
DRAWN BY R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V11	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB   Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER

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RECORD OF REVISIONS

No	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
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- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY KCN

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

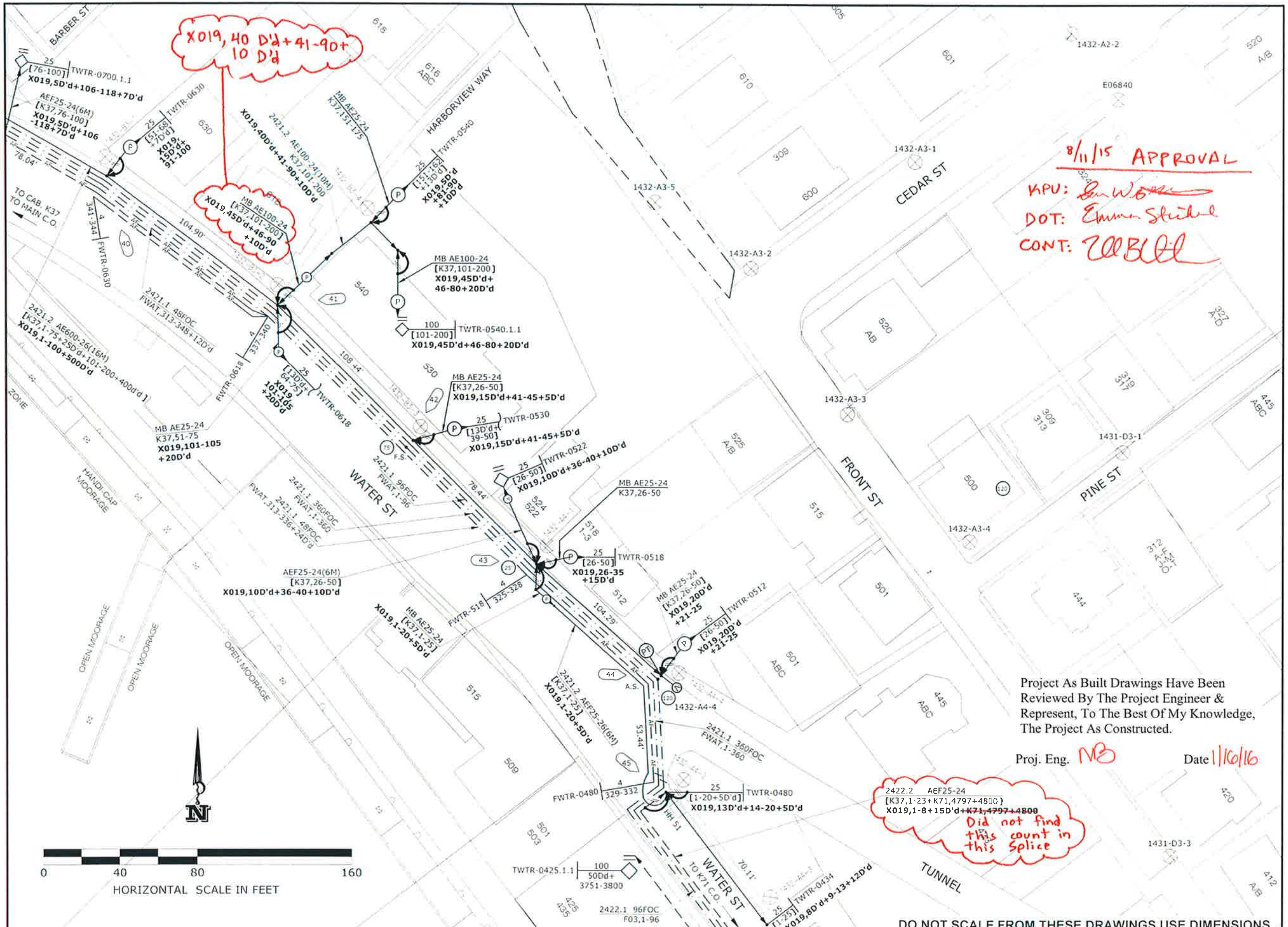
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V12	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB   Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ 69548.DWG

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
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EXISTING AERIAL FOC
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EX. DOUBLE X-ARM ON EX. POLE
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PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7665 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT # 69548

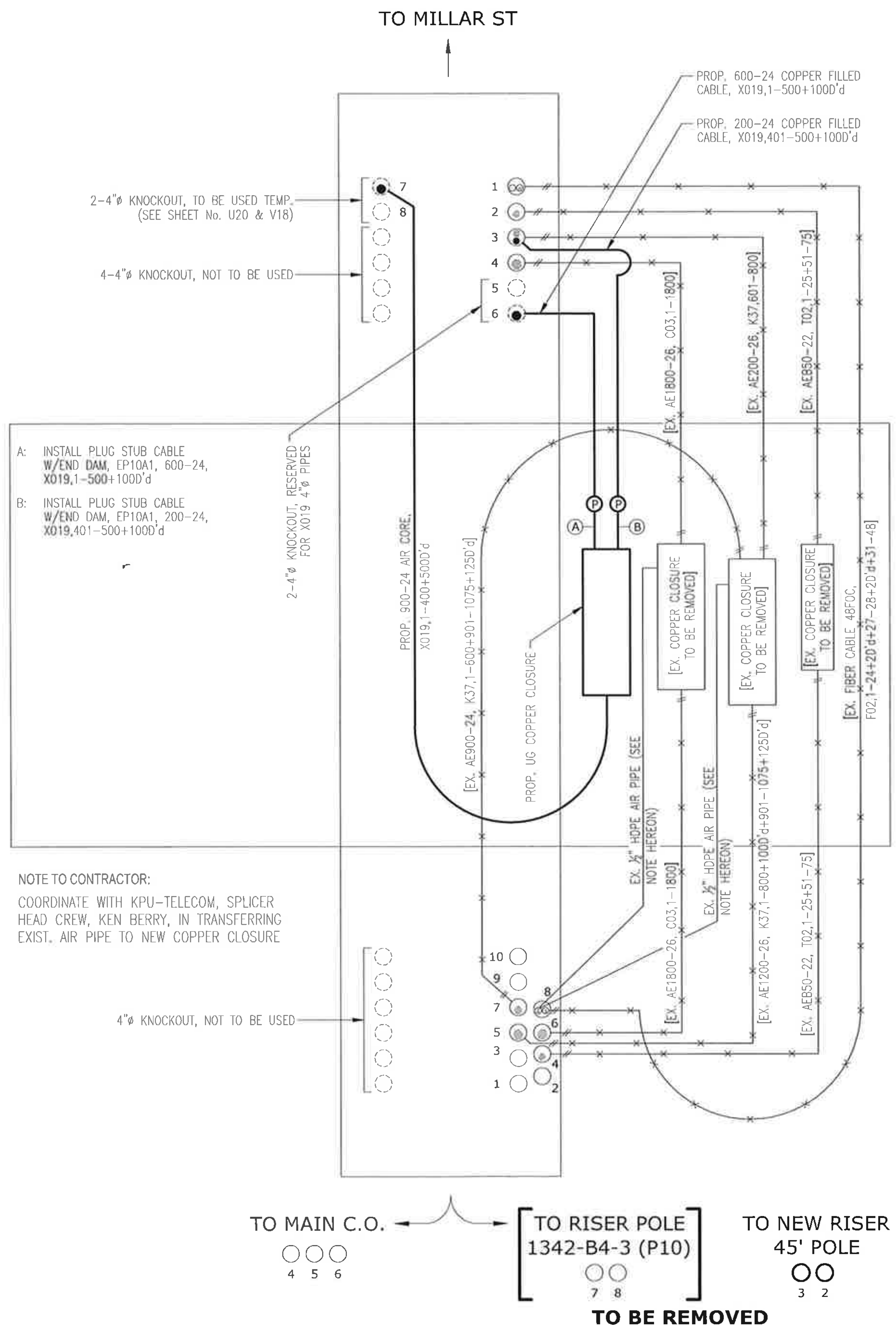
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V13	78



EXISTING VACANT CONDUITS AT SOUTH END (TO RISER/TO MAIN C.O.)

- 1 ◯ NO CONDUIT PLUG
- 2 ◯ NO CONDUIT PLUG
- 3 ◯ NO CONDUIT PLUG
- 9 ◯ WITH CONDUIT PLUG
- 10 ◯ WITH CONDUIT PLUG

MANHOLE-18 FOLDOUT

NOT TO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ 2014AUG26.DWG

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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- PROP. FOC LONG TAIL TERM.
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- EX. AER. COPPER TERMINAL
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- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

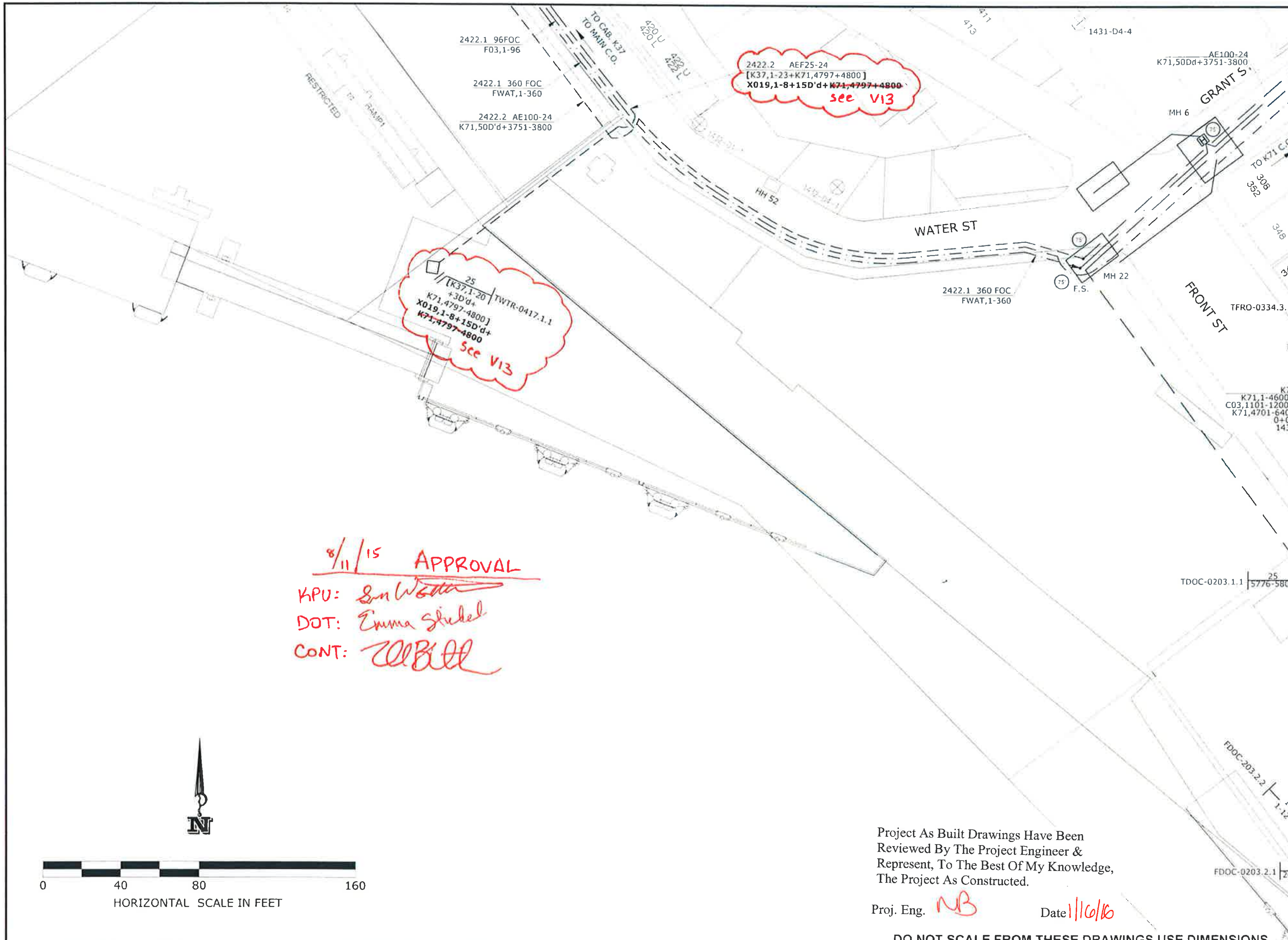
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V19	78



8/11/15 APPROVAL

KPU: [signature]

DOT: Emma Strebel

CONT: [signature]

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ_STA052014.DWG

TAB V14 ... 12:40:06 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

Symbol	Description
	PROP. AERIAL FOC
	PROP. FOC LONG TAIL TERM.
	PROP. AERIAL COPPER CA.
	EXISTING AERIAL FOC
	EX. FOC LONG TAIL TERM.
	EX. AERIAL COPPER CA.
	EX. AER. FOC TO BE REMOVED
	EX. FOC LONG TAIL TO BE REMOVED
	EX. COPPER CABLE TO BE REMOVED
	PROPOSED POLE
	EXISTING POLE
	PROP. DOUBLE X-ARM ON PROP. POLE
	EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
	EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
	EX. DOUBLE X-ARM ON EX. POLE
	EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
	EX. GUY & ANCHOR TO BE REMOVED
	PROP. GUY & ANCHOR with PROP. LEAD
120'	EXISTING FIBER SLACK LOOP
120'	PROP. FIBER SLACK LOOP
	EX. AER. FIBER TERMINAL
	EX. AER. COPPER TERMINAL
	EX. FOC SPLICE POINT
	PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

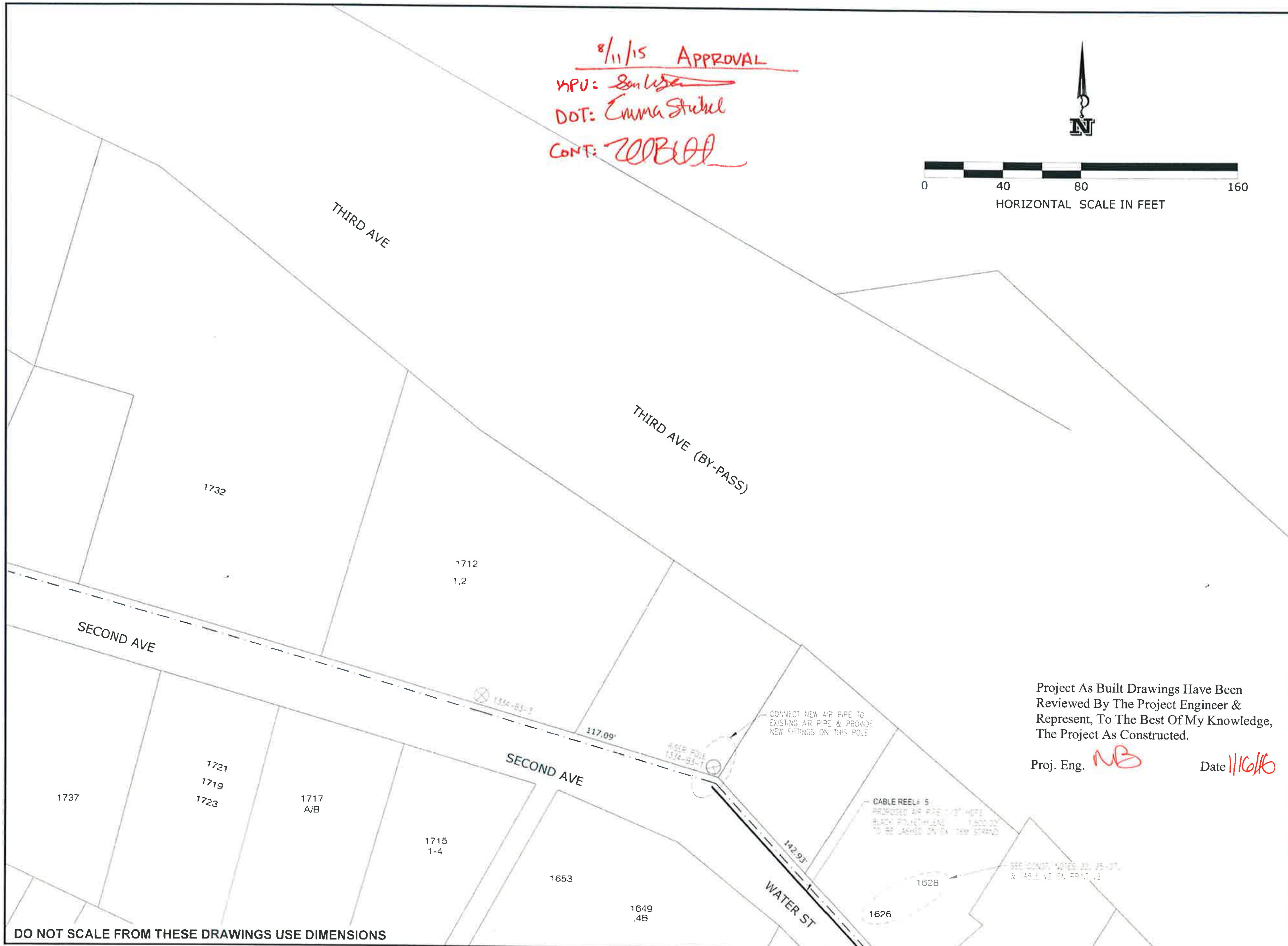
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V14	78



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Proj. Eng. NB

Date 1/16/16

PATH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE 2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ 27AUG2014.DWG

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EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

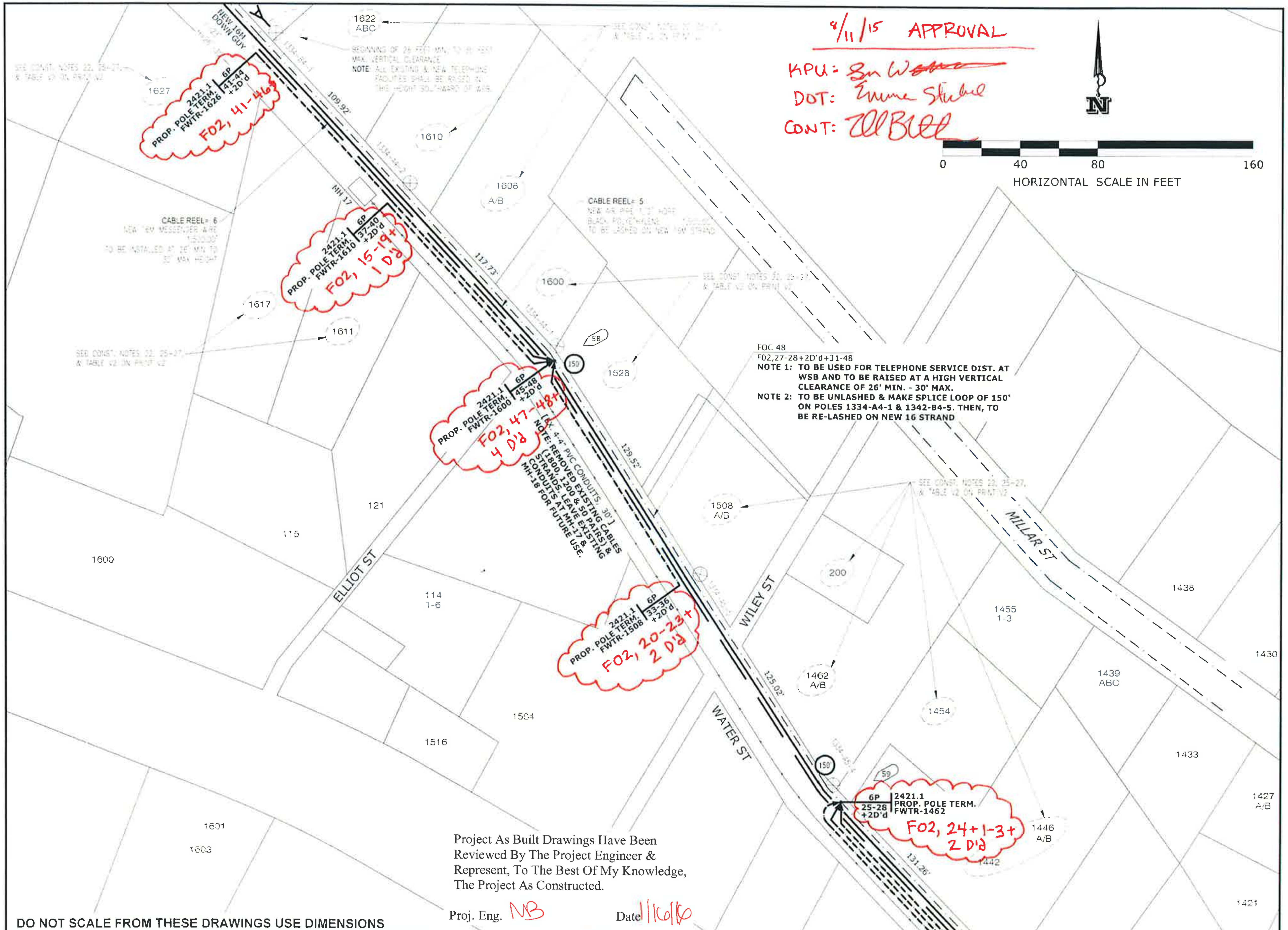
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V15	78



8/11/15 APPROVAL
KPU:
DOT:
CONT:
HORIZONTAL SCALE IN FEET
0 40 80 160
FOC 48
F02,27-28+2D'd+31-48
NOTE 1: TO BE USED FOR TELEPHONE SERVICE DIST. AT WSB AND TO BE RAISED AT A HIGH VERTICAL CLEARANCE OF 26' MIN. - 30' MAX.
NOTE 2: TO BE UNLASHED & MAKE SPLICE LOOP OF 150' ON POLES 1334-A4-1 & 1342-B4-5. THEN, TO BE RE-LASHED ON NEW 16 STRAND
2421.1 PROP. POLE TERM. FWTR-1626 6P 41-44 +2D'd
F02, 41-46
2421.1 PROP. POLE TERM. FWTR-1610 6P 37-40 +2D'd
F02, 15-19+ 1 D'd
2421.1 PROP. POLE TERM. FWTR-1600 6P 45-48 +2D'd
F02, 47-48+ 4 D'd
2421.1 PROP. POLE TERM. FWTR-1508 6P 33-36 +2D'd
F02, 20-23+ 2 D'd
6P 25-28 +2D'd 2421.1 PROP. POLE TERM. FWTR-1462
F02, 24+1-3+ 2 D'd
NOTE: REMOVED EXISTING CABLES (1800, 1200 & 50 PAIRS) & STRANDS. LEAVE EXISTING CONDUITS AT MH-17 & MH-18 FOR FUTURE USE.
EX. 4-4" PVC CONDUITS, 30'
CABLE REEL= 6
CABLE REEL= 5
ELLIOT ST
WILEY ST
WATER ST
MILLAR ST
109.92'
117.73'
129.52'
125.02'
131.26'
MH 17
1622 ABC
1627
1610
1606 A/B
1600
1617
1611
1528
1508 A/B
200
1462 A/B
1454
1455 1-3
1439 ABC
1438
1430
1433
1427 A/B
1446 A/B
1442
1421
121
115
1600
114 1-6
1504
1516
1601
1603
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.
Proj. Eng.
Date 1/16/16
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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- EX. FOC LONG TAIL TO BE REMOVED
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- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY

DESIGNED BY R. MOJE

DRAWN BY R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

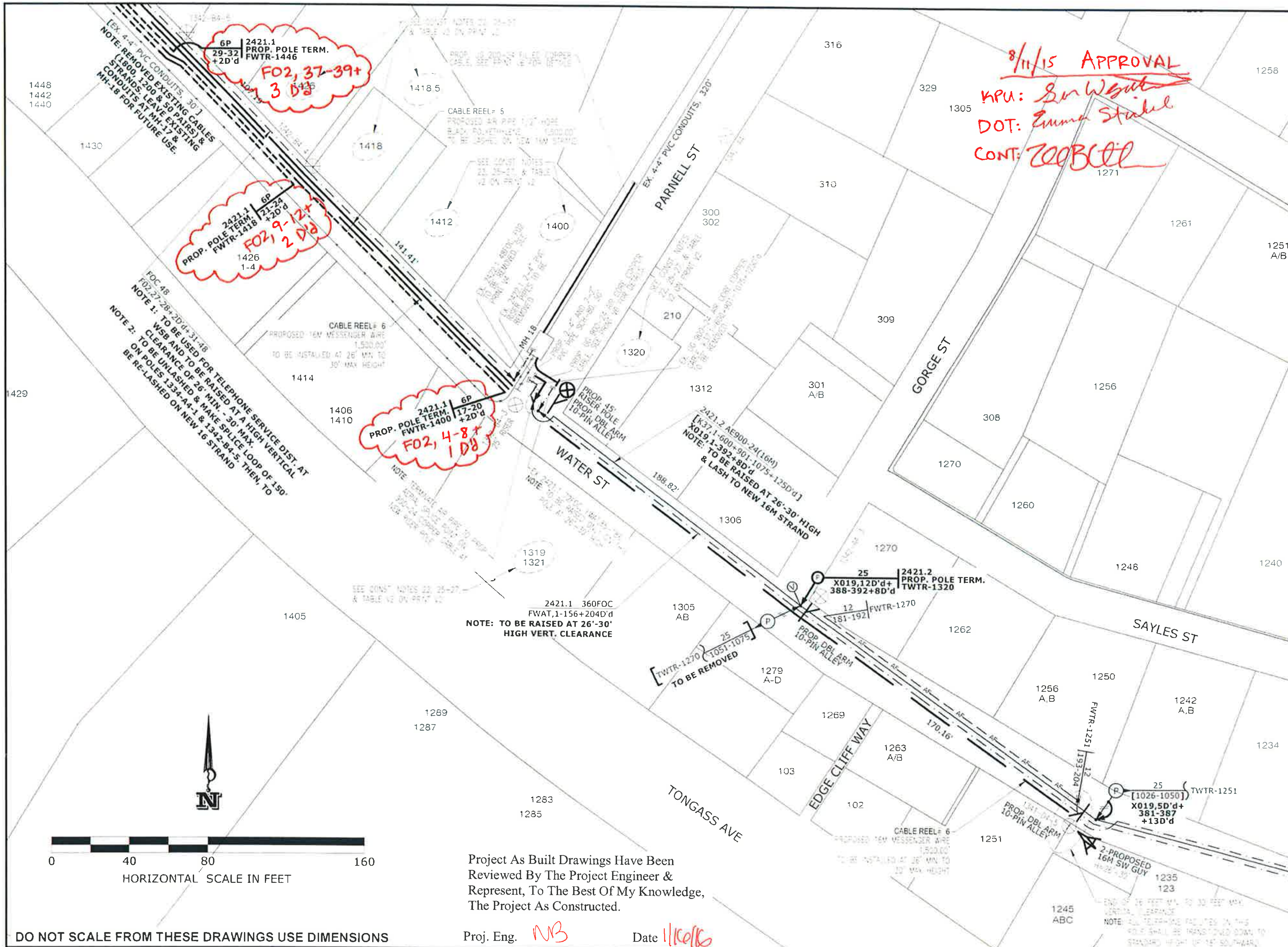
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V16	78


8/11/15 APPROVAL
KPU:
DOT:
CONT:
EX. 4-4" PVC CONDUITS, 30']
NOTE: REMOVED EXISTING CABLES (1800, 1200 & 50 PAIRS) & STRANDS. LEAVE EXISTING CONDUITS AT MH-17 & MH-18 FOR FUTURE USE.
6P
29-32 +2D'd
2421.1 PROP. POLE TERM. FWTR-1446
FO2, 37-39+ 3 D'd
6P
21-24 +2D'd
2421.1 PROP. POLE TERM. FWTR-1418
FO2, 9-12+ 2 D'd
6P
17-20 +2D'd
2421.1 PROP. POLE TERM. FWTR-1400
FO2, 4-8+ 1 D'd
FOC 48
FO2,27-28+2D'd+31-48
NOTE 1: TO BE USED FOR TELEPHONE SERVICE DIST. AT WSB AND TO BE RAISED AT A HIGH VERTICAL CLEARANCE OF 26' MIN. - 30' MAX.
NOTE 2: TO BE UNLASHED & MAKE SPLICE LOOP OF 150' ON POLES 1334-A4-1 & 1342-B4-5. THEN, TO BE RE-LASHED ON NEW 16 STRAND
CABLE REEL# 5
CABLE REEL# 6
PROPOSED 16M MESSENGER WIRE 1,500.00' TO BE INSTALLED AT 26' MIN TO 30' MAX HEIGHT
141.41'
188.82'
170.16'
MH 18
EX. 4-4" PVC CONDUITS, 320'
PARNELL ST
GORGE ST
WATER ST
SAYLES ST
TONGASS AVE
EDGE CLIFF WAY
PROP. 45' RISER POLE PROP. DBL ARM 10-PIN ALLEY
2421.2 AE900-24(16M) [K37,1-600+901-1075+125D'd] X019,1-392+8D'd
NOTE: TO BE RAISED AT 26'-30' HIGH & LASH TO NEW 16M STRAND
25
X019,12D'd+ 388-392+8D'd
2421.2 PROP. POLE TERM. TWTR-1320
12
181-192
FWTR-1270
25
1051-1075
TWTR-1270
TO BE REMOVED
PROP. DBL ARM 10-PIN ALLEY
2421.1 360FOC
FWAT,1-156+204D'd
NOTE: TO BE RAISED AT 26'-30' HIGH VERT. CLEARANCE
FWTR-1251
12
193-204
25
[1026-1050]
TWTR-1251
X019,5D'd+ 381-387 +13D'd
PROP. DBL ARM 10-PIN ALLEY
2-PROPOSED 16M SW GUY
1448
1442
1440
1430
1429
1426
1-4
1418.5
1418
1412
1400
1414
1406
1410
1405
1320
1319
1321
1312
1306
1305
AB
1279
A-D
1269
1263
A/B
1289
1287
1283
1285
103
102
1251
1245
ABC
1235
123
316
329
1305
310
300
302
210
309
301
A/B
308
1270
1260
1270
1262
1256
1271
1261
1258
1251
A/B
1256
1246
1240
1256
A,B
1250
1242
A,B
1234
N
0
40
80
160
HORIZONTAL SCALE IN FEET
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.
Proj. Eng.
Date 1/16/16
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE

DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

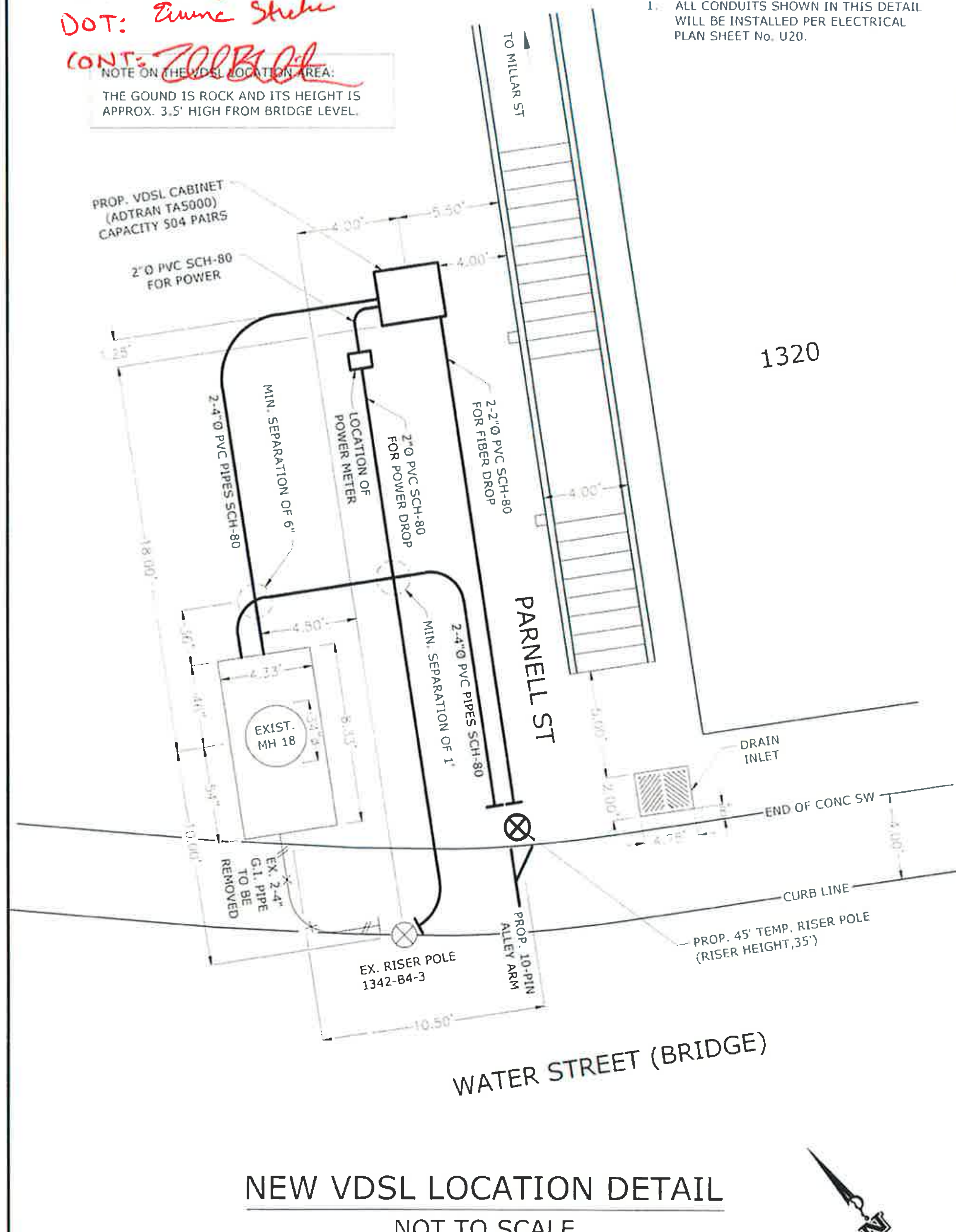
PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V17	78

8/11/15 APPROVAL
KPU: [signature]
DOT: [signature]
CONT: [signature]

NOTE TO CONTRACTOR:

1. ALL CONDUITS SHOWN IN THIS DETAIL WILL BE INSTALLED PER ELECTRICAL PLAN SHEET No. U20.

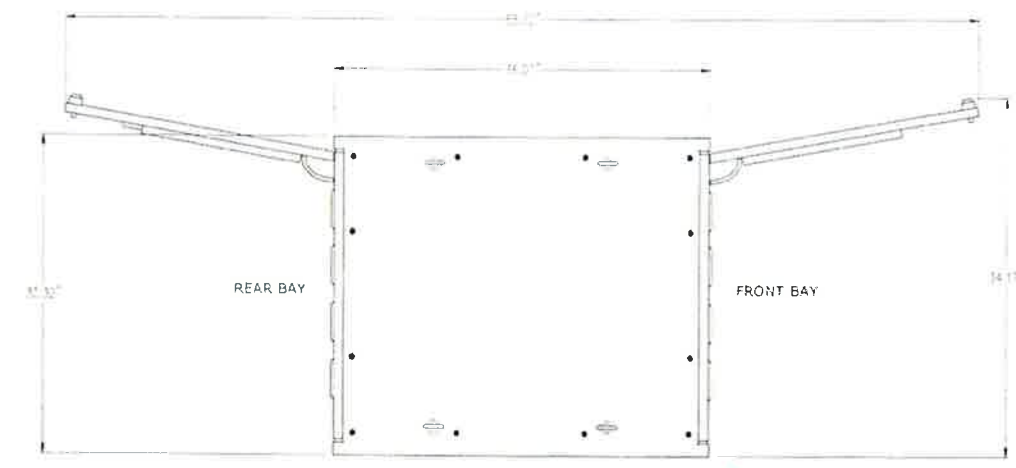
NOTE ON THE VDSL LOCATION AREA:
THE GOUND IS ROCK AND ITS HEIGHT IS APPROX. 3.5' HIGH FROM BRIDGE LEVEL.



NEW VDSL LOCATION DETAIL

NOT TO SCALE

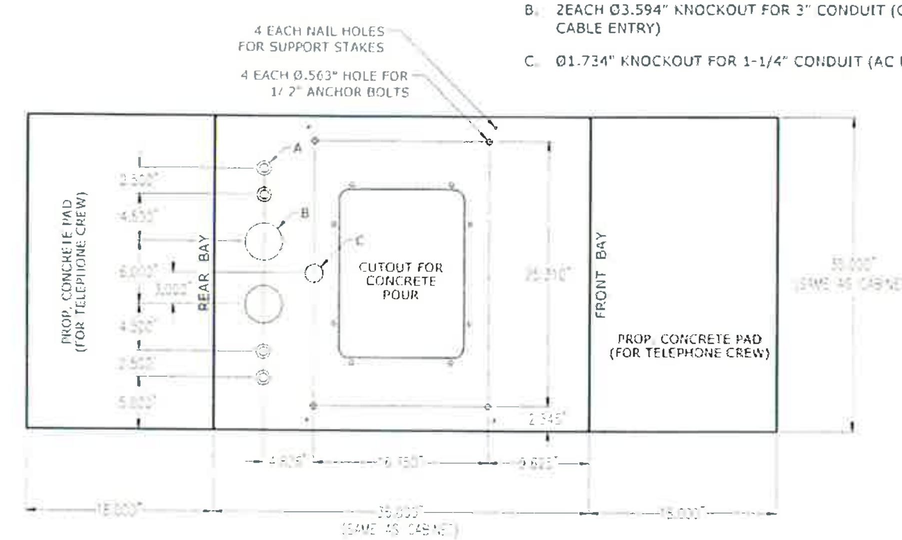
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



CABINET CLEARANCE REQUIREMENT
NOT TO SCALE

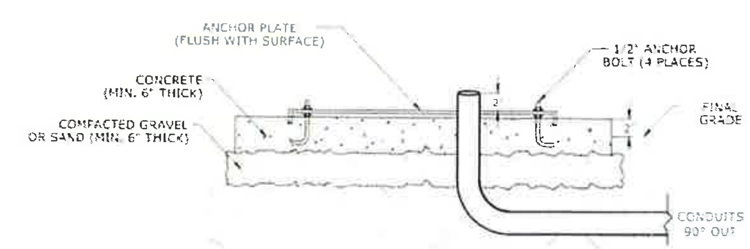
CONDUIT:

A. 4 EACH Ø0.875" x Ø1.375" DOUBLE KNOCKOUT FOR 1/2" OR 1" CONDUIT (GROUND AND FIBER ENTRY)
B. 2EACH Ø3.594" KNOCKOUT FOR 3" CONDUIT (COPPER OSP CABLE ENTRY)
C. Ø1.734" KNOCKOUT FOR 1-1/4" CONDUIT (AC POWER ENTRY)



TOTAL CONCRETE PAD AREA = 72" x 30"

CONCRETE PAD & CONDUIT POSITIONS
NOT TO SCALE



CONCRETE PAD & CONDUIT PROFILE
NOT TO SCALE

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Proj. Eng. MB   Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN\13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT KCN12\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT WSB PROJ 2014082...

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CHECKED BY KCN

STATE OF ALASKA 49th KEITH NELSON EE-2655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY R MOJE
DRAWN BY R MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

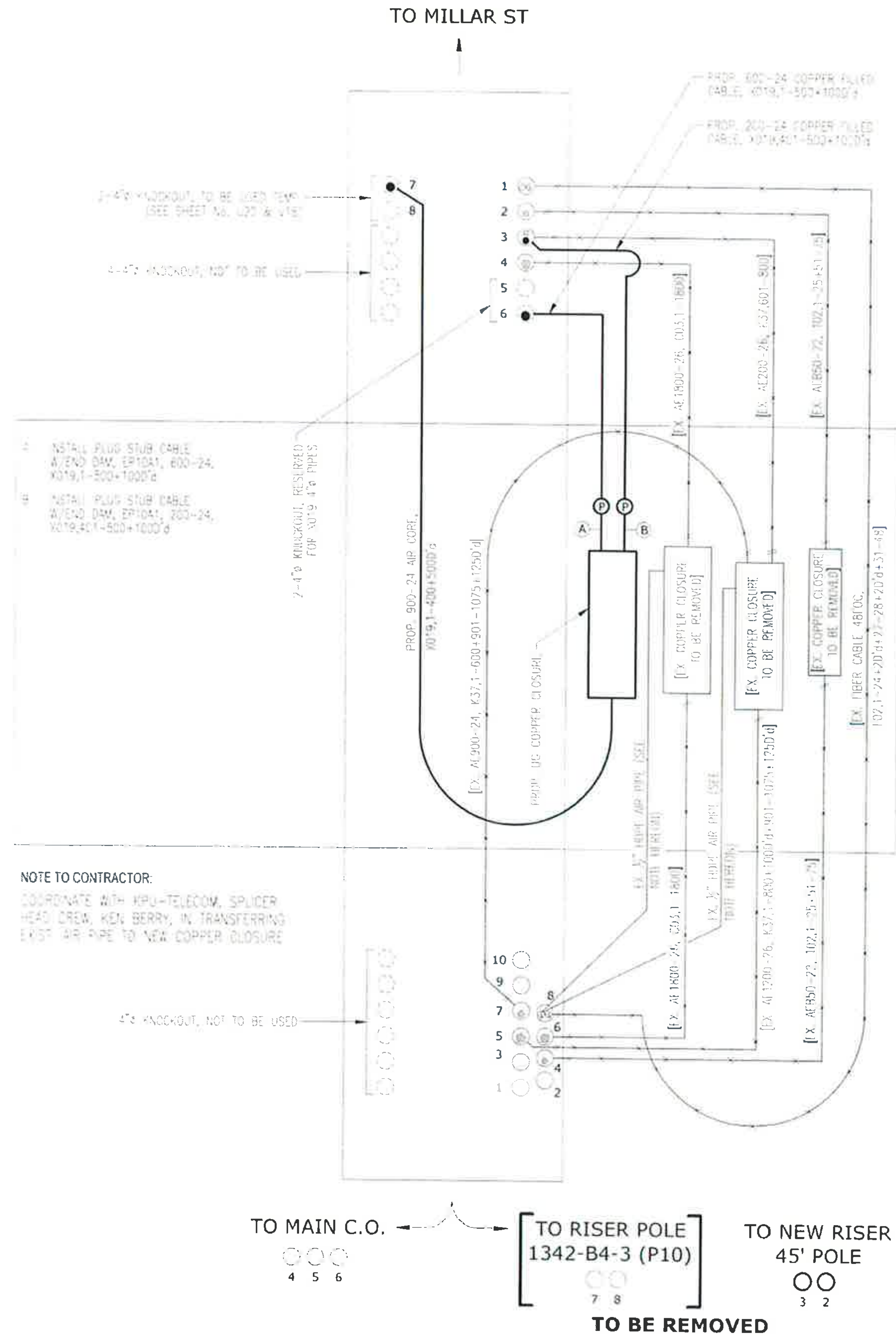
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V18	78

8/11/15 APPROVAL
KPU: [signature]
DOT: [signature]
CONT: [signature]



EXISTING VACANT CONDUITS AT SOUTH END
(TO RISER/TO MAIN C.O.)

1	◯	NO CONDUIT PLUG
2	◯	NO CONDUIT PLUG
3	◯	NO CONDUIT PLUG
9	◯	WITH CONDUIT PLUG
10	◯	WITH CONDUIT PLUG

MANHOLE-18 FOLDOUT

NOT TO SCALE

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STATE OF ALASKA 49th KEITH NELSON CE-7655 REGISTERED PROFESSIONAL ENGINEER

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SHEET 1 of 1

INTERNATIONAL BOUNDARY LINE — ALASKA / CANADA — Pen #4
CORPORATED OR CITY LIMITS — Pen #1
TOWNSHIP & RANGE LINE — T.17N., R.2W., SM / T.16N., R.2W., SM — Pen #1
SECTION LINE OR BLOCK LINE, NOT ABUTTING STREET IN SUBDIVISIONS — Pen #1
1/4 SECTION LINE — Pen #1
1/16 SECTION LINE OR LOT LINE IN SUBDIVISIONS — Pen #1
CONTROLLED ACCESS — Pen #3 C/A
EASEMENT LINE (PROPOSED) — Pen #1
EASEMENT LINE (EXISTING) — Pen #00
SET BACK LINE — Pen #0
PROJECT RIGHT-OF-WAY LINE — Pen #3 R/W
STAKED CENTERLINE — Pen #2
CONSTRUCTION CENTERLINE — Pen #3
EXISTING CENTERLINE — Pen #1
STATION EQUATIONS — 'L' 48+94.70 PT = 'L' 48+32.05 PDT — Pen #1
SECTION LINE INTERSECTION — S 23° 30'W — 1936' 51+41.3
ROAD CLOSURE — 115 — Pen #3
LIMIT OF CUT SLOPE — Pen #0
LIMIT OF FILL SLOPE — Pen #1
OBLITERATE ROADWAY — Pen #0

	RECOVERED MONUMENT	RECORD MONUMENT
TOWNSHIP CORNER		
SECTION CORNER	6 5 7 8	6 5 7 8
1/4 SECTION CORNER	6 5	6 5
CENTERLINE SURVEY MONUMENT		

P. K. NAIL
MISCELLANEOUS FOUND CORNER
MAILBOX — MB
SATELLITE DISH — SAT. DISH

PVC CONDUIT
RIGID METAL CONDUIT (EXISTING)
RIGID METAL CONDUIT (PROPOSED)
RAILROAD TRACKS--- SINGLE--
MULTIPLE or DOUBLE--

RAILROAD PROTECTIVE DEVICES

ADVANCE WARNING — X-BUCK — FLASHING LIGHT — CANTILEVER

EXISTING UTILITY PIPELINES (Direction or flow indicated by bell)
OIL — SANITARY SEWER — GAS — WATER

PROPOSED UTILITY PIPELINES
OIL — D
SANITARY SEWER — SS
GAS — G
WATER — W

EXISTING STORM DRAIN — SD STORM DRAIN
PROPOSED STORM DRAIN STRUCTURE AND PIPE NO'S APPLICABLE IF SHOWN — S-1, S-2, SD, P-1, P-2

	EXISTING	PROPOSED
FIRE HYDRANT		
METER		
VALVE or RISER		
POWER POLE		
JOINT USE POWER & TELEPHONE		
TELEPHONE or TELEGRAPH POLE		
TRANSMISSION TOWERS	Steel, Wood	Steel, Wood
POLE ANCHOR		
STUB POWER or TELEPHONE		
TELEPHONE DUCT	T	T
ELECTRIC DUCT	E	E
TELEPHONE MANHOLE	TMH	TMH
ELECTRIC MANHOLE	EMH	EMH
LUMINAIRE (MAST ARM MOUNTED)	5	5
LUMINAIRE (SPAN WIRE MOUNTED)	4	4
TELEPHONE PEDESTAL	T	T
ELECTRICAL TRANSFORMER	E	E
BURIED CABLE MARKER		
CATCH BASIN or DROP INLET		
MANHOLE	MH.	MH.

INTERMITTENT DRAINAGE
INTERCEPTOR DITCH
TUNNEL
EXISTING ROADWAY
DAM
FORD
FERRY
HEAD & WINGWALLS
LAKE & RESERVOIRS — LAKE, RES., RIVER, CREEK
RIVERS OR CREEK
BUILDINGS: H=HOUSE, M=MERCHANT/STORE, S=SHED, SS=SERVICE STATION, G=GARAGE, B=BARN, P=PRIVY, W=WAREHOUSE — PROPOSED H, EXISTING H
FOUNDATIONS — FD
WETLANDS
STUMPS
TANK (ABOVE GROUND) — 550 GAL. FUEL OIL TANK
TANK (BELOW GROUND) — 550 GAL. FUEL OIL TANK
GAS PUMP — GAS PUMP
DELINEATOR--GUIDE MARKER (FACING →)
RETAINING WALL
STONE FENCE

	EXISTING	PROPOSED
DECIDUOUS TREE		
CONIFER TREE		
CONIFER TREE SHRUB		

SIGN (FACING →)
RIPRAP
BRIDGE
PIPE CULVERTS
NOISE BARRIER
FENCE LINE
GUARDRAIL
GUIDE POST
SIDEWALK
CONCRETE CURB
CONCRETE CURB GUTTER
DRIVEWAYS, APPROACHES

	EXISTING	PROPOSED
SIGNAL FACE, VEHICULAR	9	9
SIGNAL FACE, BACKPLATE	9	9
SIGNAL FACE, LEFT TURN, BACKPLATE	9	9
SIGNAL FACE, PEDESTRIAN	8	8
JUNCTION BOX, TYPE I	1	1
JUNCTION BOX, TYPE II	2	2
JUNCTION BOX, TYPE III	3	3
DETECTOR, LOOP	4	4
DETECTOR, MAGNETOMETER	M	M
DETECTOR, RADAR	R	R
DETECTOR, SONIC	S	S
DETECTOR, OPTICOM		
DETECTOR, PUSH BUTTON (DIRECTION →)	5	5
SIGNAL CONTROLLER		
LOAD CENTER		
SIGNAL POLE	2	4
SIGNAL POLE w/MASTARM	3	5

FOR STRIPING PLANS

SOLID WHITE STRIPE	W
SOLID YELLOW STRIPE	Y
BROKEN WHITE or YELLOW STRIPE	W / Y
DASH YELLOW STRIPE	Y
SOLID YELLOW STRIPE with BROKEN YELLOW STRIPE	Y

842 — R.R. 2580+60 / HWY. 126+38 — RAILROAD MILE POST

143 — 121+25 — HIGHWAY MILE POST

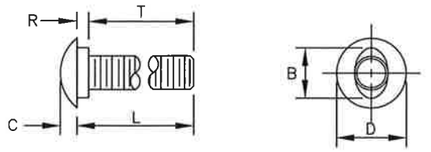
REVISIONS		
Date	Description	By

State of Alaska
Department of Transportation
& Public Facilities

SYMBOLS

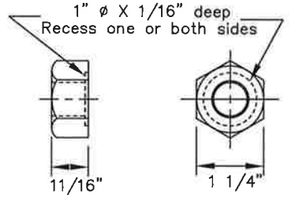
APPROVED — 49TH STATE — Date _____

A-1

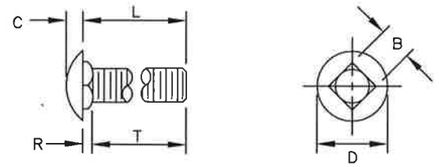


B	C	D	L (Length)	R	T (Thread Length)
15/16"	5/16"	1 5/16" or 1 7/16"	As Required	7/32"	As Required

5/8" BUTTONHEAD BOLT

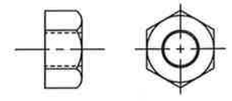


5/8" Dia. RECESSED HEX NUT



B	C	D	L (Length)	R	T (Thread Length)
5/8"	5/16"	1 5/16"	As Required	3/16"	As Required

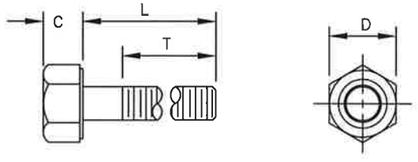
5/8" Dia. CARRIAGE BOLT



STANDARD HEX NUT

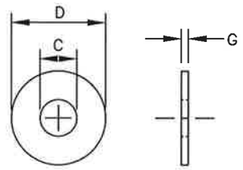
GENERAL NOTES:

1. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition.



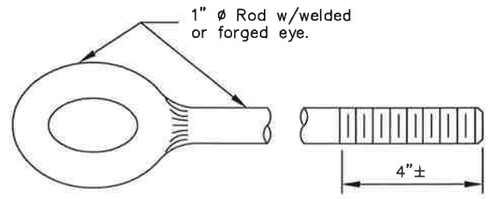
Bolt Size	C	D	L (Length)	T (Thread Length)
5/16"	—	—	1 1/2"	7/8"
5/16"	—	—	1"	1"
3/8"	—	—	7 1/2"	1 1/2"
1/2"	—	—	1 1/2"	1 1/2"
1/2"	—	—	1 1/4"	1 1/4"
5/8" H.S.	5/16"	7/8"	8"	1 1/2"
5/8"–11	—	—	1 1/2"	1 1/2"
3/4"	—	—	1 1/2"	1 1/2"
3/4"	—	—	As Required	2"
3/4" H.S.	15/32"	1 1/4"	2"	1 1/2"

STANDARD HEX BOLTS



For Bolt ø	C	D	G
3/8"	7/16"	1"	5/64"
1/2"	17/32"	1 1/16"	3/32"
1/2" H.S.	17/32"	1 1/16"	3/32"
5/8"	11/16"	1 3/4"	9/64"
3/4"	13/16"	1 15/32"	9/64"
3/4" H.S.	13/16"	2"	5/32"
1"	1 1/16"	2"	9/64"

STANDARD STEEL WASHERS



EYE BOLT

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

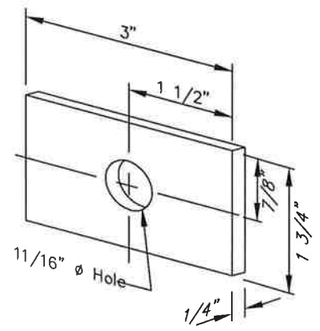
Proj. Eng. MB Date 1/10/16

REVISIONS		
Date	Description	By
3/15/99	Delete BCT Hardware	KJS

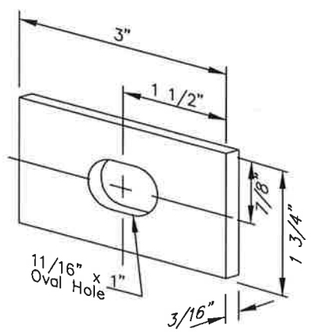
State of Alaska
Department of Transportation
& Public Facilities

STANDARD GUARDRAIL HARDWARE
(NUTS, BOLTS, WASHERS)

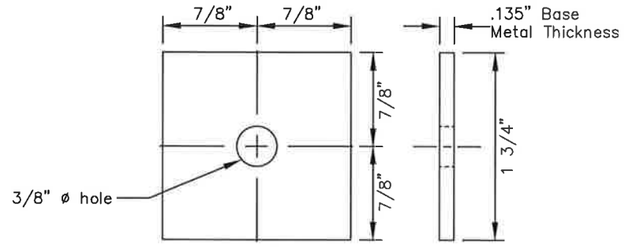
APPROVED
Date 5/31/12



FLAT PLATE WASHER

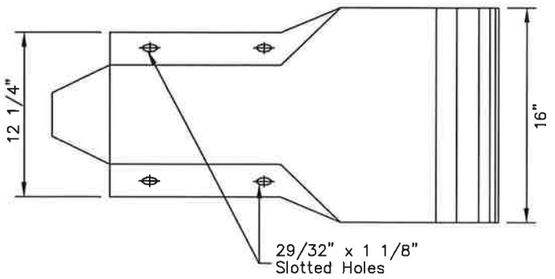


RECTANGULAR POST BOLT WASHER

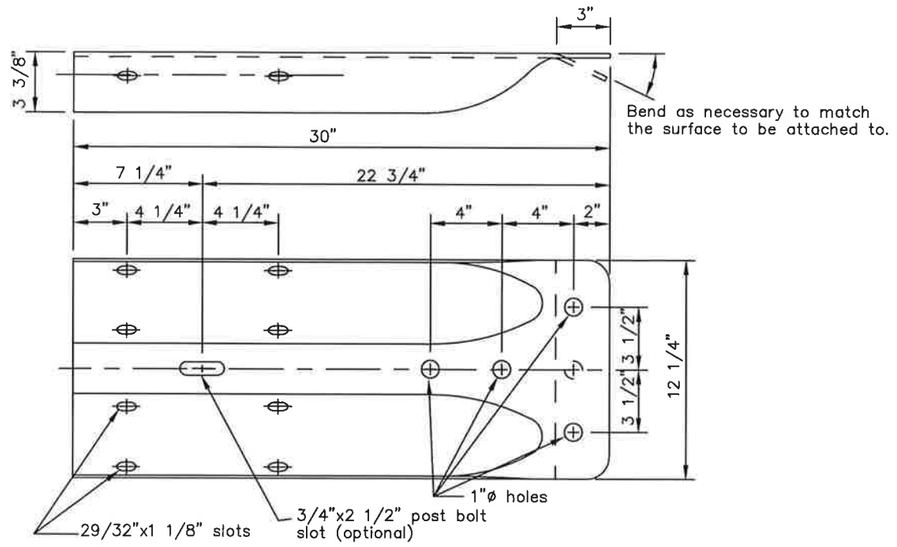


SQUARE STEEL WASHER

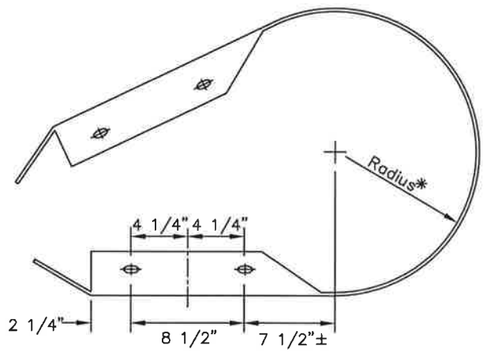
G-00.02



PROFILE



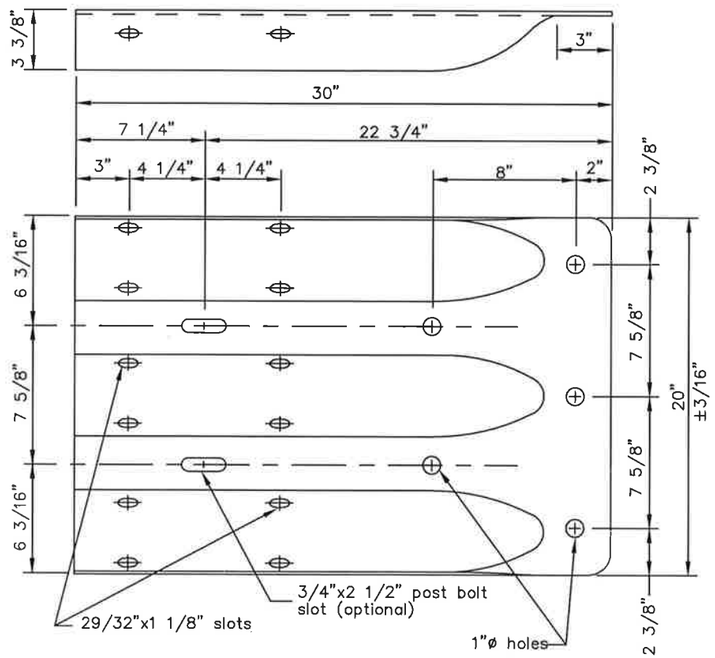
STANDARD W-BEAM TERMINAL CONNECTOR



W-BEAM PLAN VIEW

*Radius to be specified on the plans

STANDARD W-BEAM END SECTION



STANDARD THRIE BEAM TERMINAL CONNECTOR

GENERAL NOTES:

1. W-Beam and Thrie Beam Terminal Connectors shall conform to AASHTO M180, Class B, Type 2.
2. W-Beam end sections shall conform to AASHTO M180, Class A, Type 2.
3. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

REVISIONS		
Date	Description	By
3/15/99	Delete Thrie End Sect.	KJS

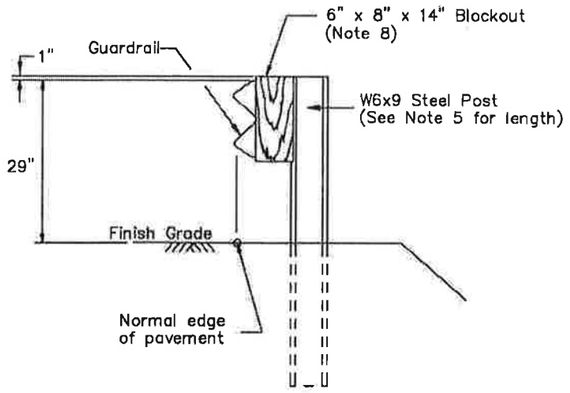
State of Alaska
Department of Transportation
& Public Facilities

STANDARD GUARDRAIL HARDWARE (TERMINAL CONNECTORS)

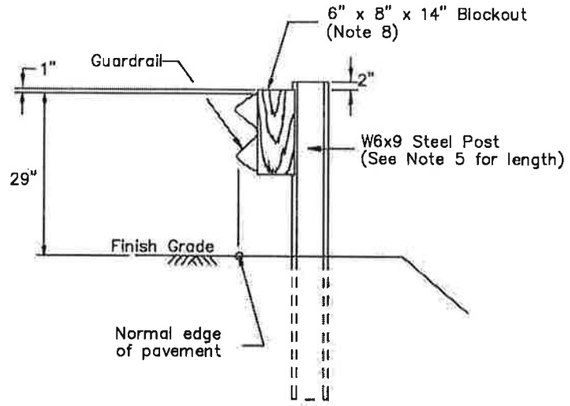
APPROVED 49TH Kurtis J. Smith CE-7547 4/28/10

Date 5/31/12

G-00.02

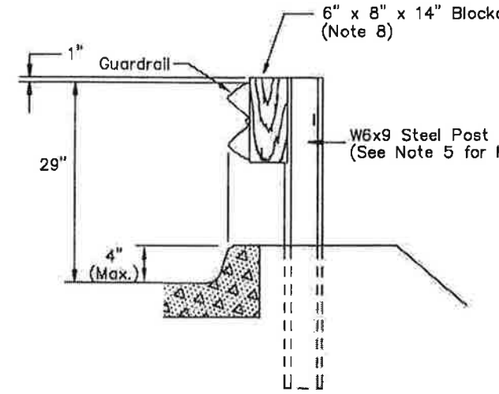


TYPE I POST INSTALLATION



TYPE II POST INSTALLATION

(Facilitates raising rail for future overlays.)

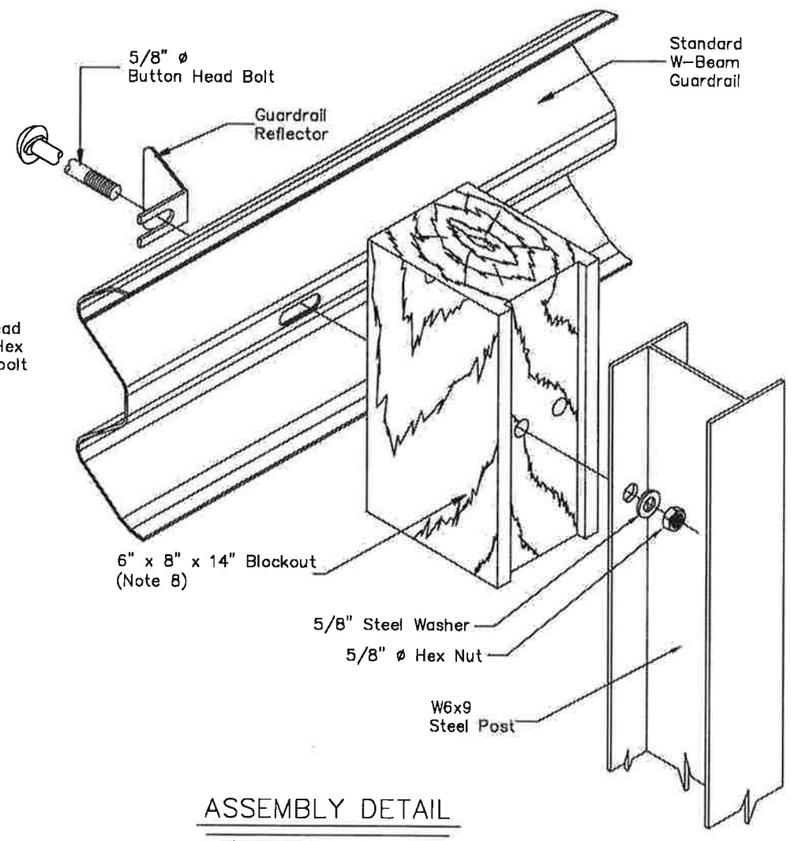


CURB DETAIL

TYPE III POST INSTALLATION

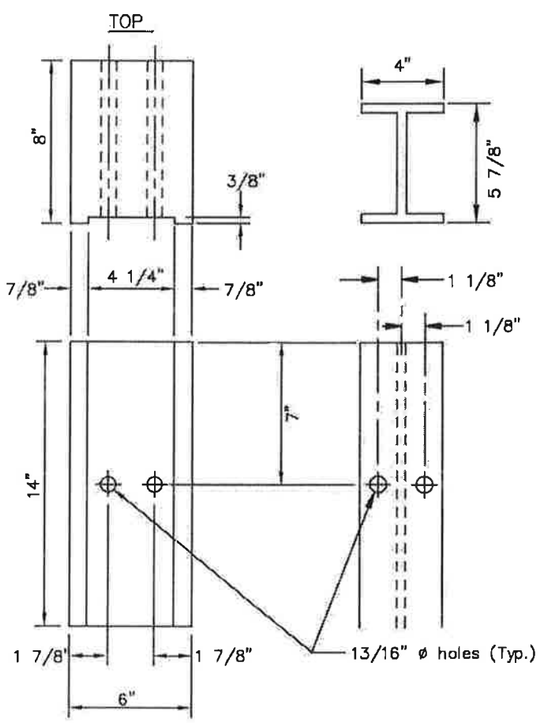
NOTE: Curb should not be installed with guardrail when the speed limit exceeds 40 mph.

TYPE IV DOUBLE SIDED INSTALLATION



ASSEMBLY DETAIL

(Type I post shown)



BACK

6" x 8"
WOOD BLOCK

FACE

W6x9
STEEL POST

G-04.10S

SHEET 1 of 1

GENERAL NOTES:

1. Attach guardrail reflectors at 50' centers beginning with the first post. Use Type A reflectors unless specified otherwise.
2. Provide hardware compliant with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware," latest edition.
3. See Standard Drawing G-00 for hardware details.
4. Mount rail to block with bolt on approaching traffic side of block web.
5. See Standard Drawing G-10 for post lengths corresponding to different combinations of slope and behind-post embankment width.
6. Typical post spacing is 6'-3" center to center.
7. This barrier is acceptable under NCHRP 350, TL-3.
8. Use wood, rubber, plastic, or other NCHRP 350 or MASH approved blockouts designed to be used with steel posts
9. Use 25 linear foot transition to match height of existing or new rail elements and end treatments.
10. W6x8.5 steel post may be substituted for W6x9 steel post.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

REVISIONS		
Date	Description	By
3/1/83	Revised gen. notes	Gdo
1/1/86	Revised hanger detail	Gdo
3/15/99	Block and post length	KJS
4/1/13	Add double-sided detail and increase g.r. height	JCJ

State of Alaska
Department of Transportation & Public Facilities

STEEL POST
W-BEAM GUARDRAIL

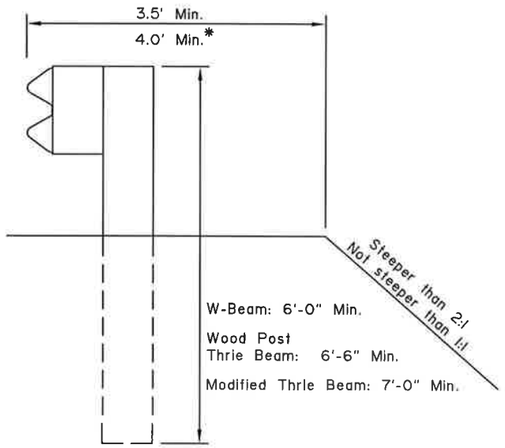
APPROVED

Date 05/15/13

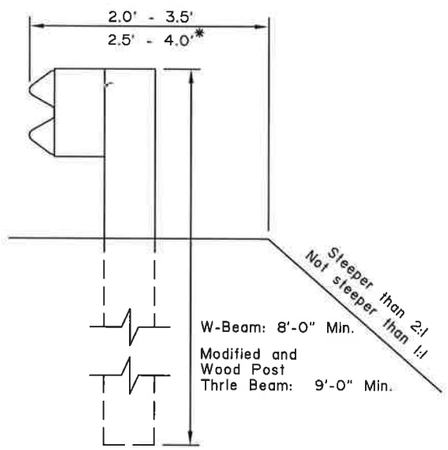
G-04.10S

GENERAL NOTES:

1. This drawing is to be used for post length determination only. See the plans for slopes and behind-post embankment widths.
2. To determine post length, identify the case that matches site conditions and read the length corresponding to the pertinent guardrail type.
3. These dimensions apply to both curbed and uncurbed sections.

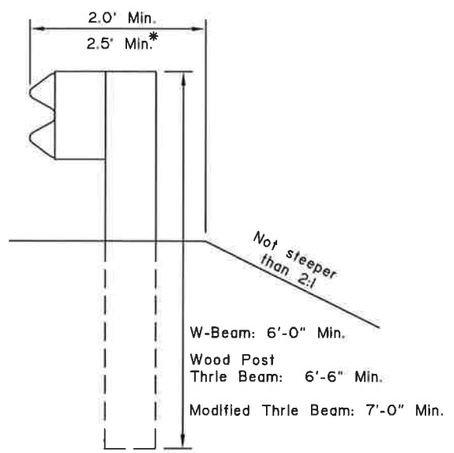


CASE 1



*with Modified Thrie Beam'

CASE 2



CASE 3

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/6/16

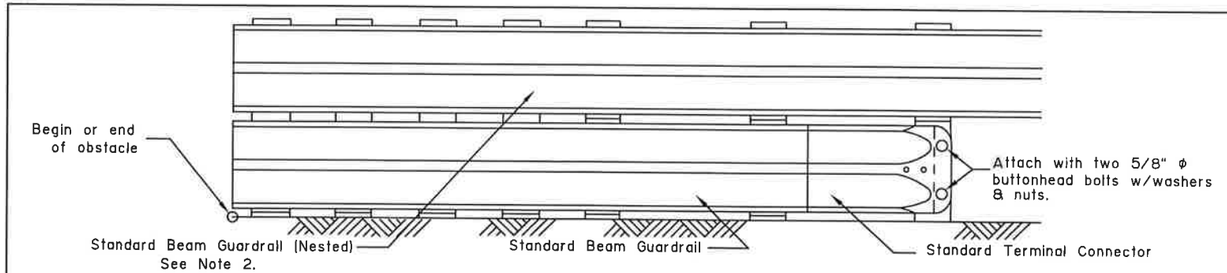
REVISIONS		
Date	Description	By
12/2/99	Delete Case 4,5, and 6	KJS

State of Alaska
Department of Transportation
& Public Facilities

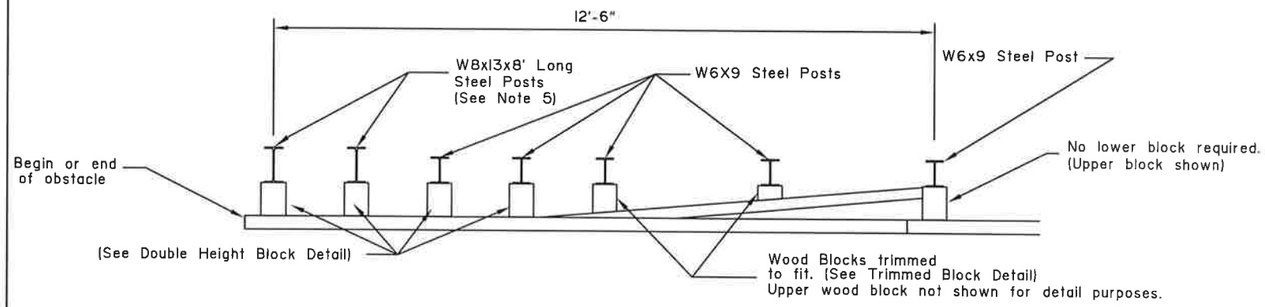
BEAM GUARDRAIL POST INSTALLATION

APPROVED Date 3/15/99

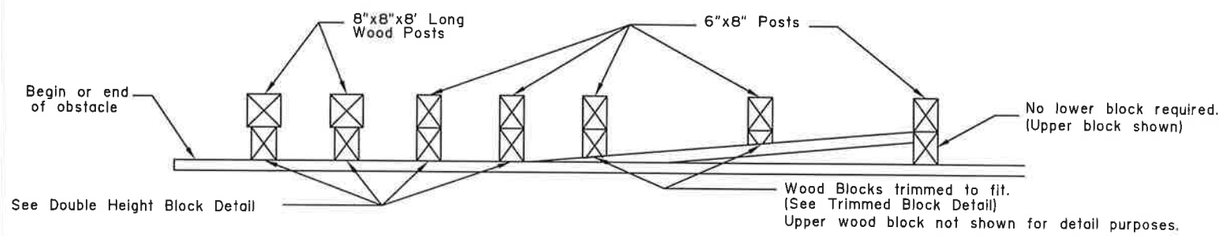
G-10.01



RUBRAIL TRANSITION ELEVATION (STEEL & WOOD POST)

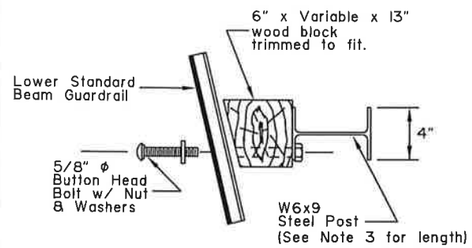


RUBRAIL TRANSITION PLAN (STEEL POST)



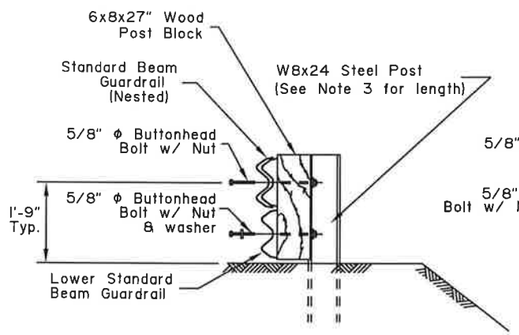
RUBRAIL TRANSITION PLAN (WOOD POST)

STEEL POST DETAILS

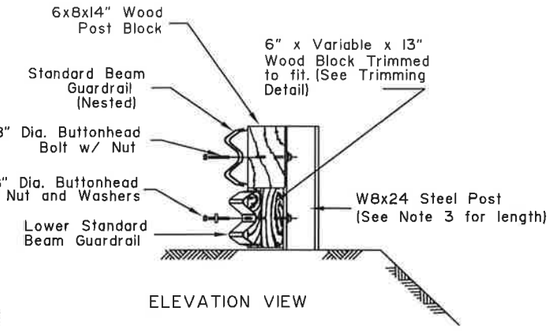


PLAN VIEW

TRIMMED BLOCK



DOUBLE HEIGHT BLOCK



ELEVATION VIEW

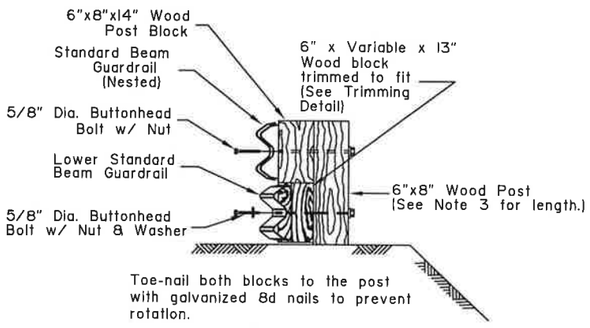
TRIMMED BLOCK

G-27.11

GENERAL NOTES:

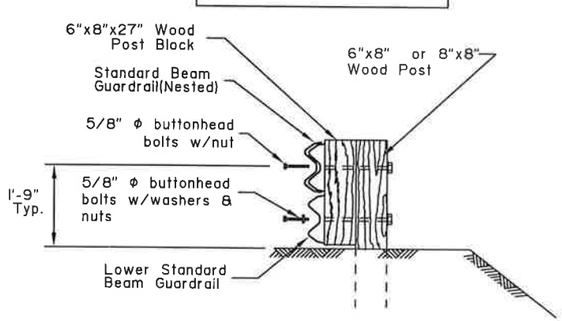
1. Post spacings shall be per sheet 1 of 2.
2. The 12'-6" section of guardrail immediately adjacent to the obstacle rail shall be nested.
3. See standard drawing G-10, "Beam Guardrail Post Installation" for post lengths corresponding to different combinations of slope and behind-post embankment widths.
4. Hardware details not shown here shall conform to drawings G-04 & G-00.
5. Blockouts shall conform to Standard Drawing G-04, except that no notch is required on W8x13 steel posts.

WOOD POST DETAILS

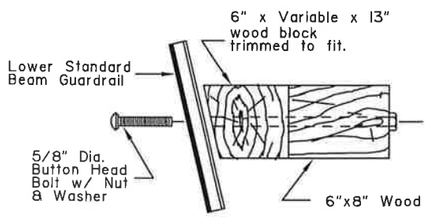


ELEVATION VIEW

TRIMMED BLOCK



DOUBLE HEIGHT BLOCK



PLAN VIEW

TRIMMED BLOCK

NOT TO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

REVISIONS		
Date	Description	By
10/31/03	Added Sheet 2 For	LRG
	Rubrail transition	

Sheet 2 of 2

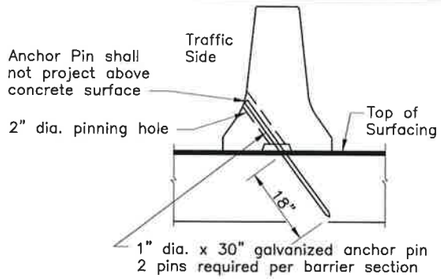
State of Alaska
Department of Transportation & Public Facilities

GUARDRAIL STIFFENING AT OBSTACLES

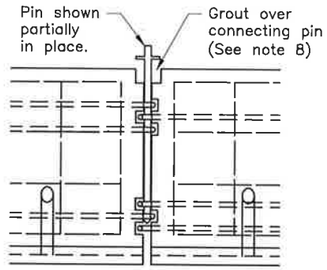
APPROVED Lars R. Gregovich CE-6065 Date 10/31/03

G-27.11

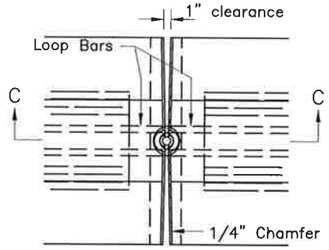
G-46.11



PINNING CONCRETE BARRIER TO ROADWAY
(Use when required by plans or as directed)

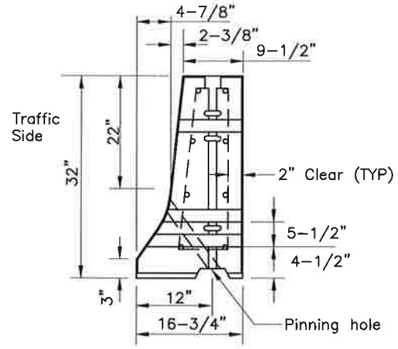


SECTION C–C
For details not shown see End Views A–A and B–B



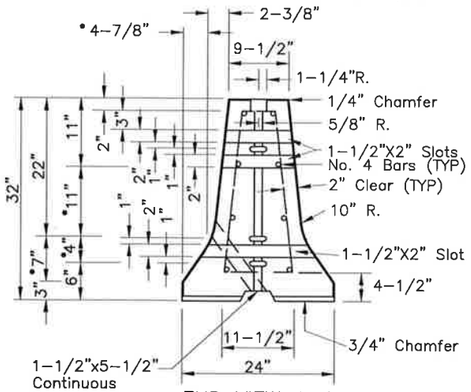
PLAN
For details not shown see End Views A–A and B–B

CONNECTING PIN AND LOOP CONNECTION

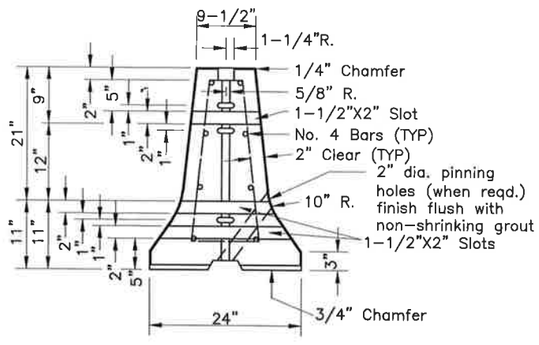


SHOULDER BARRIER

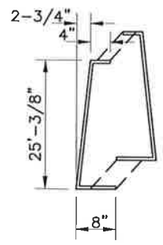
* Dimensions marked thus are to the intersection point of the barrier slopes.



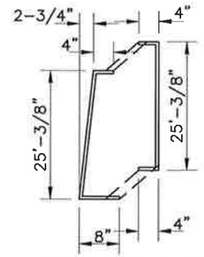
END VIEW A–A



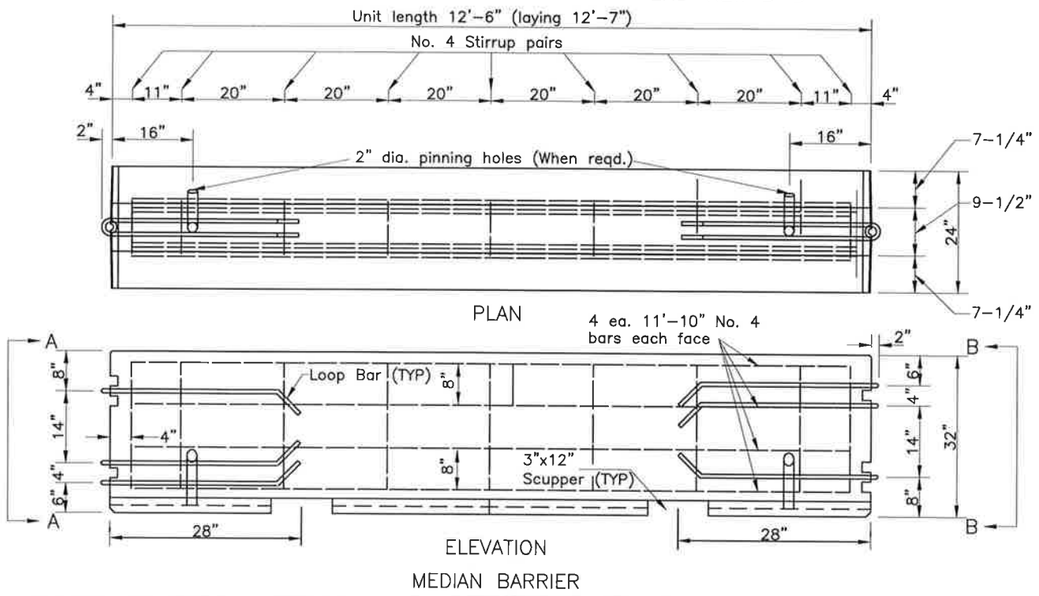
END VIEW B–B

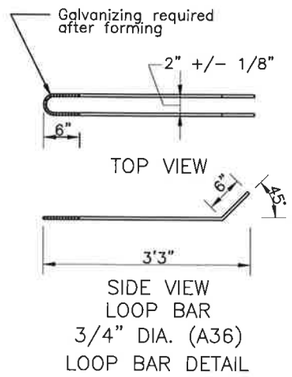


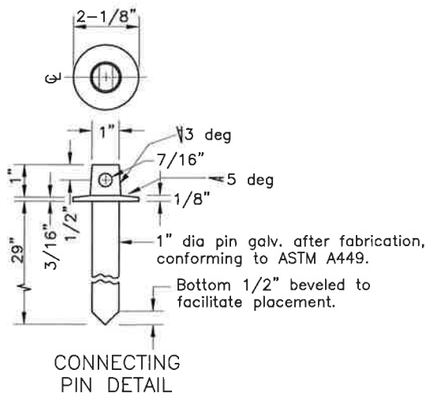
MEDIAN BARRIER STIRRUP
No. 4 REBAR



SHOULDER BARRIER STIRRUP
No. 4 REBAR







GENERAL NOTES

1. Barriers may be used for temporary and permanent applications.
2. Provide 36" unobstructed smooth deflection area behind barrier for unanchored applications. Provide 12" unobstructed smooth deflection area behind barrier for anchored applications.
3. When anchored, install anchor pins on the side facing traffic. Precast barrier used as permanent median barrier in medians less than 8' in width shall be anchored to the roadway. When anchored in medians, install anchor pins on both sides of the barrier.
4. Provide 2" clearance between all metal reinforcement and the nearest face of concrete unless otherwise shown.
5. Normal use of precast barrier units is restricted to curvatures with radii greater than 770'.
6. Use narrow base shoulder barrier only at locations with full height backfill or equivalent structural support placed behind barrier.
7. When scuppers are not required plug them with a minimum 2" of grout.
8. Concrete grout for grouting over pins, pinning holes or grouting of scuppers shall be a non–shrinking grout, weak in strength and of thick consistency.
9. This precast concrete barrier is NCHRP 350 TL–3 approved.

REVISIONS		
Date	Description	By
4/28/10	Correct Dims, Note 1	KJS

Sheet 1 of 2

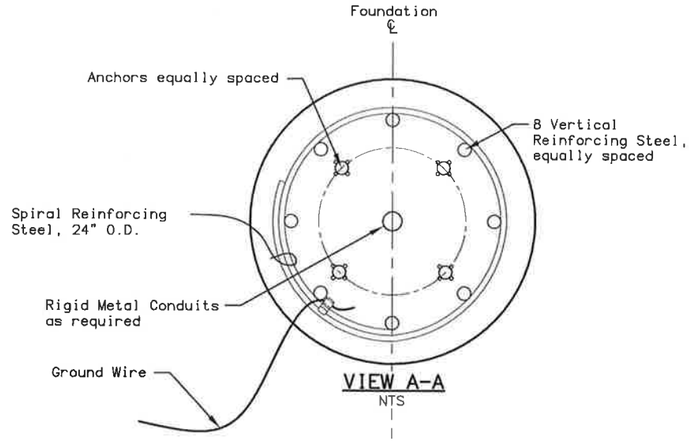
State of Alaska
Department of Transportation & Public Facilities

PRECAST CONCRETE "F" SHAPE BARRIER

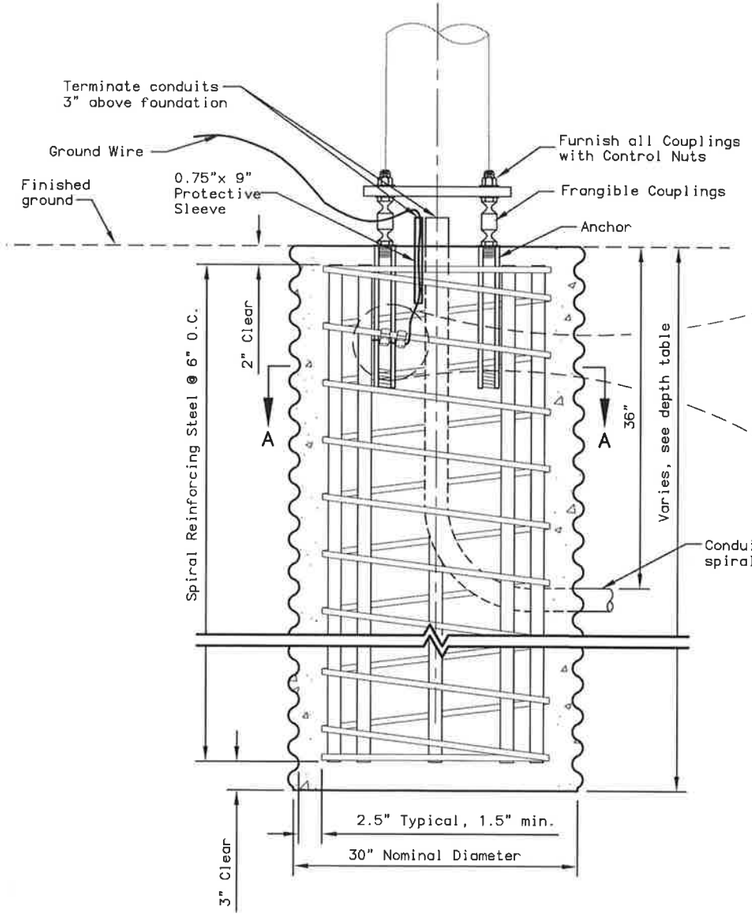
APPROVED
Date 5/31/12

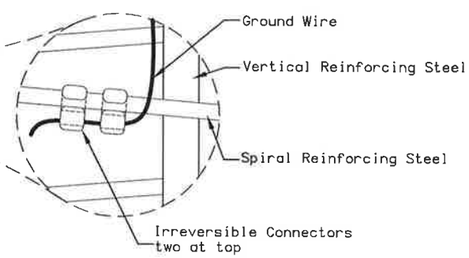
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16



VIEW A-A
NTS





FOUNDATION DETAILS
NTS
(Skirt omitted for clarity)

MATERIAL REQUIREMENTS		
Concrete	Class A	f'c = 4000 psi
CMP	AASHTO M218	14 ga.
Vertical Reinforcing Steel	AASHTO M31 #11	GR 60
Spiral Reinforcing Steel	AASHTO M31 #5	GR 60
Ground Wire		#4 awg
Frangible Coupling	NCHRP 350 TL3 Frangible Coupling	Vu = 5.5 kips Tu = 43.2 kips
Anchor	NCHRP 350 TL3 Frangible Coupling Anchor	
Conduit	Sch 40	RMC
Protective Sleeve	Sch 40	PVC

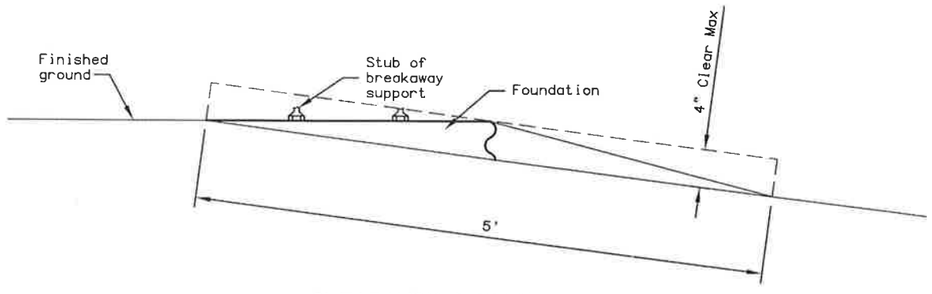
DEPTH TABLE		
GRADE	FOUNDATION DEPTH BY APPLICATION (ft.)	
	ELECTROLIER * SEE NOTE 9	BREAKAWAY TRAFFIC SIGNAL
Flat to 6:1	8	6
>=6:1 to 3:1	9	7
>=3:1 to 1.5:1	10	8

SAND SLURRY MIX DESIGN		
ITEM	BATCHING QUANTITIES PER CYD BATCH (lbs.)	APPLICABLE SPECS.
Portland Cement Concrete	188	701-2.01
Water (52.1 gal.)	435	712-2.01
Fine Aggregate SSD	3041	703-2.01
Admixture: Microair	2.0 oz.	711-2.02
Total	3664	

BOLT CIRCLE	
REGION	DIAMETER
Northern Region Projects	14.5"
Central Region Projects	15.5"
Southeast Region Projects	15.5"

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16



CLEARANCE DETAIL
NTS

DESIGN NOTES:

Design Standard: 2001 Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals with 2006 interim.

Design Load: 1,000 lbs axial, 2,000 lbs shear, 50,000 ft-lbs moment.

Construction Standard: Latest edition of the State Of Alaska Standard Specifications for Highway Construction with Special Provisions.

NOTES:

1. This foundation is approved for electrolier and breakaway traffic signal applications in cohesionless soils with an N1-60 value of 10 or greater per AASHTO T-206, "Standard Penetration Test" (SPT). This foundation shall not be used if any of the following are encountered; water table above the bottom of foundation, very loose soils, organic soils, cohesive soils (clay), or soils susceptible to frost jacking. If any of these conditions are encountered, stop foundation work and contact the Engineer.
2. Place foundation in drilled or excavated hole with centerline of foundation located at the station, offset, and elevation specified in plans. Set foundation to satisfy the conditions depicted in clearance detail.
3. Form the foundation in corrugated metal pipe conforming to Subsection 707-2.01 of the Specifications.
4. Provide 1.5 extra turns at each end of the spiral reinforcing steel. Reinforcing steel shall not be spliced. Tie vertical reinforcing steel to each intersection of the spiral reinforcing steel.
5. Connect ground wire near the top of spiral reinforcing steel with two irreversible connectors as shown. Fasten connectors according to the manufacturers' recommendations including the use of manufacturer specified tools. The ground wire may be bare solid, stranded, or braided copper. Protect ground wire with protective sleeve as shown and fill with silicon sealant.
6. Complete all concrete work in conformance with Sections 501, 503, and 660 of the Specifications. Use a tube with a hopper head or other approved device when dropping concrete more than 5 feet per Subsection 501-3.08. Vibrate concrete during placement by mechanical vibration per Subsection 501-3.08. Ensure anchor threads are protected from contact with concrete during pour.
7. Backfill and compact according to Section 205, and Subsections 203-3.04 and 660-3.01 of the Specifications. Use select material, Type A or sand slurry as backfill material. Ensure area below foundation meets compaction requirements and is free of loose material and debris prior to concrete work.
8. Install all anchors according to the manufacturer's written installation instructions. Anchors shall be installed plumb. Anchors greater than 1:40 out-of-plumb will result in foundation rejection.
9. When used for electrolier reduce the foundation depth 1 foot when there is no luminaire arm or the luminaire arm is less than or equal to 12 feet.
10. Grade in depth table refers to fill slopes. If foundation is in a cut slope assume flat grade in table. To determine grade in fill slopes, use the most severe grade found within an 8 foot radius of the center of the foundation. Slopes steeper than 1.5:1 require engineered depth calculation.

REVISIONS		
Date	Description	By

SHEET 1 OF 1

State of Alaska
Department of Transportation
& Public Facilities

CONCRETE STREET LIGHT POLE FOUNDATION

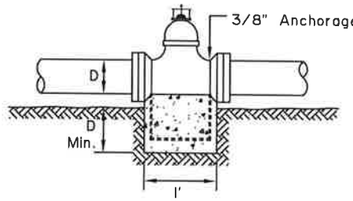
APPROVED

Date 05/31/12

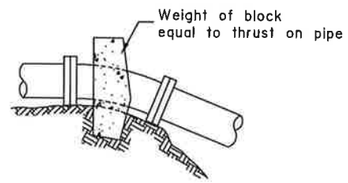
THRUST BLOCK MINIMUM SIZE TABLE						
For Bends Greater Than 45°, Tee Branches & Crosses						
Pipe Diam. (In.)	Water Pressure in Pipe (P.S.I.)					
	50		150		250	
	Bearing Area (Sq. Ft.)	Concrete Volume (Cu. Ft.)	Bearing Area (Sq. Ft.)	Concrete Volume (Cu. Ft.)	Bearing Area (Sq. Ft.)	Concrete Volume (Cu. Ft.)
2	0.5	0.5	0.8	1.0	1.0	1.3
3	0.6	0.8	1.0	1.3	1.1	1.5
4	0.8	1.0	1.6	3.1	1.5	3.0
6	1.0	1.3	1.9	4.0	3.2	7.0
8	1.1	1.5	3.2	7.0	5.4	11.0
10	1.7	3.2	4.9	10.0	8.3	19.0
12	2.4	5.2	7.1	17.0	11.8	24.3
14	3.2	7.0	9.8	21.0	16.1	32.0
16	4.1	8.0	12.3	25.0	20.5	40.0
18	5.4	11.0	16.2	32.0	27.1	50.0
20	6.8	15.0	20.6	40.0	34.4	70.0
24	8.2	19.0	25.3	50.0	42.0	80.0
For Bends 45° or Less						
2	0.5	0.5	0.5	0.5	0.6	0.8
3	0.5	0.5	0.7	0.9	0.8	1.0
4	0.5	0.5	0.9	1.1	1.0	1.5
6	0.6	0.8	1.2	2.0	1.7	3.2
8	0.8	1.0	1.8	3.6	2.9	6.0
10	1.0	1.3	2.7	5.8	4.5	9.0
12	1.3	2.5	3.8	7.5	6.4	14.0
14	1.7	3.2	5.2	11.0	8.6	19.0
16	2.2	4.5	6.7	15.0	11.2	24.0
18	2.8	5.9	8.5	19.0	14.1	30.0
20	3.5	7.0	10.5	22.2	17.5	35.0
24	4.2	8.0	12.8	26.0	21.5	40.0

VALVES REQUIRING ANCHORAGE	
WORKING PRESSURE (P.S.I.)	VALVES REQUIRING ANCHORAGE
50 - 100	12 Inch and up
101 - 150	8 Inch and up
151 - 200	All Sizes

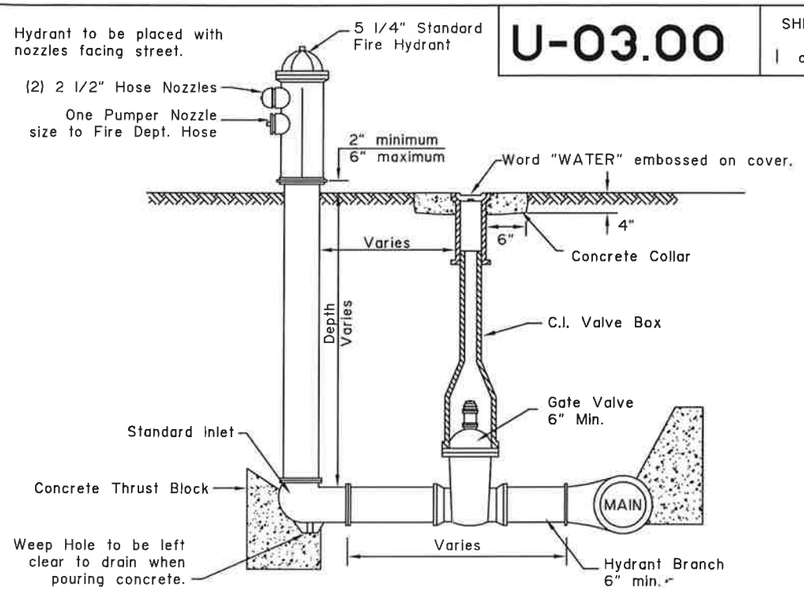
THRUST AT VERTICAL BEND PER DEGREE DEFLECTION AT 100 P.S.I. WATER PRESSURE			
PIPE SIZE	THRUST (LB.)	PIPE SIZE	THRUST (LB.)
4"	35	10"	197
6"	72	12"	278
8"	122	14"	377
		16"	486



ANCHORAGE OF VALVES

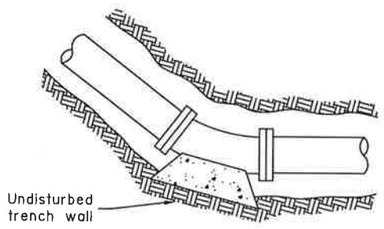


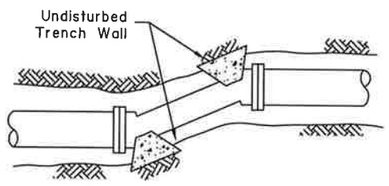
VERTICAL BENDS

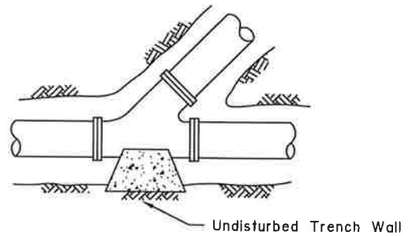


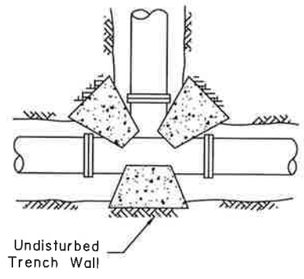
No bends shall exceed 11 1/4" between the hydrant and the main.

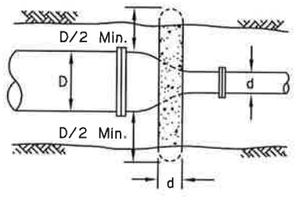
STANDARD HYDRANT

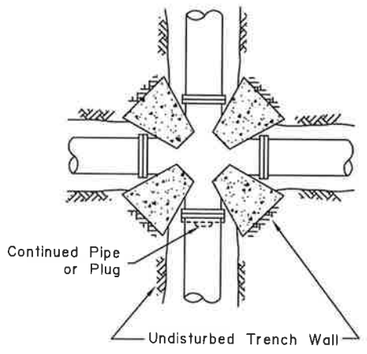












PLACEMENT OF THRUST BLOCKS

GENERAL NOTES:

1. Thrust blocks are to be concrete poured in place between the fitting and undisturbed trench wall.
2. Concrete shall be kept behind bell of fitting so as not to obstruct the joint.
3. Thrust blocks are required whenever pipe-line changes direction, changes size, dead ends, or develops thrust at valves.
4. Material, behind the thrust blocks, deemed inadequate by the engineer shall be removed and replaced by a ballast material, the extent and quality of replacement material to be determined by the engineer.
5. In impervious soils, a hole shall be dug beneath the hydrant thrust block to a minimum volume of 7 cubic feet. The hole shall be backfilled and compacted with a pourous material acceptable to the engineer.
6. Refer to AWWA C600-64 Section 11 for placement of hydrant.
7. Concrete class shall be as directed by the engineer.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

U-03.00

SHEET 1 of 1

REVISIONS		
Date	Description	By

State of Alaska
Department of Transportation & Public Facilities

THRUST BLOCKS FOR WATER MAIN & HYDRANT

APPROVED Date 7/15/82

U-03.00

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL INSTALL NEW 2-ADTRAN VDSL SYSTEM & REMOVE THE FOLLOWING EXISTING VARIOUS AERIAL & UG TEL. CABLE FACILITIES FOR THE REHABILITATION OF WATER STREET BRIDGE:
   a) AERIAL FIBER OPTIC CABLE, 48FOC, FWAT,37-60+24D'd;
   b) AERIAL COPPER CABLE AEF100PR-26GA, K37,801-900;
   c) UG COPPER CABLE AEB50-22, T02,1-25+51-75
   d) UG COPPER CABLE AE1200-26, K37,1-800+100D'd+901-1075+125D'd; AND
   e) UG COPPER CABLE AE1800-26, C03,1-1800.
2. NO REMOVAL/MIGRATION OF EXISTING TELEPHONE COPPER AND FIBER CABLES OR SERVICES SHALL BE DONE UNLESS THE PROPOSED VDSL SYSTEM AT PARNELL ST AND BEAR VALLEY ARE IN FULL OPERATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT A PAD MOUNT OF 72"x30" AT PARNELL ST AND TO INSTALL ADTRAN VDSL CABINET TA5000 INCLUDING PLACEMENT OF 1 EACH 17"x30" (TIER 22) HANDHOLE AS SHOWN IN PROPOSED VDSL LOCATION DETAIL, PRINT V18.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO SET UP THE PROPOSED VDSL CABINET TA5000 SHELL & ITS ELECTRONIC DEVICES AT PARNELL ST INCLUDING TERMINATION OF PROPOSED 600 COPPER PAIRS INTO VDSL TERMINATION BLOCK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL ELECTRONIC VDSL CARDS IN EXISTING CABINET SHELL AT SCHEONBAR RD & 3RD AVENUE BYPASS. UPON INSTALLATION OF ADTRAN ELECTONIC CARDS, THE CONTRACTOR SHALL DO THE CUTOVER OF ALL EXISTING ACTIVE LINES SERVING BEAR VALLEY HOMES FROM EXISTING COPPER CABLE C03, WHICH IS TO BE REMOVED, INTO NEW VDSL SYSTEM, CABINET X021.
6. THE CONTRACTOR SHALL INSTALL NEW POWER METER AND SHALL BE RESPONSIBLE TO COORDINATE W/ KPU ELECTRIC ABOUT INSTALLATION STANDARDS & ITS PROPER LOCATION.
7. THE CONTRACTOR SHALL INSTALL NEW 45' POLE AT PARNELL ST CORNER WATER ST INCLUDING ITS PROPOSED RISER PIPES.
8. THE CONTRACTOR SHALL INSTALL VARIOUS SIZES OF NEW CONDUITS FROM NEW VDSL CABINET THROUGH EX. MH-18 & NEW HH (17"x30") TO NEW 45' POLE RISER, SEE NEW VDSL LOCATION ON PRINT V18.
9. THE CONTRACTOR SHALL INSTALL NEW 16M STRAND WIRE FROM POLE 1334-B4-1 TO 1341-D4-5 AT A HEIGHT OF 26' MIN TO 30' MAX ALONG WATER ST.
10. THE CONTRACTOR SHALL CONSTRUCT 1 EACH OF 16M DOWN GUY ON POLE 1334-B4-1 AND 2-EACH OF 16M SIDEWALK GUY ON POLE 1341-D4-5 ALONG WATER ST. SEE PRINTS V16 & V17.
11. THE CONTRACTOR SHALL RE-LASH (DOUBLE LASH) EXISTING FIBER CABLE 48FOC, F02, AT A NEW HEIGHT OF 26' (MIN) TO 30' (MAX) CLEARANCE AND TO MAKE 150' SPLICE LOOPS ON POLES 1334-A4-1 & 1334-A5-4 AT WATER ST AFTER THE CABLE IS CUT AT SCHOENBAR ROAD, AS SHOWN ON PRINT V16, TO SPLICE IN NEW 6-PORT FIBER TERMINALS.
12. THE CONTRACTOR SHALL INSTALL 8 EACH OF NEW 6-PORT FIBER POLE TERMINAL AND SPLICE INTO EXISTING FIBER CABLE 48FOC, F02, AS SHOWN ON PRINTS V16 TO V17.
13. THE CONTRACTOR SHALL INSTALL 1500' NEW AIR PIPE AS SHOWN ON PRINTS V15 TO V17. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO SPLICE IN THE NEW AIR PIPE TO EXISTING CABLE PRESSURIZATION SYSTEM INCLUDING THE TESTING. **THE CONTRACTOR SHALL COORDINATE WITH KEN BERRY, KPU-TELECOM SPLICE HEAD CREW, OF ANY ATTACHMENT TO EXISTING KPU-TELECOM CABLE PRESSURIZATION SYSTEM.**
14. DUE TO CONSTRUCTION, AS A TEMP. SERVICE TO WATER STREET BRIDGE RESIDENTS, THE CONTRACTOR SHALL INSTALL NEW FIBER DROPS & ONT (30 UNITS, PER TABLE V2) TO ALL ACTIVE COPPER CUSTOMERS IN THE VICINITY TO CONVERT THEIR SERVICE TO FIBER PER V16 & V17. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO REMOVE THEIR EX. COPPER DROPS & NIDS (21 UNITS), SEE CONST. NOTE No. 25. **THE CONTRACTOR SHALL COORDINATE WITH JOHN BECK, KPU-TELECOM OSP FOREMAN, ABOUT KPU-TELECOM GUIDELINES IN THE INSTALLATION OF FIBER DROPS.**
15. THE CONTRACTOR SHALL COORDINATE WITH KPU-TELECOM INSPECTOR IN TRANSFERRING EXISTING TELEPHONE AERIAL CABLE FACILITIES FROM A HEIGHT OF 18-FOOT CLEARANCE TO A NEW HEIGHT OF 26- TO 30-FOOT HIGH AT WATER ST. **THE CONTRACTOR SHALL ALSO REPLACE EXISTING COPPER & FIBER DROPS FROM EX. 18-FOOT HIGH EXISTING TERMINALS TO NEW HEIGHT OF COPPER & FIBER TERMINALS.**
16. THE CONTRACTOR SHALL COORDINATE WITH KPU-TELECOM BEFORE MIGRATING/CONVERTING ANY TELEPHONE SERVICE TO NEW SERVICE BOTH IN VDSL OR FIBER SYSTEM INCLUDING SERVICE DROPS REMOVAL THAT THERE **SHALL BE NO SERVICE INTERRUPTIONS** IN THE AREA.

   KPU-TELECOM STAFF TO BE CONTACTED FOR MAINTENANCE WINDOW:
   a) KEITH WADLEY - PLANT MANAGER
   b) JOHN BECK - OSP FOREMAN
   c) CARYN HOMAN - ISP FORMAN
   d) JEFF HENDRICKSON - SENIOR C.O.N.T.
   e) KEN BERRY - SPLICER HEAD CREW
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE REMOVAL OF CUT CABLES (BOTH COPPER & FIBER) BUT NOT LIMITED TO SERVICE DROPWIRES, STRAND WIRES AND OTHER POLE LINE HARDWARES.
18. THE CONTRACTOR SHALL SPLICE THE FOLLOWING (AS CALL OUT IN PRINTS V3-V17 FROM BOAT 1 TO 60):
   a) SPLICING OF NEW UG COPPER CABLES (900PR-24, 600PR-24G, AND 200PR-24GA) IN MH-18,
   b) SPLICING OF NEW 200PR-24 CABLE TO EXISTING COPPER CABLES AT MILLAR ST CORNER PARNELL ST,
   c) RE-SPLICING OF ALL EXISTING COPPER CABLES AND TERMINALS WHICH ARE AFFECTED BY CUTOVER FROM EXISTING K37 COPPER CABINET TO NEW X019 VDSL CABINET.
   d) RE-SPLICING OF EXISTING FIBER CABLE, F02, AT SCHOENBAR RD AFTER THE CUT.
   e) SPLICING OF NEW LONG TAIL FIBER TERMINALS (6-PORT) INTO EXISTING 48FOC, F02, ALONG WATER STREET
19. ALL NEW INSTALLED TELEPHONE FACILITIES INCLUDING ALL NEW SPLICED CABLES (COPPER & FIBER) SHALL BE DONE PER KPU-TELECOM STANDARD.
20. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND TEST IN THE FIELD ALL CABLE PAIRS/COUNTS IF THERE'S NO ACTIVE WORKER(S) IN THE CABLE BEFORE CUTTING IT OFF FOR REMOVAL.
21. THE CONTRACTOR SHALL INSTALL NEW DOUBLE ARM 10-PIN ALLEY ON THE FOLLOWING POLES (SEE PRINT V17):
   a) PROPOSED 45' HIGH POLE AT PARNELL AND WATER STREETS;
   b) POLE 1342-A4-3 AT WATER AND GORGE STREETS; AND
   c) POLE 1341-D4-5 IN FRONT OF 1251 WATER STREET.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONVERSION OF SERVICE DROPS OF HOUSES ALONG WATER STREET BRIDGE FROM COPPER TO FIBER AS MENTIONED IN CONST. NOTE No. 26 & TABLE V2, RESPECTIVELY. ALL DROPS FED FROM EXISTING COPPER TERMINAL OF CABLE K37 WILL BE REMOVED AND NEW FIBER DROPS WILL BE INSTALL FROM FIBER CABLE F02 AS SHOWN ON PRINTS V16 & V17. THIS INCLUDES THE MIGRATION OF EXISTING FIBER DROPS FROM FWAT CABLE TO F02.
23. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PERFORM A CABLE (COPPER & FIBER) TESTING WITH KPU-TELECOM INSPECTOR AND A 100% PASSED ON CABLE TESTING SHALL BE SUBMITTED TO KPU-TELECOM FOR ACCEPTANCE & APPROVAL OF THE PROJECT INCLUDING REDLINE AS-BUILT PLANS SIGNED BY THE KPU-TELECOM INSPECTOR, CONTRACTOR MANAGER AND DOT PROJECT ENGINEER/REPRESENTATIVE.
24. WHERE NEW CABLE LENGTHS ARE CALLED OUT, THIS IS A PRELIMINARY LENGTH - ADD 10% SPARE LENGTH FOR ESTIMATING PURPOSES. PROVIDE ACTUAL CABLE LENGTH AS REQUIRED FOR CONSTRUCTION.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EX. 6-PAIR COPPER SERVICE DROPS FROM THE FOLLOWING ADDRESS PER TERMINAL NO.:
   a. **TWTR-1626 ON POLE 1334-B4-1:**
      1) 1628 WATER STREET
      2) 1626 WATER STREET
      3) 1627 WATER STREET
      4) 1622 WATER STREET APT. MID.
   b. **TWTR-1610 ON POLE 1334-A4-2:**
      1) 1617 WATER STREET
      2) 1611 WATER STREET
      3) 1610 WATER STREET
      4) 1608 WATER STREET APT. UPR
   c. **TWTR-1600 ON POLE 1334-A4-1:**
      1) 1600 WATER STREET
      2) 1528 WATER STREET
   d. **TWTR-1508 ON POLE 1334-A5-5:**
      1) 1508 WATER STREET APT. UPR 2
      2) 200 WILEY STREET
   e. **TWTR-1462 ON POLE 1334-A5-4:**
      1) 1462 WATER STREET APT. UPR
      2) 1454 WATER STREET
   f. **TWTR-1446 ON POLE 1342-B4-5:**
      1) 1442 WATER STREET
   g. **TWTR-1418 ON POLE 1342-B4-4:**
      1) 1426 WATER STREET
      2) 1418 WATER STREET
   h. **TWTR-1400 ON POLE 1342-B4-3 (WHICH IS TO BE REMOVED):**
      1) 1412 WATER STREET
      2) 1400 WATER STREET
      3) 1320 WATER STREET
      4) 1321 WATER STREET
26. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PLACEMENT OF FIBER DROPS FROM NEW TERMINALS TO ALL HOUSES INDICATED ON TABLE V2. THIS WORKS INCLUDE THE INSTALLATION OF ONT (OPTICAL NETWORK TERMINAL) PER ADDRESS TO TERMINATE THE FIBER DROP.
27. FROM ONT, KPU TELECOM WILL BE RESPONSIBLE TO MIGRATE THE SERVICES TO HOUSE NUMBERS SHOWN ON TABLE V2.
28. FOR INFORMATION ONLY, DOT & KPU TELECOM WILL ADDRESS THE CONNECTIVITY BETWEEN MH-17 & MH-18 IN THE NEXT PHASE OF THE PROJECT (WATER SHEET BRIDGE).
29. SEE NOTE IN NOMENCLATURE FOR THE WORD "PROP." OR "PROPOSED".

NOMENCLATURE

NOTE: ALL STATEMENTS WITH THE WORD "PROP." OR "PROPOSED" IN THIS ENG'G. PLAN MEAN NEW AND NEED TO BE INSTALLED.

PROP. POLE TERM. FWTR-1626 — 2421.1 | 6P | 41-44 +2D'd

├── , TERMINAL SYMBOL; BOLD LINE MEANS PROPOSED.

2421.1, A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 1 MEANS FIBER SYSTEM.

PROP. POLE TERM., A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE INSTALLED.

FWTR-1626, ASSIGNED TERMINAL NUMBER, THE VERY FIRST LETTER "F" MEANS FIBER.

6P, NUMBER OF TERMINAL FIBER PORT

41-44+2D'd, FIBER COUNTS 41 TO 44 TO BE SPLICED INTO THE TERMINAL & 2 PORTS WOULD NOT BE USED.

PROP. POLE TERM. TWTR-1320 — 2421.2 | 25 | 17D'd+ 393-400 —(P)—

2421.2, A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 2 MEANS COPPER SYSTEM.

PROP. POLE TERM., A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE USED.

TWTR-1320, PROPOSED ASSIGNED TERMINAL NUMBER, THE VERY FIRST LETTER "T" MEANS COPPER.

25, A 25-PAIR COPPER TERMINAL

17D'd+393-400, 17 PAIRS DEAD MEANS WILL NOT BE USED & COPPER PAIRS 393 TO 400 TO BE SPLICED INTO THE TERMINAL.

(P)—, SYMBOL FOR CABLE PLUG STUB, EP-10A1.

(2), SPLICING ACTIVITY NUMBER

[FWTR-1626 | 4 | 53-56] **TO BE REMOVED**, EX. TERMINAL TO BE REMOVED OR TAKEN DOWN.

[2422.2 AE1800-26 (16M) C03,1-1800] **TO BE REMOVED**

2422.2, A 2422 NUMBER IS AN FCC CODE THAT MEANS U.G. FACILITIES & DOT (.) 1 MEANS FIBER CABLE; .2 MEANS COPPER.

AE1800-26, EXISTING CABLE SIZE & GAUGE TO BE REMOVED.

(16M), MESSENGER WIRE SIZE WHERE CABLE IS PRESENTLY LASHED.

C03,1-1800, C03 IS CABLE NUMBER & 1-1800 WORKING PAIRS.

[ ], BOLD BRACKETS MEANS FOR REMOVAL.

MB AEF25-24
[K37,251-268+D'd]
X019,20D'd+171-175

MB AEF25-24, TYPE OF EXISTING CABLE, SIZE & GAGE TO BE RE-SPLICED TO NEW CABLE NUMBER OR PAIRS.

[K37,251-268+D'd], EXISTING CABLE NUMBER & PAIRS TO BE CHANGED.

X019,20D'd+171-175, PROP. CABLE NUMBER & PAIRS TO BE USED.

TABLE V2 - COVERED ADDRESSES PER NEW & EXISTING FIBER TERMINAL

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1626 (6-PORT) F02, 41-46	POLE 1334-B4-1 ALONG WATER STREET	1628 WATER STREET
		1626 WATER STREET
		1627 WATER STREET
		1622-A WATER STREET
		1622-B WATER STREET
		1622-C WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1610 (6-PORT) F02, 35-40+2D'd	POLE 1334-A4-2 ALONG WATER STREET	1617 WATER STREET
		1611 WATER STREET
		1610 WATER STREET
		1608-A WATER STREET
		1608-B WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1600 (6-PORT) F02, 45-48+4D'd	POLE 1334-A4-1 ALONG WATER STREET	1600 WATER STREET
		1528 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1508 (6-PORT) F02, 33-36+2D'd	POLE 1334-A5-5 ALONG WATER STREET	1508-A WATER STREET
		1508-B WATER STREET
		200 WILEY STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1462 (6-PORT) F02, 25-28+2D'd	POLE 1334-A5-4 ALONG WATER STREET	1462-A WATER STREET
		1462-B WATER STREET
		1454 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1446 (6-PORT) F02, 29-32+2D'd	POLE 1342-B4-5 ALONG WATER STREET	1446-A WATER STREET
		1446-B WATER STREET
		1442 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1418 (6-PORT) F02, 21-24+2D'd	POLE 1342-B4-4 ALONG WATER STREET	1426 WATER STREET
		1418 WATER STREET
		1418.5 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1400 (6-PORT) F02, 17-20+2D'd	NEW POLE 45' ALONG WATER STREET	1412 WATER STREET
		1320 WATER STREET
		1321 WATER STREET
		NEW VDSL CABINET

EXISTING TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FPAR-0302 (4-PORT) FWAT, 1D'd+146 +155-156	POLE 1342-A4-1 ALONG PARNELL STREET	210 PARNELL STREET
		1400 WATER STREET

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TAB: V2 Thursday, August 28, 2014 12:37:26 PM
KCN12_000

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- L=21' PROP. GUY & ANCHOR with PROP. LEAD
- (120') EXISTING FIBER SLACK LOOP
- (120') PROP. FIBER SLACK LOOP
- F120-002 305+48 | 4P | 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+48 | 25 | 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

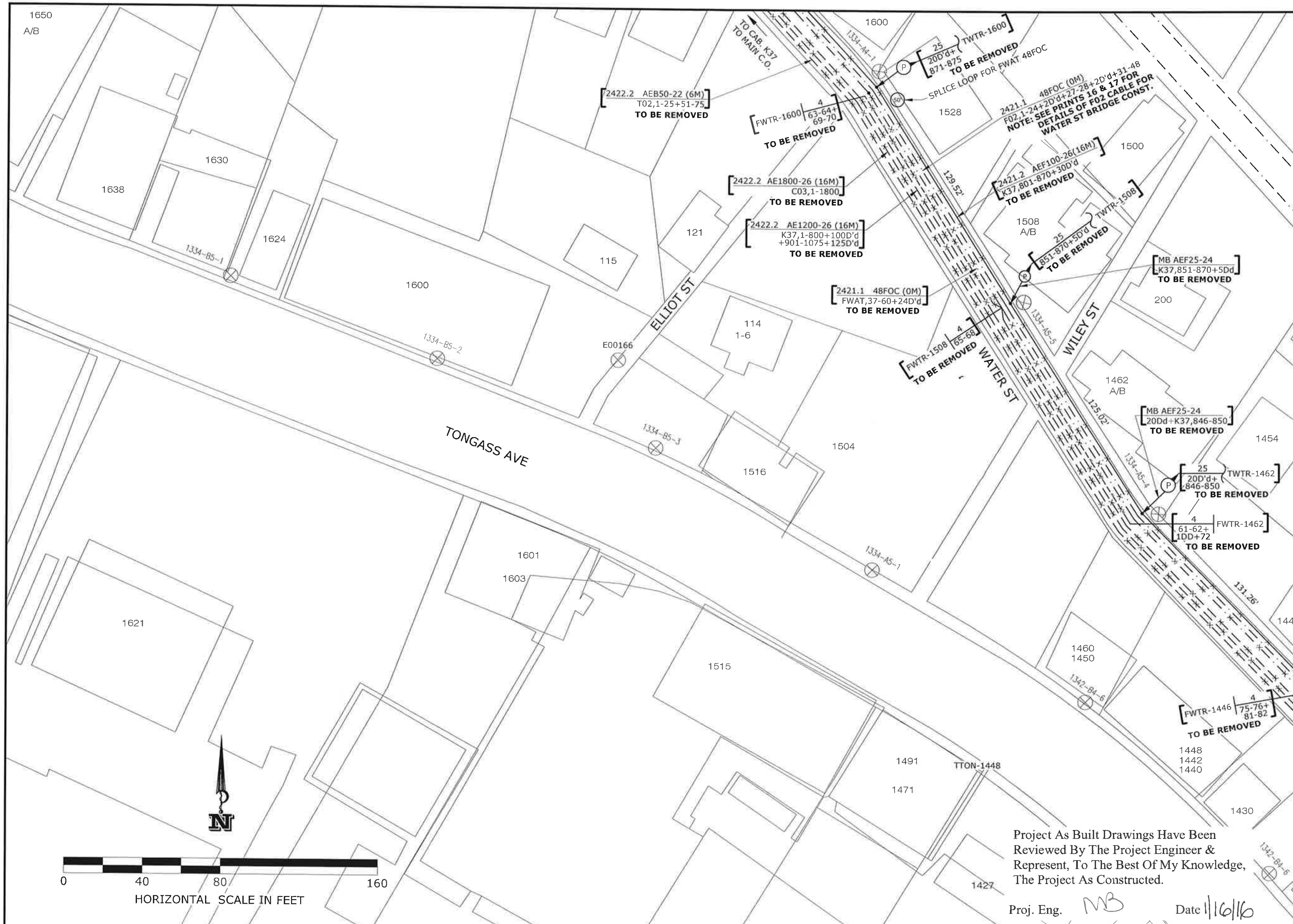
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V2	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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KCN12_000

TAB: V4 Thursday, August 28, 2014 12:49:21 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- (120') EXISTING FIBER SLACK LOOP
- (120') PROP. FIBER SLACK LOOP
- F120-002 305+48 | 4F 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+48 | 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V4	78

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

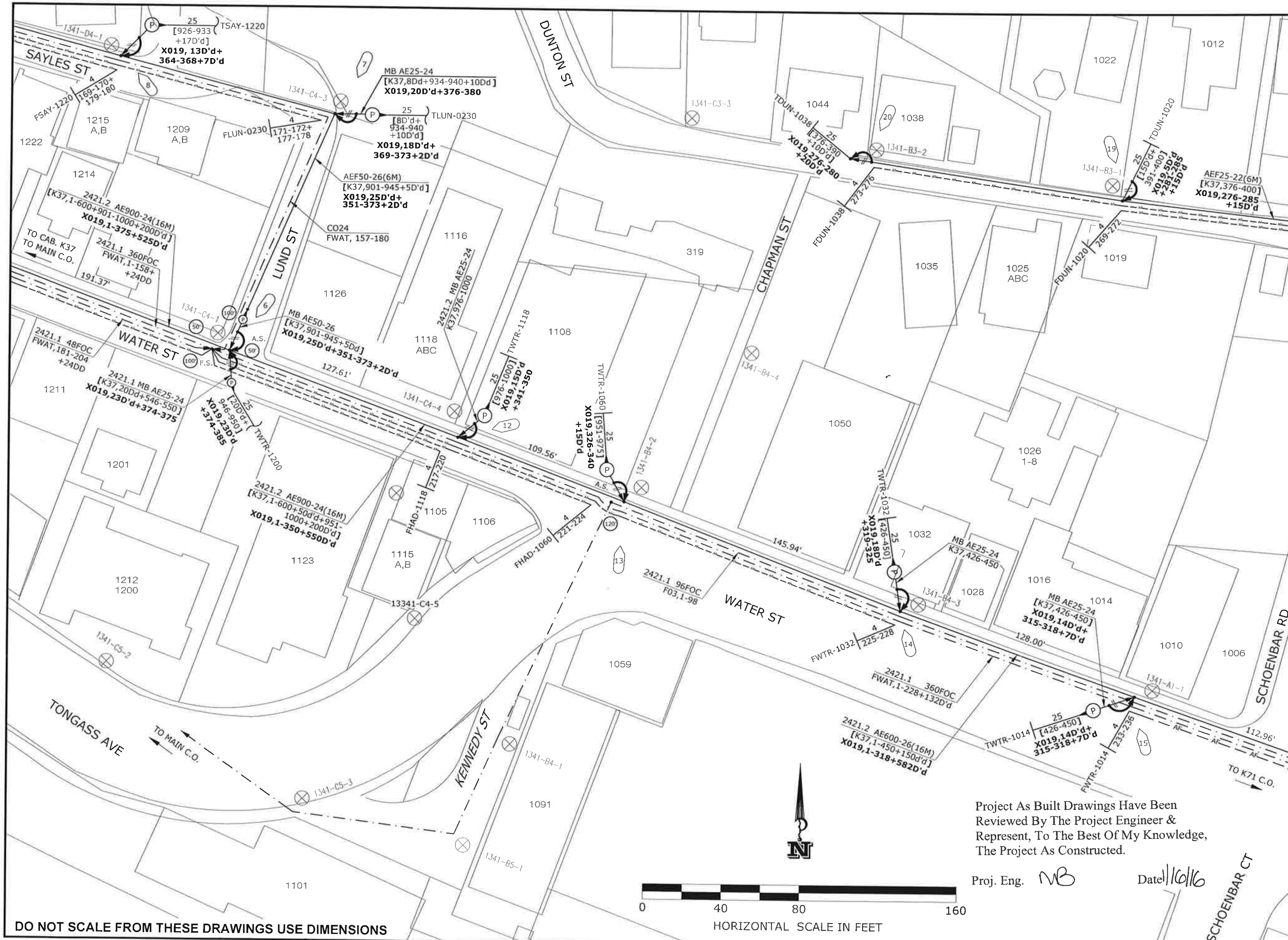
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V6	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
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- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

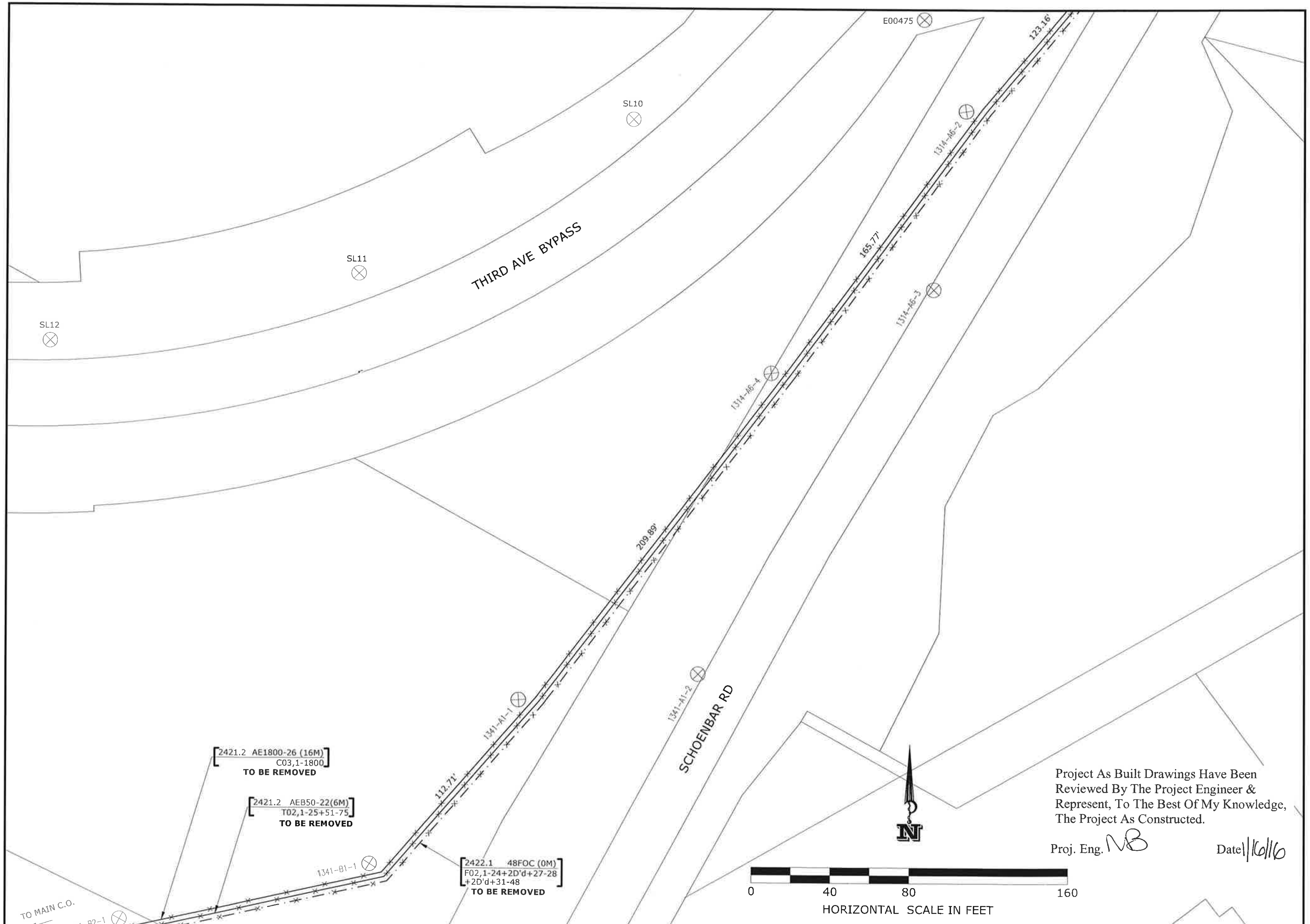
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V8	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

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TAB: V10 Thursday, August 28, 2014 12:39:26 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
L=21' PROP. GUY & ANCHOR with PROP. LEAD
120' EXISTING FIBER SLACK LOOP
120' PROP. FIBER SLACK LOOP
F120-002 305+48 4P 49-52 EX. AER. FIBER TERMINAL
T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

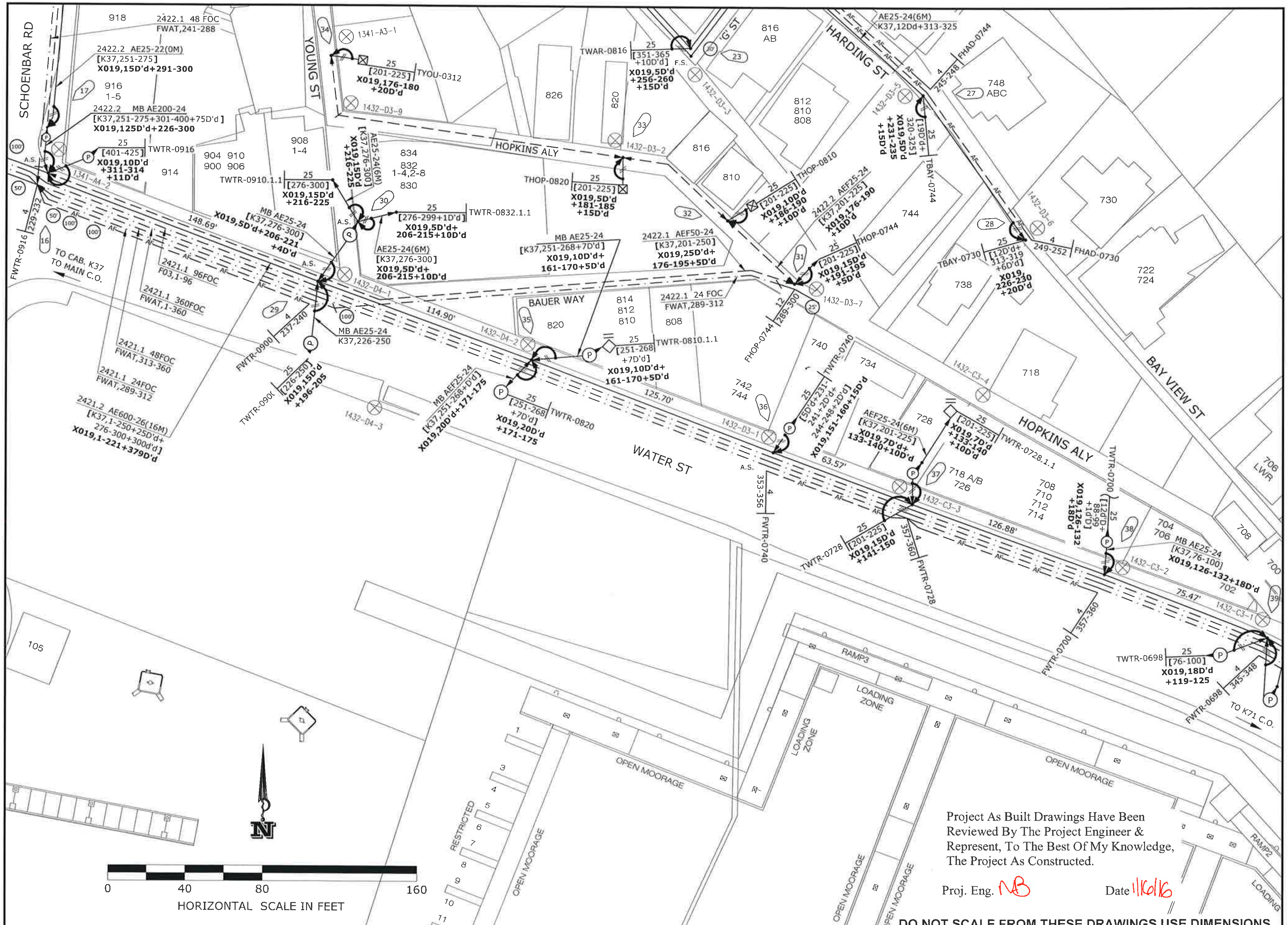
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V10	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 11/6/16

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TAB: V12 Thursday, August 28, 2014 12:39:46 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
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- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
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- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7835 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

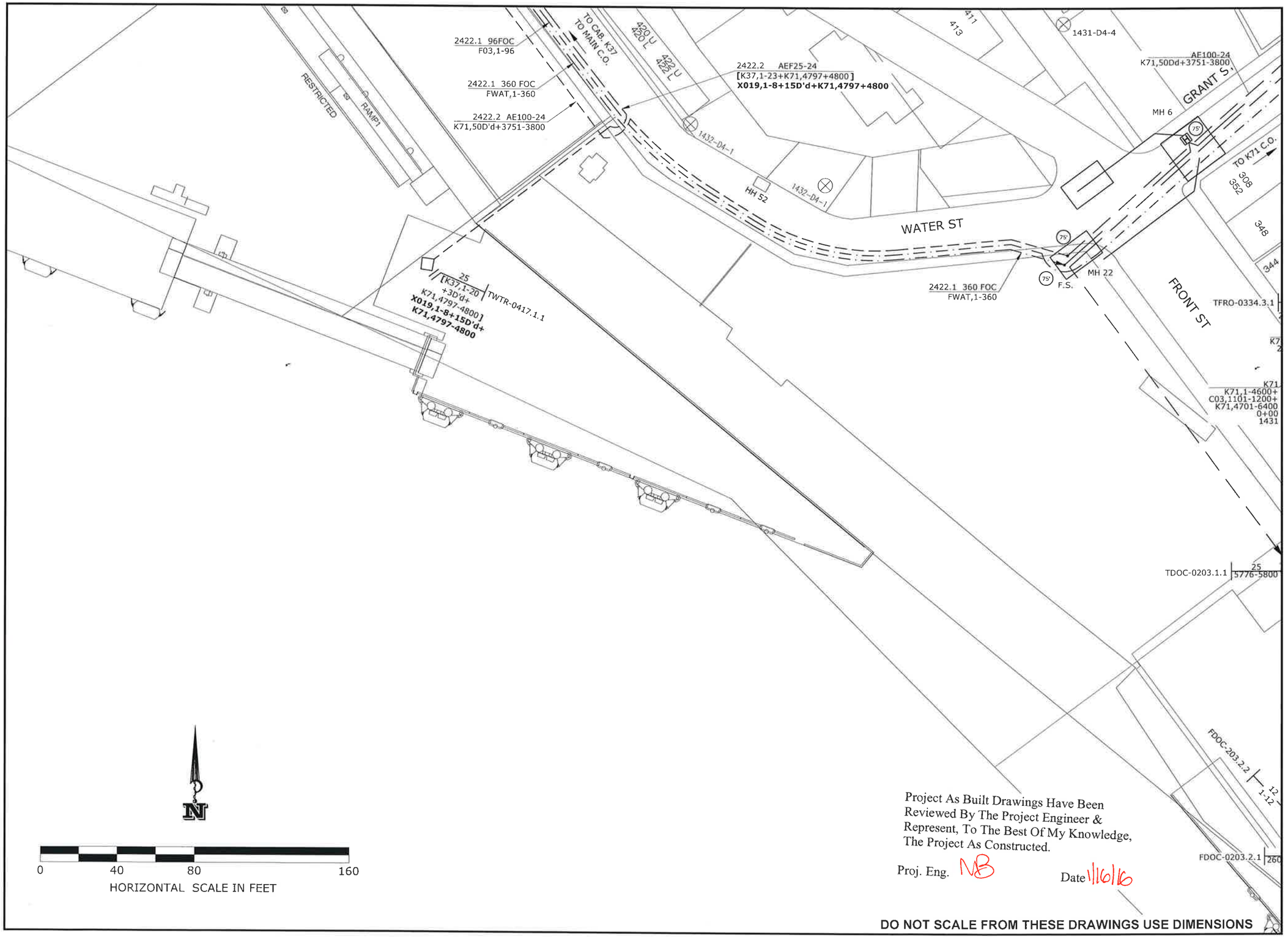
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V12	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: V14 Tuesday, January 28, 2014 12:06:06 PM

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
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- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
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- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- EX. AER. FIBER TERMINAL (F120-002 305+48 4P 49-52)
- EX. AER. COPPER TERMINAL (T120-002 305+48 25 1-25)
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

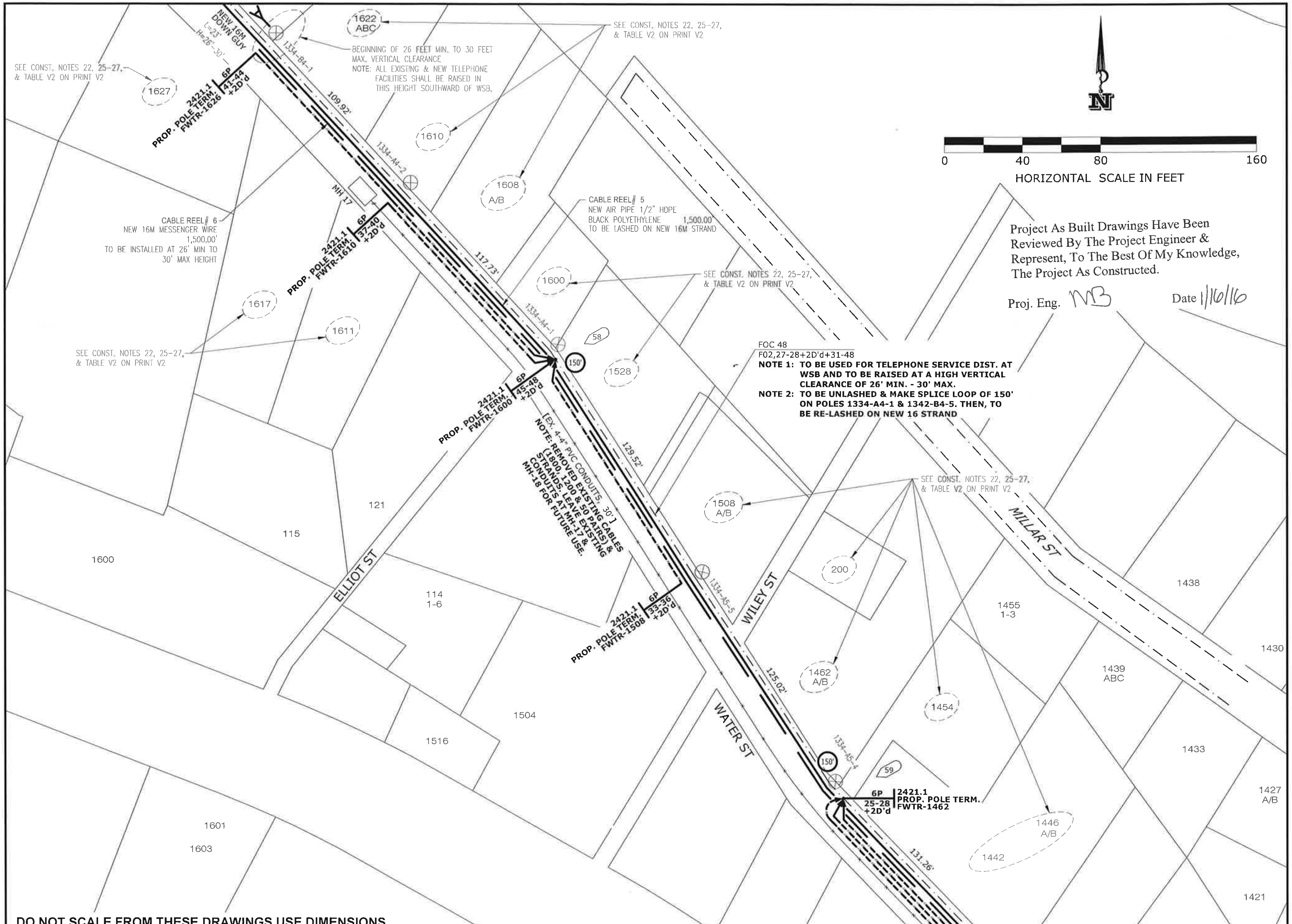
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V14	78



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
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- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- (120') EXISTING FIBER SLACK LOOP
- (120') PROP. FIBER SLACK LOOP
- F120-002 305+48 | 4P 49-52 — EX. AER. FIBER TERMINAL
- T120-002 305+48 | 25 1-25 — EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY:

STATE OF ALASKA — 49th — Keith Nelson — KEITH NELSON EE-7655 8-27-14 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

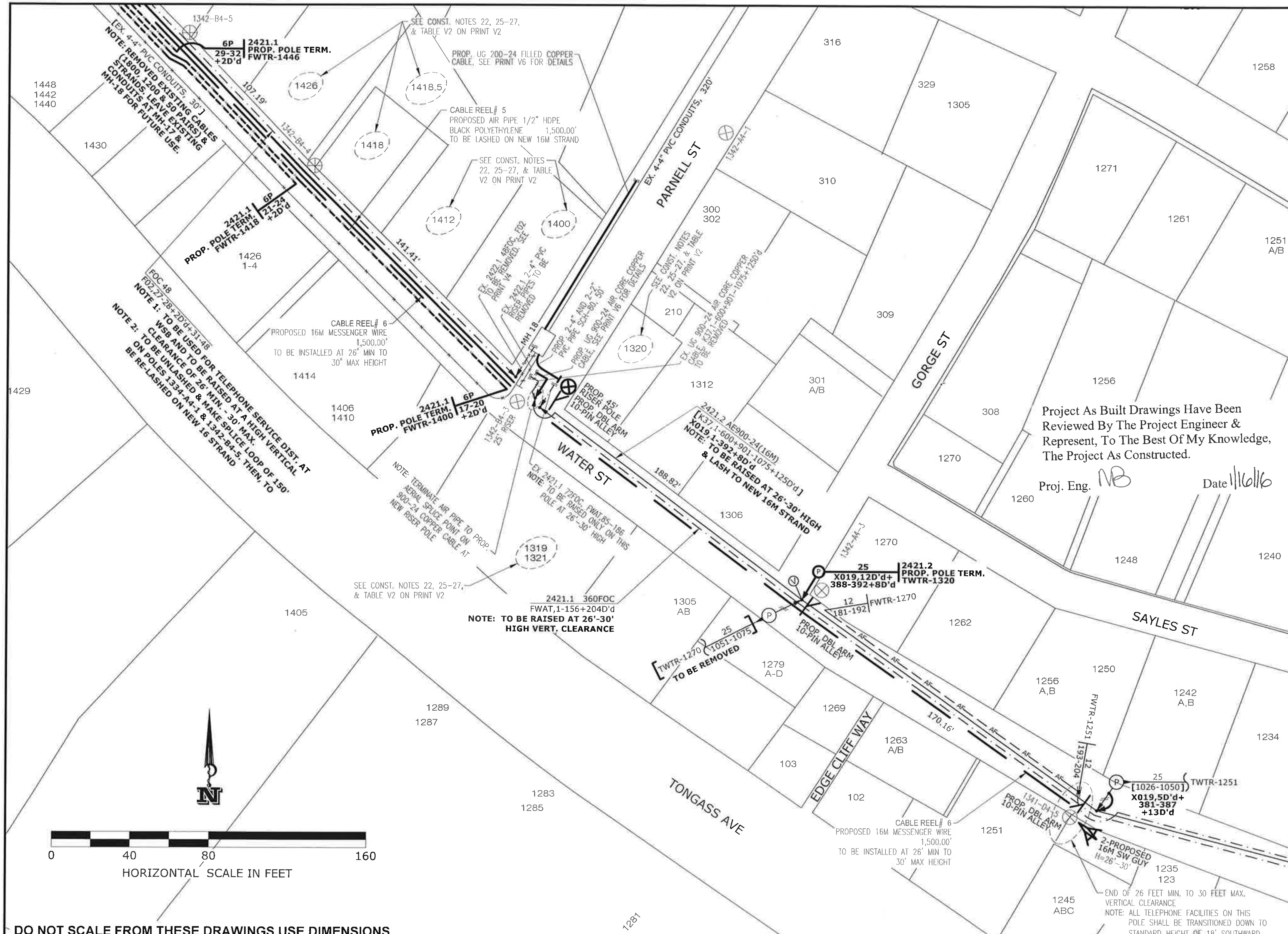
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V16	78



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT WSB PROJ

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

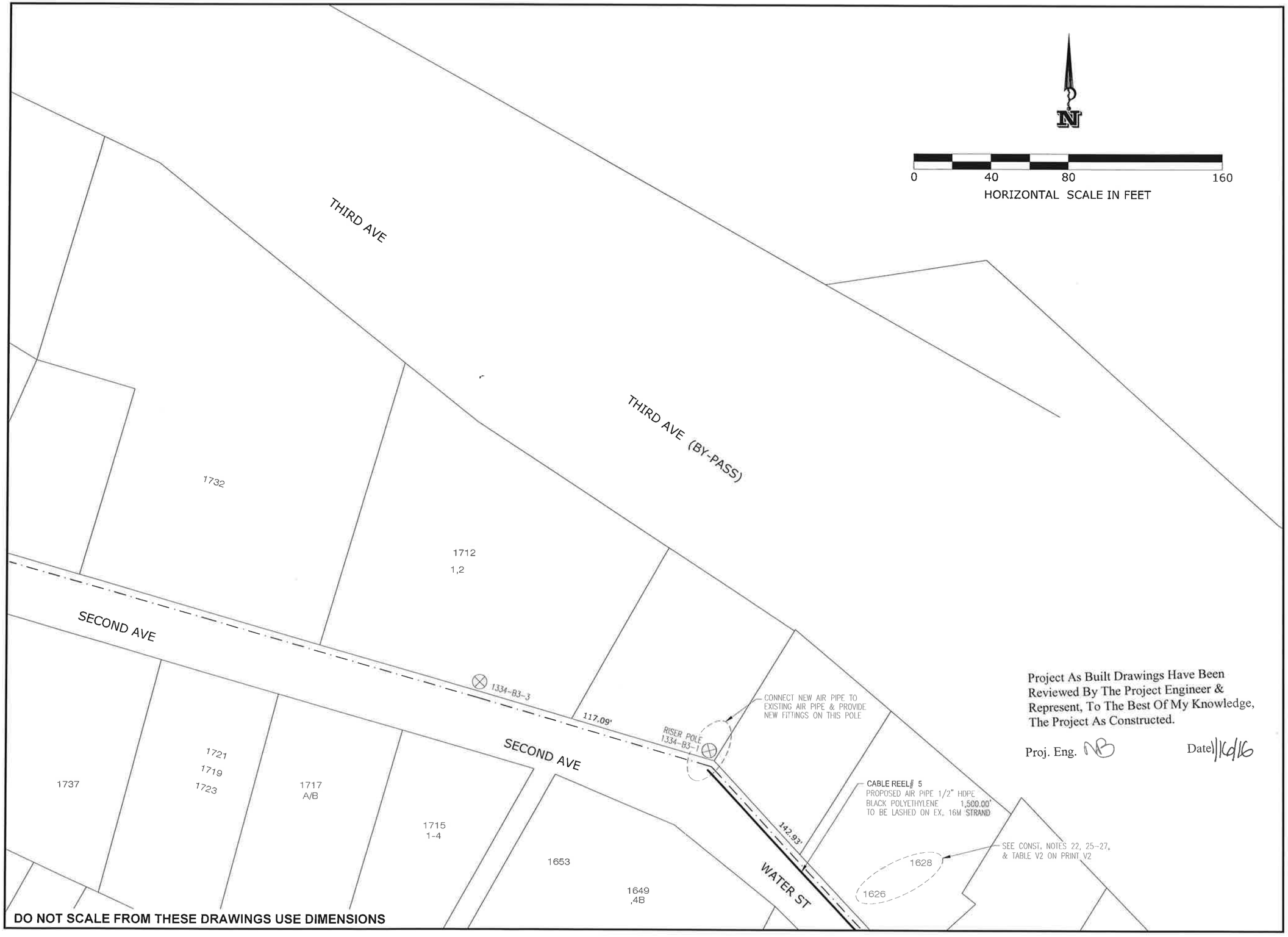
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V17	78



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TAB: V15 Thursday, January 16, 2014 12:10:15 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- EX. AER. FIBER TERMINAL (F120-002 305+48 AP 49-52)
- EX. AER. COPPER TERMINAL (T120-002 305+48 25 1-25)
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

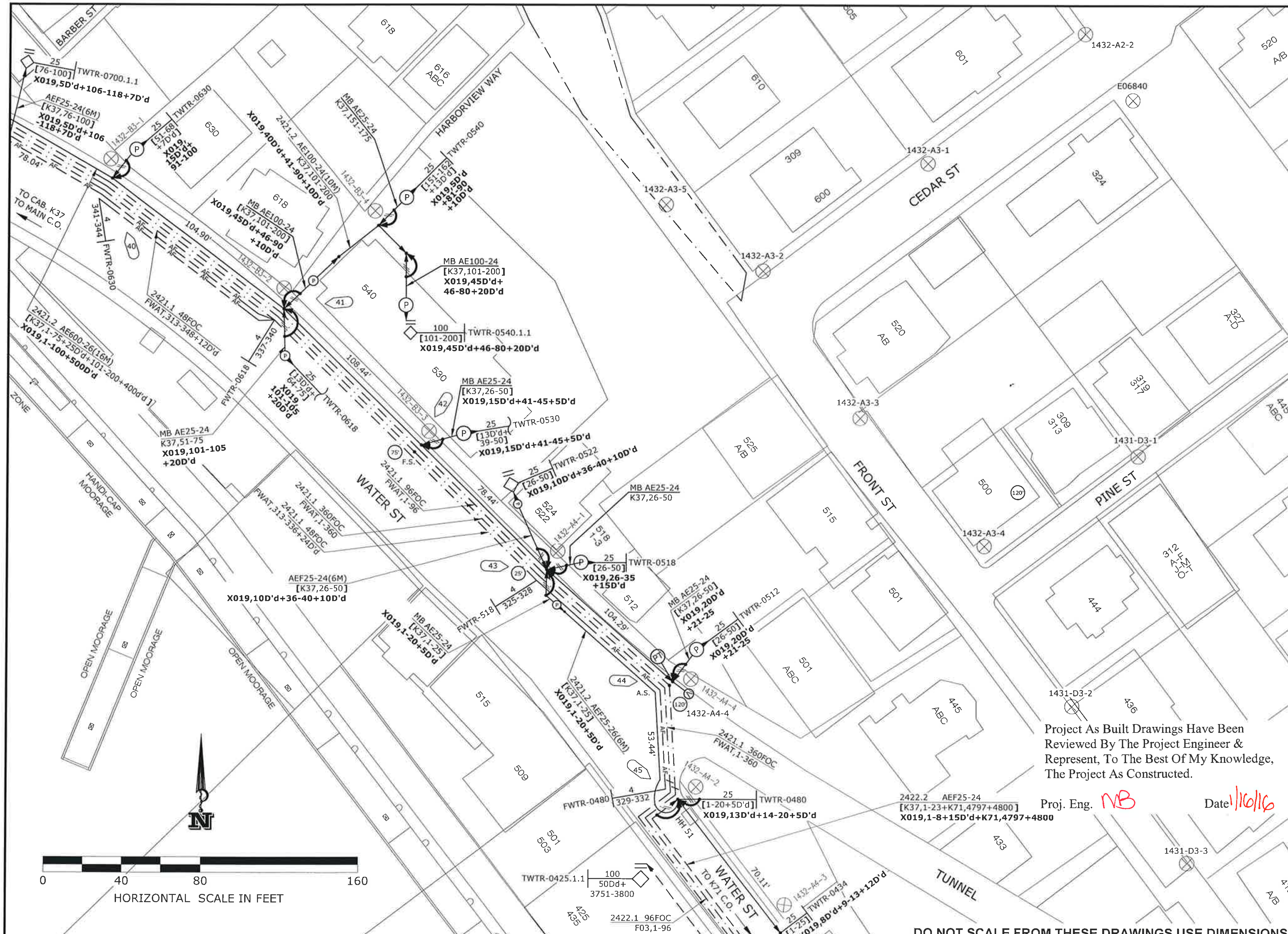
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V15	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT WSB PROJ 27AUG2014.DWG

KCN12_000

TAB: V13 Thursday, August 28, 2014 12:39:56 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP
- PROP. FIBER SLACK LOOP
- EX. AER. FIBER TERMINAL
- EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

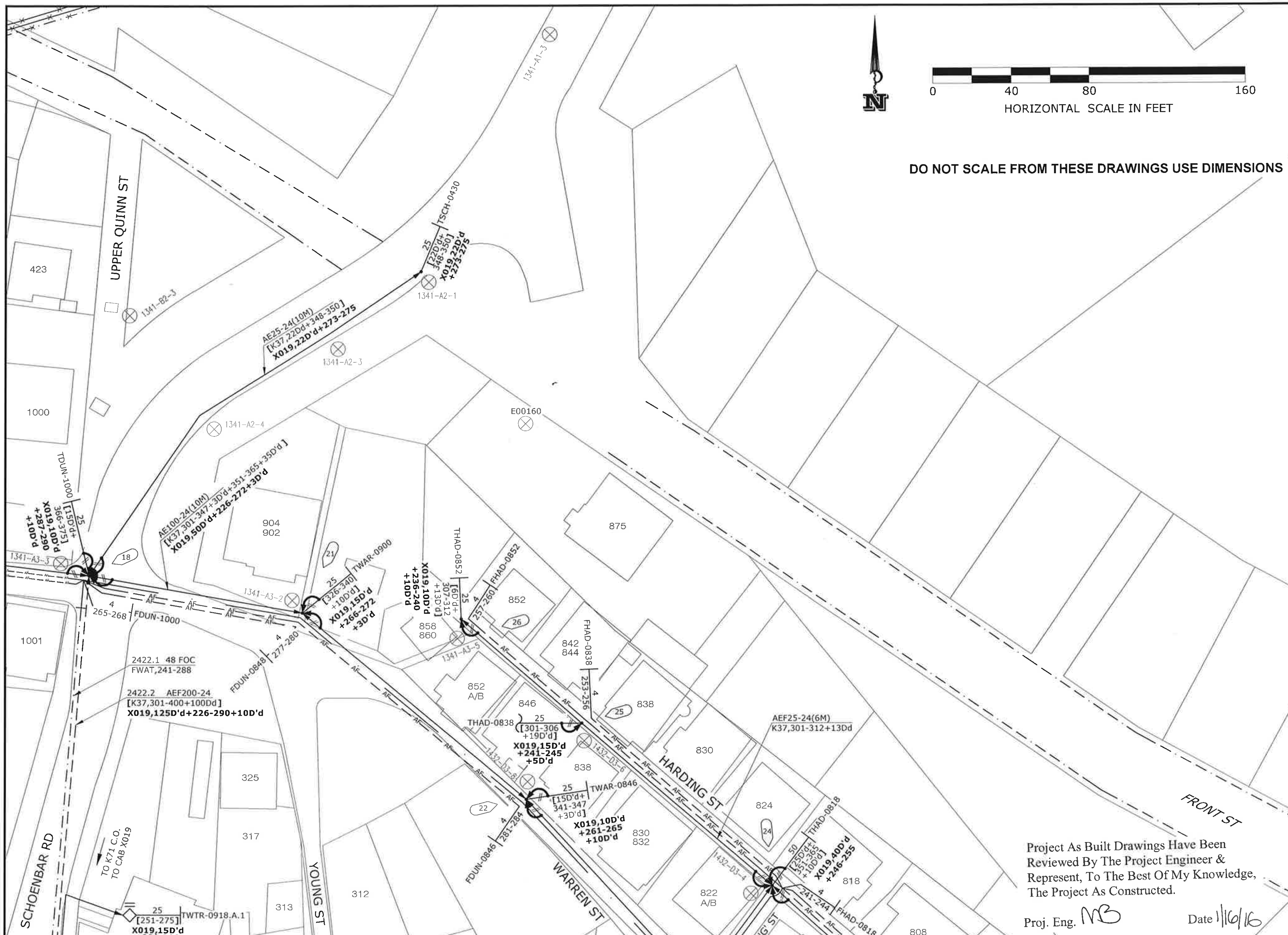
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V13	78



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION PROJECT # 69548

TELEPHONE CABLE LAYOUT

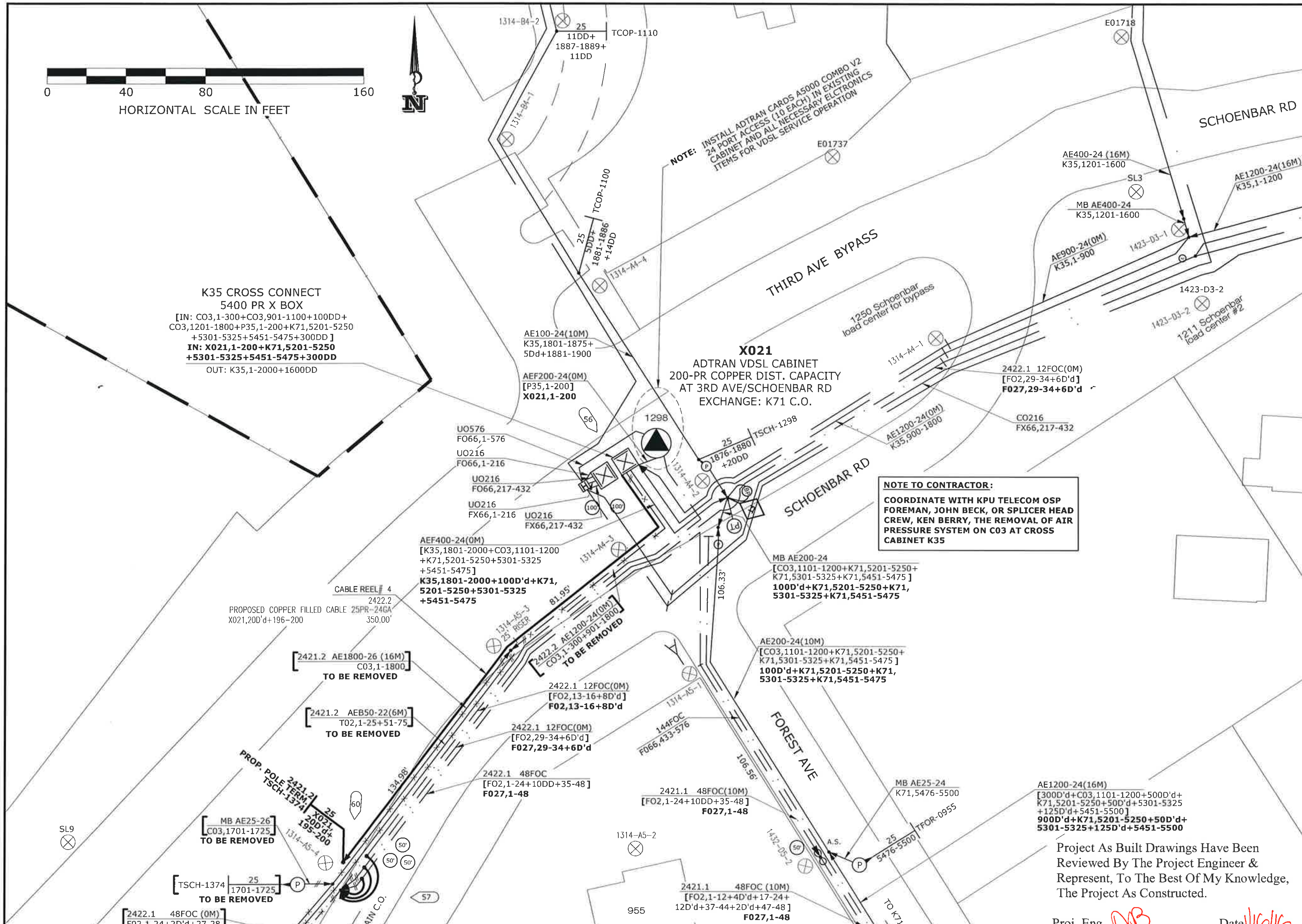
PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V11	78

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: V9 Thursday, August 28, 2014 12:49:47 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

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PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

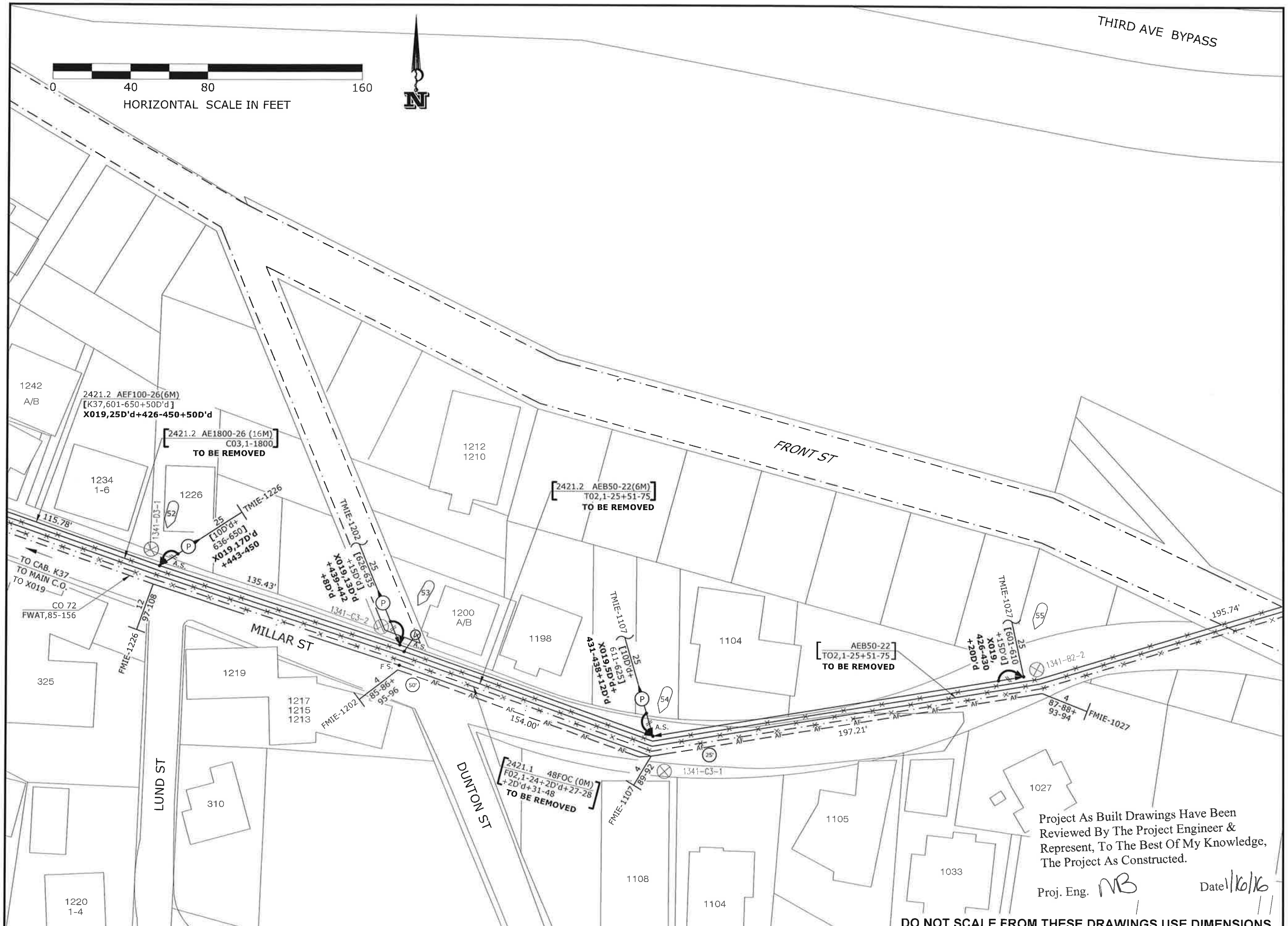
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V9	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/6/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
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- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- (120') EXISTING FIBER SLACK LOOP
- (120') PROP. FIBER SLACK LOOP
- F120-002 305+48 | 4P 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+48 | 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

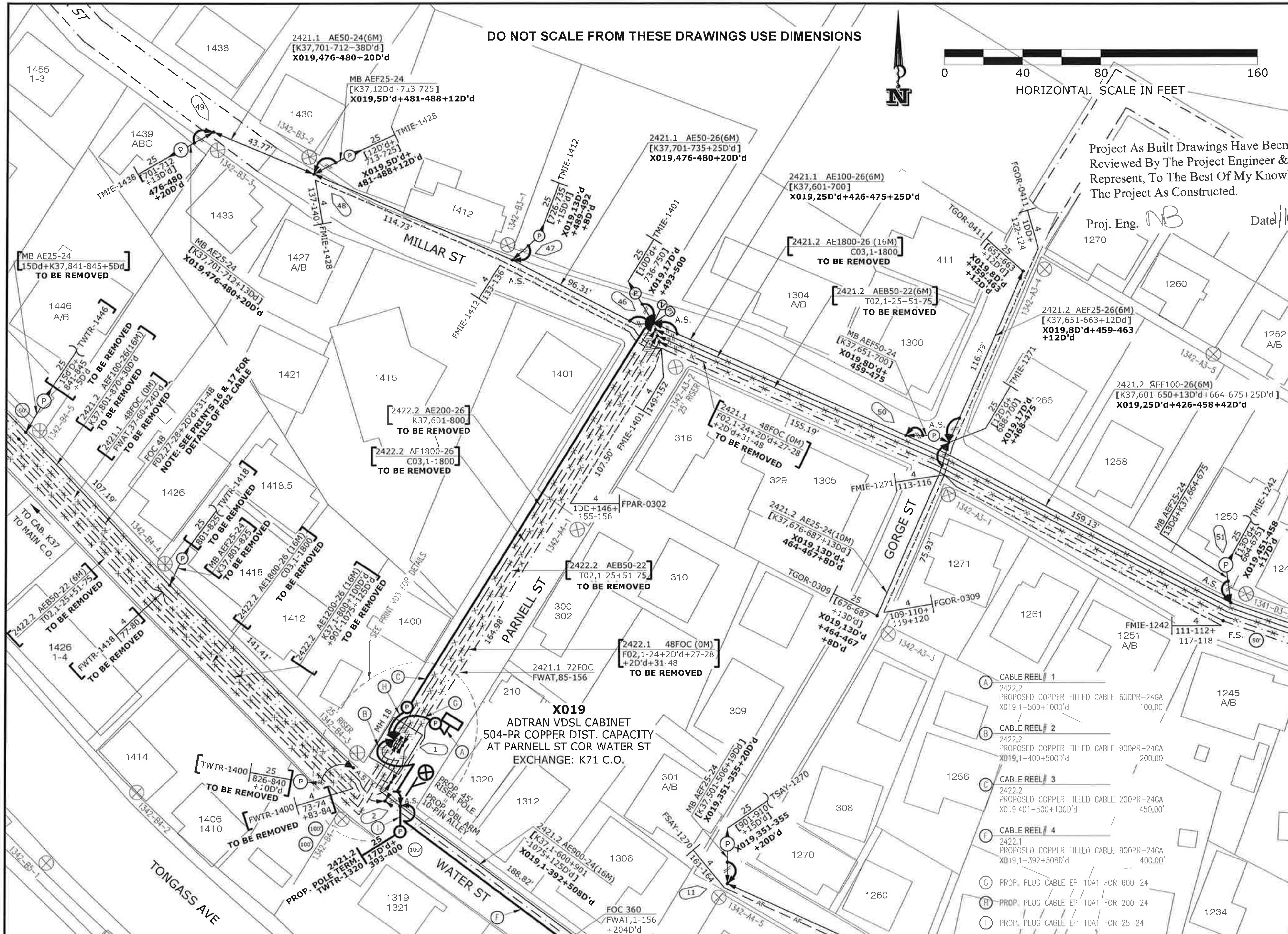
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: **BR-000S(735) ~ 69548**

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
V7	78



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS
N
0 40 80 160
HORIZONTAL SCALE IN FEET
Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.
Proj. Eng. NB
Date 1/6/16
MILLAR ST
PARNELL ST
GORGE ST
WATER ST
TONGASS AVE
TO CAB. K37 TO MAIN C.O.
2421.1 AE50-24(6M) [K37,701-712+38D'd] X019,476-480+20D'd
MB AEF25-24 [K37,12Dd+713-725] X019,5D'd+481-488+12D'd
2421.1 AE50-26(6M) [K37,701-735+25D'd] X019,476-480+20D'd
2421.1 AE100-26(6M) [K37,601-700] X019,25D'd+426-475+25D'd
2421.2 AE1800-26 (16M) C03,1-1800 TO BE REMOVED
2421.2 AEB50-22(6M) T02,1-25+51-75 TO BE REMOVED
2421.2 AEF25-26(6M) [K37,651-663+12Dd] X019,8D'd+459-463 +12D'd
2421.2 AEF100-26(6M) [K37,601-650+13D'd+664-675+25D'd] X019,25D'd+426-458+42D'd
MB AE25-24 15Dd+K37,841-845+5Dd TO BE REMOVED
2422.2 AE200-26 K37,601-800 TO BE REMOVED
2422.2 AE1800-26 C03,1-1800 TO BE REMOVED
2422.2 AEB50-22 T02,1-25+51-75 TO BE REMOVED
2422.1 48FOC (0M) F02,1-24+2D'd+27-28 +2D'd+31-48 TO BE REMOVED
2421.1 72FOC FWAT,85-156
NOTE: SEE PRINTS 16 & 17 FOR DETAILS OF F02 CABLE
X019
ADTRAN VDSL CABINET
504-PR COPPER DIST. CAPACITY
AT PARNELL ST COR WATER ST
EXCHANGE: K71 C.O.
PROP. 45' RISER POLE
PROP. DBL ARM 10-PIN ALLEY
2421.2 PROP. POLE TERM. TWTR-1320
2421.2 AE900-24(16M) [K37,1-600+901 -1075+125D'd] X019,1-392+508D'd
FOC 360 FWAT,1-156 +204D'd
CABLE REEL # 1 2422.2 PROPOSED COPPER FILLED CABLE 600PR-24GA X019,1-500+100D'd 100.00'
CABLE REEL # 2 2422.2 PROPOSED COPPER FILLED CABLE 900PR-24GA X019,1-400+500D'd 200.00'
CABLE REEL # 3 2422.2 PROPOSED COPPER FILLED CABLE 200PR-24GA X019,401-500+100D'd 450.00'
CABLE REEL # 4 2422.1 PROPOSED COPPER FILLED CABLE 900PR-24GA X019,1-392+508D'd 400.00'
(G) PROP. PLUG CABLE EP-10A1 FOR 600-24
(H) PROP. PLUG CABLE EP-10A1 FOR 200-24
(I) PROP. PLUG CABLE EP-10A1 FOR 25-24

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB PLACEMENT OF VDSL CABINETS FOR DOT\WSB PROJ 2014.DWG

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

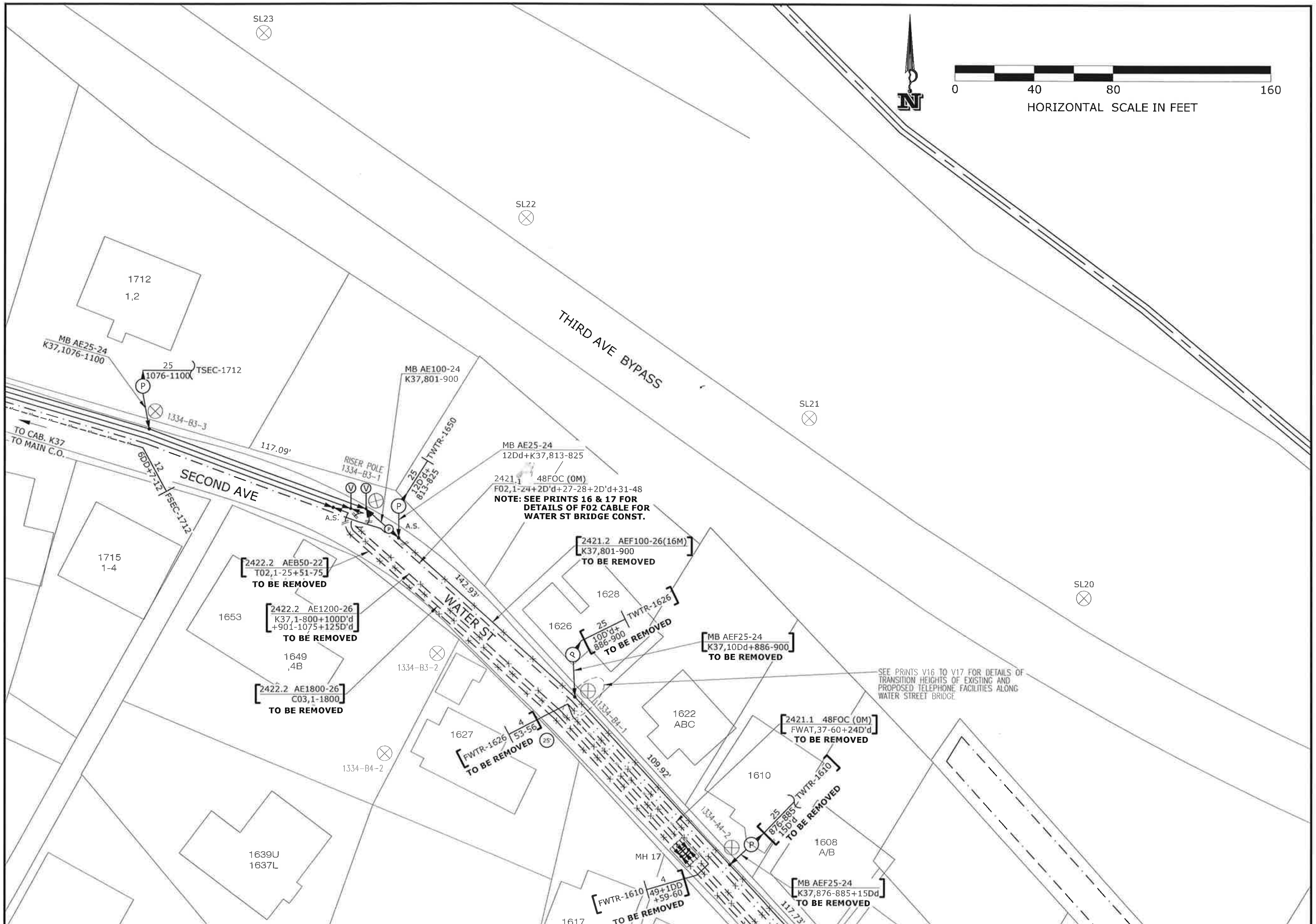
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION: BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V5	78



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- L=21' PROP. GUY & ANCHOR with PROP. LEAD
- 120' EXISTING FIBER SLACK LOOP
- 120' PROP. FIBER SLACK LOOP
- F120-002 305+40 4P 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+40 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

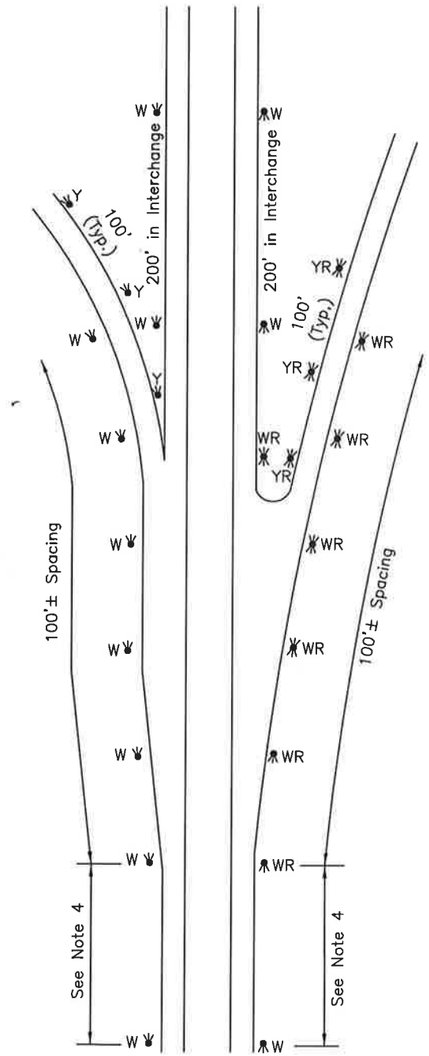
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

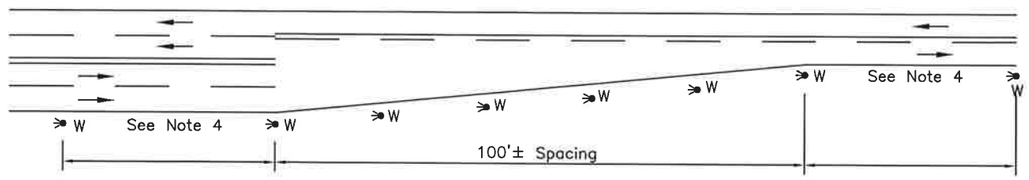
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V3	78

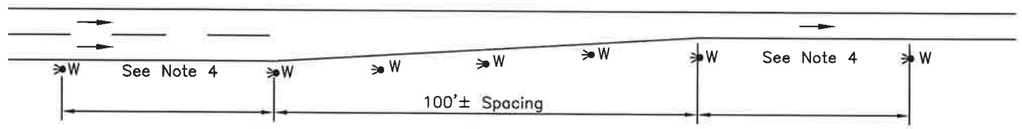
T-05.10



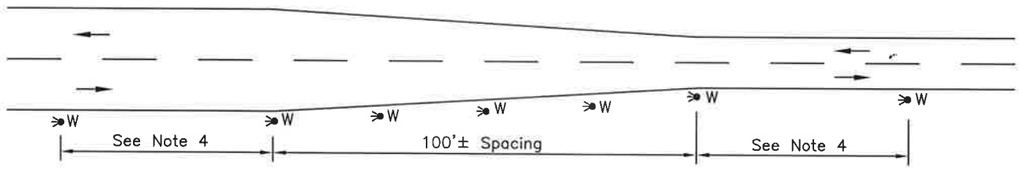
FREEWAY RAMPS



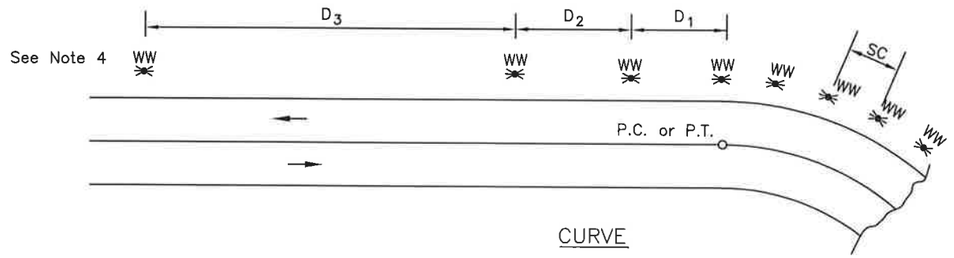
TWO WAY ROAD – LANE REDUCTION CONDITION



ONE WAY ROAD – RIGHT LANE DROP CONDITION
(FOR LEFT LANE DROP CONDITION USE TYPE Y MARKERS)



TWO WAY ROAD – NARROWING CONDITION



CURVE

SPACING ON CURVES				
RADIUS FT	SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVE		
		FIRST	SECOND	THIRD
R	SC	D_1	D_2	D_3
1,000'	90'	160'	270'	300'
900'	85'	155'	250'	300'
800'	80'	145'	240'	300'
700'	75'	135'	225'	300'
600'	70'	125'	210'	300'
500'	65'	115'	195'	300'
400'	55'	100'	165'	300'
300'	50'	90'	150'	300'
250'	40'	70'	120'	240'
180'	35'	65'	105'	210'
115'	25'	55'	90'	180'
50'	20'	35'	60'	120'

GUIDE MARKER REFLECTORS		
TYPE	FRONT COLOR	BACK COLOR
WW	WHITE	WHITE
W	WHITE	--
Y	YELLOW	--
YY	YELLOW	YELLOW
WR	WHITE	RED
YR	YELLOW	RED

GENERAL NOTES

1. Maximum spacing on tapers, speed change lanes, pavement transitions, and ramps should be 100'±.
2. On roads with continuous delineation, adjust existing guide marker locations to tie into these configurations.
3. Marker spacing in table has been rounded for ease of calculation and field layout.
4. Spacing on tangents should be approximately 500', 530' maximum. See table for spacing on curves.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. [signature] Date 1/10/16

REVISIONS		
Date	Description	By

Sheet 1 of 1

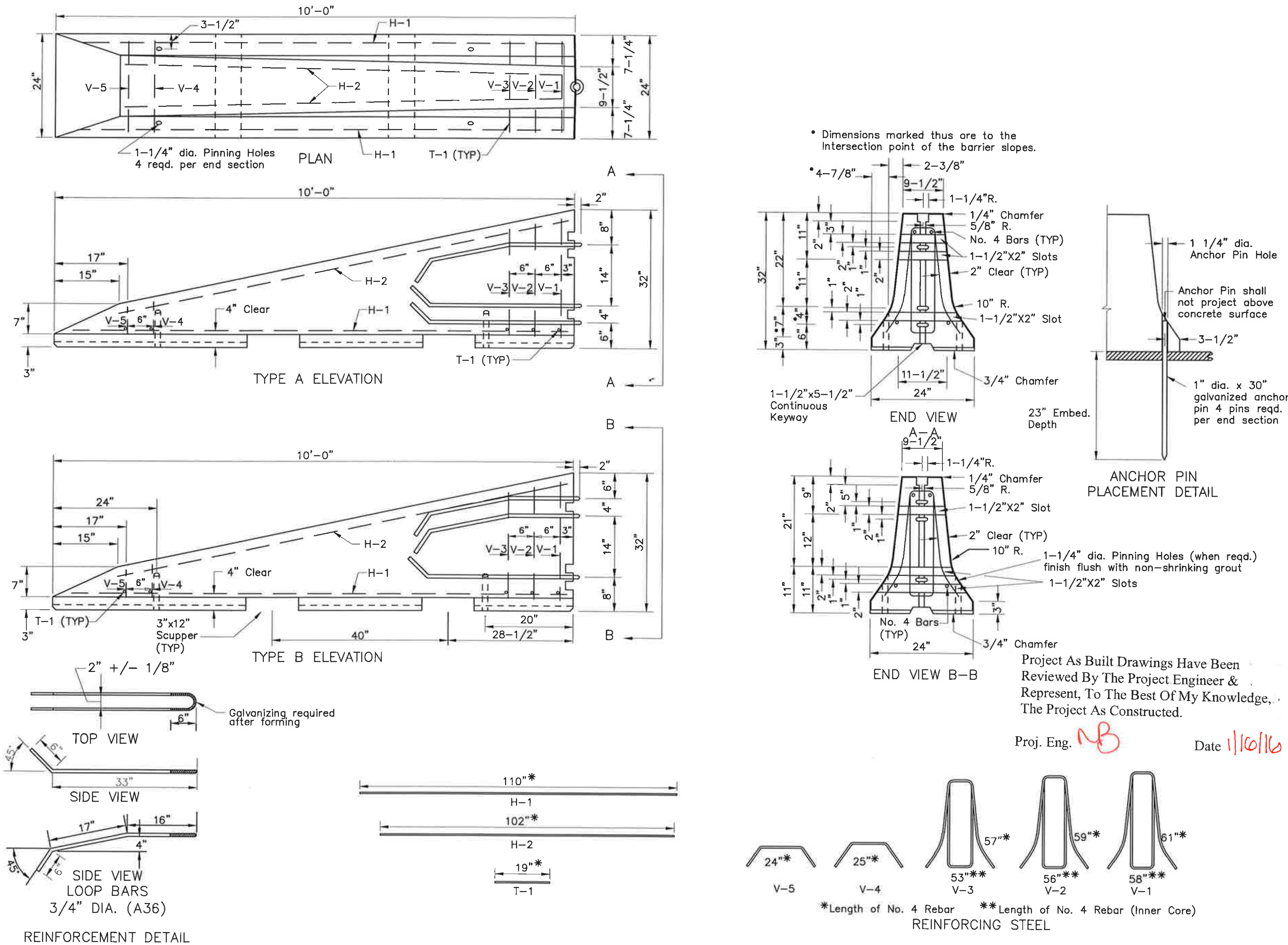
State of Alaska
Department of Transportation
& Public Facilities

GUIDE MARKER PLACEMENT

APPROVED
Date 2/28/03

T-05.10

G-46.11



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

GENERAL NOTES

1. Use tapered end sections only where:
   a. Barriers terminate outside the clear zone, or
   b. The regulatory speed limit is 25 MPH or below, or 30 MPH if the Engineer determines NCHRP 350 or MASH compliant end treatments are unfeasible.
2. Use air entrained concrete with minimum compressive strength of 3,000 p.s.i.
3. Provide a minimum of two inches clear cover for reinforcing steel bars except as shown otherwise.
4. Galvanize all exposed hardware in accordance with AASHTO M 232.
5. Provide reinforcing steel bars conforming to AASHTO M 31-86, grade 60.
6. Provide anchor pins conforming to AASHTO M 183 steel.
7. Provide connecting pins conforming to AASHTO M 164-86.
8. Provide four anchor pins per unit.

REVISIONS

Date	Description	By
4/28/10	Correct dimensioning	KJS

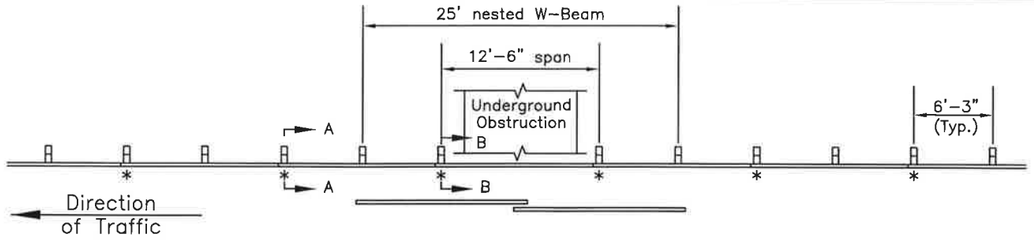
Sheet 2 of 2

State of Alaska
Department of Transportation & Public Facilities

PRECAST CONCRETE "F" SHAPE BARRIER TAPERED END SECTION

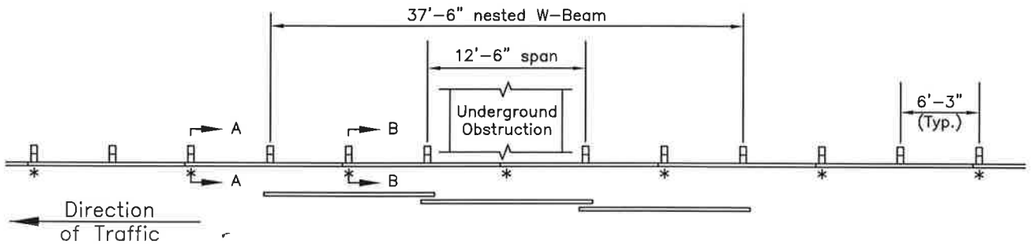
APPROVED Date 5/31/12

G-28.00



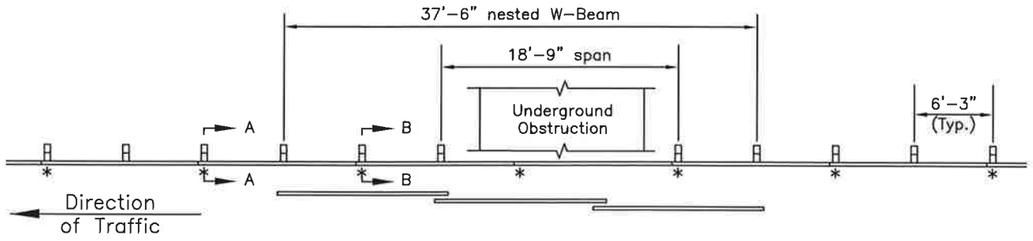
CASE A – ONE POST OMITTED (NESTED RAIL SPLICE AT OMITTED POST)

For obstruction widths up to 10'–6"



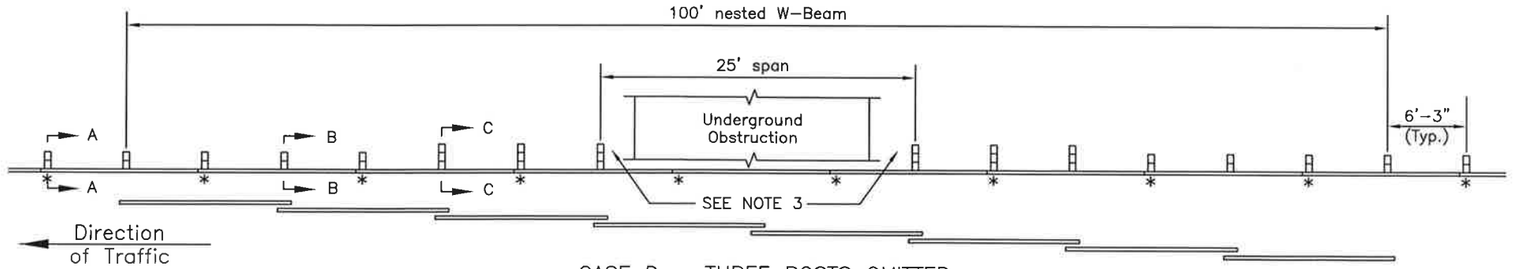
CASE B – ONE POST OMITTED (NESTED RAIL SPANS OMITTED POST)

For obstruction widths up to 10'–6"



CASE C – TWO POSTS OMITTED

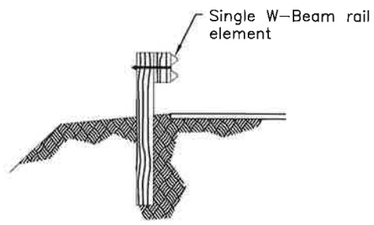
For obstruction widths from 10'–6" to 16'–9"



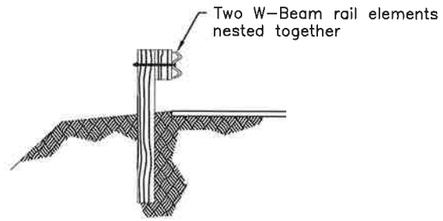
CASE D – THREE POSTS OMITTED

For obstruction widths from 16'–9" to 20'–6"

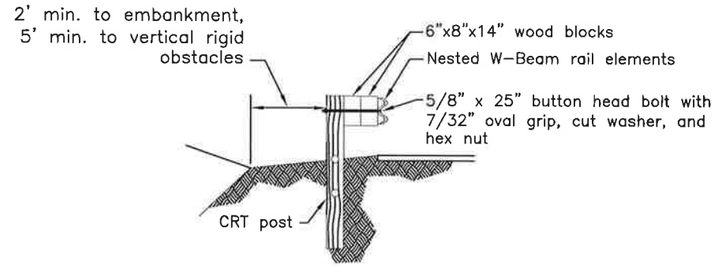
* Designates Splice Location



SECTION A–A



SECTION B–B



SECTION C–C

CROSS SECTIONS

GENERAL NOTES

1. See Standard Drawings G–00, G–04, G–10 for additional details, and G–25 Sheet 1 of 3 for CRT post details.
2. For one–way traffic locations Case D may be modified so that only the posts trailing the span are CRT posts with double blocks.
3. In Case D only, provide 2' minimum clearance between posts and underground obstruction.
4. Standard steel posts with standard wood blocks (or NCHRP 350 compliant synthetic blocks) may be used for all posts except those indicated to be CRT posts.
5. Install nested rail element with leading edge lapped behind primary rail element.
6. Cases A and B were tested under NCHRP 230 guidelines but the FHWA considers them equivalent to an NCHRP 350 Test Level 2 design. Case C has not been tested (as of March, 03) but the FHWA considers it equivalent to an NCHRP 350 Test Level 3 design. Case D is NCHRP 350 Test Level 3 tested and approved.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

REVISIONS		
Date	Description	By

Sheet 1 of 1

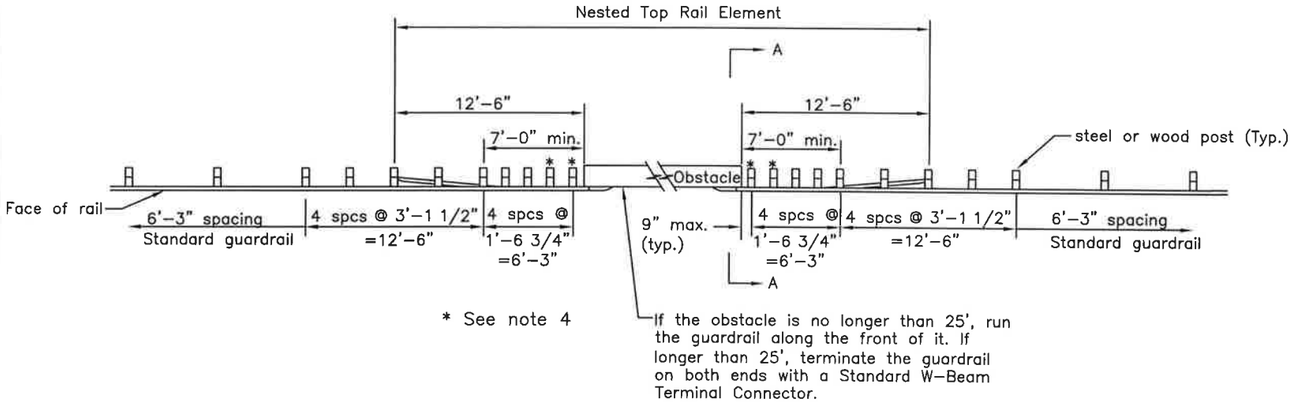
State of Alaska
Department of Transportation & Public Facilities

LONG SPAN
W BEAM GUARDRAIL

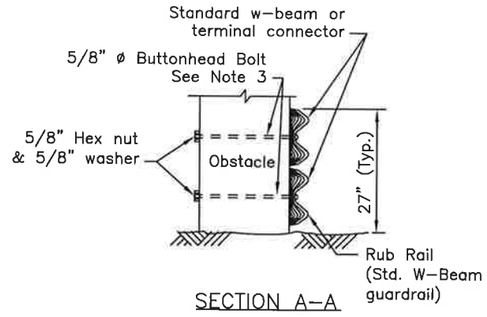
APPROVED

Date 2/28/03

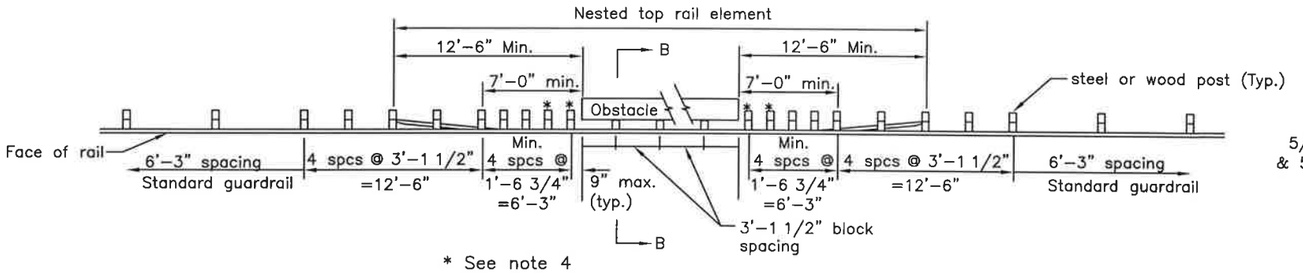
G–28.00



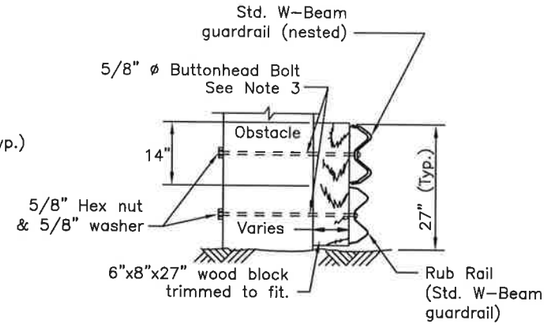
CASE A – OBSTACLE AT BACK OF W–BEAM



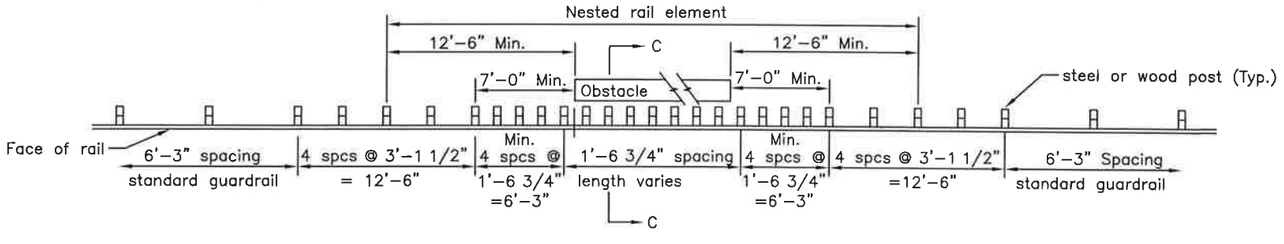
SECTION A–A



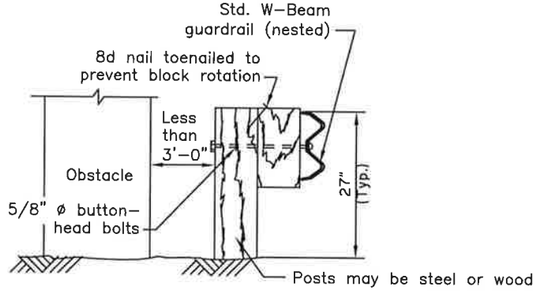
CASE B – OBSTACLE AT BACK OF BLOCK–OUT



SECTION B–B



CASE C – LESS THAN THREE FEET OF CLEARANCE TO BACK OF POST



Use Std. W–Beam rail, post, wood block and hardware (See G–04S and G–04W).

SECTION C–C

NOT TO SCALE

GENERAL NOTES:

1. Hardware details not shown here shall conform to drawings G–04, G–00, & G–10.
2. No stiffening is required if the clearance between the back of post and the obstacle is 3 feet or greater,
3. Guardrail that is connected to an obstacle shall be through–bolted or shall have an alternate connection that develops the full tensile strength of the bolt. Alternate connections must be approved by the Engineer.
4. Posts marked with * shall be 8' long W8x13 steel or 8"x8" wood with blockouts as shown on G–04 (without notches).
5. Install nested rail inside standard rail elements. Ensure that exposed ends of lapped rail elements face away from approaching traffic.
6. These barriers are NCHRP 350, TL 3 approved.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

REVISIONS		
Date	Description	By
10/31/03	Added Sheet 2 For Rubrail Transition	LRG

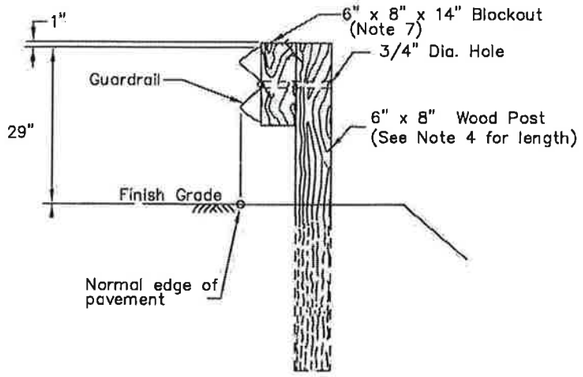
Sheet 1 of 2

State of Alaska
Department of Transportation & Public Facilities

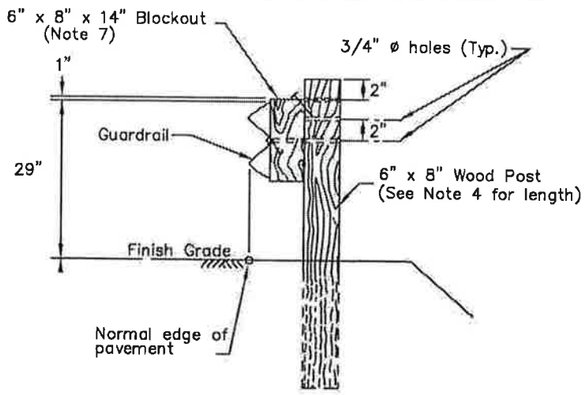
GUARDRAIL STIFFENING AT OBSTACLES

APPROVED
Date 10/31/03

G–27.11

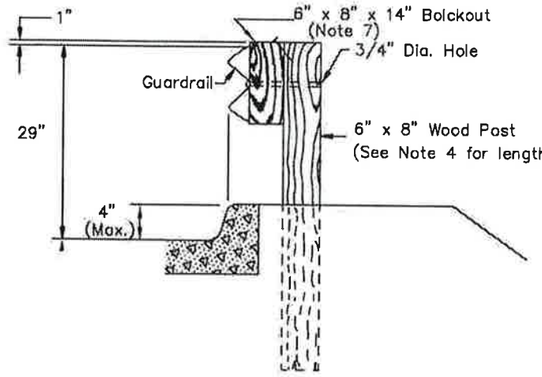


TYPE I POST INSTALLATION



TYPE II POST INSTALLATION

(Facilitates raising rail for future overlays.)

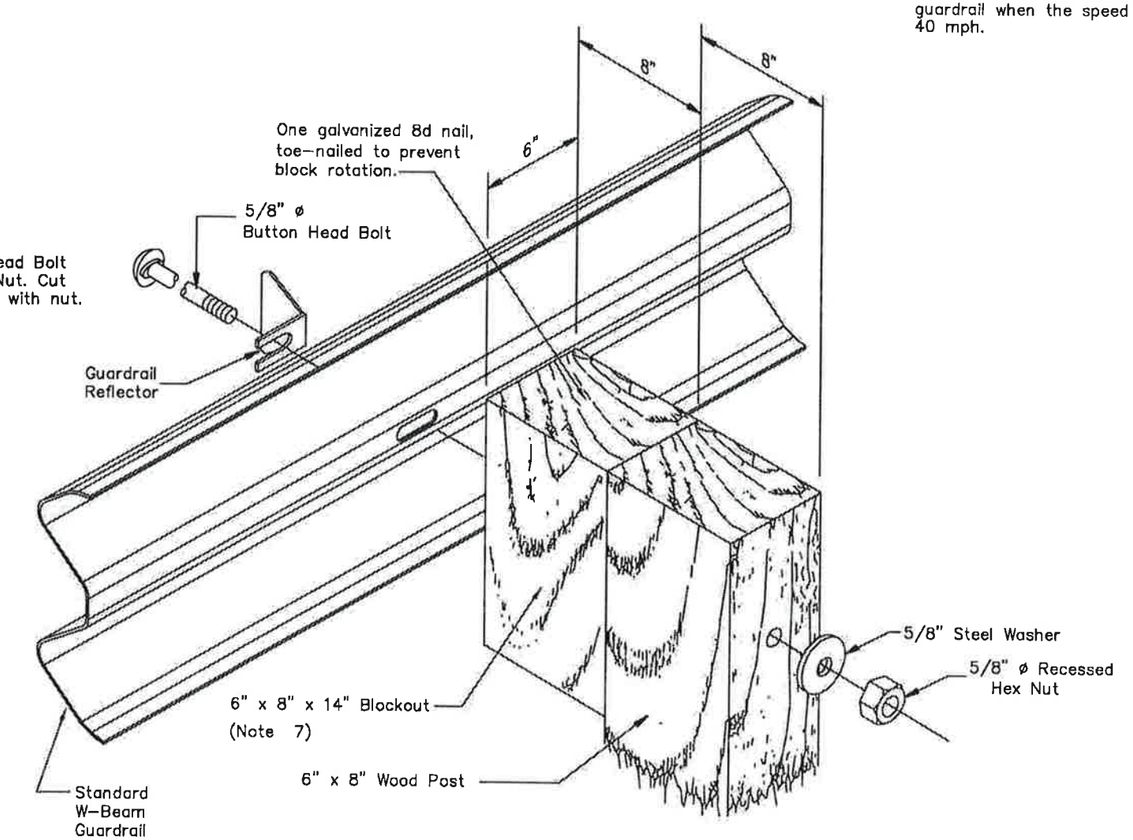


CURB DETAIL

TYPE III POST INSTALLATION

NOTE: Curb should not be installed with guardrail when the speed limit exceeds 40 mph.

TYPE IV DOUBLE SIDED INSTALLATION



ASSEMBLY DETAIL

(Type I post shown)

GENERAL NOTES:

1. Attach guardrail reflectors at 50' centers beginning with the first post. Use Type A reflectors unless specified otherwise.
2. Provide hardware compliant with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware," latest edition.
3. See Standard Drawing G-00 for hardware details.
4. See Standard Drawing G-10 for post lengths corresponding to different combinations of slope and behind-post embankment width.
5. Typical post spacing is 6'-3" center to center.
6. This barrier is acceptable under NCHRP 350, TL-3.
7. Use wood, rubber, plastic, or other NCHRP 350 or MASH approved blockouts designed to be used with wood posts.
8. Use 25 linear foot transition to match height of existing or new rail elements and end treatments.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

REVISIONS		
Date	Description	By
12/1/87	2'-0" behind post	Gdo
5/15/89	Ref S4S to rough sawn	Gdo
4/1/93	Hinge point note	Gdo
1/1/96	Del. hardware/ add type II	Gdo
3/15/99	Post length and misc	Gdo
4/1/13	Double-sided detail and increase g.r. height	JCJ

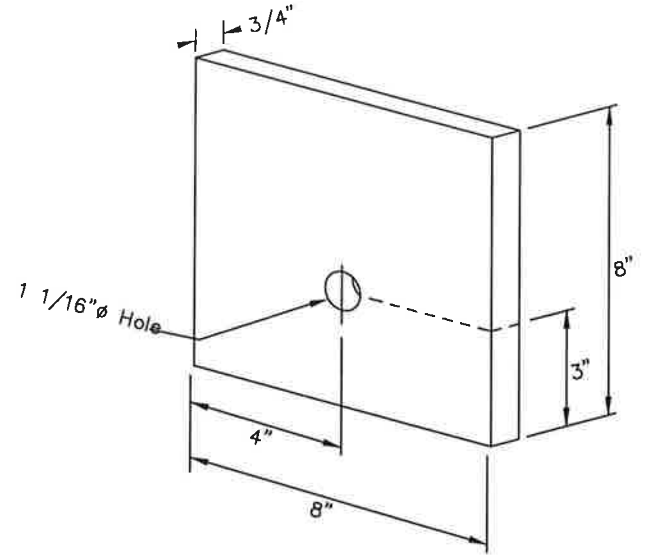
State of Alaska
Department of Transportation
& Public Facilities

WOOD POST W-BEAM GUARDRAIL

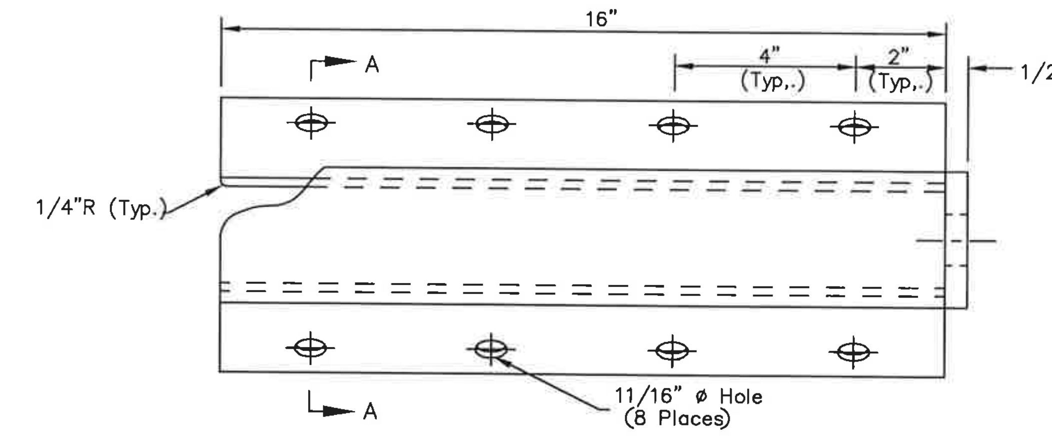
APPROVED

Date 05/15/13

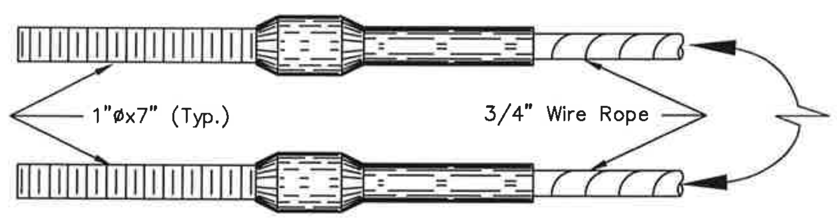
G-04.10W



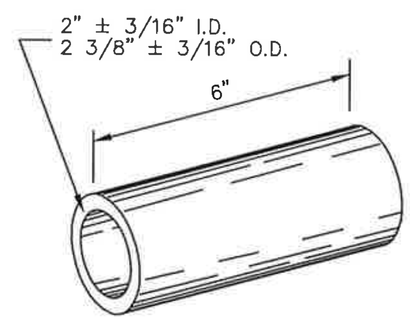
BEARING PLATE for CRT TERMINAL ANCHOR



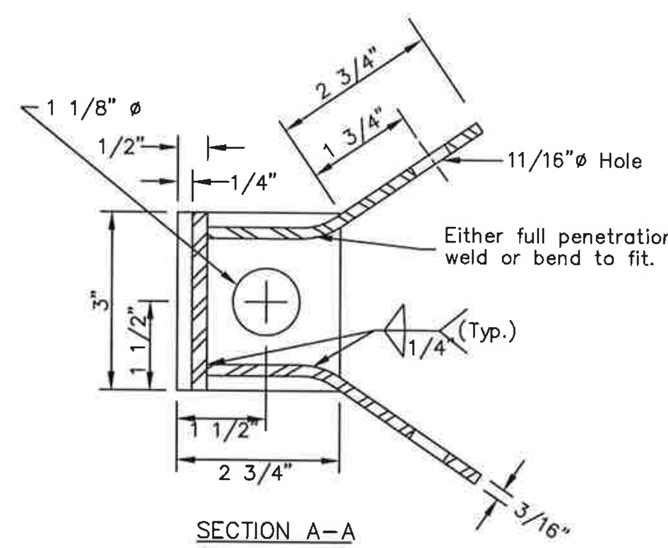
CABLE ANCHOR PLATE



SWAGED FITTING DETAIL



SLEEVE DETAIL



SECTION A–A

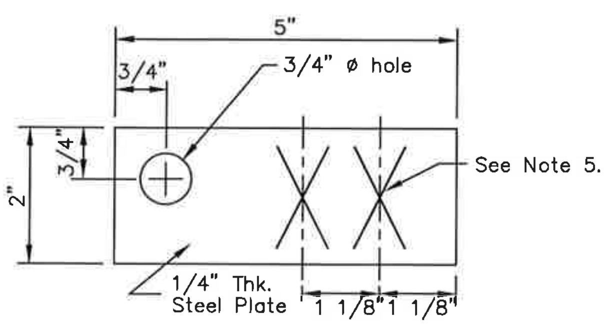
CONTROLLED RELEASE TERMINAL HARDWARE DETAILS

GENERAL NOTES:

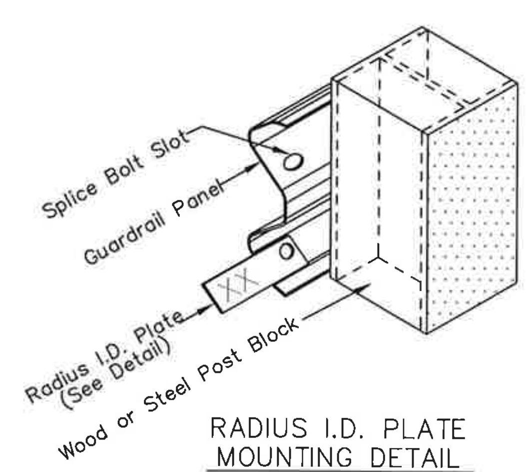
1. Cable Anchor Plate may be formed in single unit or welded fabrication.
2. Anchor Cable Assembly shall conform to AASHTO M–30 with Type II Wire Rope.
3. Sleeve for Wood Posts shall conform to the requirements of ASTM A120 and shall be of 2–inch galvanized standard pipe. Sleeve shall be a tight, pressed fit in post.
4. Bolts, nuts and washers shall conform to ASTM A–325 and galvanized in accordance with ASTM A–153.
5. Radius ID plates shall be attached to all shop–bent guardrail sections. They shall be bolted to the back side of the guardrail panel with the lower splice bolt nearest the P.C. of the radius.
6. Rail bend radius in feet shall be shown as "XX" on the radius ID plate. Digits shall be etched or stamped and have a min. height of 1 1/2" and a max. width of 3/4". The plate shall be galvanized after digits are marked.
7. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

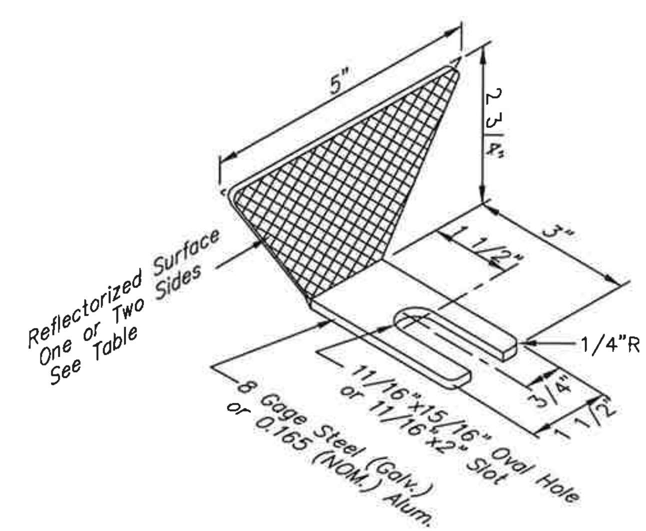
Proj. Eng. NB Date 1/16/16



RADIUS I.D. PLATE



RADIUS I.D. PLATE MOUNTING DETAIL



GUARDRAIL REFLECTOR

Guardrail Reflectors

Type	Color	Reflectorized
A	White	Front & Rear
B	White	Front
C	Yellow	Front
D	Yellow	Front & Rear

REVISIONS

Date	Description	By
3/15/99	Delete BCT Hardware	KJS

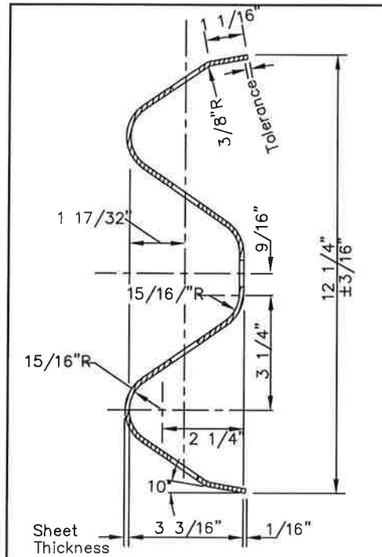
State of Alaska
Department of Transportation & Public Facilities

STANDARD GUARDRAIL HARDWARE (MISCELLANEOUS)

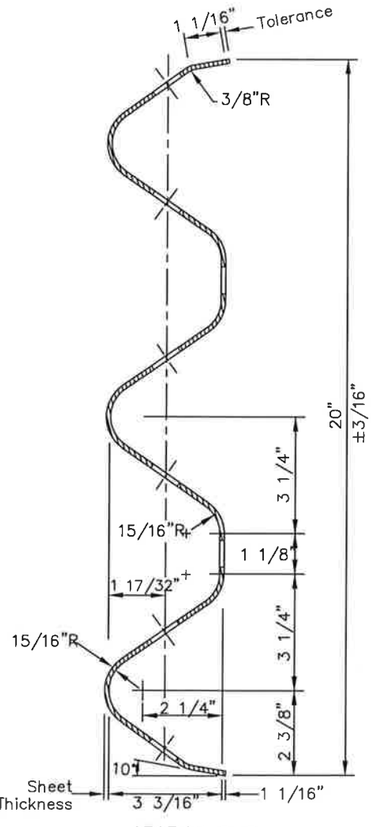
APPROVED

Date 5/31/12

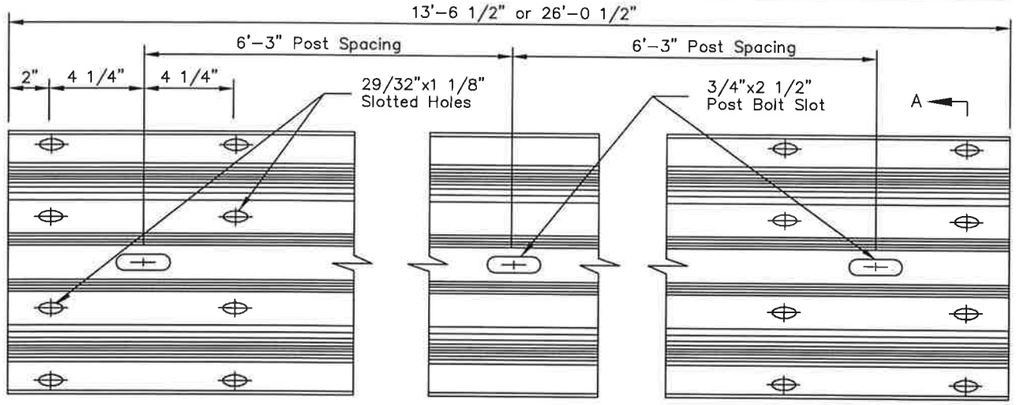
G–00.02



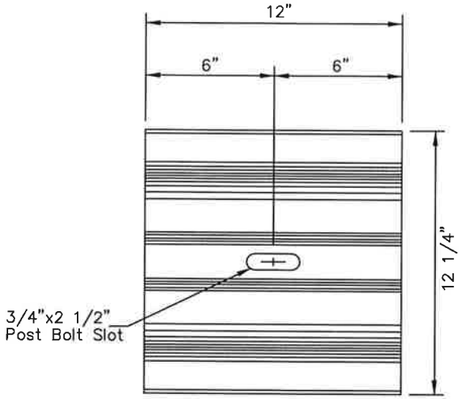
SECTION A–A



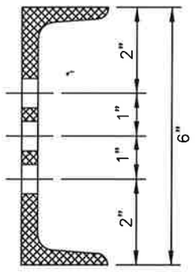
SECTION C–C



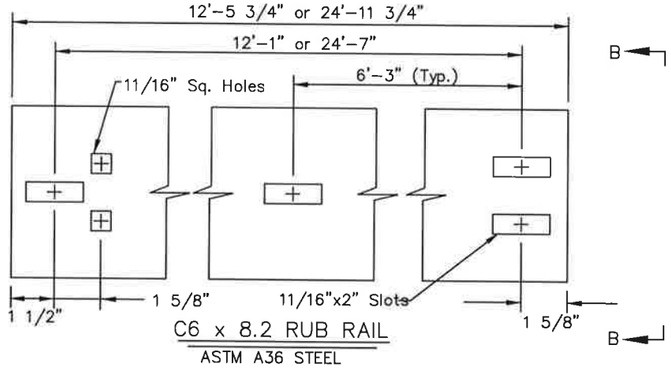
STANDARD W–BEAM PANEL



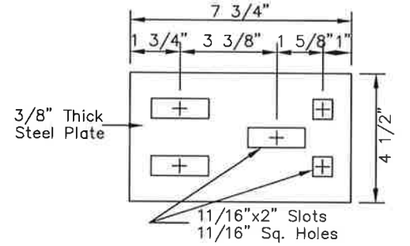
W–BEAM BACKUP PLATE



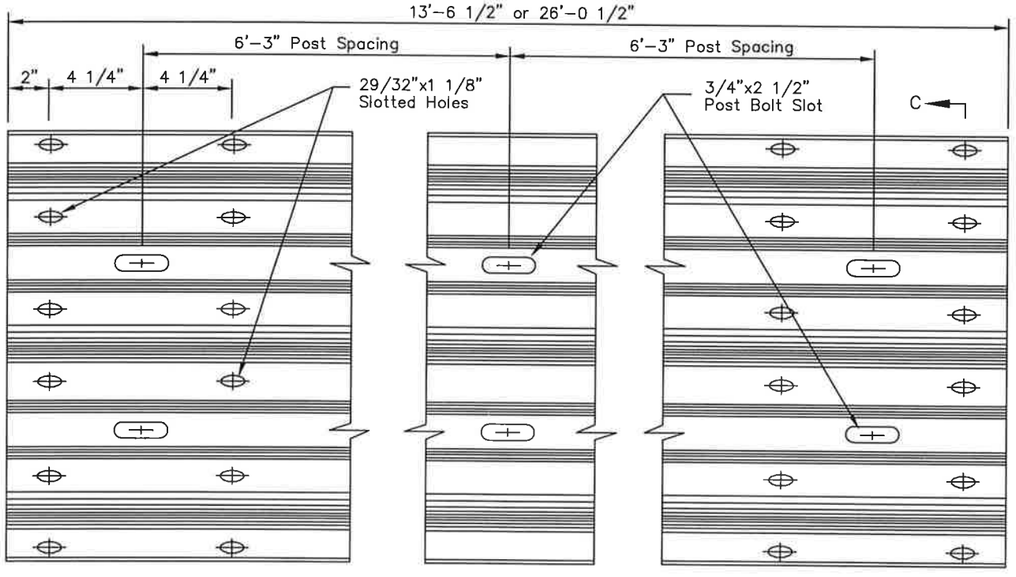
SECTION B–B



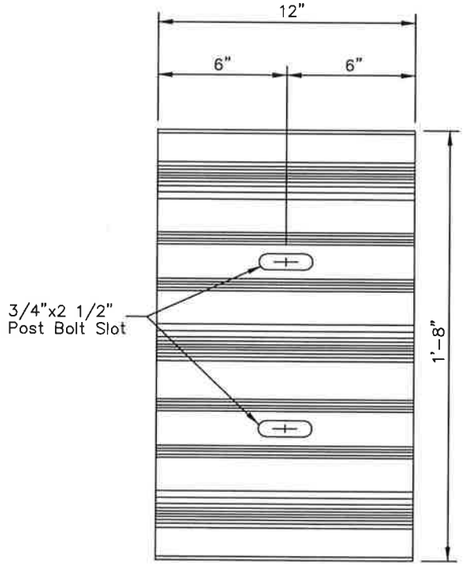
C6 x 8.2 RUB RAIL
ASTM A36 STEEL



SPLICE PLATE
ASTM A36 STEEL



STANDARD THRIE BEAM PANEL



THRIE BEAM BACKUP PLATE

G-00.02

SHEET 2 of 4

GENERAL NOTES:

1. Provide hardware compliant with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware, latest edition.
2. Install back–up plates between blockouts and w–beam or thrie–beam rail at intermediate (non–splice) posts when steel blockouts are used but not with wood, rubber, plastic, or other approved blockouts.
3. Provide Thrie beam and W–beam compliant with AASHTO M180A. Use 12 gauge (0.105") thick steel for both.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

REVISIONS		
Date	Description	By
4/28/10	Revise General Notes	KJS

State of Alaska
Department of Transportation
& Public Facilities

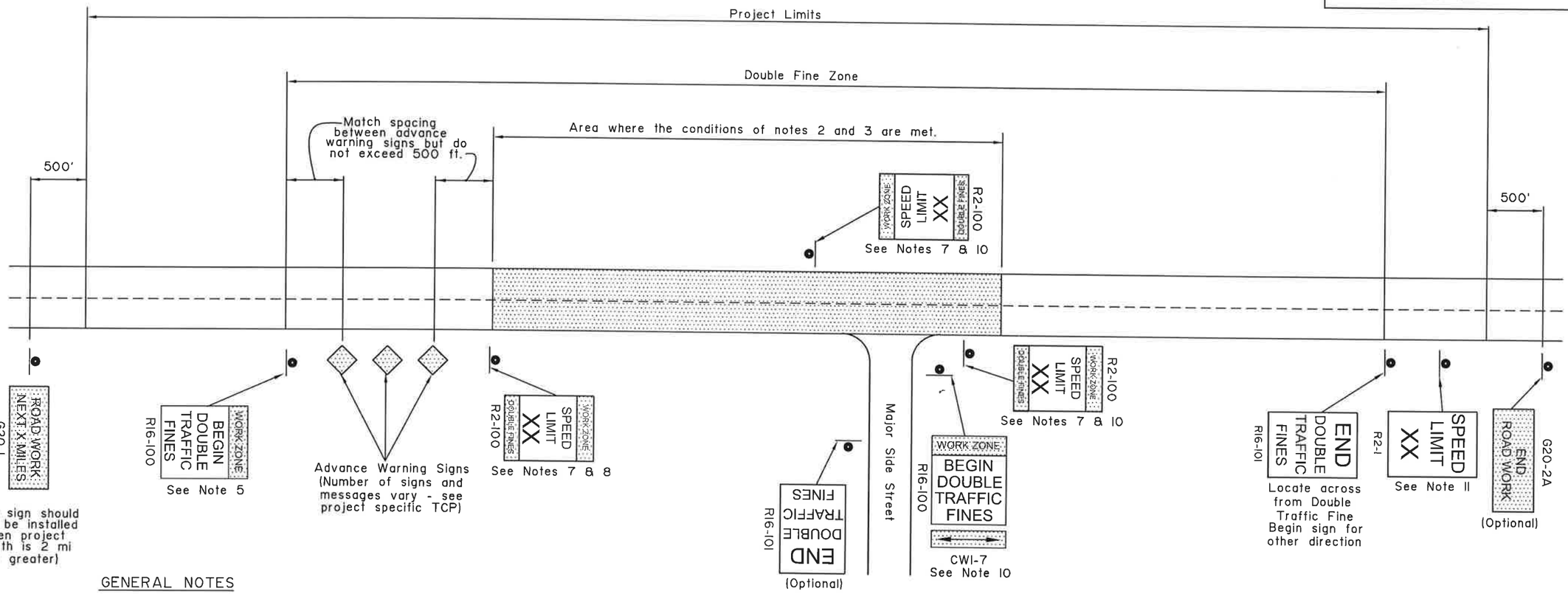
STANDARD GUARDRAIL HARDWARE (RAILS AND SPLICES)

APPROVED
Date 5/31/12

G-00-02

C-04.12

SHEET 1 of 1



GENERAL NOTES

1. Signs are shown for one direction only (with one exception). Signs for the other direction mirror those shown.
2. Double fine signs shall be used only where one or more of the following conditions exist:
   a. Active work areas (where road workers and/or machines are presently working on or adjacent to a road)
   b. Detours on new temporary roads built for that purpose (this does not include detours on existing streets)
   c. Sections of paved roads where pavement has been removed.
   d. Roads being paved where unmatched asphalt lifts result in a vertical lip between lanes.
3. Double fine signs shall be confined to the areas where the above conditions exist, with the following exceptions:
   a. If the project is 2 miles or shorter in length, the entire project may be posted for double fines when the above conditions exist on any part of the project.
   b. When the above conditions exist at multiple locations separated by less than 2 miles, the locations and the intervening segments may be posted as a single double fine zone.
4. Double fine signs shall be removed or covered when work activity ceases for more than two days and conditions b, c, or d of note 2 are not met.
5. The R16-100 "BEGIN" sign may be used in place of the first advance warning sign. However, when this is done, the appropriate advance warning sign must be reinstalled when the double fine sign is taken down or covered.
6. When a double fine zone is longer than 2 miles, work zone speed limit signs shall be posted at spacings not greater than 2 miles within the double fine zone.
7. "Work zone speed limit signs", as used here, refer either to 1) R2-100 signs or 2) standard R2-1 regulatory speed limit signs with CW20-102 "DOUBLE FINES" plates mounted below.
8. The limit shown on work zone speed limit signs shall be either the existing limit before construction or, if a work zone speed limit order has been approved in accordance with ADOT&PF Procedure 05.05.020 PDR, a reduced limit.
9. All existing regulatory speed limit signs within double fine zones shall either be replaced with R2-100 signs or supplemented with CW20-102 plates.
10. Signs shall be installed at major intersections within the double fine zone to warn entering drivers of double fines. This may be done with a R16-100 sign with a CWI-7 arrow panel on the side street or with two work zone speed limit signs on the main street on either side of the intersection. Use of R16-100 signs on side streets eliminates the need for "Road Work Ahead" signs on those streets. If the speed limit has been reduced, the two work zone speed limit signs are mandatory.
11. At the end of each double fine zone, install an R2-1 sign showing the speed limit for the road beyond the double fine zone.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 11/16/16

REVISIONS		
Date	Description	By
6/11/99	Revised Notes	KJS
2/28/03	Rev. Notes & Sign No's	KJS

State of Alaska
Department of Transportation & Public Facilities

LOCATION OF DOUBLE TRAFFIC FINE SIGNS

APPROVED Date 3/31/99

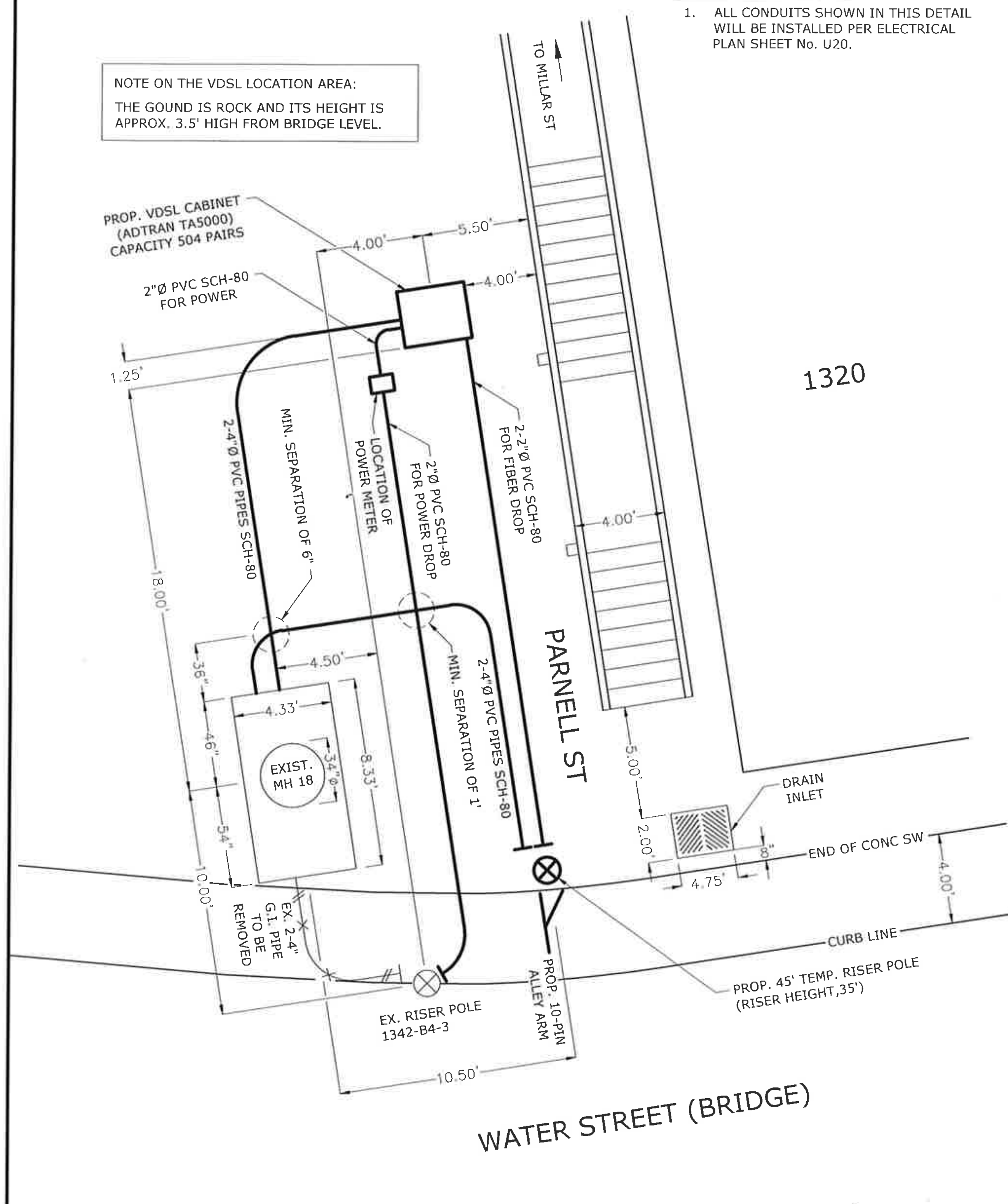
C-04.12

NOTE TO CONTRACTOR:

1. ALL CONDUITS SHOWN IN THIS DETAIL WILL BE INSTALLED PER ELECTRICAL PLAN SHEET No. U20.

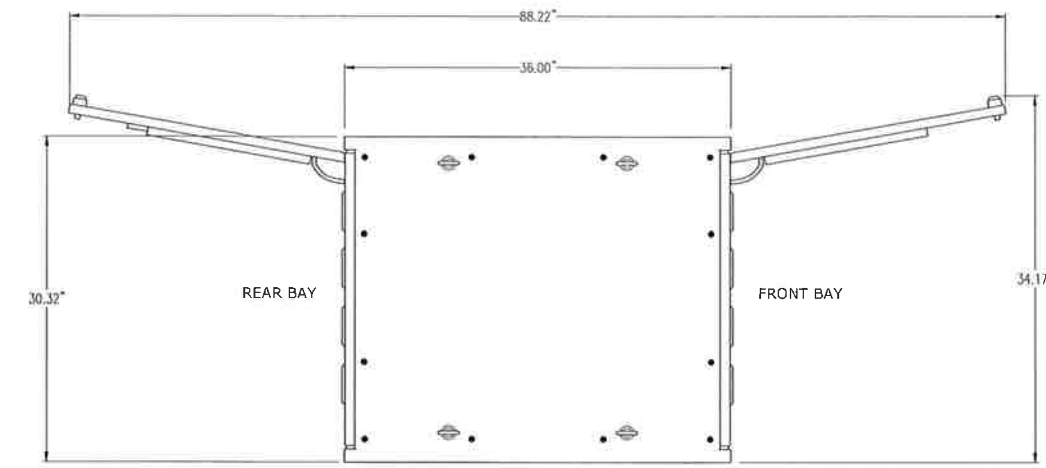
NOTE ON THE VDSL LOCATION AREA:

THE GOUND IS ROCK AND ITS HEIGHT IS APPROX. 3.5' HIGH FROM BRIDGE LEVEL.



NEW VDSL LOCATION DETAIL

NOT TO SCALE



CABINET CLEARANCE REQUIREMENT

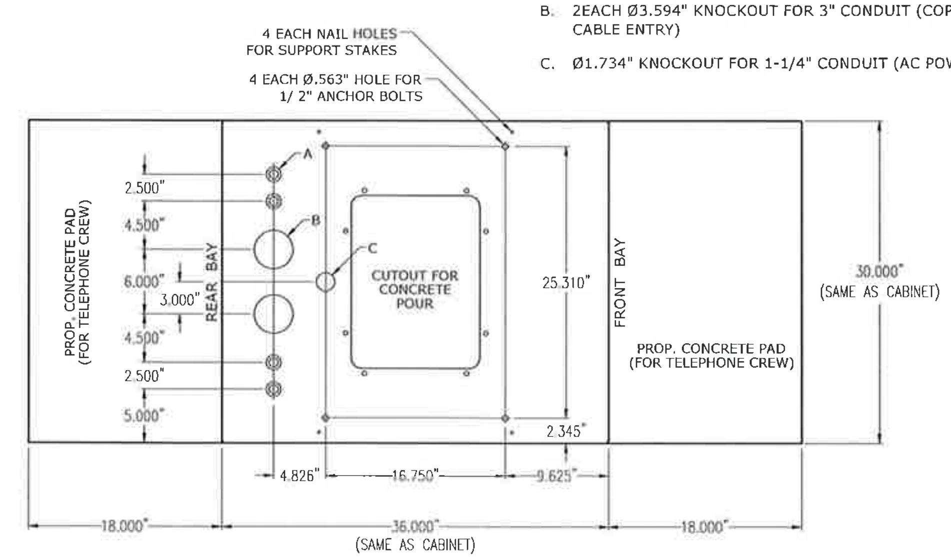
NOT TO SCALE

CONDUIT:

A. 4 EACH Ø.875" x Ø1.375" DOUBLE KNOCKOUT FOR 1/2" OR 1" CONDUIT (GROUND AND FIBER ENTRY)

B. 2EACH Ø3.594" KNOCKOUT FOR 3" CONDUIT (COPPER OSP CABLE ENTRY)

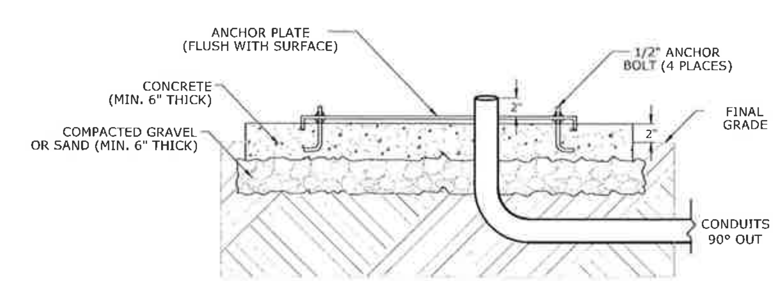
C. Ø1.734" KNOCKOUT FOR 1-1/4" CONDUIT (AC POWER ENTRY)



TOTAL CONCRETE PAD AREA = 72" x 30"

CONCRETE PAD & CONDUIT POSITIONS

NOT TO SCALE



CONCRETE PAD & CONDUIT PROFILE

NOT TO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/6/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013 DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERT\DWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDSL CABINETS FOR DOT WSB PROJ

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

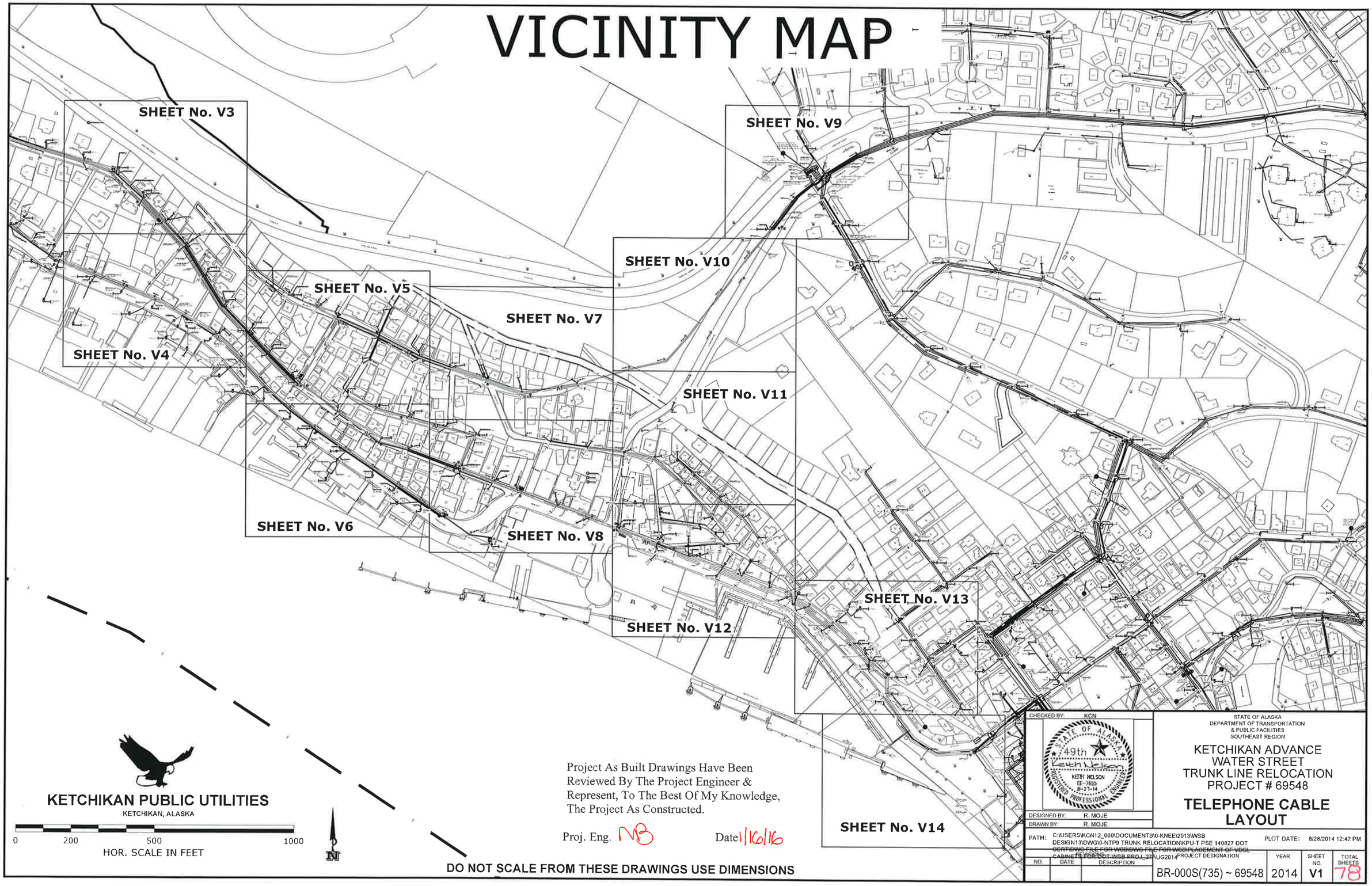
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
V18	78

VICINITY MAP



KETCHIKAN PUBLIC UTILITIES
KETCHIKAN, ALASKA

0 200 500 1000
HOR. SCALE IN FEET

N

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: KCN

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION
PROJECT # 69548

TELEPHONE CABLE LAYOUT

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\KPU-T PSE 140827 DOT CERTIDWG FILE FOR WSB\DWG FILE FOR WSB\PLACEMENT OF VDGL CABINETS FOR DOT WSB PROJ_27AUG2014

PLOT DATE: 8/28/2014 12:42 PM

NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	V1	78

OVERHEAD SERVICE DROP INFORMATION
120/240V, Single Phase, Three Wire Distribution

	Address	Street	# Existing Meters	Existing Triplex (Alum)	Feed	Commments
1	1628 / 1626	Water Street	AB	#2	Midspan tap	
2	1627	Water Street		#2	Pole P1A	Fed from Pole P1A, no work required on overhead drop
3	1622	Water Street	ABC	#2	Midspan tap	
4	1617	Water Street		#2	Midspan tap	
5	1611	Water Street		#2	Pole P4	
6	1610	Water Street		#2	Pole P4	
7	1608	Water Street	AB	#2	Pole P4	
8	1600	Water Street		#2	Midspan tap	
9	1528	Water Street		#1/0	Midspan Tap to Pole P5A	#1/0 midspan to Pole 5A; adjust drop to Pole P5A; #2 from P5A to mast
10	1508	Water Street	AB	#2	Midspan tap	
11	1500	Water Street		#2	Midspan Tap to Pole P5A	House is located above 1528 Water; adjust drop to Pole P5A; #2 P5A to mast
12	200	Wiley Stairs		#2	Midspan tap	House is located above 1462 Water
13	1462	Water Street	AB	#1/0	P7	
14	1454	Water Street		#2	Midspan tap	
15	Near 1454	Water Street		#4 Duplex	Midspan tap	Security Street Light; Pole P7L; adjust drop to Pole P7L
16	1446	Water Street	AB	See Comments	P8	#4/0 drop parlayed: 1446 = #2 Triplex; 1442 = #1/0 Triplex.
17	1442	Water Street		See Comments	P8	#1/0 tapped from a #4/0 drop (see 1446 comment)
18	1426	Water Street		#2	P9	
19	1418.5	Water Street		#2	P9	Located above 1418
20	1418	Water Street		#2	P9	
21	1412	Water Street		#2	Midspan tap	
22	1400	Water Street		#4	Midspan tap	Fed from Parnell Stairs Overhead
23	200	Parnell Stairs		#2	Midspan tap	Fed from Parnell Stairs Overhead
24	Base of Parnell Stairs	Water Street		#2	P10	New service for VDSL Cabinet; install service mast on pole.
25	1320	Water Street		#2	P10	
26	1319	Water Street		#2	Midspan tap	
27	1312	Water Street		#2	Midspan tap	
28	1306	Water Street		#2	Midspan tap	
29	1305	Water Street	ABC	#2	Midspan tap	Two combination meter mains; one overhead service drop
30	1279	Water Street	A-D	#1/0	Midspan tap	Meters located in the street level entry hallway
31	1269	Water Street		#1/0	Midspan tap	Adjust drop to mast; drop is attached to Pole P11A
32	1263	Water Street		#1/0	Midspan tap	No service mast; drop attached to the eaves; then conduit from eaves to meters
33	1262	Water Street		#2	Midspan tap	
34	1256	Water Street		#2	Midspan tap	
35	1251	Water Street		#2	Midspan tap	Adjust drop to mast; drop is attached to Pole P10A
36	1250	Water Street		#2	P12	
37	1245	Water Street	ABC	#1/0	P12	
38	1242	Water Street		#4/0	P12	4/0 is parlayed

UNLESS NOTED OTHERWISE WHEREVER THE DISTRIBUTION SYSTEMS ARE RAISED ON THE POLES, ADJUST ALL OVERHEAD DROPS TO ACCOMMODATE THE NEW HEIGHT.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\12\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB: U34

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

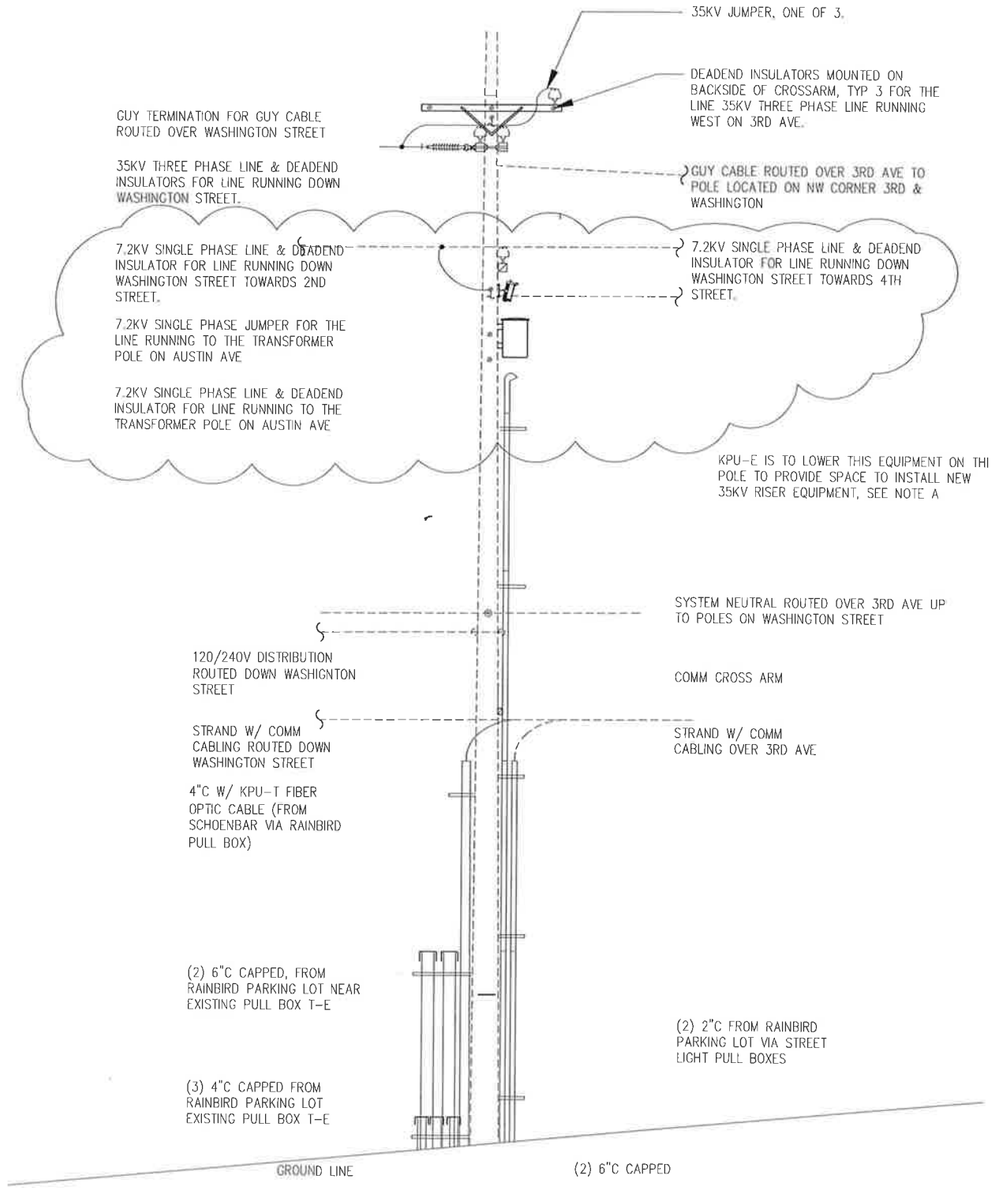
KETCHIKAN -ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

SERVICE DROP INFORMATION

PROJECT DESIGNATION

BR-000S(735) ~ 69548

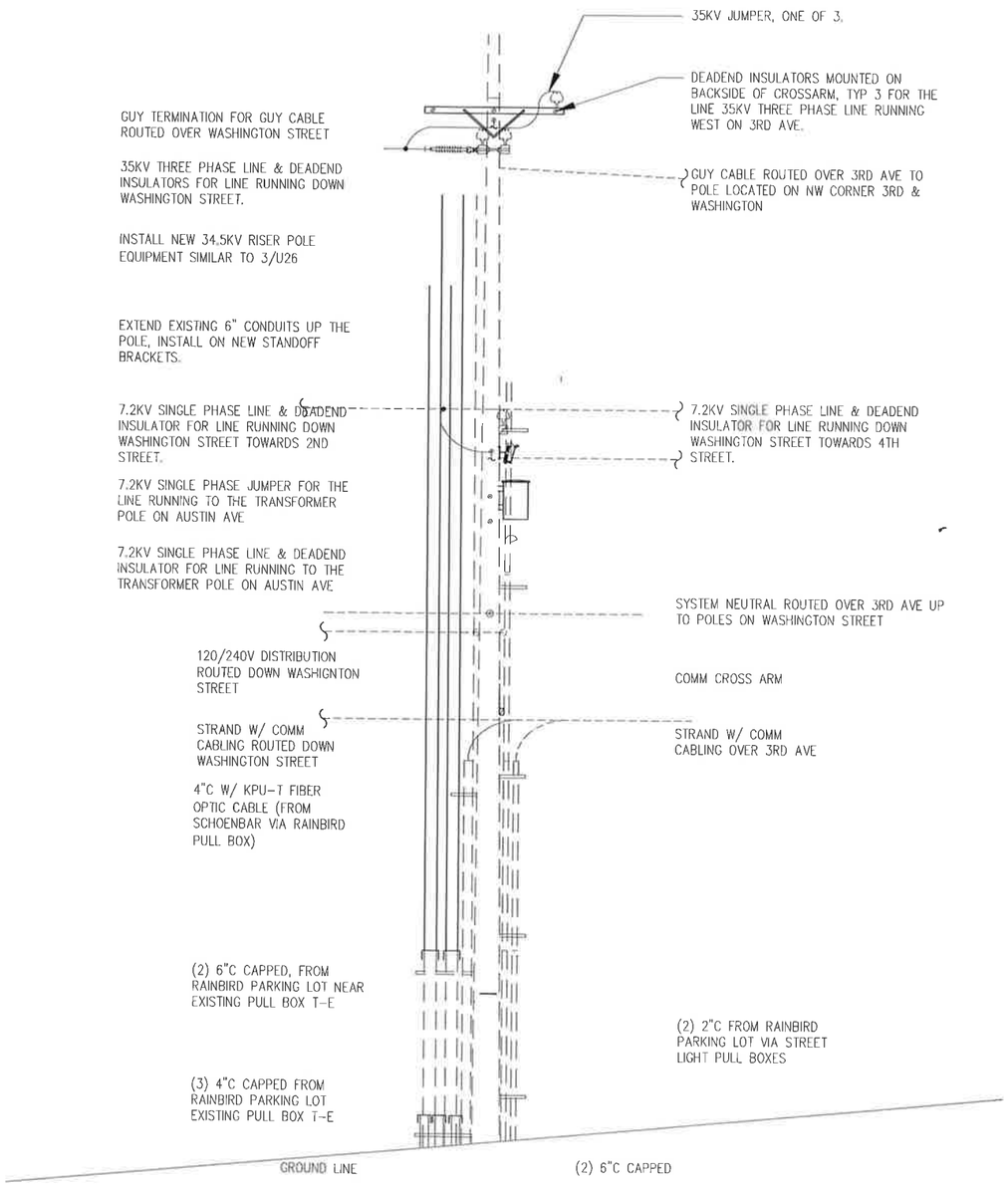
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U34	78



1 EXISTING POWER POLE P1W

NO SCALE

A AT THE TIME THIS DRAWING SET WAS ISSUED FOR BID, KPU-E WAS GOING TO PERFORM THE WORK TO LOWER THE 12.47KV & 7.2KV SYSTEMS, STREET LIGHT, TRANSFORMER AND EQUIPMENT ON THE POLE TO PROVIDE THE NECESSARY SPACE FOR THE CONTRACTOR TO INSTALL THE 35KV RISER POLE EQUIPMENT SHOWN IN 3/U26. FOR THE BID PHASE, ASSUME THE SPACE ON THE POLE IS ADEQUATE TO INSTALL



2 REVISED POWER POLE P1W

NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U18-35 POTOS POLES.DWG

KCN12_000

TAB: U32

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

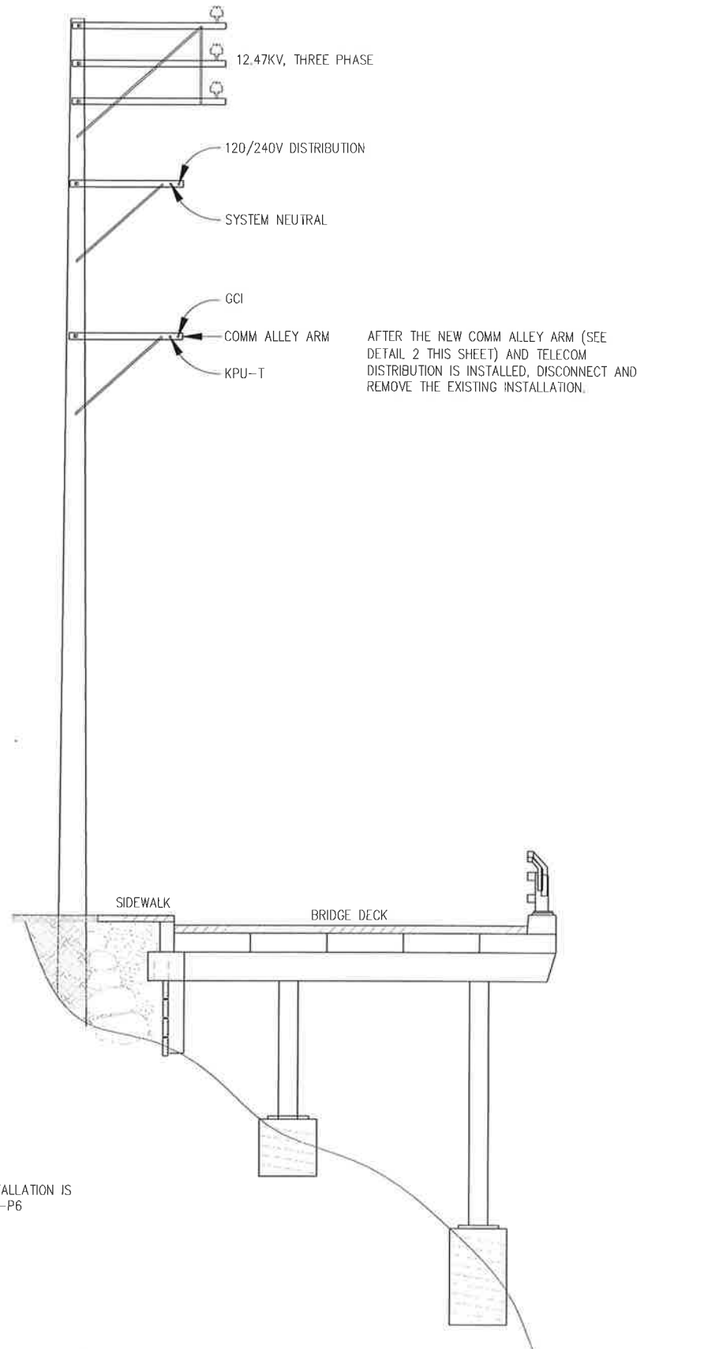
KETCHIKAN -ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

POLE DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69548

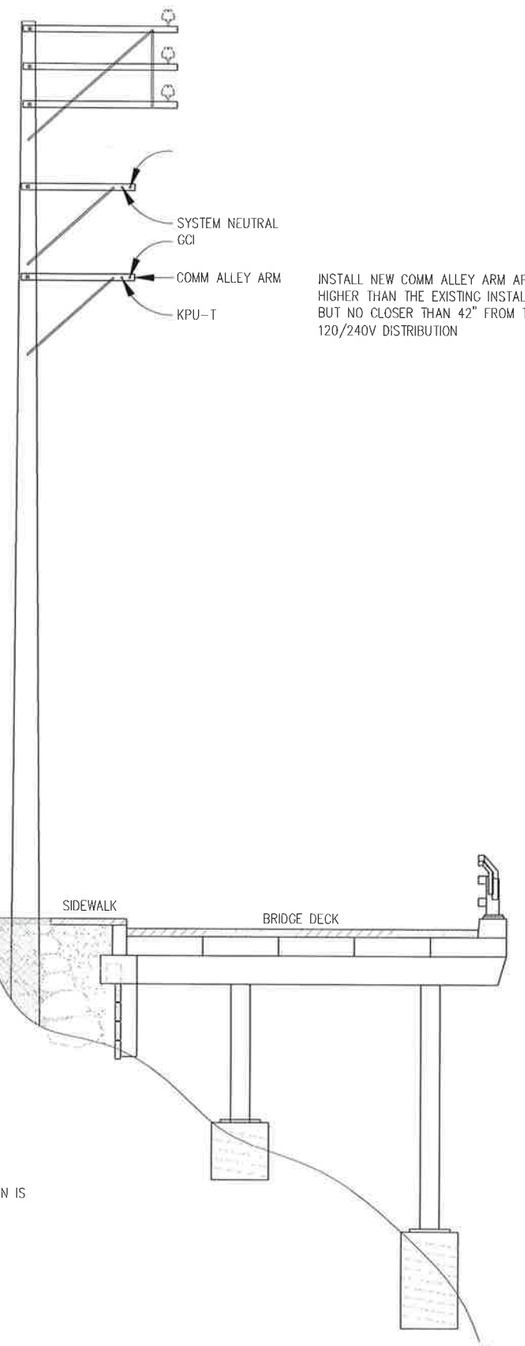
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U32	78



AFTER THE NEW COMM ALLEY ARM (SEE DETAIL 2 THIS SHEET) AND TELECOM DISTRIBUTION IS INSTALLED, DISCONNECT AND REMOVE THE EXISTING INSTALLATION.

POLE P5 SHOWN, INSTALLATION IS SIMILAR FOR POLE P3-P6

1 EXISTING POWER POLE P11
NO SCALE



INSTALL NEW COMM ALLEY ARM APPROX 3' HIGHER THAN THE EXISTING INSTALLATION, BUT NO CLOSER THAN 42" FROM THE 120/240V DISTRIBUTION

POLE P5 SHOWN, INSTALLATION IS SIMILAR FOR POLE P3-P6

2 REVISED POWER POLE P11
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\6-KNEE\2013\WSB DESIGN\3DWGS\6-ATP9 TRUNK RELOCATION\WSB AUR U15-35 FOTOS POLES.DWG

KCN12_000
TAB: U30

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

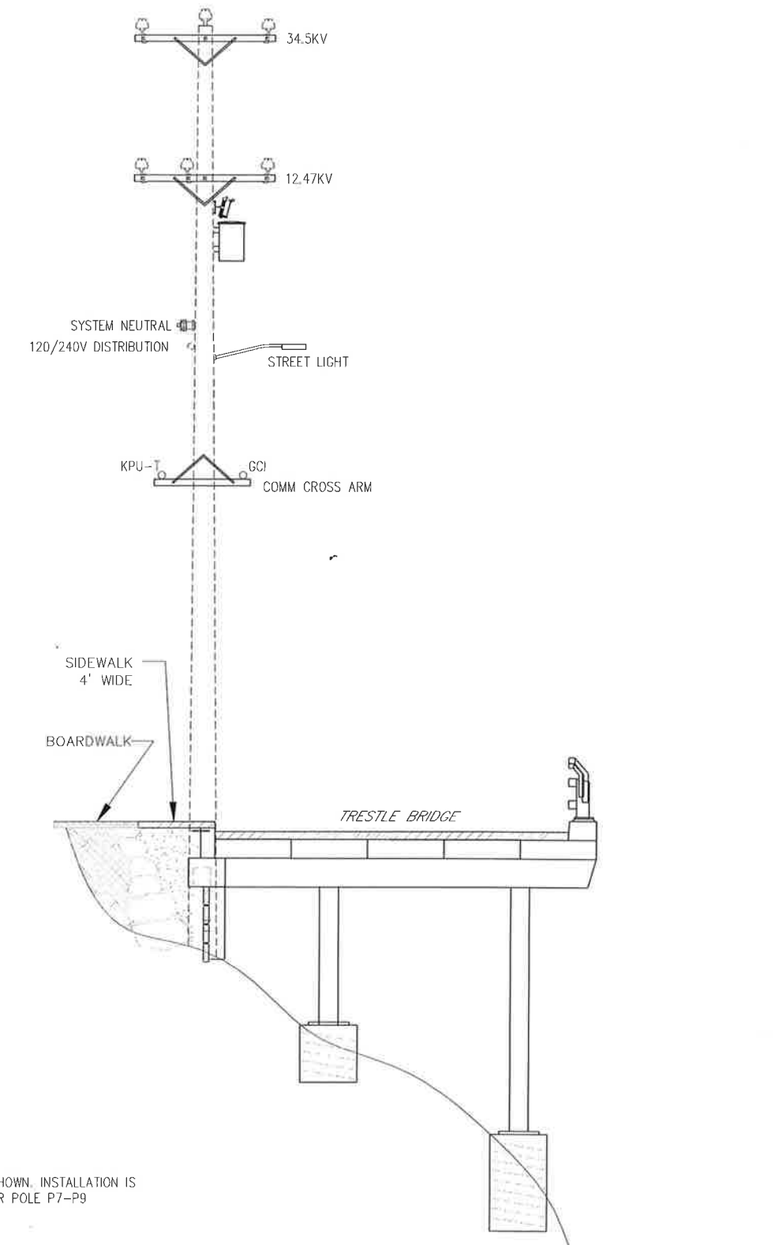
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN -ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

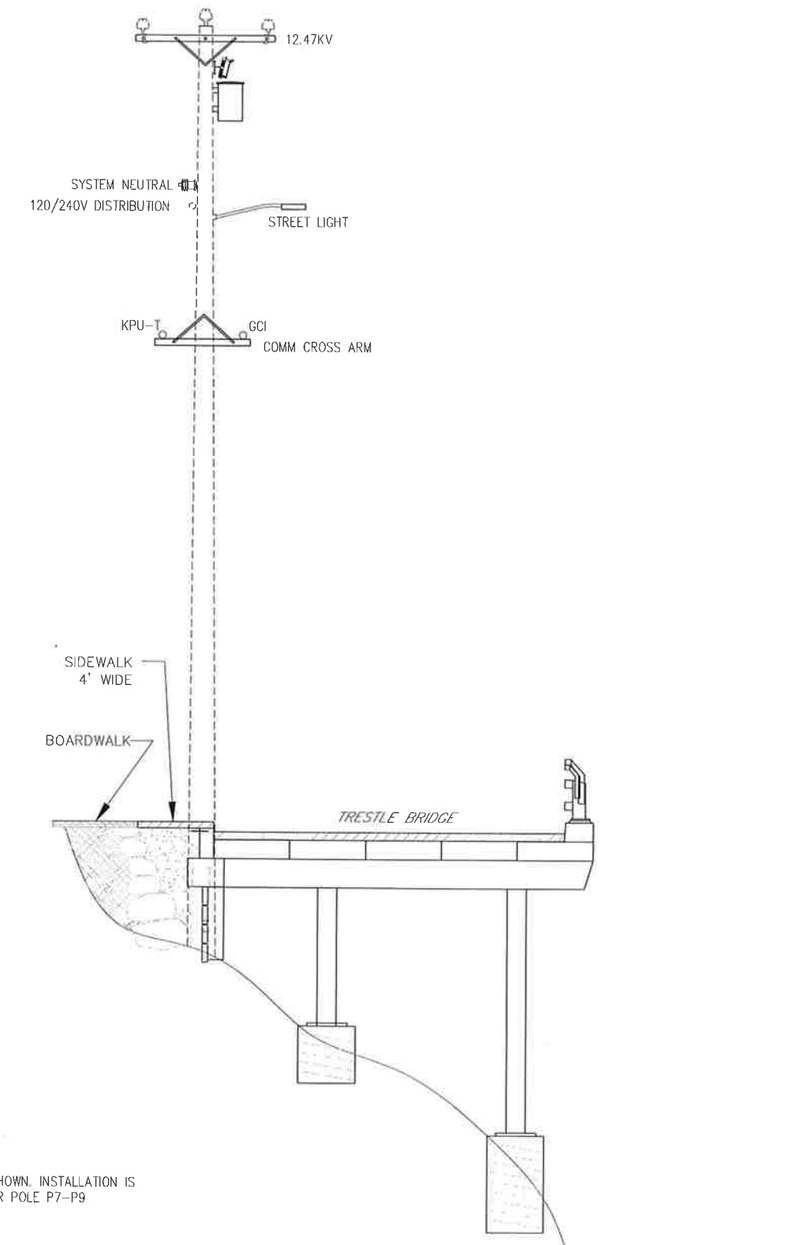
POLE DETAILS

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U30	78



POLE P8 SHOWN, INSTALLATION IS SIMILAR FOR POLE P7-P9

1 EXISTING POWER POLE P8
NO SCALE



POLE P8 SHOWN, INSTALLATION IS SIMILAR FOR POLE P7-P9

2 REVISED POWER POLE P8
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\9-KNEE\2013\WSB DESIGN13\DWG\9-NTP9 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB U28

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

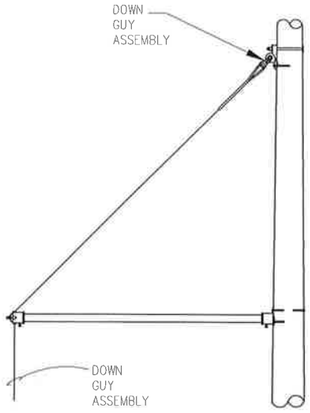
KETCHIKAN -ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE DETAILS

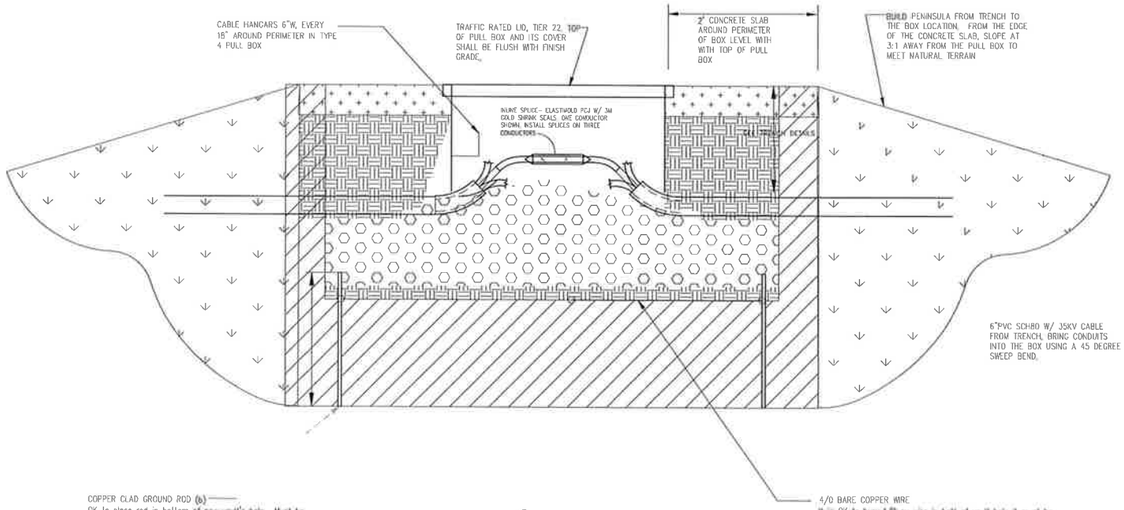
PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U28	78



1 SIDEWALK GUY
NO SCALE

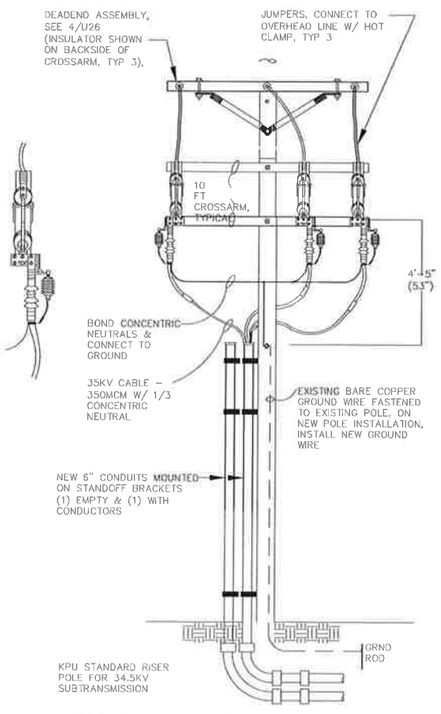


2 PULL BOX - GENERAL INSTALLATION
NO SCALE

THE DETAIL SHOWS THE GENERAL INSTALLATION REQUIREMENTS FOR THE TYPE 1-4 PULL BOXES.

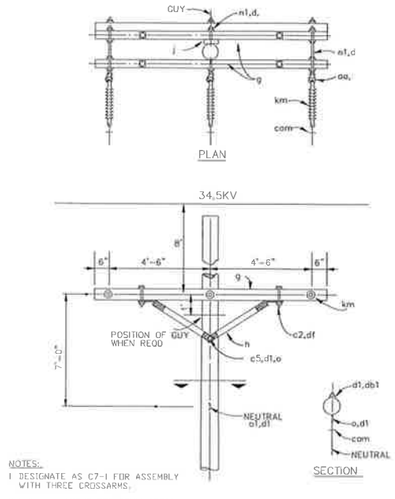
TIE THE (3) CONCENTRIC NEUTRALS TOGETHER WITH #4 CU GROUND WIRE AND CONNECT TO GROUND ROD IN THE BOX.

SEE U_ FOR GROUNDING AND ADDITIONAL INSTALLATION INFORMATION



3 KPU 34.5KV RISER POLE
NO SCALE

MATERIAL LIST			
ITEM	KPU NUMBER	QTY	DESCRIPTION
	17173.58	3	TERMINATION KIT FOR 350 MCM (TYCO RAYCHEM cat#TFT-353E)
	17897.10	3	SOLID BLADE SWITCH (S&C cat#494389-E-D2-J)
	11612	3	POWER TAP GRIP (UTILCO cat#SCH-397)
	19240		INSULATED JUMPER 350MCM (TO LENGTH) (use-2 or RHH or RHW-2 INSULATION)
	10828	2	BOLT MACHINE 5/8" x 14" (or as reqd)
	18358	4	WASHER, 2 1/4"x2 1/4"x2 1/4"x 9/16" hole
	10354	2	CROSS ARM, LIGHT 3 3/4"x4 3/4"x10'-0"(HUGHES BRO, TYPE 5 DRILL PATTERN)
		3	KELLEMS GRIP (HUBBELL cat#02206013)
	12052		CONDUIT 6" SCH 80 (as req)
	12052.30		CONDUIT 6" 90 ELBOW (as req)
	16388		STAND-OFF BRACKETS 12" (2 PER SECTION CONDUIT)
	10456.30	3	LIGHTNING ARRESTER 36KV (COOPER cat#URS3614-0A1A-0A1A)
	18220.10	3	1/2" GROUNDED BRAID WITH EYELETS (ELECTRIC MOTION cat#EM12435)
	11613	3	#8-2/0 STR CU ARRESTER LINE CONNECTORS (HUBBELL/FARGO cat#GH-201D)
	NOI		UNDERGROUND 35KV CONCENTRIC NEUTRAL CABLE 350 MCM
	NOI	3	BRONZE TAP LUG (1-BOLTS) 1/0-500 (ANDERSON cat#TLD-52-L)
	13114	3	LUGS-500 1/2"BOLT (T&B HOMAC cat#AL-500-NTN)
	16566	1	GROUND ROD (JOSLYN cat#J8338)
		3	PLATE PARALLEL CIRCUIT CU BUS
		3	ARRESTER FLAG BRACKET P/L 60DAMP
		3	DISCONNECT SW LEAD COVER



NOTES:
1 DESIGNATE AS C7-1 FOR ASSEMBLY WITH THREE CROSSARMS.

2 SIMILAR LAYOUT FOR 35KV CROSSARM DEADEND. ITEM km BECOMES SEDIVER ODI-35-70-28-C7-SIL

4 KPU 7.2/12.5KV CROSSARM DEADEND, C7, C7-1
NO SCALE 35KV INSTALLATION IS SIMILAR

MATERIAL LIST			
ITEM	KPU NUMBER	QTY	DESCRIPTION
aa	15690	3	Nut, eye 5/8" JOSLYN: J1092
c2	10770	4	Bolt, machine 1/2" x 8" (or as reqd)
c5	10828	1	Bolt, machine 5/8" x 14" (or as reqd)
com	11610	3	Deadend Assm-primary, Anderson336-3/0ADE70N
com	11610	1	Deadend Assm-neutral, Anderson336-3/0ADE70N
d1	18358	12	Washer, 2 1/4"x2 1/4"x2 1/4"x 9/16" hole
g	10355	2	Crossarm, heavy 5 3/4"x 43/4"x 10'-0"
h	11180	4	Brace, wood, HUGHES BROS 2045D45-11-13
j	14999	1	Arm Gain Plastic Radar Enterprises #601
km	15730	3	Ins, Supen SEDIVER ODI-15-70-28-CT-SIL
n1	10861	3	Bolt, double arming, 5/8" x 24" (or as reqd)
o1	10690	2	Bolt, Eye 5/8" x 12" (or as reqd)
df		4	1/2" flat washers

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\12DWGS\0-ATP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB: U26

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-21-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

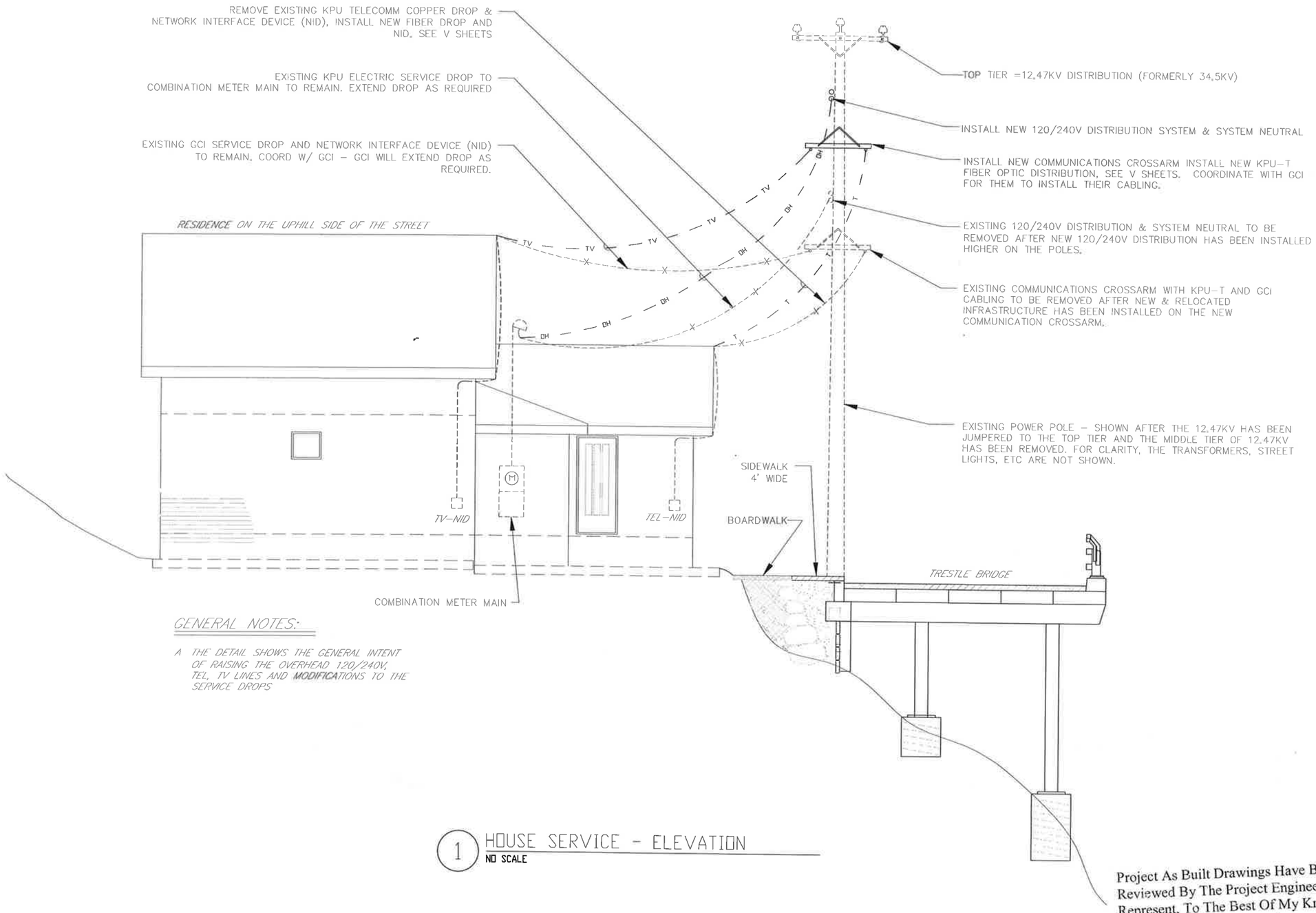
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN -ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

POLE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U26	78



GENERAL NOTES:

A THE DETAIL SHOWS THE GENERAL INTENT OF RAISING THE OVERHEAD 120/240V, TEL, TV LINES AND MODIFICATIONS TO THE SERVICE DROPS

1 HOUSE SERVICE - ELEVATION
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

PATH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U18-35 FOTOS POLES.DWG

KCN12_000
TAB: U24

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

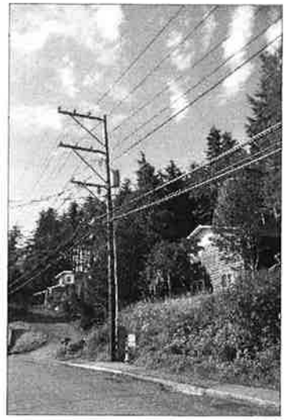
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69548

POLE DETAILS

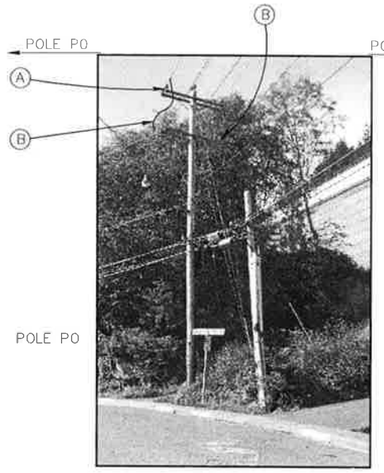
PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U24	78



1 POLE P0
NO SCALE

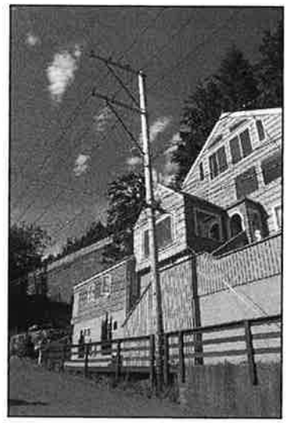


A = TOP TIER: INSTALL DEADEND INSULATORS ON DOUBLE DEADEND CROSSARMS AND TERMINATE CONDUCTORS. REMOVE EXISTING POST INSULATORS FROM CROSSARMS.

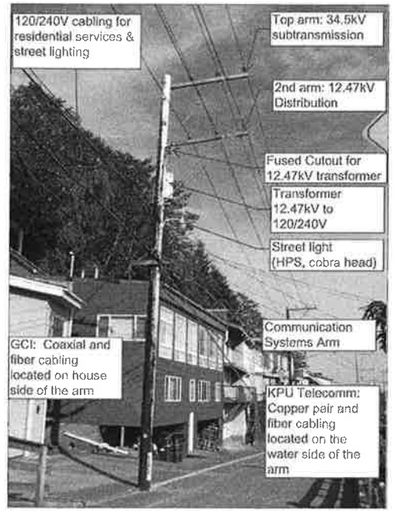
B. MIDDLE TIER: INSTALL DEADEND INSULATORS THE P0 SIDE OF THE EXISTING CROSSARM AND TERMINATE CONDUCTORS. REMOVE EXISTING POST INSULATORS FROM CROSSARMS. DISCONNECT OVERHEAD CONDUCTORS TO POLE P3

C. LOWER THE 12.47KV ON THE TOP TIER (RUNNING FROM P1 TO P10) BACK DOWN TO THE MIDDLE TIER: INSTALL POST INSULATORS ON POLE BETWEEN THE TOP AND MIDDLE TIER. INSTALL JUMPERS CONNECTING THE CONDUCTORS ON THE POLE P2 SIDE OF THE TOP TIER DOWN TO THE CONDUCTORS ON THE POLE P0 SIDE OF THE MIDDLE TIER. TIE OFF THE JUMPERS TO THE NEW INSULATORS ON THE POLE.

2 POLE P1 & P2
NO SCALE



3 POLE P3
NO SCALE



4 POLE P4
NO SCALE

5 POLE P5
NO SCALE

6 POLE P6
NO SCALE

7 POLE P7
NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

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KCN12_000
TAB: U22

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EX-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

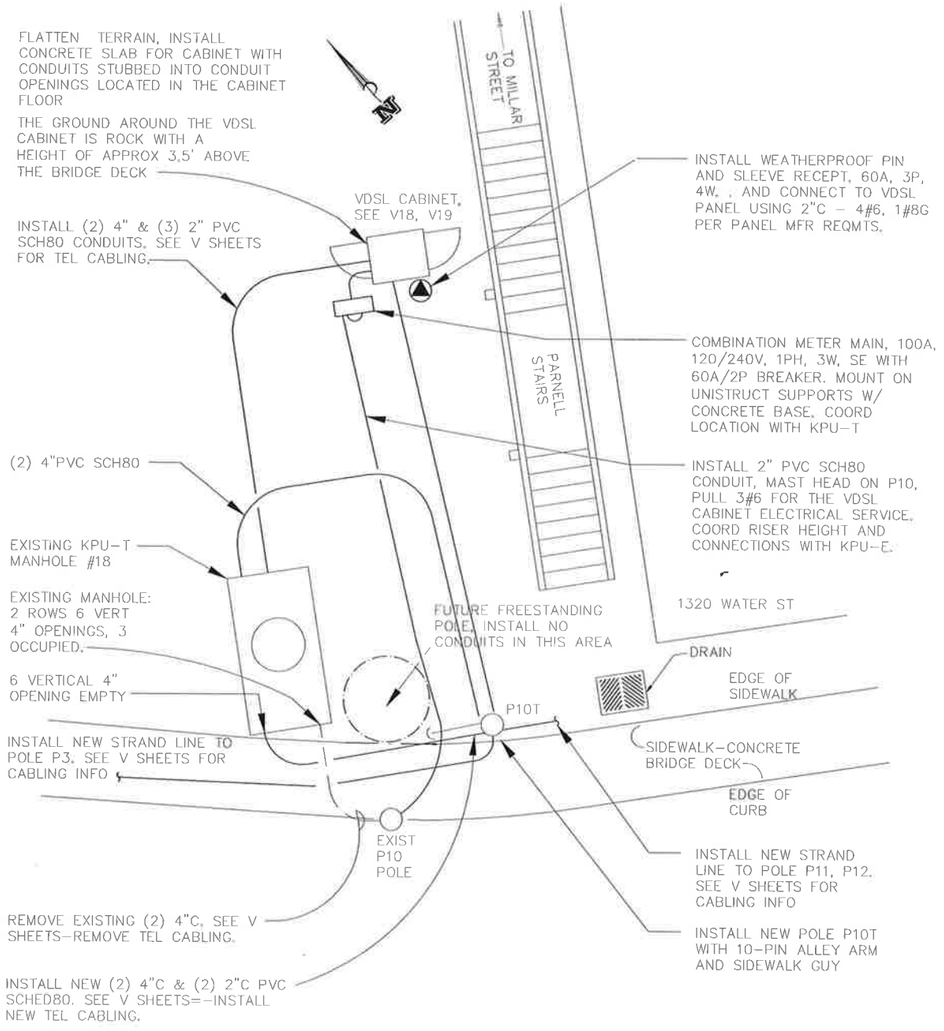
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

POLE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014

SHEET NUMBER	TOTAL SHEETS
U22	78



1 VDSL CABINET

SCALE: 1/4" = 1'-0"

COORDINATE THE TELEPHONE CONDUIT INSTALLATION AND MANHOLE MODIFICATIONS WITH KPU–T PRIOR TO INSTALLATION. ALSO DETERMINE WITH KPU–T INSTALLING NEW COMM CABLES WITH ENOUGH SLACK TO SWING THEM OVER TO A FUTURE FREESTANDING POLE.

2 P10 & CABINET LOCATION

NO SCALE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KCN Date 1/16/16

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KCN12_000

TAB U20

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

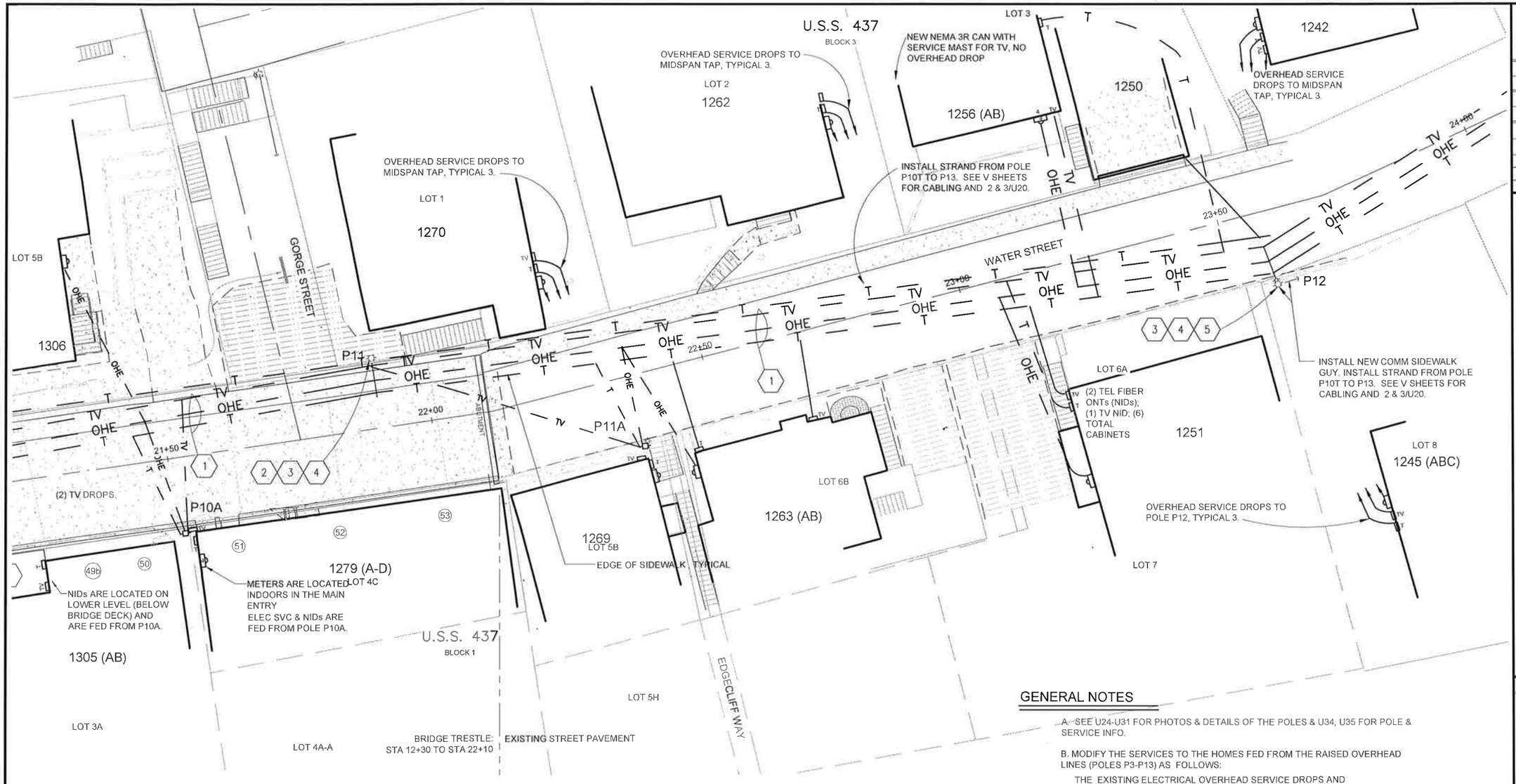
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT #69548

ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U20	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

ELECTRICAL NOTES

1. EXISTING OVERHEAD MOUNTED ON ALLEY ARMS: 12.47KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, INSTALL 120/240V AND COMM SYSTEMS HIGHER ON THE POLE., WHEN THEY ARE OPERATIONAL DEMO THE EXISTING SYSTEMS. SEE U22, U23 FOR POLE PHOTOS.
2. INSTALL NEW 120/240V CROSSARM, SYSTEM NEUTRAL, 120/240V DISTRIBUTION UP ON THE POLE AT POLE P11. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE 120/240V SYSTEMS HAVE MOVED UP ON THE POLE P11, INSTALL NEW COMM CROSSARM . SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES, NEW 900 PAIR CU. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.
5. EXISTING OVERHEAD MOUNTED ON ALLEY ARMS: 12.47KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, INSTALL COMM SYSTEMS HIGHER ON THE POLE. WHEN THEY ARE OPERATIONAL DEMO THE EXISTING SYSTEMS. SEE U23 FOR POLE PHOTOS.
6. INSTALL NEW COMM CROSSARM DOUBLE ARM 10 PIN ALLEY. SEE V SHEETS FOR RAISING EXISTING COPPER & FIBER OPTIC CABLES, INSTALL NEW 900 PAIR, ADJUST TEL SERVICE DROPS

DISTRIBUTION CABLE AND DROPS TO THE HOMES, NEW 900 PAIR CU. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG

KCN12_000

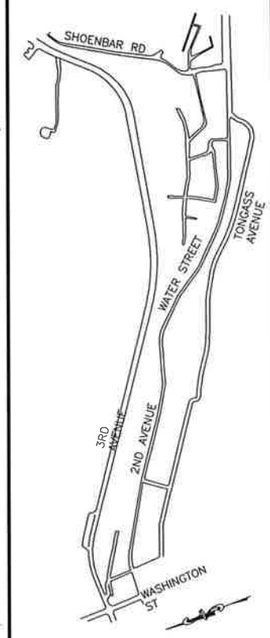
TAB: U17

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

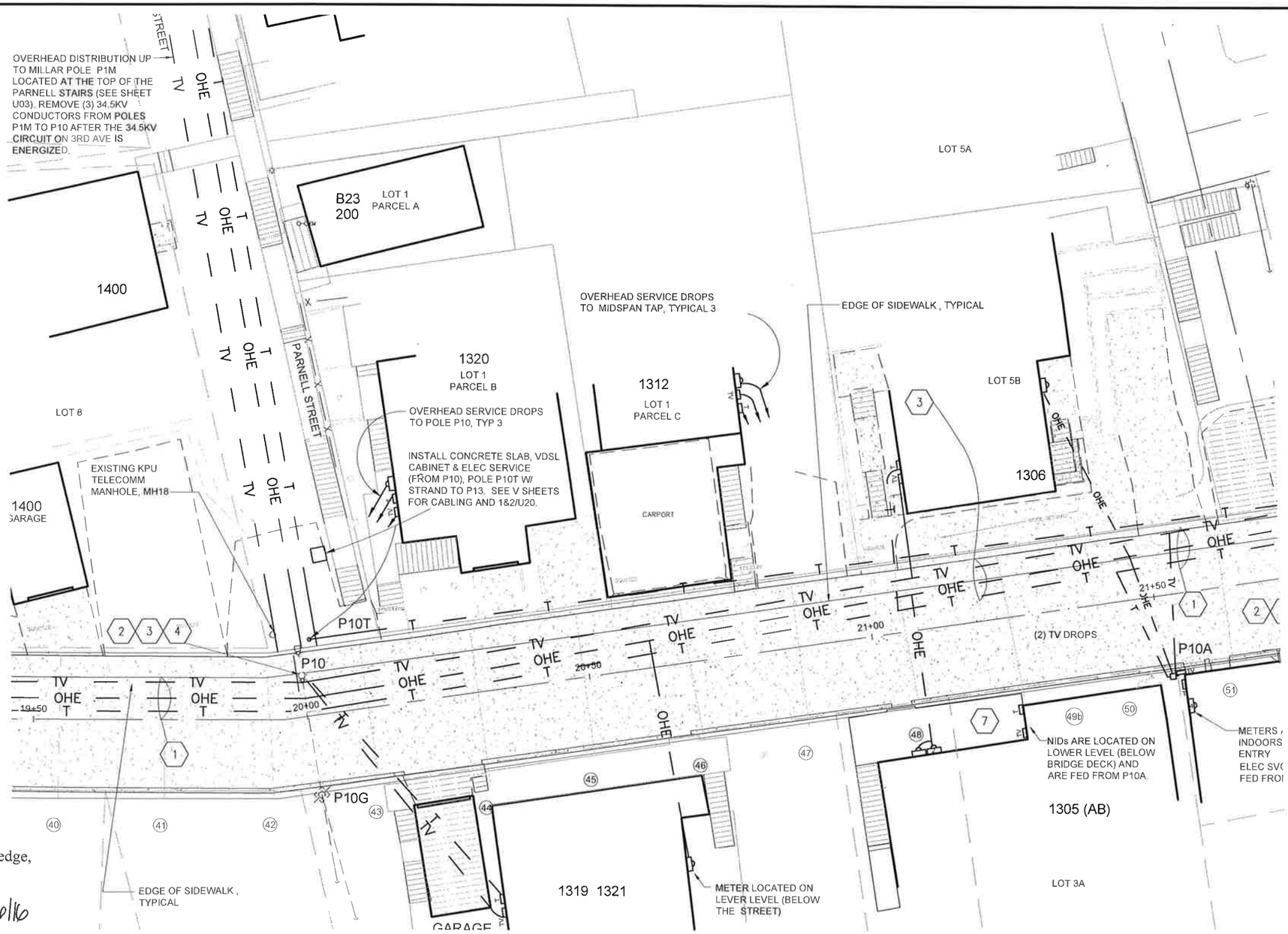
KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION

BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U17	78



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE BETWEEN P3-P10 AND CROSSARMS ON POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P3 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P2 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

GENERAL NOTES

A. SEE U FOR PHOTOS OF THE POLES.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG

KCN12_000

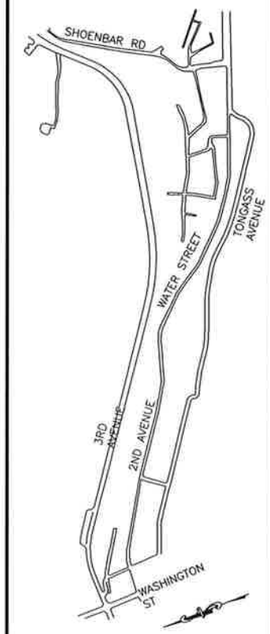
TAB: U16

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

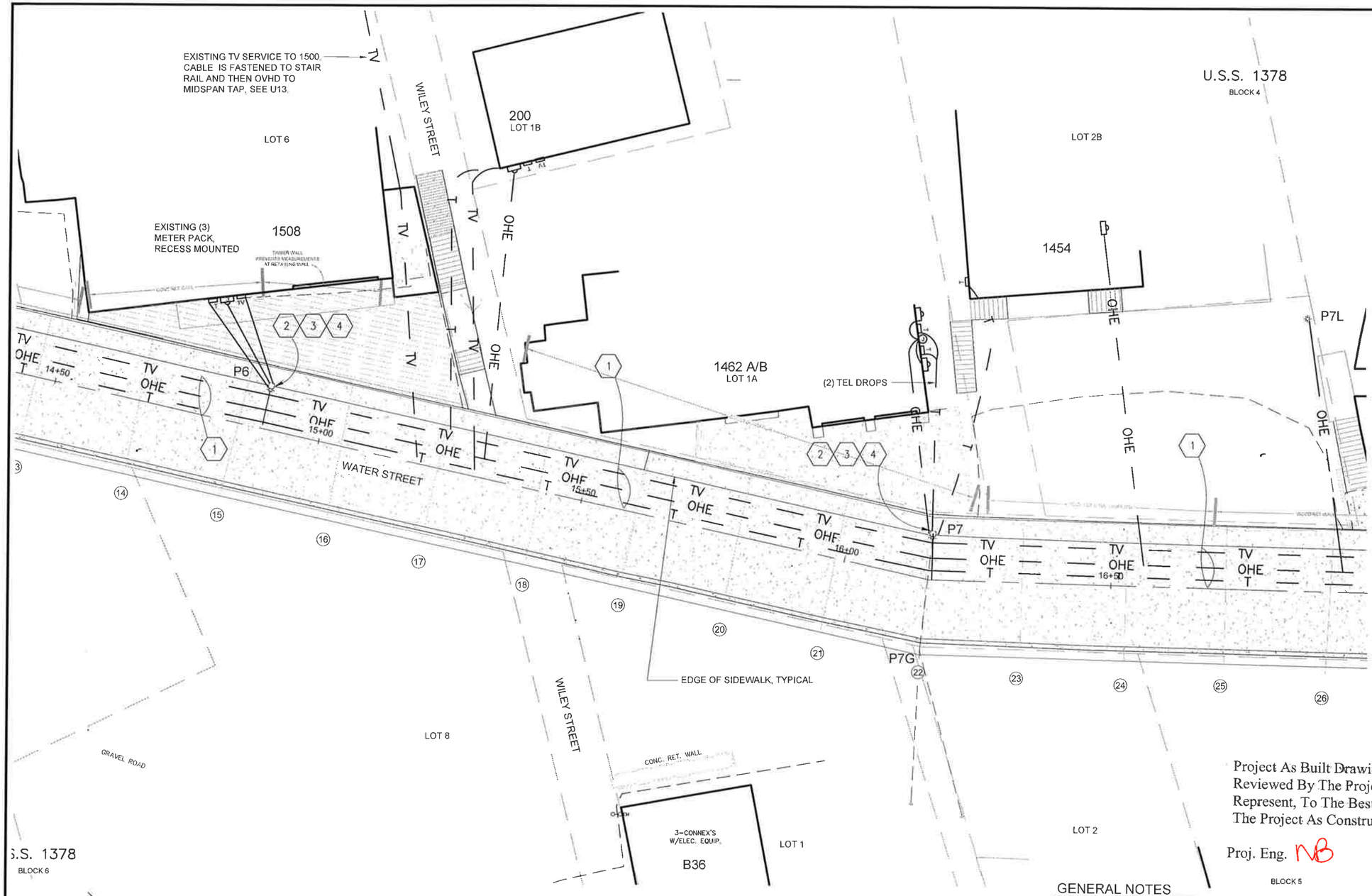
KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION

BR-000S(735) ~69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U16	78



ELECTRICAL NOTES

1. EXISTING OVERHEAD 34.5KV, 12KV, 120/240V DISTRIBUTION, CABLE TV, AND TEL DISTRIBUTION. AFTER THE 12.47KV DISTRIBUTION IS JUMPERED TO THE TOP TIER AT POLES P1 AND P10, REMOVE 12.47KV LINE AND CROSSARMS POLES P4-P9. SEE U22, U23 FOR POLE PHOTOS.
2. MOVE THE SYSTEM NEUTRAL, 120/240V STREET LIGHTS, TRANSFORMERS UP ON THE POLE FROM POLE P4 TO P10. EXTEND 120/240V SERVICE DROPS TO THE HOMES AS REQUIRED BY THE NEW HEIGHTS.
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P2 TO P10, INSTALL NEW COMM CROSSARMS FROM POLE P4 TO P10. SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP3 TRUNK RELOCATION\WSB AUR U01+12-17 BRIDGE.DWG

KCN12_000

TAB: U14

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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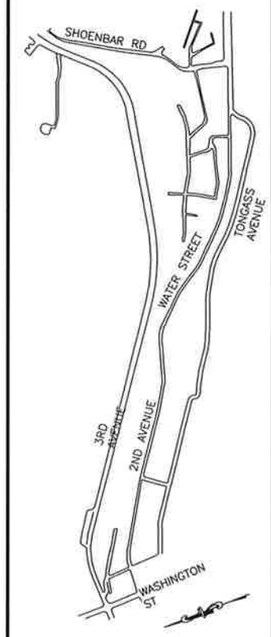


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7655 8-27-14

DESIGNED BY: KCN

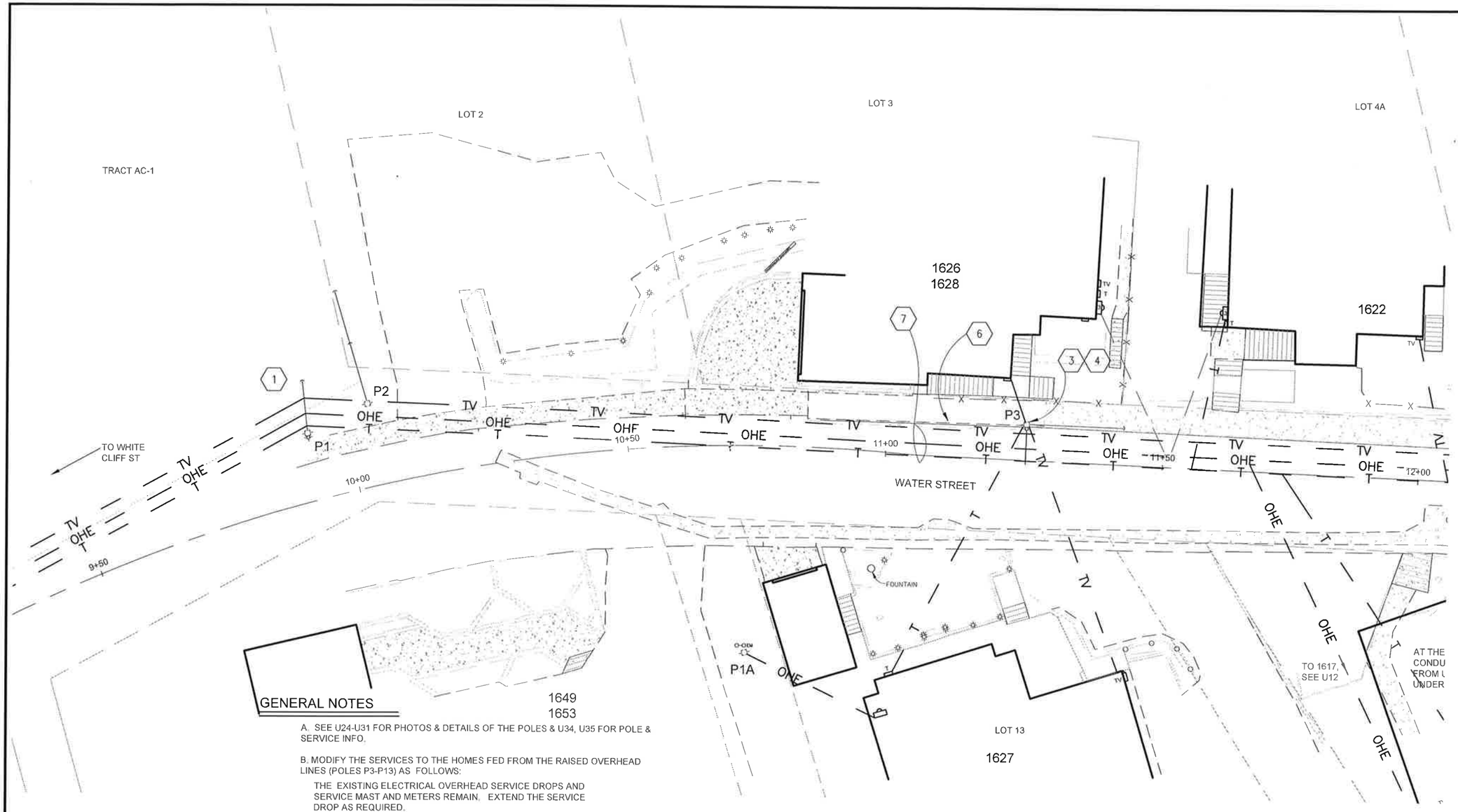
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN WATER ST. ELECT

PROJECT DESIGNATION	
BR-000S(735) ~69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U14	78



GENERAL NOTES

A. SEE U24-U31 FOR PHOTOS & DETAILS OF THE POLES & U34, U35 FOR POLE & SERVICE INFO.

B. MODIFY THE SERVICES TO THE HOMES FED FROM THE RAISED OVERHEAD LINES (POLES P3-P13) AS FOLLOWS:

THE EXISTING ELECTRICAL OVERHEAD SERVICE DROPS AND SERVICE MAST AND METERS REMAIN. EXTEND THE SERVICE DROP AS REQUIRED.

SEE V SHEETS: REMOVE EXISTING TELEPHONE OVERHEAD COPPER SERVICE DROP AND NID. INSTALL NEW FIBER DROP AND FIBER NID.

EXISTING TV OVERHEAD SERVICES TO THE HOMES REMAIN. COORD W/ GCI - GCI WILL EXTEND DROPS AS REQUIRED.

ELECTRICAL NOTES

1. AFTER NEW 3RD AVE 34.5KV UNDERGROUND CIRCUIT IS ENERGIZED: REMOVE THE 12.47KV CONDUCTORS BETWEEN P1 TO P10 AND THEIR CROSSARMS ON P2-P9. REMOVE EXISTING 34.5KV POST TOP INSTALLATION AND INSTALL 34.5KV DOUBLE DEADEND WITH NO JUMPERS. REMOVE EXISTING 12.47KV POST TOP INSTALLATION AND INSTALL 12.47KV DEADEND ON THE UPHILL SIDE OF THE POLE. INSTALL 12.47KV AND 35KV GUYS. ON THE UPHILL SIDE OF THE POLE JUMPER THE 12.47KV DISTRIBUTION TO THE DEENERGIZED 34.5KV TOP TIER.A
2. NOTE NOT USED
3. AFTER THE ELECTRICAL SYSTEMS HAVE MOVED UP ON THE POLES FROM P4 TO P10 AND NEW COMM CROSSARMS INSTALLED FROM POLE P4 TO P11 - SEE V SHEETS: INSTALL NEW FIBER OPTIC DISTRIBUTION CABLE AND DROPS TO THE HOMES. REMOVE THE EXISTING COPPER TELEPHONE DISTRUBITION FROM THE POLES, COPPER SERVICE DROPS TO THE HOMES, AND NIDs ON THE HOME.
4. COORDINATE WITH GCI THE PROJECT SCHEDULE THAT MOVES THE TELEPHONE DISTRIBUTION UP ON THE POLES. GCI WILL MOVE THEIR TV DISTRIBUTION UP ON THE POLES AND EXTEND SERVICE DROPS TO THE HOMES AS REQUIRED.
5. EXISTING OVERHEAD INSTALLATION: 34.5KV 3 PHASE, 12.47KV 3 PHASE, 120/240V FOR STREET LIGHTS AND HOMES, GCI & KPU-T CABLING, TYPICAL. REMOVE 12.47KV CONDUCTORS. ADJUST SERVICE DROPS TO THE HOMES.
6. INSTALL NEW GUY FOR KPU-T FIBER OPTIC LINE.
7. EXISTING OVERHEAD INSTALLATION: 34.5KV 3 PHASE, 12.47KV 3 PHASE, GCI & KPU-T CABLING, TYPICAL. REMOVE 12.47KV CONDUCTORS.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-NTP9 TRUNK RELOCATION\WSB AUR U61+12-17 BRIDGE.DWG

KCN12_000

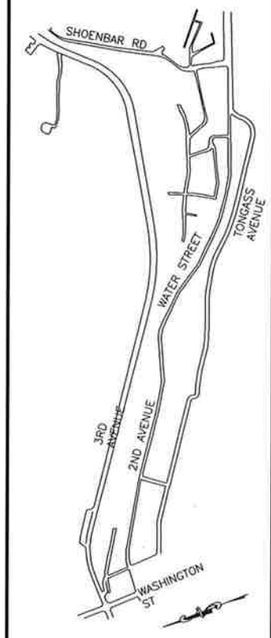
TAB: U12

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: TED

DESIGNED BY: KCN

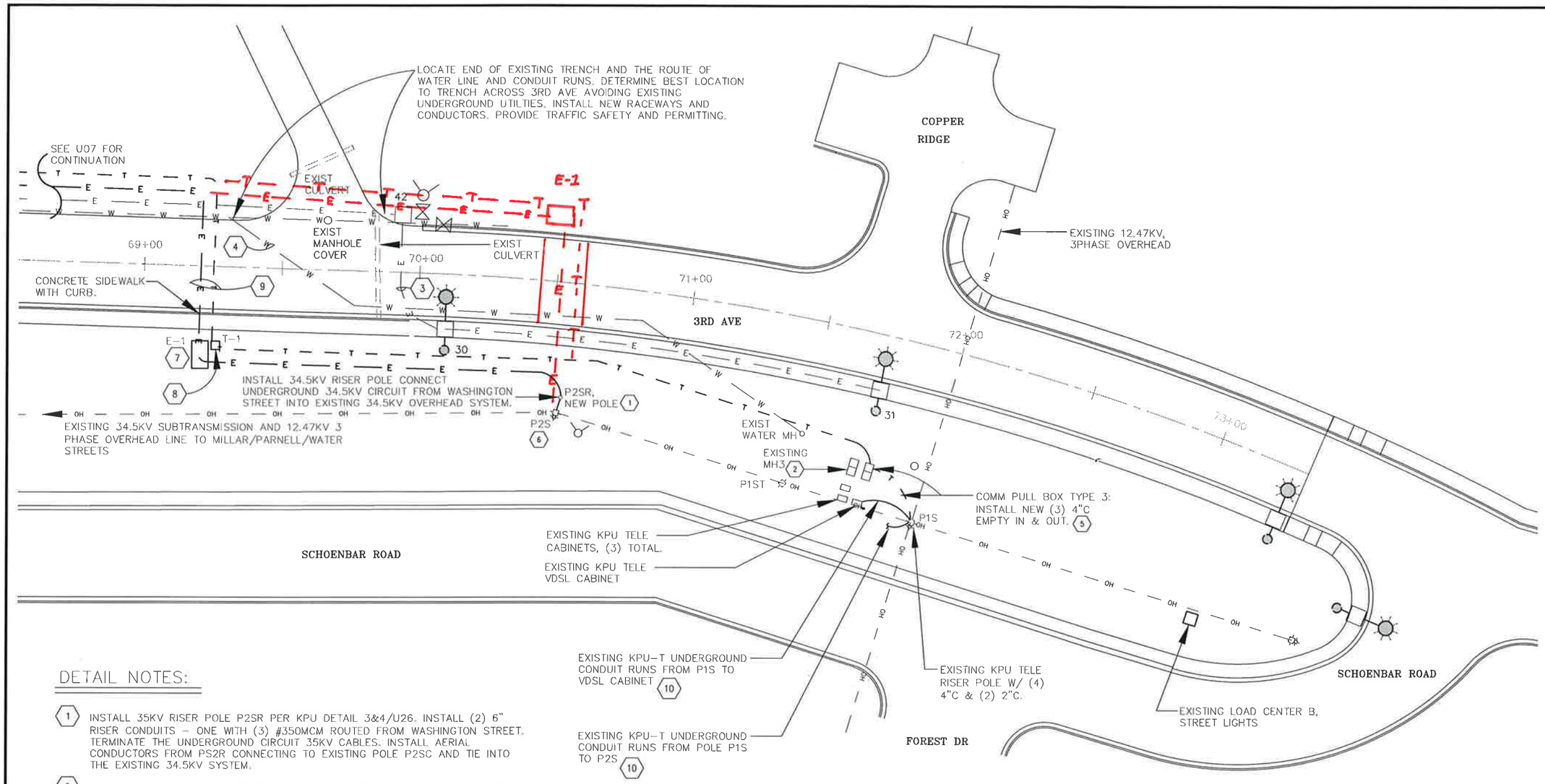
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNKLINE
RELOCATION
PROJECT #69548

UTILITY PLAN
WATER ST. ELECTRIC

PROJECT DESIGNATION	
BR-000S(735) ~69458	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U12	78



DETAIL NOTES:

1. INSTALL 35KV RISER POLE P2SR PER KPU DETAIL 3&4/U26. INSTALL (2) 6" RISER CONDUITS – ONE WITH (3) #350MCM ROUTED FROM WASHINGTON STREET. TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES. INSTALL AERIAL CONDUCTORS FROM PS2R CONNECTING TO EXISTING POLE P2SC AND TIE INTO THE EXISTING 34.5KV SYSTEM.
2. EXISTING KPU-T MANHOLE (MH3) WITH EXISTING 2"C W/ FIBER CABLE FROM WASHINGTON RISER POLE AND (3) 4"C TO POLE P1S.
3. LOCATION OF THE STREET LIGHTING CIRCUIT CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION.
4. LOCATION OF THE WATER LINE CROSSING 3RD AVE PER AS-BUILT DRAWINGS. CONFIRM LOCATION
5. INSTALL NEW PULL BOX AND INSTALL (3) SETS OF CONDUITS IN AND OUT OF BOX: (1) 4"C FOR 662(2) & (2) 4"C FOR 662(3). THE CONDUITS TERMINATING ON P1S SHALL MATCH EXISTING RISER CONDUIT INSTALLATION.
6. INSTALL NEW CROSSARM W/ 34.5KV DEADEND HARDWARE AND 34.5KV 3 PHASE OVERHEAD CONDUCTORS CONNECTING TO NEW RISER POLE P2S. ALSO JUMPER NEW OVERHEAD CONDUCTORS TO THE EXISTING 34.5KV LINE LOCATED ON THE TOP TIER OF P2S.
7. PULL BOX, TYPE 4 FOR ELECTRIC (KPU-E), SETS OF CONDUIT RUNS IN & OUT:
   (1) 6"C W/ 35KV CABLING;
   (1) 6"C EMPTY
   (1) 4"C EMPTY, WORK IN 662(3)
8. PULL BOX, TYPE 2 FOR TELECOMM: INSTALL NEW (3) 4"C EMPTY IN & OUT:
   (1) SET FOR 662(2)
   (2) SET FOR 662(3)
9. SAWCUT 3RD AVE AND SIDEWALK, SEE 1/U09 & F SHEETS FOR ADDITIONAL INFO. CONTRACTOR'S OPTION: IT IS PERMISSIBLE TO BORE UNDER THE ROADWAY AND SIDEWALK. EXCAVATIONS SHALL BE BACKFILLED PER SPEC SECTION 203 & 204 –TOP COURSE SHALL MATCH EXISTING FINISH SURFACE.
10. INSTALL NEW 25 PAIR CABLE IN EXISTING CONDUIT FROM EXISTING VDSL CABINET TO POLE P2S. TERMINATE IN CABINET AND NEW AERIAL TERMINAL ON POLE P2S, SEE V SHEETS.

1 SCHOENBAR ISLAND PLAN
SCALE: 1" = 20'

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: XXX

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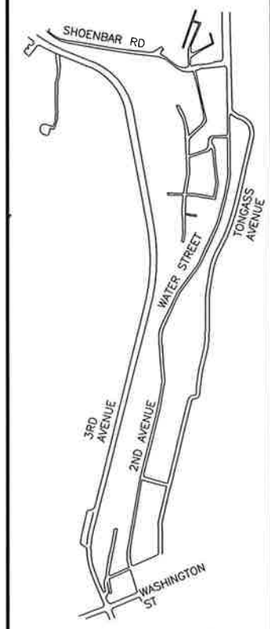
ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7855 8-27-14

DESIGNED BY: KCN

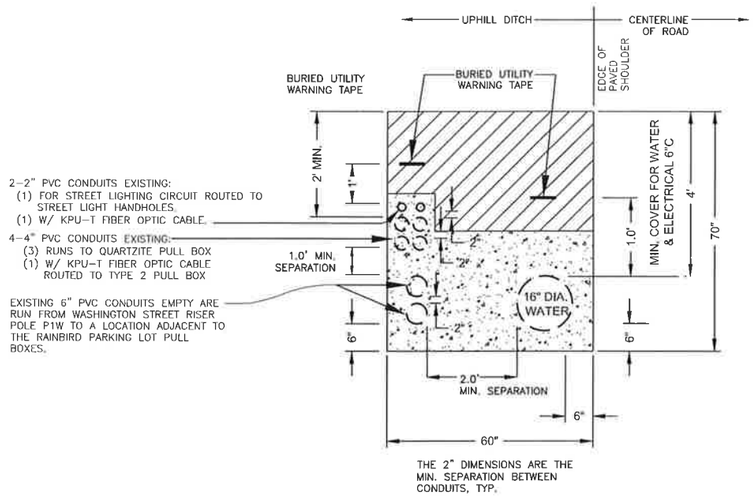
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT #69534

SCHOENBAR PLAN

PROJECT DESIGNATION	
BR-000S(735) ~ 69354	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U10	78



EXISTING LAYOUT

DETAIL NOTES:

A THE DETAIL SHOWS THE EXISTING TRENCH CONSTRUCTION PER A DOT AS-BUILT.

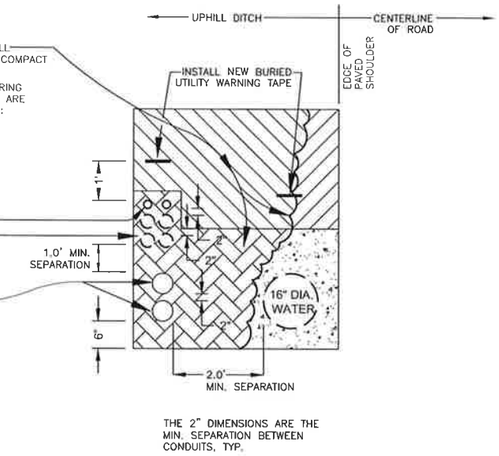
B THE EXISTING TRENCH ALONG 3RD AVENUE WAS BLASTED OUT OF A BEDROCK SUBSTRATE. SEE 2/U09 FOR PHOTO OF EXISTING CONSTRUCTION.

C DOT AS-BUILTS INDICATE THAT FROM WASHINGTON ST TO RAINBIRD PARKING AREA NEAR STA 30+00 THE WATER LINE IS RUN UNDER THE 3RD AVE PAVEMENT. THE ELECTRICAL CONDUITS ARE RUN IN A SEPARATE TRENCH ALONG SIDE 3RD AVE, SEE U04.

1 TRENCH DETAIL - NEAR RAINBIRD PARKING LOT

NO SCALE

THESE DETAILS PROVIDE INFO ABOUT THE TRENCH INSTALLATION FROM WASHINGTON & 3RD TO RAINBIRD PARKING AREA NEAR STA 30+00

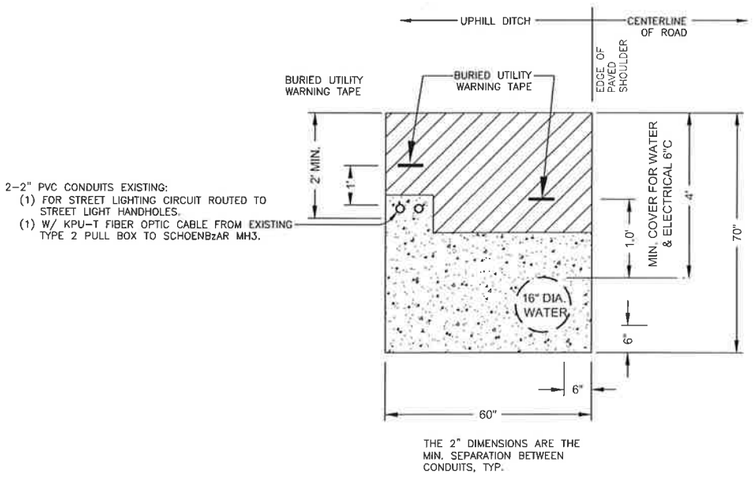


NEW WORK NEAR RAINBIRD PARKING LOT

DETAIL NOTES:

A BACKHOE AND HAND DIGGING IN THE TRENCH AREA ARE PERMISSIBLE. ROCK HAMMER DRILL, SAWCUT, AND DITCH WITCH ARE PERMISSIBLE IN AREAS OUTSIDE THE EXISTING TRENCH AREA. BLASTING IS NOT PERMITTED.

B SEE SHEET B01 FOR ADDITIONAL TRENCH INFO AND SPEC 204 FOR ADDITIONAL REQUIREMENTS INCLUDING 204-3.01 FOR THE MAX. LENGTH OF TRENCH THAT CAN BE OPEN AT ONE TIME, SHORING AND DEWATERING REQUIREMENTS.



EXISTING LAYOUT

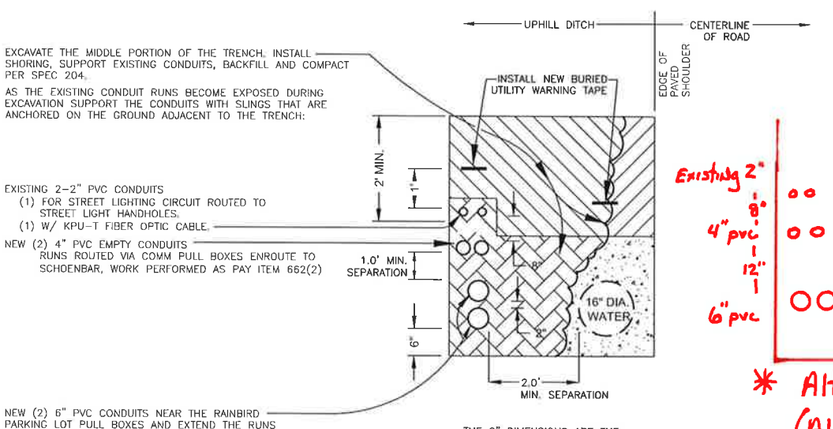
DETAIL NOTES:

A THE DETAIL SHOWS THE EXISTING TRENCH CONSTRUCTION PER A DOT AS-BUILT.

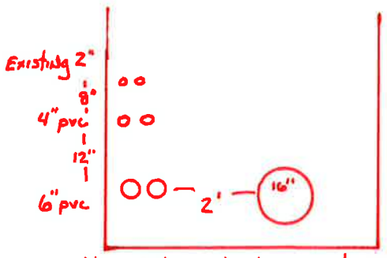
B THE EXISTING TRENCH ALONG 3RD AVENUE WAS BLASTED OUT OF A BEDROCK SUBSTRATE. SEE 2/U09 FOR PHOTO OF EXISTING CONSTRUCTION.

2 TRENCH DETAIL - RAINBIRD TO SCHOENBAR

NO SCALE



* As Designed (AD)



* Alternate Layout (AL)

NEW WORK

DETAIL NOTES:

A BACKHOE AND HAND DIGGING IN THE TRENCH AREA ARE PERMISSIBLE. ROCK HAMMER DRILL, SAWCUT, AND DITCH WITCH ARE PERMISSIBLE IN AREAS OUTSIDE THE EXISTING TRENCH AREA. BLASTING IS NOT PERMITTED.

B SEE SHEET B01 FOR ADDITIONAL TRENCH INFO AND SPEC 204 FOR ADDITIONAL REQUIREMENTS INCLUDING 204-3.01 FOR THE MAX. LENGTH OF TRENCH THAT CAN BE OPEN AT ONE TIME, SHORING AND DEWATERING REQUIREMENTS.

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PATH: XXX

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TAB: U08 8/28/2014 10:45 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69534

3rd AVE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69354

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U08	78

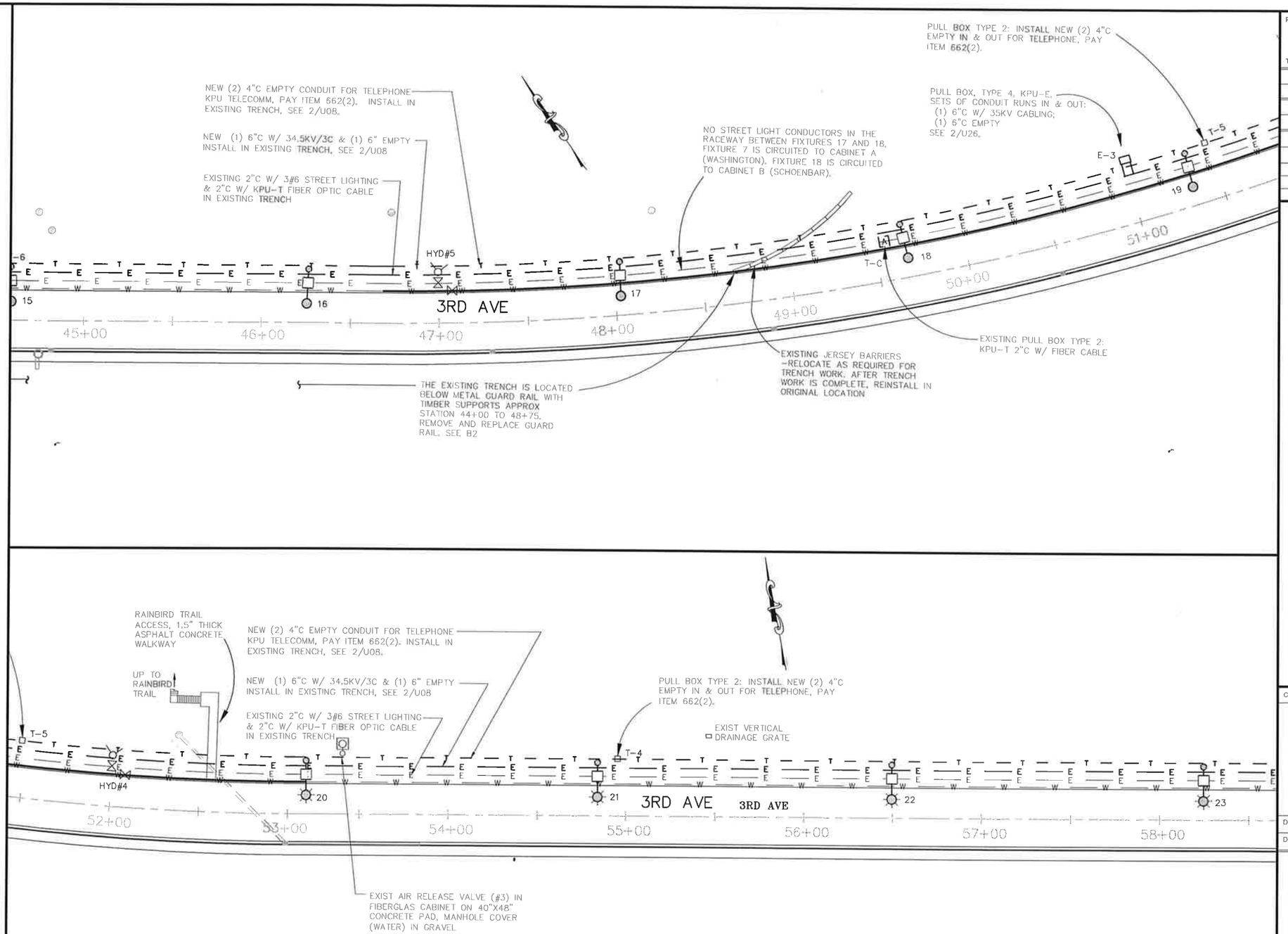
GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3/C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1.02



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. MB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: XXX

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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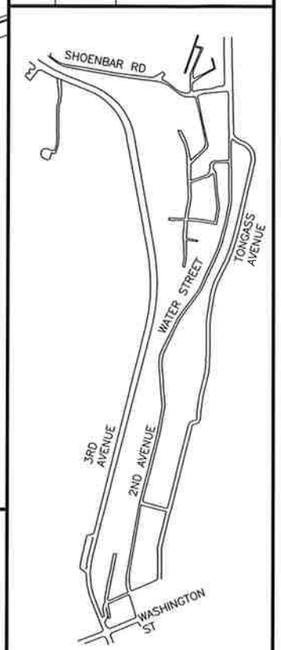


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U06	78

GENERAL NOTES:

A. EXISTING ELECTRICAL EQUIPMENT AND CIRCUITING IS TO REMAIN UNLESS OTHERWISE NOTED. THE DRAWINGS SHOW EXISTING TRENCH, ELECTRICAL CIRCUITS AND WATER LINE BASED ON AS-BUILT INFO. FIELD CONFIRM ALL INFO.

B. THERE ARE TWO EXISTING 6"C RUN FROM THE WASHINGTON STREET RISER POLE TO THE RAINBIRD PARKING LOT JBOX. EXTEND THE (2) EXISTING 6"C FROM THE RAINBIRD PARKING LOT JBOX TO SCHOENBAR W/ (2) NEW 6"C. ONE CONDUIT IS A SPARE. IN THE OTHER CONDUIT INSTALL #350MCM 35KV 3/C CABLING FROM THE WASHINGTON STREET RISER POLE TO THE SCHOENBAR RISER POLE. CONNECT NEW CABLE TO EXISTING 34.5KV OVERHEAD DISTRIBUTION SYSTEM.

C. AN EXISTING TRENCH, WHICH WAS BLASTED OUT OF A ROCK SUBSTRATE, RUNS FROM THE RAINBIRD PARKING LOT TO SCHOENBAR ON THE UPHILL SIDE OF 3RD AVE. DIG INTO THE EXISTING TRENCH TO INSTALL NEW CONDUIT RUNS. FIELD LOCATE ALL EXISTING WATER LINE VALVES, HYDRANTS, UNDERGROUND CONDUIT RUNS, HANDHOLES, LIGHT FIXTURES, ETC. SEE TRENCH DETAILS U5. SEE SPEC SECTION 204 FOR TRENCH EXCAVATION AND OTHER CONSTRUCTION REQUIREMENTS.

D. SEE 2/U26, U18 & U19 FOR PULL BOX INSTALLATION INFO, 2/U11 FOR HYDRANT INFO. ADDITIONAL INFO ON 3RD AVE BYPASS CONSTRUCTION IS AVAILABLE ON DOT AS-BUILT DRAWINGS, SEE SPEC 662-1,02

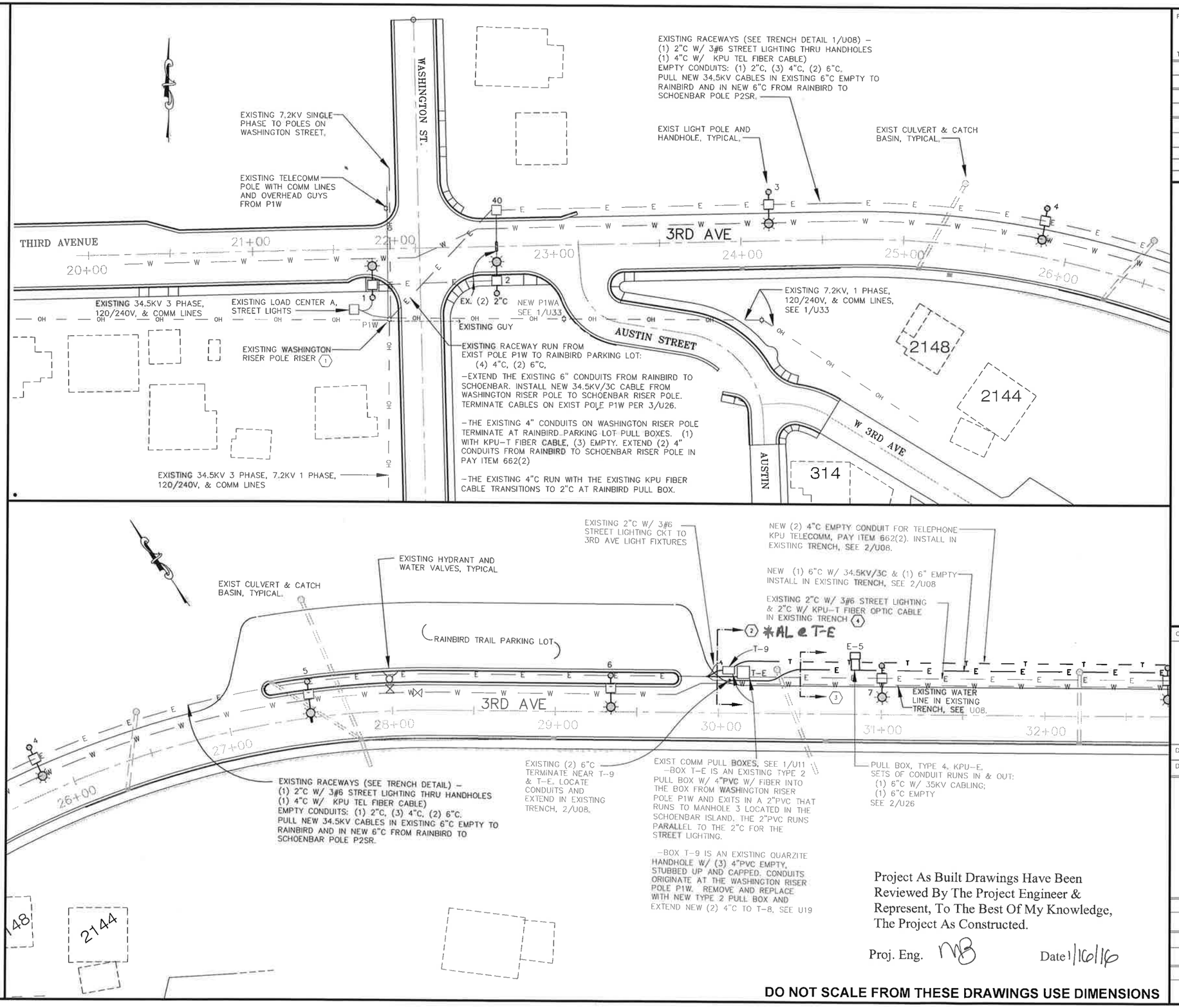
ELECTRICAL NOTES:

1. INSTALL 35KV RISER POLE PER KPU DETAIL (3/U26) AND TERMINATE THE UNDERGROUND CIRCUIT 35KV CABLES TO THE AERIAL 35KV SUBTRANSMISSION CIRCUIT LOCATED ON THE TOP TIER OF THE POLE. DISCONNECT (3) EXISTING JUMPERS AND ASSOCIATED CONNECTORS AT 2ND AND WASHINGTON WHICH CONNECT THE WASHINGTON STREET AND WATER STREET AVE 35KV AERIAL LINES, SEE U03.

2. EXISTING TRENCH FROM RAINBIRD TO WASHINGTON STREET RISER POLE P1W SEE DETAIL 1/U08.

3. EXISTING TRENCH FROM RAINBIRD TO SCHOENBAR. SEE DETAIL 2/U08.

4. THE EXISTING 2"C W/ THE STREET LIGHTING CIRCUIT BYPASSES THE EXISTING PULL BOXES. THE (2) 6"C EMPTY FROM THE WASHINGTON STREET RISER POLE P1W TERMINATE NEAR THE EXISTING PULL BOXES -LOCATE THE ENDS OF THE CONDUITS AND EXTEND THE TWO RUNS TO SCHOENBAR RISER POLE P2SR.



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KCN Date 1/16/16

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PATH: XXX

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ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

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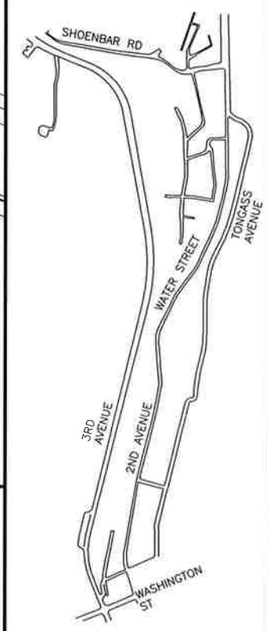

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
PROJECT # 69548

UTILITY PLAN ELECTRICAL 3rd AVE

PROJECT DESIGNATION	
BR-000S(735) ~ 69548	
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U04	78

SYMBOLS AND LEGEND

- EM — ELECTRIC METER
- NETWORK INTERFACE DEVICE, NID (T = TELEPHONE, TV = CABLE TV)
- T — PADMOUNT TRANSFORMER
- COMBINATION METER MAIN / METER PACK
- POWER POLE / POWER POLE W/LIGHT
- PS — POWER POLE W/ SIDEWALK ARM & POLE #
- EXIST LIGHT POLE W/ SIDEWALK BOX & POLE #
- EXIST LIGHT POLE / LIGHT POLE W/MASTARM
- GUY
- TV — CABLE TELEVISION LINE – GCI
- E — ELECTRIC UNDERGROUND – KPU ELECTRIC
- OH — ELECTRIC OVERHEAD – KPU ELECTRIC
- T — TELEPHONE – KPU TELECOMM
- W — WATER LINE
- J — JUNCTION BOX
- PULL BOX
- WATER VALVE
- CULVERT
- HYDRANT

- BOLLARD / POST
- BRIDGE BENT No. (TYP.)
- BUILDING DESIGNATION (TYP.)
- CATCH BASIN
- DECIDUOUS / CONIFER / BUSH
- GATE POST
- GUTTER / DOWNSPOUT
- GUTTER – UNDERGROUND
- MAIL BOX
- SIGN
- FENCE
- GUARDRAIL
- SURVEY LIMITS
- TREE / BRUSH LINE
- UNDERGROUND FUEL LINE
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM DRAIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE

HATCH PATTERN LEGEND

- ASPHALT
- BEDROCK
- BUILDING
- CONCRETE
- DRIVEWAY – WOOD
- GRAVEL
- LANDING PLATFORM / DECK
- STAIRS – BRICK
- STAIRS – METAL / WOOD

ABBREVIATIONS

CoK	CITY OF KETCHIKAN
GCI	GCI (CABLE TV COMPANY)
KPU–E	KPU ELECTRICAL DIVISION
KPU–T	KPU TELECOMMUNICATIONS DIVISION
KV	KILOVOLT
NID	NETWORK INTERFACE DEVICE

U and V Sheets Project Notes:

General Information:

- The intent of the AUR project is to relocate 34.5kV aerial circuit out of the project work area and arrange the remaining existing Water Street aerial infrastructure to provide additional working clearance for the heavy equipment to operate during the next phase of work, bridge constructione.
- Prior to the start of the work the Contractor shall meet with the DOT, KPU-E, KPU-T, GCI and the City to discuss project schedule, sequence of work, and methods to handle outages. Work cannot proceed until the issues are agreed upon.
- All electrical work shall comply with KPU safety programs including OSHA clearances and fire protective clothing policy. All electrical installation work shall comply with KPU and RUS construction details and specifications. Coordinate with KPU to obtain their latest requirements.
- GCI will perform all work associated with their infrastructure. The contractor shall coordinate the projecct work schedules with GC to allow GCI adequate time to perform their work.
- The bridge will be shored up in work administered by the City of Ketchikan and is scheduled to be completed prior to the start of work in the Advance Utility Relocation (AUR) project. The new load ratings will be posted along the bridge, but in general it will be 50,000 pounds. Specific load rating information can be obtained from the R&M Engineering.

Electrical Scope of Work:

3rd Avenue

- Open the existing 3rd Ave trench; shore and stabilize the trench; see Section 204 for additional trenching info. Maintain service for the existing street lighting circuits, telephone fiber optic system and water line that are installed in the trench. Install new conduit systems, pull boxes and 35kV circuit:
  - (1) 6" conduit system with 34.5kV circuit
  - (1) 6" conduit system for future power from Rainbird to Schoenbar
  - (2) 4" conduit system for future telephone from Rainbird to Schoenbar (installed in Pay Item 662(2))
- Install 35kv risers at existing pole P1W and new pole P2SR. Pull new 35kV triplex in 6" conduit and make connection to the existing 35kV aerial system at Washington and Schoenbar Streets.
- After the 3rd Ave 34.5kV work is energized and accepted by the KPU and DOT, disconnect 34.5kV jumpers at Washington Street and 2nd Ave(see U03) and Schoenbar P1S. Disconnect and remove 35kV conductors, crossarms, insulators and jumpers from Millar pole P1M and Water Street pole P10. All remaining 34.5kV demolition will be done in the future by KPU Electric.
- Water Street - Raise aerial infrastructure to provide additional clearance for bridge construction project:
- Install jumpers from the 12.47kV up to the 34.5kV aerial system at Poles P1 and P10.
- Remove the 12.47kV tier (conductors, crossarms) from poles P1 to P10.
- Move transformers, 120/240 volt circuits, system neutral, and street lights up on the pole into the spaces formerly occupied by the 12.47kV tier. Adjust overhead electrical service drops to the homes; splice in new cabling if required
- Move telecomm infrastructure up on the poles into the spaces formerly occupied 120/240V circuits. Install new telecomm crossarms and fiber optic cable for telephone distribution. Install new fiber optic ONT on the homes and fiber drop to the homes per the V sheets for telephone work and cabling info.
- Coordinate with GCI to have them move their cable plant up onto the new crossarms and adjust overhead drops to their NIDs on the homes.
- Install guys at existing poles P3, P12 and new pole P10T
- Install VDSL cabinet at Parnell; provide power to the cabinet, conduits and telephone cabling. See U20 & V18 sheets for additional info.
- Install hardware in existing VDSL cabinet at Schoenbar; install conduits and telephone cabling. See V sheets for additional info.
- Install new air core pipe and tie into existing air system. Test system per spec 663 requirements. See V sheets for additional info.
- Work with KPU Telecomm to determine the active pairs in 900 pair cable originating in KPU Telecomm Manhole 18. Reterminate cable pairs in (60) aerial terminals to free up cable pairs for the Water Street VDSL.
- Demo KPU-T telephone cables per V sheets.
  - Underground and under the bridge from Pole P1 to P10 via Manholes MH1 and MH2 (1800, 1200, 50 pair copper);
  - Water Street aerial (48 strand fiber, 100 pair copper distribution and overhead service drop copper cables);
  - Parnell Stairs, Millar to Schoenbar aerial systems (1800 and 200 pair copper)
- Coordinate with GCI to have them relocate their cable plant; adjust service drops to the home; remove unused equipment and conductors.

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. KB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: XXX

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7855 8-27-14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

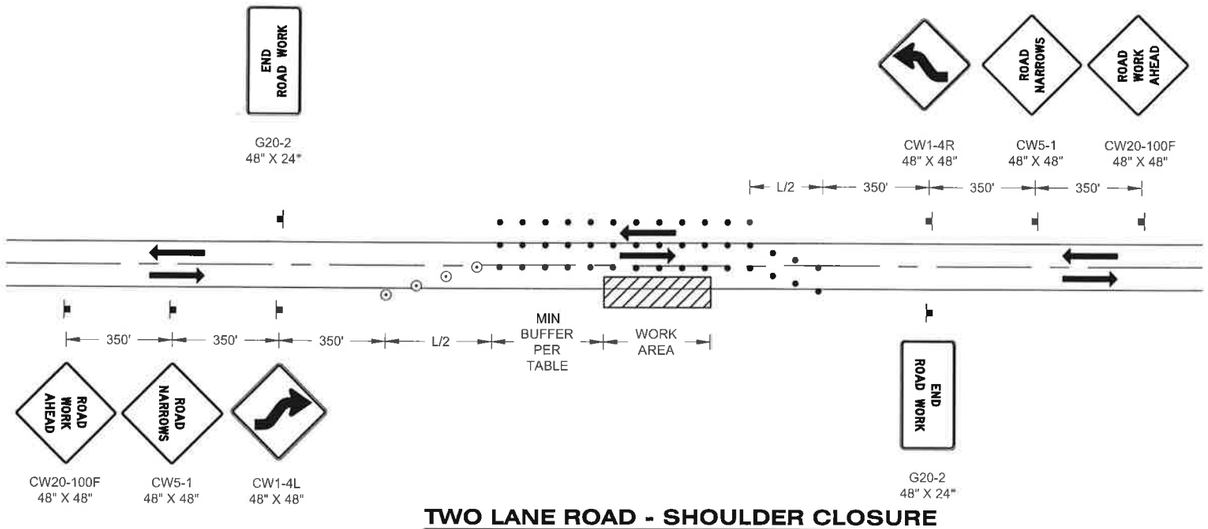
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET TRUNK LINE
RELOCATION
PROJECT # 69548

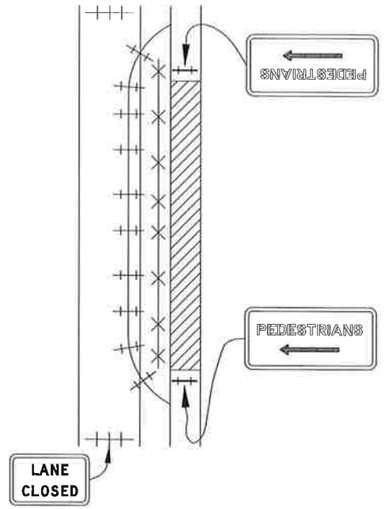
SYMBOL & NOTES

PROJECT DESIGNATION
BR-000S(735) ~ 69548

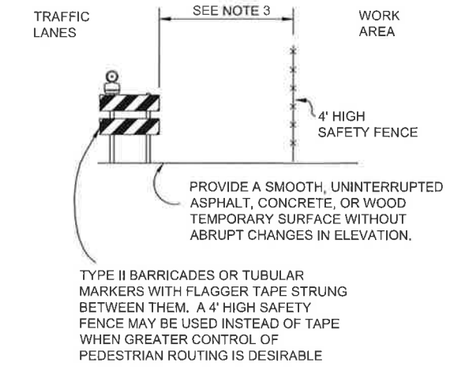
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
U02	78



TWO LANE ROAD - SHOULDER CLOSURE

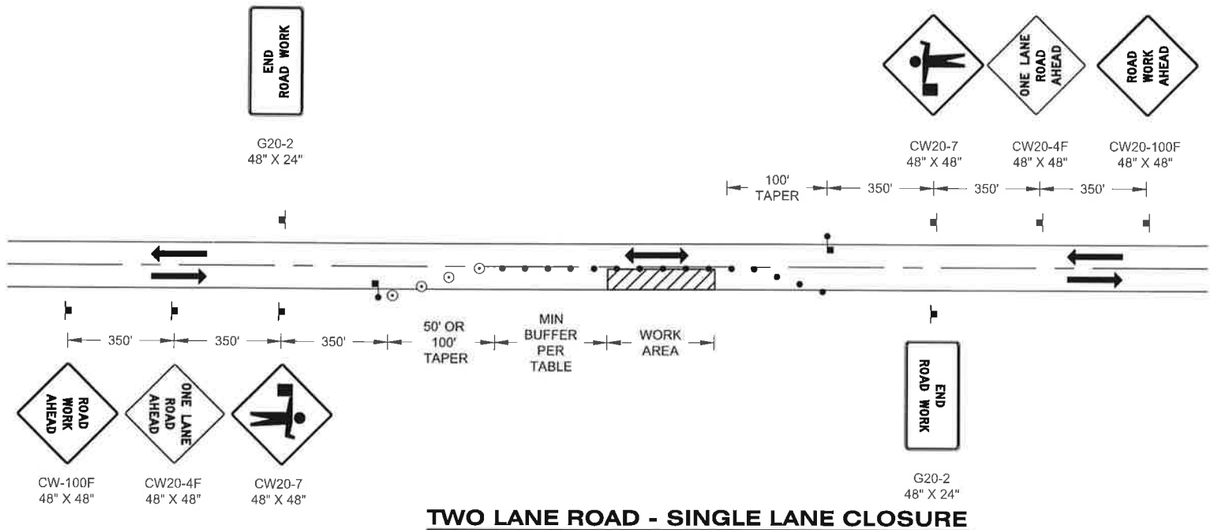


DETAIL A: DETOUR TO SHOULDER OR TRAVEL LANE



DETAIL B: PEDESTRIAN DETOUR TYPICAL SECTION

MID-BLOCK SIDEWALK, PATHWAY OR SHOULDER CLOSURE



TWO LANE ROAD - SINGLE LANE CLOSURE

TCP SETUP TABLE

DESIGN SPEED (MPH)	MIN MERGING TAPER LENGTH(L) IN FEET WIDTH OF OFFSET (W) IN FEET			MIN NUMBER OF DEVICES WIDTH OF OFFSET(W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	(FT)
25 OR BELOW	105	115	125	6	6	6	25	50	155
30	150	165	180	6	7	7	30	60	200
35	205	225	245	7	8	8	35	70	250
40	270	295	320	8	9	9	40	80	305
45	450	495	540	11	12	13	45	90	360
50	500	550	600	11	12	13	50	100	425
55	550	605	660	11	12	13	55	110	495
60	600	660	720	11	12	13	60	120	570

LEGEND

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION
- TYPE II BARRICADE OR TUBULAR MARKER
- TYPE III BARRICADE
- SAFETY FENCE
- WORK AREA

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 10/16

NOTES:

1) TAPERS ARE 6 DEVICES EVENLY SPACED.
2) PROVIDE PEDESTRIAN TRAFFIC CONTROL DEVICES WHEN SIDEWALKS OR PATHWAYS ARE CLOSED TO PEDESTRIANS AND WHERE REQUIRED BY THE PLANS OR SPECIFICATIONS.
3) AVOID ROUTING PEDESTRIANS ACROSS ROADS UNNECESSARILY.
4) MAINTAIN A MINIMUM PEDESTRIAN FACILITY WIDTH OF 5 FEET OR THE WIDTH OF THE FACILITY THAT EXISTED BEFORE CONSTRUCTION, WHICHEVER IS LESS.
5) WHEN PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY THE CURRENT TRAFFIC CONTROL PLAN ARE NOT IN PLACE OR ARE TEMPORARILY REMOVED, PROVIDE A WORKER TO DIRECT PEDESTRIANS THROUGH THE WORK AREA.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME
DESIGNED BY: I.NAME
DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION

TRAFFIC CONTROL PLAN

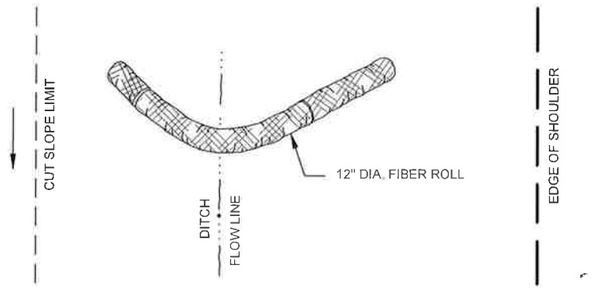
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-T SHEETS(AUR)
PLOT DATE: 8/28/2014 12:07 PM

REVISIONS NO.	DATE	DESCRIPTION

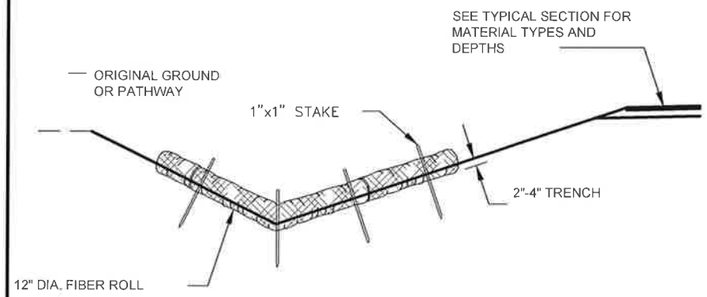
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735) ~ 69548	2014	T02	78

EROSION & SEDIMENT CONTROL NOTES:

1) REFER TO THE CONTRACT DOCUMENTS FOR THE ENVIRONMENTAL COMMITMENTS
2) THE LOCATIONS OF TEMPORARY EROSION & SEDIMENT POLLUTION CONTROLS SHOWN ON THE P SHEETS ARE RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ACCORDING TO SECTION 641 OF THE SPECIFICATIONS
3) INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE BEGINNING EARTH DISTURBING ACTIVITIES
4) IF INSPECTION REVEALS SEDIMENT IS DISCHARGED BEYOND THE PROJECT WORK LIMITS, IMMEDIATELY IMPLEMENT CORRECTIVE ACTION. ADDITIONAL BMP'S MAY BE REQUIRED

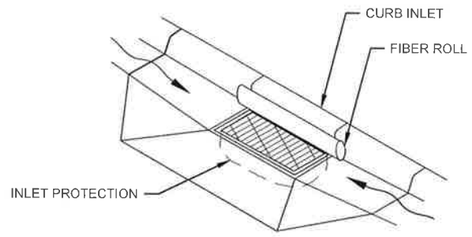


FIBER ROLL CHECK DAM PLAN VIEW
NTS

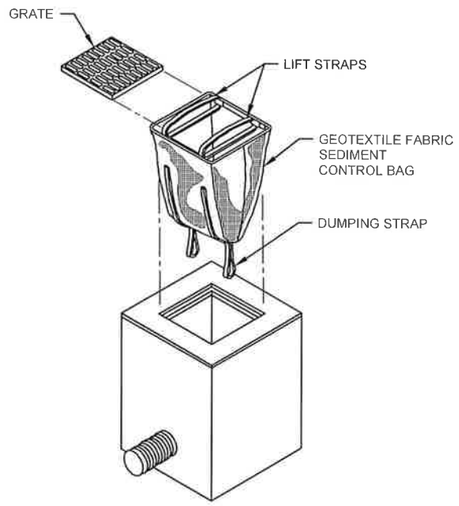


FIBER ROLL CHECK DAM ELEVATION VIEW
NTS

NOTES:
1) FIBER ROLL CHECK DAMS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED ON PLANS OR AS REQUIRED BY THE SWPPP IMMEDIATELY AFTER THE DITCH FLOW LINE HAS BEEN ESTABLISHED
2) SPACE CHECK DAMS ON 100 FOOT CENTERS FOR GRADES BETWEEN 2% AND 5 %. USE CLOSER SPACING FOR STEEPER GRADES UP TO 5% AS REQUIRED BY THE SWPPP
3) FIBER ROLL INSTALLATION FOR CHECK DAMS REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH 2"-4" DEEP. RUNOFF MUST NOT BE ALLOWED TO FLOW UNDER THE ROLL

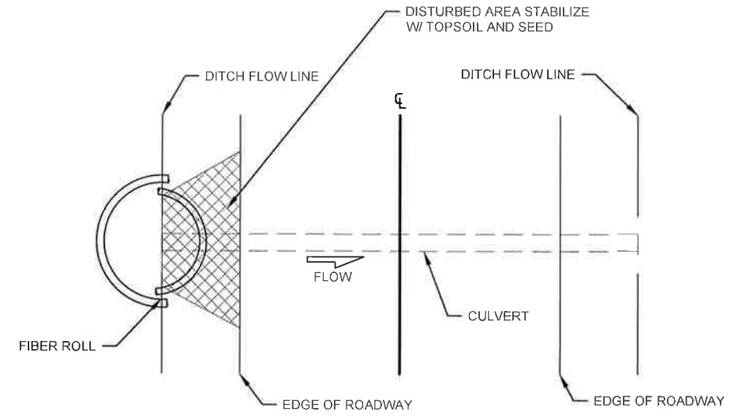


ABOVE GRATE INLET PROTECTION DETAIL
NTS

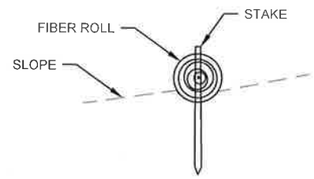


BELOW GRATE INLET PROTECTION DETAIL
NTS

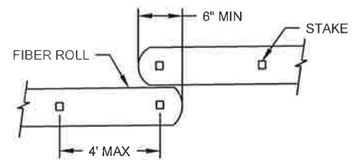
INLET PROTECTION INSTALLATION AND MAINTENANCE:
1) INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENT; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE LIFT STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE SEDIMENT BAGS SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET
2) MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE SEDIMENT BAG. IF THE CONTAINMENT AREA IS MORE THAT 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION
3) INSTALL INLET PROTECTION AT LOCATIONS PRIOR TO EARTH DISTURBING ACTIVITIES



FIBER ROLL PLACEMENT AT CULVERT REPAIRS
NTS



SECTION



FIBER ROLL

FIBER ROLL
NTS

NOTES:
1) THE LOCATION AND LENGTH OF FIBER ROLLS IS DEPENDENT ON THE CONDITION OF THE SITE
2) LAP ADJACENT FIBER ROLLS TO PREVENT SEDIMENT BYPASS
3) ANCHOR AS NECESSARY TO FIRMLY SECURE FIBER ROLLS AND PROVIDE CONTINUOUS CONTACT WITH THE SURFACE ON WHICH IT IS INSTALLED

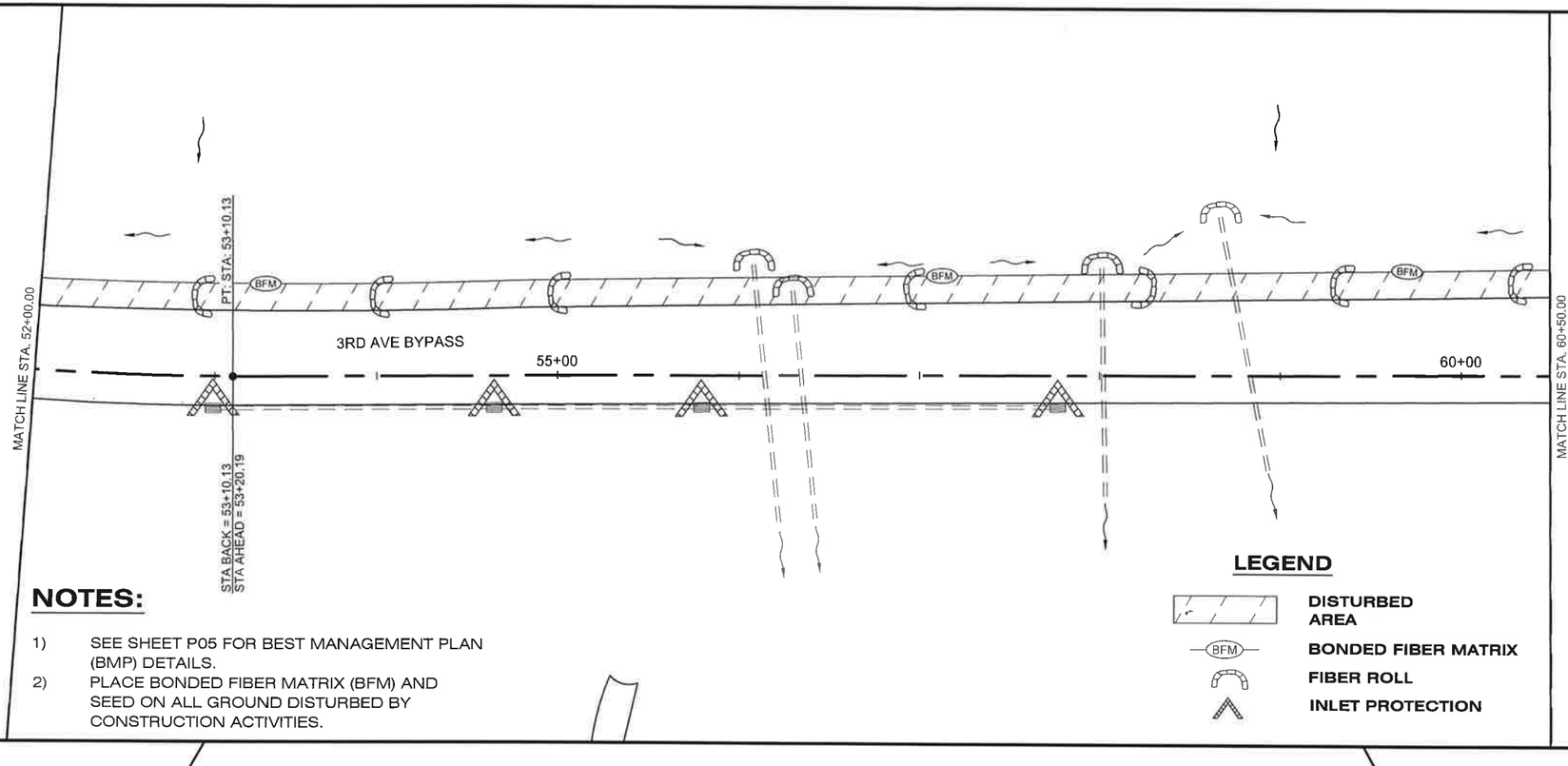
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/6/16

CHECKED BY: I.NAME	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION
STATE OF ALASKA 49TH David Yeatt CE-13268 8/29/14 REGISTERED PROFESSIONAL ENGINEER	KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION
DESIGNED BY: I.NAME	**EROSION SEDIMENT CONTROL PLAN DETAILS**
DRAWN BY: I.NAME	
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CAD\ADV UTILITY RELO\1744.00-P SHEETS(AUR)	PLOT DATE: 8/29/2014 3:55 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	P05	78

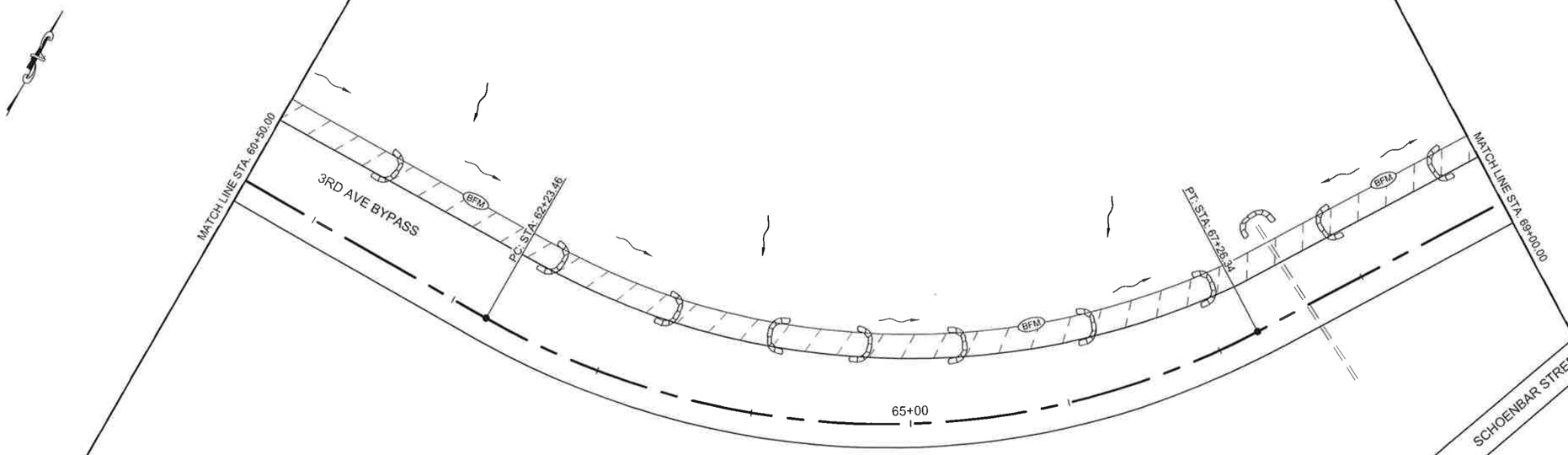


NOTES:

1) SEE SHEET P05 FOR BEST MANAGEMENT PLAN (BMP) DETAILS.
2) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.

LEGEND

- DISTURBED AREA
- BFM — BONDED FIBER MATRIX
- FIBER ROLL
- INLET PROTECTION



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/10/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-P SHEETS(AUR).DWG

RYAN REDICK

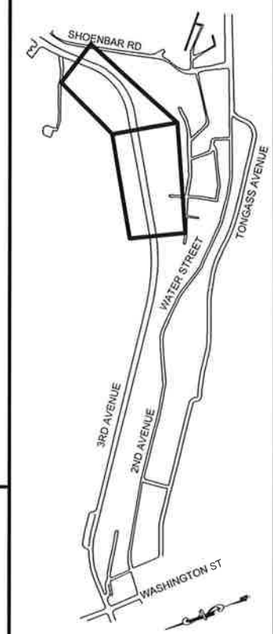
TAB: P03 8/29/2014 3:55 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: I.NAME

STATE OF ALASKA 49TH David Pyeatt 8/29/14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION

EROSION SEDIMENT CONTROL PLAN

PROJECT DESIGNATION

BR-000S(735) ~ 69548

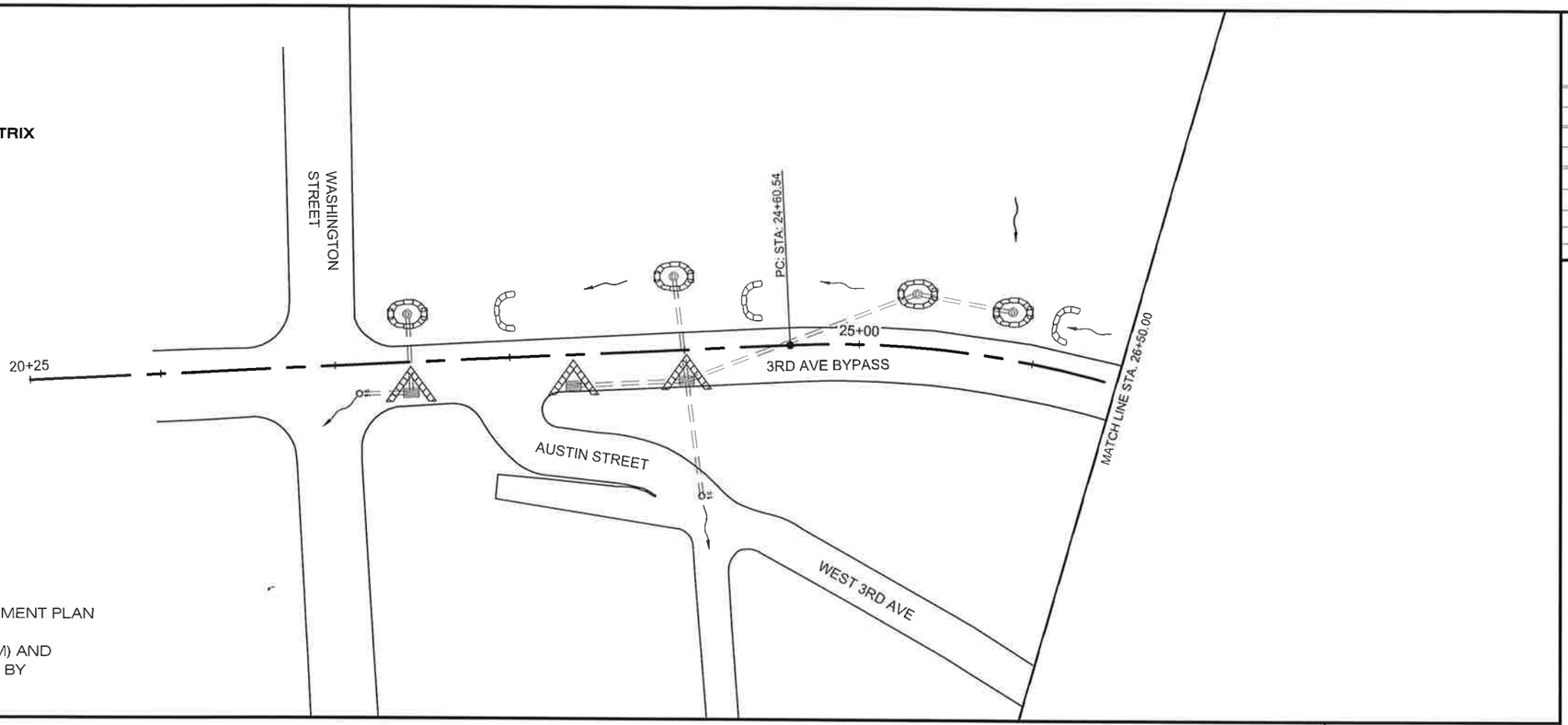
STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
P03	78

LEGEND

- DISTURBED AREA
- BFM — BONDED FIBER MATRIX
- FIBER ROLL
- INLET PROTECTION

NOTES:

1) SEE SHEET P05 FOR BEST MANAGEMENT PLAN (BMP) DETAILS.
2) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.



Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-P SHEETS(AUR).DWG

RYAN REDICK

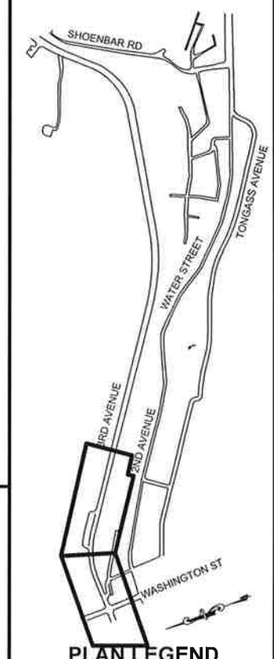
TAB: P01 8/29/2014 3:55 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: I.NAME

STATE OF ALASKA 49TH David Pruett CE-13709 8/29/14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION

EROSION SEDIMENT CONTROL PLAN

PROJECT DESIGNATION

BR-000S(735) ~ 69548

STATE	YEAR
ALASKA	2014
SHEET NUMBER	TOTAL SHEETS
P01	78

606 (5) REMOVING & RECONSTRUCTING GUARDRAIL

SHEET	STATION RANGE			LENGTH (LF)	REMARKS
B01	3RD AVE 44+00		3RD AVE 48+75	482	
			TOTAL	482	

608 (1A) CONCRETE SIDEWALK, 4 INCHES THICK

SHEET	STATION RANGE			AREA (SY)	REMARKS
U05	3RD AVE 70+40		3RD AVE 70+60	12.51	3RD AVENUE CROSSING
			SUBTOTAL		
			CONTINGENCY (100%)		
			TOTAL	12.51	

609 (2) CURB AND GUTTER, TYPE 1

SHEET	STATION RANGE			LENGTH (LF)	REMARKS
U05	3RD AVE 69+10		3RD AVE 69+30	20.10	3RD AVENUE CROSSING
			SUBTOTAL		
			CONTINGENCY (50%)		
			TOTAL	20.10	

618 (2) SEEDING & 619 (3) BONDED FIBER MATRIX

SHEET	STATION RANGE			LENGTH (LF)	SEED WEIGHT (POUNDS)	BFM (POUNDS)	REMARKS
U02	3RD AVE 30+00		3RD AVE 32+75	275	4	400	18' WIDTH
U03	3RD AVE 32+75		3RD AVE 45+00	1,225	17	1,775	18' WIDTH
U04	3RD AVE 45+00		3RD AVE 58+60	1,360	19	1,970	18' WIDTH
U05	3RD AVE 58+60		3RD AVE 69+20	1,060	15	1,535	18' WIDTH
U05				220	3	320	18' WIDTH, 3RD AVENUE CROSSING TO RISER POLE
				SUBTOTAL	58	6,000	
				CONTINGENCY (20% & 5%)	12	300	
				TOTAL	70	6,300	

633 (2) SEDIMENT BARRIER

SHEET	STATION RANGE			LENGTH (LF)	REMARKS
P01	3RD AVE 22+00		3RD AVE 35+00	330	33 SEDIMENT BARRIERS
P02	3RD AVE 35+00		3RD AVE 52+00	380	38 SEDIMENT BARRIERS
P03	3RD AVE 52+00		3RD AVE 69+00	260	26 SEDIMENT BARRIERS
P04	3RD AVE 69+00		3RD AVE 72+25	80	8 SEDIMENT BARRIERS
			SUBTOTAL	1,050	
			CONTINGENCY (15%)	150	
			TOTAL	1,200	

690 (1) BELOW GRATE INLET PROTECTION

SHEET	STATION RANGE			INLETS (EA)	REMARKS
P01	3RD AVE 22+00		3RD AVE 35+00	9	
P02	3RD AVE 35+00		3RD AVE 52+00	8	
P03	3RD AVE 52+00		3RD AVE 69+00	4	
P04	3RD AVE 69+00		3RD AVE 72+25	3	
			SUBTOTAL	24	
			CONTINGENCY (15%)	4	
			TOTAL	28	

Project As Built Drawings Have Been
Reviewed By The Project Engineer &
Represent, To The Best Of My Knowledge,
The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME

STATE OF ALASKA
49TH
David Pratt
CE-13268
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME
DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION

SUMMARY TABLES

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-D SHEETS(AUR)

PLOT DATE: 8/28/2014 12:05 PM

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735) ~ 69548	2014	D02	78

ESTIMATE OF QUANTITIES

ITEM NO	ITEM DESCRIPTION	PAY UNIT	QUANTITY
202 (2)	REMOVAL OF PAVEMENT	SQUARE YARD	81.49
202 (3)	REMOVAL OF SIDEWALK	SQUARE YARD	18.41
202 (9)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	20.10
204 (2)	STRUCTURE TRENCH EXCAVATION	LINEAR FOOT	4,255
204(3)	TRENCH ROCK EXCAVATION	CS	AR
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	LUMP SUM	ALL REQUIRED
401 (1)	ASPHALT CONCRETE, TYPE II: CLASS B	LUMP SUM	ALL REQUIRED
606 (5)	REMOVING AND RECONSTRUCTING GUARDRAIL	LINEAR FOOT	482
608 (1A)	CONCRETE SIDEWALK 4 INCHES THICK	SQUARE YARD	12.51
609 (2)	CURB AND GUTTER, TYPE 1	LINEAR FOOR	20.10
618 (2)	SEEDING	POUND	68.60
619 (3)	BONDED FIBER MATRIX (BFM)	POUND	4,400
633 (2)	SEDIMENT BARRIER	LINEAR FOOT	950
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
640 (4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
641 (1)	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641 (3)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
641 (4)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL ADDITIVE	CONTINGENT SUM	ALL REQUIRED
641 (6)	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641 (7)	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643 (15)	FLAGGING	CONTINGENT SUM	ALL REQUIRED
643 (23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
644 (6)	VEHICLES	LUMP SUM	ALL REQUIRED
646 (1)	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
662 (1)	POWER DISTRIBUTION SYSTEM CONSTRUCTION	LUMP SUM	ALL REQUIRED
662 (2)	POWER DISTRIBUTION SYSTEM CONSTRUCTION - KPU TELECOMM	LUMP SUM	ALL REQUIRED
663 (1)	TELECOMMUNICATIONS CONSTRUCTION	LUMP SUM	ALL REQUIRED
690 (1)	BELOW GRATE INLET PROTECTION	EACH	28

TABLE OF ESTIMATING FACTORS

ITEM NO	ITEM DESCRIPTION	FACTOR	
301(1)	AGGREGATE BASE COURSE, GRADING D-1	145	LB / FT3
401(1)	ASPHALT CONCRETE, TYPE II: CLASS B	150	LB / FT3
401(2)	ASPHALT CEMENT, GRADE PG 58-28	6%	of 401(1)
402	STE-1 ASPHALT FOR TACK COAT	0.10, 243	GAL/SY, GAL/TON
608(1A)	CONCRETE SIDEWALK 4 INCHES THICK	9.1	SY/CY
618(2)	SEEDING	33	LB / ACRE
619(3)	BONDED FIBER MATRIX (BFM)	3,500	LB / ACRE

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME

STATE OF ALASKA 49TH David Pyeatt CE-13268 8/29/14 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: I.NAME

DRAWN BY: I.NAME

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

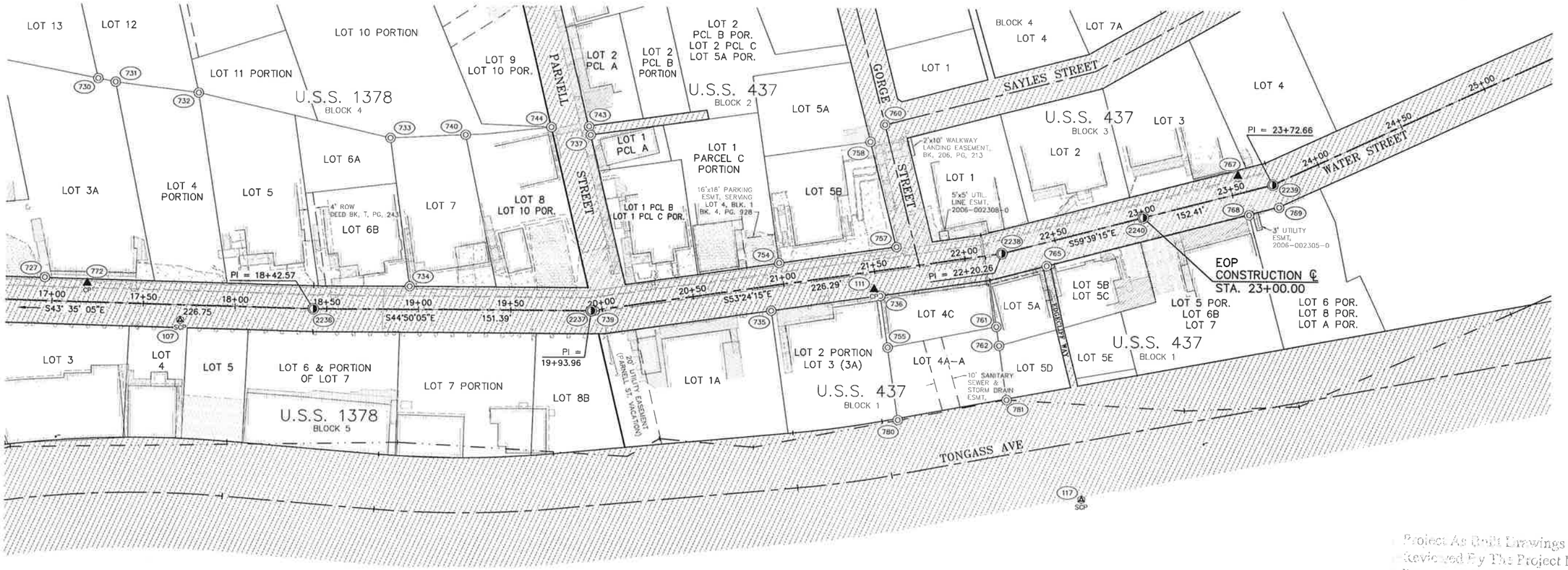
KETCHIKAN ADVANCE
WATER STREET
TRUNK LINE RELOCATION

ESTIMATE OF QUANTITIES

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-C SHEETS(AUR)

PLOT DATE: 8/29/2014 3:19 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	C01	78



RECOVERED CORNERS					
PT. NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
727	89642.9834	103372.1650	16+95.75	12.73 Lt.	Fd PC: ROW L3A B4 S1378
730	89699.7260	103469.0986	17+21.47	122.06 Lt.	Fd IP: S L13 B4 S1378
731	89691.6394	103474.4735	17+31.04	120.38 Lt.	Fd IP: N L4 B4 S1378
732	89655.6075	103502.4619	17+76.43	115.81 Lt.	Fd Rbr: N L5 B4 S1378
733	89564.4019	103559.4576	18+83.84	93.34 Lt.	Fd AC[6269-S]: N L7 B4 S1378
734	89499.5624	103510.0425	18+94.98	12.58 Lt.	Fd AC[3491]: W L7 B4 S1378
740	89536.6649	103589.7547	19+24.87	95.27 Lt.	Fd AC[3491]: N L8 B4 S1378
744	89506.9110	103625.7677	19+71.36	99.83 Lt.	Fd AC[3491]: E L8 B4 S1378
739	89419.0696	103572.2380	19+95.88	0.36 Rt.	Fd BC: dated 1962
743	89492.7477	103640.6579	20+06.89	99.59 Lt.	Fd IP: W L2 PA B2 S437
737	89488.7847	103637.9949	20+07.11	94.82 Lt.	Fd IP: N L1 PA B2 S437
735	89351.7356	103640.9350	20+91.18	13.46 Rt.	Fd AC[7213-S]: E L1A B1 S437
754	89367.1673	103662.3034	20+99.13	11.67 Lt.	Fd PK: W L5B B2 S437
780	89261.0029	103648.3349	21+51.21	81.90 Rt.	Fd PlgTk: W L4AA B1 S437
755	89292.9578	103672.1489	21+51.28	42.04 Rt.	Fd PC[4742-S]: N L4AA B1 S437
736	89315.7472	103689.0751	21+51.28	13.66 Rt.	Fd AC[7213-S]: N L4C B1 S437
758	89379.2603	103744.1553	21+57.64	70.17 Lt.	Fd PK: S L5A B2 S437
757	89328.4537	103714.0422	21+63.75	11.43 Lt.	Fd PK: S L5B B2 S437
760	89380.2484	103756.3511	21+66.84	78.24 Lt.	Fd PlgTk: SI Sayles and Gorge Streets
781	89227.0272	103698.3734	22+11.64	79.34 Rt.	Fd PlgTk: S L4AA B1 S437
761	89259.3125	103722.4511	22+11.72	39.07 Rt.	Fd PC[4742-S]: S L4C B1 S437
762	89250.9263	103716.2818	22+11.77	49.48 Rt.	Fd AC[6269-S]: N L5D B1 S437
765	89263.6646	103765.2549	22+42.26	12.53 Rt.	Fd PlgTk: CL ROW Edgcliff Way
768	89205.9202	103863.3268	23+56.07	12.81 Rt.	Fd PlgTk: N L6 POR B1 S437
769	89197.2964	103877.9906	23+73	12.5 Rt.	Fd PlgTk: ROW AngPt L6 POR B1 S437

ABBREVIATIONS

AC = Aluminum Cap
BC = Brass Cap
GLO = General Land Office
IP = Iron Pipe
MAG = Mag Nail
PC = Plastic Cap
PK = PK Nail
PlgTk = Lead Plug with Tack
POR = Portion
Rbr = Rebar
SI = Street Intersection

PROJECT CONTROL POINTS						
PT. NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
772	89624.4952	103386.3961	17+18.95	10.29 Lt.	92.68	Fd AC [COK]: Pt. No. 0091
107	89574.6061	103408.2109	17+70.13	8.31 Rt.		Set MAG: CP107
767	89225.4608	103874.0745	23+55.47	9.48 Lt.	74.84	Fd AC [COK]: Pt. No. 0024
769	89197.	103878.	23+73	12.5 Rt.	74.40	Fd PlgTk: ROW AngPt Ret. Wall
117	89159.7964	103689.2897	22+29.18	140.54 Rt.	22.41	Set Survey Spike: CP117

CONSTRUCTION CENTERLINE ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2236	89527.8560	103464.1724	18+42.57	0.00 Rt.	Not Set: Construction CL PI
2237	89420.5000	103570.9106	19+93.96	0.00 Rt.	Not Set: Construction CL PI
2238	89285.5909	103752.5927	22+20.26	0.00 Rt.	Not Set: Construction CL PI
2240	89245.3022	103821.4120	23+00.00	0.00 Rt.	Not Set: Construction CL EOP
2239	89208.5916	103884.1191	23+72.66	0.00 Rt.	Not Set: Construction CL PI

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB

STATE OF ALASKA
49TH
Randal H. Brinker
LS 8852
8/28/14
Professional Land Surveyor

DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

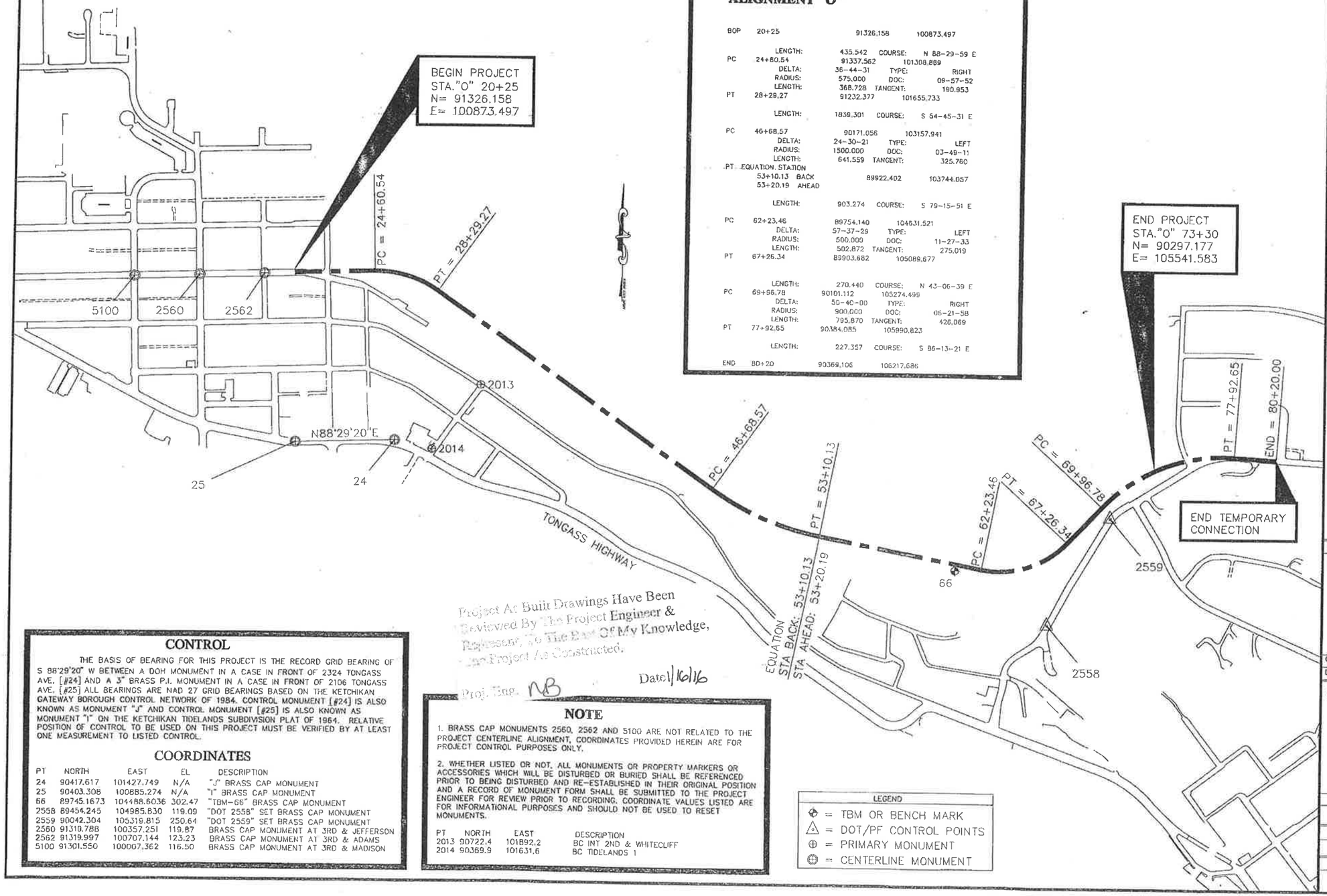
SURVEY CONTROL SHEET

TAB: A06 Thursday, August 28, 2014 12:27:28 PM HANK BRINKER

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	BR-000S(735)	2014	A06	78

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\SURVEY\ACAD\WATER STREET_SCS V2014.DWG

NOTE: 3RD AVENUE ASBUILT SURVEY CONTROL



ALIGNMENT "O"

BOP	20+25		91326.158	100873.497
	LENGTH:	435.542	COURSE:	N 88-29-59 E
PC	24+60.54		91337.562	101308.869
	DELTA:	36-44-31	TYPE:	RIGHT
	RADIUS:	575.000	DOC:	09-57-52
	LENGTH:	368.728	TANGENT:	190.953
PT	28+29.27		91232.377	101655.733
	LENGTH:	1839.301	COURSE:	S 54-45-31 E
PC	46+68.57		90171.056	103157.941
	DELTA:	24-30-21	TYPE:	LEFT
	RADIUS:	1500.000	DOC:	03-49-11
	LENGTH:	641.559	TANGENT:	325.760
PT	EQUATION. STATION			
	53+10.13 BACK		89922.402	103744.057
	53+20.19 AHEAD			
	LENGTH:	903.274	COURSE:	S 79-15-51 E
PC	62+23.46		89754.140	104531.521
	DELTA:	57-37-29	TYPE:	LEFT
	RADIUS:	500.000	DOC:	11-27-33
	LENGTH:	502.872	TANGENT:	275.019
PT	67+26.34		89903.682	105089.677
	LENGTH:	270.440	COURSE:	N 43-06-39 E
PC	69+96.78		90101.112	105274.499
	DELTA:	56-40-00	TYPE:	RIGHT
	RADIUS:	900.000	DOC:	06-21-58
	LENGTH:	795.870	TANGENT:	426.069
PT	77+92.65		90384.085	105990.823
	LENGTH:	227.357	COURSE:	S 86-13-21 E
END	80+20		90369.106	106217.686

CONTROL

THE BASIS OF BEARING FOR THIS PROJECT IS THE RECORD GRID BEARING OF S 88°29'20" W BETWEEN A DOH MONUMENT IN A CASE IN FRONT OF 2324 TONGASS AVE. [#24] AND A 3" BRASS P.I. MONUMENT IN A CASE IN FRONT OF 2106 TONGASS AVE. [#25] ALL BEARINGS ARE NAD 27 GRID BEARINGS BASED ON THE KETCHIKAN GATEWAY BOROUGH CONTROL NETWORK OF 1984. CONTROL MONUMENT [#24] IS ALSO KNOWN AS MONUMENT "J" AND CONTROL MONUMENT [#25] IS ALSO KNOWN AS MONUMENT "I" ON THE KETCHIKAN TIDELANDS SUBDIVISION PLAT OF 1964. RELATIVE POSITION OF CONTROL TO BE USED ON THIS PROJECT MUST BE VERIFIED BY AT LEAST ONE MEASUREMENT TO LISTED CONTROL.

COORDINATES

PT	NORTH	EAST	EL	DESCRIPTION
24	90417.617	101427.749	N/A	"J" BRASS CAP MONUMENT
25	90403.308	100885.274	N/A	"I" BRASS CAP MONUMENT
66	89745.1673	104488.6036	302.47	"TBM-66" BRASS CAP MONUMENT
2558	89454.245	104985.830	119.09	"DOT 2558" SET BRASS CAP MONUMENT
2559	90042.304	105319.815	250.64	"DOT 2559" SET BRASS CAP MONUMENT
2560	91310.788	100357.251	119.87	BRASS CAP MONUMENT AT 3RD & JEFFERSON
2562	91319.997	100707.144	123.23	BRASS CAP MONUMENT AT 3RD & ADAMS
5100	91301.550	100007.362	116.50	BRASS CAP MONUMENT AT 3RD & MADISON

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

NOTE

1. BRASS CAP MONUMENTS 2560, 2562 AND 5100 ARE NOT RELATED TO THE PROJECT CENTERLINE ALIGNMENT, COORDINATES PROVIDED HEREIN ARE FOR PROJECT CONTROL PURPOSES ONLY.

2. WHETHER LISTED OR NOT, ALL MONUMENTS OR PROPERTY MARKERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED AND RE-ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FORM SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO RECORDING. COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD NOT BE USED TO RESET MONUMENTS.

PT	NORTH	EAST	DESCRIPTION
2013	90722.4	101892.2	BC INT 2ND & WHITECLIFF
2014	90369.9	101631.6	BC TIDELANDS 1

LEGEND
- ⊕ = TBM OR BENCH MARK
- △ = DOT/PF CONTROL POINTS
- ⊕ = PRIMARY MONUMENT
- ◎ = CENTERLINE MONUMENT

PATH: Q:\Ktn\71811A\Planset\A2_Control.dwg
Mon, 06/May/02 10:01AM Michael Limbaugh
PLOT: PSPACE 1=1(F) OR MSPACE 1=1(F)
TAB: PLANVIEW

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KTN-THIRD AVENUE EXTENSION
PROJECT NO. 68490

Survey Control Layout Plan

DESIGNED BY: C. HOWARD

STATE OF ALASKA 49th — Gareth Mclean S-9019 — REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: T. MOORE

DRAWN BY: K.K.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
STATEWIDE DESIGN & ENGINEERING SERVICES DIVISION

THIRD AVENUE EXTENSION
PROJECT NO. 68490

Survey Control Layout Plan

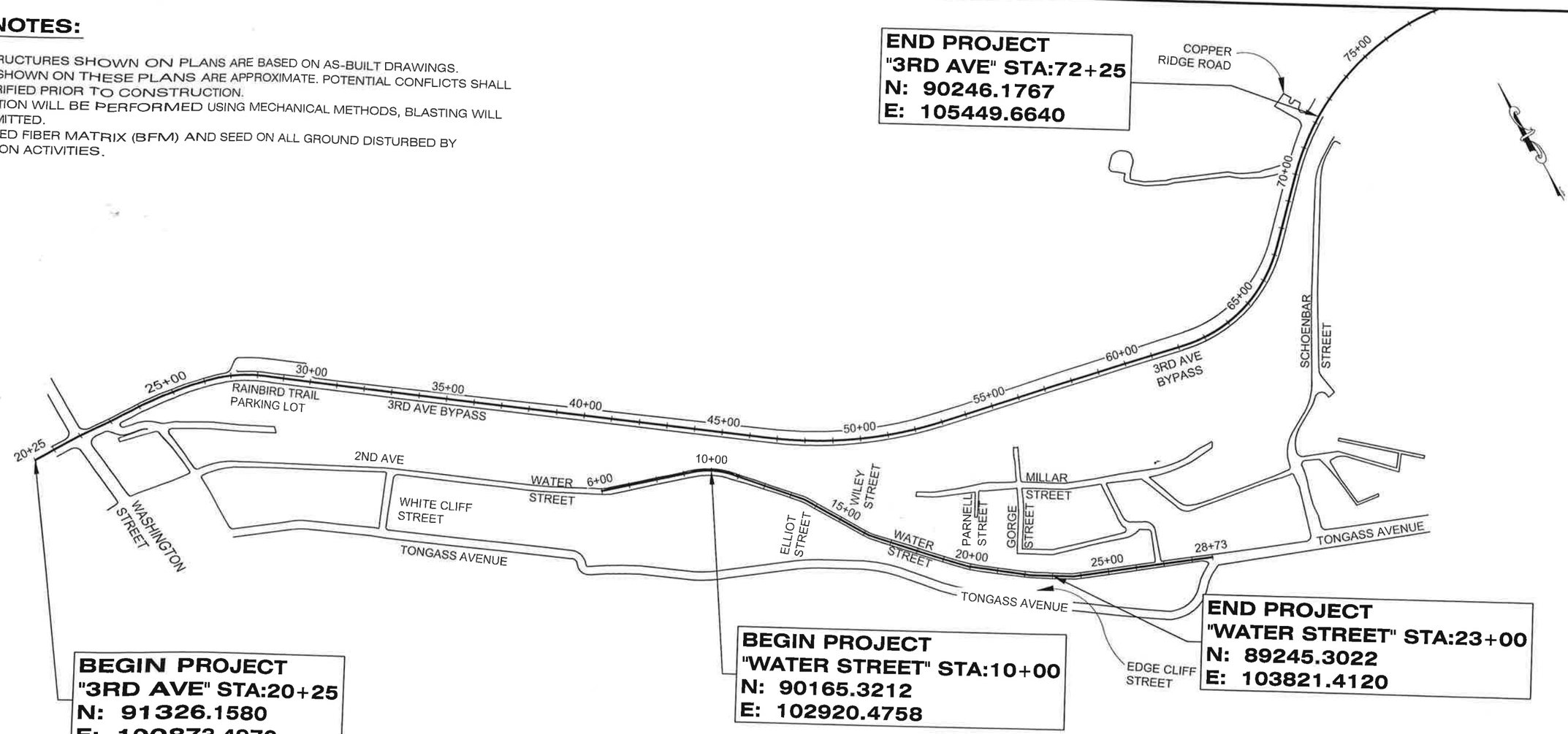
PROJECT DESIGNATION NUMBER	
STP-MG-0904(2)	
STATE	YEAR
ALASKA	2002
SHEET NUMBER	TOTAL SHEETS
A2 A03	78

Project As Built Drawings have been reviewed by the Project Engineer. To the best of his/her knowledge, they represent the project as constructed.

Proj. Eng. _____ Date 2-9-06

GENERAL NOTES:

1) EXISTING STRUCTURES SHOWN ON PLANS ARE BASED ON AS-BUILT DRAWINGS. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. POTENTIAL CONFLICTS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2) ALL EXCAVATION WILL BE PERFORMED USING MECHANICAL METHODS, BLASTING WILL NOT BE PERMITTED.
3) PLACE BONDED FIBER MATRIX (BFM) AND SEED ON ALL GROUND DISTURBED BY CONSTRUCTION ACTIVITIES.



LEGEND

B6 BOLLARD / POST	TREE / BRUSH LINE	STORM DRAIN MANHOLE	
BUILDING DESIGNATION (TYP.)	OVERHEAD CABLE TELEVISION LINE	TELEPHONE MANHOLE	
ELECTRIC METER	OVERHEAD ELECTRIC LINE	T OVERHEAD TELEPHONE	
FIRE HYDRANT	E/T OVERHEAD ELECTRIC / TELEPHONE LINE	T/TV OVERHEAD TELEPHONE / TELEVISION LINE	
GATE POST	STORM DRAIN INLET	TV UNDERGROUND CABLE TELEVISION LINE	
GUTTER / DOWNSPOUT	GUY WIRE	UGE UNDERGROUND ELECTRIC LINE	
GUTTER UNDERGROUND	LIGHT POLE / LIGHT POLE W/MASTARM	F UNDERGROUND FUEL LINE	
TELEPHONE PEDESTAL	MAIL BOX	SS UNDERGROUND SANITARY SEWER LINE	
WATER VALVE / KEYBOX	POWER POL / POWER POLE W/LIGHT	SD UNDERGROUND STORM DRAIN	
INLET PROTECTION	SANITARY SEWER CLEANOUT	T UNDERGROUND TELEPHONE LINE	
FLOW LINE	SANITARY SEWER MANHOLE	W UNDERGROUND WATER LINE	
EXISTING CULVERT	SIGN	BFM BONDED FIBER MATRIX	
GUARDRAIL	123.4 SPOT ELEVATION	FIBER ROLL	

ABBREVIATIONS

AVENUE	AVE	LINEAR FOOT	LF
AVERAGE DAILY TRAFFIC	ADT	MILEPOST	MP
BEGINNING OF PROJECT	BOP	NORTH, NORTHING	N
CENTERLINE	CL	NOT TO SCALE	NTS
COORDINATED DATA SYSTEM	CDS	POINT OF CURVATURE	PC
DESIGN HOURLY VOLUME	DHV	POINT OF INTERSECTION	PI
DESIGN SPEED	V	POINT OF TANGENT	PT
EACH	EA	RIGHT OF WAY	ROW
EAST, EASTING	E	SQUARE YARDS	SY
END OF PROJECT	EOP	STATION	STA
EQUIVALENT SINGLE AXLE LOAD	ESAL	TYPICAL	TYP
EROSION SEDIMENT CONTROL PLAN	ESCP		
FEET, FOOT	FT		

Project As Built Drawings Have Been Reviewed By The Project Engineer & Represent, To The Best Of My Knowledge, The Project As Constructed.

Proj. Eng. NB Date 1/16/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME
DESIGNED BY: I.NAME
DRAWN BY: I.NAME

STATE OF ALASKA 49TH David J Yeaw CE-13208 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN ADVANCE WATER STREET TRUNK LINE RELOCATION

SCHEMATIC LAYOUT

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\ADV UTILITY RELO\1744.00-A02(AUR) PLOT DATE: 8/28/2014 12:03 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735) ~ 69548	2014	A02	78