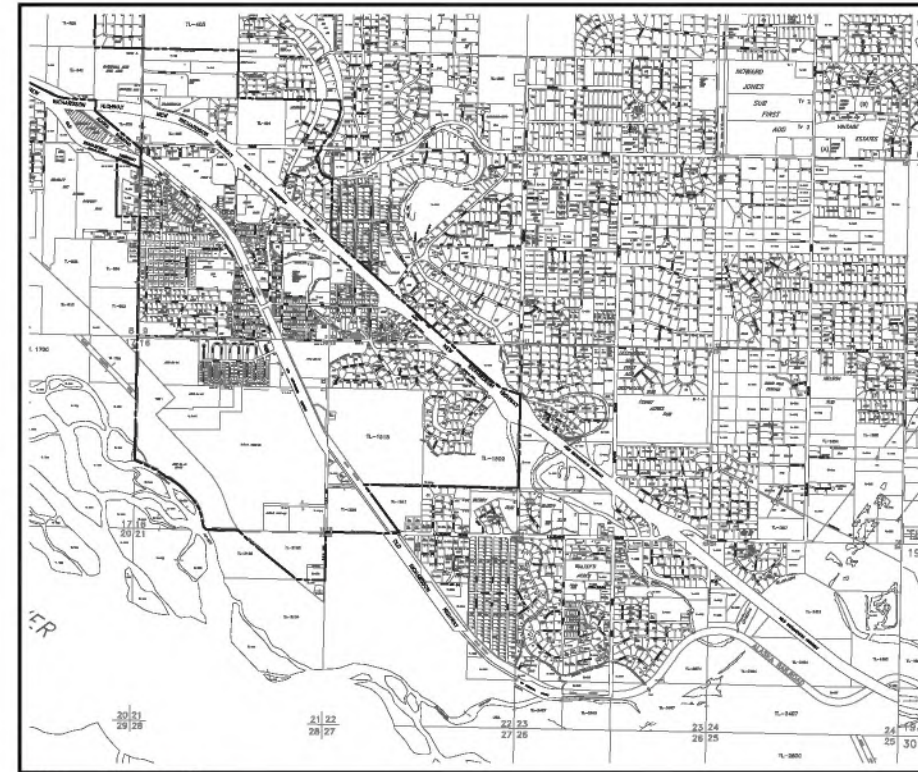


NATURAL GAS DISTRIBUTION SYSTEM PHASE 1: CLEARING ZONE A&C

FOR:

INTERIOR GAS UTILITY



SHEET INDEX

SHT #	DESCRIPTION
T1.01	COVER SHEET
G1.01	MAP INDEX
G1.02	PROJECT OVERVIEW
G2.01	LEGEND AND NOTES
V1.01	SURVEY CONTROL INDEX
V1.02	SURVEY CONTROL
V1.03	SURVEY CONTROL
V1.04	SURVEY CONTROL
V1.05	SURVEY CONTROL
V1.06	SURVEY CONTROL
V1.07	SURVEY CONTROL
C3.01	CLEARING DETAIL
C4.01-C4.210	MAPS (1" x 100 FT)

PREPARED BY:



REVISIONS

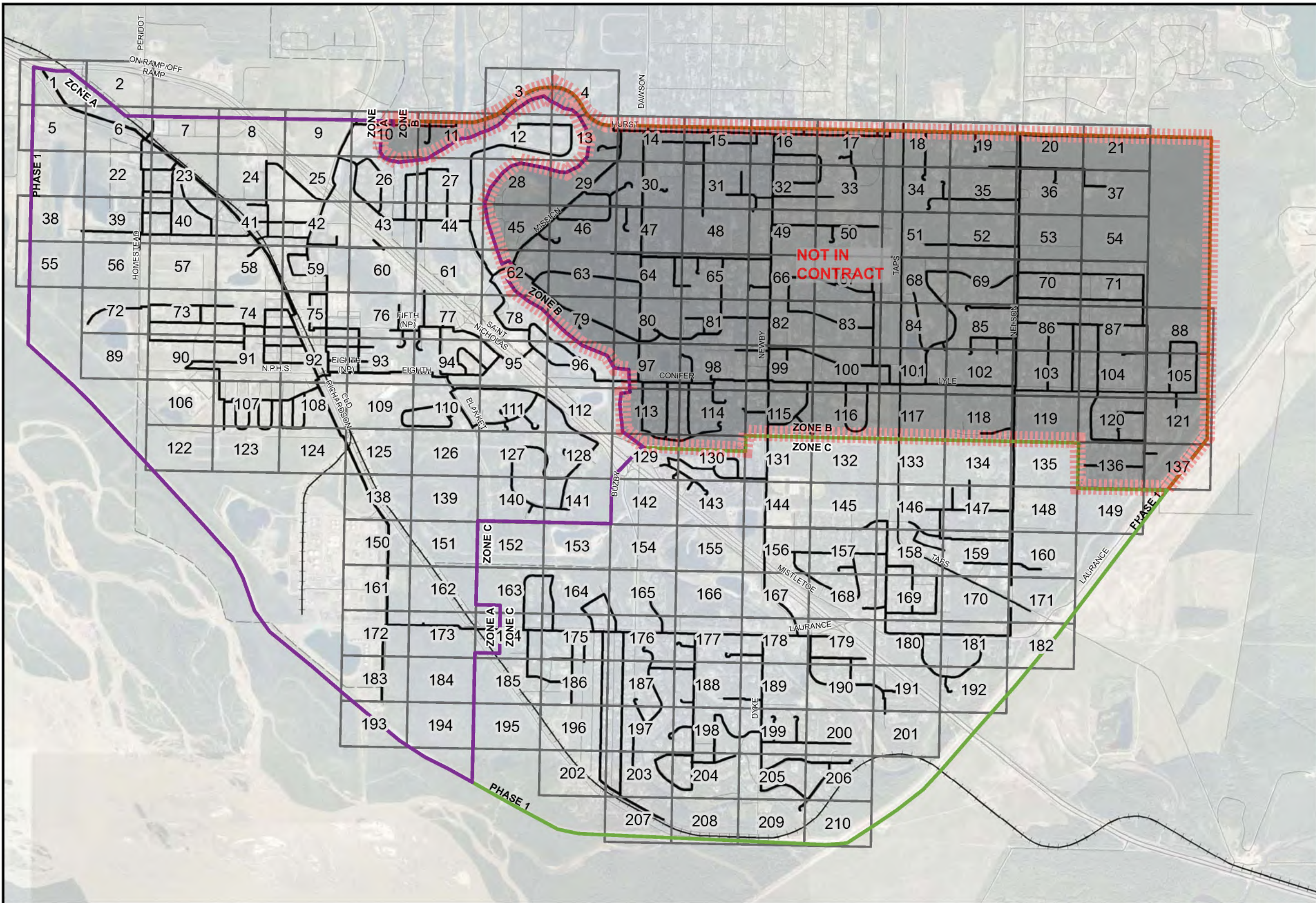
REV. #	DATE	DESCRIPTION

DESIGNED BY: WDH SCALE:
DRAWN BY: RJP AS SHOWN
CHECKED BY: KLH

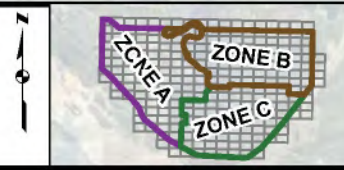
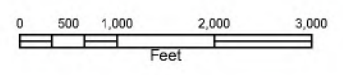
SITE NAME:
**CLEARING FOR
DISTRIBUTION SYSTEM
PHASE 1-ZONE A&C
2015-GC-01
NORTH POLE, ALASKA**

DRAWING TITLE:
COVER SHEET

DRAWING NO:
T1.01



NOTES:



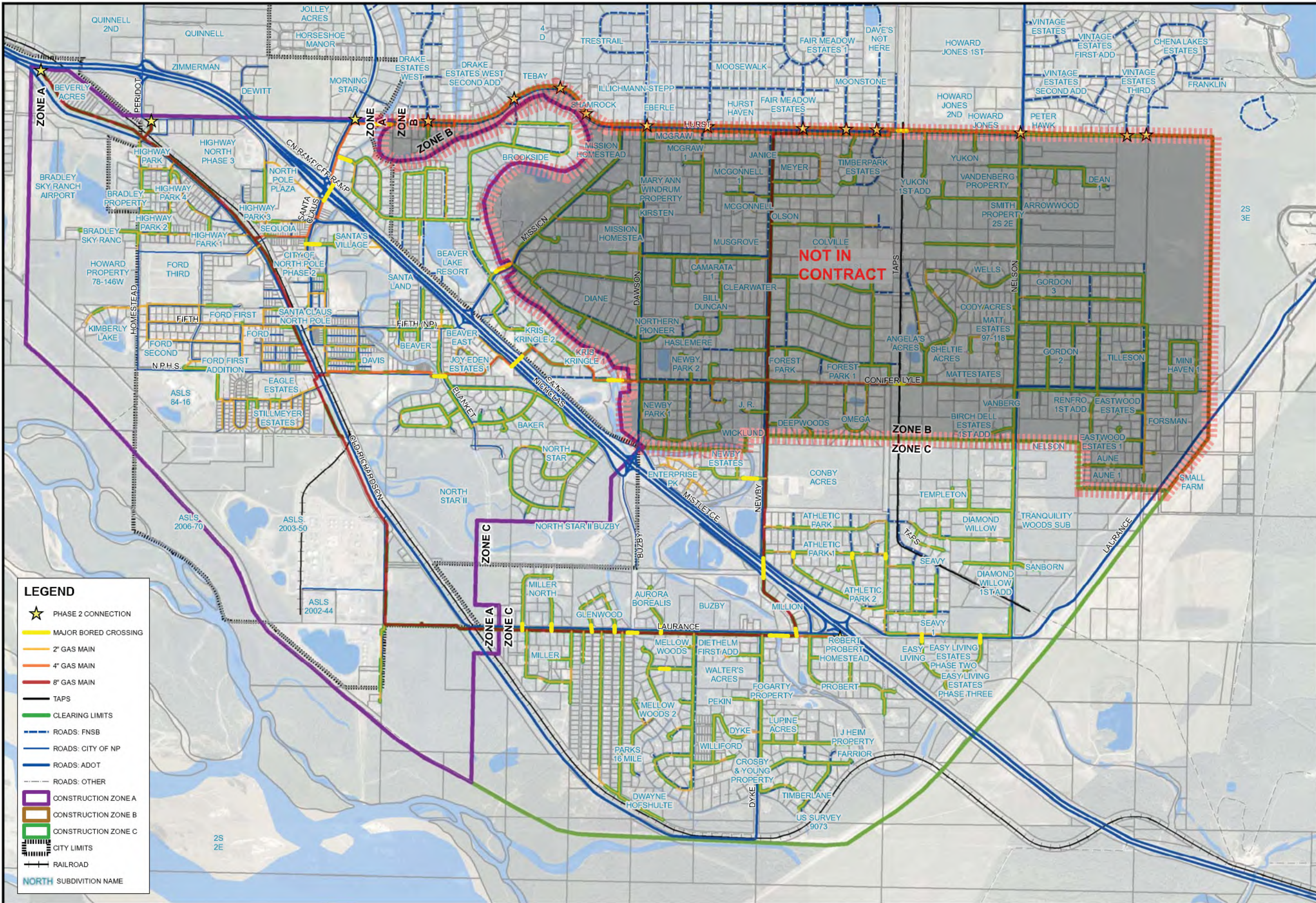
REVISIONS		
Rev. #	DATE	DESCRIPTION

REVISIONS		
Rev. #	DATE	DESCRIPTION

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE 1
 NORTH POLE, ALASKA

DRAWING TITLE:
MAP INDEX

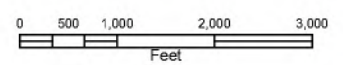
DRAWING NO:
G1.01



LEGEND

- ★ PHASE 2 CONNECTION
- MAJOR BORED CROSSING
- 2" GAS MAIN
- 4" GAS MAIN
- 8" GAS MAIN
- TAPS
- CLEARING LIMITS
- ROADS: FNSB
- ROADS: CITY OF NP
- ROADS: ADOT
- ROADS: OTHER
- CONSTRUCTION ZONE A
- CONSTRUCTION ZONE B
- CONSTRUCTION ZONE C
- CITY LIMITS
- RAILROAD
- NORTH SUBDIVISION NAME

NOTES:



100 Cushman Street,
Suite 801
Fairbanks, Alaska, 99701

PDC INC. ENGINEERS
1028 Aurora Drive, Fairbanks, Alaska 99709-5229

NOT IN CONTRACT

REVISIONS

Rev. #	DATE	DESCRIPTION

DESIGNED BY:	SCALE:
DRAWN BY:	AS SHOWN
CHECKED BY:	

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE 1
NORTH POLE, ALASKA

DRAWING TITLE:
PROJECT OVERVIEW

DRAWING NO.:
G1.02

ABBREVIATIONS

2" G	2" NATURAL GAS DISTRIBUTION MAIN
4" G	4" NATURAL GAS DISTRIBUTION MAIN
8" G	8" NATURAL GAS DISTRIBUTION MAIN
ADOT	ALASKA DEPARTMENT OF TRANSPORTATION
BRK	BREAKLINE
C	COMMUNICATIONS UTILITIES
CC	CONCRETE
CULV INV	CULVERT INVERT
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
F	FIBER OPTIC CABLE
FNSB	FAIRBANKS NORTH STAR BOROUGH
GRND	GROUND ELEVATION
HDD	HORIZONTAL DIRECTIONAL DRILLING
OH C	OVERHEAD COMMUNICATIONS UTILITIES
OH P	OVERHEAD POWER UTILITIES
P	POWER UTILITIES
S	SEWER UTILITIES
W	WATER UTILITIES
CUE	COMBINED USE UTILITY EASEMENTS
PUE	PUBLIC USE UTILITY EASEMENTS
RUE	RESTRICTED USE UTILITY EASEMENTS
RAWE	ROADWAY/ACCESS/PEDESTRIAN/WALKWAY EASEMENTS
SLE	SECTION LINE EASEMENT
TOE	TOE OF BANK ELEVATION
TOP	TOP OF BANK ELEVATION
DOT ROW	DEPARTMENT OF TRANSPORTATION RIGHT OF WAY
RR ROW	RAILROAD RIGHT OF WAY
TAPS	TRANS ALASKA PIPELINE
10" TRG	10" FUTURE GAS TRANSMISSION LINE
WD	ELEVATION UNDER WATER

LEGEND

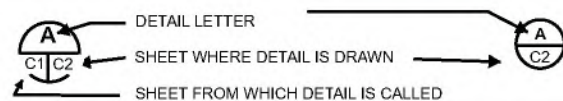
Existing

	Data Frames		Private Roads	Communications Utilities	Easements
	City of North Pole		RR		Aboveground
	Lot Lines	Other Utilities			Combined Utility Easements
	OldRich-ROW		Sewer		Public Utility Easements
	OldRich-RR-ROW		Abandoned Sewer		Roadway/Access Easements
	ROW		Water		Restricted Utility Easements
	Bike Path CL		Canol Pipeline		Section Line Easements
	Bike Path Edge		Haines to Fairbanks Pipeline		
			Fiber		
		Power Utilities			Aboveground
			Underground		Underground

Proposed

Natural Gas Lines		HDD End Points	
	10" Transmission Gas		HDD Crossings
	2" Diameter Gas Distribution Main		New Easements
	4" Diameter Gas Distribution Main		Clearing Limits
	8" Diameter Gas Distribution Main		Construction Zone A
	Phase 2 Connection Points		Construction Zone B
			Construction Zone C

DETAIL IDENTIFICATION



GENERAL NOTES:

- NATURAL GAS DISTRIBUTION MAIN SHALL BE 5' INSIDE THE ROW BOUNDARY (STANDARD CONDITION) UNLESS OTHERWISE NOTED. GAS LINE SHALL BE NO CLOSER THAN 5' TO THE ROW BOUNDARY.**
- A CORRIDOR (OFFSET SO THAT DISTRIBUTION MAIN IS WITHIN 5' OF ONE EDGE) WILL BE CLEARED ALONG GAS DISTRIBUTION MAINS.
 - * 2" MAIN: 15' WIDE CORRIDOR
 - * 4" MAIN: 20' WIDE CORRIDOR
 - * 8" MAIN: 20' WIDE CORRIDOR
- CLEARING INDICATED ON DRAWINGS IS FROM INTERPRETATION OF AERIAL IMAGERY USING THE COMPILED BASEMAP AS THE BASIS FOR DISTRIBUTION MAIN ALIGNMENT. ACTUAL CLEARING REQUIRED WILL BE DIFFERENT ONCE ROW/EASEMENTS ARE LOCATED BY CONTRACTOR IN THE FIELD AND CLEARING LIMITS ARE FLAGGED. OWNER WILL REVIEW CLEAR FLAGGING AND ROW/EASEMENT STAKING PRIOR TO CLEARING.**
- EXTEND CLEARING FOR DISTRIBUTION MAIN 15' PAST THE PROPERTY CORNER OF THE LAST PROPERTY BEING SERVED, AS SHOWN IN C4.01-C4.210.
- THE BACKGROUND MAP INFORMATION PRESENTED IN THESE DOCUMENTS IS A COMPILATION OF SYSTEM MAP INFORMATION FROM UTILITIES AND PROPERTY INFORMATION FROM THE FNSB ADJUSTED TO IMPROVE THE FIT TO LIMITED FIELD SURVEY TIES AND RECORDED ADOT RIGHT-OF-WAY MAPS OVERLAID OVER THE FNSB AERIAL IMAGERY. THIS COMPILATION IS NOT A TOPOGRAPHIC SURVEY AND WAS ONLY INTENDED TO INDICATE THE WORK EFFORT TO THE CONTRACTOR AND ALLOW THEM TO IDENTIFY POTENTIAL UTILITY CONFLICTS ALONG THE ROUTE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATES OF ALL UTILITIES ALONG THE PIPE ALIGNMENT, AVOIDING OR COORDINATING CONFLICTS, AND RESTORATION OF ITEMS DISTURBED ALONG THE ROUTE TO PRE-EXISTING CONDITIONS OR BETTER.**
- CALL THE DIG LINE (1-907-459-6400) AS WELL AS:
 - * ADOT (STREET LIGHTS, ETC)
 - * US ARMY CORP ENGINEERS (HAINES TO FAIRBANKS, CANOL PIPELINES)
 - * CITY OF NORTH POLE
 - * GVEA PIPELINES (FROM TAPS TO REFINERY)
 - * GVEA DISPATCH (WHEN WORKING NEAR POWER LINES)
 PRIOR TO BEGINNING CONSTRUCTION.



REVISIONS		
Rev. #	DATE	DESCRIPTION

DESIGNED BY:	SCALE:
DRAWN BY:	AS SHOWN
CHECKED BY:	

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE 1
 NORTH POLE, ALASKA

DRAWING TITLE:
LEGEND AND NOTES

DRAWING NO.:
G2.01

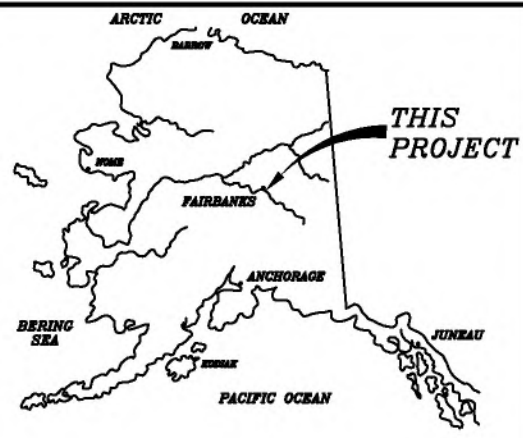
SURVEY CONTROL INTERIOR GAS UTILITY - PHASE I NORTH POLE, ALASKA

SURVEYOR'S CERTIFICATE

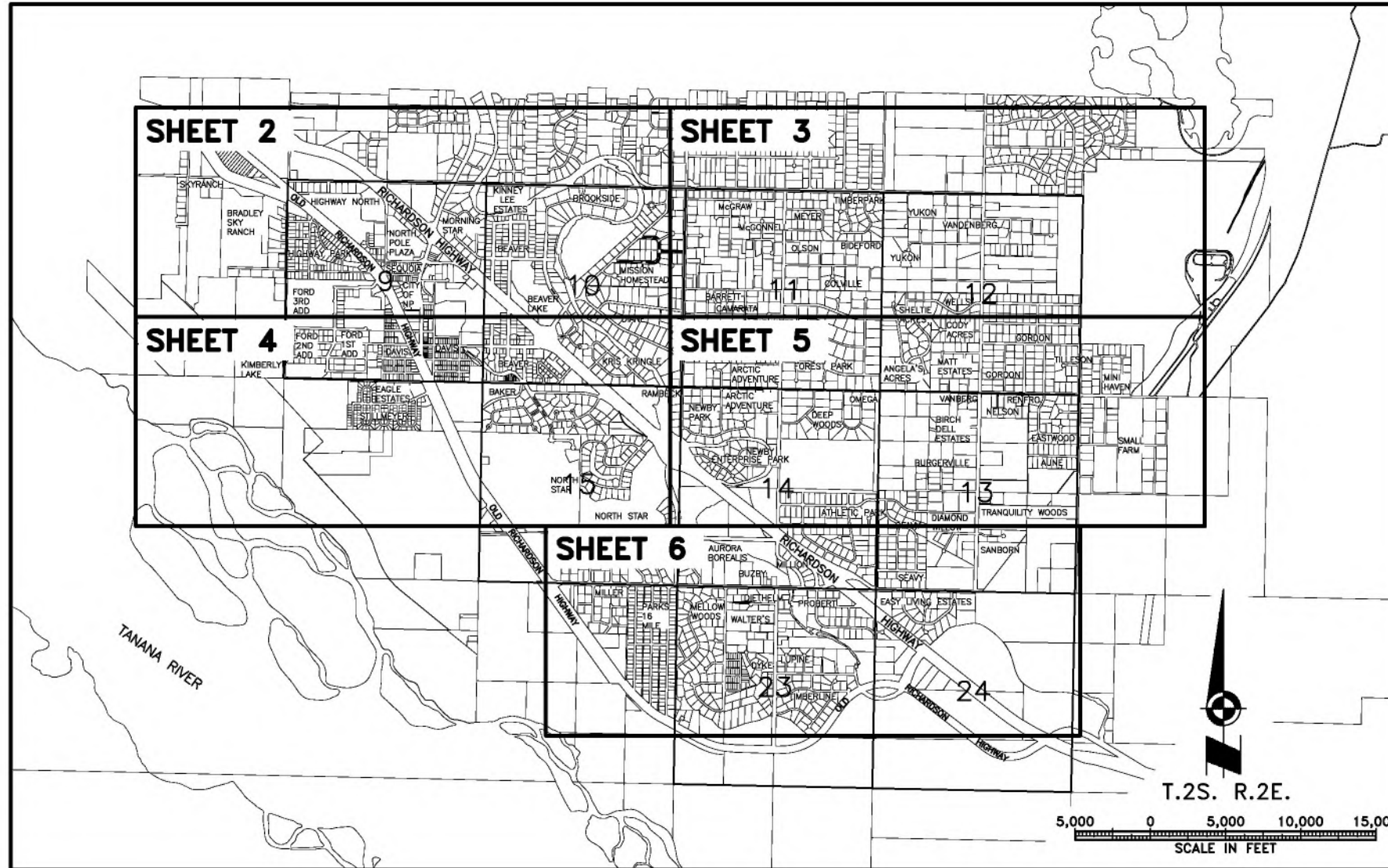
I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO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

DATE _____ REGISTRATION NO. _____

REGISTERED LAND SURVEYOR



LOCATION MAP
NOT TO SCALE



NOTES:

1. THE PURPOSE OF THIS SURVEY IS TO PROVIDE SITE CONTROL FOR PHASE I OF THE INTERIOR GAS UTILITY PROJECT.
2. FIELD WORK FOR THIS SURVEY WAS CONDUCTED BETWEEN JULY & DECEMBER 2014.
3. CONTROL AND CHECK POINT MONUMENT COORDINATES ARE NAD 83 ALASKA STATE PLANE ZONE 3 COORDINATES ESTABLISHED FROM OPUS PROCESSED STATIC GPS SESSIONS ON SELECTED MONUMENTS AND THEN DENSIFIED WITH STATIC GPS SURVEYS. SEE THE SURVEY CONTROL MONUMENTS AND CHECK POINTS TABLE ON THIS SHEET.
4. ELEVATIONS FOR THIS SURVEY WERE DERIVED FROM STATIC GPS SURVEYS USING GEOID 12 A.
5. UNITS ARE U.S. SURVEY FEET.
6. THE BASIS OF BEARINGS IS THE NAD83, ALASKA STATE PLANE, ZONE 3. GRID BEARING, S 28°47'13" E AS DETERMINED BY STATIC GPS OBSERVATIONS AND OPUS PROCESSING BETWEEN POINTS 12 AND 11.
7. RECOVERED MONUMENT COORDINATES WERE GENERATED BY SINGLE OCCUPATION RTK SURVEY METHODS WITH A TARGET ACCURACY OF ONE METER. THEY SHOULD NOT BE USED FOR SURVEY COMPUTATIONS.

LEGEND:

- ⊗ SURVEY CONTROL MONUMENT
- RECOVERED MONUMENT WITH METER LEVEL SEARCH COORDINATES

SURVEY CONTROL MONUMENTS AND CHECK POINTS

POINT	NORTHING	EASTING	DESCRIPTION
1	3924659.84	1439899.59	SET REBAR AND CAP
2	3930284.22	1441494.95	SET REBAR AND CAP
3	3931230.82	1449781.27	SET REBAR AND CAP
4	3935524.03	1434927.93	SET REBAR AND CAP
5	3935154.98	1441551.6	SET REBAR AND CAP
6	3929862.74	1436082.74	SET REBAR AND CAP
11	3924670.29	1432532.17	FOUND 3.25" BRASS CAP -- G-121
12	3931066.81	1429017.57	FOUND 3.25" BRASS CAP -- FAIR-6
21	3924701.88	1432482.39	SET CHECK SPIKE
101	3924663.76	1440036.89	SET CHECK SPIKE
102	3930222.83	1441491.21	SET CHECK SPIKE
103	3931107.10	1449687.57	SET CHECK SPIKE
104	3935526.50	1434886.75	SET CHECK SPIKE
105	3935065.74	1441545.62	SET CHECK SPIKE
106	3929957.84	1436076.91	SET CHECK SPIKE
116	3931105.72	1449685.65	FOUND REBAR AND CAP
126	3931085.40	1429099.57	SET CHECK SPIKE

REVISIONS

REV. #	DATE	DESCRIPTION

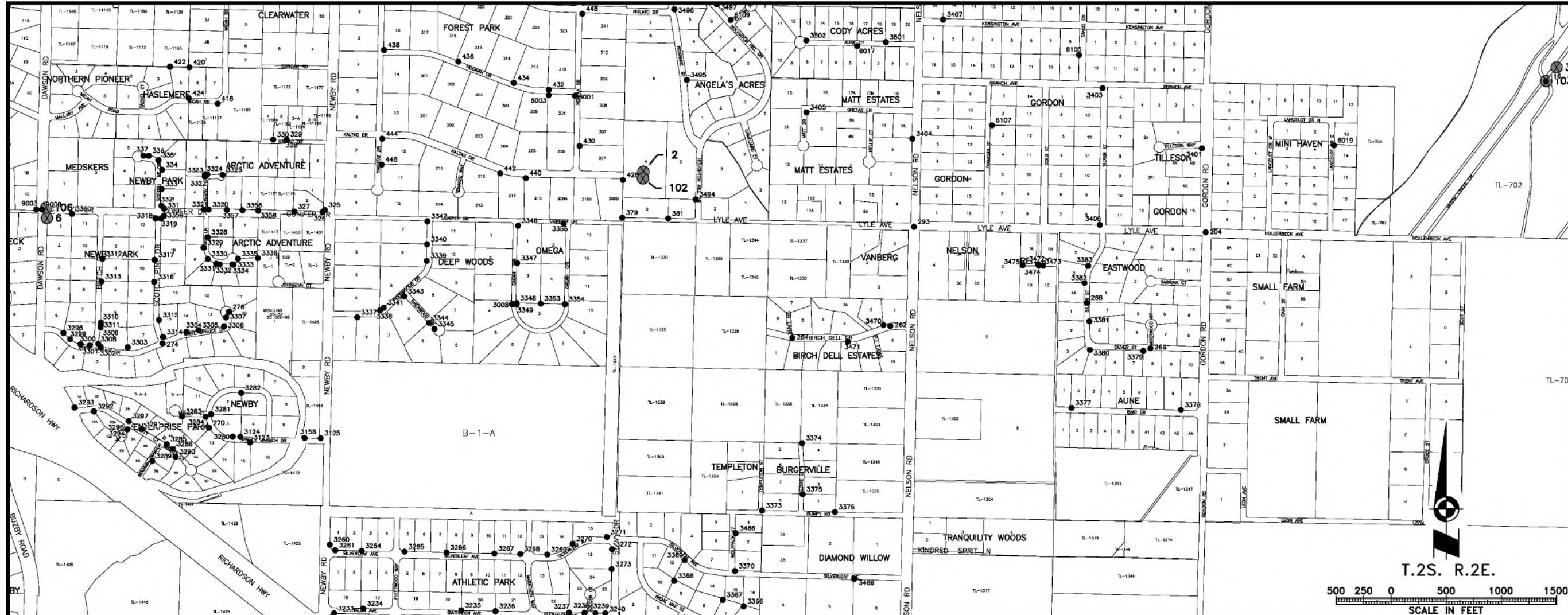
DESIGNED BY: D.B. SCALE: 1" = 5000'
 DRAWN BY: C.K.
 CHECKED BY:

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE I
 NORTH POLE, ALASKA

DRAWING TITLE:
SURVEY CONTROL INDEX

DRAWING NO:
V1.01

P:\2014\1408178-001-011-001\1408178-001-001.dwg 1: Survey Control 1:100 12/23/2014 12:24 PM



100 Cushman Street,
Suite 501
Fairbanks, Alaska, 99701



1028 AURORA DRIVE, FAIRBANKS, ALASKA 99709-5529

RECOVERED MONUMENTS WITH METER LEVEL SEARCH COORDINATES

POINT #	NORTHING	EASTING	DESCRIPTION
116	3931105.72	1449685.65	Found 2" Rebar Cap In
204	3929734.32	1446598.22	Found 2.5" Aluminum Monument
262	3928883.29	1443735.70	Found 1.5" Rebar Cap 705-S
264	3928775.31	1442846.60	Found 3.5" Aluminum Monument
266	3928681.61	1446096.88	Found " Aluminum Monument
268	3929094.10	1445520.47	Found 3.25" Rebar Cap 3239-S
270	3927958.67	1437554.58	Found 3.25" Aluminum Monument
272	3928277.30	1437845.06	Found 1.5" Rebar Cap 3246
274	3928726.87	1437132.12	Found 1.5" Rebar Cap 3246
276	3929011.11	1437733.46	Found 3.25" Aluminum Monument
293	3929783.98	1443950.57	Found 3.25" Aluminum Monument
325	3929937.38	1438604.38	Found 1.5" Aluminum Monument
326	3929918.06	1438583.96	Found 1.5" Aluminum Monument
327	3929922.86	1438326.92	Found 1.5" Aluminum Monument
328	3930573.28	1438256.95	Found 1.5" Aluminum Monument
329	3930578.22	1438257.08	Found 1.5" Aluminum Monument
330	3930575.85	1438136.08	Found 1.5" Aluminum Monument
331	3929949.83	1437145.52	Found Rebar
332	3929975.31	1437121.35	Found 1.5" Aluminum Monument
333	3930127.50	1437124.51	Found 1.5" Aluminum Monument
334	3930301.38	1437128.08	Found 1.5" Aluminum Monument
335	3930388.92	1437094.81	Found Rebar
336	3930428.81	1437005.89	Found Rebar
337	3930429.85	1436959.08	Found 2" Iron Pipe

POINT #	NORTHING	EASTING	DESCRIPTION
379	3929867.38	1441303.47	Found 1.5" Aluminum Monument
381	3929859.57	1441720.51	Found LS" Rebar Cap 6474
418	3930902.43	1437631.63	Found 1.5" Aluminum Monument
420	3931232.80	1437375.23	Found 1.5" Aluminum Monument
422	3931236.85	1437200.28	Found Rebar
424	3930952.47	1437368.88	Found 1.5" Aluminum Monument
428	3930209.34	1441310.16	Found 1.5" Aluminum Monument
430	3930517.18	1440916.32	Found 1.5" Aluminum Monument
432	3931027.95	1440636.86	Found 1.5" Aluminum Monument
434	3931089.37	1440319.62	Found 1.5" Aluminum Monument
436	3931284.27	1439815.44	Found 1.5" Aluminum Monument
438	3931388.52	1439141.66	Found 1.5" Aluminum Monument
440	3930226.37	1440428.12	Found 1.5" Aluminum Monument
442	3930269.05	1440196.57	Found 1.5" Aluminum Monument
444	3930583.92	1439125.48	Found 1.5" Aluminum Monument
446	3930349.00	1439120.81	Found 1.5" Aluminum Monument
448	3931716.93	1440940.26	Found 1.5" Aluminum Monument
3008	3929080.87	1440303.72	Found Rebar
3123	3927825.90	1437924.67	Found 1.5" Rebar Cap 6474
3124	3927877.46	1437837.84	Found 1.5" Rebar Cap 3246
3125	3927864.74	1438567.27	Found 1.5" Rebar Cap 8204
3158	3927867.52	1438421.61	Found 1.5" Rebar Cap 8204
3233	3926274.76	1438688.05	Found Rebar
3234	3926319.59	1438953.62	Found 1.5" Rebar Cap 2235-S

POINT #	NORTHING	EASTING	DESCRIPTION
3235	3926301.55	1439843.19	Found 3.25" Aluminum Monument
3236	3926295.33	1440153.03	Found Rebar
3237	3926281.84	1440821.25	Found 1.5" Rebar Cap 2235-S
3238	3926278.68	1440960.23	Found Rebar
3239	3926276.94	1441060.17	Found 1.5" Rebar Cap 6474-S
3240	3926275.12	1441149.25	Found 1.5" Rebar Cap 6474-S
3260	3926898.65	1438650.21	Found 2" Aluminum Monument
3261	3926847.45	1438698.89	Found Rebar
3264	3926842.83	1438939.03	Found 1.5" Rebar Cap 2235-S
3265	3926834.83	1439328.52	Found 1.5" Rebar Cap 2235-S
3266	3926827.15	1439708.81	Found 1.5" Rebar Cap 2235-S
3267	3926818.43	1440143.51	Found 1.5" Rebar Cap 2235-S
3268	3926813.70	1440378.51	Found 1.5" Rebar Cap 2235-S
3269	3926808.78	1440623.07	Found 1.5" Rebar Cap 2235-S
3270	3926906.98	1440853.13	Found 1.5" Rebar Cap 2235-S
3271	3926968.04	1441163.02	Found 1.5" Rebar Cap 2235-S
3272	3926857.07	1441210.85	Found 1.5" Rebar Cap 2235-S
3273	3926676.90	1441207.27	Found 3.25" Aluminum Monument
3280	3927878.51	1437788.05	Found 1.5" Rebar Cap 3246-S
3281	3928082.27	1437571.72	Found 1.5" Rebar Cap 3246-S
3282	3928277.18	1437845.16	Found 1.5" Rebar Cap 3246-S
3283	3928062.20	1437308.20	Found 1.5" Rebar Cap 3246-S
3284	3928058.80	1437523.73	Found 1.5" Rebar Cap 3246-S
3285	3927810.69	1437170.99	Found 1.5" Rebar Cap 6474-S

POINT #	NORTHING	EASTING	DESCRIPTION
3286	3927767.02	1437226.87	Found 1.5" Rebar Cap 6474-S
3289	3927657.88	1437038.91	Found 1.5" Rebar Cap 6474-S
3290	3927696.75	1437250.18	Found Rebar
3291	3927947.90	1436944.51	Found 1.5" Rebar Cap 6474-S
3292	3928108.29	1436508.93	Found Rebar
3293	3928144.37	1436333.55	Found Rebar
3294	3927945.94	1436812.44	Found Rebar
3296	3927945.91	1436812.47	Found Rebar
3297	3928020.69	1436824.73	Found Rebar
3298	3928820.80	1436232.46	Found Rebar
3299	3928763.33	1436292.82	Found 1.5" Rebar Cap 3239-S
3300	3928717.62	1436388.05	Found 1.5" Rebar Cap 3239-S
3301	3928706.15	1436471.60	Found 1.5" Rebar Cap 3239-S
3302	3928692.57	1436570.44	Found Rebar
3303	3928689.73	1436816.40	Found Rebar
3304	3928829.56	1437349.22	Found Rebar
3305	3928845.47	1437459.97	Found Rebar
3306	3928880.94	1437690.34	Found 1.5" Rebar Cap
3307	3928961.55	1437707.94	Found 1.5" Rebar Cap
3308	3928721.02	1436549.20	Found 1.5" Rebar Cap 3239-S
3309	3928870.80	1436569.67	Found 1.5" Rebar Cap 3239-S
3311	3928913.88	1436572.64	Found Rebar
3311	3928889.25	1436571.27	Found 1.5" Rebar Cap 3239-S
3312	3929493.67	1436585.59	Found Rebar

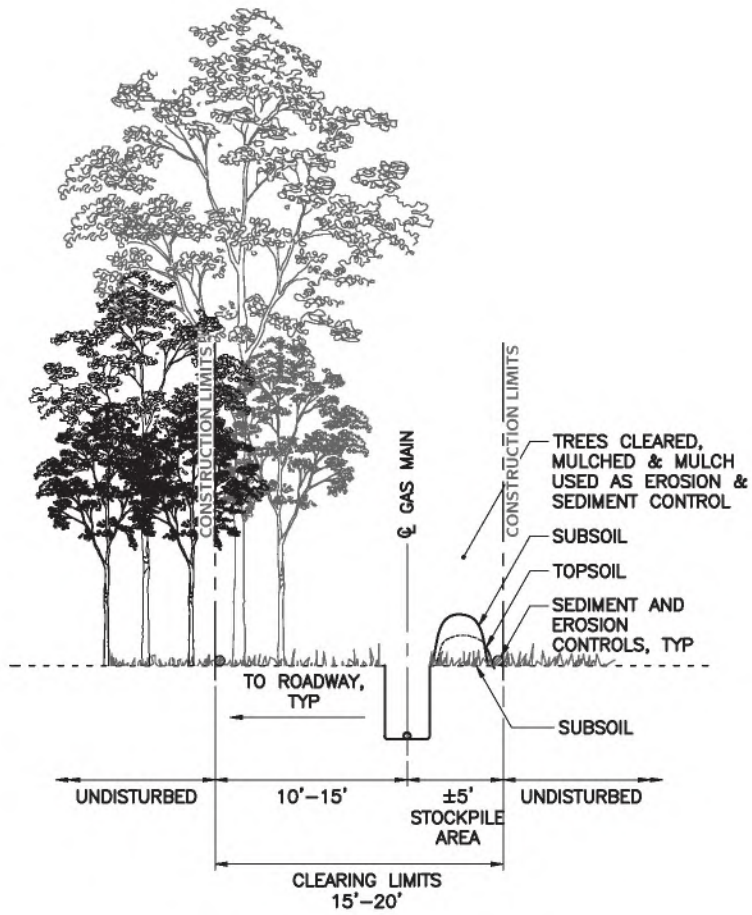
REVISIONS		
REV. #	DATE	DESCRIPTION

DESIGNED BY: SCALE: 1" = 5000'
DRAWN BY: C.K.
CHECKED BY:

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE 1
NORTH POLE, ALASKA

DRAWING TITLE:
SURVEY CONTROL

DRAWING NO:
V1.05



NOTE: CONSTRUCTION LIMITS SHALL NOT INFRINGE OUTSIDE OF ASSIGNED ROAD ROW OR EASEMENT INTO PRIVATE PROPERTY.

A
TYPICAL DETAIL:
CONSTRUCTION SECTION
 SCALE: N.T.S.



100 Cushman Street,
 Suite 501
 Fairbanks, Alaska, 99701



1028 AURORA DRIVE, FAIRBANKS, ALASKA 99709-5529



REVISIONS		
REV. #	DATE	DESCRIPTION

DESIGNED BY: WDH SCALE:
 DRAWN BY: RJP AS SHOWN
 CHECKED BY: KLH

SITE NAME:
CLEARING FOR DISTRIBUTION SYSTEM PHASE 1
 NORTH POLE, ALASKA

DRAWING TITLE:
CLEARING DETAIL

DRAWING NO:
C3.01