

Midtown Corridor Improvements

MOA Project No. 16-28

Preliminary Utility Conflict Report for the Design Study Report



Prepared for: Municipality of Anchorage
Project Management & Engineering Department

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NOTICE TO USERS

1. The intent of this Draft Utility Conflict Report is to document the existing utilities within the project limits, and provide a preliminary analysis of potential utility related impacts to the project scope, schedule and budget.

The findings, assumptions and recommendations included in this report will change as the project design evolves. Persons who may rely on the information contained in this document are strongly encouraged to contact R&M Consultants, Inc., for the most current design decisions. Contact:

Marc Frutiger, P.E.
Project Manager
R&M Consultants, Inc.
907-522-1707

2. This report does not address storm drain, street lighting, or intersection signalization facilities. Refer to the Design Study Report for information regarding these systems.

MIDTOWN CORRIDOR IMPROVEMENTS UTILITY CONFLICT REPORT

1 INTRODUCTION

1.1 Project Location and Description

The scope of this project is to design upgrades to Denali Street, from Benson Boulevard to Tudor Road, and 36th Avenue, from A Street to the Old Seward Highway, in order to accommodate all users and all modes including pedestrians, bicyclists, transit riders, and motor vehicles.

The MOA Project Management & Engineering Department (PM&E) is working to improve the safety of non-motorized users by evaluating existing corridor conditions in order to define obstacles to non-motorized and motorized travel. As demonstrated in the Anchorage Bowl and Land Use Plan Map (LUPM) update, maximizing all modes of travel while enhancing transit connections between neighborhoods, employment, and commercial centers, is critical to supporting successful growth.

The Midtown Corridor Improvement project balances transportation improvements among transit, pedestrians, and road improvements to determine feasible solutions for improving the area transportation network, which will expand transportation opportunities, promote reliability, and enhance connectivity in midtown Anchorage.

1.2 Purpose of Report

The purpose of this draft Utility Conflict Report (UCR) is to:

- Identify known utilities within the project limits
- Identify known utilities within the project limits that could affect project scope, schedule and budget if impacted
- Summarize potential conflicts and encounters with proposed transportation improvements
- Provide a preliminary estimate of utility relocation costs
- Recommend strategies to mitigate conflicts



Figure 1. Location and Vicinity Map

2 DEFINITIONS

Two terms are used in this report to describe the impacts to the different utilities caused by the project.

Utility Conflict is used to refer to the situation where proposed improvements will occupy the same three-dimensional space as existing utilities, requiring the relocation and/or adjustment of the utility.

Utility Encounter is used to describe the probability that work required to complete the project will expose the utility or require work in close proximity to the utility.

3 EXISTING UTILITIES WITHIN THE PROJECT LIMITS

Existing utility facilities within the project limits include water distribution, sanitary sewer collection, natural gas distribution, electric transmission and distribution, and communications.

Plan sheets showing the existing utilities are included in Appendix B. The horizontal locations of existing utilities shown on the Utility Plan Sheets in Appendix B were not surveyed from field locates, rather were drafted from utility system maps and record drawings. A thorough utility as-built survey is needed to support the detailed project design and the development of utility relocation agreements.

3.1 Water Distribution

Anchorage Water & Wastewater Utility (AWWU) operates the water distribution facilities within the project limits.

36th Avenue

A 16-inch ductile iron main parallels 36th Avenue, in the eastbound lanes, between C Street and approximate station 121+80, where it crosses north in to the westbound lanes, and extends east to the Old Seward Highway. Connections and taps off the main include:

- Connecting 16-inch mains at approximate station 108+70, extending north and south on A Street
- Main at approximate station 113+45, extending south along Barrow Street
- 12-inch ductile iron connection at approximate station 119+90, extending north along Denali Street
- 12-inch ductile iron connection at approximate station 121+75, extending south along Denali Street
- Main crossing at approximate station 127+90

There are fourteen (14) water valves and seven (7) fire Hydrants associated with the 16-inch main along 36th Avenue.

Denali Street, 36th Avenue to Fireweed Lane

The 12-inch ductile iron main connected to the 16-inch main at 36th Avenue station 119+90 extends north along Denali Street to Northern Lights Boulevard. There is a short segment of 12-inch cast iron between Benson and Northern Lights. The main transitions to 8-inch ductile iron between Northern Lights Boulevard and Fireweed Lane.

Connections and taps off the main include:

- 8-inch Ductile iron crossing to the west at approximate station 40+45

- 12-inch ductile iron connection at approximate station 43+40, extending east along 34th Avenue
- Connecting 12-inch mains at approximate station 47+90, extending both east and west along Calais Drive
- 8-inch ductile iron connection at approximate station 52+80, extending east along 32nd Avenue
- 8-inch ductile iron connection at approximate station 55+60, extending west

There are 18 water valves and 6 fire hydrants associated with the 12-inch main along Denali Street between 36th Avenue and Fireweed Lane, as well as an unknown number of service connections.

Denali Street, Tudor to 36th Avenue

The 12-inch ductile iron main connected to the 16-inch main at approximate 36th Avenue station 121+75 extends south, through utility easement, to Telephone Avenue, where it enters into the Denali Street right-of-way. The main is located in the Denali Street southbound lanes between Telephone Avenue and 40th Avenue, where it crosses east, into the northbound lane, and extends to Tudor Road.

There are four (4) crossings of Denali Street serving Cuddy Park, the Loussac Library, and connecting to AWWU Well House 7 at the northwest corner of Denali Street and 40th Avenue.

There are fourteen (14) water valves and five (5) fire hydrants along Denali Street between Tudor Road and 36th Avenue, as well as an unknown number of service connections.

3.2 Sanitary Sewer

Anchorage Water & Wastewater Utility (AWWU) operates the sanitary sewer collection facilities within the project limits.

36th Avenue

There are no sewer mains paralleling 36th Avenue between C Street and the Old Seward Highway.

A 12-inch asbestos cement sewer main enters the 36th Avenue right-of-way from the south to a manhole at approximate station 122+00, extends west to a manhole at station 120+10, then north along the east side of Denali Street.

There are two (2) sewer manholes in 36th Avenue.

Denali Street, 36th Avenue to Fireweed Lane

AWWU operates sanitary sewer pipelines along Denali Street, including:

- 8-inch to 14-inch asbestos cement mains with southern flow paralleling the northbound lanes between Northern Lights Boulevard and the manhole at station 43+10
- 12-inch asbestos cement main with northern flow from Telephone Avenue north to, and crossing 36th Avenue, to the manhole at station 43+10
- 8-inch asbestos cement main along 34th Avenue, with western flow, to the manhole at approximate station 43+10

A 16-inch asbestos cement pipeline extends west out of the manhole at station 43+10.

There are ten (10) sanitary sewer manholes within Denali Street between 36th Avenue and Fireweed Lane, as well as an unknown number of service connections.

Denali Street, Tudor Road to 36th Avenue

An 8-inch ductile iron main crosses Denali Street at station 36+25, and extends north to a manhole at 36th Avenue station 120+10.

A 12-inch asbestos cement main extends south in easement from a manhole at 36th Avenue station 122+00, through a manhole in Telephone Avenue right of Denali Street station 32+60, to a manhole in Denali Street at Communications Avenue, station 29+25.

A 16-inch ductile iron main parallels 40th Avenue and crosses Denali Street at station 24+25.

There are four (4) sewer manholes within Denali Street between Tudor Road and 36th Avenue, as well as an unknown number of service connections.

3.3 Natural Gas

There are no transmission pressure natural gas pipelines within the project limits.

ENSTAR operates the natural gas distribution facilities within the 36th Avenue and Denali Street rights-of-way, including:

- 4-inch plastic main along the south side of 36th Avenue between C Street and the Old Seward Highway
- 2-inch plastic main along the east side of Denali Street between Telephone Avenue and East 40th Avenue, and;
- 2-inch plastic and steel mains along the east side of Denali Street between 36th Avenue and Northern Lights Boulevard.

Each of the mains include multiple side street connections and service taps to individual properties.

3.4 Electrical Transmission and Distribution

ML&P operates overhead and underground electrical transmission and distribution facilities along and crossing both 36th Avenue and Denali Street.

36th Avenue

The pole line along the north side of 36th Avenue between C Street and station 122+20 includes a 115 kV overhead circuit and under build, including a 3-phase 12.5kV circuit and fiber optic cable.

Three (3) underground 12.5kV 3-phase feeder circuits cross 36th Avenue at approximate station 122+20:

- One circuit risers on pole 51B, station 122+20, left, and extends west, along the north side of 36th Avenue, on the existing pole line;
- One circuit risers on pole 51B, station 122+20, left, and extends east on existing poles to riser pole 71B, station 128+40. The circuit continues east, along the north side of 36th Avenue, to the Old Seward Highway in an underground configuration, and;
- One circuit continues underground to the west, across Denali Street, to SC 162, Denali Street station 38+70, left.

There is an underground 3-phase 12.5kV direct buried circuit along the south side of 36th Avenue between C Street and Denali Street, where it extends south, along the west side of Denali Street.

Denali Street, Tudor Road to 36th Avenue

ML&P operates two (2) 3-phase 12.5kV circuits along the east side of Denali Street between Tudor Road and Communications Avenue. One circuit is in conduit, the other direct buried.

Both circuits pass through the vault at station 18+60, and enter vault/switch cabinet SC-63, approximate station 25+00, right (40th Avenue).

A 3-phase 12.5kV circuit crosses Denali Street in conduit from the vault at station 18+60, providing service to Lowes and Home Depot.

From SC-63, station 25+00, one circuit crosses Denali Street and extends west, along the north side 40th Avenue, providing service to a public works load center and the AWWU well house, looping back across Denali Street to the northeast quadrant of Denali Street and 40th Avenue.

Both circuits extend north, along the east side of Denali Street. One circuit turns east along the Communications Avenue, while the other continues north along Denali Street to a vault in the southeast quadrant of Denali Street and Telephone Avenue.

A 3-phase 12.5kV circuit in conduit crosses Denali Street at approximate station 32+65, and extends north, along the west side of Denali Street, to 36th Avenue.

Denali Street, 36th Avenue to Fireweed Lane

ML&P operates a 3-phase 12.5kV circuit along the east side of Denali Street from switch cabinet SC-162, approximate station 38+70, to a riser pole 44C at Fireweed Lane, approximate station 74+00.

The facility is direct buried between a pull box near 34th Avenue, approximate station 42+40, and a pull box in the southwest quadrant of Denali Street and E. Northern Lights Boulevard, approximate station 64+00.

The circuit passes through the following switch cabinets/vaults:

- SC-328, station 48+60, E. 33rd Avenue
- SC-56, station 54+40, north of E. 32nd Avenue
- SC-170, station 58+30, Benson Boulevard

There is an underground crossing at station 58+30 that includes 2-4-inch rigid steel conduits, and a crossing at station 64+00 that includes 4-#2 15kV conductors.

3.5 Communications

Alaska Communications Systems (ACS) and General Communications, Inc. (GCI) operate underground communication facilities within the project limits.

The ACS Central Wire Center is located west of Denali Street at Communications Avenue. Both ACS and GCI operate multiple fiber optic and large pair copper cables entering and exiting the wire center which are integral to communication systems in Anchorage.

ACS

ACS operates an interconnected manhole/duct system along 36th Avenue and Denali Street.

36th Avenue

The ACS manhole/duct system along 36th Avenue begins at the manhole located on the north side of 36th Avenue between C Street and A Street, approximate station 106+60, and extends east, passing through five (5) manholes to and crossing the Old Seward Highway. The duct bank consists of twelve (12) ducts, a combination of 4-inch PVC conduits and/or 6-way modular duct.

Facilities in the ducts include multiple 3600x26 copper and fiber optic cables.

The manholes and duct bank are located within within the 36th Avenue travel way between approximate stations 115+00 and 135+00.

In addition to the manhole/duct system, ACS operates underground direct buried 1200 pair copper cables along and crossing 36th Avenue:

- 2-1200x24 cables exit ACS manhole 903 at station 122+00, left, cross 36th Avenue in conduit, and extend west, along the south side of 36th Avenue, through A Street;
- 1-1200x24 direct buried cable exits manhole 903, station 122+00, and extends east, along the north side of 36th Avenue, to the Old Seward Highway, and;
- 1-1200x24 crosses 36th Avenue at station 122+00 and extends south, outside the project limits, in utility easement.

Denali Street, Tudor Road to 36th Avenue

The ACS manhole/duct system parallels the east side of Denali Street from a manhole near Tudor Road at approximate station 12+30, north to manhole 902, located in the 36th Avenue median, station 122+10.

The duct bank passes through three manholes:

- MH 968, located in the southeast quadrant of Denali Street and 40th Avenue intersection, approximate station 23+95;
- MH C900, located in the southeast quadrant of Denali Street and Communications Avenue intersection, approximate station 28+80, and;
- MH 901, located located in utility easement north of Telephone Avenue.

There are a total of 24 conduits, made up from 4 each runs of 6-way modular duct, between manhole 902 and manhole 900. There are 32 each 4-inch PVC conduits from manhole 900, across Denali Street, to the Central Wire Center.

Denali Street, 36th Avenue to Fireweed Lane

The ACS manhole/duct system between 36th Avenue and Fireweed Lane begins at manhole 902, located in the 36th Avenue median, approximate station 122+10. A 6-way modular duct extends north, along the east side of Denali Street to manhole 465, located in the Fireweed Lane, approximate station 74+20.

The duct bank passes through five (5) manholes:

- MH 904, station 34+80
- MH 492, station 45+60
- MH N491, station 53+25
- MH 490, station 59+30
- MH 466, station 64+70
- MH 569, station 70+50

All of the manholes are located within the Denali Street north bound lanes.

GCI

36th Avenue

GCI operates underground fiber optic facilities along the south side of 36th Avenue between approximate A Street station 108+00 east to approximate station 127+60. The facilities provide services to adjacent properties such as the Loussac Library and the Denali Alaska Financial Center.

Denali Street

GCI operates underground fiber optic facilities crossing Denali Street between stations 28+50 and 30+20. The fiber cables and four (4) handholes and associated conduits are associated with the Central Wire Center.

4 UTILITY CONFLICTS, RESOLUTIONS, AND RECOMMENDATIONS

4.1 Water Distribution

No conflicts are anticipated with water distribution mains on either 36th Avenue or Denali Street. However, the preliminary estimate provides for the surface adjustment of approximately forty-six (46) water valve boxes and lids to finished pavement grades, and the relocation/adjustment of eighteen (18) fire hydrants. The adjustments and/or relocations apply to all design alternatives.

Recommendations: Coordinate with AWWU on other planned water distribution upgrades or improvements, including replacement of surface valve boxes and lids as required.

4.2 Sanitary Sewer

No conflicts are anticipated with sewer collection pipelines along 36th Avenue or Denali Street. However, the preliminary relocation estimate provides for the adjustment of twelve (12) manhole frames and grates to finished pavement grades. The adjustments apply to all design alternatives.

Recommendations: Consider requesting AWWU report on the condition of existing asbestos cement mains along Denali Street. Coordinate with AWWU on other planned sewer upgrades or improvements, including replacement of sewer manhole lids, frames, and grates as required.

4.3 Natural Gas

36th Avenue

Encounters with the 4-inch plastic main along 36th Avenue are likely, given its location under the existing pathway. Depending on the design alternative chosen and factors such as the pathway structural section depth, landscape grading, etc., the encounters may become conflict and require relocation or adjustment.

The preliminary relocation estimate includes costs for the relocation of the 4-inch main between stations 108+00 (A Street) and 135+00 (Old Seward Highway) under both design alternatives 1 and 2.

Denali Street, Tudor Road to 36th Avenue

This report assumes that construction of the roundabout at 40th Avenue requires the relocation of the 2-inch plastic main between stations 24+00 and 31+30 under design alternatives 1 and 2.

The preliminary relocation estimate provides for minor vertical or horizontal adjustments to the main under design alternative 3.

Denali Street, 36th Avenue to Northern Lights Boulevard

Encounters with the 2-inch main along Denali Street between 36th Avenue and Northern Lights Boulevard are likely, given its location under the existing sidewalk, curb and gutter, and the northbound travel lane.

This report assumes full relocation of the main between stations 37+65 and 61+60, including crossings at 36th Avenue, station 54+25, and station 58+60, under design alternative 1.

The preliminary relocation estimate provides for minor vertical or horizontal adjustments to the main under design alternatives 2 and 3.

Recommendations: Consider surveying the horizontal location of the 4-inch main along the south side of 36th Avenue to determine the true extent of encounters/conflicts.

4.4 Electrical Transmission and Distribution

PM&E provided ML&P a limited engineering authority to evaluate the relocation of the electrical infrastructure within the project limits and develop a concept level estimate for the design alternatives under consideration. Appendix C includes copies of correspondence, meeting summaries, and ML&P's preliminary relocation estimate.

36th Avenue

Design alternative 1 requires the relocation of the ML&P pole line north, into new utility easement, to accommodate the 115kV circuit. ML&P indicates that any conflict requiring a pole to be relocated will require relocating all poles to a uniform alignment between Denali Street and Arctic Boulevard. (angle pole ?)

The 12.5kV circuit and fiber optic cable underbuilt on the existing poles would be relocated to an underground configuration, presumably under the proposed 10-foot pathway.

The ML&P preliminary estimate also provides for relocation of the 3-phase 12.5kV direct buried circuit along the south side of 36th Avenue between A Street and Denali Street.

Design alternatives 2 does not require the relocation of the ML&P pole line along the north side of 36th Avenue. However, the ML&P preliminary estimate provides for undergrounding the aerial 3-phase 12.5kV circuit and fiber optic cable along the north side of 36th Avenue, as well as the direct buried 3-phase 12.5kV circuit along the south side of 36th Avenue between A Street and Denali Street in alternative 2.

ML&P has a project in design (Sub 16 West Feeders) that will underground the aerial 3-phase 12.5kV circuit between riser pole 51B, station 122+20, and riser pole 71B, station 128+40. However, the costs to underground the circuit and remove the poles are included in ML&P's preliminary relocation estimate for this project.

Denali Street

ML&P's preliminary estimate provides for the relocation of the underground 3-phase 12.5kV facilities along and crossing Denali Street between Tudor Road and Fireweed Lane in all design alternatives.

The estimate provides for the relocation of conductors and associated vaults, pull boxes, switch cabinets and transformers for design options 1 and 2.

The estimate provides for relocating underground direct buried conductors into conduits in all design options.

Recommendations:

- Consider surveying the horizontal locations of surface vaults and switch cabinets/transformer pads to determine the true extent of encounters/conflicts.
- Reevaluate and refine encounters and conflicts to determine unavoidable conflict requiring relocation verses relocations that can be considered ML&P system improvements.
- Coordinate the project design with ML&P's Sub 16 Feeder Project.
- Evaluate the need for electrical service to new street lighting and/or intersection signalization as the design matures.

4.5 Communications

This report and preliminary relocation estimate is predicated on the project design avoiding any conflict with the ACS and GCI underground duct and cables associated with both the Central Wire Center, and the ACS manhole/duct systems along 36th Avenue and Denali Street. Surface adjustments to GCI handholes and ACS manhole access lids are considered.

ACS

Encounters are likely and conflict requiring relocation is possible between proposed pathway construction and existing underground 1200x24 cables:

- Along the south side of 36th Avenue between stations 102+00 and 122+10, and
- Along the north side of 36th Avenue between stations 122+10 and 135+00.

The preliminary estimate provides for a replacement-in-kind relocation for all design alternatives.

The preliminary estimate also includes costs to adjust seventeen (17) ACS manhole lids, frames and grates to final pavement grades.

No conflict with ACS facilities along Denali are noted aside from manhole adjustments.

GCI

Potential conflict exists between pathway construction and underground fiber optic cable along the south side of 36th Avenue between stations 108+00 and 129+00. The preliminary estimate includes costs for a replacement in kind relocation.

The preliminary estimate also includes costs for the adjustment and/or relocation of four (4) fiber handholes associated with the Central Wire Center on Denali Street. The estimate assumes sufficient fiber slack loops in each of the handholes.

No other conflicts with GCI facilities were noted along Denali Street aside from handhole relocations/adjustments.

Recommendations:

- Consider surveying the horizontal locations of the ACS 1200x24 pair cables and GCI fiber optic cables along 36th Avenue to determine the true extent of encounters/conflicts.
- Request ACS pull manhole covers and verify the number and size of grade rings.
- Request GCI open the fiber optic handholes adjacent to the Central Wire Center to verify available slack loops.

APPENDIX A

PRELIMINARY UTILITY RELOCATION ESTIMATE

**Preliminary Utility Relocation Estimate
Midtown Corridor Improvements
MOA Project No. 16-28**

Denali Street, Tudoe Road to Fireweed Lane

		<u>ALT 1</u>	<u>ALT 2</u>
ACS		\$ 25,000	\$ 25,000
AWWU	sanitary sewer	\$ 30,000	\$ 30,000
	water	\$ 115,000	\$ 115,000
ENSTAR		\$ 200,000	\$ 80,000
GCI		\$ 50,000	\$ 50,000
ML&P		<u>\$ 2,500,000</u>	<u>\$ 2,250,000</u>
	Subtotal	\$ 2,920,000	\$ 2,550,000

36th Avenue, C Street to Old Seward Highway

ACS		\$ 2,420,000	\$ 2,420,000
AWWU	sanitary sewer	\$ 5,000	\$ 5,000
	water	\$ 70,000	\$ 70,000
ENSTAR		\$ 250,000	\$ 250,000
GCI		\$ 175,000	\$ 175,000
ML&P		<u>\$ 3,750,000</u>	<u>\$ 2,500,000</u>
	Subtotal	\$ 6,670,000	\$ 5,420,000
TOTAL		\$ 9,590,000	\$ 7,970,000

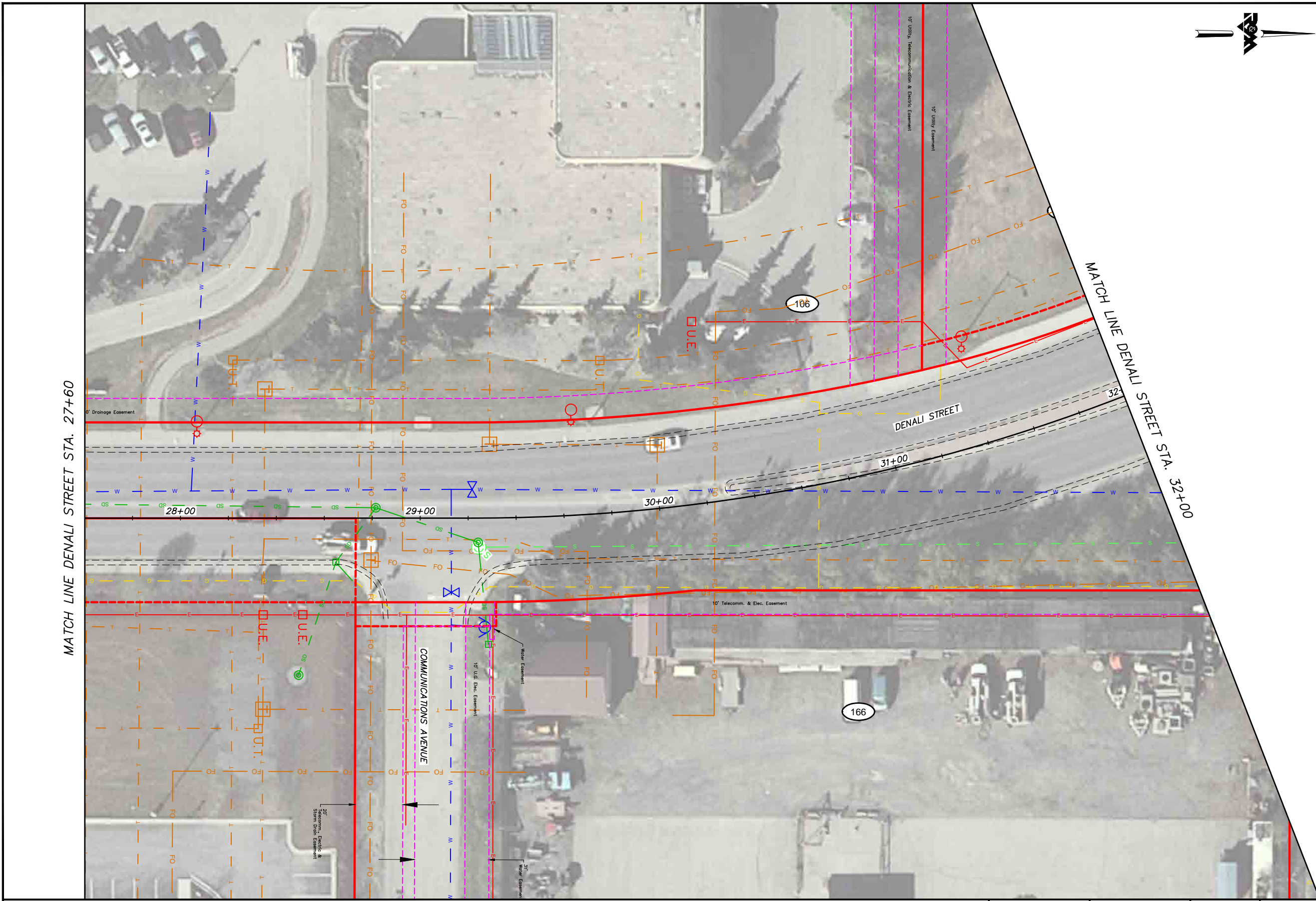
Notes:

1. The estimate includes utility company design engineering and construction inspection
2. The estimate includes a 10% contingency
3. The estimate does not include right-of-way or easement acquisition

APPENDIX B
EXISTING UTILITIES PLAN SET

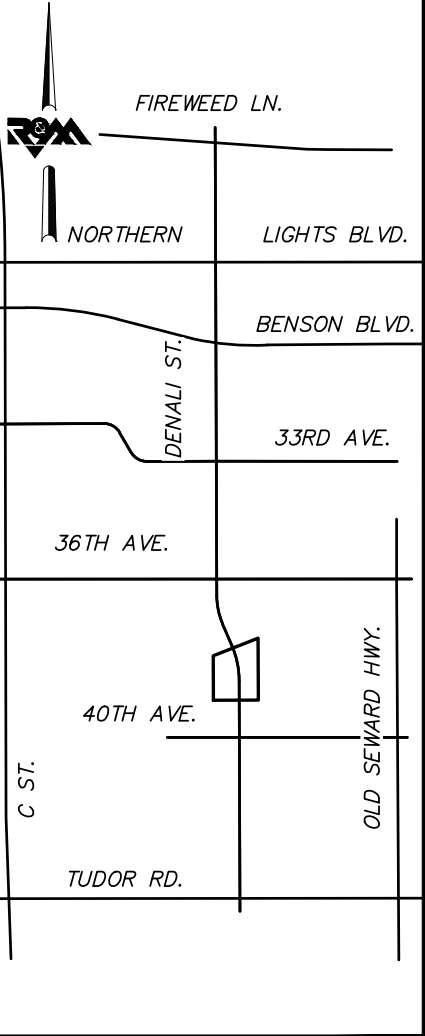
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UNDERGROUND
LOCATION**

LOCATE CALL CENTER OF ALASKA
STATEWIDE 800-478-3121 WILL
NOTIFY SUBSCRIBED UTILITIES ONLY.
OTHER UTILITIES NEED TO BE
CONTACTED INDIVIDUALLY.



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
				SANITARY SEWER			DESIGN										
				STORM SEWER			QUANTITIES										
				WATER			MUN. FINAL CHK.										
				GAS													
CONTRACTOR	BASIS OF THIS DATUM			PLAN CHECK				REVISIONS				CONSULTANT		SEAL			

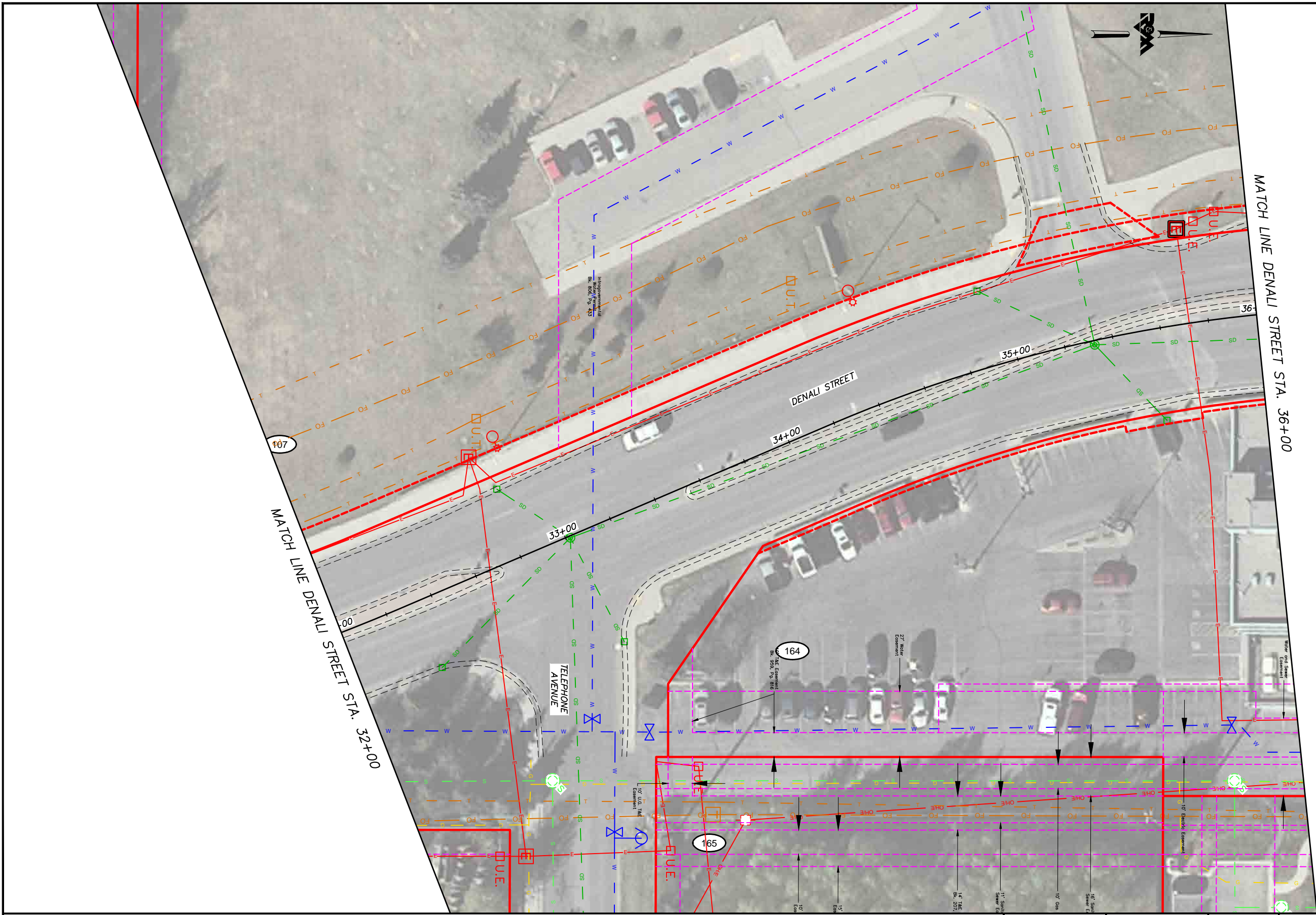
R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
907 522 1707 voice
907 522 3404 fax
www.rmconsult.com



PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS DENALI ST - STA 27+60 TO STA 32+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 5 of 25

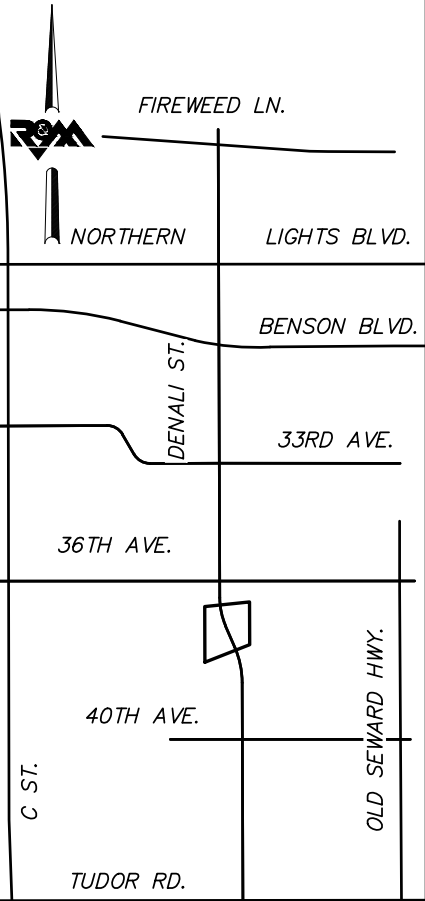
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KEYMAP



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
				SANITARY SEWER			DESIGN										
				STORM SEWER			QUANTITIES										
				WATER			MUN. FINAL CHK.										
				GAS													
CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR																	
CONSTRUCTION RECORD		VERTICAL DATUM				PLAN CHECK									REVISIONS		



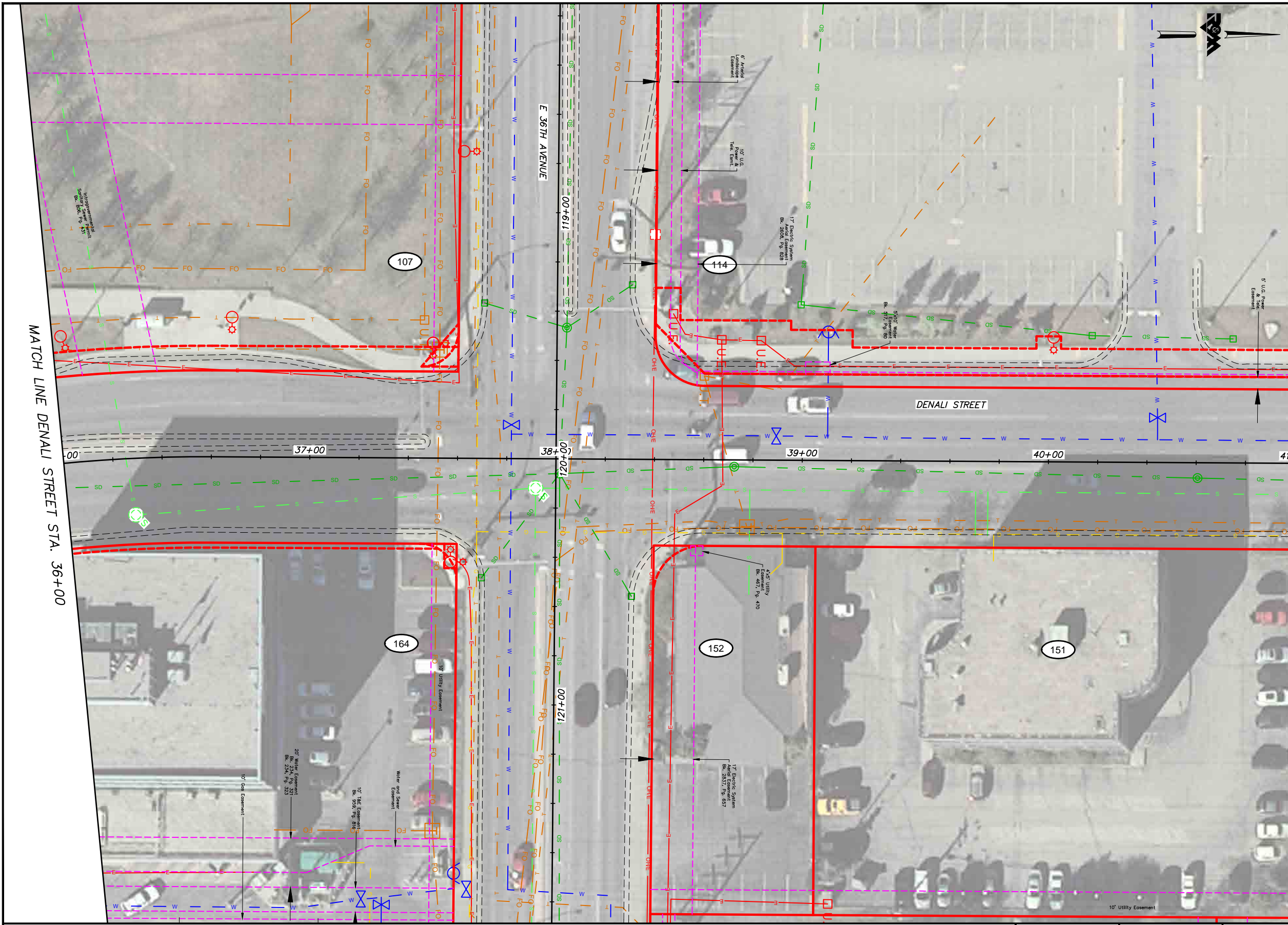
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PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS DENALI ST - STA 32+00 TO STA 36+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 6 of 25

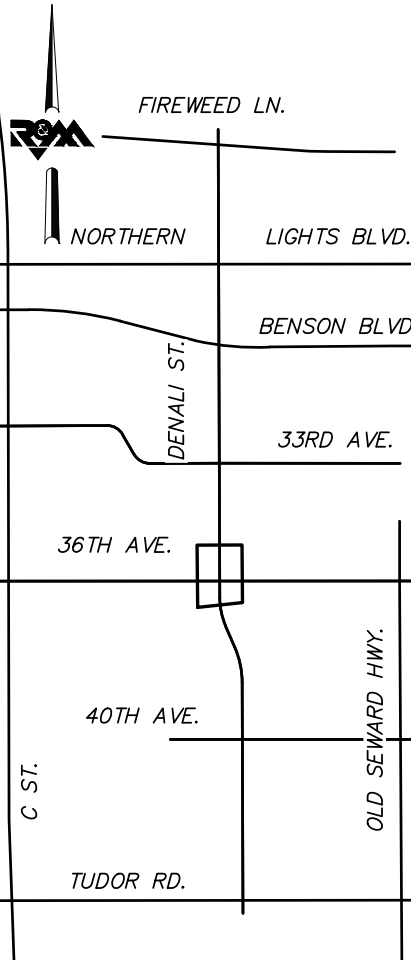
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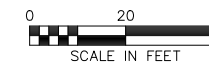


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KEYMAP



SCALE IN FEET

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE TOPOGRAPHY PROFILE SANITARY SEWER STORM SEWER WATER GAS			TELEPHONE ELECTRIC CABLE TV DESIGN QUANTITIES MUN. FINAL CHK.										
CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR	VERTICAL DATUM			PLAN CHECK				REVISIONS				CONSULTANT					

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SEAL



**PROJECT MANAGEMENT AND
ENGINEERING DIVISION**

16-28 MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

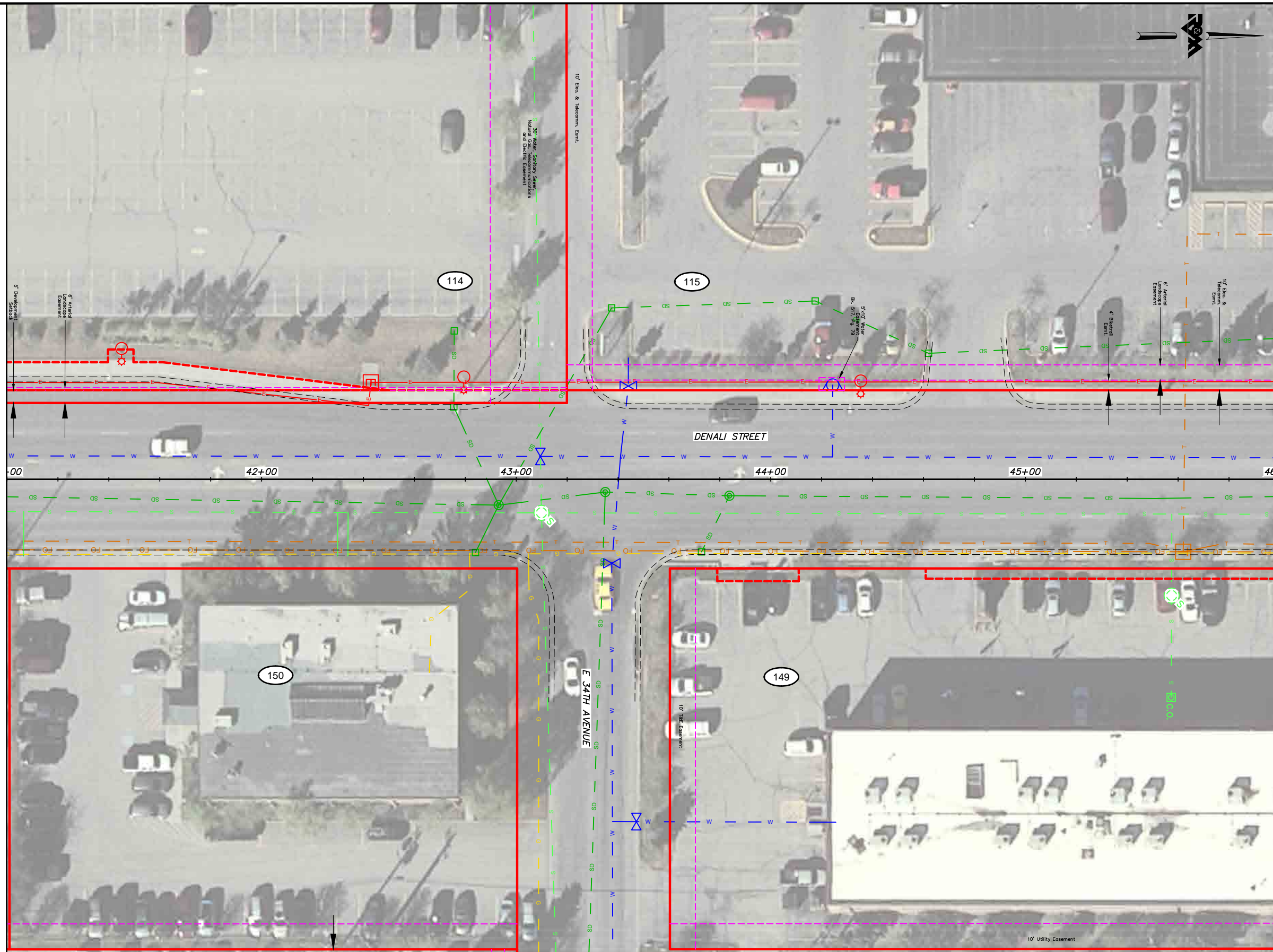
UTILITY SHEETS DENALI ST - STA 36+00 TO STA 41+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 7 of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

Plotted: 12/15/2017 2:17 PM

MATCH LINE DENALI STREET STA. 41+00

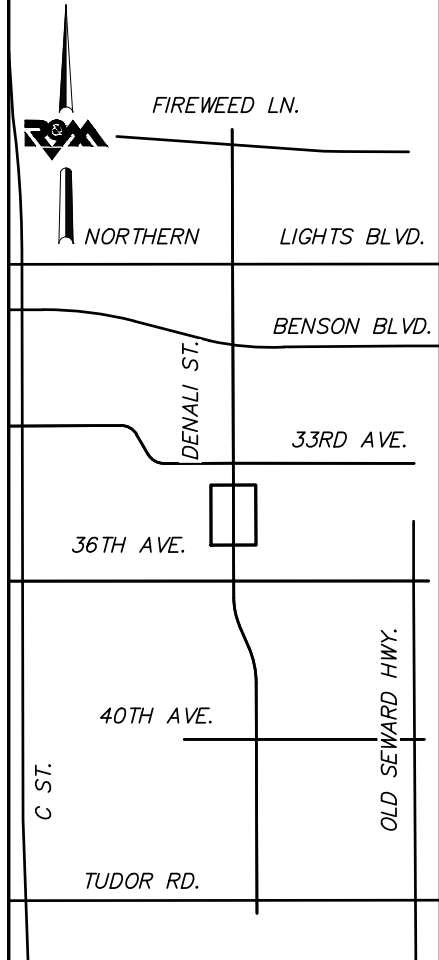


MATCH LINE DENALI STREET STA. 46+00

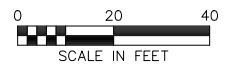


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KEYMAP



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY	
DESIGN				BASE			TELEPHONE											
				TOPOGRAPHY			ELECTRIC											
				PROFILE			CABLE TV											
				SANITARY SEWER			DESIGN											
				STORM SEWER			QUANTITIES											
CONTRACTOR	BASIS OF THIS DATUM			WATER			MUN. FINAL CHK.											
INSPECTOR				GAS														
CONSTRUCTION RECORD		VERTICAL DATUM				PLAN CHECK						REVISIONS						

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16-28 MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

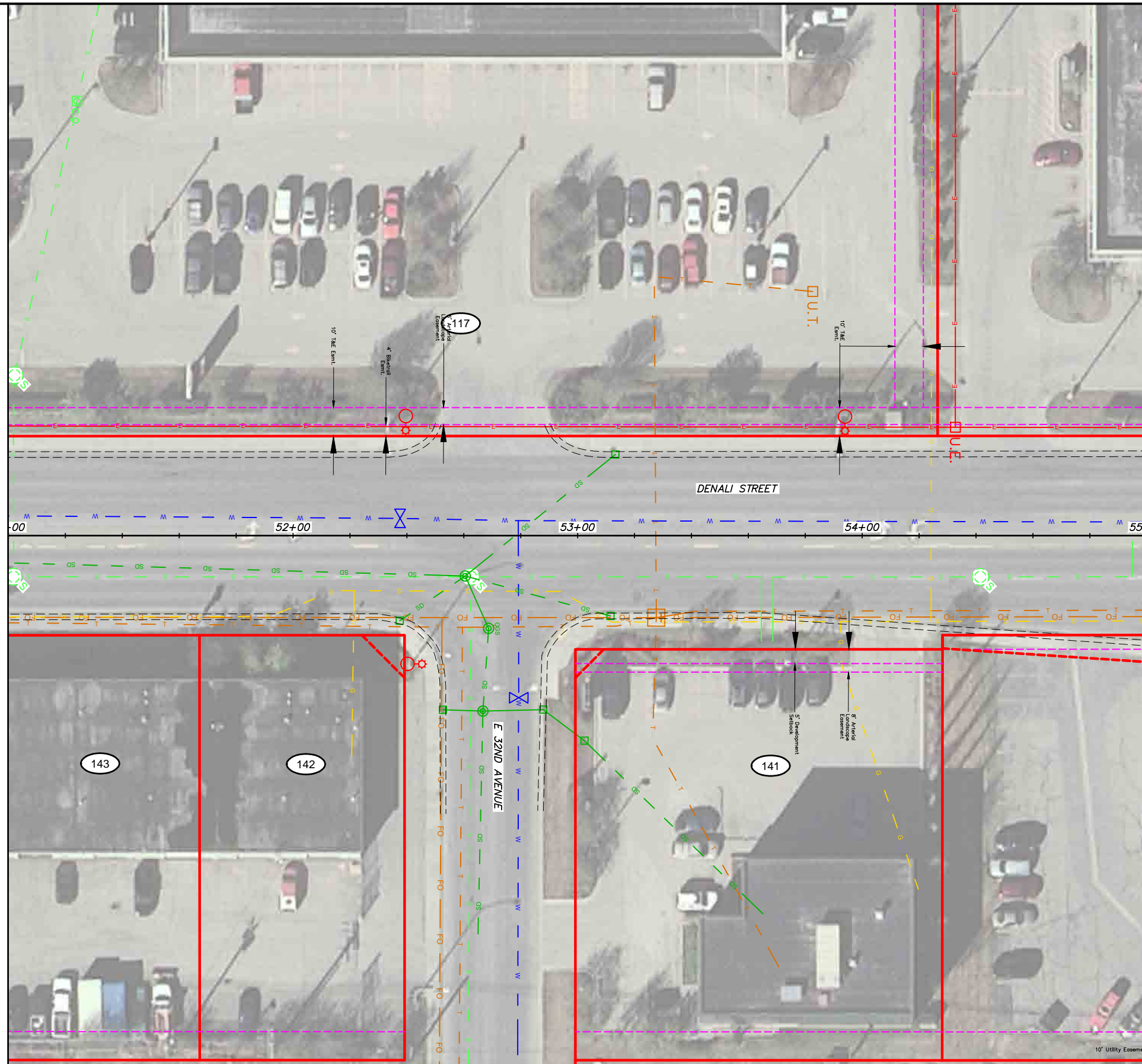
UTILITY SHEETS DENALI ST - STA 41+00 TO STA 46+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 8 of 25

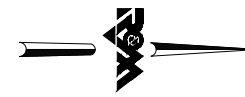
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Plotted: 12/15/2017 2:18 PM

MATCH LINE DENALI STREET STA. 51+00

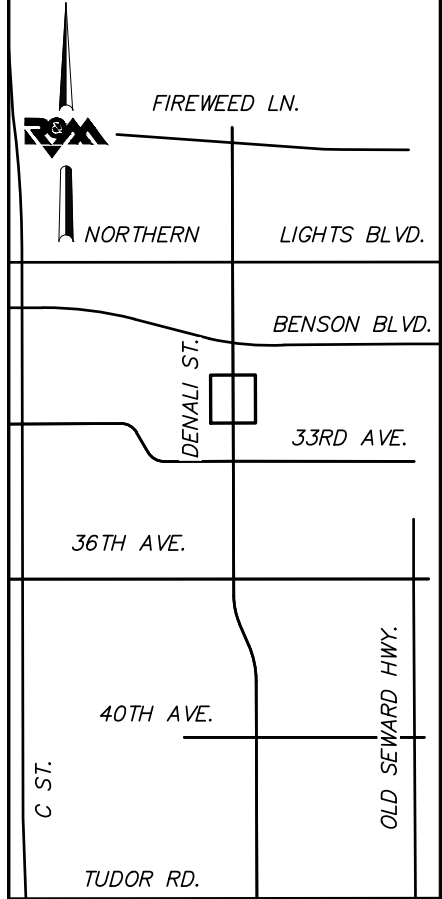


MATCH LINE DENALI STREET STA. 55+00



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KEYMAP



SCALE IN FEET

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
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				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
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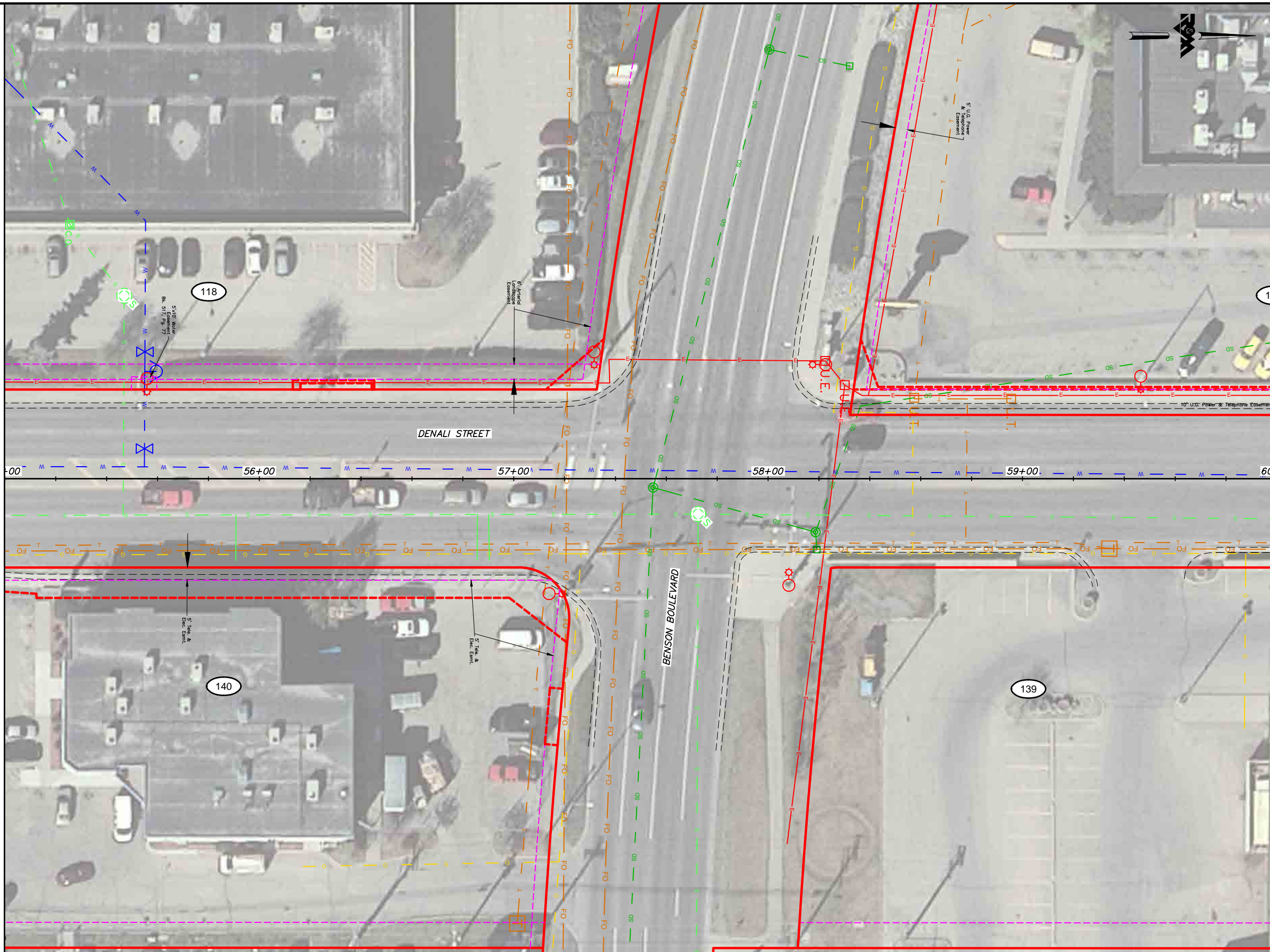


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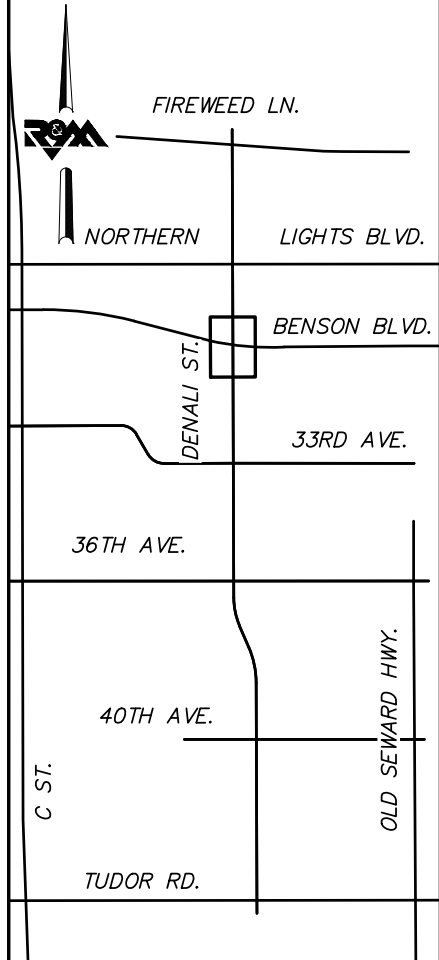
PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS DENALI ST - STA 51+00 TO STA 55+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 10 of 25

MATCH LINE DENALI STREET STA. 55+00

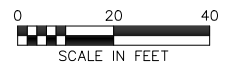


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FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
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				STORM SEWER			QUANTITIES										
CONTRACTOR	BASIS OF THIS DATUM			WATER			MUN. FINAL CHK.										
INSPECTOR				GAS													
CONSTRUCTION RECORD		VERTICAL DATUM				PLAN CHECK											



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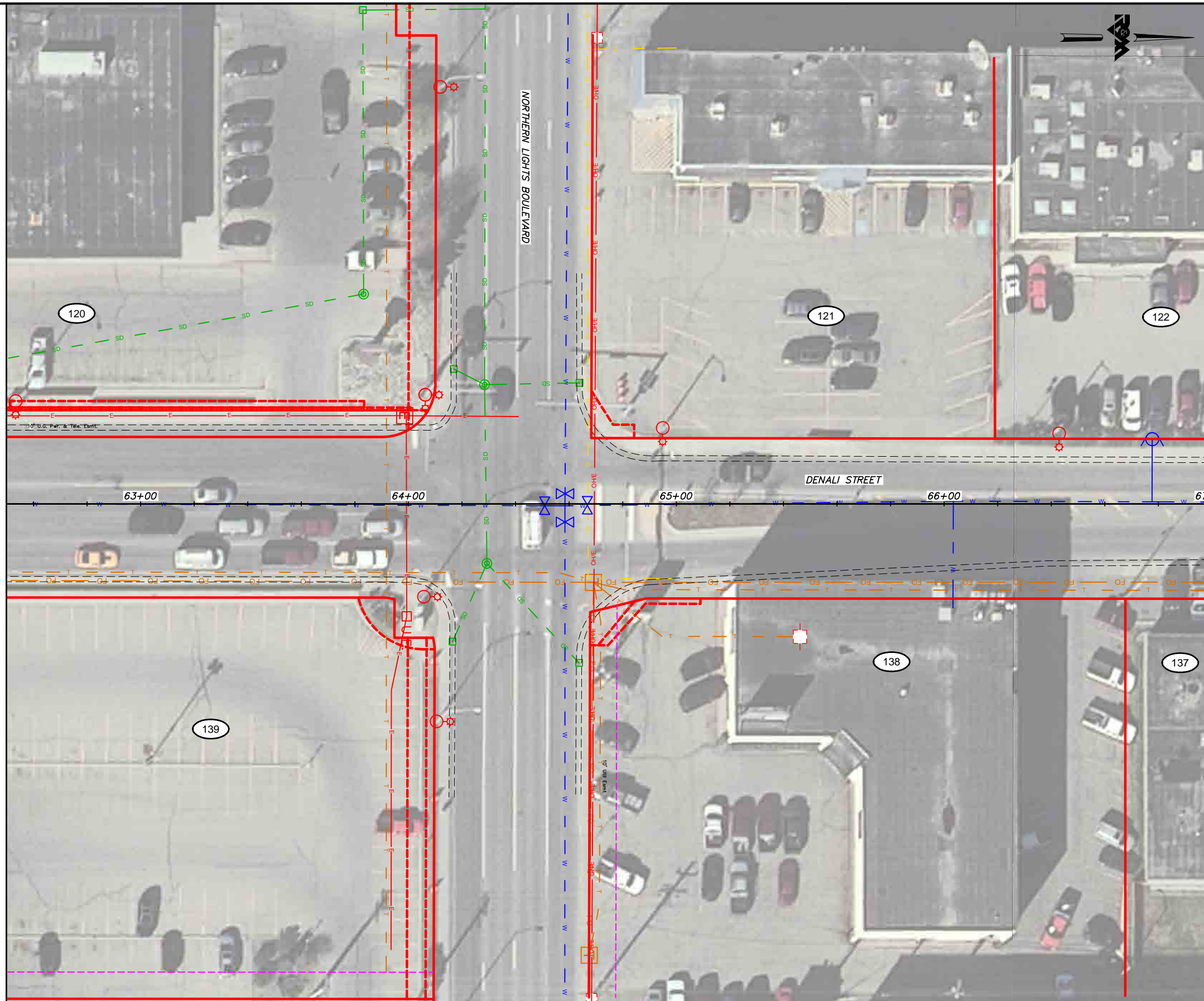
UTILITY SHEETS DENALI ST - STA 55+00 TO STA 60+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 11 of 25

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MATCH LINE DENALI STREET STA. 62+50

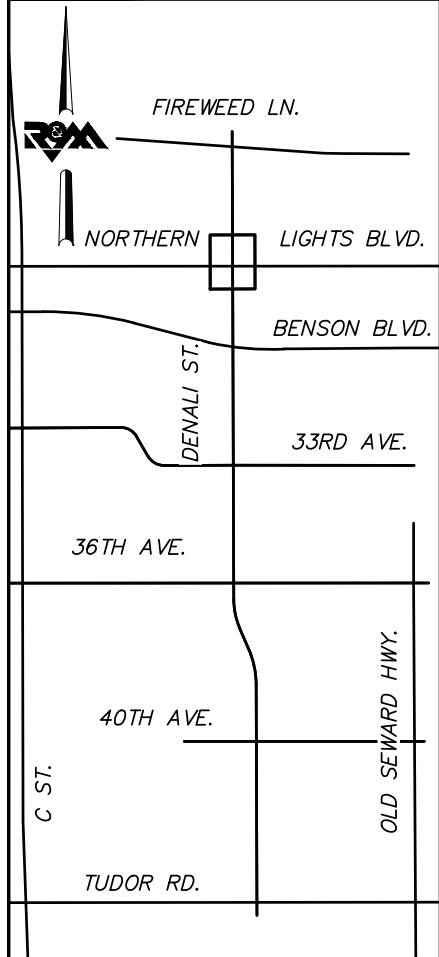


MATCH LINE DENALI STREET STA. 67+00



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FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
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				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
				SANITARY SEWER			DESIGN										
				STORM SEWER			QUANTITIES										
CONTRACTOR	BASIS OF THIS DATUM			WATER			MUN. FINAL CHK.										
INSPECTOR				GAS													
CONSTRUCTION RECORD	VERTICAL DATUM			PLAN CHECK				REVISIONS				CONSULTANT		SEAL			



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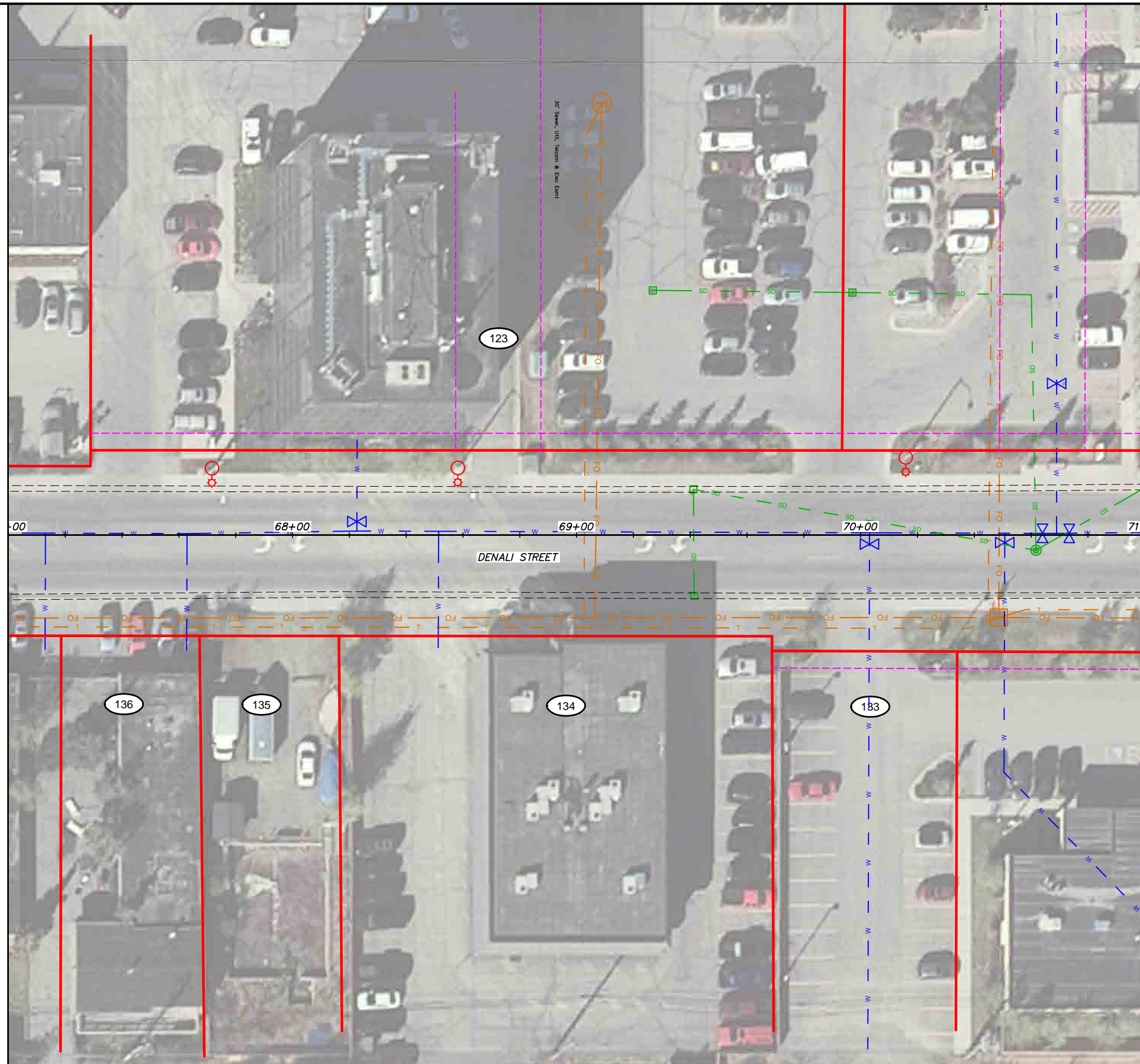


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16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS DENALI ST - STA 62+50 TO STA 67+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 13 of 25

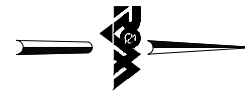
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MATCH LINE DENALI STREET STA. 67+00

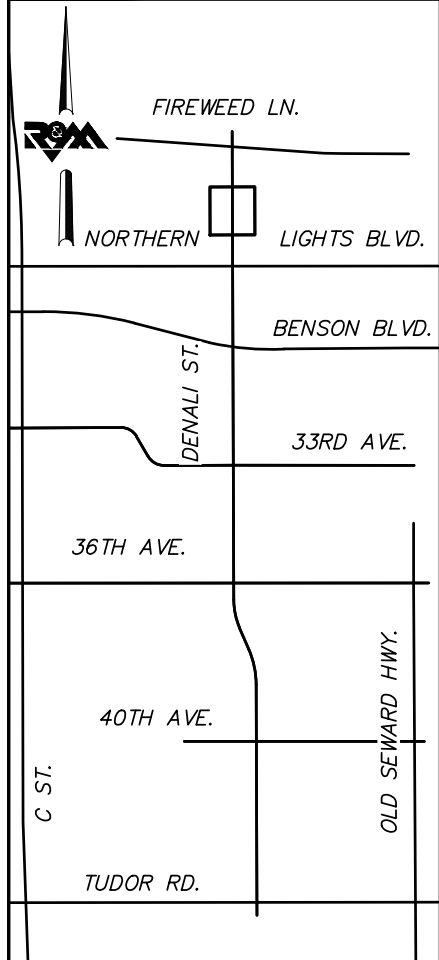


MATCH LINE DENALI STREET STA. 71+00



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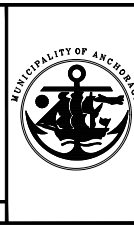
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				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
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				WATER			MUN. FINAL CHK.										
				GAS													
CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR																	
CONSTRUCTION RECORD	VERTICAL DATUM			PLAN CHECK				REVISIONS				CONSULTANT					

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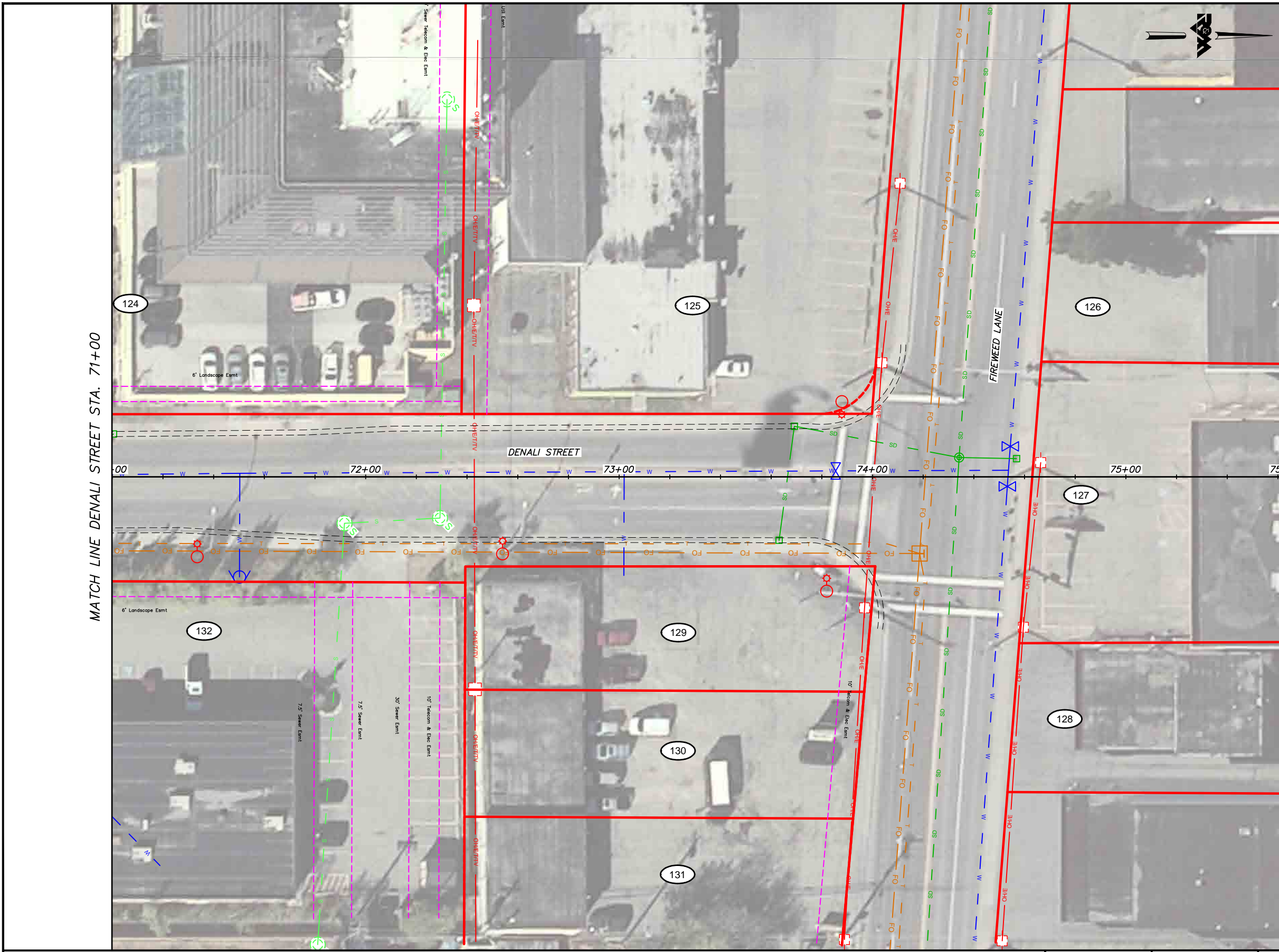
16-28
MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

UTILITY SHEETS DENALI ST - STA 67+00 TO STA 71+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 14 of 25

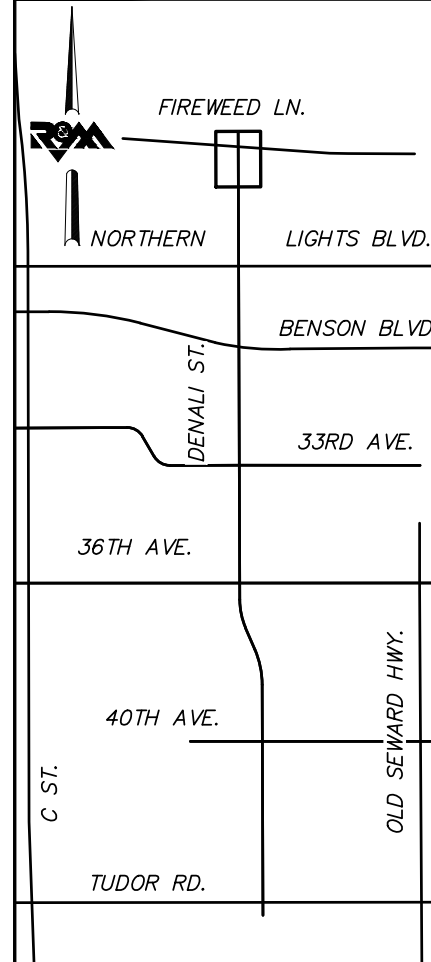
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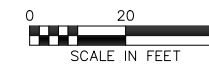


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FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE TOPOGRAPHY PROFILE SANITARY SEWER STORM SEWER WATER GAS			TELEPHONE ELECTRIC CABLE TV DESIGN QUANTITIES MUN. FINAL CHK.										
CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR	VERTICAL DATUM						PLAN CHECK										
CONSTRUCTION RECORD																	
										REVISIONS		CONSULTANT		SEAL			



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16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS DENALI ST - STA 71+00 TO EOP	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424
SHEET 15 of 25	

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

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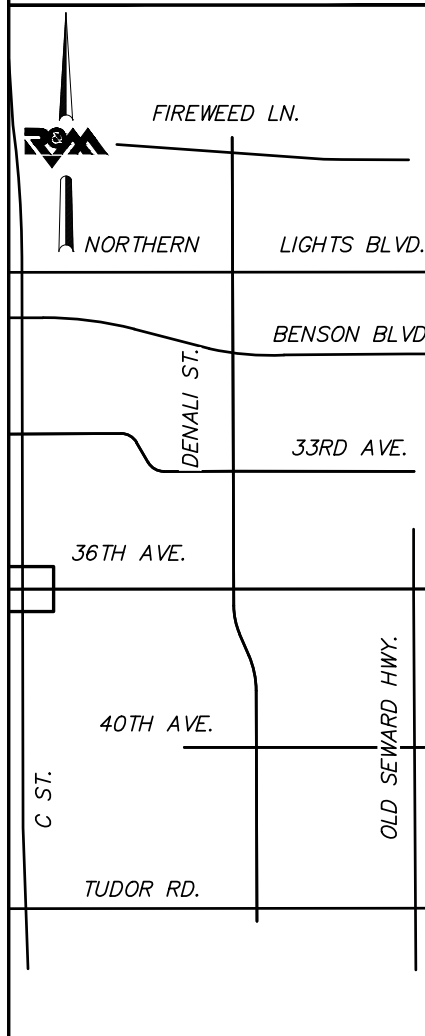


MATCH LINE E 36TH AVENUE STA. 105+00

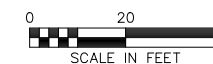


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				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
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				GAS													
CONTRACTOR				BASIS OF THIS DATUM													
INSPECTOR																	
CONSTRUCTION RECORD				VERTICAL DATUM				PLAN CHECK				REVISIONS					



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16-28 MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

UTILITY SHEETS E 36TH AVE - BOP TO STA 105+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 16 of 25

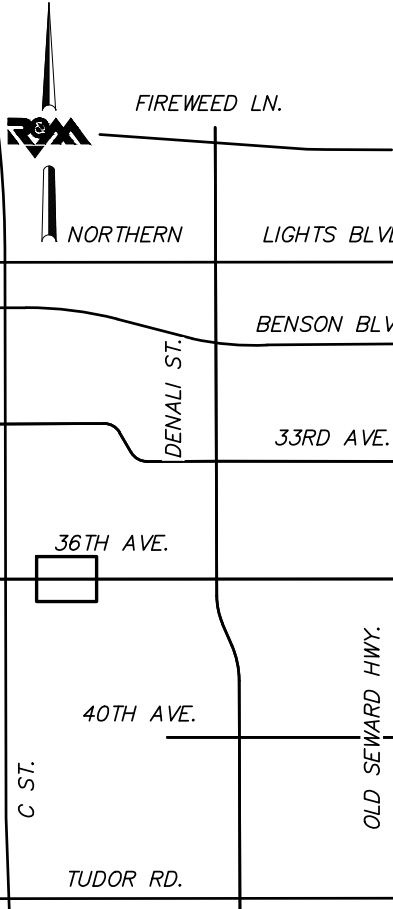
MATCH LINE E 36TH AVENUE STA. 105+00



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MATCH LINE E 36TH AVENUE STA. 110+00



KEYMAP

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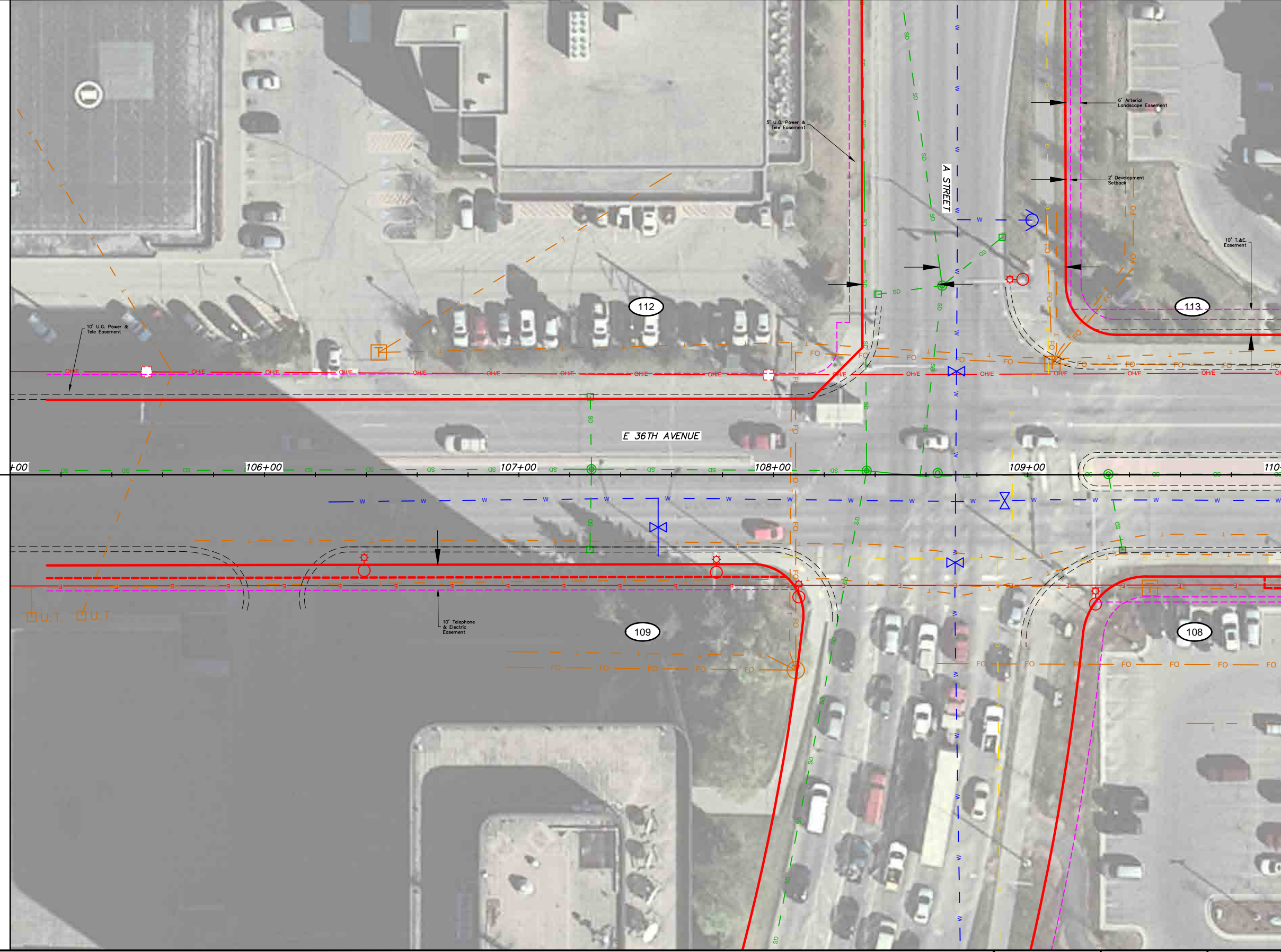
16-28 MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

UTILITY SHEETS E 36TH AVE - STA 105+00 TO STA
110+00

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 17 of 25



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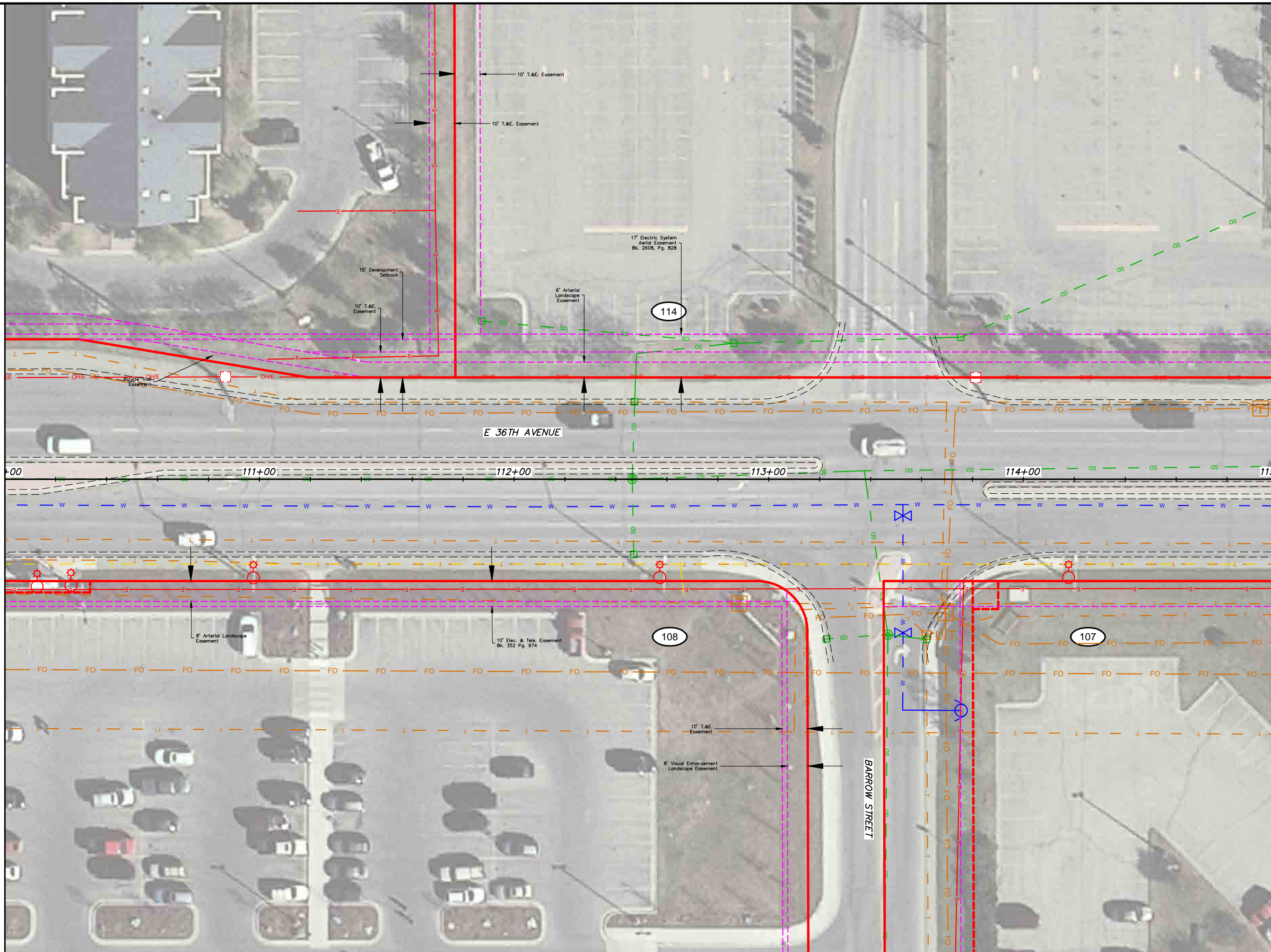
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CONTRACTOR	BASIS OF THIS DATUM																	
INSPECTOR																		
CONSTRUCTION RECORD	VERTICAL DATUM				PLAN CHECK				REVISIONS				CONSULTANT				SEAL	

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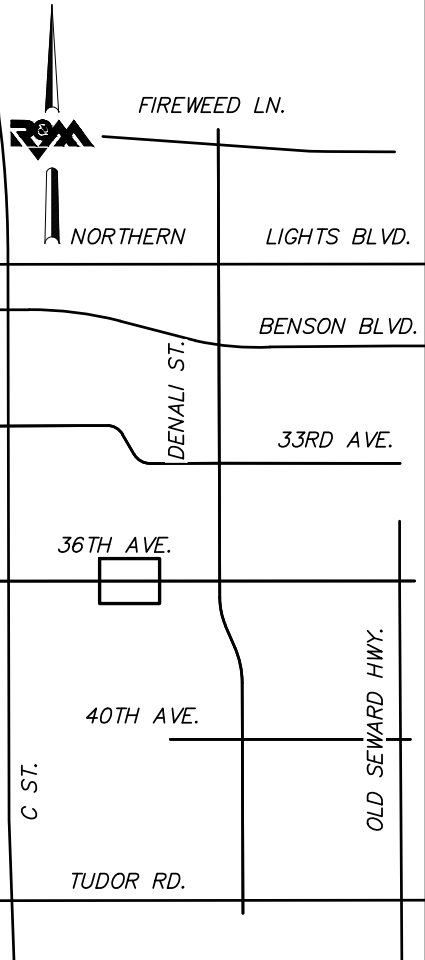
MATCH LINE E 36TH AVENUE STA. 110+00

MATCH LINE E 36TH AVENUE STA. 115+00



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SCALE IN FEET

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
				BASE			TELEPHONE										
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CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR				PLAN CHECK				REVISIONS				CONSULTANT					
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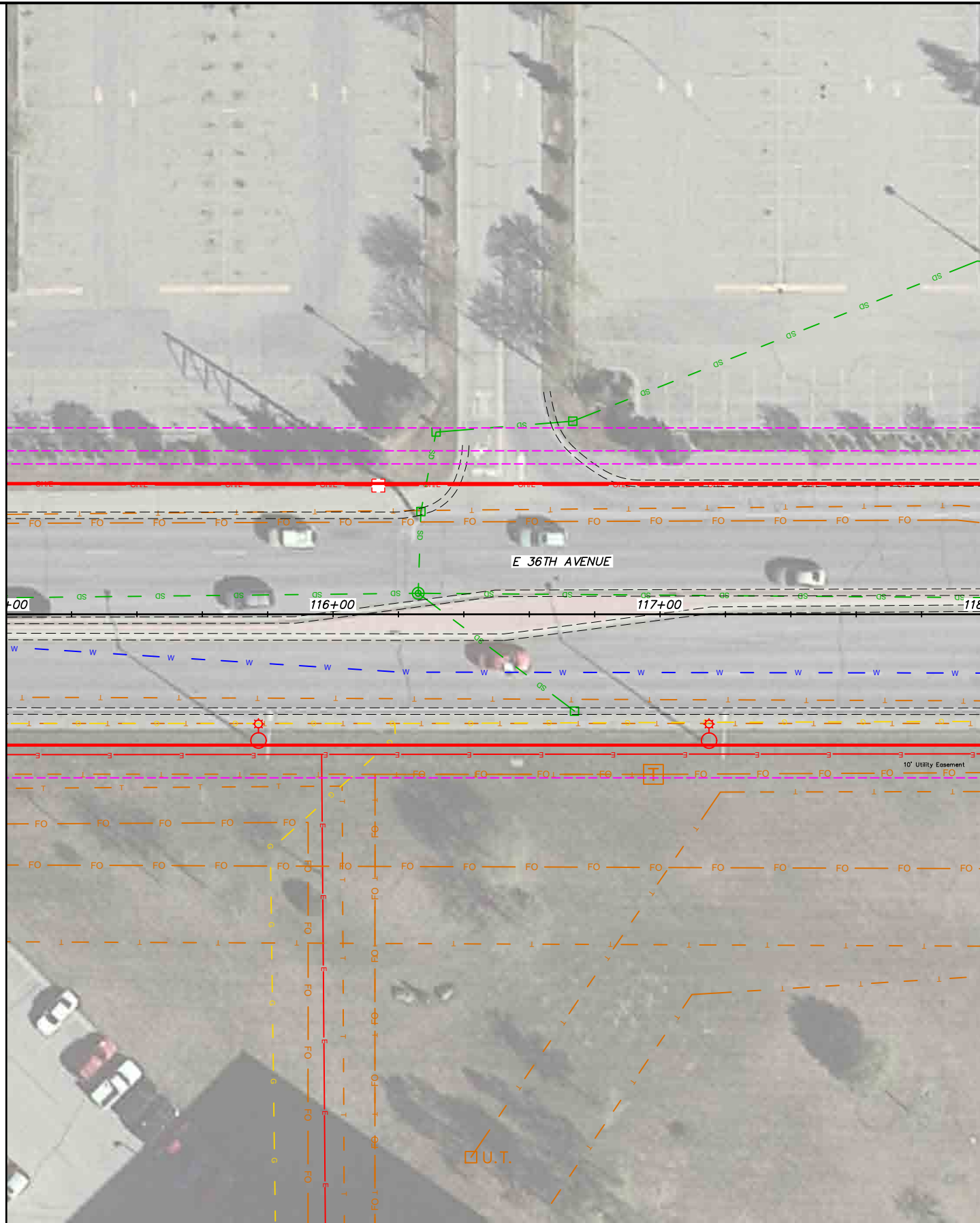


PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS E 36TH AVE - STA 110+00 TO STA 115+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 18 of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_UTILITY SHEETS.dwg

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MATCH LINE E 36TH AVENUE STA. 115+00

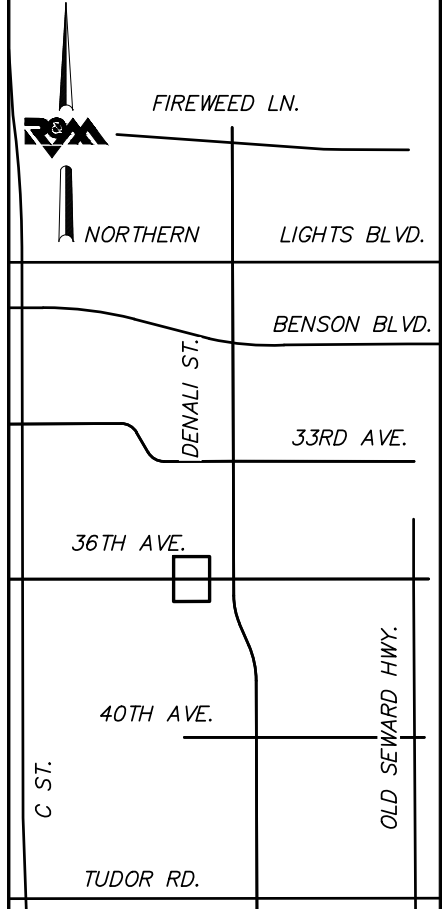


MATCH LINE E 36TH AVENUE STA. 118+00

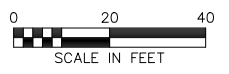


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FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN				BASE			TELEPHONE										
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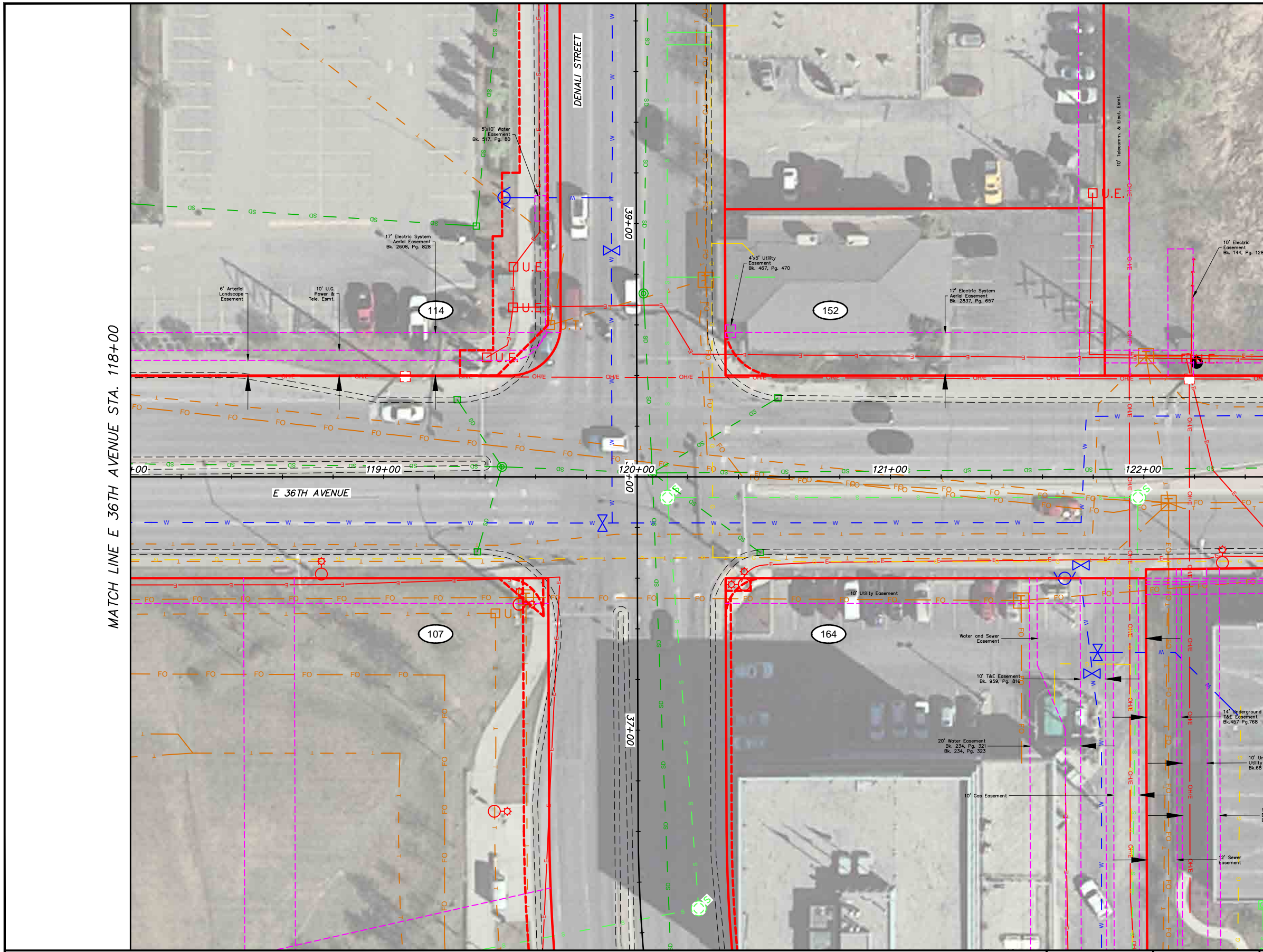
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16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS E 36TH AVE - STA 115+00 TO STA 118+00	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 19 of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

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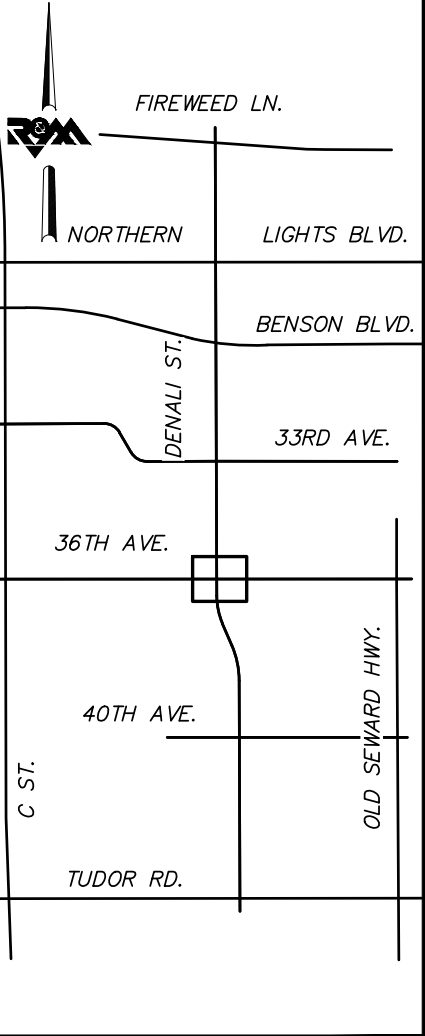
MATCH LINE E 36TH AVENUE STA. 118+00

MATCH LINE E 36TH AVENUE STA. 122+50

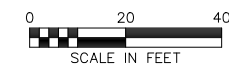


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				STORM SEWER			QUANTITIES											
				WATER			MUN. FINAL CHK.											
				GAS														
CONTRACTOR	BASIS OF THIS DATUM			PLAN CHECK				REVISIONS				CONSULTANT		SEAL				
INSPECTOR	VERTICAL DATUM																	



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907 522 3404 fax
www.rmconsult.com



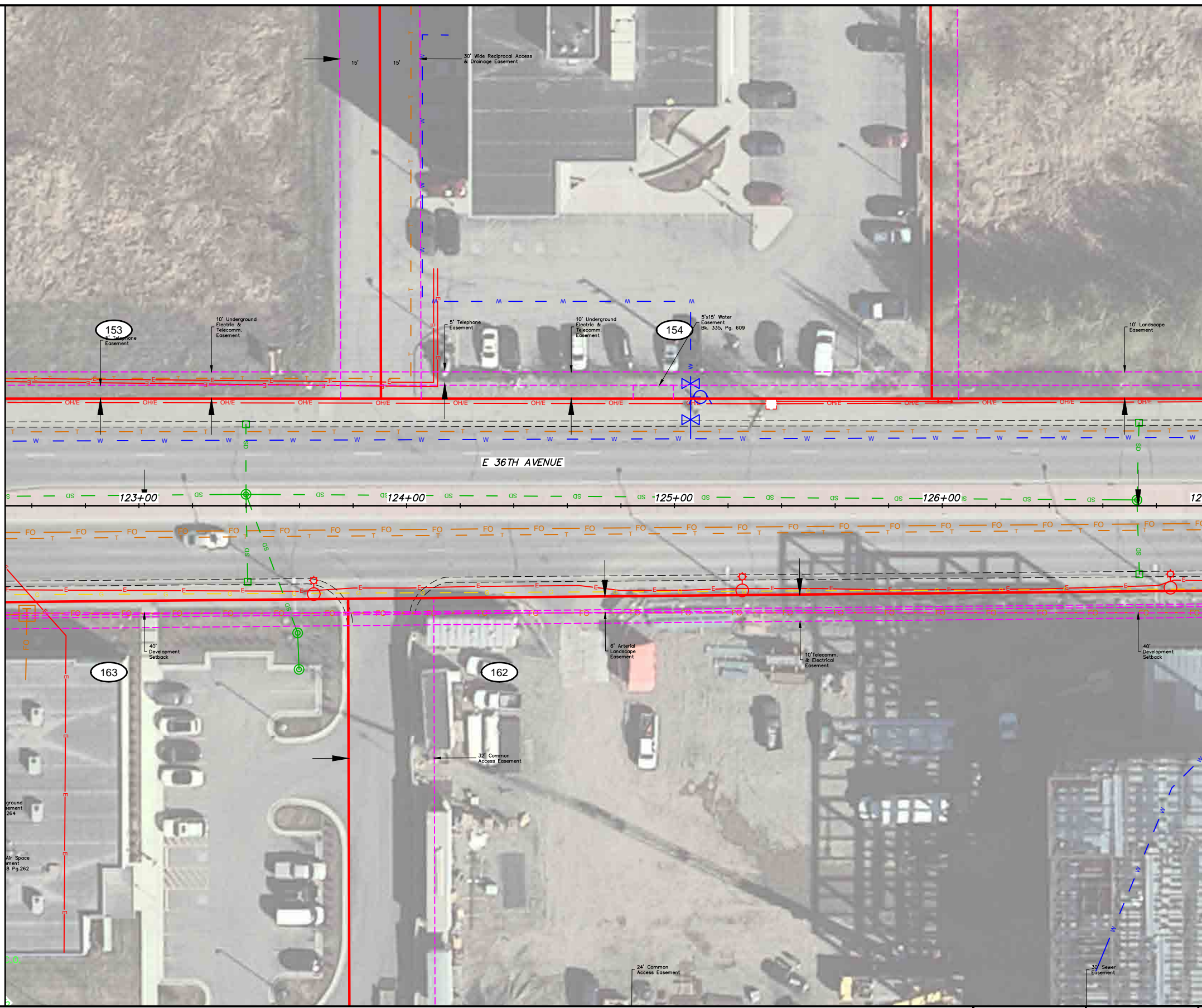
PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS E 36TH AVE - STA 118+00 TO STA 122+50	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424 SHEET 20 of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

Plotted: 12/15/2017 2:19 PM

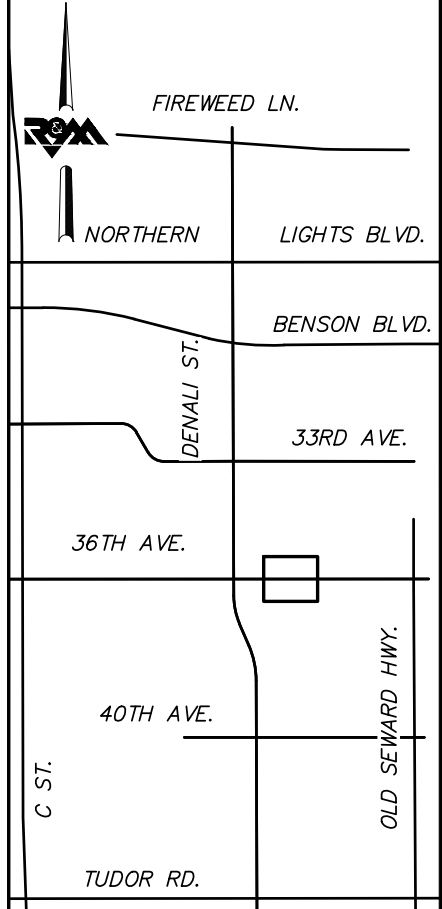
MATCH LINE E 36TH AVENUE STA. 122+50

MATCH LINE E 36TH AVENUE STA. 127+00



**BEFORE YOU DIG
CALL FOR FREE
UNDERGROUND
LOCATION**

LOCATE CALL CENTER OF ALASKA
STATEWIDE 800-478-3121 WILL
NOTIFY SUBSCRIBED UTILITIES ONLY.
OTHER UTILITIES NEED TO BE
CONTACTED INDIVIDUALLY.



KEYMAP



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
				SANITARY SEWER			DESIGN										
				STORM SEWER			QUANTITIES										
				WATER			MUN. FINAL CHK.										
				GAS													
CONTRACTOR	BASIS OF THIS DATUM			PLAN CHECK				REVISIONS				CONSULTANT		SEAL			



R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
907 522 1707 voice
907 522 3404 fax
www.rmconsult.com

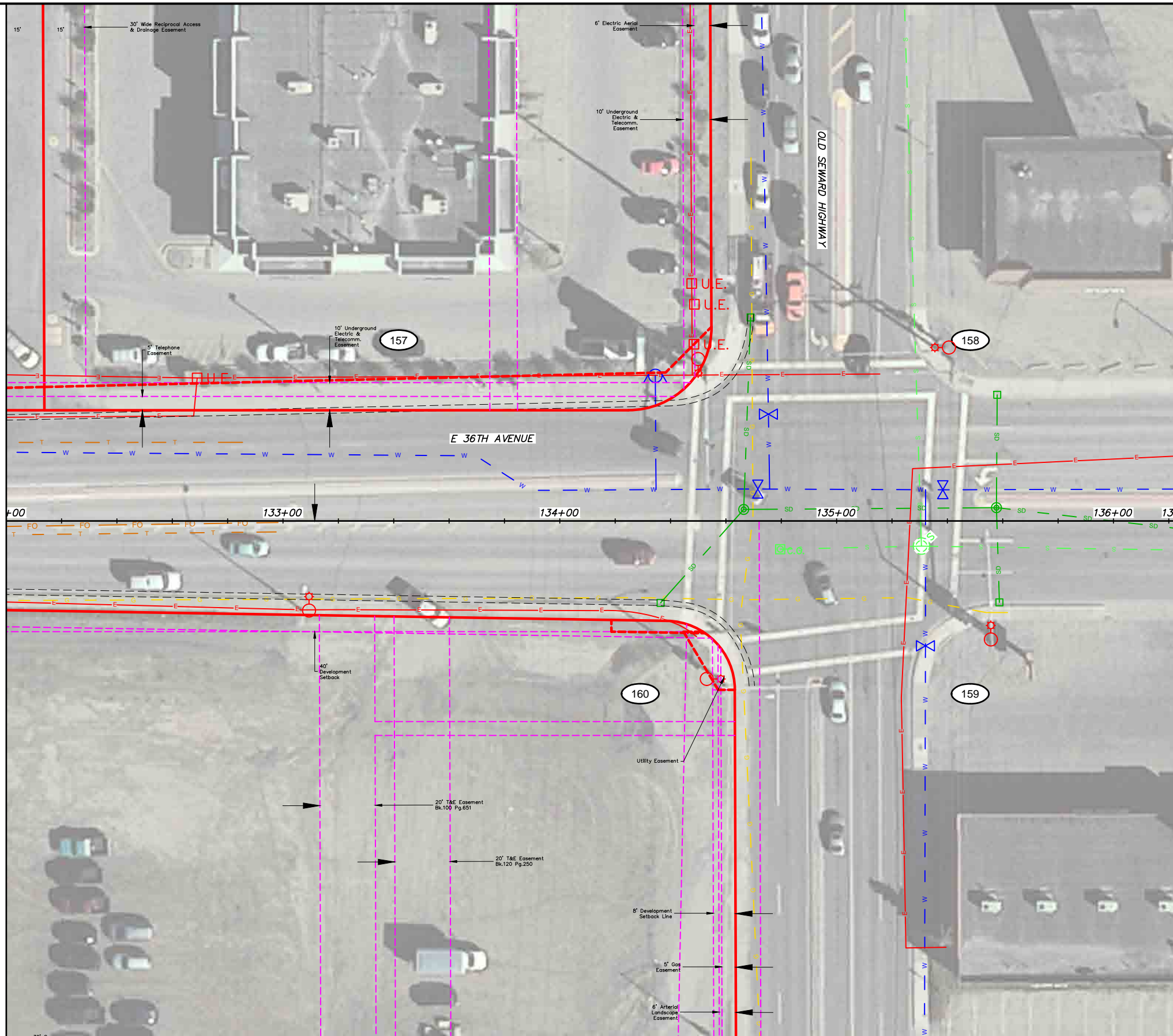


PROJECT MANAGEMENT AND ENGINEERING DIVISION			
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA		
UTILITY SHEETS E 36TH AVE - STA 122+50 TO STA 127+00			
SCALE 1:20	DATE 12/15/17	GRID 2323 2324 2423 2424	SHEET 21 of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

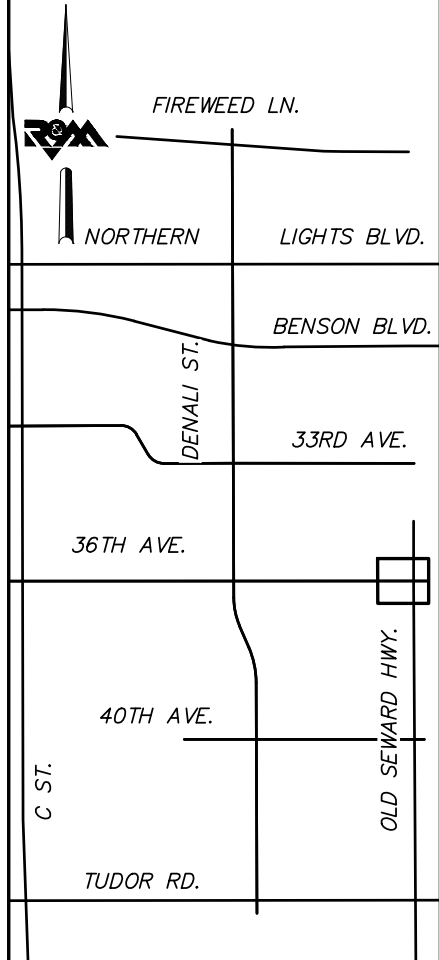
Plotted: 12/15/2017 2:20 PM

MATCH LINE E 36TH AVENUE STA. 132+00



**BEFORE YOU DIG
CALL FOR FREE
UNDERGROUND
LOCATION**

LOCATE CALL CENTER OF ALASKA
STATEWIDE 800-478-3121 WILL
NOTIFY SUBSCRIBED UTILITIES ONLY.
OTHER UTILITIES NEED TO BE
CONTACTED INDIVIDUALLY.



KEYMAP



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
				BASE			TELEPHONE										
				TOPOGRAPHY			ELECTRIC										
				PROFILE			CABLE TV										
				SANITARY SEWER			DESIGN										
				STORM SEWER			QUANTITIES										
				WATER			MUN. FINAL CHK.										
				GAS													
CONTRACTOR	BASIS OF THIS DATUM																
INSPECTOR				PLAN CHECK				REVISIONS				CONSULTANT					
CONSTRUCTION RECORD	VERTICAL DATUM											SEAL					



R&M Consultants, Inc.
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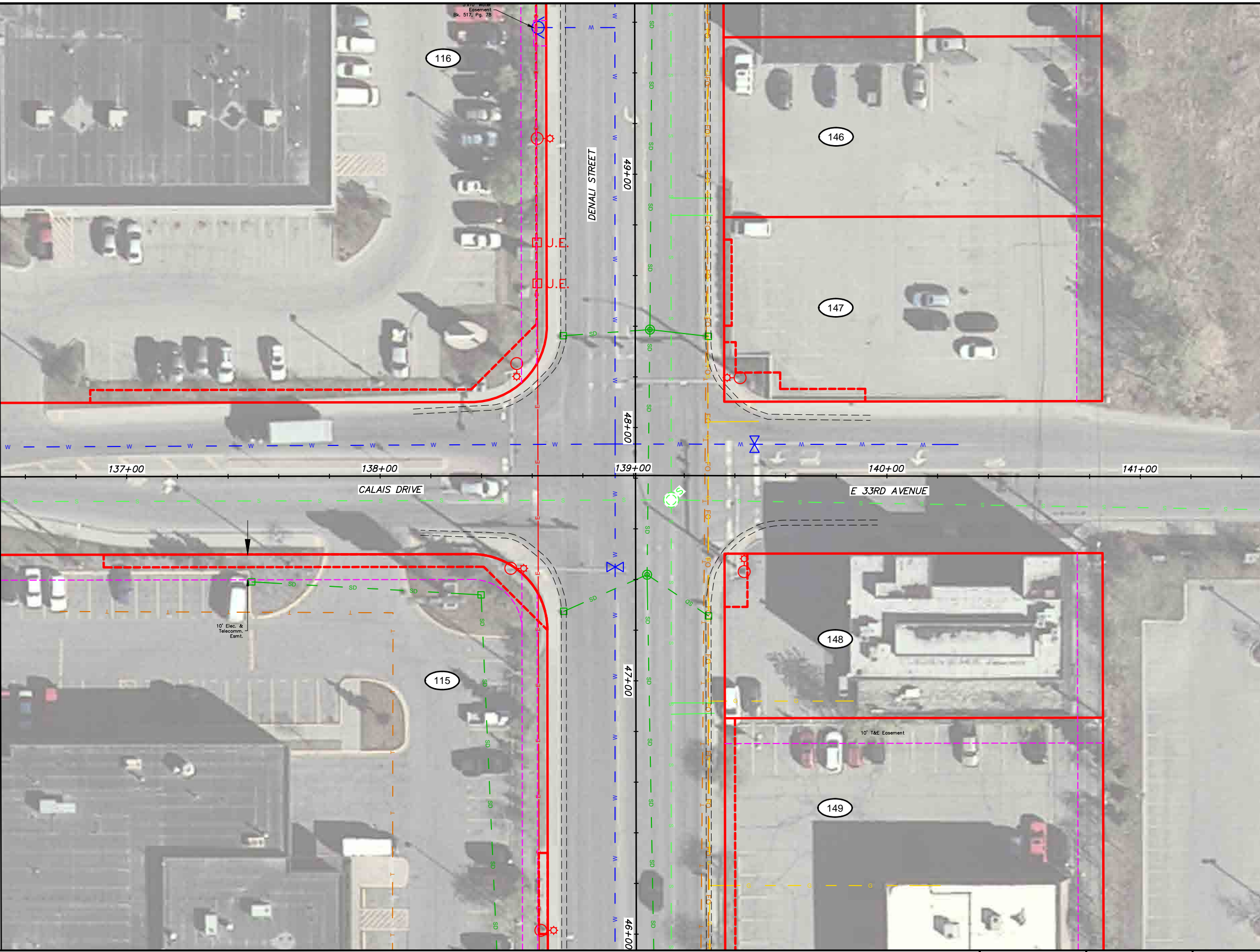


PROJECT MANAGEMENT AND ENGINEERING DIVISION	
16-28	MIDTOWN CORRIDOR IMPROVEMENTS, DENALI STREET AREA
UTILITY SHEETS E 36TH AVE - STA 132+00 TO EOP	
SCALE 1:20	DATE 12/15/17 GRID 2323 2324 ACCT. NO. 2423 2424
SHEET 23	of 25

File Location: Z:\project\2517.01 MOA PME Denali Street\Civil\ACAD\2517_Utility Sheets.dwg

Plotted: 12/15/2017 2:20 PM

MATCH LINE CALIAS DRIVE STA. 136+50

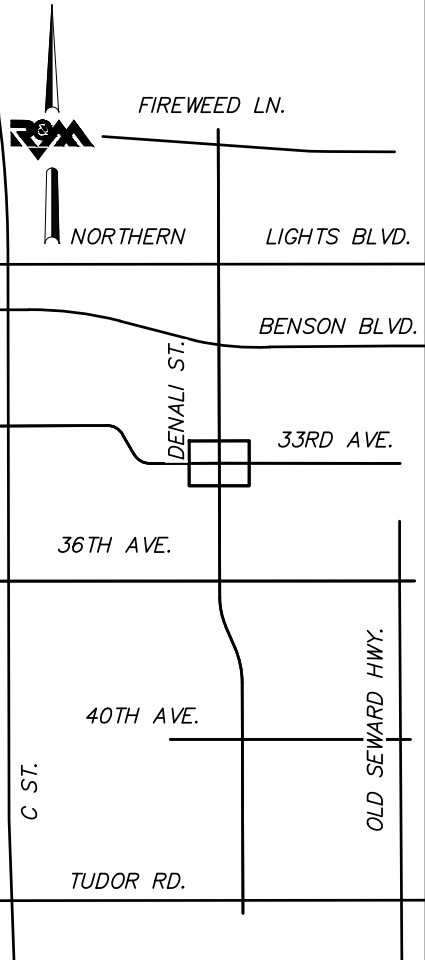


MATCH LINE E 33RD AVENUE STA. 141+50



**BEFORE YOU DIG
CALL FOR FREE
UNDERGROUND
LOCATION**

LOCATE CALL CENTER OF ALASKA
STATEWIDE 800-478-3121 WILL
NOTIFY SUBSCRIBED UTILITIES ONLY.
OTHER UTILITIES NEED TO BE
CONTACTED INDIVIDUALLY.



KEYMAP



FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY	
				BASE			TELEPHONE											
				TOPOGRAPHY			ELECTRIC											
				PROFILE			CABLE TV											
				SANITARY SEWER			DESIGN											
				STORM SEWER			QUANTITIES											
				WATER			MUN. FINAL CHK.											
				GAS														
CONTRACTOR	BASIS OF THIS DATUM																	
INSPECTOR																		
CONSTRUCTION RECORD		VERTICAL DATUM				PLAN CHECK										REVISIONS		

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SEAL



PROJECT MANAGEMENT AND
ENGINEERING DIVISION

16-28 MIDTOWN CORRIDOR IMPROVEMENTS,
DENALI STREET AREA

UTILITY SHEETS E 33RD AVE - STA 136+50 TO STA
141+50

SCALE 1:20 DATE 12/15/17 GRID 2323 2324
ACCT. NO. 2423 2424 SHEET 25 of 25

APPENDIX C
UTILITY COORDINATION



Midtown Corridor Improvements, Denali St Area – Benson Blvd to Tudor Rd
Project # 16-28 (PM&E)/2517.01 (R&M)
W. 32nd- E. 33rd Avenue Upgrades Project #16-29 (PM&E)
November 3, 2017

ML&P Coordination Meeting Agenda

- I. Introductions
- II. Meeting Goals
- III. Project Scope and Status
 - a. R&M (Denali and 36th)
 - b. CRW (32nd/33rd) FBXS to 34th
 - c. ML&P (P150022-E. 36th New Feeders, From Sub 16 West, undergrounding)
- IV. Potential Utility Conflicts
 - a. Denali and 36th
 - b. 32nd/33rd
- V. Coordination
- VI. Schedule
 - a. Denali/36th DEC 3rd PLANNING & ZONING DRAFT CONCEPT REPORT (2018 DETAILED DESIGN)
 - b. 32nd/33rd JAN 2nd DESIGN CONCEPTS, 3 ALTERNATIVES (2019 CONSTRUCTION)
 - c. ML&P 2018-2019 FOR WORK ALONG & KING 30TH AVE
- VII. Miscellaneous
 - a. Data gaps
- VIII. Action Items — LIMITED NTP W/ ENGINEERING BY MOA

~~11 POLES @ 350K~~
~~- NOT INCLUDING ROW~~
~~#####~~

MUNICIPALITY OF ANCHORAGE



Project Management and Engineering Department
4700 Elmore Road

Ph: 907.343.8135
Fax: 907.343.8088

Mayor Ethan Berkowitz

November 6, 2017

Mr. Victor Willis
Line Design Supervisor
Municipal Light & Power
1200 East 1st Avenue
Anchorage, Alaska 99501

SUBJECT: Utility Relocation Engineering Authorization
Midtown Corridor Improvements, Denali Street Area –
Benson Blvd to Tudor Road
Project No. 16-28

Dear Mr. Willis:

PM&E is requesting utility relocation cost estimate information from ML&P for the subject project. As discussed at the meeting on November 3, 2017, R&M Consultants, Inc. (R&M) is the design consultant and the project team will be evaluating design alternatives to improve pedestrian and non-motorized facilities along Denali Street and 36th Avenue with the project limits shown on the attached project key map.

PM&E requests information on the feasibility of relocating ML&P infrastructure and a concept level cost estimate for facilities within the project limits, broadly defined as follows:

- Overhead 115 kV transmission and 12 kV distribution along the north side of East 36th Avenue;
- Underground 12 kV distribution along both sides of East 36th Avenue;
- Underground 12 kV distribution along both sides of Denali Street;
- Above ground cabinets and underground vaults along East 36th Avenue and Denali Street; and
- Other conductors, conduits, poles, junction boxes, etc. identified as potentially conflicting with proposed improvements.

R&M will coordinate potential conflicts with ML&P to better define the relocation feasibility and cost estimate effort.

Please note that the ML&P cost estimate does not need to account for the cost estimate for the additional ROW needed. The acquisition cost will be estimated separately.

Mailing Address: P.O. Box 196650 • Anchorage, Alaska 99519-6650 • <http://www.muni.org>

The current schedule is to complete the DSR phase in spring 2018, the design in 2018, and to commence construction in 2019.

PM&E requests that you open a work order in an amount not to exceed \$10,000. As the project progresses through the design study report (DSR) phase, PM&E will coordinate with ML&P if relocation design work is necessary and amend this authorization.

Request for payment should be forwarded to Robert Moore, Public Works Deputy Officer (343-8180). Please reference the project name and number on all work products and invoices. This authorization is effective November 6, 2017.

We request that your estimated costs reach us by **December 15, 2017**. If you have any questions, please call me at 343-8196, or Melinda Tsu at 343-8110.

Sincerely,



Russell H. Oswald, P.E.
Project Manager

Attachment: Project Map

cc: Melinda Tsu, P.E., Project Administrator
Robert Moore, PW Deputy Officer
Marc Frutiger, P.E., R&M Design Manager
Rory Redick, Utility Design Coordinator
16-28 M

Russell Oswald, PE, LS
Project Management & Engineering
E-mail: Oswaldrh@muni.org
voice: 343-8196, cell: 230-5911

From: Cluff, Lance A.
Sent: Tuesday, January 09, 2018 9:08 AM
To: Oswald, Russ H. <OswaldRH@ci.anchorage.ak.us>
Subject: RE: Midtown Corridor Improvements, Denali St. & 36th Ave. PM&E project #16-28, ML&P P1700075

Russ,

Attached is the spreadsheet I used to note what facilities appeared to be in conflict with an Alternative. Also attached are the ML&P grid maps of the areas (they are not all up to date, but it is what is available to send). Keep in mind that the estimates given are WAGs, and that the map-points on the list may not be the only ones in conflict (or those on the list may require more or less work). The Alternatives are conceptual at this stage, and so are these estimates. They are more useful as a differential cost comparison between the Alternatives, not as an actual estimated cost for an Alternative.

NOTE: On 36th Avenue, the 12KV circuit would be undergrounded on all Alternatives. The 115KV poles would be relocated on all Alternatives, except #2 (it appears they could stay in that design – however if any conflict does require a 115KV pole to be relocated to the north or south, all of them will have to be).

Lance Cluff

Line Design Engineer

1200 E. 1st Avenue

Anchorage, AK 99501

P: 907-263-5244

cluffla@muni.org

www.mlandp.com

From: Oswald, Russ H.

Sent: Monday, January 08, 2018 1:36 PM

To: Cluff, Lance A. <CluffLA@ci.anchorage.ak.us>; Tsu, Melinda A. <TsuMA@ci.anchorage.ak.us>; 'rredick@gci.net' <rredick@gci.net>

Cc: Willis, Victor R. <WillisVR@ci.anchorage.ak.us>; Matt Edge (medge@crweng.com) <medge@crweng.com>

Subject: RE: Midtown Corridor Improvements, Denali St. & 36th Ave. PM&E project #16-28, ML&P P1700075

Lance,

Can you please provide a scope summary for each?

Let me know if you have any questions/comments.

Russ

Russell Oswald, PE, LS
Project Management & Engineering

E-mail: Oswaldrh@muni.org
voice: 343-8196, cell: 230-5911

From: Cluff, Lance A.

Sent: Monday, January 08, 2018 8:03 AM

To: Oswald, Russ H. <OswaldRH@ci.anchorage.ak.us>; Tsu, Melinda A. <TsuMA@ci.anchorage.ak.us>; 'rrredick@gci.net' <rrredick@gci.net>

Cc: Willis, Victor R. <WillisVR@ci.anchorage.ak.us>

Subject: Midtown Corridor Improvements, Denali St. & 36th Ave. PM&E project #16-28, ML&P P1700075

ML&P has performed a preliminary budget estimate for the requested project. As the project is in the initial planning stage, and there are several Alternatives being looked at, it is only possible to give a rough budgetary estimate for each Alternative – as there is very little detailed information and approved funding to determine possible conflicts for each of the multiple Alternatives. So, there are a lot of assumptions, including (but not limited too) – work during construction season and during normal ML&P crew hours, all restoration done by PM&E contractor (some areas are outside of the project scope – such as crossing intersections not included in the Alternatives scope), close coordination and workable construction schedule with PM&E contractor, whether a facility would need to be adjusted or relocated.

Below are the rough budgetary estimates for the Alternatives. Once a decision is made as to which Alternative will be constructed, PM&E will need to submit a Facility Relocation Request (R-Form), so ML&P can begin working on a relocation design and formal estimate.

Denali Street

Alternative 1 ~ \$2.50M

Alternative 2 ~ \$2.00M

Alternative 3 ~ \$2.25M

36th Avenue

Alternative 1 ~ \$3.25M

Alternative 2 ~ \$1.50M

Alternative 3 ~ \$2.50M

Alternative 4 ~ \$3.75M

If there are any questions, please contact me.

Lance Cluff

Line Design Engineer

1200 E. 1st Avenue

Anchorage, AK 99501

P: 907-263-5244

cluffla@muni.org

www.mlandp.com

- [Preliminary Estimates Locations.pdf](#) PDF Document - 10 KB
- [Grid 1730.pdf](#) PDF Document - 297 KB
- [Grid 1630.pdf](#) PDF Document - 490 KB
- [Grid 1731.pdf](#) PDF Document - 206 KB
- [Grid 1631.pdf](#) PDF Document - 280 KB
- [Grid 1531.pdf](#) PDF Document - 406 KB

Subject: Midtown Corridor Improvements, Denali St. & 36th Ave. PM&E project #16-28, ML&P P1700075

From: "Cluff, Lance A." <CluffLA@ci.anchorage.ak.us>

To: "Oswald, Russ H." <OswaldRH@ci.anchorage.ak.us>, "Tsu, Melinda A." <TsuMA@ci.anchorage.ak.us>, "rrredick@gci.net" <rrredick@gci.net>

Cc: "Willis, Victor R." <WillisVR@ci.anchorage.ak.us>

Mon, 8 Jan 2018 17:02:46 +0000

ML&P has performed a preliminary budget estimate for the requested project. As the project is in the initial planning stage, and there are several Alternatives being looked at, it is only possible to give a rough budgetary estimate for each Alternative – as there is very little detailed information and approved funding to determine possible conflicts for each of the multiple Alternatives. So, there are a lot of assumptions, including (but not limited too) – work during construction season and during normal ML&P crew hours, all restoration done by PM&E contractor (some areas are outside of the project scope – such as crossing intersections not included in the Alternatives scope), close coordination and workable construction schedule with PM&E contractor, whether a facility would need to be adjusted or relocated.

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Denali Street

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Alternative 2 ~ \$2.00M

Alternative 3 ~ \$2.25M

36th Avenue

Alternative 1 ~ \$3.25M

Alternative 2 ~ \$1.50M

Alternative 3 ~ \$2.50M

Alternative 4 ~ \$3.75M

If there are any questions, please contact me.

36th Avenue

<u>Mappoint</u>	<u>To Mappoint</u>	<u>Description</u>	<u>Apply 1</u>	<u>Apply 2</u>	<u>Apply 3</u>	<u>Apply 4</u>
1630-81C		reloc pole	1			1
-81A		reloc XFMR	1	1		1
-81A	-81B	replace DB cables in conduit	1	1		1
-81B		reloc pole	1			1
-91A		reloc pole	1			1
-91B		reloc SC-20	1	1		1
-81B	1631-11B	underground 12kV & fiber	1		1	1
-81?		new vault & SC	1		1	1
1631-11B		reloc pole	1		1	1
-21B		reloc pole	1		1	1
-31B		reloc pole	1		1	1
-41B		reloc pole	1		1	1
-51B		reloc pole	1		1	1
-51E		reloc SC-231		1		
-61A		remove pole	1	1	1	1
-71B		remove pole	1	1	1	1
-71C		remove pole	1	1	1	1
-71D		reloc vault				1
-91K		reloc SC-62	1	1		1
-91J		reloc vault				1
-91C		reloc SC-175	1	1		1
-11B	-51B	underground 12kV & fiber	1		1	1
-51B	-71D	underground 12kV	1	1	1	1
-11?		new vault	1		1	1
-51?		new vault	1		1	1
1730-79C	-89A	replace DB cables in conduit	1	1	1	1
-89A	1731-49b	replace DB cables in conduit	1	1	1	1
1731-89E		reloc XFMR		1		

Denali Street

<u>Mappoint</u>	<u>To Mappoint</u>	<u>Description</u>	<u>Apply 1</u>	<u>Apply 2</u>	<u>Apply 3</u>
1731-51a		connect conduits and replace cables	1	1	1
-53B		adj manhole	1	1	
-53B		reloc vault			1
-54a		new pullbox, extend conduits	1	1	1
-55E	-58B	replace DB cables in conduit	1	1	1
near -55B		new vault	1	1	1
1631-42D	-44D	replace DB cables in conduit	1	1	1
-44D	-56B	replace DB cables in conduit	1	1	1
-56B		reloc SC-56	1		
-56B	-48B	replace DB cables in conduit	1		
-47?		new vault	1		
-48B	-49F	replace DB cables in conduit	1	1	1
-49F		reloc pullbox	1		
1531-42A		reloc SC-163	1	1	1
-43H		remove sidewalk vault	1	1	1
-44E		reloc sidewalk vault	1	1	1
-44C		reloc pole w/riser		1	1

RECORD OF MEETING

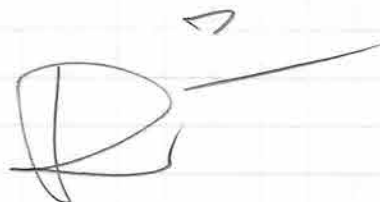
DEC 28, 2017

WITH: LANCE CLUFF, MLEP

DELIVERED DESIGN OPTIONS/ALTERNATIVES AND EXISTING UTILITY PLAN SHEETS DEVELOPED BY R&M.

DISCUSSED PRELIMINARY, "ORDER OF MAGNITUDE" ESTIMATE. IF BROKEN DOWN BY DESIGN ALTERNATIVES IT WOULD BE EASIER FOR PROJECT TO EVALUATE.

RECEIVED MLEP SYSTEM MAPS.



RECORD OF MEETING

JAN 8, 2018

WITH: REBECCA COLTON, GCI PROJECT MANAGER

DISCUSSED GCI FACILITIES WITHIN 36TH AVE,
AND DENALI STREET, INCLUDING:

- FIBER OPTIC FACILITIES ASSOCIATED WITH THE ACS WIRE CENTER, KING DENALI AT COMMUNICATIONS AVENUE. 4 FIBER HANDHOLES ON WEST SIDE. DISCUSSED RELOCATION OF HANDHOLES BY PULLING SLACK COOPS & PLACING IN SPLIT DUCT TO NEW VAULT LOCATION. NEED TO VERIFY QTY. OF SLACK LOOPS IN EACH HANDHOLE.
- FIBER OPTIC FACILITIES ALONG SOUTH SIDE OF 36TH AVENUE. DISTRIBUTION FIBER SERVING BUSINESSES. RELOCATION POSSIBLE IF REQ'D.

REBECCA EMAILED SCREEN SHOTS SHOWING FACILITY LOCATIONS.

R³

RECORD OF MEETING

JAN 16, 2018

w/ LARRY SMITH, ACS

DISCUSSED ACS FACILITIES W/IN PROJECT LIMITS, INCLUDING:

- FIBER AND COPPER CABLE ASSOCIATED WITH ACS CENTRAL WIRE CENTER.
- UNDERGROUND MANHOLE/DOCT SYSTEM ALONG DENALI STREET & 36TH AVENUE. SYSTEM IS INTERCONNECTED. LARRY INDICATED THAT, IF RELOCATION WAS ORDERED, ACS WOULD HAVE A DIFFICULT TIME FIGURING OUT FLOW. EXISTING MHS CURRENTLY WITHIN TRAVEL WAY ALONG 36TH & DENALI, THE RESULT OF PREVIOUS WIDENING PROJECTS.

BOTTOM LINE, PROJECT DOES NOT WANT TO DO MORE THAN MANHOLE CID ADJUSTMENTS TO PAVEMENT GRADE.

ACS IS HIRING A CONSULTANT W/IN NEXT YEAR TO EVALUATE EXTENSIVE CABLING IN DOCT SYSTEM, AND DETERMINING WHICH CIRCUITS CAN BE MIGRATED INTO OTHER CABLES TO REDUCE SHEER NUMBER OF CABLE FACILITIES IN DOCT SYSTEM.

LARRY PRINTED OUT SYSTEM MAPS & MH DETAILS FOR ME.

DS