



Planning & Development Division
Planning & Economic Development Department

Room 160
 411 West First Street
 Duluth, Minnesota 55802

218-730-5580
 planning@duluthmn.gov

File Number	PLSUP-2411-0011		Contact	Chris Lee, clee@duluthmn.gov	
Type	Special Use Permit – Wireless Facility		Planning Commission Date	February 11, 2025	
Deadline for Action	Application Date	November 21, 2024	60 Days	January 20, 2025	
	Date Extension Letter Mailed	December 12, 2024	120 Days	March 21, 2025	
Location of Subject	2120 Jean Duluth Road				
Applicant	Fullerton US		Contact	Nora Geci	
Agent			Contact		
Legal Description	PID: 010-2680-00250				
Site Visit Date	December 13, 2024		Sign Notice Date	January 14, 2025	
Neighbor Letter Date	December 5, 2024		Number of Letters Sent	5	

Proposal

A Special Use Permit to replace 6 antennae with 6 new antennae and install 6 new antenna units to existing 69-foot-tall pole. Also proposed is new accessory equipment and new concealment canisters.

Recommended Action: Approve with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	RR-1	Mixed-Use	Rural Residential/Open Space
North	RR-1	Commercial	Open Space
South	RR-1	Residential	Open Space
East	RR-1	Commercial	Open Space
West	RR-1	Medical/Institutional	Rural Residential/Open Space

Summary of Code Requirements

UDC Section 50-20.4.E. Major utility or wireless telecommunications facility.

(a) Requiring a special use permit for any new, co-location or modification of a wireless telecommunications facility; (b) Implementing an application process for person(s) seeking a special use permit for wireless telecommunications facilities; (c) Establishing a policy for examining an application for and issuing a special use permit for wireless telecommunications facilities that is both fair and consistent; (d) Promoting and encouraging, wherever possible, the sharing and co-location of wireless telecommunications facilities among service providers; (e) Promoting and encouraging, wherever possible, the placement, height and quantity of wireless telecommunications facilities in such a manner, including but not limited to the use of stealth technology, to minimize adverse aesthetic and visual impacts on the land, property, buildings, and other facilities adjacent to, surrounding and in generally the same area as the requested location of such wireless telecommunications facilities, which shall mean using the least visually and physically intrusive facility that is not technologically or commercially impracticable under the facts and circumstances; (f) That in granting a special use permit,

the city has found that the facility shall be the most appropriate site as regards being the least visually intrusive among those available in the city;

UDC Section 50-37.10. Special Use Permits. The Planning Commission shall approve the application or approve it with modifications if the commission determines that the application meets the following criteria: 1. The application is consistent with the Comprehensive Land Use Plan; 2. The application complies with all applicable provisions of this Chapter, including without limitation any use-specific standards applicable to the proposed use, development or redevelopment, and is consistent with any approved district plan for the area; 3. Without limiting the previous criteria, the commission may deny any application that would result in a random pattern of development with little contiguity to existing or programmed development or would cause anticipated negative fiscal or environmental impacts on the community.

Comprehensive Plan Governing Principles and/or Policies and Current History (if applicable):

Governing Principle # 1- Reusing of previously developed lands: this proposal is utilizing existing developed lands for a new user.

Future Land Use – Open Space: High natural resource or scenic value, with substantial restrictions and development limitations. Primarily public lands but limited private use is anticipated subject to use and design controls.

History: The property has a single-family home and an existing 69-foot-tall monopole with wireless facilities.

Review and Discussion Items

Staff finds that:

1. The applicant is proposing to replace 6 antennae with 6 new antennae and install 6 new antenna units to existing 69-foot-tall pole. Proposed plans also include new accessory equipment within the existing equipment shed and new concealment canisters to fit the new antennae. The new concealment canisters will match the existing containers.
2. The applicant has presented plans that meet the use specific standards outlined in 50-20.4.E.
3. The city has the ability to regulate land use; however, the FCC preempts local review on the potential environmental effects of radio frequency (RF) emissions, assuming that the provider is in compliance with the Commission's RF rules. These facilities are categorically excluded and will be in full compliance with the current FCC RF emissions guidelines. Applicant has agreed to perform, and provide written documentation, of a post construction RF emissions compliance.
4. Based on the design and locations of the proposed facilities, staff are not anticipating any new visual impact and are not recommending any additional screening be required.
5. No public, agency, or City comments were received at the time of drafting this report.
6. The permit will lapse if no activity takes place within 1 year of approval.

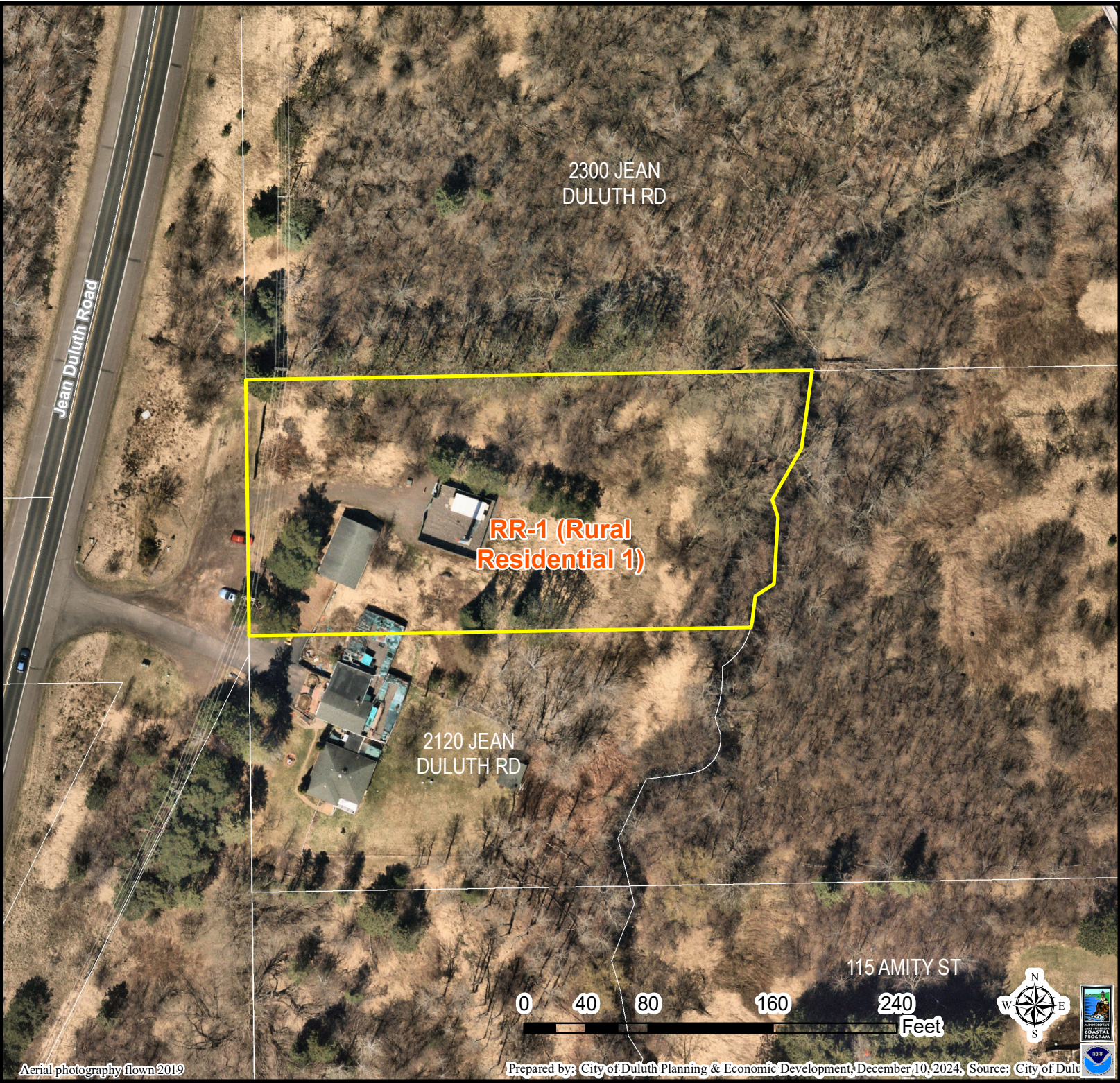
Staff Recommendation

Based on the above findings, staff recommends that Planning Commission approve the Special Use Permit with the following conditions:

1. The project be limited, constructed, and maintained consistent with plans submitted and included in this report, titled LAKESIDE ROBERTS RELO.
2. The applicant must follow FCC RF emissions requirements and submit a completed RF Emissions Compliance Report to the Planning Department after construction.
3. Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.



PLSUP-2411-0011
 Special Use - Wireless Facility
 2120 Jean Duluth Rd



The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, December 10, 2024, Source: City of Duluth

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SITE PHOTO



PROJECT INFORMATION

SITE NAME: LAKESIDE ROBERTS RELO
COUNTY: ST. LOUIS COUNTY
ADDRESS: 2120 JEAN DULUTH ROAD
DULUTH, MN 55804-2648
CITY OF DULUTH, MN
MN5419
10146456
PTN: 3514A1A7YV, 3514A1A80X, 3514A1A80Y, 3514A1A7YQ, 3514A1A7YY, 3514A1A7YZ, 3514A1A80V, 3514A1A80S
IWM #: WSUMW0029067, WSUMW0028461, WSUMW0028456, WSUMW0029334, WSUMW0029000, WSUMW0028991, WSUMW0028640, WSUMW0028749
ATC ASSET #: 278173
LATITUDE: 46°50'51.8" N (46.84772778°)
LONGITUDE: 92°02'50.5" W (-92.04735°)
TOWER OWNER: AMERICAN TOWER COMPANY
GROUND OWNER: LD ACQUISITION COMPANY 13 LLC
LANDLORD CONTACT: -
APPLICANT: AT&T WIRELESS
AT&T PROJECT MANAGER: SHAMMIKKA CHISOLM
AT&T CONSTRUCTION MANAGER: PETER MCENERY

PROJECT CONSULTANTS

ENGINEER: FULLERTON ENGINEERING CONSULTANTS, LLC
ADDRESS: 1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
CONTACT: LISA LAVICKA
PHONE: (847) 908-8400
EMAIL: llavicka@fullerton-us.com

AT&T MOBILITY

PROJECT: E/// MODERNIZATION
SITE #: MN5419
FA #: 10146456
PTN #: 3514A1A7YV, 3514A1A80X, 3514A1A80Y, 3514A1A7YQ, 3514A1A7YY, 3514A1A7YZ, 3514A1A80V, 3514A1A80S

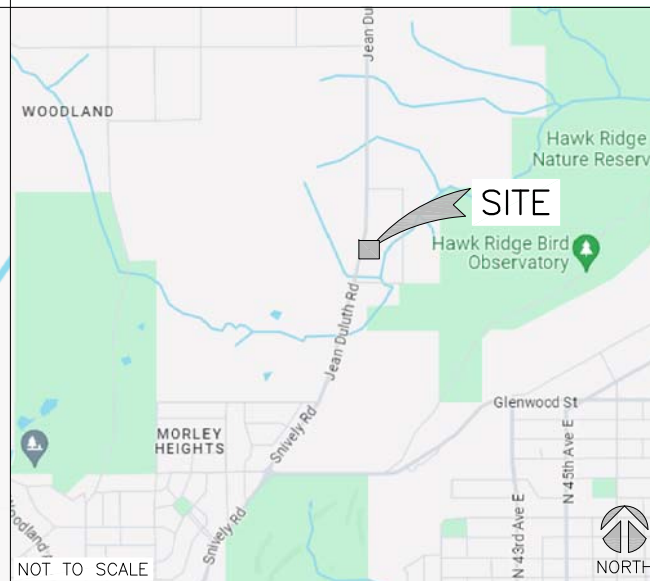
IWM #: WSUMW0029067, WSUMW0028461, WSUMW0028456, WSUMW0029334, WSUMW0029000, WSUMW0028991, WSUMW0028640, WSUMW0028749

ATC ASSET #: 278173
JURISDICTION: CITY OF DULUTH, MN
SITE NAME: LAKESIDE ROBERTS RELO
ADDRESS: 2120 JEAN DULUTH ROAD
DULUTH, MN 55804-2648

VICINITY MAP



LOCAL MAP



DRIVING DIRECTIONS

DIRECTIONS FROM AT&T ADDRESS; 7900 XERXES AVE S #301, BLOOMINGTON, MN 55431:
GET ON I-35W S FROM AMERICAN BLVD W, PENN AVE S AND W 82ND ST.
GET ON I-35W N IN RICHFIELD FROM W 78TH ST AND W 76TH ST.
TAKE I-35 N TO S 21ST AVE E IN DULUTH. TAKE EXIT 258 FROM I-35 N.
TAKE WOODLAND AVE AND SNIVELY RD TO JEAN DULUTH RD.

811 logo and text: TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN MINNESOTA, CALL GOPHER STATE ONE CALL. TOLL FREE: 1-800-252-1166 OR FAX A LOCATE: 1-800-236-4967. www.gopherstateonecall.org

DRAWING INDEX

Table with 2 columns: Drawing ID, Description. Includes T1 (TITLE SHEET), SP1 (NOTES & SPECIFICATIONS), A1 (COMPOUND PLAN), A2 (EQUIPMENT PLAN), A3 (TOWER ELEVATION), A4 (ANTENNA PLAN), A5 (ANTENNA & CABLE CONFIGURATION), A6/A7 (EQUIPMENT DETAILS), A8 (CABLE NOTES & COLOR CODING), E1 (GROUNDING DETAILS), ATTACHED (CANISTER POLE MODIFICATION DRAWINGS), ATTACHED (DE111).

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- TOWER WORK:
- REPLACE 20.0 FT OF VENTED CONCEALMENT CANISTER (34.00"Ø X 0.25" FIBERGLASS SECTION) FROM ELEV. 49.0'± TO 69.0'±
- REPLACE 10.0 FT OF VENTED CONCEALMENT CANISTER (34.00"Ø X 0.25" FIBERGLASS SECTION) FROM ELEV. 39.0'± TO 49.0'±
- REMOVE (6) EXISTING BA-A5A5407X65V-01 ANTENNAS (2) PER SECTOR IN POSITION 1 & 2. ELEV. 65' & 55' (TYP. OF 3 SECTORS)
- REMOVE (6) EXISTING TMABPD7823VG12A TMA UNITS (2) PER SECTOR (TYP. OF 3 SECTORS)
- INSTALL (3) PROPOSED STACKED AIR6419 B77D AND AIR6419 B77G ANTENNAS (1) PER SECTOR IN POSITION 2. (TYP. OF 3 SECTORS)
- INSTALL (6) PROPOSED ERICSSON 840-370966K ANTENNAS (2) PER SECTOR IN POSITION 1 & 3 (TYP. OF 3 SECTORS)
- INSTALL (3) PROPOSED UNIVERSAL TRI-SECTOR MOUNT KITS AT ELEV. 43'/47', 55' AND 65'
- INSTALL (2) PROPOSED DC3-48-60-8-1086F RAYCAP UNITS, ELEV. 45'
- INSTALL (24) PROPOSED 7/8" COAX CABLES
- INSTALL (2) PROPOSED 0.40" (6 PAIR) FIBER TRUNKS
- INSTALL (2) PROPOSED 0.96" 6 AWG 6 DC TRUNKS

GROUND WORK: POWER PLANT:

- RETAIN (1) VERTIV 7100 POWER PLANT
- RETAIN (12) -48V RECTIFIERS
- RETAIN (12) 180AH BATTERIES IN BASE OF POWER PLANT
- RETAIN (4) 180AH BATTERIES IN STANDALONE BATTERY RACK
- INSTALL (8) 180AH BATTERIES IN STANDALONE BATTERY RACK
- INSTALL (1) 23" FIF NEXT TO EXISTING BATTERY RACK
- INSTALL (1) RETROFIT KIT 58V CONVERTER
- INSTALL (10) -58V CONVERTERS

CIVIL:

- REMOVE (12) SHELTER MOUNTED RRH UNITS
- REMOVE (1) 7705 ROUTER FROM EXISTING FIF
- RETAIN (1) DC12-48-60-RM (GEN1) RAYCAP UNIT
- INSTALL (3) NEW ERICSSON 4415 B30 RRH UNITS ON PROPOSED EXTERIOR H-FRAME UNDER ICE BRIDGE
- INSTALL (3) NEW ERICSSON 4490 B5/B12A RRH UNITS ON PROPOSED EXTERIOR H-FRAME UNDER ICE BRIDGE
- INSTALL (3) NEW ERICSSON 4478 B14 RRH UNITS ON PROPOSED EXTERIOR H-FRAME UNDER ICE BRIDGE
- INSTALL (3) NEW ERICSSON 4890 B25/B66 RRH UNITS ON PROPOSED EXTERIOR H-FRAME UNDER ICE BRIDGE
- INSTALL (1) NEW DC12-48-60-RM RAYCAP UNIT IN NEW FIF
- INSTALL (2) NEW DC9-48-60-24-PC16-EV ON EXTERIOR H-FRAME UNDER THE ICE BRIDGE
- INSTALL (1) NEW 0.40" 24 PAIR FIBER TRUNK TO GROUND DC9
- INSTALL (4) NEW 0.96" 6 AWG 6 DC TRUNKS FROM DC12 TO GROUND DC9
- INSTALL (6) NEW CBC1726-DP-2X DIPLEXERS
- INSTALL E/// EQUIPMENT IN EXISTING FIF
- INSTALL (1) 6601
- INSTALL (1) XMU
- INSTALL (2) 6651
- INSTALL (1) 6610

CODE COMPLIANCE

- 2018 INTERNATIONAL BUILDING CODE
• 2023 NATIONAL ELECTRICAL CODE
• TIA/EIA-222-H STANDARDS

REFERENCE MATERIALS

- THESE DRAWINGS ARE BASED AT&T SCOPING DOCUMENT DATED 03/29/24
• REVISED RFDS PENDING. CONTRACTOR TO USE LATEST VERSION WITH CD'S PER SCOPE OF WORK.

SPECIAL NOTES

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH CURRENT AT&T CONSTRUCTION INSTALLATION GUIDE.
• EXISTING CONDITIONS WILL BE CHANGED & VERIFIED IN FIELD. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED & CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
• THESE DRAWINGS ARE 11"x17" & SCALEABLE ON FULL SHEET SIZE.
• STATEMENT THAT COMPLIANCE WITH THE ENERGY CODE IS NOT REQUIRED.
• SCOPE OF WORK DOES NOT INVOLVE MODIFICATIONS TO EXTERIOR ENVELOPE OF BUILDING, HVAC SYSTEMS OR ELECTRICAL LIGHTING.

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



1100 E. WOODFIELD ROAD, SUITE 500
SCHAUMBURG, ILLINOIS 60173
TEL: 847-908-8400
www.fullerton-us.com

REVISIONS

Table with 4 columns: REV., DATE, DESCRIPTION, INITIALS. Includes revisions A, B, and O.

NOT FOR CONSTRUCTION UNLESS LABELED AS FOR CONSTRUCTION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel W Smith
License # 52398
[Signature]

Digitally signed by Daniel W Smith
Date: 2024.10.29 14:29:54 -05'00'

E/// MODERNIZATION
10146456
LAKESIDE ROBERTS RELO
2120 JEAN DULUTH ROAD
DULUTH, MN 55804-2648

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T1

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

T/ EXISTING CANISTER POLE
ELEV. = 69'-0"± AGL

T/ EXISTING AT&T PANEL ANTENNAS
ELEV. = 65'-0"± AGL

(3) EXISTING BA-A5A5407X65V-01
ANTENNAS TO BE REMOVED
(TYP. 1 PER SECTOR)

(6) EXISTING TMABPD7823VG12A
TMA UNITS TO BE REMOVED
(TYP. 2 PER SECTOR)

T/ EXISTING AT&T PANEL ANTENNAS
ELEV. = 55'-0"± AGL

(3) EXISTING BA-A5A5407X65V-01
ANTENNAS TO BE REMOVED
(TYP. 1 PER SECTOR)



REPLACE 20.0 FT OF VENTED
CONCEALMENT CANISTER
[34.00"Ø X 0.25" FIBERGLASS SECTION]
FROM EL: 49.0'± TO 69.0'±

REPLACE 10.0 FT OF VENTED
CONCEALMENT CANISTER
[45.00"Ø X 0.25" FIBERGLASS SECTION]
FROM EL: 39.0'± TO 49.0'±

EXISTING CANISTER POLE

(24) EXISTING 7/8" COAX CABLES
(6) EXISTING 3/8" RET CONTROL CABLES
ROUTED INSIDE EXISTING MONOPOLE
TO REMAIN

- TOWER STRUCTURAL CALCULATIONS PREPARED BY OTHERS. CONTRACTOR TO VERIFY WITH PROJECT MANAGER TO OBTAIN A COPY
- CONTRACTOR TO REFER TO TOWER STRUCTURAL CALCULATIONS FOR ADDITIONAL LOADS. NO ERECTION OR MODIFICATION OF TOWER SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER.

T/ EXISTING CANISTER POLE
ELEV. = 69'-0"± AGL

T/ OF PROPOSED AT&T ANTENNAS
ELEV. = 69'-0"± AGL

℄ OF PROPOSED AT&T PANEL ANTENNAS
ELEV. = 65'-0"± AGL

UTILIZE EXISTING HOIST GRIP
ANCHORS FOR NEW CABLES

T/ OF PROPOSED AT&T ANTENNAS
ELEV. = 59'-0"± AGL

℄ OF PROPOSED AT&T PANEL ANTENNAS
ELEV. = 55'-0"± AGL

UTILIZE EXISTING HOIST GRIP
ANCHORS FOR NEW CABLES

℄ OF PROPOSED AT&T PANEL ANTENNAS
ELEV. = 47'-0"± AGL

(2) PROPOSED
DC3-48-60-8-1086F
RAYCAP UNITS MOUNTED
AT ELEV. 45' BELOW
PROPOSED AIR6419 B77D
ANTENNAS

℄ OF PROPOSED AT&T PANEL ANTENNAS
ELEV. = 43'-0"± AGL

NEW HOIST GRIP ANCHOR/CABLE
SUPPORT MOUNT FOR PIPE FROM
1.5" TO 8" ATTACHED TO EXISTING
6-5/8" CENTER MAST PIPE
MFR: COMMScope
PART#: 860680188-006
(SEE A7 FOR DETAILS)



(3) PROPOSED 840-370966K
ANTENNAS
(TYP. 1 PER SECTOR)

REPLACED CANISTER

(3) PROPOSED 840-370966K
ANTENNAS
(TYP. 1 PER SECTOR)

(3) PROPOSED ANTENNAS
AIR6419 B77D AND
(3) PROPOSED ANTENNAS
AIR6419 B77G STACKED
(TYP. 1 EACH PER SECTOR)

REPLACED CANISTER

EXISTING MONOPOLE

(24) EXISTING 7/8" COAX CABLES
(6) EXISTING 3/8" RET CONTROL CABLES
ROUTED INSIDE EXISTING MONOPOLE

(24) PROPOSED 7/8" COAX CABLES
(2) PROPOSED 0.40" (6 PAIR) FIBER TRUNKS
(2) PROPOSED 0.96" 6 AWG 6 DC TRUNKS
ROUTED INSIDE EXISTING MONOPOLE



Fullerton
DESIGN DEVELOP CONSTRUCT

1100 E. WOODFIELD ROAD, SUITE 500
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REVISIONS				
REV.	DATE	DESCRIPTION	INITIALS	
A	08/28/24	ISSUED FOR REVIEW	GL	
B	10/02/24	ISSUED FOR REVIEW	RV	
O	10/29/24	ISSUED FOR CONSTRUCTION	RV	

NOT FOR CONSTRUCTION UNLESS
LABELED AS FOR CONSTRUCTION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel W Smith
License # 52398

E/// MODERNIZATION
10146456
LAKESIDE ROBERTS RELO
2120 JEAN DULUTH ROAD
DULUTH, MN 55804-2648

SHEET TITLE

TOWER
ELEVATION

SHEET NUMBER

A3

EXISTING TOWER ELEVATION

SCALE
N.T.S.

1

PROPOSED TOWER ELEVATION

SCALE
N.T.S.

2

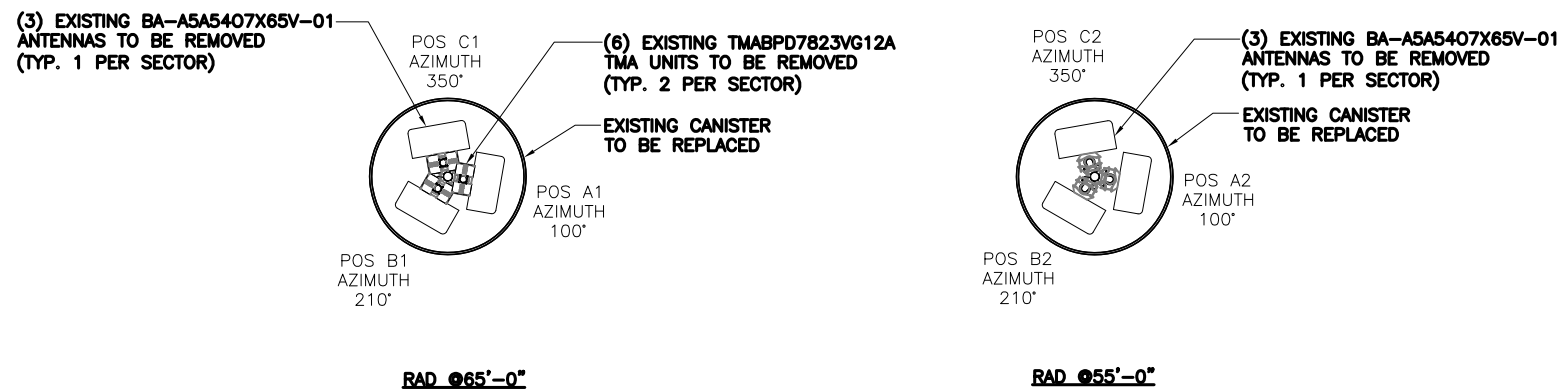
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EXISTING ANTENNA PLAN

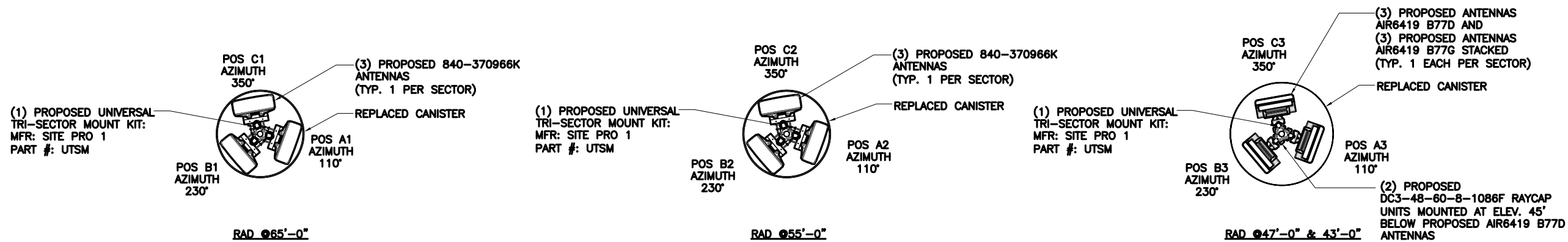
0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36)
 (OR) 1/4" = 1'-0" (11x17)



1

REPLACE 20.0 FT OF VENTED CONCEALMENT CANISTER [34.00"Ø X 0.25" FIBERGLASS SECTION] FROM EL: 49.0'± TO 69.0'±

REPLACE 10.0 FT OF VENTED CONCEALMENT CANISTER [45.00"Ø X 0.25" FIBERGLASS SECTION] FROM EL: 39.0'± TO 49.0'±



PROPOSED ANTENNA PLAN

0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36)
 (OR) 1/4" = 1'-0" (11x17)



2

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel W Smith
 License # 52398

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 10146456
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 DULUTH, MN 55804-2648

SHEET TITLE

ANTENNA
 PLAN

SHEET NUMBER

A4