



CITY OF DULUTH
Community Planning Division

411 W 1st St, Rm 208 * Duluth, Minnesota 55802-1197
Phone: 218/730.5580 Fax: 218/723-3559

File Number	PL 18-134, CUP	Contact	Steven Robertson, 218-730-5295	
Type	Concurrent Use Permit to Place Private Obstructions in Public Right of Way/Public Facilities (Utility/Light Pole)	Planning Commission Date		November 13, 2018
Deadline for Action	Application Date	October 9, 2018		
	Date Extension Letter Mailed	N/A	90 Days* (237.163)	January 7, 2019
Location of Subject	3800 Trinity Road			
Applicant	Verizon Wireless	Contact		
Agent	Amy Dresch, Jacobs Telecom	Contact		
Legal Description				
Site Visit Date	November 6, 2018	Sign Notice Date	October 30, 2018	
Neighbor Letter Date	N/A for Concurrent Use	Number of Letters Sent	N/A for Concurrent Use	

Proposal: The applicant is seeking a concurrent use permit to allow a private obstruction (utility pole mounted antennas and related equipment) in the public right of way.

Recommended Action: Recommend to the City Council to Approve With Conditions (Ordinance).

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-C	Public Right of Way	Large Scale Commercial
North	MU-C	Undeveloped/ Commercial	Large Scale Commercial
South	MU-C/R-1	Undeveloped	Preservation
East	MU-C	Commercial	Large Scale Commercial
West	MU-C	Commercial	Large Scale Commercial

Summary of Code Requirements

UDC Section 50-37.7.C. The planning commission shall review the application, and council shall approve the application or approve it with modifications, if it determines that:

- 1) The proposed concurrent use will not harm or inconvenience the health, safety and general welfare of the city;
- 2) No portion of a public easement proposed of use is being physically occupied by the public.

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

Principle #4 - Support emerging economic growth sectors. Emerging economic sectors add economic, cultural and social diversity. These include higher education, medical, value-added manufacturing, commercial outdoor recreation, historic resources interpretation, arts and music, information technology and visitor services.

The installation falls with the provisions of Minnesota Statute 237.162 and 247.1643, as amended in 2017.

Future Land Use: Large Scale Commercial Mall, shopping center and big box retail development, with associated surrounding retail and service uses, but only ancillary office uses and no residential uses. Oriented primarily to the motorist, with planned internal circulation patterns while still accommodating pedestrian movement. Requires access to regional transportation routes. May include regional green infrastructure for watershed protection.

Review and Discussion Items

1) The applicant is seeking a concurrent use permit to allow a private obstruction (utility pole mounted antennas and equipment mount) in the public right of way.

According to the application submitted, the “small wireless facility (will be installed) on a replacement wood utility pole, which will be 5 feet taller than the current pole for a height of 36 feet above ground level. The new equipment will be installed at least 34 feet above ground level and the new ancillary equipment will be installed at least 19 feet above ground level with no ground equipment”. The wireless facilities will not be stealthed or camouflaged; the equipment will be visibly attached to the exterior of the pole. The attachments will include 1 exterior mounted panel antenna and 2 radio units.

2) The applicant included a letter from Minnesota Power, dated October 5, 2018, giving consent to allow the wireless facility (DUL Miller Hill Mall SC1) on their pole, with the understanding that Verizon will obtain an attachment permit from Minnesota Power.

3) Granting a concurrent use permit would give the applicant the ability to use dedicated public rights-of-way, with conditions, while preserving other existing public uses in the same right-of-way corridors. Concurrent use permits require a public hearing and recommendation by the Planning Commission, and is approved by the City Council via ordinance. Unlike street right-of-way vacations, concurrent use permits are not recorded at the County as they are voidable permits issued by the City to applicants who are private users of public rights-of-way.

4) Ownership of the poles will remain with Minnesota Power, and the public right of way will remain unchanged.

5) Granting the proposed concurrent use permits will not harm or inconvenience the health, safety and general welfare of the city. The area proposed for the concurrent use permit will not take away from the public's ability to use the public right-of-way. The city will own the poles and continue to use them for utility purposes (lighting).

6) The UDC generally requires that new wireless facilities follow a location standard: first they should be collocated on existing towers or other structures on city owned properties first, and then existing towers or other structures on other (private) property, and so forth down the location standard list. As these small wireless facilities would be located on existing infrastructure in public right of way, and as per the recent change in state statute, the city is processing these applications as concurrent use permits and not special use permits, and the UDC's use-specific standards do not apply in this specific situation.

7) The city has the ability to regulate land use, however, the Federal Communications Commission preempts local review on the potential environmental effects of radio frequency (RF) emissions, with the presumption that the applicant and service provider complies with the Commission's RF rules. The applicant included an FCC checklist used to determine exemption from RF regulations (unlikely to cause exposure in excess of the FCC's guidelines).

8) At the time that this memo was written, no written comments from the public have been received. City Engineering was still reviewing the exhibits at the time this staff report was written, and will likely have some requests for changes related to some of the technical aspects of the installations in the right of way.

Staff Recommendation:

Based on the above findings, Staff recommends that the Planning Commission recommend approval of the two concurrent use permits subject to the following conditions:

- 1) The project be limited to, constructed, and maintained according to construction drawings submitted and included with this staff report (signed 10/9/2018)
- 2) Applicant, and/or successors, shall remove the proposed obstructions at applicant's expense if directed to do so by the City with appropriate notice, and shall adhere to other standards and obligations established in the approving document (ordinance).
- 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, all other changes must be approved by amending the City Council's approved ordinance.



PL 18-134
CUP Small Cell Wireless Facility





PL 18-134
CUP Small Cell Wireless Facility





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DUL Burning Tree Plaza SC3 & DUL Miller Hill Mall SC1
Proposed Site Candidate Locations

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Verizon Small Cell



SITE NAME:

DULMILLER HILL MALL SC

SITE NUMBER:

20181847133

LOCATION CODE:

504067

SITE TYPE:

SMALL CELL

INSTALLATION TYPE: REPLACEMENT WOOD UTILITY POLE

Site Information		Replacement Pole	Project Description/SOW		Sheet Index				
Approximate Address: 3800 TRINITY RD DULUTH, MN 55806 ST. LOUIS COUNTY			Work Product		Installed By		No:	Sheet Title	
Site Coordinates: LAT: 46°48'07.89" N LONG: 92°09'15.51" W GROUND ELEVATION: 1329.2' AMSL (PER 1A CERTIFICATE)			REPLACEMENT WOOD UTILITY POLE	MN POWER	G-001	Title Sheet & Project Data			
			OVERHEAD ELECTRICAL SERVICE WIRE BETWEEN REPLACEMENT POLE AND POWER SOURCE	MN POWER	G-002	General Specifications			
			FIBER CONDUIT, BETWEEN HAND HOLE AND POLE BASE, TO BE TRENCHED/DIRECTIONALLY BORED BELOW GRADE	FIBER PROVIDER	G-003	General Specifications			
			FIBER CONDUIT, WITHIN RIGHT OF WAY, TO BE TRENCHED/DIRECTIONALLY BORED BELOW GRADE	FIBER PROVIDER	C-101	Site Plan			
			FIBER HAND HOLE AT POLE BASE	FIBER PROVIDER	T-201	Site Elevation			
			DIPLEXERS	VERIZON	T-501	Antenna Details			
			LOAD CENTER/DISCONNECT	VERIZON	T-502	Equipment Details			
			ELECTRICAL METER	VERIZON	E-101	Utility Plan			
			ERICSSON RRUS AND POWER CONVERTERS	VERIZON	E-102	Grounding Plan			
			PANEL ANTENNA	VERIZON	E-501	Utility Details			
					E-502	Grounding Details			



PROJECT NO:	20181847133
LOCATION CODE:	504067
EDGE PROJECT NO:	20095
CHECKED BY:	OGD



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.

DUL MILLER HILL MALL SC
DULUTH, MN
REPLACEMENT WOOD UTILITY POLE
SMALL CELL DRAWINGS

SHEET TITLE
**TITLE SHEET &
PROJECT DATA**

SHEET NUMBER
G-001

POWER AND FIBER ROUTING NOTE:

THE PROPOSED POWER AND FIBER ROUTES ARE PRELIMINARY, AND WILL BE CONFIRMED WITH THE LANDLORD AND FIBER PROVIDER PRIOR TO CONSTRUCTION. IF THE GENERAL CONTRACTOR NOTICES ANY DISCREPANCIES BETWEEN THESE PLANS AND THE ACTUAL SOURCES OF POWER AND FIBER, THE VERIZON CONSTRUCTION ENGINEER AND PROJECT ENGINEER ARE TO BE NOTIFIED PRIOR TO COMMENCING WORK.

PROPOSED 2" (2-3/8" O.D.) SCH 40 FIBER OPTIC SERVICE CONDUIT TO ROUTE WITHIN RIGHT OF WAY, BY PROVIDER

PROPOSED FIBER HAND HOLE/DEMARC. BY PROVIDER

10' X 5' PREMISES

PROPOSED UNDERGROUND FIBER CABLES FROM PROPOSED HAND HOLE TO POLE BASE THROUGH PROPOSED CONDUIT

REPLACEMENT WOOD UTILITY POLE BY MN POWER

PROPOSED 2" (2-3/8" O.D.) SCH 40 FIBER OPTIC SERVICE CONDUIT TO ROUTE FROM POLE BASE TO HAND HOLE, BY PROVIDER: APPROX 2'-0" IN LENGTH

PROPOSED SINGLE METER, PV/VERIZON

L

— APPROX PROPERTY L

PROPOSED OVERHEAD ELECTRIC SERVICE WIRE
TO ROUTE FROM REPLACEMENT POLE TO POWER
SOURCE, BY MN POWER

ONE

EXISTING OVERHEAD ELECTRIC SERVICE WIRE (TYP) TO
BE RELOCATED TO REPLACEMENT POLE, BY MN POWER

TRINITY RD/US HWY 53

The North logo, which is a stylized black arrow pointing upwards and to the right, enclosed in a circle.

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS AWARE OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, AND EXAMINE WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY. FOLLOW AS CLOSELY AS POSSIBLE.
5. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULLBOX, J-BOX, SWITCH BOX, ETC. IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.)
6. CONTRACTOR SHALL PROVIDE LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY THE UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, AND NFBU.
8. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
9. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPONWRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
12. PROVIDE CONSTRUCTION ENGINEER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
13. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
14. USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR.
15. ALL CONDUCTORS SHALL BE COPPER.
16. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
17. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
18. RECEPTACLES SHALL BE 20 AMPERE, 125 VOLT A.C., WHITE AS REQUIRED BY THE ARCHITECT OR APPROVED EQUAL.
19. WALL SWITCHES SHALL BE SINGLE-POLE, HUBBELL #1201 OR EQUIVALENT, WHITE AS REQUIRED BY THE ARCHITECT.
20. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS, SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE RACO #800, 1/2" RAISED WORK COVERS.
21. WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM, NO BX OR ROMEX CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
22. GROUND RODS SHALL BE AS SPECIFIED ON THE GROUNDING DRAWINGS.
23. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL. IF HOST FACILITY REQUIRES THE NEW SERVICE TO BE SUB-METERED FROM THE EXISTING SERVICE, SUB-METER SHALL BE OF THE 10x OR 16x TYPE.
24. ALL MATERIALS SHALL BE U.L. LISTED.
25. CONDUIT:
 - A. SERVICE CONDUITS SHALL BE GRAY SCH.40 PVC BURIED MIN. 36", EXCEPT THAT SCH.80 SHALL BE USED UNDER ROADWAYS AND IN LOCATIONS SUBJECT TO CASUAL IMPACTS. BENDS SHALL BE MADE USING "WIDE SWEEP" (12" MIN. RADIUS) ELBOW FITTINGS. ANY CODE-REQUIRED RIGID STEEL CONDUIT SHALL BE U.L. LABEL, GALVANIZED INSIDE AND OUTSIDE. CONDUIT SHALL EXTEND MIN. 36" BELOW GRADE, WITH "SWEEP" ELBOWS (12" R. MIN.) ENDING IN PVC TRANSITION FITTINGS. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAP-WRAPPED WITH HUNTS PROCESS NO. 3 EXTENDING MIN. 12" ABOVE GRADE.
 - B. INTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING HAVING U.L. LABEL. FITTINGS SHALL BE GLAND RING COMPRESSION TYPE.
 - C. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. NO SUCH CONDUIT SHALL EXCEED SIX FEET IN LENGTH.
26. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
27. PATCH, REPAIR, AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
28. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH SECTION 712, PENETRATIONS - INTERNATIONAL BUILDING CODE (IBC)
29. DRILLING OR CORING HOLES IN CONCRETE WALLS OR DECKS, WHETHER FOR FASTENING OR ANCHORING PURPOSES, REQUIRES THAT TENDONS OR REINFORCING STEEL MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT (X-RAY OR OTHER DEVICE) THAT CAN ACCURATELY LOCATE THEM. TENDONS OR REINFORCING MUST NOT BE DRILLED, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
30. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO CONSTRUCTION ENGINEER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
31. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF BOTH TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.
32. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS NECESSARY TO COMPLETE THE INSTALLATION OF ANY TOWER LIGHTING SYSTEM DESCRIBED IN THE REQ.

verizon

JACOBS
Jacobs Engineering Group, Inc.
2727 Patton Road
Roseville, Minnesota 55113
www.jacobs.com

The logo for Edge Consulting Engineers, Inc. It features a stylized 'E' icon composed of a blue triangle pointing right and an orange triangle pointing left, with a blue square in between. To the right of the icon, the word 'Edge' is written in a bold, black, sans-serif font. Below 'Edge', the words 'Consulting Engineers, Inc.' are written in a smaller, black, sans-serif font.

2101 Highway 13 W
Burnsville, MN 55337
608.644.1449 voice
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PROJECT NO:	20181847133
LOCATION CODE:	504067
EDGE PROJECT NO:	20095
CHECKED BY:	OGD

OTTO G. DINGFELDER III
LICENSED
PROFESSIONAL
ENGINEER
49720
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Otto G. Dingfelder III
10/9/2018

DUL MILLER HILL MALL SC
DULUTH, MN
REPLACEMENT WOOD UTILITY POLE
SMALL CELL DRAWINGS

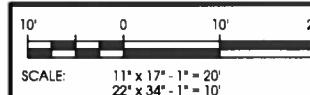
SHEET TITLE

UTILITY PLAN

SHEET NUMBER
E-101

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A / UTILITY PLAN



GENERAL ELECTRICAL NOTES