Agenda # 8.V

Staff Report

TO: Honorable Mayor and City Council

FROM: Karl Schoettler, City Planner, Collins and Schoettler

THROUGH: John Jansons, City Manager

DATE: July 25, 2016

RE: Proposed Wireless Antenna in Street Right-of-Way

RECOMMENDED ACTION:
Discussion of request for Encroachment Permit for a proposed wireless antenna to be placed in City right of way and direction to Staff:

BACKGROUND:
At the beginning of July, the City received an application for an encroachment permit for installation of a 123-foot high wireless transmission tower in a dirt area within the street right of way on the north side of Costner Street immediately west of Farmersville Boulevard (see Map 1).

As mentioned, the site is within the right-of-way of the street, even though it is not within the paved area. The City's current standards pertaining to this type of installation in the right-of-way are minimal. Staff requests direction from City Council as to how the City should regulate these types of facilities.

ANALYSIS:
This is the first proposal for this type of facility that Staff has seen, but apparently it is an installation that is becoming more common throughout the State and Nation. The cell provider seems to be relying on legislation that considers them similar to any other utility that has facilities in the right-of-way – like power poles for the electric company or telephone poles for the telephone company. The main difference is this facility will be much taller. Most electricity and telephone poles in the City are 45-60 feet high – the proposed wireless pole will be 123 feet high. As a comparison the existing cell tower behind City Hall is about 100 feet high.

One of the purposes for this new type of antenna appears to be that the company does not have to pay rent or lease to construct them in the right-of-way – similar to telephone poles and power poles. They also do not have to pay any planning permit fees that are normally associated with construction of a cell tower on private property (again because this is in the right-of-way). Finally they don't have to pay another cell provider rent to place the antenna on an existing cell tower.

It appears the purpose of this proposed facility and location is three-fold:

1. Based on State law, tower placement in the right-of-way, would be rent-free, in contrast to renting land on private property to install a tower or rent space on an existing tower.

2. It appears these taller 120-foot poles are intended to reduce costs for installing a greater number of "Small Cells" on shorter poles in the public right-of-way within a given area. Typically wireless carriers will install cell antennas on rooftops or Small Cells on (short) poles. The signal from a cell phone would reach a cell antenna and the signal would be carried back to the network over fiber-optic cable run for miles back to the data center. This is known as backhaul. In contrast, the Mobilitie proposal appears to allow for the use of microwave dishes on tall poles to transfer signals to small microwave dishes mounted on shorter Small Cell poles nearby. Thereby, reducing the costs associated with fiber-optic backhaul as typically used by competitors.

3. These facilities would not be subject to the same permitting fees typically associated with structures erected on private property; and would instead be subject to much lower encroachment fees.

If the facility was similar in height and appearance to a telephone pole or street light staff would not be so concerned, however because the pole will be so tall staff believes it would be unsightly and set a bad precedent. If all providers determine they can get away with building their towers without going through the process normally required for cell towers on private property, then the city could potentially be inundated with these facilities.

It appears a number of cities and counties (e.g. Yolo County) in the United States have rejected this type of proposal. Furthermore, it is not clear if these facilities would be co-locatable, in terms of structural ability to hold antennas/dishes for other wireless carriers.

It should also be noted that under a recent Federal law, referred to as "6409," once an unscreened (e.g. steel tower or wood pole) wireless facility is installed, the wireless carrier can demand the ability to add additional equipment (e.g. diesel generators for backup power, battery packs or large equipment cabinets with noise-generating cooling fans); increase the overall height and width; and supersede any local rules; as long as changes comply with the limits established in a 2014 Report and Order by the Federal Communications Commission.

In light of these concerns staff would like to obtain feedback from the City Council on a potential course of action to put in place regulations for these towers. The recommended action would be to adopt an urgency ordinance to put in place standards to regulate wireless equipment in the public right-of-way – to protect the public health, safety and welfare.

An urgency ordinance requires at least a 4/5 vote of the Council to put in place and does not require the normal public hearing process. Upon passage, the ordinance is in force for 45 days. The ordinance can be extended twice, giving the City time to adopt a permanent ordinance.

Staff is researching state and federal laws concerning wireless equipment in public rights-of-way, as well as ordinances adopted by other cities to regulate these types of installations. The City of Rancho Palos Verdes in Southern California has adopted an ordinance that has many good features that could be used in Farmersville.

Map 1: Aerial photo showing location of proposed cell tower

FISCAL IMPACT:
There will be an expense for staff to prepare an ordinance and related materials, as well as for taking the ordinance through the adoption process.

CONCLUSION:
It is recommended the City Council receive this report, discuss the issue and give staff direction on potential actions.

ATTCHMENT(S): 1

1) Request Letter from Mobilitie Corp.

Respectfully Submitted By:	**Approved By:**	**Reviewed By:**
Karl Schoettler City Planning Consultant	John Jansons City Manager	Deputy City Attorney

mobilitie
intelligent infrastructure

2955 Red Hill Ave, Suite 200
Costa Mesa, CA 92626
Tel. 877.296.1009

June 29, 2016

Attachment 1

City of Farmersville
Department of Public Works
909 W Visalia Road
Farmersville, CA 93223
(559) 747-3330

RE: **Mobilitie, LLC**

Site IDs: **SF90XCVVAA**

To whom this may concern,

Please find enclosed Mobilitie's Encroachment Permit applications for one (1) proposed new data infrastructure facility in the City of Farmersville, along with the construction drawing and a permit fee check in the amount of $80.00.

Mobilitie is a privately held utility company regulated by the California Public Utilities Commission. In an effort to meet the growing demand for connectivity, Mobilitie is deploying a hybrid transport network that provides high-speed, high-capacity bandwidth in order to facilitate the next generation of devices and data-driven services. This network can support a variety of technologies and services that require connectivity to the internet, including remote weather monitoring stations and mobile service providers. These transport utility poles and facilities are not dedicated to any particular customer, and to the extent capacity is available, can be utilized by other entities, including the City of Farmersville.

With the digital divide shrinking, access to web-connected technology is not only needed, but necessary. From web-connected appliances to online banking, technology is entrenched in our day-to-day lives. In our technology filled world, connectivity is the new currency that drives progress. Mobilitie's main goal of providing areas with access to cutting-edge connectivity will allow communities such as yours to remain ahead of the curve.

Mobilitie is excited to work with the City of Farmersville. In case you have any questions or concerns, please feel free to contact me. I can be reached during regular business hours by e-mail (anne.dinh@mobilitie.com) or phone (949-402-7720). Thank you for your attention and time to this matter.

Respectfully submitted,

Anne Dinh
Network Real Estate Specialist, Mobilitie

City of Farmersville
Department of Public Works

APPLICATION FOR ENCROACHMENT PERMIT

SE CHECK
PROPRIATE BOX: ☑ Annual Utility Company Encroachment Permit ☐ Standard Encroachment Permit

APPLICANT INFORMATION

Application Date: June 30, 2016 Contractor License #: (See subcontractor section)

Applicant/Business Name: Mobilitie, LLC

Mailing Address: 2955 Red Hill Ave, Suite 200 City: Costa Mesa State: CA Zip: 92626

Office Phone: (714) 415-4500 Cell Phone: (949) 402-7720 Fax #:

Email: anne.dinh@mobilitie.com

Name of Foreman or Field Contact: Anne Dinh Cell Phone: (949) 402-7720

JOB INFORMATION

START DATE December 5, 2016 **COMPLETION DATE** December 9, 2016

Work will be performed by: ☑ Applicant / Contractor ☐ Sub-contractor (Contractor must complete subcontractor list)

Job Location: North side of W Costner St, West of Farmersville Rd Cross Street: W Costner St & Farmersville Rd

NATURE OF WORK

☐ Sidewalk ☐ Driveway Approach ☐ Curb & Gutter ☐ Pedestrian Ramp ☐ Water Service ☐ Storm Drain
☐ Excavation ☐ Traffic Control ☑ Utility Installation ☐ Utility Maintenance ☐ Obstruction ☐ Boring/Trenching

DESCRIPTION OF WORK

Applicant proposes to install one (1) 120'-0" utility pole in the public right of way along with one (1) PPC, one (1) meter socket, four (4) microwave dishes, and one (1) 2'x3' Quazite box. The pole will serve as a microwave relay transmission facility to enhance the quality of fiber-based communications services in underserved areas.

TRAFFIC AND PEDESTRIAN CONTROL (Check all that apply)

☐ Road Closure ☑ Lane Closure ☐ Sidewalk Closure ☐ Detour

Duration of closure? 5 Day/s ____ Week/s Other: ____

FMC 12.04.010 A permit shall be obtained for all underground facilities where pavement, driveways or sidewalks are cut or excavations are made in public right-of-way in the City where the City has accepted the streets for maintenance.

FMC 12.04.020 A permit for the necessary work is to be obtained and approved *prior* to the start of any work.

FMC 12.12.040 Installation of curb, gutter, sidewalks and drive approach required before permit issuance for any building, electrical or plumbing work.

In consideration of granting of this application, it is agreed by the applicant that the City of Farmersville and any officer or employee thereof shall be saved harmless by the applicant from any liability or responsibility for any accident, loss or damage to persons or property, happening or occurring as the proximate result of any of the work undertaken under the terms of this application and the permit or permits which may be granted in response thereto, and that all of said liabilities are hereby assumed by the applicant. It is further agreed that if any part of this installation interferes with the future use of any street it must be removed or relocated, as designated by the City Engineer, at the expense of the applicant of their successor in interest.

I hereby certify the foregoing to be true and correct, and that all construction to be performed hereunder shall be performed in compliance with City of Farmersville Municipal Codes, Ordinances and/or State of California laws.

I hereby acknowledge that I have read and hereby agree to all the provisions of this Encroachment Permit Application.

I understand that this application IS NOT A PERMIT and does not authorize any work to be performed.

I understand that application approval is subject to the payment of fees and is revocable for any violation.

Applicant Signature

6/29/2016
Date

1 EXHIBIT PHOTO – GENERIC (NOT SITE SPECIFIC)
SCALE: N.T.S.

2 AERIAL SITE LOCATION
SCALE: N.T.S.

NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY PINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED.

TRUE NORTH

NOTE:
PROPOSED 120'0" POLE IN THE R.O.W.
R.O.W. BOUNDARIES TO BE CONFIRMED AFTER SURVEY

3 ENLARGED SITE PLAN
SCALE: N.T.S.

mobilitie

Mobilitie, LLC

PROJECT NUMBER: 9CAX002691A
DRAWN BY: ////
CHECKED BY: ////

Preliminary
Not For
Construction

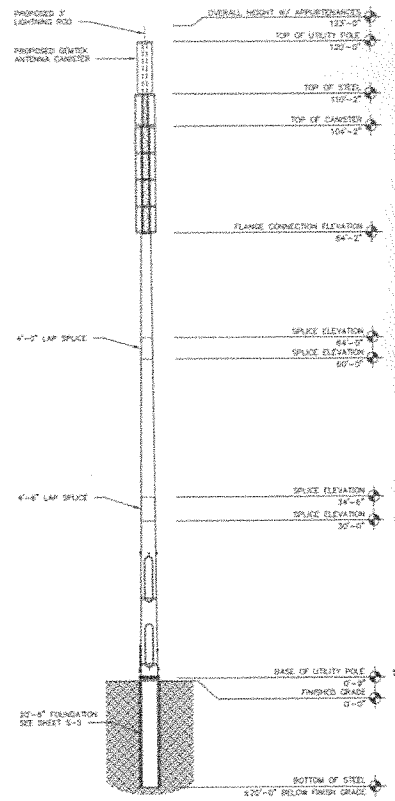
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

SITE INFORMATION
9CAX002691A
36.29964,-119.207389
Costner St & Formersville Rd
Formersville, CA 93223
UTILITY POLE

SHEET TITLE
EXHIBIT PHOTO &
ENLARGED SITE PLAN

SHEET NUMBER
1.0

SECTION	1	2	3	4	5	6	7
LENGTH (FT)	SECTION CONSIST ON SHEET S-1	24.167	34.667	33.750	1.3 S-3	1.3 S-3	
NUMBER OF SIDES		12	12	12			
THICKNESS (IN)		0.188	0.250	0.375			
TOP DIAMETER		21.344	25.184	30.876			
BOTTOM DIAMETER		26.407	32.918	36.000			
GRADE			A572-65				
WEIGHT (K)	1.2	1.2	2.7	4.7			
REFERENCE SHEET				S-3			



POLE DESIGN NOTES:

1. POLE IS DESIGNED FOR EXPOSURE C TO THE TIA-222-G STANDARD.
2. ALL WIND SPEEDS ARE BASED ON 3 SECOND GUSTS.
3. POLE IS DESIGNED FOR A 90 MPH BASIC WIND IN ACCORDANCE WITH TIA-222-G STANDARD.
4. POLE IS ALSO DESIGNED FOR A 30 MPH BASIC WIND WITH 0.75 IN ICE. ICE IS CONSIDERED TO INCREASE THICKNESS WITH HEIGHT.
5. DEFLECTIONS ARE BASED UPON A 60 MPH WIND.
6. POLE STRUCTURE CLASS II.
7. FOUNDATION DIMENSIONS DETERMINED USING NORMAL SOILS. SITE SPECIFIC GEOTECH REQUIRED FOR FINAL DESIGN.

POLE MANUFACTURER NOTES:

1. THERMAL STUDY SHALL BE PERFORMED BY THE POLE MANUFACTURER TO DETERMINE IF THE PROPOSED EQUIPMENT INSIDE POLE IS BEING ADEQUATELY COOLED/HEATED AND PROVIDE A CLIMATE CONTROL SYSTEM AS NECESSARY BY DESIGN.
2. POLE MANUFACTURER SHALL ENSURE THE THE POLE IS WATERPROOF SO THAT THE INTERIOR COMPONENTS OF THE POLE ARE NOT ADVERSELY AFFECTED BY THE EXTERIOR ELEMENTS.
3. POLE ANALYSIS CALCULATIONS AND THERMAL STUDY SHALL BE PROVIDED TO THE ENGINEER OF RECORD WITH THE POLE SUBMITTAL PACKAGE.
4. POLE SHAFT AND ALL PORT RIM STEEL TO BE 65 KSI.
5. ALL OTHER PLATE TO BE 50 KSI.

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A572-65	65 ksi	80 ksi
A36	36 ksi	58 ksi			

EQUIPMENT CHART

QTY	DESCRIPTION	CENTERLINE(AGL)	DIMENSIONS (HxWxD)	WEIGHT
1	GEMTEK ANTENNA CANISTER	112'-0" +/-	118" x 33"ø	633 LBS
2	3' MICROWAVE DISH ANTENNA	107'-2" +/-	12" x 36"ø	53 LBS
3	2500 MHz FILTER	102'-2" +/-	8" x 12.5" x 2.8"	22 LBS
3	2500 MHz RRU	99'-8" +/-	25" x 18" x 5"	55 LBS
3	800 MHz FILTER	97'-2" +/-	8.6" x 4.60" x 4.73"	60 LBS
3	800 MHz RRU	93'-2" +/-	16" x 11" x 15.4"	53 LBS
3	800 MHz 2X FILTER	93'-2" +/-	8.6" x 4.60" x 4.73"	60 LBS
3	800 MHz RRU	90'-8" +/-	16" x 11" x 15.4"	53 LBS
3	1900 MHz RRU	88'-2" +/-	25" x 16" x 13"	60 LBS

POLE ELEVATION

SCALE: 1" = 15'-0" (1" = 7'-6" ON 24"x36" SHEET)

1

mobilitie

Mobilitie, LLC

PROJECT MANAGER:	MONGOSERVA
DRAWN BY:	####
CHECKED BY:	####

Preliminary Not For Construction

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SITE INFORMATION

SCAX002891A

34.29994,-119.203369

Center St & Fremontville Rd

Fremontville, CA 93223

UTILITY POLE

SHEET TITLE

UTILITY POLE ELEVATIONS

SHEET NUMBER

2.0