



LAND USE PRE-APPLICATION CONFERENCE

Thursday, February 1, 2018

**City Hall
22500 Salamo Road**

Willamette Conference Room

1:30 pm **Proposed collocation of small cell antennas located on utility and/or light poles within the City right-of-way. Applicant proposes approximately 12-20 node locations within West Linn.**

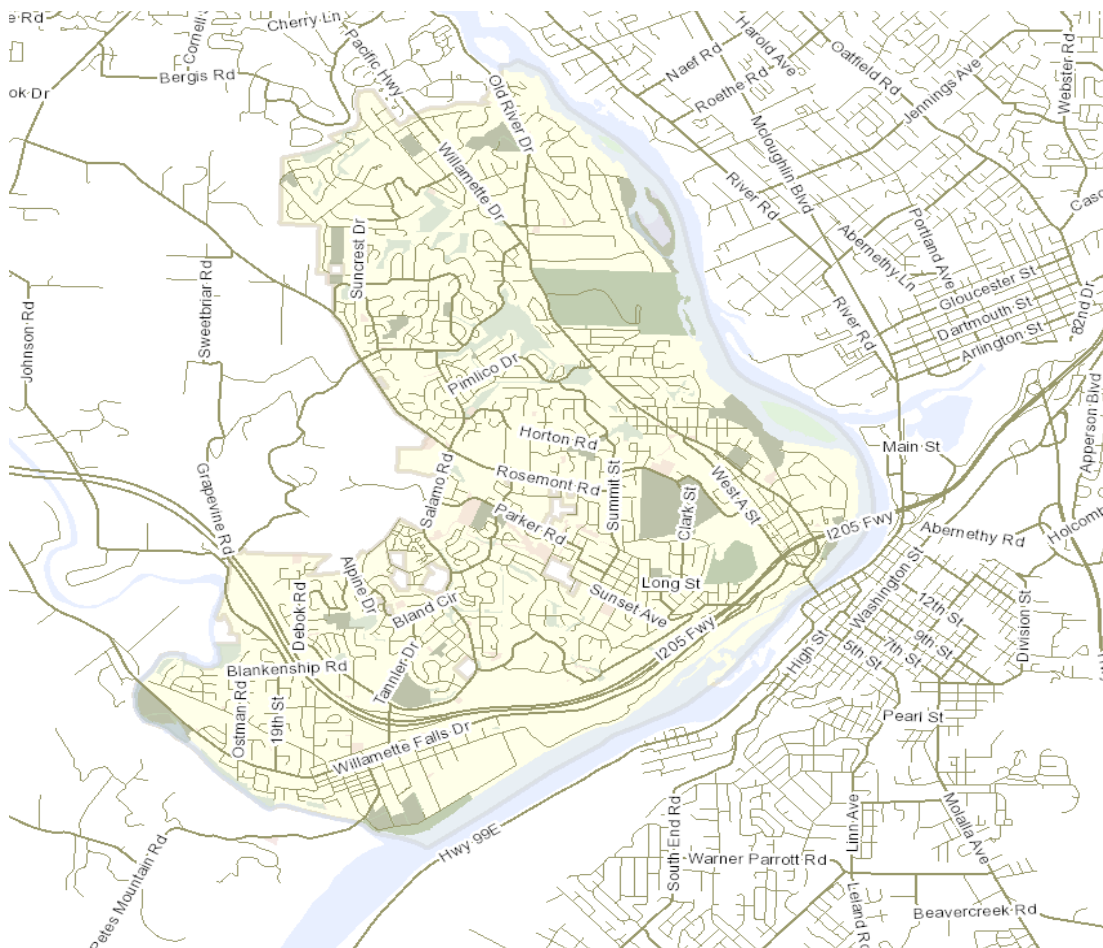
Applicant: **Verizon Wireless/Tilson Technology, Sue Leslie**

Subject Property Address: **City Right-of-Way**

Neighborhood Assn: **All**

Planner: **Jennifer Arnold**

Project #: PA-18-03





CITY OF

West Linn

Planning & Development • 22500 Salamo Rd #1000 • West Linn, Oregon 97068
Telephone 503.656.4211 • Fax 503.656.4106 • westlinnoregon.gov**PRE-APPLICATION CONFERENCE**

THIS SECTION FOR STAFF COMPLETION

CONFERENCE DATE:

JAN 18

TIME:

1:30

PROJECT #:

PA-18-03

STAFF CONTACT:

Jennifer Arnold

FEE:

350

Pre-application conferences occur on the first and third Thursdays of each month. In order to be scheduled for a conference, this form including property owner's signature, the pre-application fee, and accompanying materials must be submitted at least 14 days in advance of the conference date. Twenty-four hour notice is required to reschedule.

Address of Subject Property (or map/tax lot): City's Right of Way

Brief Description of Proposal: Verizon Wireless is proposing collocation of small cell antennas located on utility and/or light poles within the city's Right of Way. Verizon is proposing approximately 12-20 node locations within the city of West Linn.

Applicant's Name: Verizon Wireless-C/O Tilson Technology Inc. Attn: Sue Leslie

Mailing Address: 520 SW 6th Ave Suite 1250 Portland, OR 97204

Phone No: (503)936-5933

Email Address: eleslie@tilsontech.com

Please attach additional materials relating to your proposal including a site plan on paper up to 11 x 17 inches in size depicting the following items:

- North arrow
- Scale
- Property dimensions
- Streets abutting the property
- Conceptual layout, design and/or building elevations
- Easements (access, utility, all others)
- Access to and from the site, if applicable
- Location of existing trees, highly recommend a tree survey
- Location of creeks and/or wetlands, highly recommend a wetland delineation
- Location of existing utilities (water, sewer, etc.)

Please list any questions or issues that you may have for city staff regarding your proposal:

We would like to verify that a Franchise agreement is necessary to occupy the city's Right of Way.

By my signature below, I grant city staff right of entry onto the subject property in order to prepare for the pre-application conference.

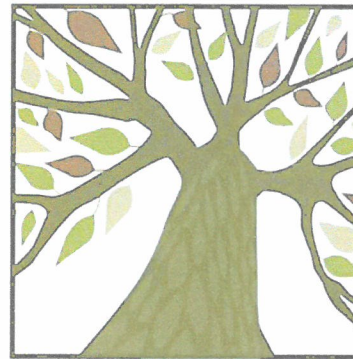
Property owner's signature

Date

Property owner's mailing address (if different from above)

Verizon Small Cell Program

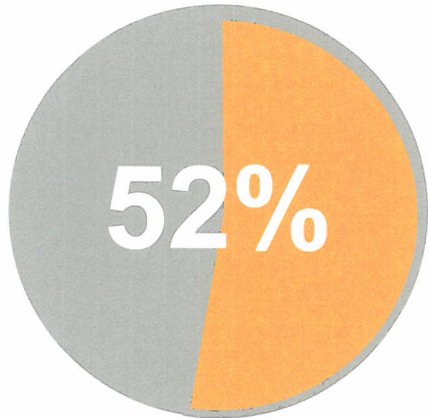
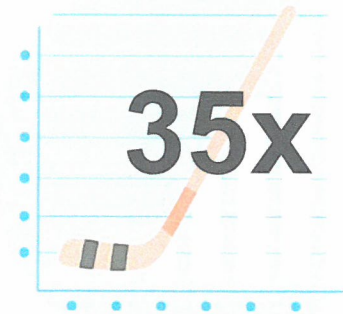
January, 2018



CITY OF
**West
Linn**

Why the Need?

From 2010 – 2016:
Mobile data use  35 times



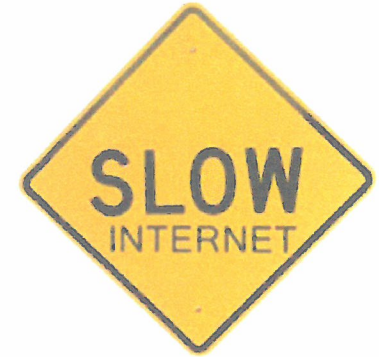
52%+ American Households
Wireless-only

Average American Household:
13 Connected Devices

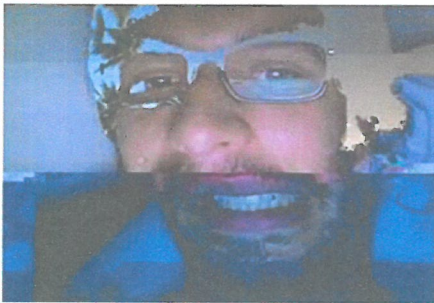


What is The Impact of Insufficient Capacity?

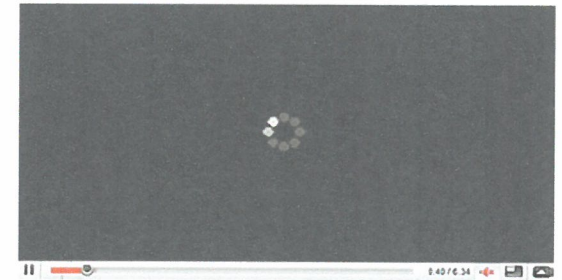
Slow Data Speeds



Increased Video Buffering Times



Disruption to Video Calls



Dropped or Incomplete Calls

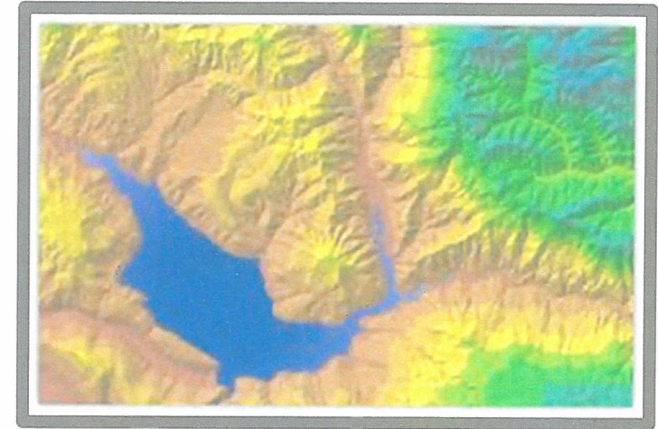


Connection Problems



Why Deploy Small Cell? Gaps in Coverage

Terrain Challenges



Tall Buildings



Large Residential Areas



What is a Small Cell?

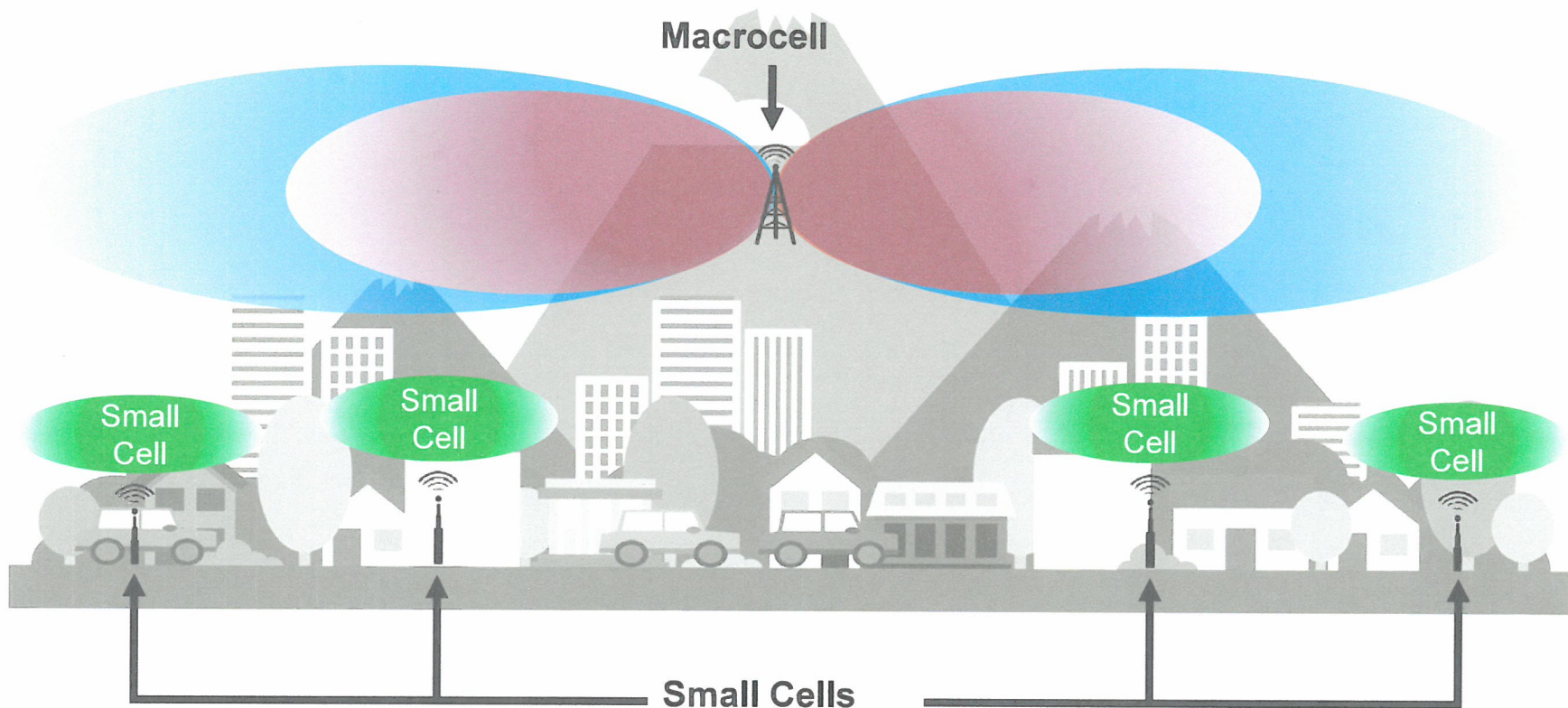
Cell-edge

Mid-cell

Near Cell

Mid-cell

Cell-edge



Small Cell Components

Fiber & Coax
Conduit

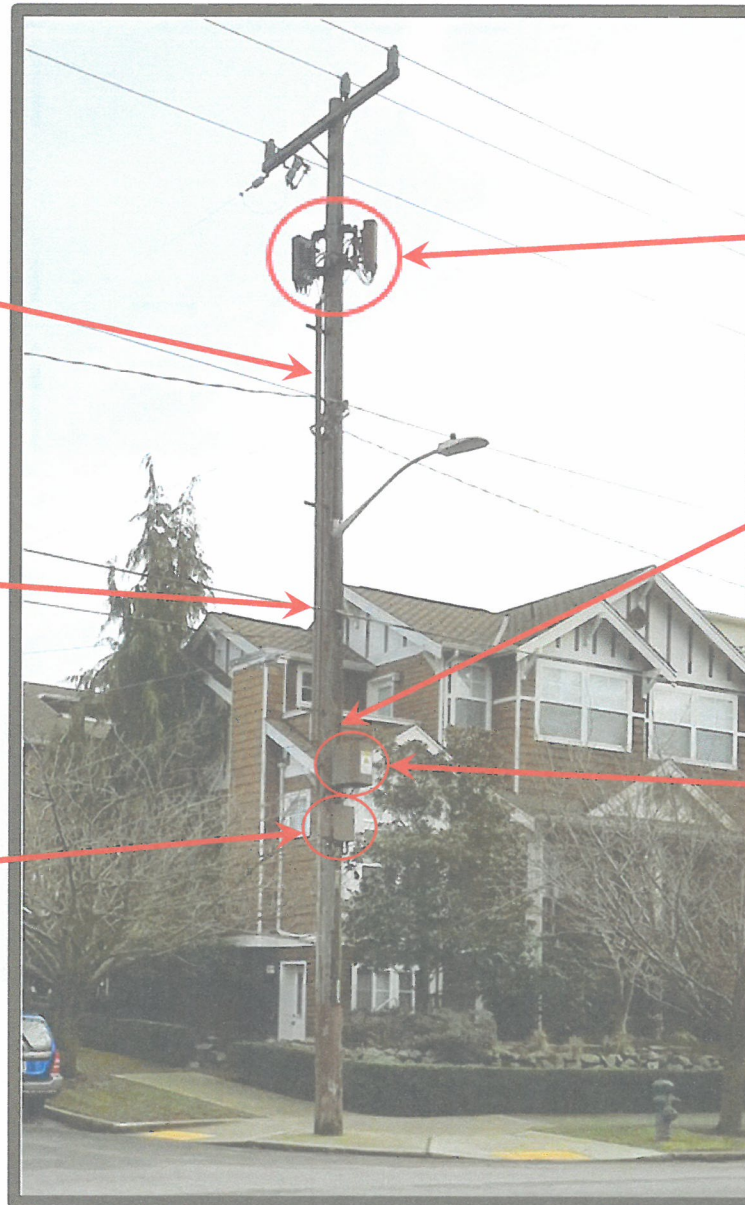
Power
Conduit

Power
Disconnect

Antennas

Dark Fiber
(leased from 3rd party)

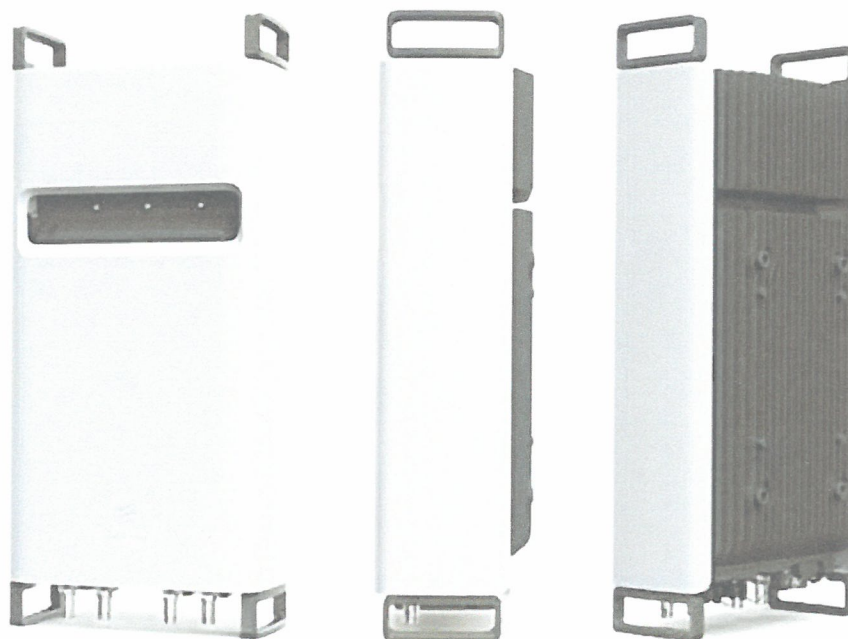
Radios & Fiber
Termination Box



Radios

**Small
Form
Factor**

**AC
Power**
≈ 100W bulb



**Direct Fiber
Connections**

**2 Radio
Installation**
(typically)

Specs

27" x 12" x 8"

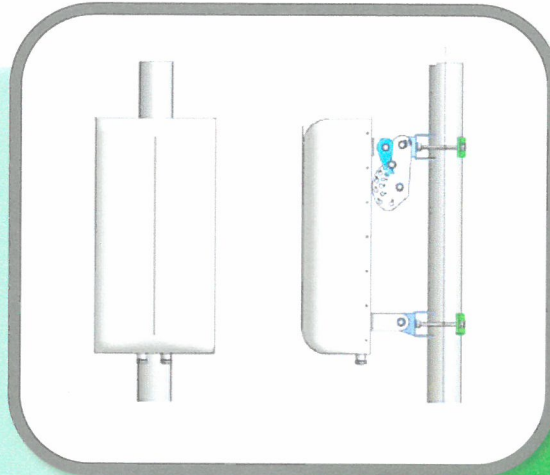
~55 lbs.

Antenna Options

Cylindrical

Height
~2 ft.

Diameter
~16 in.



Panel

Height
~2 ft.

Width
1 to 3 ft.



Design Options: Utility Poles



Seattle, WA (Greenlake)



Seattle, WA (Greenlake)

Design Options: Utility Poles

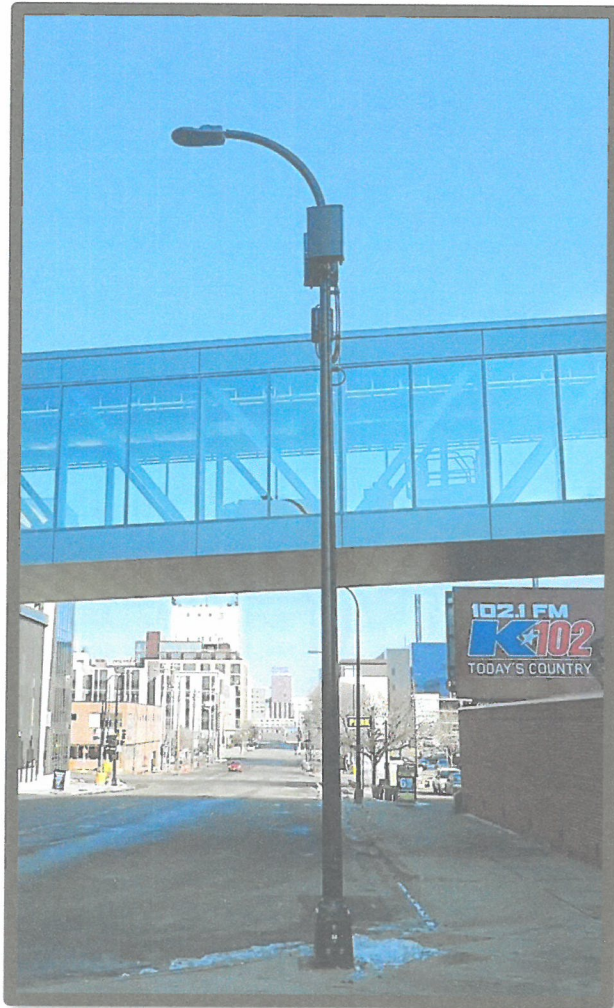


Portland, OR



Las Vegas, NV

Design Options: Street Lights

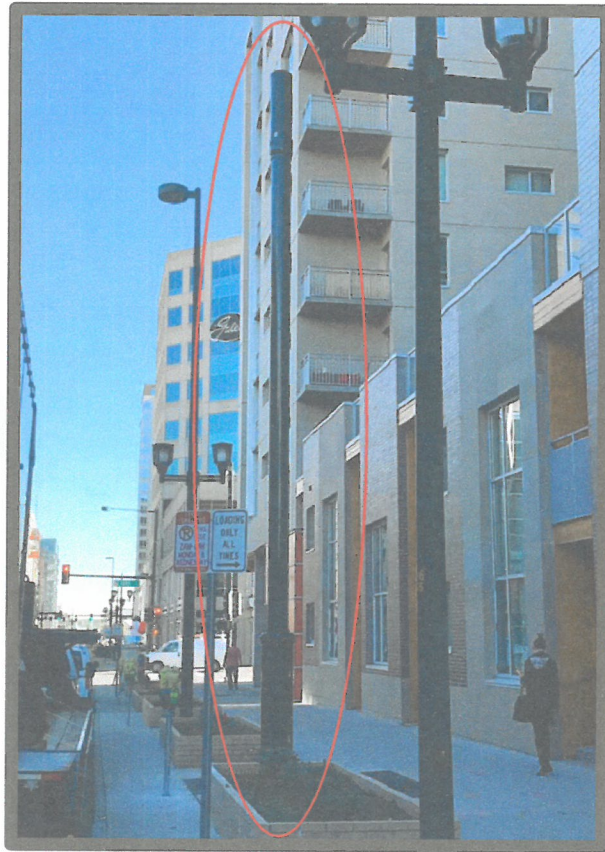


Minneapolis, MN



Kansas City, KS

Design Options: Pole Replacement - Base Mount

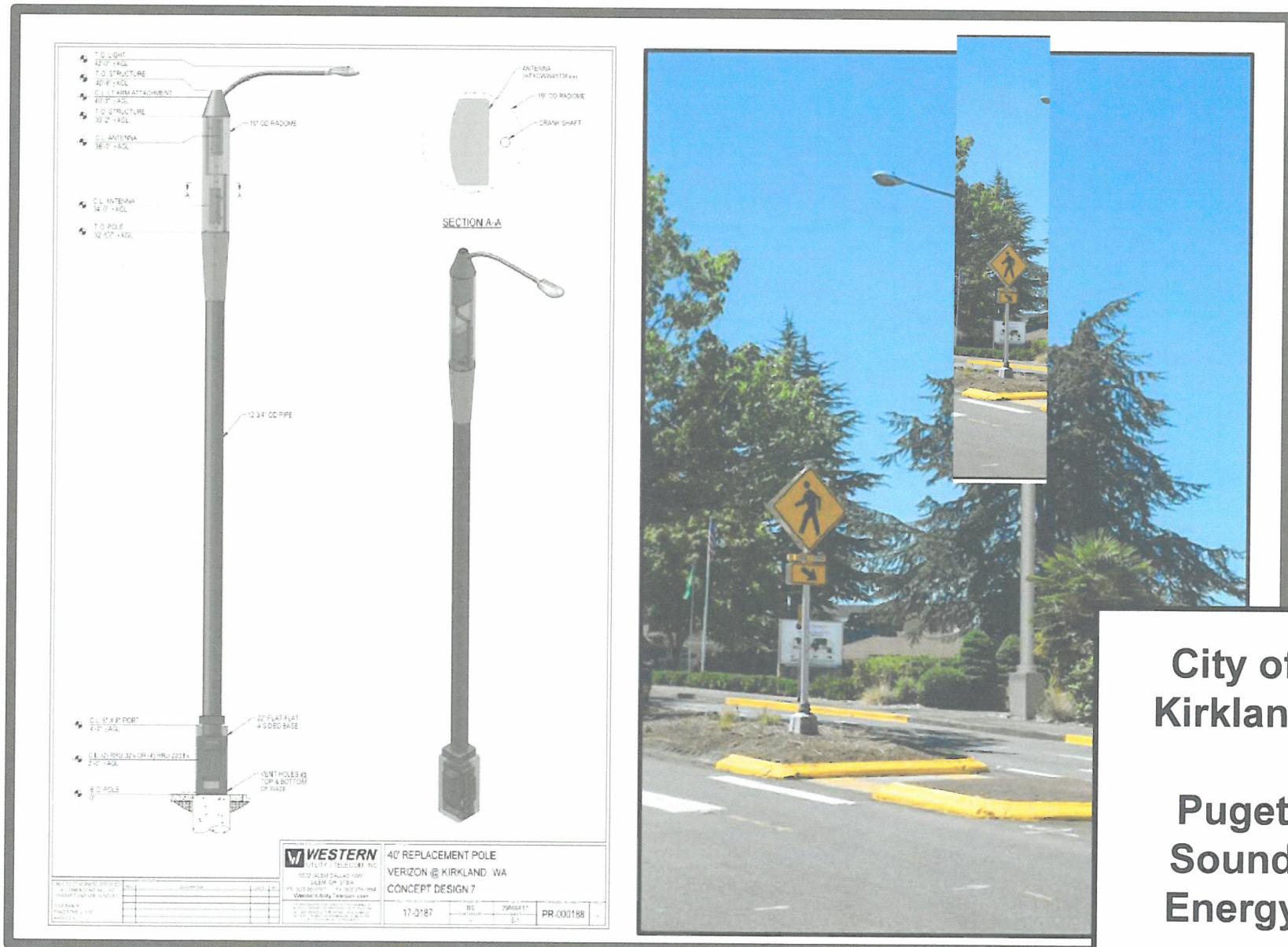


Denver, CO



Equipment Inside of
Pole Base

Proposed Light Standards



Proposed Light Standards



PROPOSED

**City of
Bellevue**

**Puget
Sound
Energy**

(A) Antenna
ANTELL CWT360x06Fx0
24" H x 14" W
28 lbs

(B) Radio 2203
7.88" H x 7.88" L x 3.94" D
11 lbs

(C) Disconnect Box
9.75" H x 9.00" L x 5.25" D
WT. TBD



PROPOSED

Thank you.