Streetlight Communication Device Commissioning Guidelines

Version 1.0 Dated September 2020

Streetlight consultants or contractors should reference the following guidelines and examples to commission the communication device when installing County owned streetlight poles in the County.

I. **Objective:** To provide precise instructions to developers/contractors on how to input data for the new streetlights installed into a specific excel format sheet, which will be used by the Arlington County Lighting Inspectors to be put it in the asset management software.

II. **Overview:**

TE&O is responsible for managing and maintaining the transportation infrastructure in Arlington County specifically streetlights and traffic signals.

The information which would be sent over to the developers/contractors would be a blank standard excel sheet (standardized format with prefilled drop-down columns) and detailed instructions on how to fill it.

The detailed instructions would provide exhaustive instructions on to how to input the location and select the properties of a streetlights based on their components from the prefilled drop-down rows in the excel sheet provided to them.

III. **City Touch Commissioning Process**

A. Streetlight / Roadway Light Identification Codes (Pole Number)

All light poles shall be stickered with the pole numbering label as per the Arlington County Lighting Specification as shown in the plan. If the pole numbers are now shown in the approved lighting plan, detailed instruction on pole numbering can be found at https://transportation.arlingtonva.us/streetlight-pole-identification-protocol/.

Once, the pole numbers are identified, fill in the respective pole number in **Column A** (Asset (External ID) in the excel sheet.

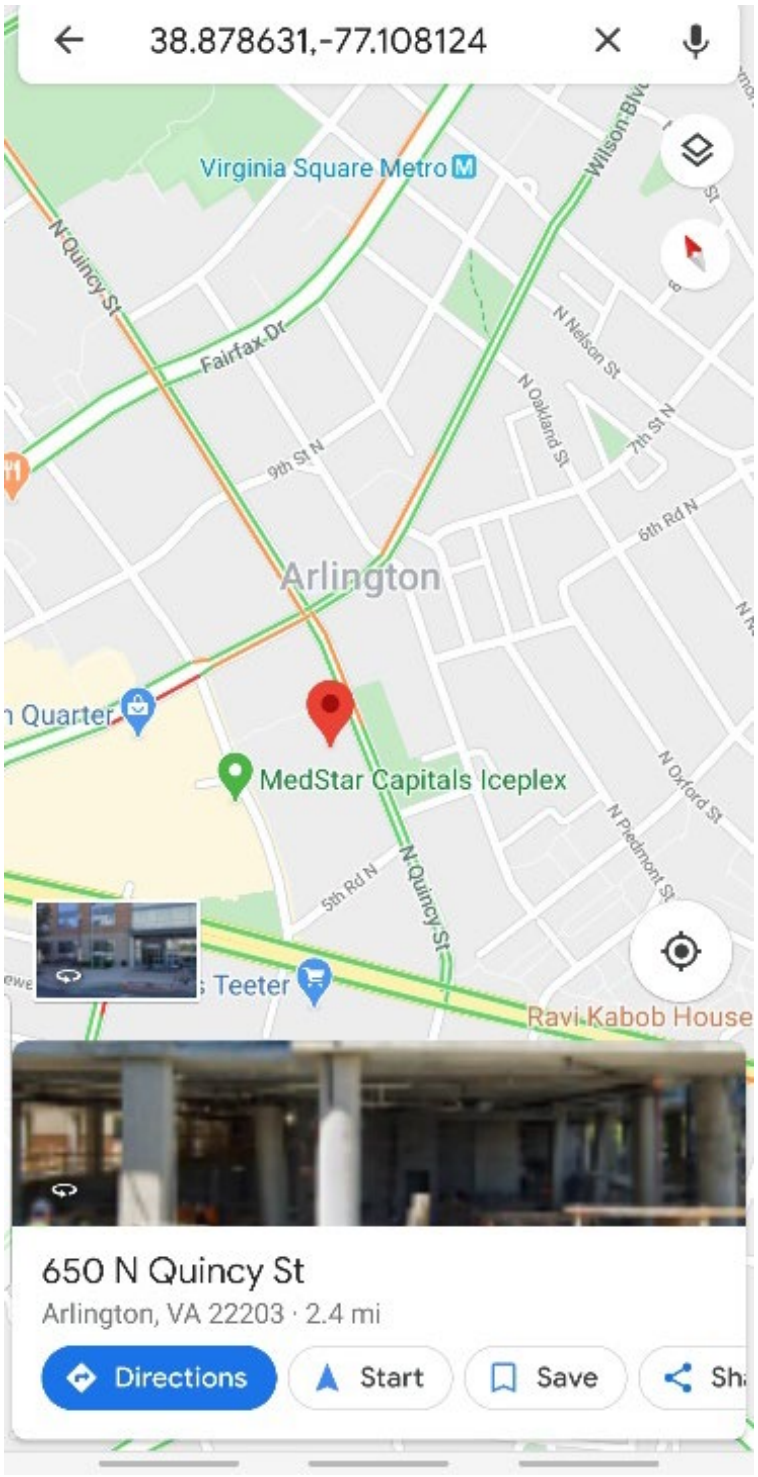
B. Streetlight / Roadway Light Location:

The specific location for Streetlight/ Roadway light is to be mapped on the City touch software through the latitudes and longitudes associated with it.

Following is a brief overview explained with an example which would help in inputting the latitudes and longitudes for a Streetlight / Roadway light:

- If the latitude coordinate is North (N) then it is a positive coordinate, South (S) negative coordinate.
- If longitude coordinate is East(E) then it is positive coordinate, West(W) negative coordinate.
- As Arlington County falls in North of Equator and West of Prime meridian, some of the valid coordinates are:
  [40.689263, -74.044505], [38.86102385, -77.09333], [38.8435, -77.05123333]

Tip: You could get the location using google maps on your phone. By using the dropped pin tool, you would be able to obtain the exact latitudes and longitudes of where the light is located.



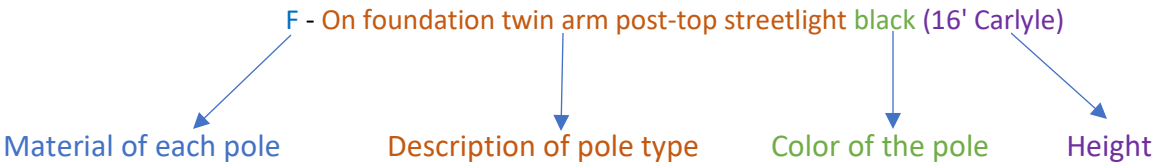
After, the latitudes and longitudes are identified, fill in the respective latitudes and longitudes in **Column B** and **Column C** respectively in the excel sheet.

C. Streetlight/Roadway Pole Properties:

Arlington County Streetlight standards and specifications identifies poles which are below 16’ height as Streetlight poles and poles which have more than 16’ height as Road way poles.

For the pole properties to be identified in the city touch software, a naming convention has been adopted.

For example:



The descriptions for the abbreviations used for the materials are as follows:

- F- Fiberglass
- S- Steel
- Aluminum
- W- Wood
- T- Traffic signal mast arm.

Table 1 gives the combination for the different poles relating to their properties that have been preset in the excel sheet. The pole relating to your project can be selected from the drop-down menu of **Column D**

Select the appropriate height of the pole in **Column E**

NOTE: For twin arms or streetlights with two luminaries make the same selection twice.
Example: if pole 18S2002N is a twin arm Carlyle with two luminaires type in 18S2002N twice.

Table 1: Light Pole Properties

Pole Type	Material	Pole Style	Pole Height
A- On foundation rear mount roadway light - black(11' carlyle)	Aluminium	Octaflute	11
A- On foundation post-top streetlight- black (12' carlyle)	Aluminium	Decorative	12
A- On foundation twin arm post-top streetlight -black (12' carlyle)	Aluminium	Decorative	12
F- On foundation post-top streetlight -black (12' carlye)	Fiberglass	Decorative	12
F- On foundation twin arm post-top streetlight - black (12' carlye)	Fiberglass	Decorative	12
F-Direct buried post-top streetlight -black (12' carlye)	Fiberglass	Decorative	12
F-Direct buried twin arm post-top streetlight -black (12' carlye)	Fiberglass	Decorative	12
S- On foundation post-top streetlight -black(12' carlyle)	Steel	Decorative	12
S- On foundation twin arm post-top streetlight-black (12' carlyle)	Steel	Decorative	12
A- On foundation post-top streetlight-black (14' carlyle)	Aluminium	Decorative	14
A- On foundation twin arm post-top streetlight -black (14' carlyle)	Aluminium	Decorative	14
F- On foundation post-top streetlight -black (14'carlye)	Fiberglass	Decorative	14
F- On foundation twin arm post-top streetlight-black (14'carlye)	Fiberglass	Decorative	14
S- On foundation post-top streetlight-black (14' carlyle)	Steel	Decorative	14
S- On foundation twin arm post-top streetlight -black (14'carlyle)	Steel	Decorative	14
A- On foundation post-top streetlight -black (16' carlyle)	Aluminium	Decorative	16
A- On foundation twin arm post-top streetlight -black (16' carlyle)	Aluminium	Decorative	16
F- On foundation post-top streetlight -black (16' carlye)	Fiberglass	Decorative	16
F- On foundation twin arm post-top streetlight black(16' carlye)	Fiberglass	Decorative	16
S- On foundation post-top streetlight -black(16 'carlyle)	Steel	Decorative	16
S- On foundation twin arm post-top streetlight -black(16' carlyle)	Steel	Decorative	16
F-Direct buried roadway light -black(25' cobra)	Fiberglass	Round tapered	25
F-Direct buried dual arm roadway light-black (25' cobra)	Fiberglass	Round tapered	25
W-Direct buried roadway light -black (25' cobra)	Wood	Round tapered	25
W-Direct buried dual arm roadway light (25'cobra)	Wood	Round tapered	25
F-On-foundation roadway light -black (25'cobra)	Fiberglass	Round tapered	25
F-On-foundation dual arm roadway light -black (25' cobra)	Fiberglass	Round tapered	25
F-On-foundation dual arm roadway light -black (25' teardrop)	Fiberglass	Round tapered	25
F-Direct buried roadway light -black(30' cobra)	Fiberglass	Round tapered	30
F-Direct buried dual arm roadway light -black (30' cobra)	Fiberglass	Round tapered	30
W-Direct buried roadway light -black (30' cobra)	Wood	Round tapered	30
W-Direct buried dual arm roadway light(30' cobra)	Wood	Round tapered	30
F-On-foundation roadway light-black (30' cobra)	Fiberglass	Round tapered	30
F-On-foundation dual arm roadway light -black (30' cobra)	Fiberglass	Round tapered	30
A- On foundation roadway light- galvanized(30' cobra)	Aluminium	Octaflute	30
A- On foundation roadway light - black(30' cobra)	Aluminium	Octaflute	30
A- On foundation dual arm roadway light - galvanized(30' cobra)	Aluminium	Octaflute	30
A- On foundation dual arm roadway light - black(30'cobra)	Aluminium	Octaflute	30
A- On foundation rear mount roadway light - black(30' cobra)	Aluminium	Octaflute	30
T- Traffic signal mast arm	Steel	Round tapered	30

D. Luminaire Properties:

For the luminaires installed on the poles, Table 2 gives an overview of the properties corresponding to a luminaire.

Select the luminaire name, luminaire type and luminaire wattage from the drop-down menu of **Column F, Column G and Column H** respectively.

Table 2: Luminaire Properties

Luminaire Name	Luminaire Type	Luminaire Wattage
Commercial Cobra Large Grey	RFL-145W64LED4K-G2-R3M-UNV- DALI-RCD7-GY3	146
Commercial Cobra Large Black	RFL-145W64LED4K-G2-R3M-UNV- DALI-RCD7-BK	146
Residential Cobra Medium Grey	RFM-72W32LED3K-G2-R3M-UNV-DALI-RCD7-GY3	73
Residential Cobra Medium Black	RFM-72W32LED3K-G2-R3M-UNV-DALI-RCD7-BK	73
Commercial Cobra Medium Grey	RFM-72W32LED4K-G2-R3M-UNV-DALI-RCD7-GY3	73
Commercial Cobra Medium Black	RFM-72W32LED4K-G2-R3M-UNV-DALI-RCD7-BK	73
Commercial Type 3	SA9033N	70
Commercial Type 5	SA9033R	70
Residential Type 3	SA9033K	40
Teardrop Type 3 Black	C7781K	138
Teardrop Type 4 Black	C7781L	138

IV. Deadline:

The excel spreadsheet is to be completed and sent over to the Arlington County Lighting Inspector prior to the final inspection for the streetlights of their project.

V. Contact information:

For any questions, please contact Mohammed Shahid Mohiuddin at mmohiuddin@arlingtonva.us (703-228-7555) or Fred Verdi at fverdi@arlingtonva.us (703-228-3402).