



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

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JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

TO: Greg Duncan
Assistant Chief Engineer of Operations

FROM: Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Request and Justification
Cleveland Utilities and City of Cleveland
Radar Detection**

The Cleveland Utilities and the City of Cleveland are requesting that the Wavetronix SmartSensor Matrix and the SmartSensor Advance radar detection be used in the signalization component of projects within the City of Cleveland's control and maintenance over the next three years where Federal and/or State funding is used. This request is based on the necessity for the synchronization with the existing traffic signal system operated and maintained by the City. The following are justification items for this request:

- 1) The City of Cleveland currently has nine intersections equipped with the Wavetronix detection system and has plans to install this detection system on all new signals plus converting the detection system at existing signalized intersection as existing systems fail. Cleveland Utilities has seen excellent performance with this system for a number of years with little or no maintenance required. In addition, a cost savings over time is expected because this system will not have to be replaced when milling/resurfacing is done.
- 2) The Cleveland Utilities staff has been extensively trained to install, operate and maintain the Wavetronix detection system. By utilizing this detection system as the standard for the City there will be a cost savings in stocking replacement equipment and will result in faster and less costly repair.

I, Brad Freeze, Director of TDOT Traffic Operations, do hereby certify that in accordance with the requirements of 23,CFR 635.41 I(a)(2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.


Assistant Chief Engineer of Operations


Date

Cc: Jeff C. Jones, TDOT Assistant Chief Engineer of Design
Mike Tugwell, TDOT State Traffic Engineer
Danny Lane, TDOT H.Q. Materials & Test Division
Tad Bacon, Cleveland Utilities

Recommended for approval:  Director of Traffic Operations



Cleveland Utilities

August 8th, 2014

Mr. Pete Falkenberg, P.E.
Civil Engineering Manager
Design Division of TDOT
James K. Polk Building, Suite 1300
Nashville, TN 37243

Re: Request for Proprietary Traffic Signal Products Certification
City of Cleveland – Wavetronix SmartSensor radar detection

Dear Mr. Falkenberg:

Cleveland Utilities and the City of Cleveland would like to request a proprietary product certification for Wavetronix SmartSensor Matrix and SmartSensor Advance radar detection. The City of Cleveland currently has 9 intersections equipped with Wavetronix detection with plans to continue installing Wavetronix on all new signals and converting to Wavetronix as existing detection methods fail.

Cleveland Utilities has seen excellent performance out of the Wavetronix equipment for several years now and has had little to no maintenance on the radar systems. Some of the other advantages include better detection zone coverage and the ability to change the detection zones to match new lane configurations. We believe that local, state, and federal entities will see a cost savings over time because this system does not have to be replaced when milling occurs.

Cleveland Utilities staff has been extensively trained to install, operate, and maintain the Wavetronix detection. CU also keeps inventory of Wavetronix parts in the event that a failure would occur. We believe that utilizing this detection method and brand will lead to faster repair times, is in the public's best interest, and that Wavetronix SmartSensor technology has no equal based on their Dynamic ETA Tracking patent.

Thank you for your consideration of this request,

Tad Bacon
Cleveland Utilities
Traffic Signals Coordinator
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