

# Dispatch – Radio System

## Radio Systems and Dispatch Centers Tied Together

- (3) Radio Systems – Cleveland System, Harris System, MARCS
- (2) Dispatch Centers – City of Brunswick, Medina County Sheriff
- City of Brunswick currently uses UHF Radio System, switching to an 800 system (MARCS), 1<sup>st</sup> quarter of 2019
- Medina County Sheriff currently uses UHF Radio System AND an 800 Radio System (Harris)

# Radio System History

## **Current System in the County**

- UHF (400) System installed in the 1980s, updated to be P-25 compliant
  - Harris 800 MgHz System
- 2010 Research Report completed by L-Tronics Inc. for Medina County EMA
  - Simulcast on 400 and 800 systems to accommodate departments without equipment and to have paging capabilities
    - HARRIS is not compatible with MARCS or Cleveland System

# Radio Systems

## MARCS (Brunswick Dispatch 2019)

- Statewide System (since 2000)
- 1,800 public safety/service agencies
- 110,000 radios, 1,800 computers
- Infrastructure by State of Ohio (300 Towers) Tower at Boston & Pearl
- Maintenance by State of Ohio
- Subscription fee – 10/month (\$4,800)
- Interoperability
- Grant possibilities (State Fire Marshall, \$3 million/yr)
- Redundancy (Potable towers)
- Coverage Good in Brunswick Hills  
\*\*see test results\*\*
- 66 out of 88 Ohio Counties use MARCS
- 9 of 13 counties in our region operate on MARCS

## Medina Co Sheriff

- UHF or 800 platform (Harris System)
- No paging ability for fire departments
- Poor to no coverage in Brunswick Hills due to a lack of towers \*\*See test results, tower map\*\*
- Harris System- Medina and Ottawa County only counties in Ohio using this system, City of Parma also uses
- Tied into Parma Radio (Vitacore)
- Infrastructure and repair cost paid by county (per the Sheriff). No sustained funding source
- No subscriber fee
- Cleveland Communications (vendor) has rights to program all radios on the system
- Started January 2016

# Radio System Future Costs

## MARCS

- Subscription Fee
- End user programming fee or clone feature available

\*\*Regardless of which radio system the Township Safety Forces choose, there will be a significant capital expense for both police and fire departments.

## Sheriff System

- Brunswick Area Tower \$225,000
- Additional channel needed for additional capacity \$93,000
- Vitacore upgrade/move \$250,000
- End user programming fee from Cleveland Communications (\$50 /radio)

# Dispatch Centers

## **Brunswick**

- 2 dispatchers (have proposed 3<sup>rd</sup> dispatcher during peak hours)
- 3 Law enforcement, 3 fire departments (Note- it appears that Hinckley Twp. will be moving to the Sheriff Office for Dispatch)
- CAD Entries Total-67,372
- CAD Entries BHT-10,034
- CAD Hinckley Twp- 5,961
- CAD City of Brunswick – 51,377
- Contract (1,3, 5 year options)

## **Sheriff**

- 2 day/night shift 3 afternoons
- 7 law enforcement, 11 fire departments (If Hinckley move 8 law enforcement, 12 fire departments)
- CAD Entries Total-67,314
- Year to Year Invoicing

# Dispatch Pros Cons

## Brunswick

- Radio system MARCS (Pro)
- Pricing (Pro)
- Notification of Mutual Aid (Pro)
- CAD System for Police (Con)
- Number of agencies (Pro)
- Location (Pro)
- Cellular 911 (Con)

## Sheriff

- Radio System Harris (Con)
- Pricing (Con)
- Notification of Mutual Aid (Con)
- CAD System for Police (Pro)
- Number of Agencies (Con)
- Location (Con)
- Cellular 911 receipt (Pro)

# Dispatch Centers

## Brunswick

- 1 year agreement \$71,413.05
  - 4% increase from 2018
- 3 year agreement
  - Year 1 - \$70,039.72 (2% increase)
  - Year 2 - \$71,440.51 (2% increase)
  - Year 3 - \$72,869.32 (2% increase)
- 5 year agreement
  - Year 1 - \$70,039.72 (2% increase)
  - Year 2 - \$71,440.51 (2% increase)
  - Year 3 - \$72,869.32 (2% increase)
  - Year 4 - \$73,589.01 (1% increase)
  - Year 5 - \$74,333.99 (1% increase)

## Sheriff

- 1 year agreement \$97,000
  - \*pricing to be negotiated for additional years

Year	Brunswick	Sheriff	Difference
1	70,039.72	97,000	26,960.28
2	71,440.51	97,000	25,559.49
3	72,869.32	97,000	24,130.68
			76,650.45
4	73,589.01	97,000	23,410.99
5	74,333.99	97,000	22,666.01
			122,727.45

## Additional Considerations

### Brunswick

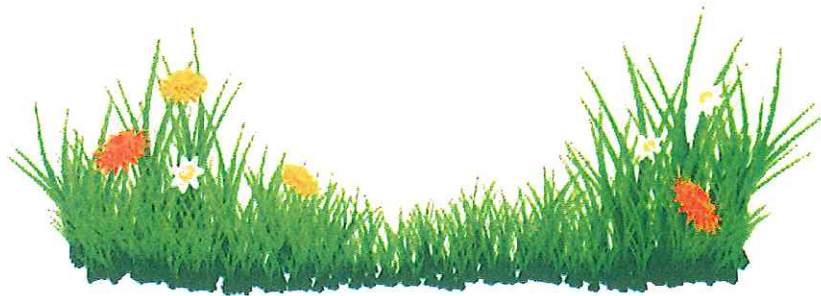
- Fire Mutual Aid (Jan-Nov) – 145
- Police Mutual Aid (Jan-Nov) - 223
- Automatic Aid Agreement –  
Primary Mutual Aid
- Jurisdictions intertwined

### Sheriff Office

- Unable to supply data reference mutual aid requested by the Sheriff's Office to Liverpool Twp.
- Mutual Aid with Valley City - 79

# Grass Not Always Greener

**Brunswick Hills LEFT the Sheriff Office Dispatch approximately 12 years ago. Why?**

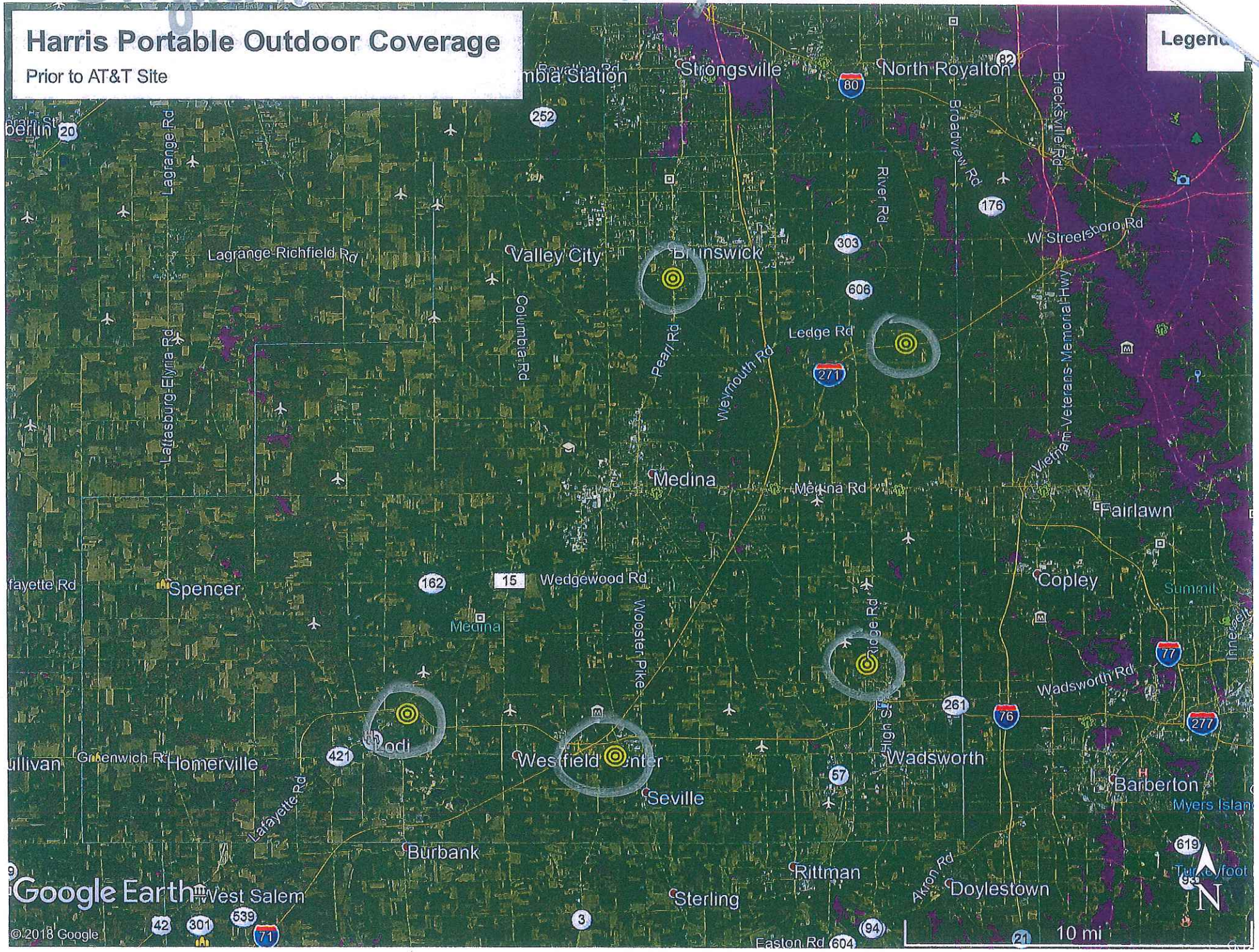


# ORIGINAL HARRIS PROPOSAL

## Harris Portable Outdoor Coverage

Prior to AT&T Site

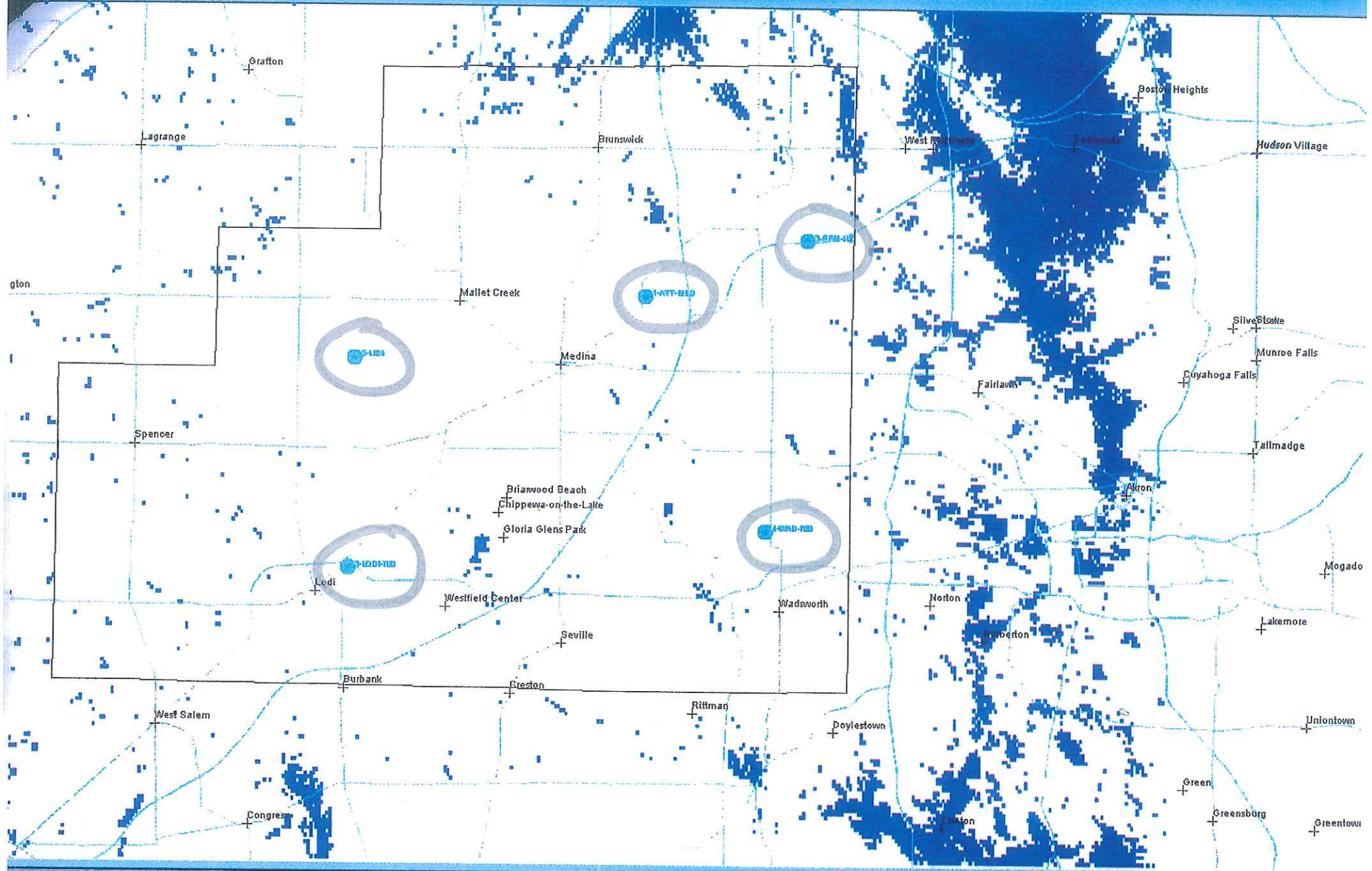
Legend



Google Earth

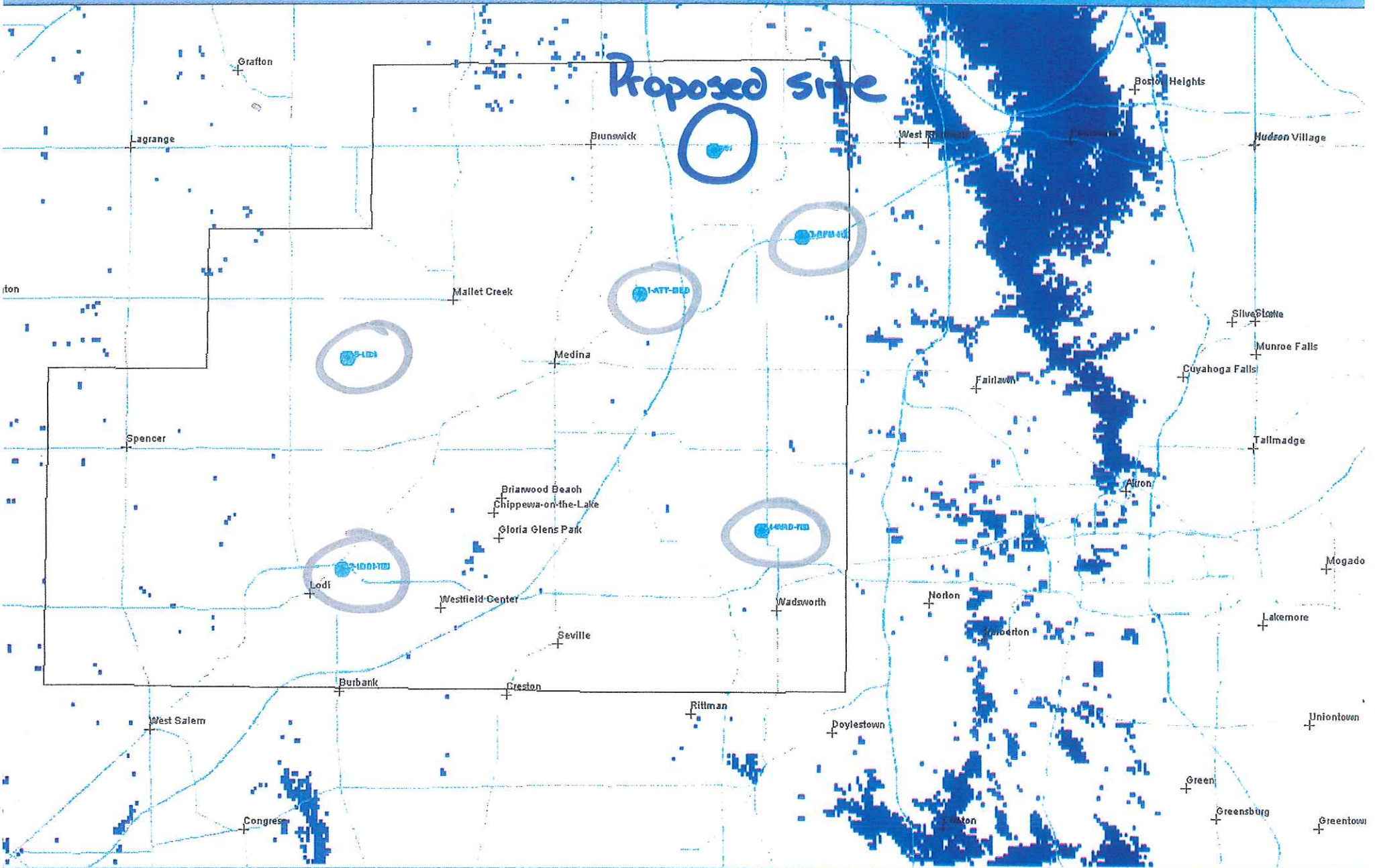
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# Portable outdoor talkback - 5 site - HARRIS



Portable outdoor talkout add water tower

HARRIS - w/proposed



# MARCS Towers



# MARCO'S TOWERS

