

Abbyville Commons and The Preserve

# Traffic Analysis

ZBA Hearing September 13, 2017

# Study Process - Recap

- Several steps
  - Analysis based on 7 year forecast (year 2023)
  - Traffic forecasting based on ITE
  - Analysis focused on Weekday AM/PM periods
  - Access/Mitigation Plan
  - Each component analyzed separately and combined
  - Study is generally consistent with ITE and MassDOT guidelines
- 
- Study has undergone Peer Review – currently in process of responding to comments/questions

# Existing Conditions - Lawrence Street



Looking east from site edge



Looking west from bridge

# Traffic Study Conclusions

- Project will increase traffic on abutting street particularly between site and Park Street
- Current roadway volumes are low and can accommodate the added traffic
- Safety concerns in area relate primarily to current observed travel speeds
- Existing bridge condition needs to be addressed regardless of the proposed development
- Project mitigation plans being prepared that will alleviate safety concerns and enhance transportation system

# Key Traffic Peer Review Comments

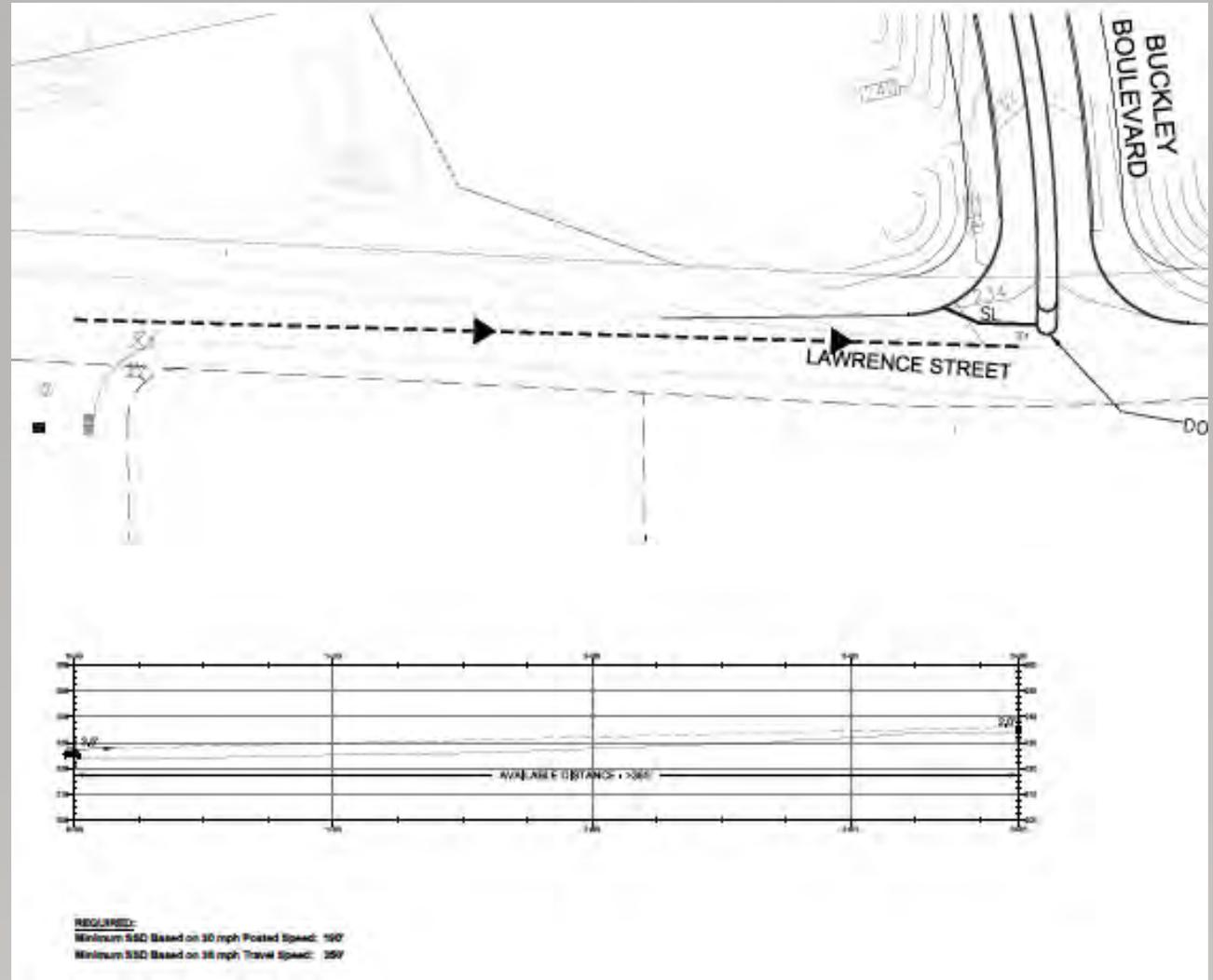
- Weekday vs. Saturday conditions
- Sight distance provisions
- Travel speed mitigation
- Internal site design
- Construction traffic management plan
- Main/Park intersection

# Weekday vs. Saturday Condition

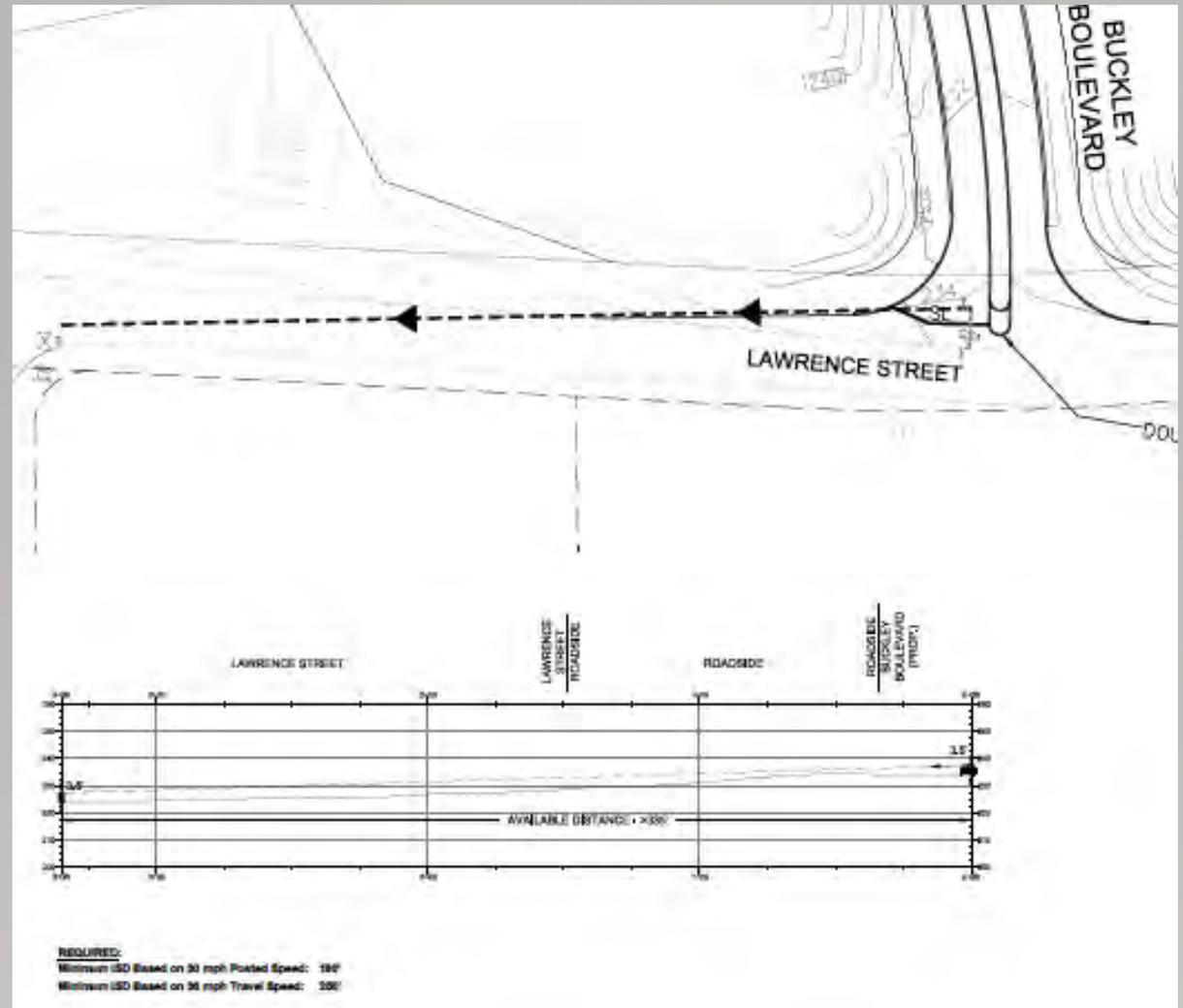
Based on 48 apt units/168 SF units

Time Period	AM Peak Hour	PM Peak Hour	Sat Midday Peak Hour
Lawrence Street	80	77	60
Site Trip Generation	154	212	183

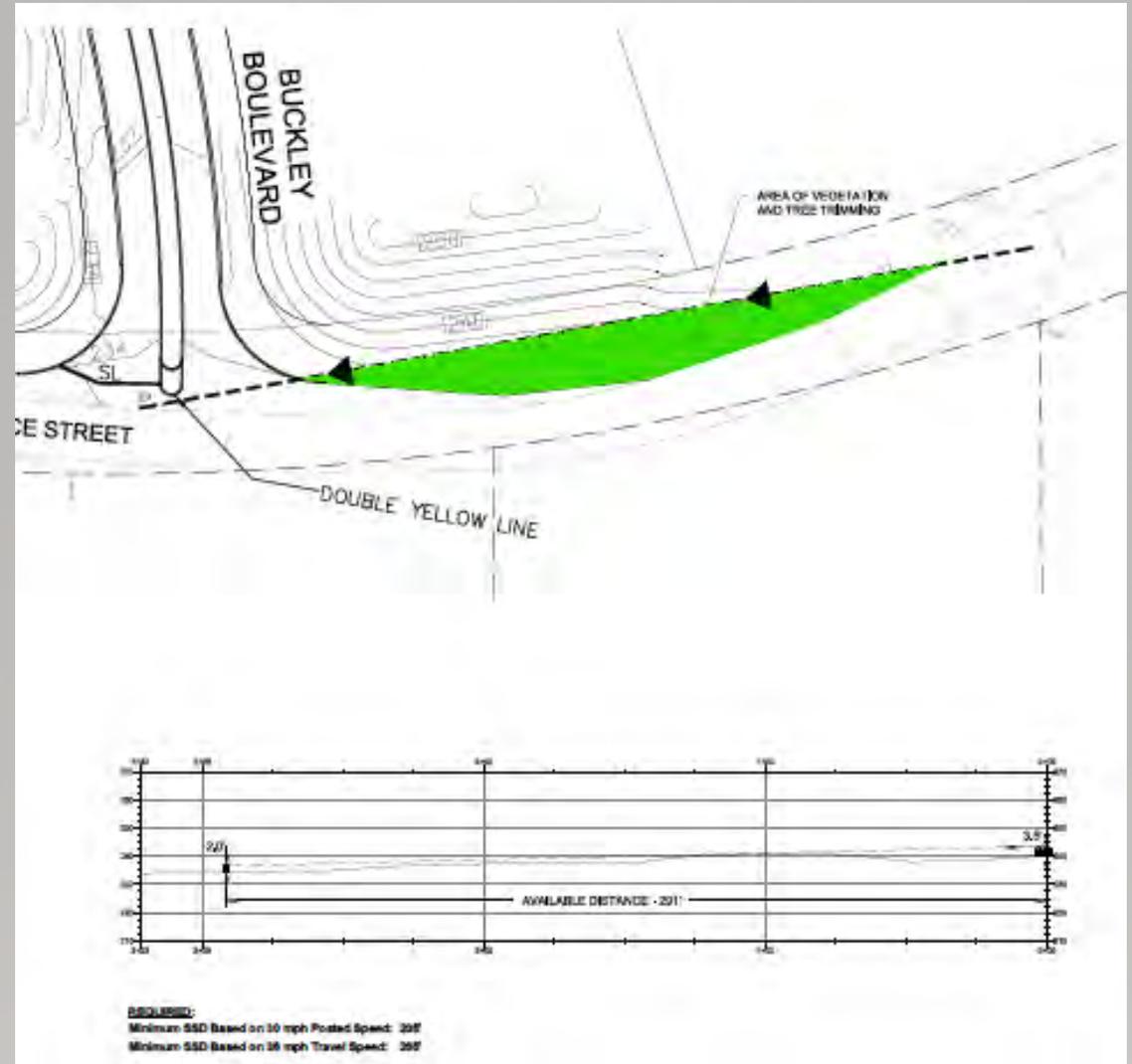
# Sight Distance Profiles – West Drive Approaching from West



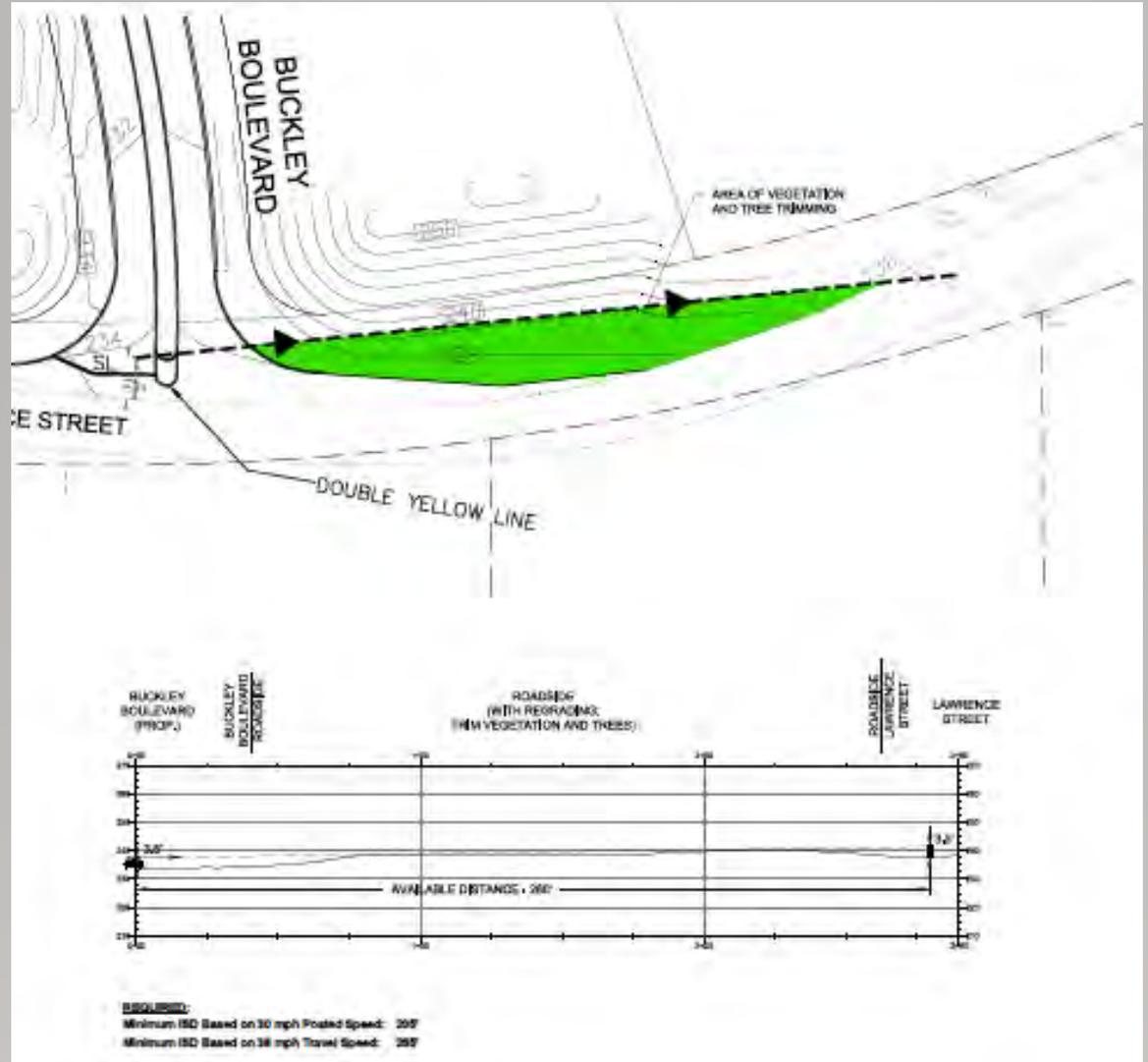
# Sight Distance Profiles – West Drive Looking to West



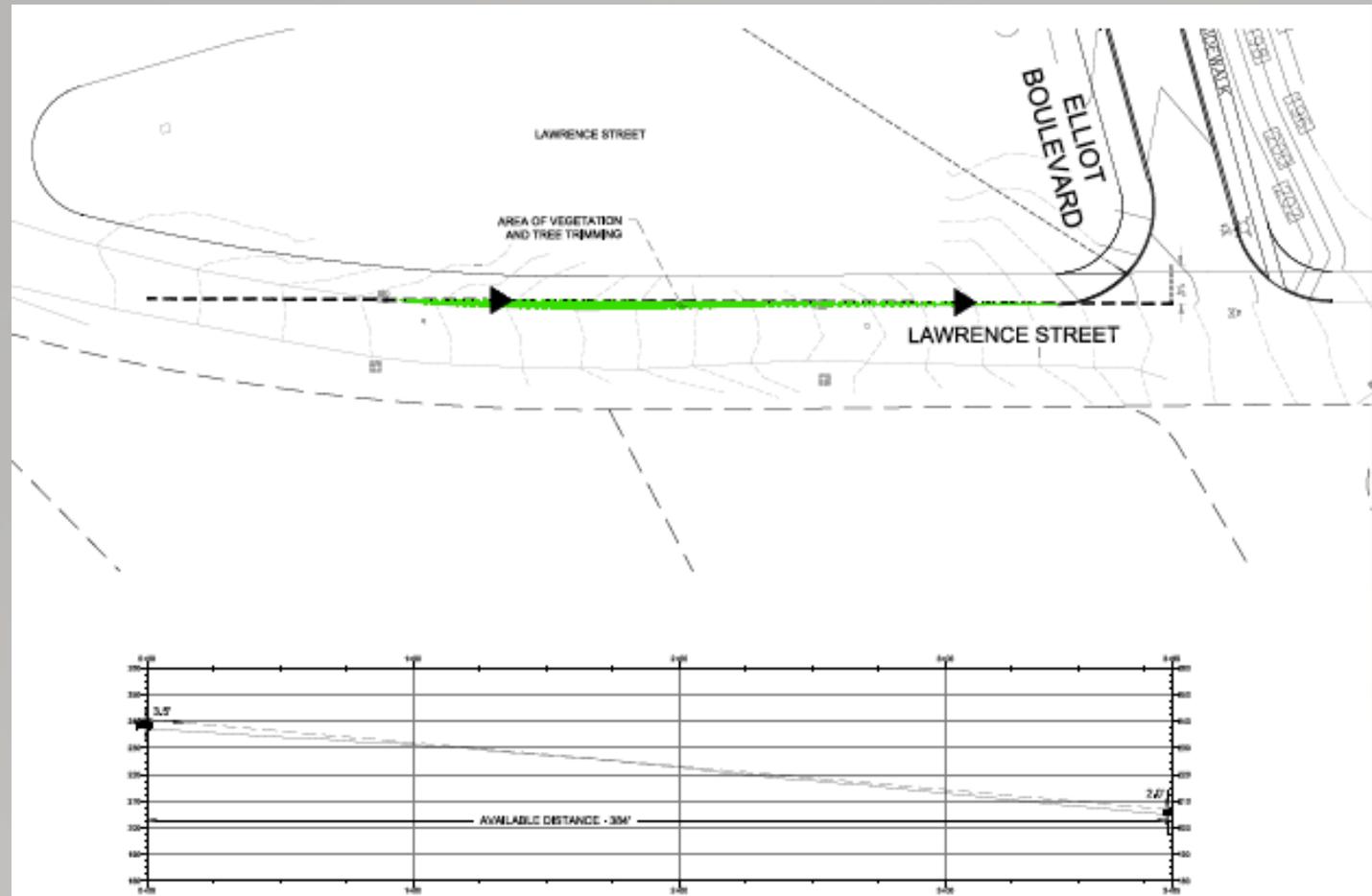
# Sight Distance Profiles – West Drive Approaching from East



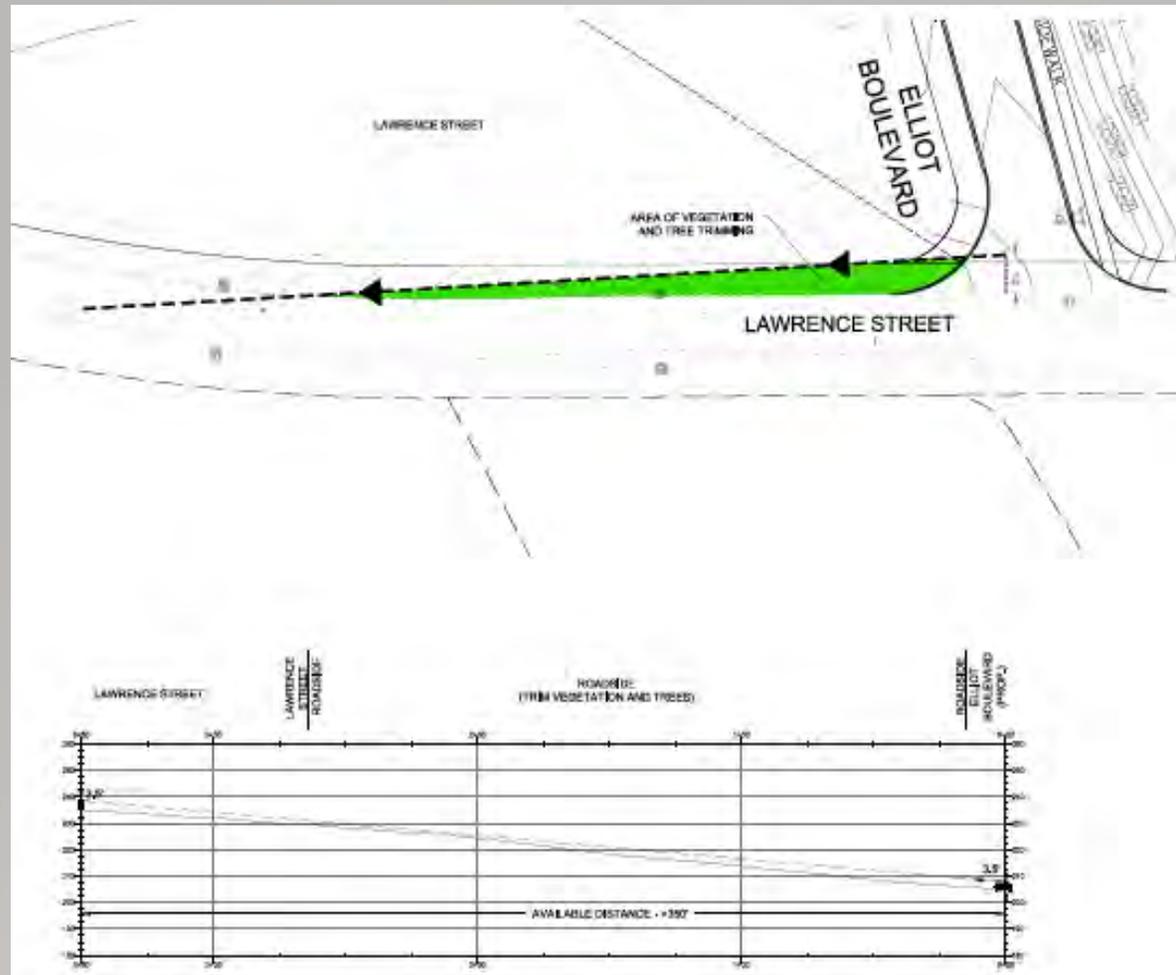
# Sight Distance Profiles – West Drive Looking East



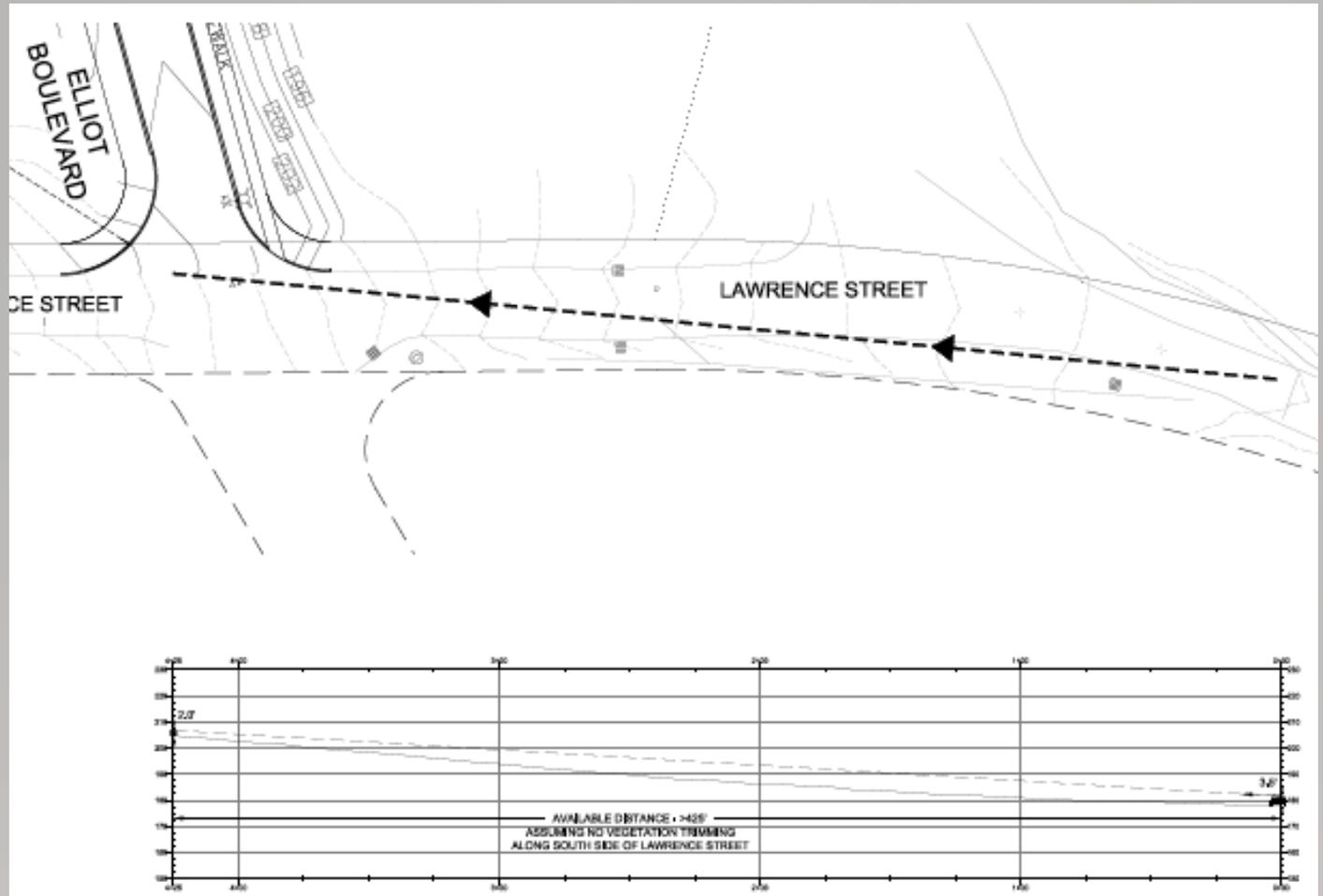
# Sight Distance Profiles – East Drive Approaching from West



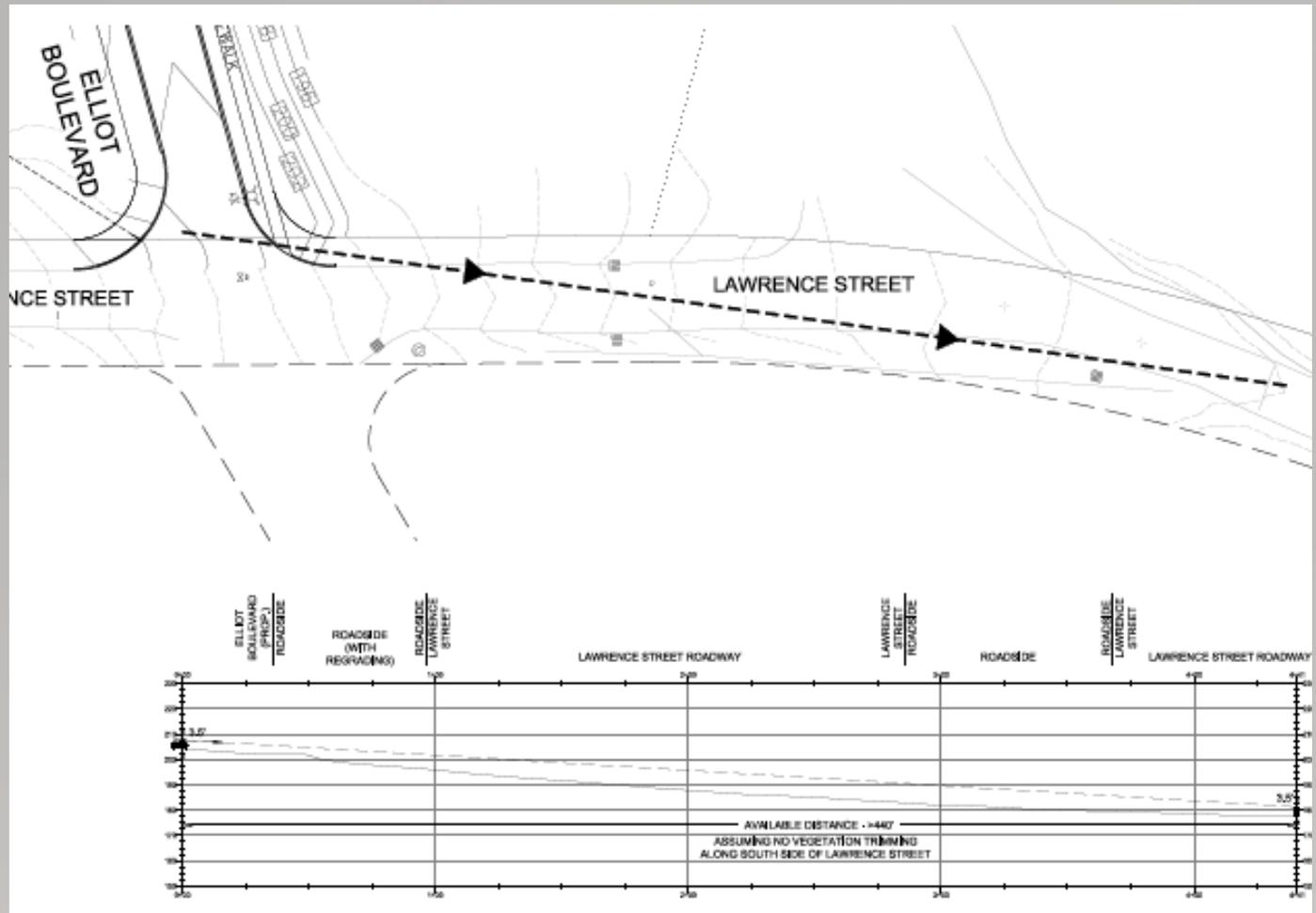
# Sight Distance Profiles – East Drive Looking West



# Sight Distance Profiles – East Drive Approaching from East



# Sight Distance Profiles – East Drive Looking East



# Main Street at Park Street

- Existing peak hour delays on Park Street
- Visibility constraints approaching from west
- Safety warning device recommended on eastbound approach
- Full traffic signal not warranted or recommended
- Vegetative trimming will be completed within public road right of way
- STOP Ahead sign installed on Park Street approach to intersection south of Grove Street

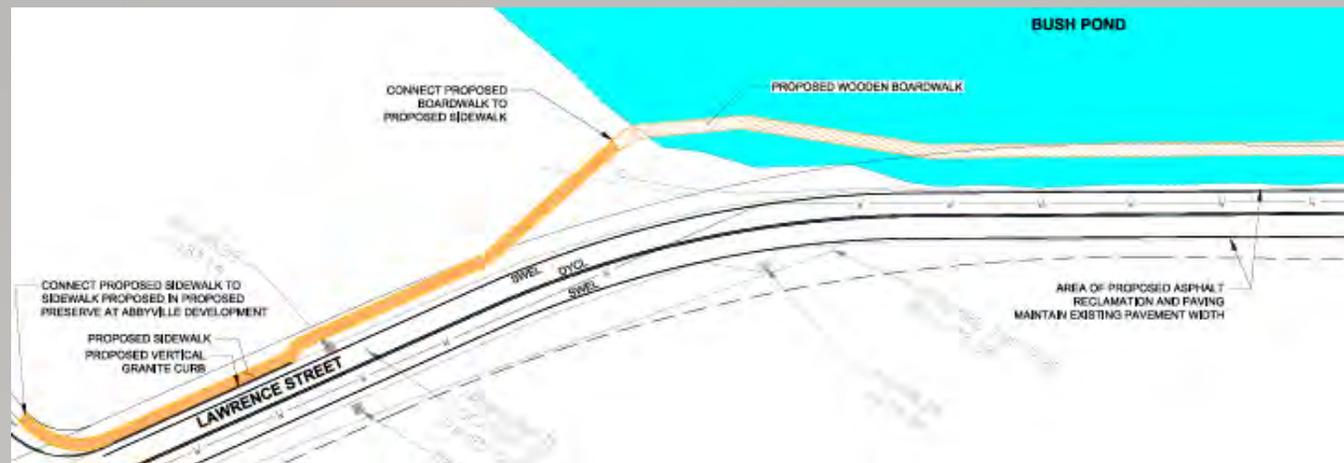
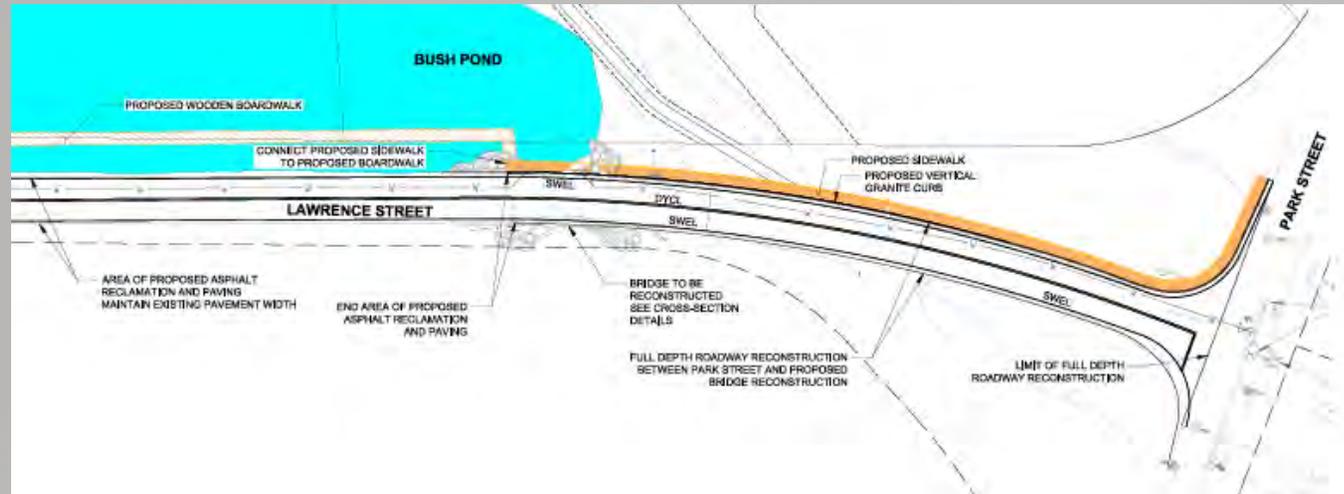
# Overall Traffic Mitigation Plan



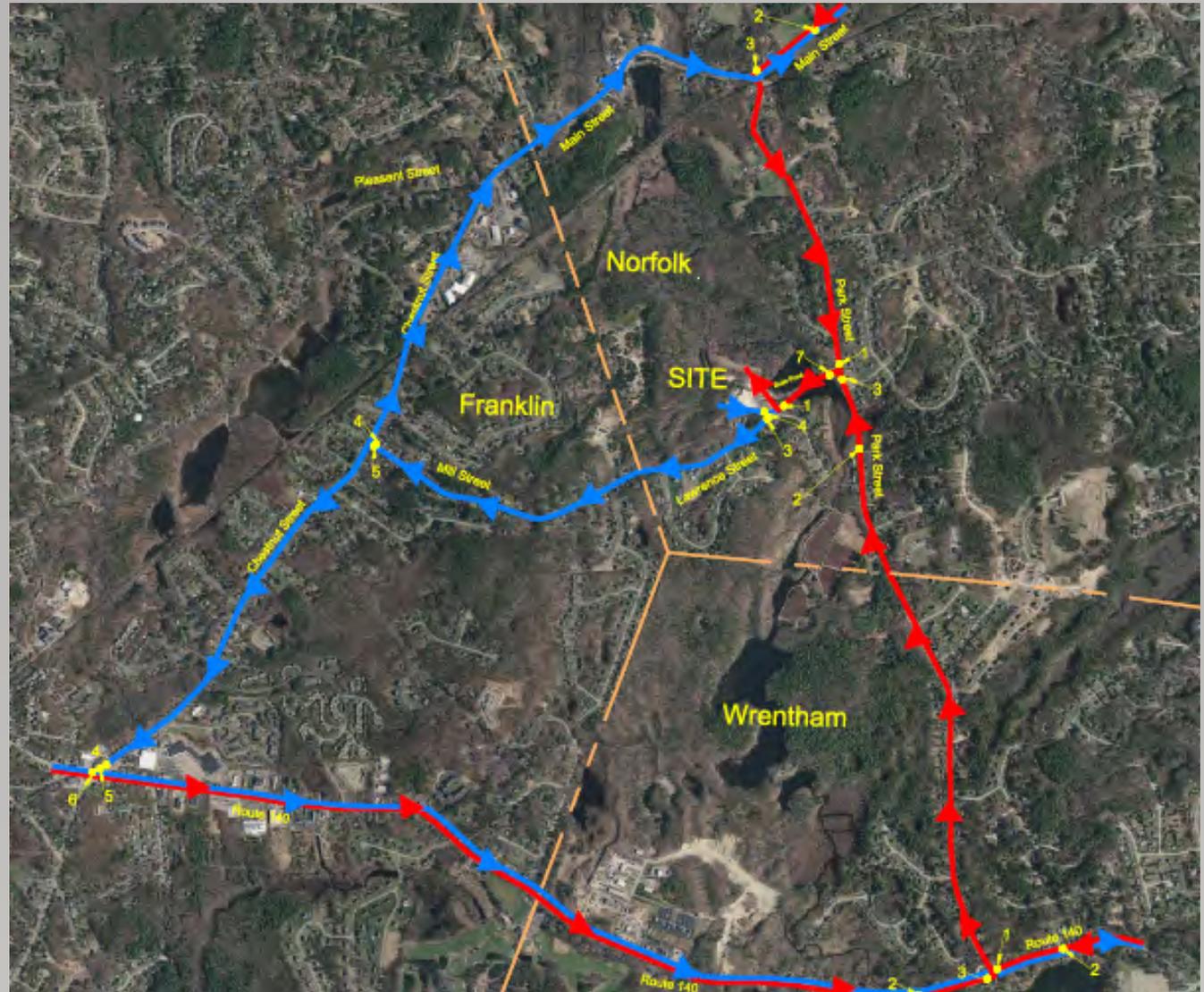
# Overall Traffic Mitigation Plan



# Proposed Boardwalk Project



# Construction Traffic Management Plan

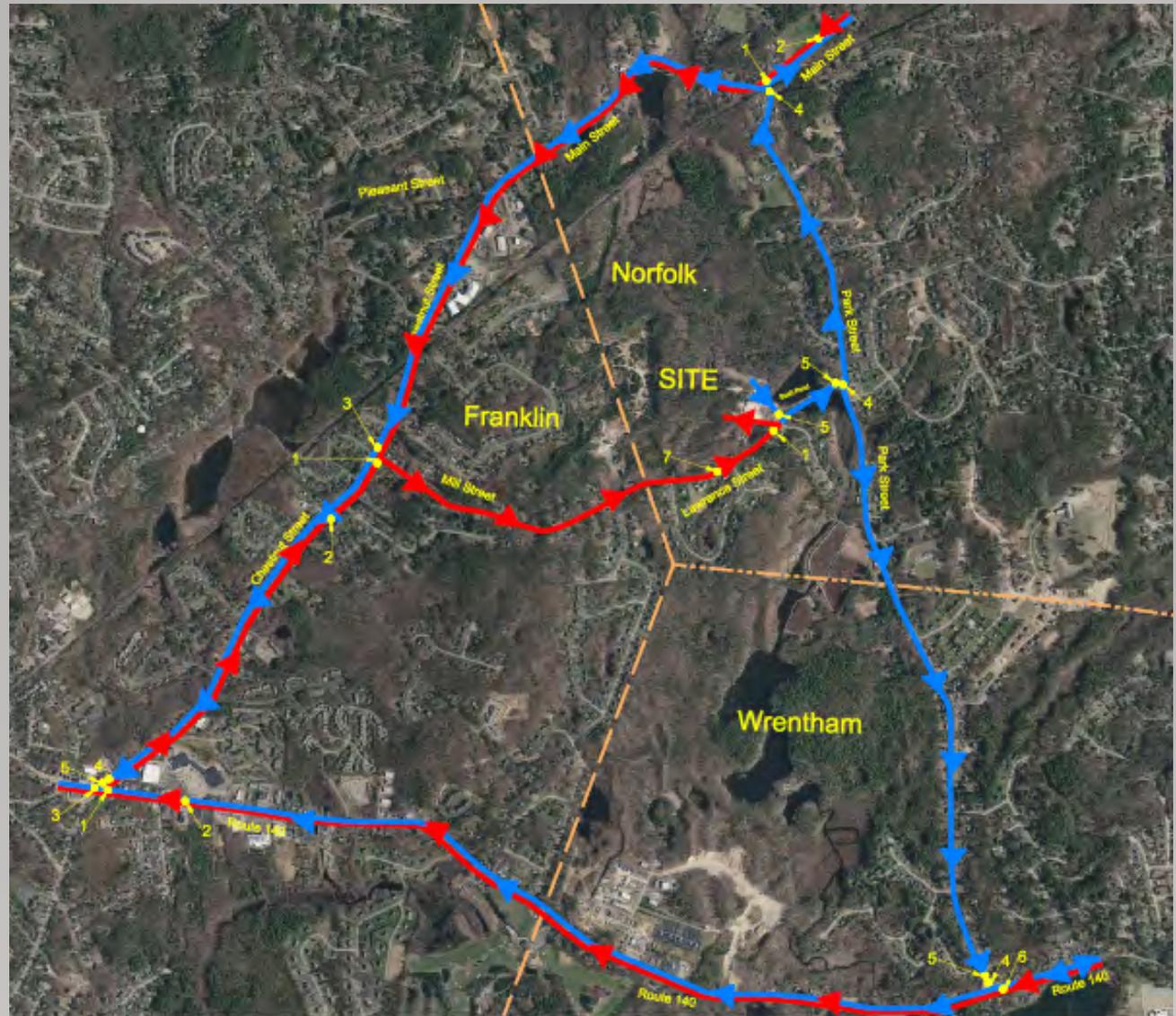


## Legend

Red – Entering from Park Street

Blue – Exit towards Franklin

# Construction Traffic Management Plan



## Legend

Blue- Exiting to Park Street  
Red- Entering from Franklin