

May 2, 2017

Massachusetts Historical Commission
Office of the State Historic Preservation Officer
Brona Simon, Executive Director
220 Morrissey Boulevard
Boston, Massachusetts 02125-3314

SUBJECT: DIRECT APE SUMMARY & RECONNAISSANCE REVIEW

**SITE: ANDOVER 2 (SITE NUMBER: BOSTHH009)
2 BURNHAM ROAD
ANDOVER, ESSEX COUNTY, MASSACHUSETTS 01810
RAMAKER & ASSOCIATES, INC. PROJECT NUMBER: 31930**

Dear Director Simon:

Ramaker & Associates, Inc. (RAMAKER) was retained by inMOTION Wireless Inc. (inMOTION) to complete a NEPA and Section 106 review of a proposed antenna and equipment installation to a proposed inMOTION monopole tower. RAMAKER and inMOTION have opined that the proposed activities cannot be considered compliant with the Federal Communication Commission's (FCC) Nationwide Programmatic Agreement for Collocations or the Amended Collocation Agreement. Thus, a Section 106 submittal is required on behalf of the proposed inMOTION undertaking. The purpose of this report is to document the potential for effect to the project's Direct Area of Potential Effect (APE), otherwise considered to the footprint of the proposed inMOTION construction activities. Specifically, this review is targeted to address the potential for impacts associated with the installation of the inMOTION tower structure and associated features, including the utilities servicing the inMOTION equipment. A site plan depicting the proposed construction related activities (i.e. the Direct APE) has been included as an attachment to this summary.

PROJECT SUMMARY

The proposed activity is located at 2 Burnham Road in Andover, Essex County, Massachusetts. The location of the site is depicted on the attached Lawrence, Massachusetts Quadrangle. The site is also identified as being located at: 42° 39' 54.58" North and 71° 8' 32.11" West. The locations of the site, site photographs, and appropriate Area of Potential Effect (APE) maps have been included in Attachment 2 of the attached FCC Form 620.

The Massachusetts Bay Transportation Authority (MBTA) granted a license to inMOTION Wireless Inc. (inMOTION) to construct, install and operate a wireless network to serve 40 million annual MBTA commuters. Features such as broadband internet access, live news broadcasts, live train tracker (displaying train progress), estimated train arrival times, train's speed of travel, availability of seats in each railcar, as well as reading material including magazines and newspapers. inMOTION proposes direct access to community specific events and support of local businesses. Additionally, future plans for the inMOTION system will allow MBTA to incorporate operations control features such as train telemetry systems, ticket scanners and video surveillance systems.

As part of the inMOTION site development activities, Ramaker & Associates, Inc. (RAMAKER) was retained by inMOTION to complete a NEPA and Section 106 submittal for the antenna and equipment installation to a proposed 70-foot inMOTION monopole tower (overall height with appurtenances of 74 feet).

These improvements include work areas within the existing active MBTA railroad right-of-way (ROW). The area of disturbance required for each installation will be an approximately 3-foot in diameter hole for the monopole tower's caisson foundation. The caisson will extend to a depth of approximately 25 feet below ground level. Soil erosion control procedures will be implemented at this site, with all existing grades to be restored, as described in the included site plans. Access to each site will be via the existing railroad ROW.

In addition, the monopole tower will support a radio-equipment cabinet and an optional battery rack, mounted approximately 10 feet above grade. A 5-foot by 5-foot equipment pad has also been proposed for future radio equipment facilities. The location of this pad in relationship to the proposed monopole tower has been included in the site development plans, which also includes an elevation detail of the proposed inMOTION monopole tower. The monopole tower and associated antennas will be used solely for telecommunication purposes; no cameras will be mounted to the tower. Additionally, no lights will be mounted to the monopole tower unless required by the FAA.

***** The inMOTION project was last reviewed by the Massachusetts SHPO as a "Positive Train Control" (PTC) undertaking and received concurrence of "No Effect" (see SHPO file MHC # RC. 59298, dated December 18, 2015) included as an attachment to this undertaking's FCC Form 620 submittal). The project is no longer a Massachusetts Bay Transportation Authority Project (MBTA) PTC activity and now consists solely of a private (inMOTION) facility development project. As such, the project is now being submitted using the FCC's non-PTC guidance for FCC Form 620 submittals to the SHPO with a distinct TCNS and E106 submittal. The project was originally submitted to SHPO as a 65-foot (74-foot overall) concrete monopole tower. Currently, inMOTION is proposing a 70-foot (74-foot overall) steel monopole tower. Other than these minor changes, there have no deviations from the original project plan.**

DIRECT APE EVALUATION

On behalf of RAMAKER, Midwest Archaeological Consultants, LLC (MAC), has reviewed the location of the proposed inMOTION undertaking, located along MBTA's Commuter Rail Line. MAC possesses geographical and archaeological familiarity with the area. Mr. Randy Dickson served as Principal Investigator and authored this report. Mr. Dickson meets the Secretary of Interior Standards for Principal Investigator for prehistoric and historic archaeology. It is the opinion of Randy Dickson M.S. R.P.A. of MAC that a Phase I archaeological survey is not warranted for this cell tower project. The following multiple lines of evidence led to this conclusion:

1. The Commonwealth of Massachusetts' files indicated that there are no previously recorded archaeological sites within the area of direct impact of the proposed cell tower.
2. Research conducted by John Milner Associates, Inc. indicated that there is one previously recorded archaeological site within a 1/4-mile radius of the project area, including site number AND-HA-5.
3. The tower location and future 5-foot by 5-foot equipment pad is to impact a relatively small portion of property and will be constructed on previously disturbed, heavily impacted land along the railroad corridor.
4. The proposed project area has previously been heavily modified. The original soil horizons have been heavily manipulated and replaced with soils that are advantageous to facilitate drainage.
5. The ingress/egress and utility easement is to use disturbed land as well.
6. Terrestrial as well as aerial photographs indicate that the proposed project area is located in a heavily developed urban area.
7. With the existing documented levels of disturbance in the project area, there is a very low probability of significant intact cultural resources intersecting the proposed project location.

FINDINGS

Based on the above research, RAMAKER has concluded that the proposed inMOTION activities will have **"No Effect"** to sites of historic significance and/or the Direct APE.

If you have any questions or comments, please do not hesitate to contact our office.

Sincerely,

RAMAKER & ASSOCIATES, INC.



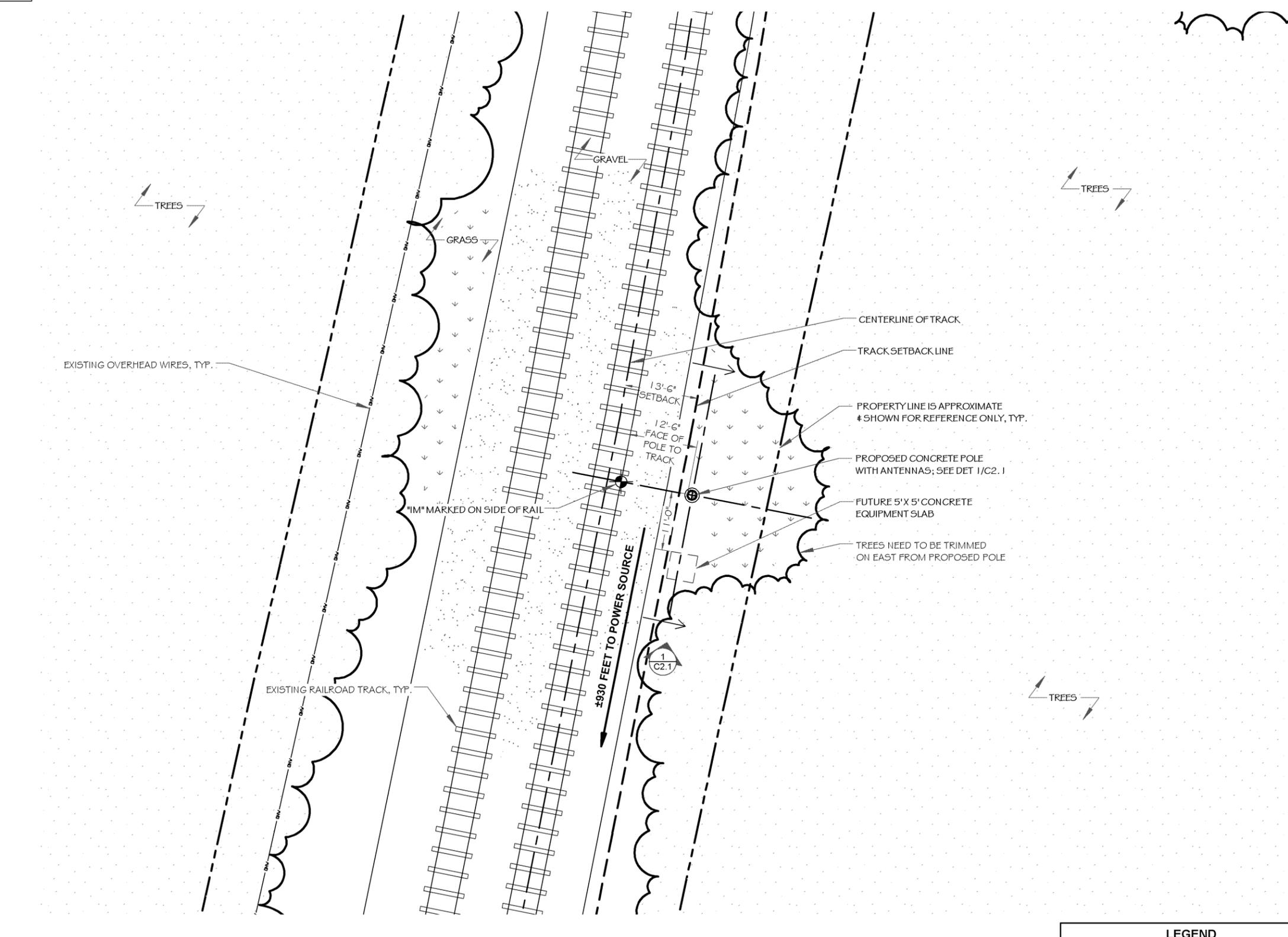
Randy Dickson M.S. R.P.A., Midwest Archaeological Consultants, LLC

Attached: Direct APE Map (Site Plan)

LEGEND

- ⊙ MANHOLE/VALVE VAULT
- ⊕ CATCH BASIN
- ▣ CURB INLET
- ⊕ VALVE (INDIVIDUAL SERVICE)
- ⊕ FIRE HYDRANT
- ⊗ STREET LIGHT/LIGHT POST
- ⊕ UTILITY/POWER POLE
- ↑ GUY WIRE/ANCHOR
- ⊕ TELEPHONE PEDESTAL
- ⊕ ELECTRIC METER
- ⊕ GAS METER
- ⊕ TRAFFIC SIGNAL
- ⊕ TRAFFIC SIGNAL BOX
- ⊕ SIGN
- ⊕ MAIL BOX
- ⊕ HANDHOLE
- - - DRAINPIPE
- ▽ FES (AT END OF PIPE)
- □ - CHAIN LINK FENCE
- □ - WOOD FENCE
- ▬ DEPRESSED CURB
- ▬ CONCRETE CURB & GUTTER
- SS - SANITARY SEWER
- STS - STORM SEWER
- W - WATER MAIN
- OE - OVERHEAD ELECTRIC
- UE - UNDERGROUND ELECTRIC
- OT - OVERHEAD TELEPHONE
- UT - UNDERGROUND TELEPHONE
- G - GAS LINE
- C - CABLE LINE
- ⊕ BUSH/SHRUB
- ⊕ TREE DECIDUOUS
- ⊕ TREE NON-DECIDUOUS
- DRAINAGE ARROW
- 570 CONTOUR LINE
- 578.45 SPOT ELEVATION
- T/F TOP OF FOUNDATION
- T/C TOP OF CONCRETE/CAISSON
- FF FINISHED FLOOR
- A.G.L. ABOVE GROUND LEVEL
- - - BOUNDARY LINE
- CONCRETE
- ASPHALT
- GRAVEL
- BRICK
- NEW BUILDING/EQUIPMENT
- EXISTING BUILDING
- LEASE SITE
- ACCESS EASEMENT

1 SITE PLAN
SCALE: 1" = 20'-0"



NOTES:

- SITE DRAWINGS HAVE BEEN PREPARED WITHOUT A SURVEY. R.O.W. DATA AND DIMENSIONS ARE PROVIDED BY THE MBTA AND DATA GATHERED FROM FIELD MEASUREMENTS. PROPERTY LINES AND EXISTING STRUCTURES ARE APPROXIMATE.
- EXISTING GRADES TO BE RESTORED UNLESS OTHERWISE NOTED
- ALL AREA DISTURBED BY CONSTRUCTION SHALL BE RETURNED TO ITS ORIGINAL CONDITION UNLESS OTHERWISE NOTED
- ELECTRIC UTILITY FINAL PATH SUBJECT TO SITE WALK WITH UTILITY COMPANY AFTER SITE LOCATION IS APPROVED
- FIBER ROUTE TO BE PROVIDED IN SEPARATE SUBMITTAL T.B.D.

- LEGEND**
- ⊕ IM BENCHMARK
 - · - · - · - US PARCEL LINE
 - - - - - MBTA RIGHT OF WAY LINE
 - - - - - CLEARANCE LINE
 - - - - - CHW OVERHEAD ELECTRIC (LAND TRACKER DATA)
 - - - - - F PROPOSED ELECTRIC

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DRAFT

DATE SIGNED: _____

**BOSTHH009
ANDOVER 2**

2 BURNHAM RD
ANDOVER, MA 01810

RAWLAND

FORGE PROJECT NO: 6830

DRAWN BY: VJ

CHECKED BY: TD

REV	DATE	DESCRIPTION
A	09/09/2015	PRELIM. MBTA APPROVAL
B	12/29/2015	ISSUED FOR REVIEW

CONSTRUCT ONLY FROM DRAWINGS MARKED "ISSUED FOR CONSTRUCTION"

SITE PLAN

C1.1

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THIS DRAWING IS SCALED FOR 11x17 PAPER (U.S. GOVT. "TABLOID")