



**Massachusetts Bay
Transportation Authority**

Dedicated Rail Crane Car Consists

Fiscal and Management Control Board

June 21, 2021

Steve Hicks, Chief Mechanical Officer

Overview

Today's Board action will request approval to enter into a contract with Geismar North America, Inc. for the procurement of three (3) dedicated rail, self-propelled Crane Car Consists. Each Consist contains a prime mover, crane car and two (2) flat cars.

- Program Overview and History
- Program Benefits
- Request of the Fiscal and Management Control Board



Program Overview and History

- Current Crane Car Consists:
 - Custom manufactured in 1980's and are beyond their useful service life
 - Requires third rail power to operate
 - Used to lift, place, and transport rail sections, ties, signal equipment on the Right of Way
- New Crane Cars Consists will replace existing vehicles on the Red, Orange, and Blue Lines
- Vehicle Maintenance, Engineering and Maintenance and Safety departments are collaborating to procure modern Crane Car Consists



Existing Orange Line Crane Car (04441)



Program Benefits

- Crane Car Consist operates with third rail power de-energized for work crew safety
- Crane Car Consist will improve safety, increase Right of Way (ROW) maintenance capabilities and reduce downtime and operating costs
 - Compliant with current construction and safety standards
 - Improved crane safety with stability system
 - Improved crane ergonomics with enclosed operator cab
 - Improved crane capacity - lift and place 10,000lb, 39 foot track panels
 - Hybrid power system (battery/diesel) can support running crane car on battery for entire work shift – zero emissions during tunnel work
 - Single consist design that will operate on all 3 heavy rail lines



Proposed Crane Car Consist Design



Conceptual drawings of proposed vehicle. Details subject to change during design review



Procurement Process

- A competitive, best value procurement (RFP) process was followed to solicit bids for:
 - Three (3) Crane Car Consists (primer mover, crane car)
 - Six (6) Flat Cars (two (2) per consist)
 - Associated capital spare parts, special tools, training, and manuals for the operation of the vehicles
- Five (5) proposals were received.
 - Geismar North America, Inc. was selected after thorough technical and price evaluation process.
- Delivery of first Crane Car Consist is scheduled for 24 months from Notice-to-Proceed, with delivery of last Crane Car Consist approximately 36 months from Notice-to-Proceed.



Request of the Fiscal and Management Control Board

VOTE:

To authorize the General Manager, or his designee, to award and execute MBTA Contract Number RFP 89C-20 with **Geismar North America, Inc.** for the Procurement of Dedicated Rail Crane Car Consists and Flat Cars in the amount of \$21,483,749.00.

