



# Minneapolis Bus Garage

Construction Update

Business Item 2021-20:

Independent Testing Agency Contract 18P430  
Amendment #2

Carrie Desmond, Project Manager  
January 25, 2020

# Project Description

- Project Completion 2023
- 11 Acre Site
- North Loop / West of downtown Minneapolis
- 350,000 sq. ft.
- 24 maintenance bays
- 216 bus capacity
- 400+ living wage jobs at full capacity
- 300+ construction jobs



Heywood Campus Map

# Project History & Schedule

- Bus Maintenance & Storage Facility
  - Land Acquisition: 2006 – 2016
  - Demolition & Site Preparation: 2009-2017
  - Design: 2011-2019
  - Construction: 2020-2022
  - Start of Operations: 2023
- Future Projects
  - Solar Array & Battery Storage Design: 2021-2022
  - Solar Array & Battery Storage Construction: 2022-2023
  - Electric Bus Charging Design: 2019-2022
  - Electric Bus Charging Construction: 2023 & Beyond\*



Rendering Main Building Entrance

\* *Funding dependent*

# Construction Highlights: May 2020



Week 2 of construction

# Construction Highlights: July 2020



Earthmoving, pile driving, construction over Bassett Creek stormwater tunnel

# Construction Highlights: September 2020



Pile driving, excavation for rainwater storage tank, retaining wall foundation

# Construction Highlights: November 2020



Transfer girders over Bassett Creek stormwater tunnel

# Construction Highlights: December 2020



Floor slab forming, geothermal loop installation, steel erection for operations and admin building



# Construction Highlights: January 2020



Precast wall panel and column erection for the operations building

## Construction Facts

- 60 Miles of Steel Pile Driven
  - ≈ 5280 60' buses in a row
  - ≈ 7x length of bus fleet
  - ≈ 1.5x length of Northstar
- Dewatering of 22M Gallons
  - ≈ 33 Olympic swimming pools
- Removal of 28,000 Tons Soil
  - ≈ 6 inches covering entire 24-acre Heywood Campus
  - ≈ 8 feet covering first floor of new MTPD building



Pile driving construction crew

# Sustainability Highlights

- 40,000 Gallon Rainwater Storage Tank
  - Save 2.6M gallons potable water/year for bus wash
- Geothermal System
  - Heat/cool operations building
- Thermal Wall Paneling
  - Preheats outside air in winter
- LED Lighting
- 2MW Solar Array



40,000 gallon rainwater storage tank (Fall 2020)



Rainwater filtration system for bus wash (Fall 2020)

# Total Project Budget & Funding

## Budget (millions)

Land/Site Prep:	\$ 11.8
Design/Mgmt:	\$ 12.0
Construction:	\$ 115.5
Contingency:	\$ 7.7
Equipment:	\$ 4.5
<u>Future Projects*:</u>	<u>\$ 8.5</u>
<b>Total:</b>	<b>\$ 160.0</b>

## Funding (millions)

Local Funding:	\$ 82.7
Federal Funding:	\$ 76.9
<u>MWMO:</u>	<u>\$ 0.4</u>
<b>Total:</b>	<b>\$160.0</b>

\*See slide 3 for future projects

# DBE Participation

- Construction Goal: 15%
  - 20 DBE Subcontractors



Dewatering pumps and piping – DBE

- ITL Goal: 10%
  - 1 DBE Subcontractor



DBE pile driving observation

# Independent Testing Laboratory

## Additional Services

- Environmental Oversight
  - Dewatering test samples
  - Dewatering permits
- Soils Monitoring
  - Soils sampling
- Pile Driving Oversight
  - Additional rigs to monitor

## Cost Control Measures

- Dewatering
  - On site filtration
  - Storm & sanitary discharge
- Soils Reuse
  - Subgrade in deep excavation
  - Limit hauling off site

## Proposed Action

- That the Metropolitan Council authorize the Regional Administrator to execute a contract amendment with Braun Intertec Corporation not to exceed \$315,000 for a total contract value of \$1,325,398.64 for additional Independent Testing Laboratory Services for the new Minneapolis Bus Garage.