



**Board Report**

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**Agenda Number:** 23.

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**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
SEPTEMBER 19, 2019**

**SUBJECT: NEW BLUE/ EXPO SERVICE AND PROJECT MANAGEMENT**

**ACTION: ORAL REPORT**

**RECOMMENDATION**

RECEIVE oral report update on New Blue/Expo Service and Project Management.

# **New Blue/Expo Service & Project Update**



# New Blue Phase 2

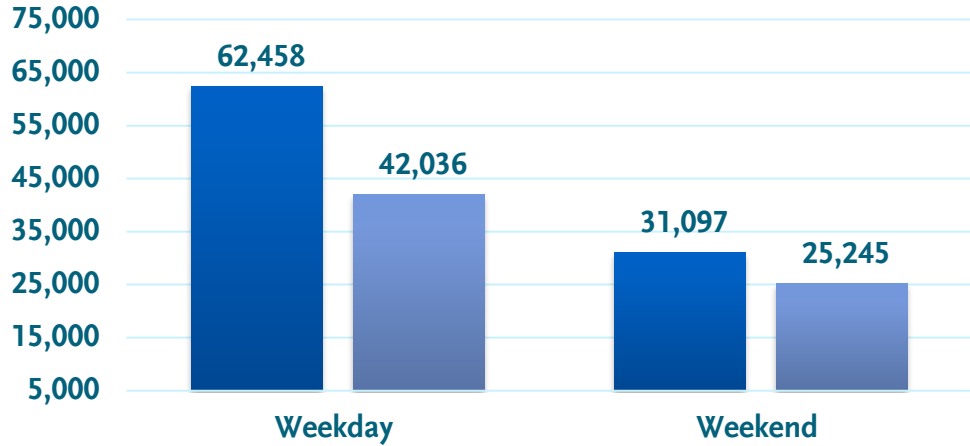
## Blue Line Bus Shuttle Service Ridership (June –July 2019)

### Frequency (Peak Period)

- Line 860 Express: 6-12 minutes
- Line 863 Select: 12 minutes/M-F
- Line 864 Local: 6-12 minutes



### New Blue Comparative Ridership



- Blue Line (before New Blue)
- Current Blue Line (New Blue - Lines 860, 863 & 864 + Rail)

	Average Ridership	Weekday	Weekend
Blue Line (before New Blue)		62,458	31,097
New Blue (Bus Shuttles 860, 863 & 864 + Rail)		42,036	25,245

Majority of New Blue bus shuttle ridership is on Local Line 864

# New Blue Phase 2

## Expo & Silver Line Comparative Ridership (July 2019)

### Frequency During Peak Periods

- Line 856 (Local): 6 -12 mins during peak, 12 mins during mid-day and weekends & 20 mins during late nights

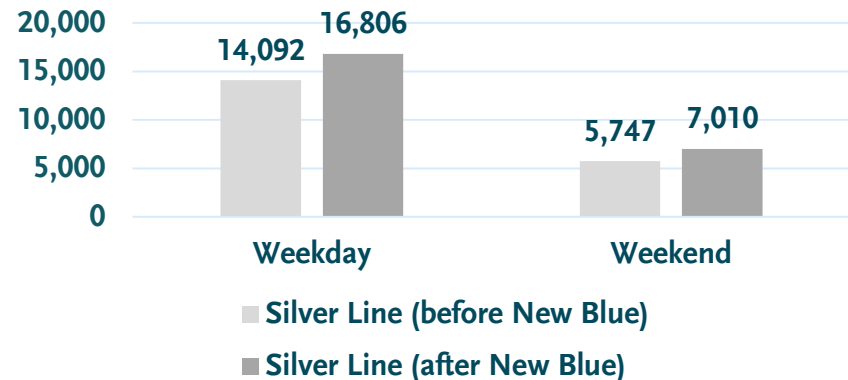
### Status

- Commenced: Saturday, June 22, 2019
- Re-Opened: **Saturday, August 24, 2019**
- Resumed full rail service on two Expo Line stations (7th St/Metro Center & Pico)

### Expo Bus Shuttle Comparative Ridership



### Silver Line Comparative Ridership



Average Ridership	Weekday	Weekend
Expo Line 856 - June 2019	15,882	9,763
Expo Line 856 - July 2019	8,809	5,883

Average Ridership	Weekday	Weekend
Silver Line - July 2018	14,092	5,747
Silver Line - July 2019	16,806	7,010

# New Blue Phase 2 Program Management Update

## New Blue Improvements Project Phase 1 (Southern Segment)

- Status: Completed (Saturday, January 26, 2019 – Friday, May 31, 2019)
- **Project Highlights:**
- Initiated Willowbrook/Rosa Parks platform and building renovation work on Day 1
- Completed brand new Compton interlocking
- Long Beach Loop signal upgrades, landscaping and fence work
- All new street running trackwork in Long Beach
- New fall protection on bridge segments
- New overhead contact system (OCS)
- Network upgrades for camera and digital map cases
- Station painting and tile renewal work
- New digital map cases and station signage



## Two Expo Line Station Closures (7th St/Metro Center and Pico)

- Status: Completed (Saturday, June 22, 2019 – Friday, August 23, 2019)
- **Project Highlights:**
- New overhead contact rail (OCR) system (first ever at Metro)
- New #10 interlocking and track fasteners in Flower tunnel
- Rebuilt a portion of the Washington Junction and special trackwork
- Pico Station painting, tile renewal, digital map cases, and new signage
- All work completed around the clock within 60 day allocated closure window.

# New Blue Phase 2 Program Management Update

## New Blue Improvements Project Phase 2 (Northern Segment)

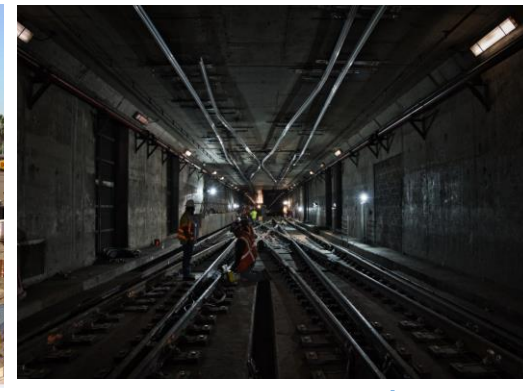
- Status: Ongoing (Commenced Saturday, June 1, 2019 – present)
- **Project Highlights:**
- Completed three new interlockings (95<sup>th</sup> Street, Firestone & Slauson)
- New OCS wires and hardware
- Station painting, new signage, tile renewal, and landscaping
- New digital map cases
- Renovated Willowbrook/Rosa Parks (W/RP) station platform and mezzanine connection to Green Line
- Major Blue Line construction work will be completed mid-September 2019
- W/RP platform construction will be substantially completed in early October 2019
- Systems integration tests commenced in September 2019 with Blue Line full re-opening anticipated for late October 2019



Expo Junction Trackwork



W/RP



#10 Crossover Track

# Next Steps

- Continue to monitor New Blue bus shuttle and rail service customer feedback
- Analyze the overall effectiveness of the Flower Street and Figueroa Bus Lanes and report back in October 2019
- Continue to provide Operational support for the remainder of the New Blue Improvements Project
- Continue efforts to complete Phase 2 of the New Blue Improvements Project by late October 2019
- Continue Blue Line re-opening rail service planning & customer communication and community celebration events
- Blue Line ROW Clean-Up Update: As of August 26-29, 2019, Metro partnered with Union Pacific, Bureau of Sanitation, and City of LA to perform a 4-day ROW joint clean up effort at specific Blue Line locations. Full details will be provided in October 2019

# Metro Gold Line Overhead Catenary System



**Metro**

Operations, Safety, and Customer Experience Committee  
September 19, 2019



# Gold Line Incident 1 – Monday, September 9, 2019

## LOCATION & TIME

North of Allen Station on Track 2  
05:52 am (Monday, 9/9/19)

## RESUMED NORMAL OPERATIONS

3:30 pm (Thursday, 9/12/19)

## TOTAL INCIDENT TIME

81 Hours 38 Minutes

## CAUSE

- A dog bone insulator broke at a balance weight assembly, causing the OCS wire to sag far below normal operating height
- As a vehicle traveled on track 2, it collided with the OCS wire, damaging OCS assemblies and 1500 feet of messenger/contact wire

## REPAIR

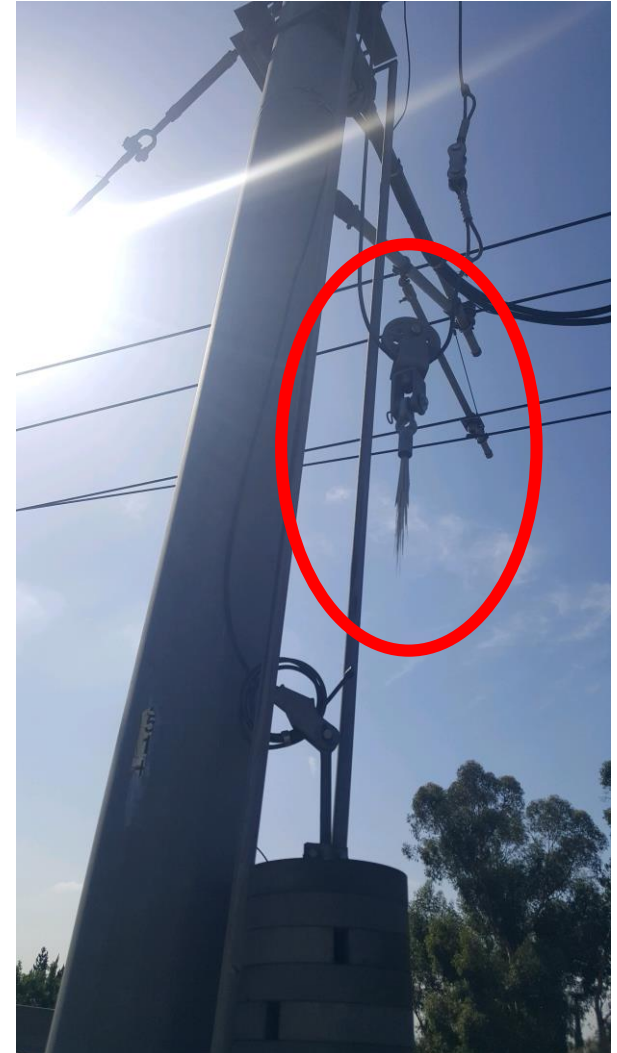
Safety tether installation

## OPERATING PLAN

Rail: Single tracked with 15-20 minute headways during peak hours

Bus Bridge between Sierra Madre and Lake:

- 12 buses during peak and 6 buses during non-peak
- 5 Vehicle Operations Staff



# Gold Line Incident 1 – OCS Damage



# Gold Line Incident 2 – Friday, September 13, 2019

## LOCATION & TIME

North of Lake Station on Track 1  
12:00 pm (Friday, 9/13/19)

## RESUMED NORTMAL OPERATIONS

5:34 am (Monday, 9/16/19)

## TOTAL INCIDENT TIME

65 Hours 34 Minutes

## CAUSE

A dog bone insulator broke at a balance weight assembly, causing the OCS wire to sag below normal heights. As a vehicle traveled on track 1, it's pantograph snagged on the wire, damaging the OCS supports and assemblies.

## REPAIR

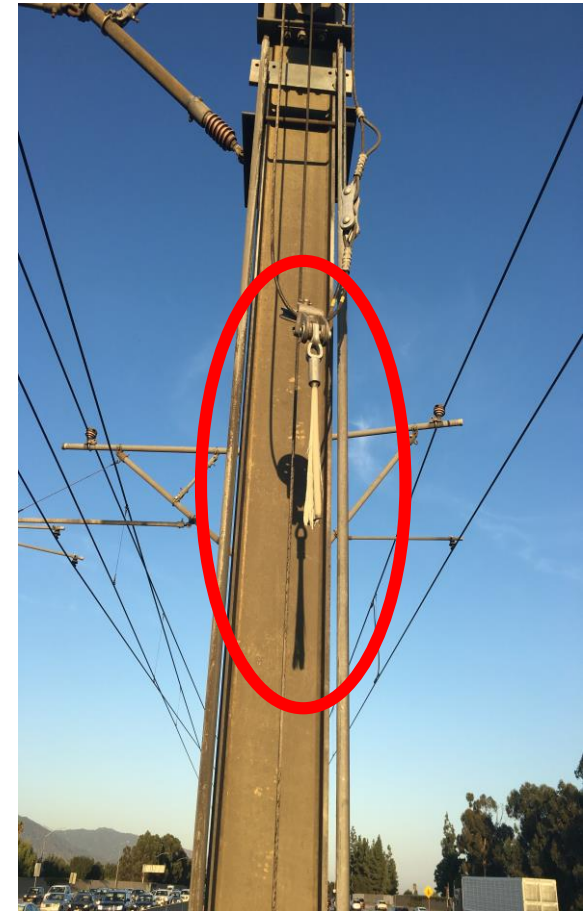
Safety tether installation

## OPERATING PLAN

Rail: Single tracked with 15-20 minute headways during peak hours

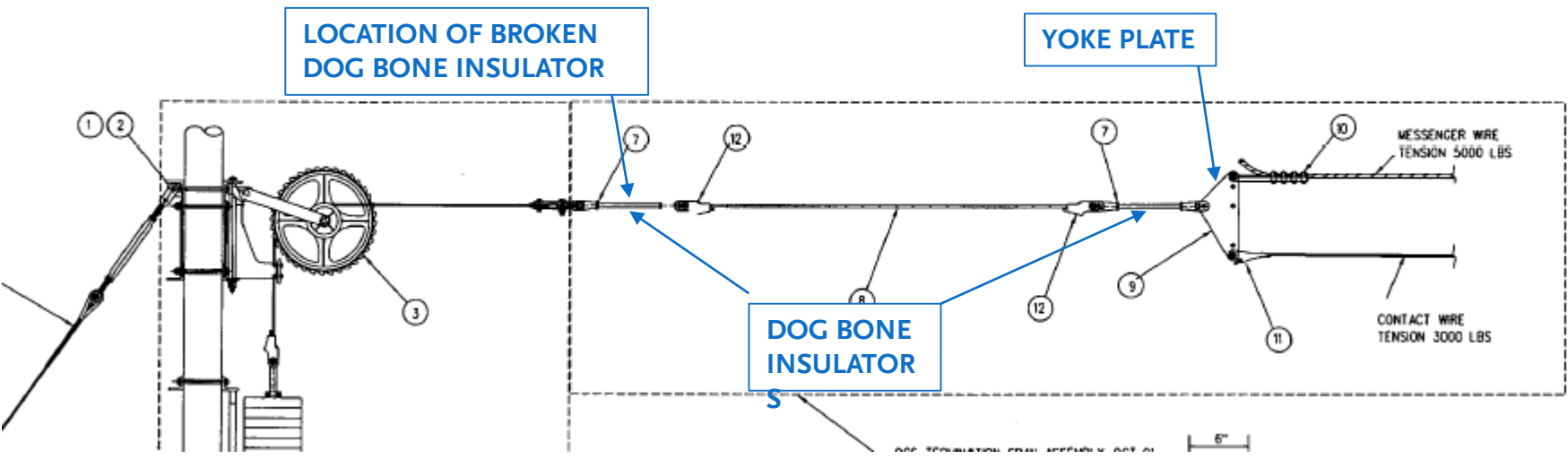
Bus Bridge between Sierra Madre and Lake:

- 14 buses during peak hours
- 6 buses during non-peak
- 5 Vehicle Operations Staff
- \*8 standby buses (Saturday & Monday am)

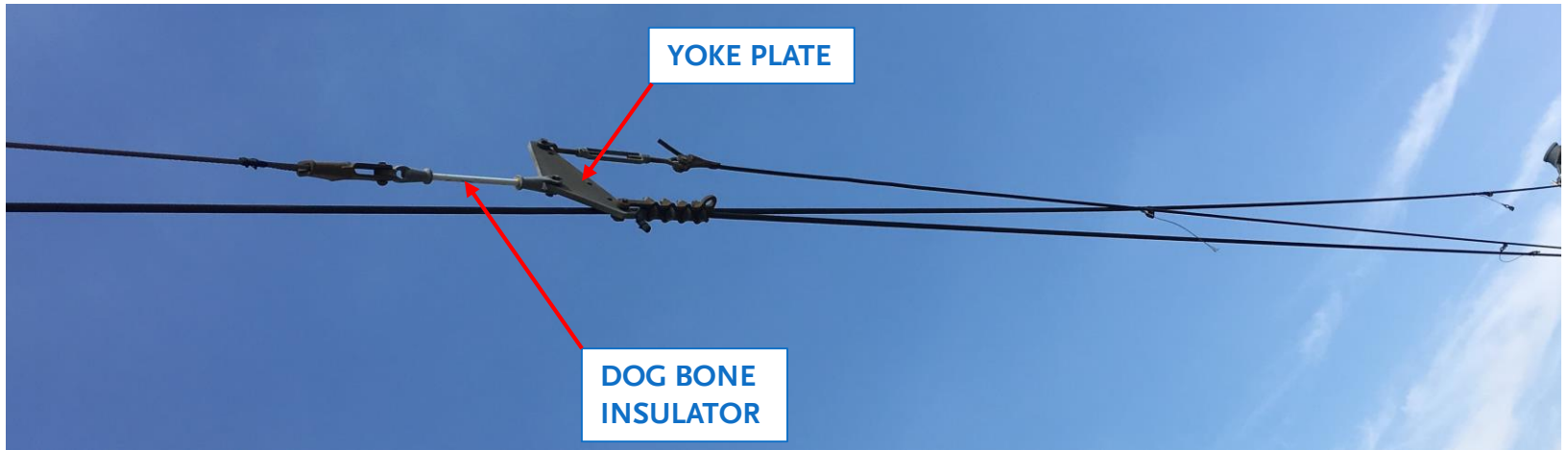


# Incident Assembly Configuration – Gold Line Pasadena Section

DETAIL DRAWING OF ASSEMBLY

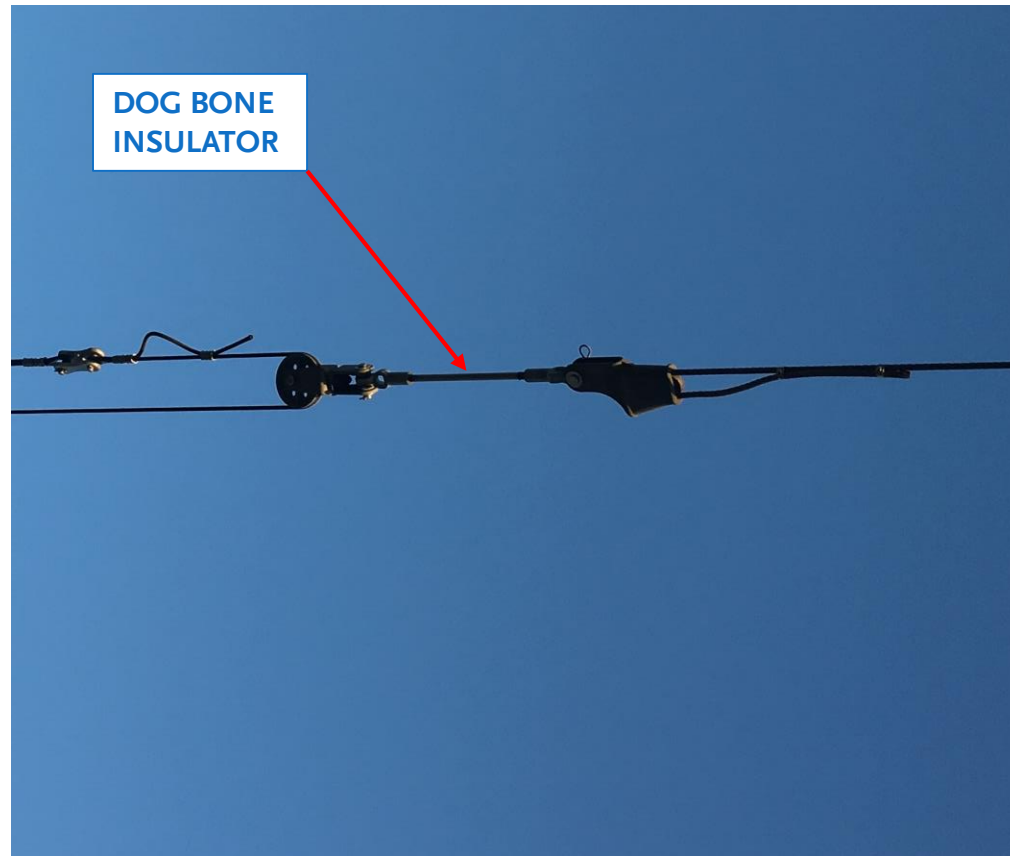


DETAIL DRAWING OF BALANCE WEIGHT ASSEMBLY



FIELD PHOTO OF BALANCE WEIGHT ASSEMBLY (NEAR YOKE PLATE)

# Incident Assembly Configuration – Gold Line Pasadena Section



**FIELD PHOTO OF BALANCE WEIGHT ASSEMBLY  
(NEAR BALANCE WEIGHTS)**

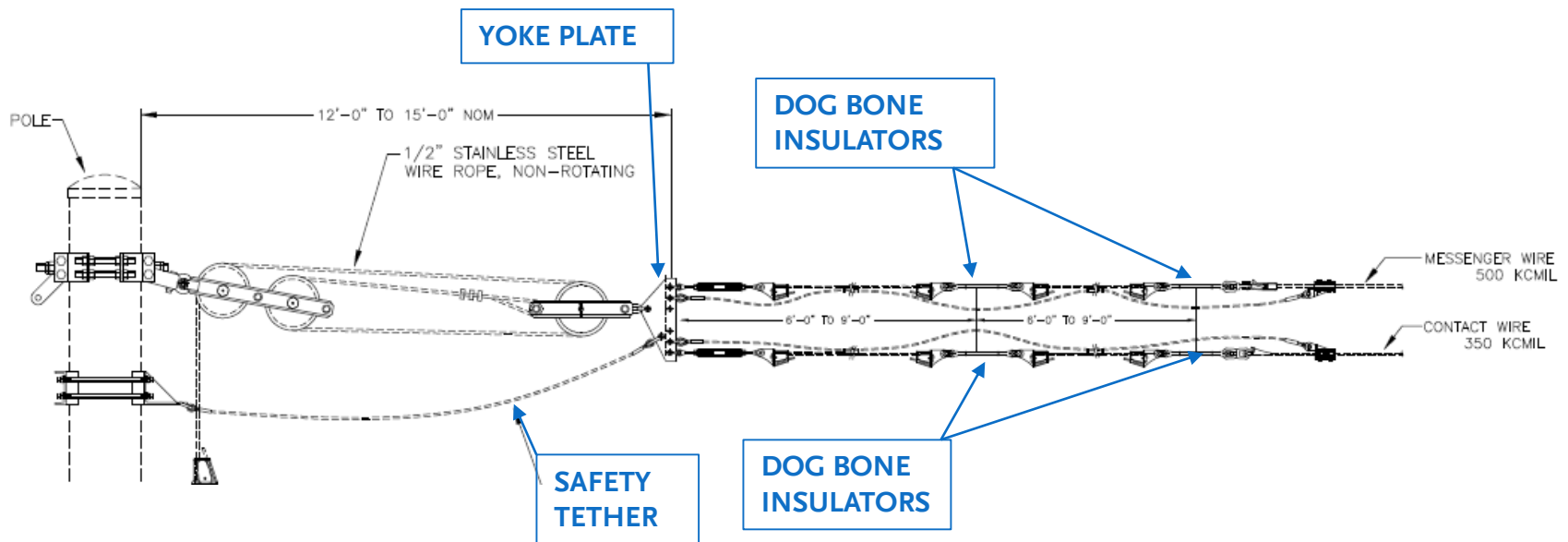
# Service Restoration Efforts & Safety Tether Information

- ✓ Two crews with 10 Inspectors and a Supervisor worked to repair damage
- ✓ OCS cantilever arms were reconnected to OCS poles
- ✓ Replacement of the dog bone fiberglass insulator rod
- ✓ Raising of the messenger and contact wire
- ✓ Reconnection of the wire assembly to the weight stack (safety tether)

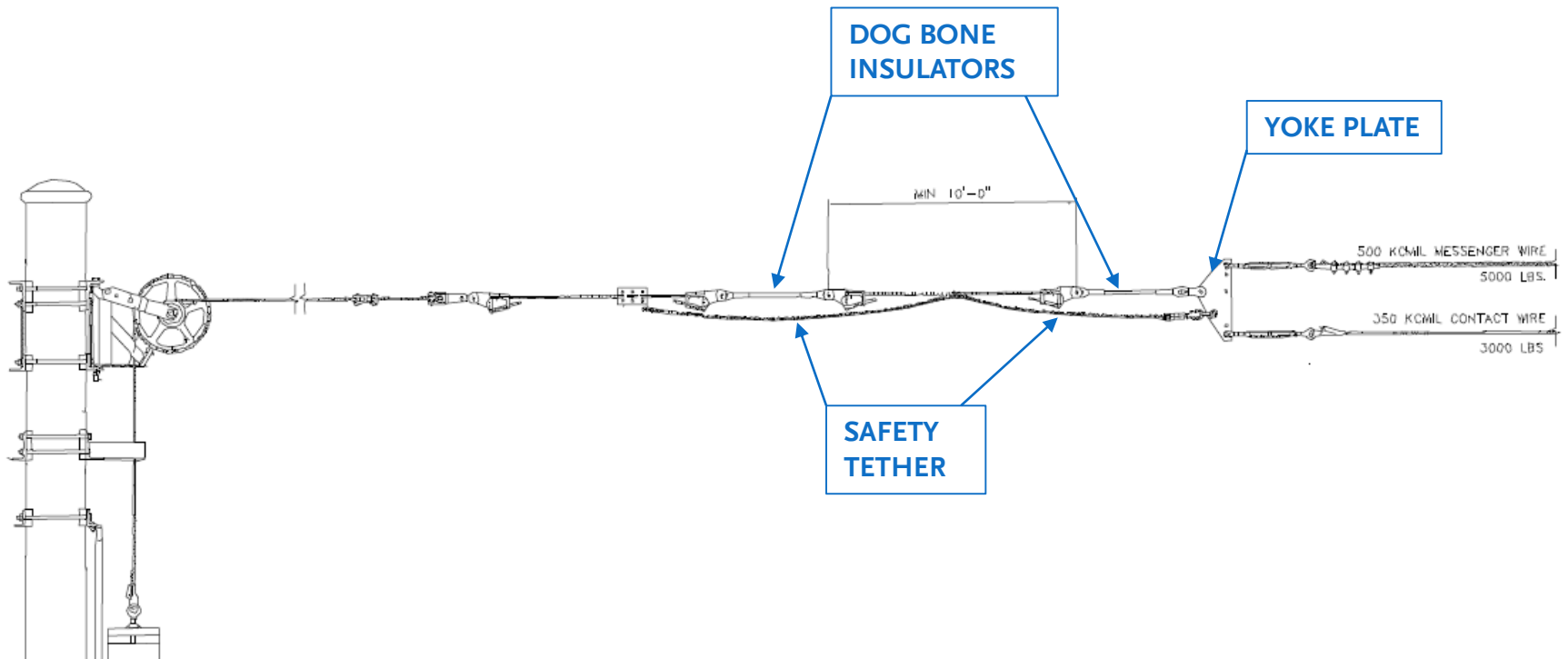
Locations with Existing Safety Tethers: Blue Line, Green Line, Gold Line Eastside & Foothill Extensions, Expo Line, and Crenshaw Line



# Existing Safety Tether Configurations – Expo Phase 2



# Existing Safety Tether Configurations – Gold Line Foothill Extension

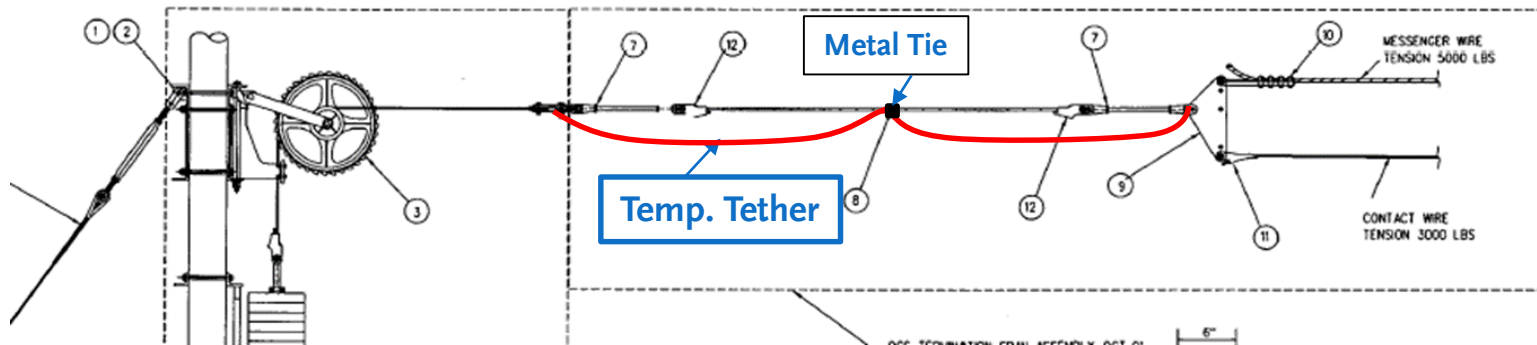




# Next Steps

## Short-Term

- Install temporary safety tethers on all termination assemblies along the Gold Line Pasadena (Union Station to Sierra Madre Station)
  - Rate: 5 per day/3 days per week
  - Timeline: December 2019
- Impound all spare dog bone insulator parts
- Lab test defective dog bone insulator
- Purchase improved dog bones



# Next Steps

## Long-Term

- Improve quality management of spare part inspection and verification process
- Install permanent safety tethers to retrofit the Gold Line Pasadena (Union Station to Sierra Madre Station)
- Timeline: Mid - 2020

