

# Alaskan Way Viaduct **REPLACEMENT** PROGRAM



Seattle City Council  
Jan. 13, 2014

# Overview

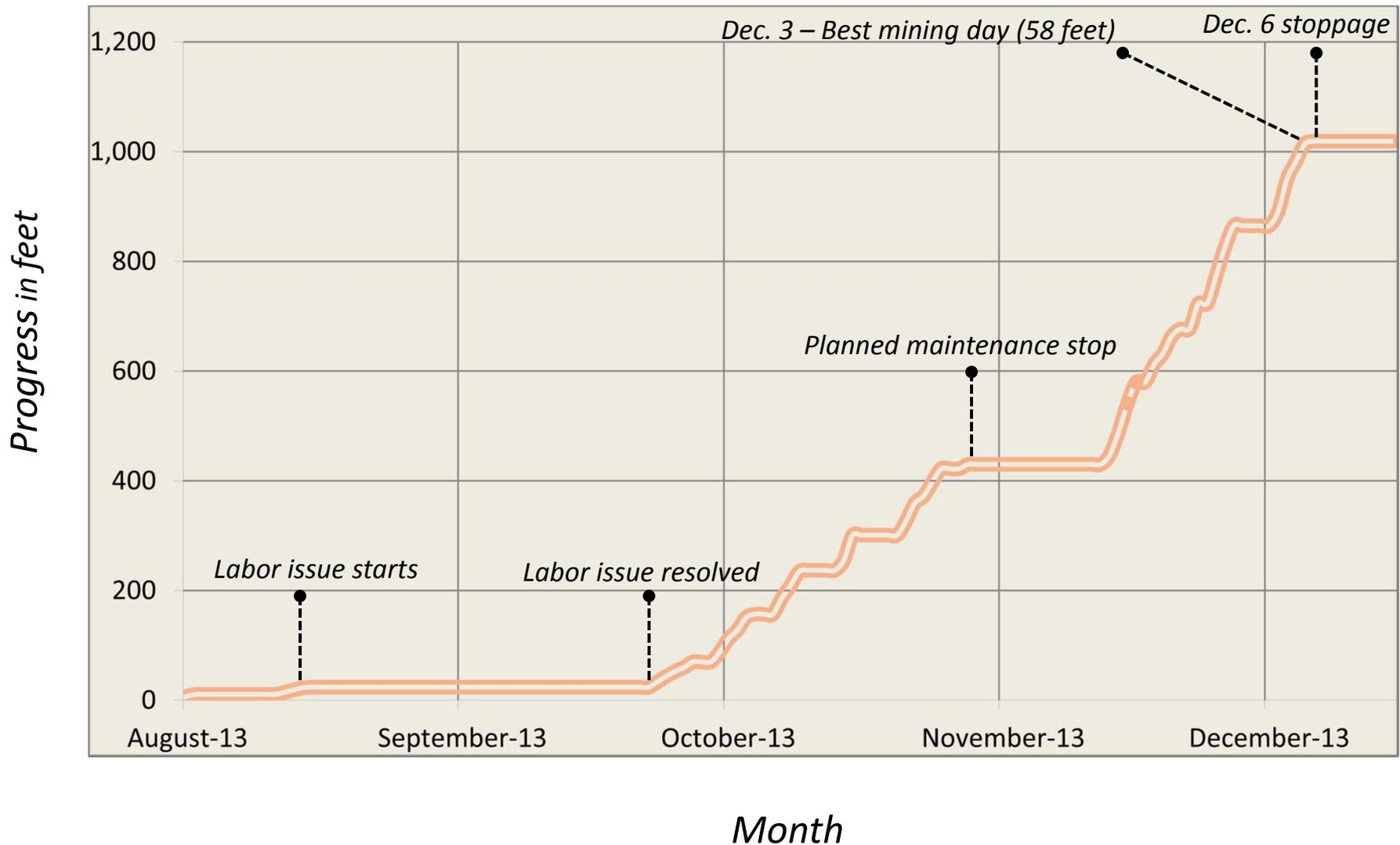
- Bertha update
- Other program activities
  - South Atlantic Street Overpass Completion
  - North Access Project award
  - Advisory Committee on Tolling and Traffic Management recommendations
  - Expert Review Panel annual report



# Launching Bertha, the SR 99 Tunneling Machine



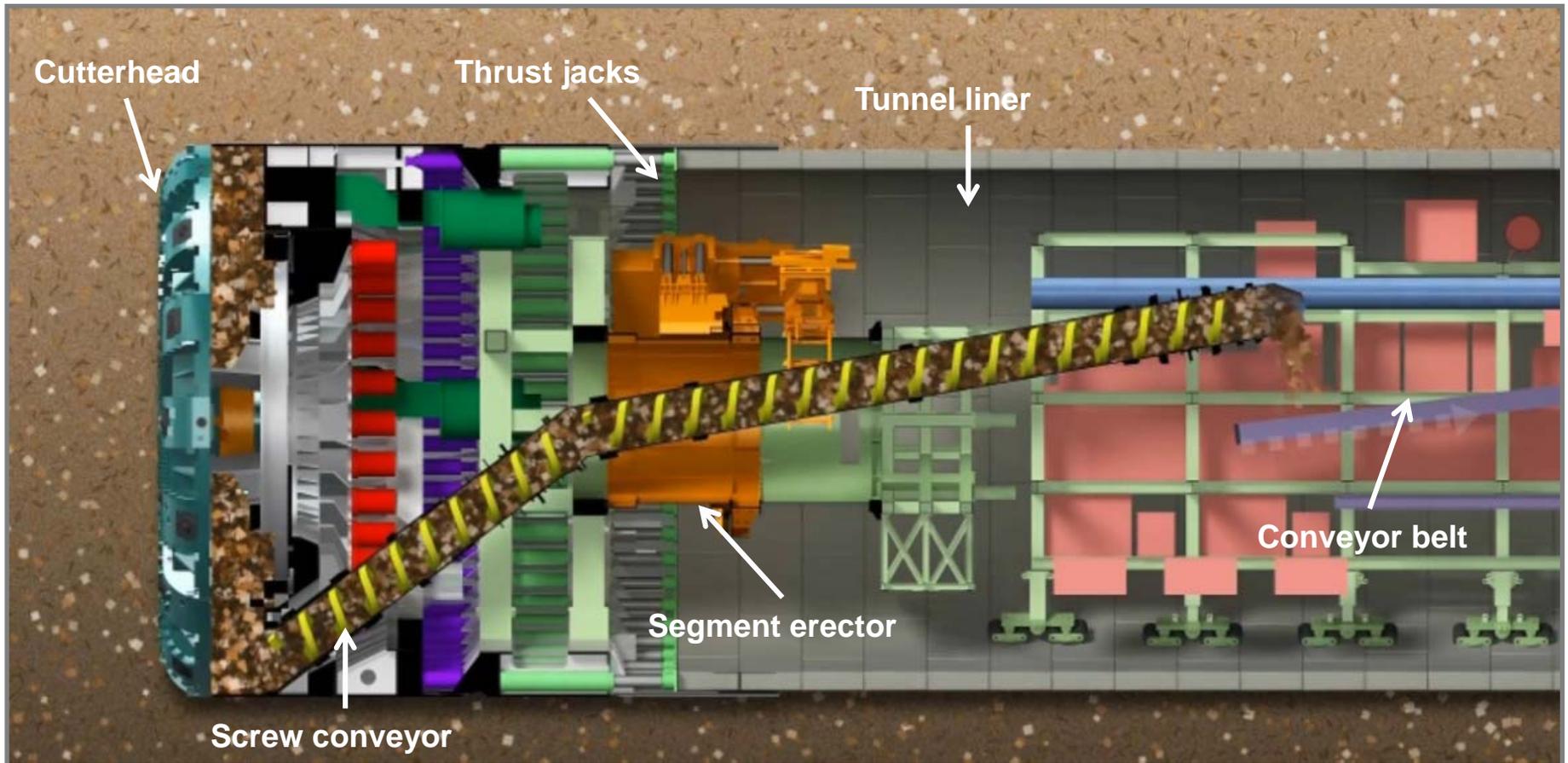
# Progress Since Tunneling Began on July 30



## Progress to Date



# How Bertha Works



## Bertha's Cutterhead



Beak

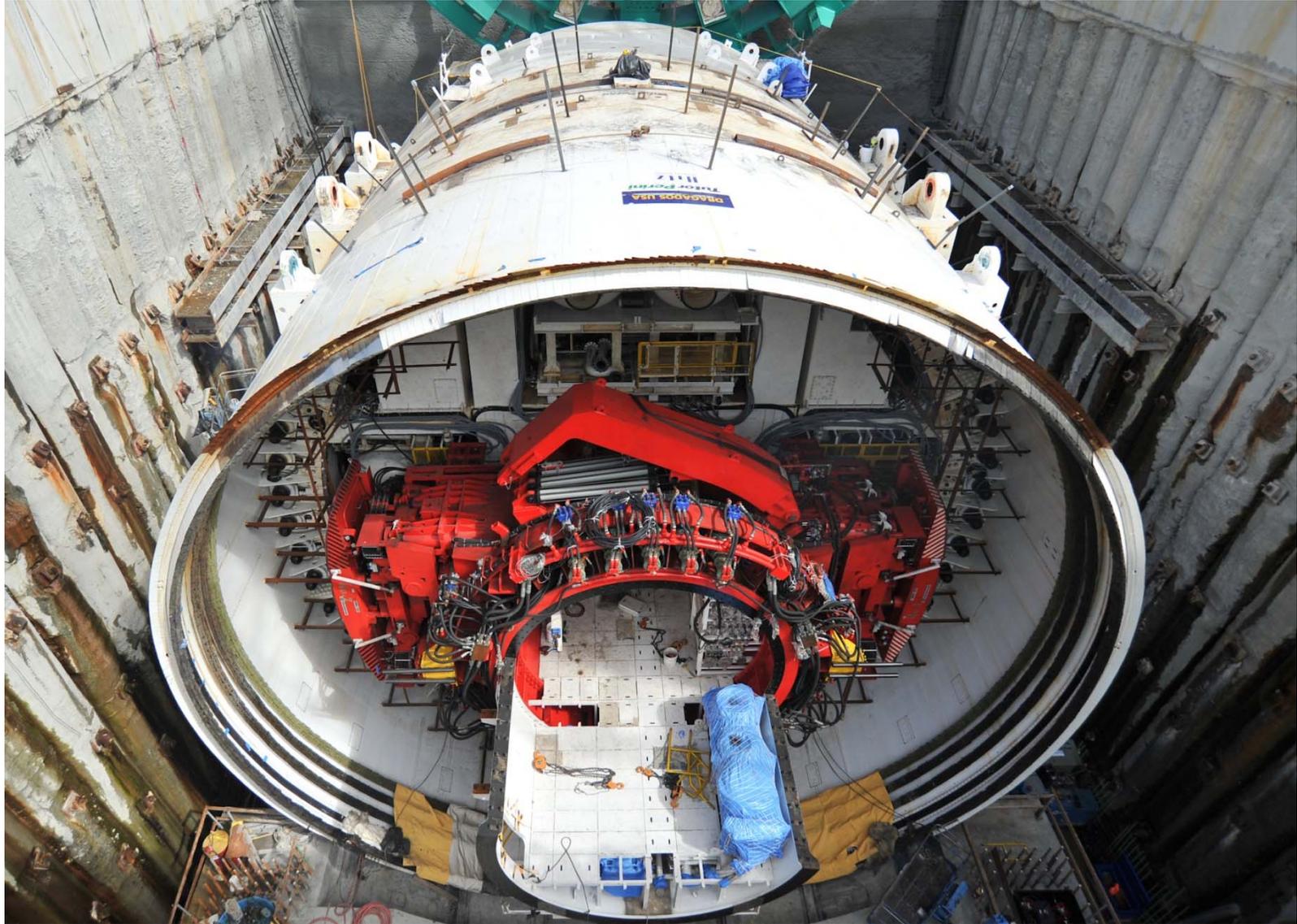
Ripper teeth

Replaceable cutter tools from  
within the machine

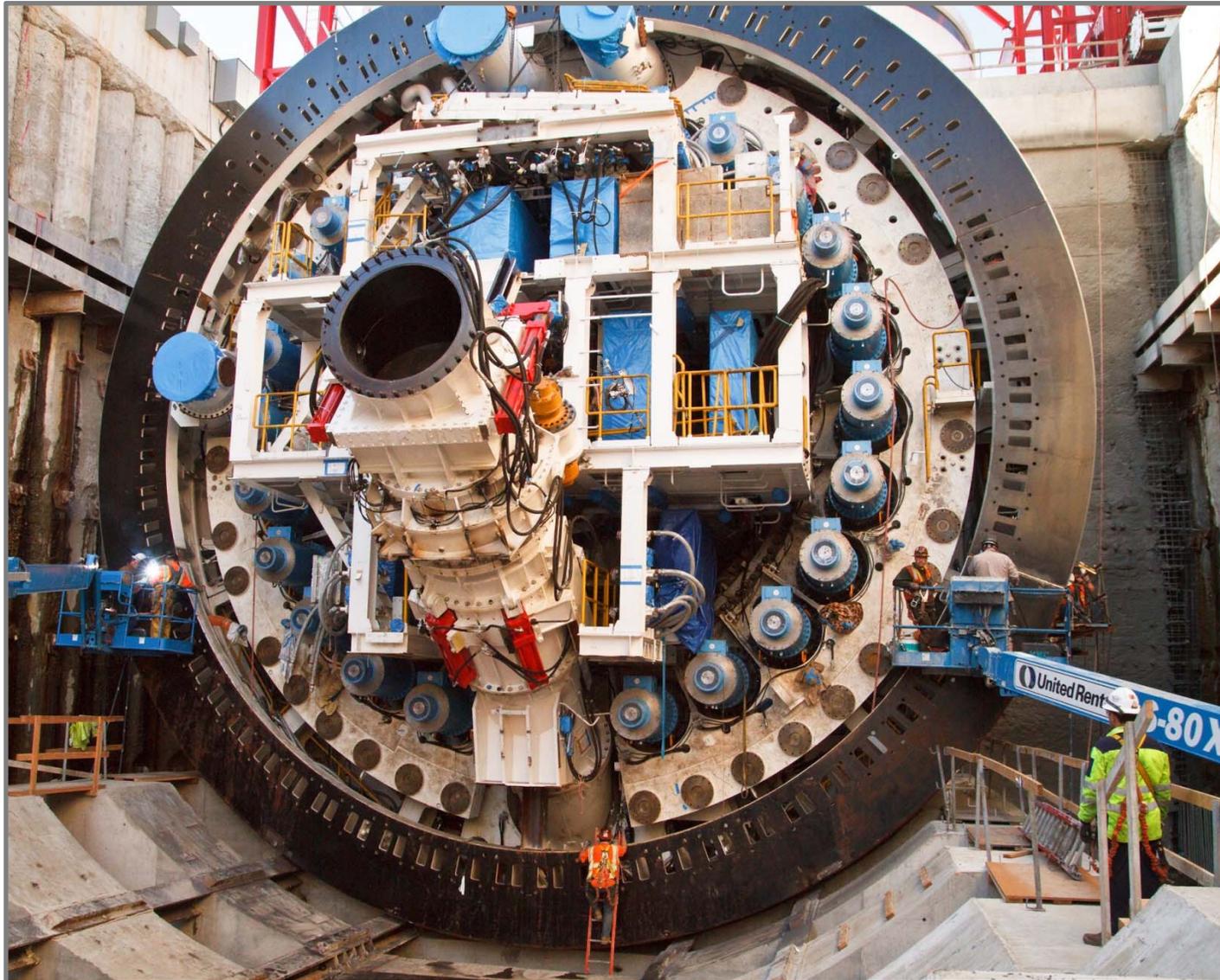
# Bertha's Screw Conveyor



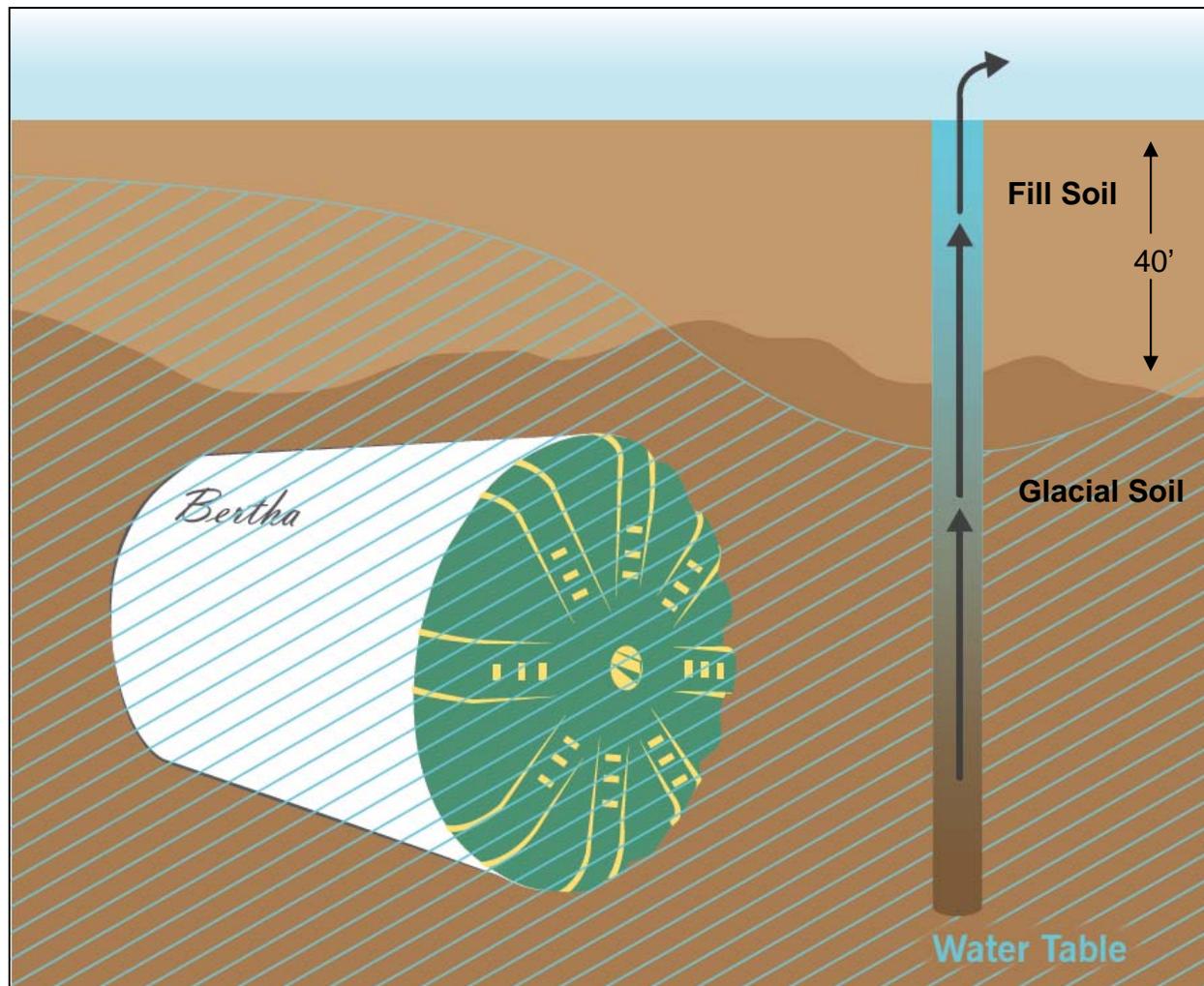
# Bertha's Segment Erector



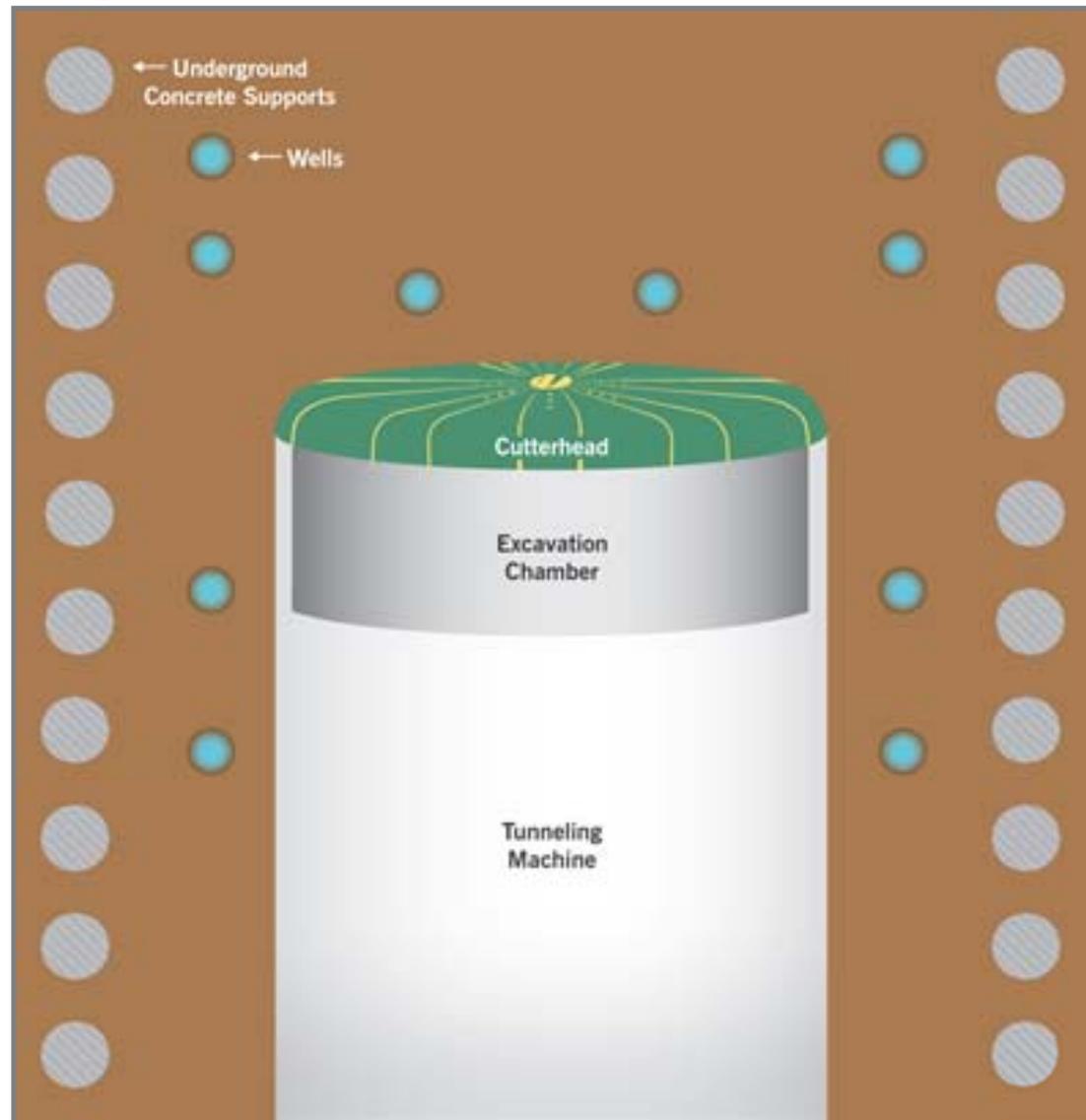
# Bertha's Cutterhead Driving Motors



# Lowering the Water Pressure Near Bertha



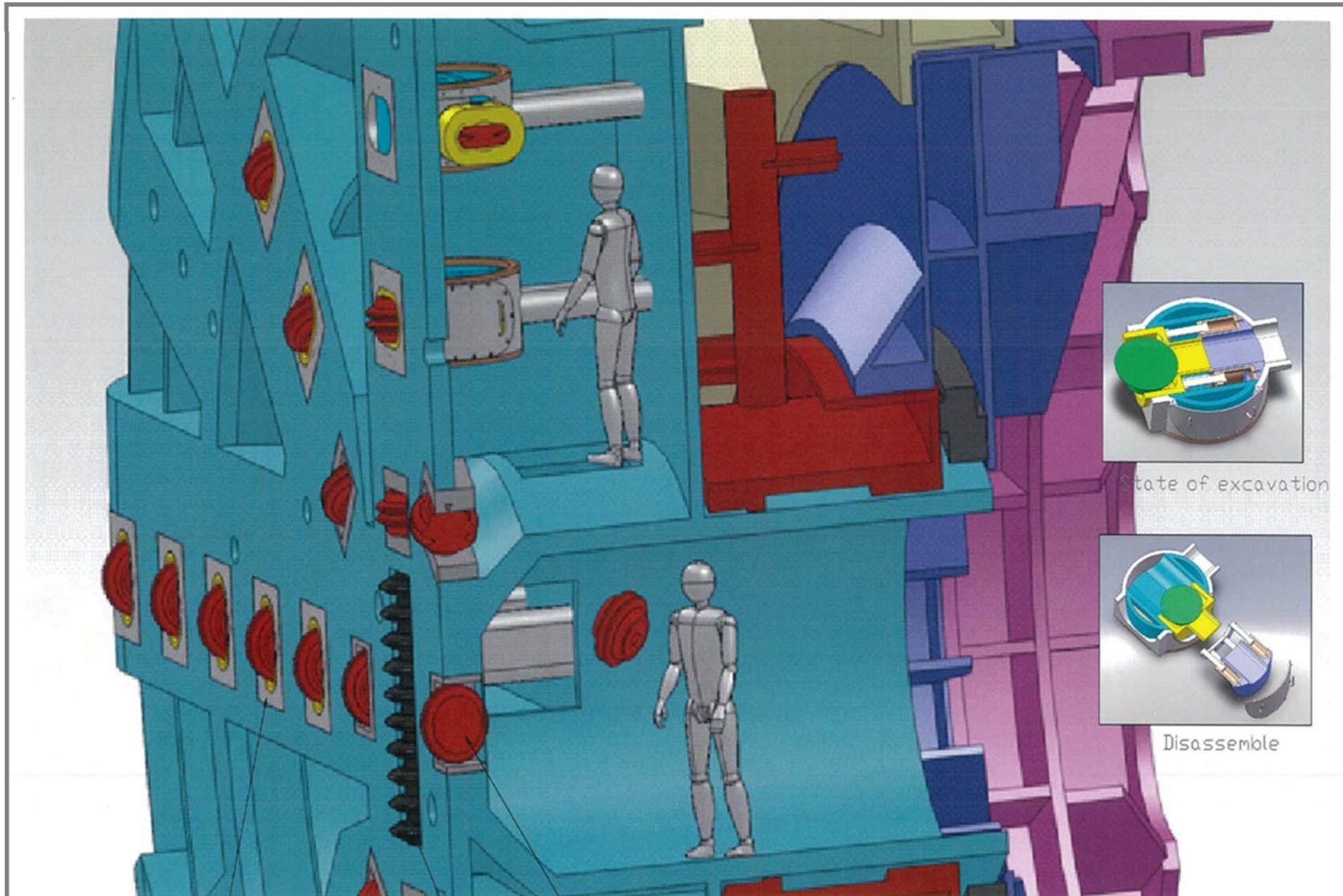
# Lowering the Water Pressure Near Bertha



# Lowering the Water Pressure Near Bertha



# Changing Bertha's Cutting Tools

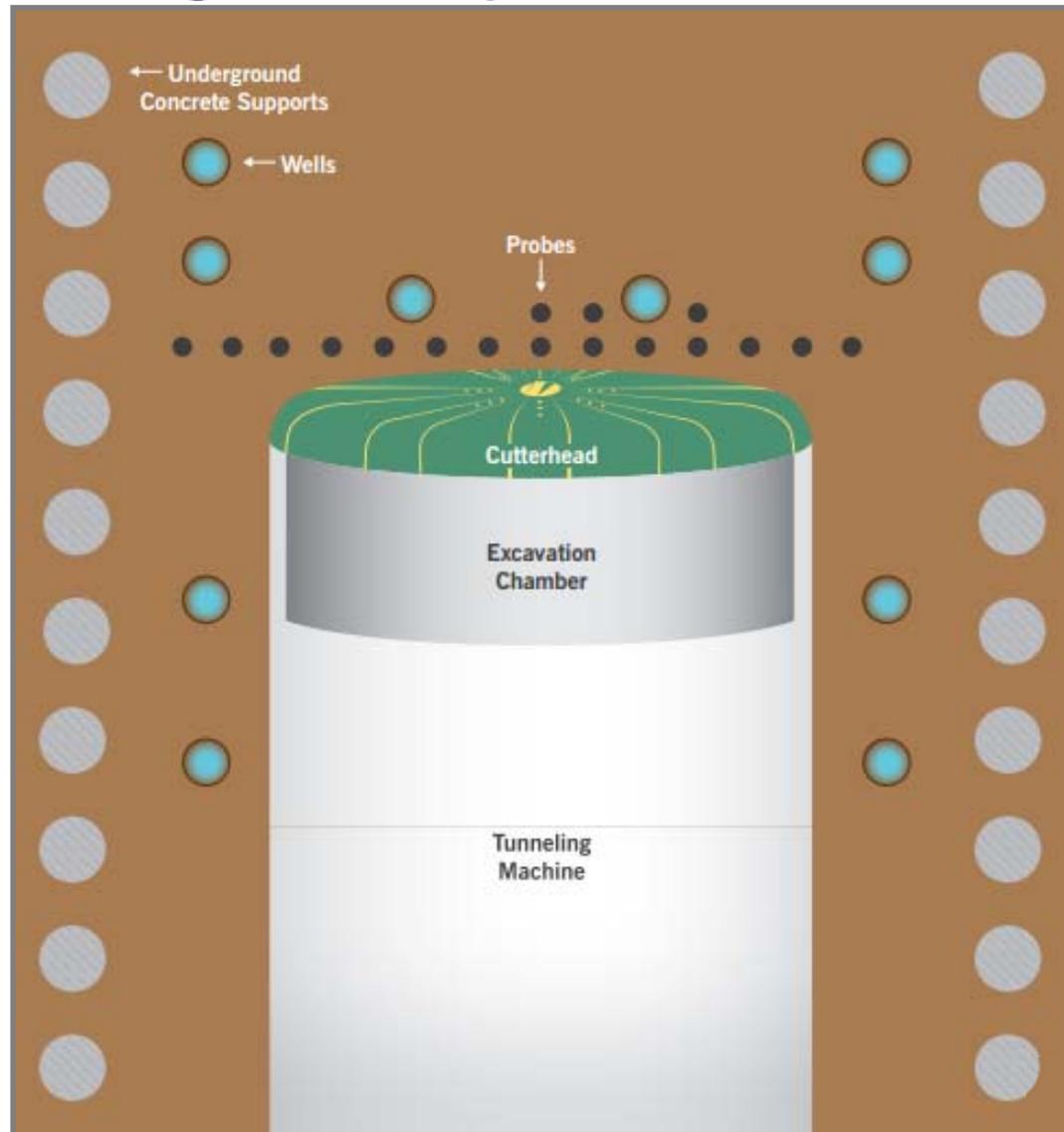


## Changing Bertha's Cutting Tools



Cutting tool weight is 1,200 pounds.

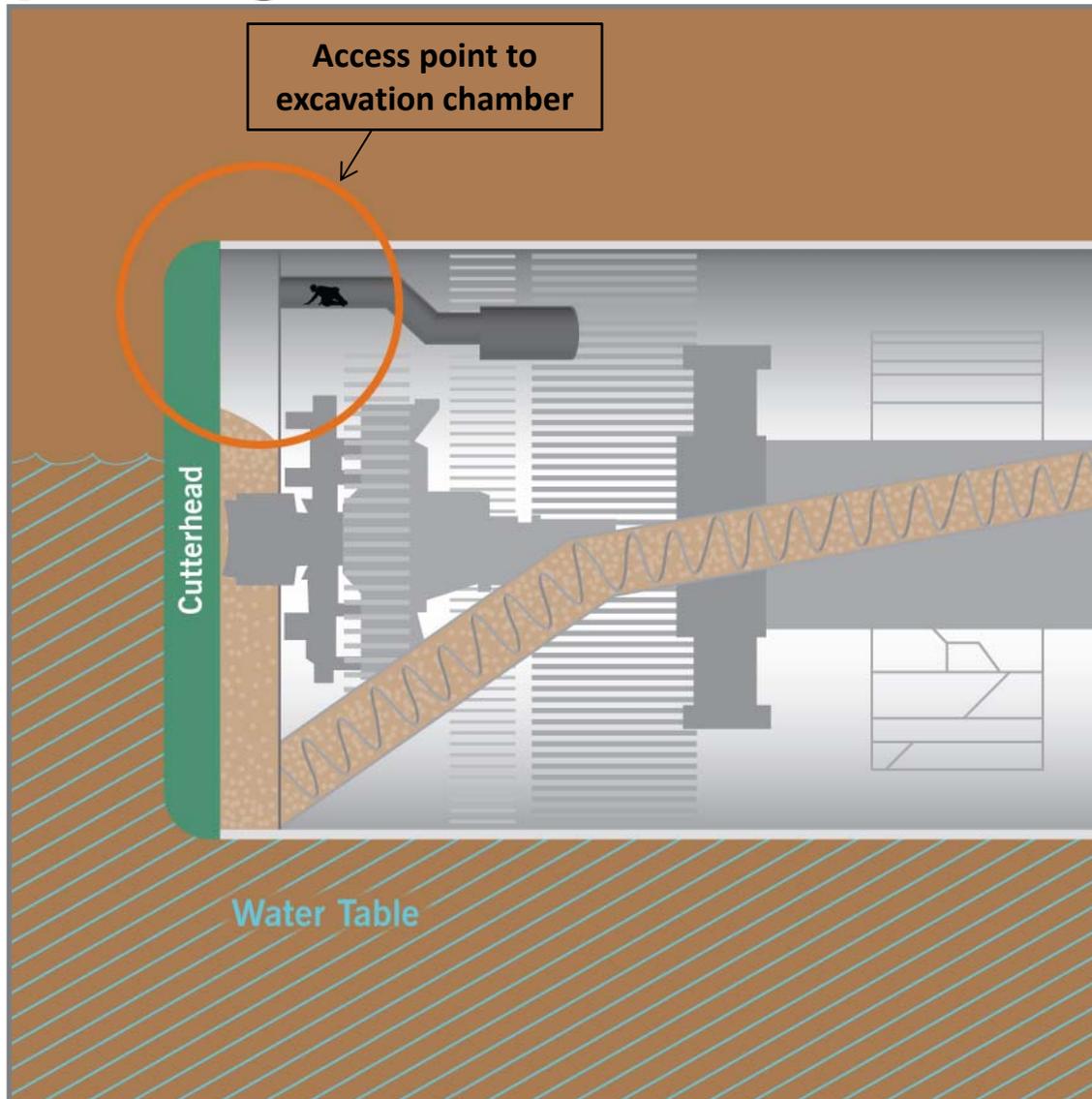
## Probing for Objects from Surface



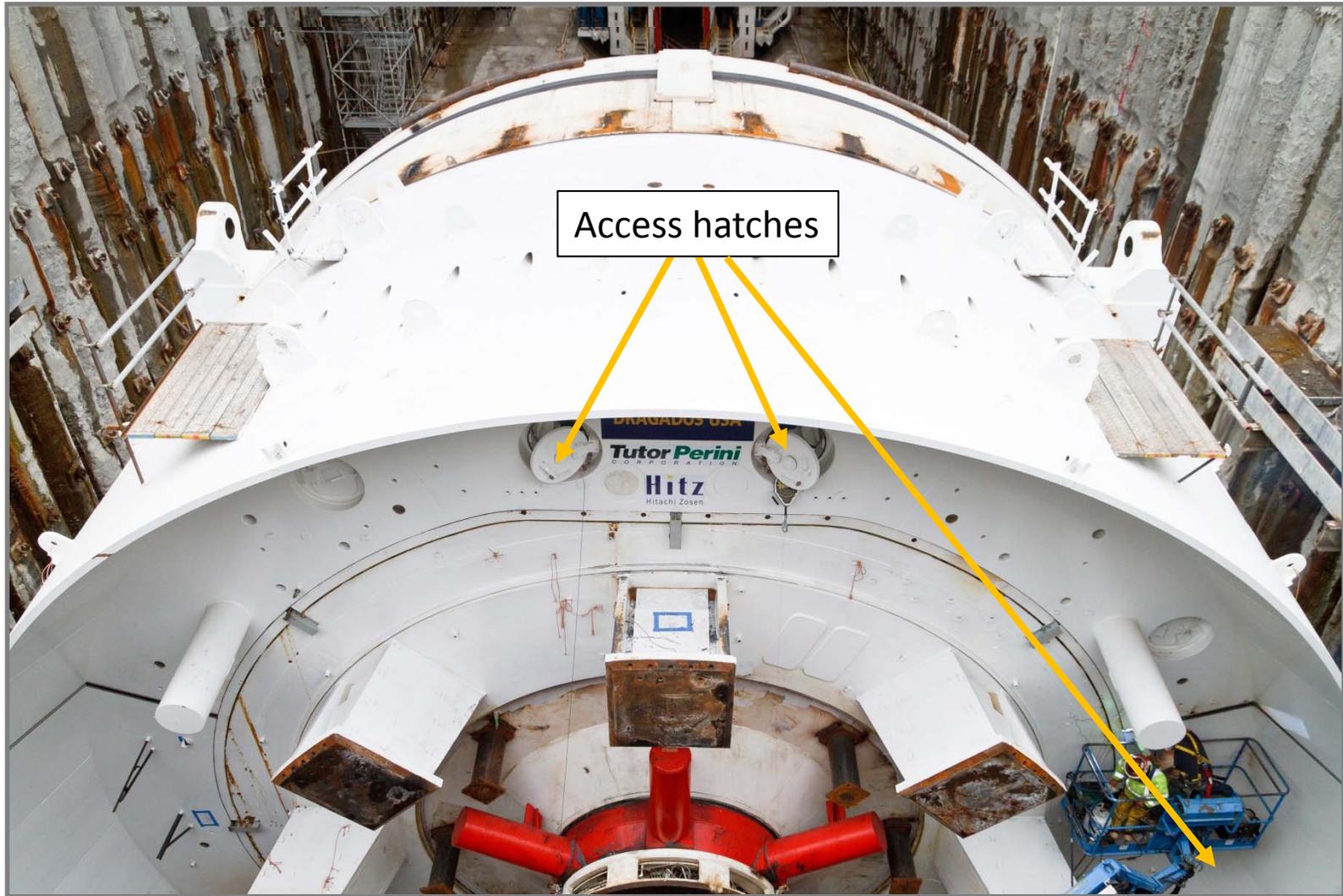
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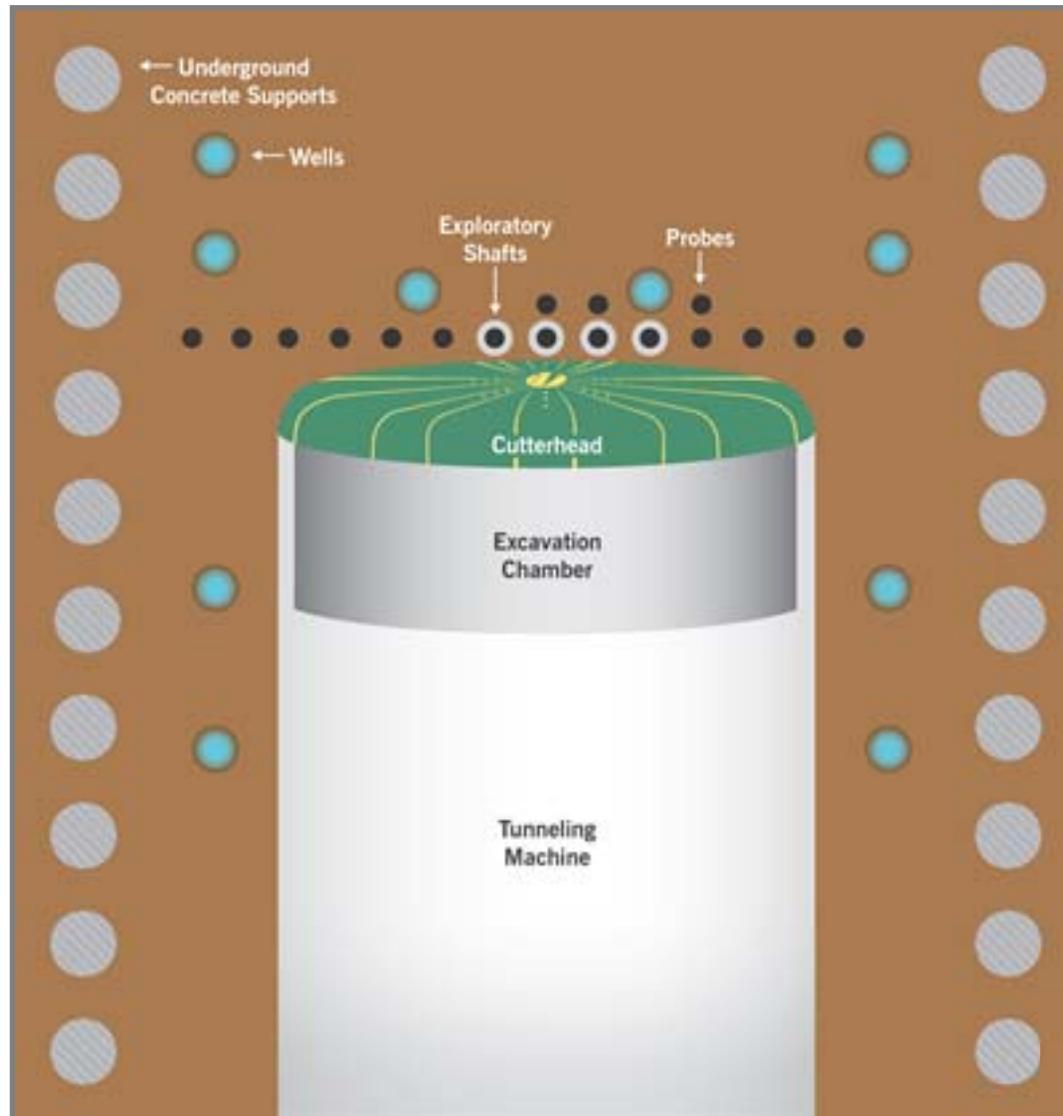
# Inspecting the Excavation Chamber



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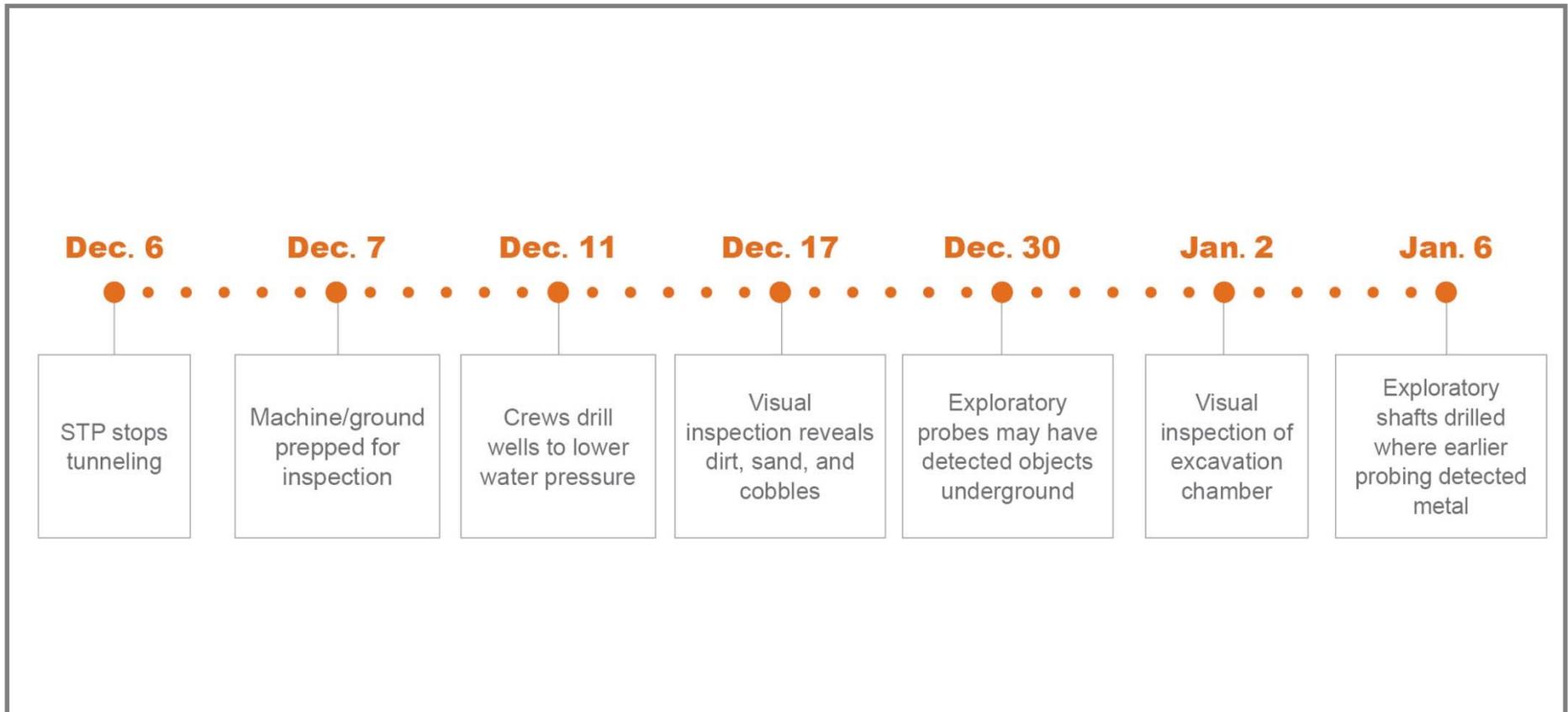
# Drilling Exploratory Shafts



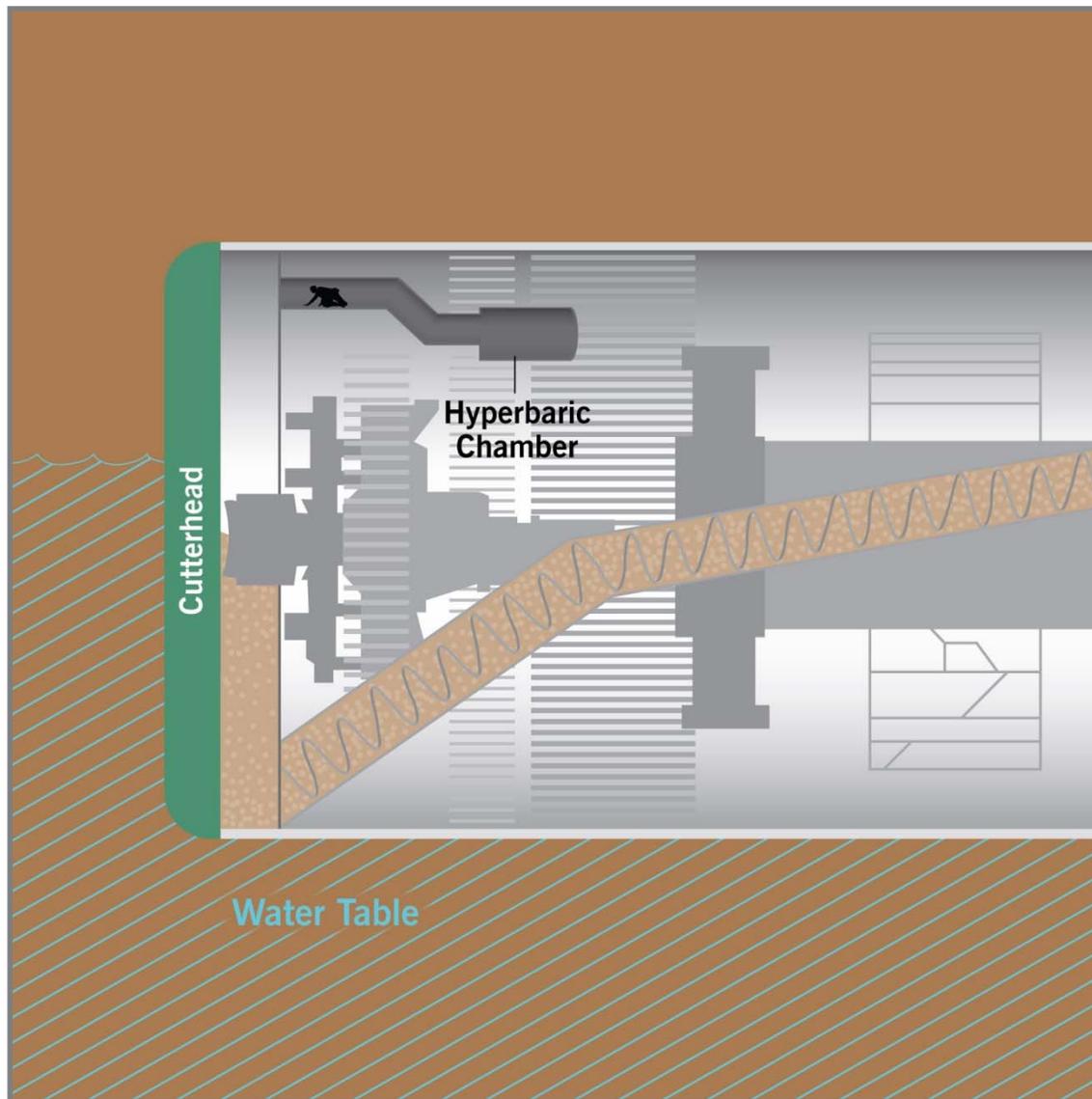
## Drilling Exploratory Shafts



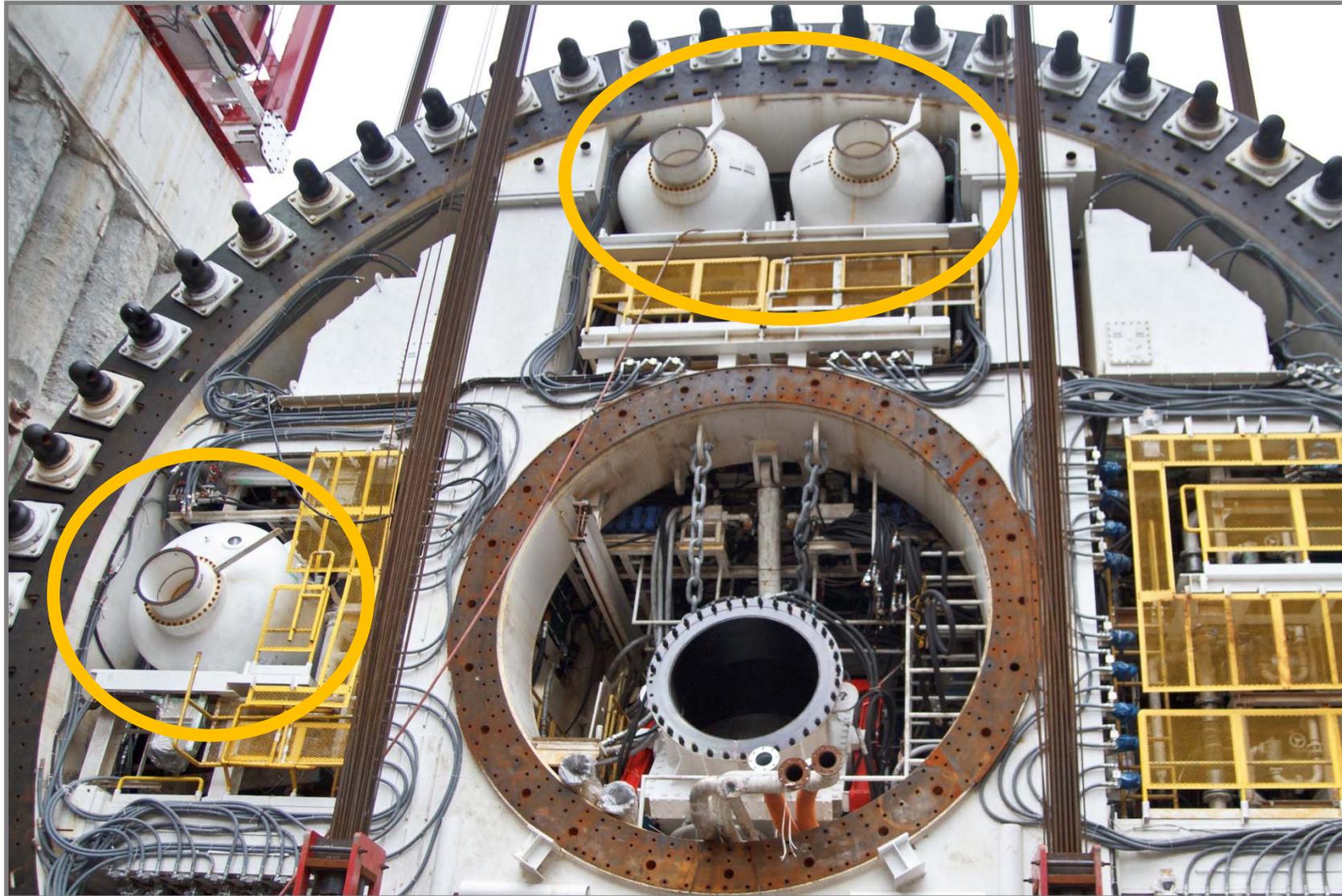
## Steps Taken to Date



## Next Steps – Hyperbaric Intervention



## Bertha's Hyperbaric Chambers



## Bertha's Hyperbaric Chambers



## Other Program Activities

- South Atlantic Street Overpass open to traffic on Jan. 27.
  - This is the 18<sup>th</sup> project within the AWWV Program to be completed on time and budget.
- North Access contract awarded on Jan. 3 to Guy F. Atkinson for \$42 million.
- Advisory Committee on Tolling and Traffic Management to issue recommendations early this year.
- Expert Review Panel to submit annual report early this year.



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