
26th Annual
MARYLAND
CONCRETE
CONFERENCE
MWIC
STRONG WOMEN. STRONGER CONCRETE
MARYLAND WOMEN IN CONCRETE
The Hotel at Arundel Preserve
Hanover, MD
March 24-25, 2026

Kiewit Infrastructure Co.



Kiewit Infrastructure Co.

David Neidballa
Sponsor – Kiewit Eastern District

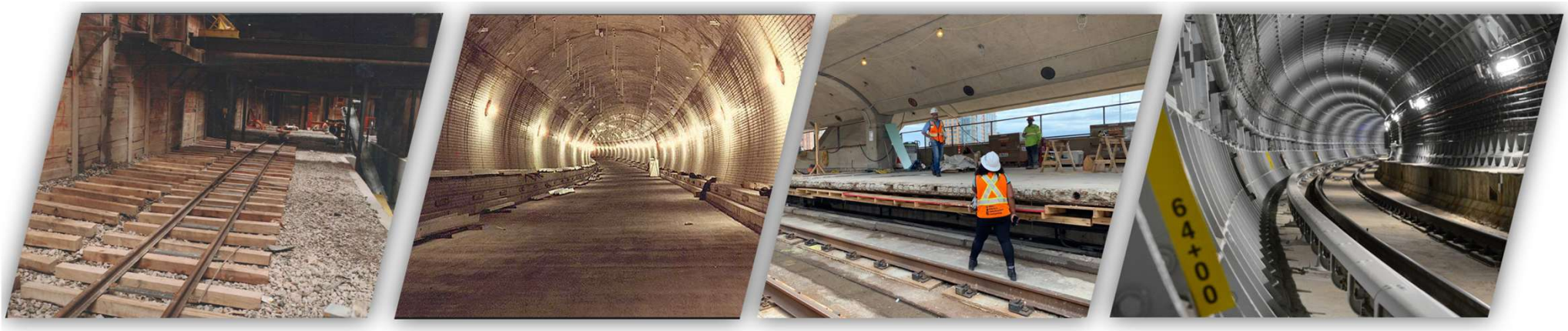
- ✓ **Deputy Project Director / Commercial Sponsor – B&P Tunnel Replacement – Frederick Douglass Tunnel Kiewit-Shea Tunnel Constructors (KSTC)**
- ✓ **Last 5 years working in the DMV**
- ✓ **Last 20 years working for Kiewit**
- ✓ **37 years working in the Construction Industry**
- ✓ **BS Civil Engineering 1991 – University of Illinois UC**
- ✓ **Currently have a house in the Chicago Suburbs and a *"work place"* here in Baltimore…**



Local Experience

Decades of Building in the DMV and Baltimore Community

- B&P Tunnel Replacement Program
- Francis Scott Key Bridge Rebuild (Current)
- Ellicott City North Tunnel (Current)
- UMD – NextGen (Current)
- WMATA Platforms 1-4
- Yellow Line Tunnel and Bridge Repairs
- Baltimore Phoenix Shot Tower Tunnel
- Fort McHenry Tunnel
- Calvert & St. Paul Bridges over MTA
- Multiple MTA improvement projects
- I83/JFX Expressway
- Many other WMATA, Federal & DOT Projects in the DMV



Kiewit-Shea Tunnel Constructors



- **Kiewit-Shea Tunnel Constructors (KSTC) is a joint venture comprised of Team Members Kiewit Infrastructure Co. (KIC) and J.F. Shea Construction, Inc. (Shea).**

- Kiewit and Shea began their collaborative relationship decades ago when the companies worked together on WMATA subway tunnel projects in the Washington, DC. Since 1983 the team has completed 23 successful tunneling projects, and our local presence dates back 34 years to the historic Phoenix Shot Tower tunnel project in Baltimore.

Kiewit & KSTC's Commitment to Building Community

Equity: Maximizing opportunities for local small, and diverse businesses in the community

Partnership: Ensuring access to information, opportunities, and resources by leveraging longstanding community and industry relationships

Investment: Practicing stewardship, ensuring maximum return on Amtrak's investment to build business and workforce capacity

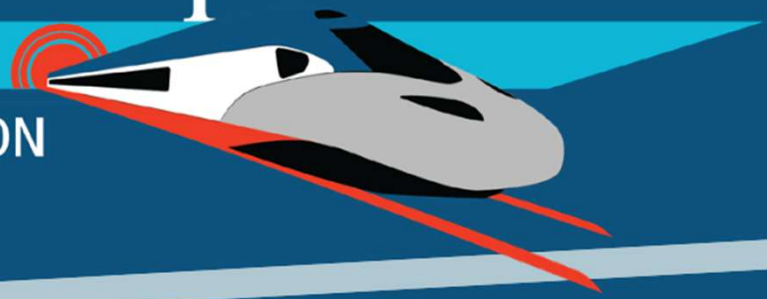
Accountability: Operating with transparency, maintaining accountability to the community and key stakeholders

AMTRAK®

B&P Tunnel Replacement

FREDERICK DOUGLASS TUNNEL

WEST BALTIMORE MARC STATION



Program Overview

Existing tunnel is 153 years old. It was constructed by the Baltimore and Potomac (B&P) Railroad in 1873…

…older than the Statue of Liberty



Carries 9 million MARC & Amtrak passengers per year on the Northeast Corridor (NEC) (MARC's Penn Line)

Top Issues:

- Deteriorating structure
- Excessive water infiltration
- High maintenance (frequent outages)
- No redundancy & resiliency
- Bottleneck (capacity + slow speeds)
- Too small to add fire/life safetv svstems

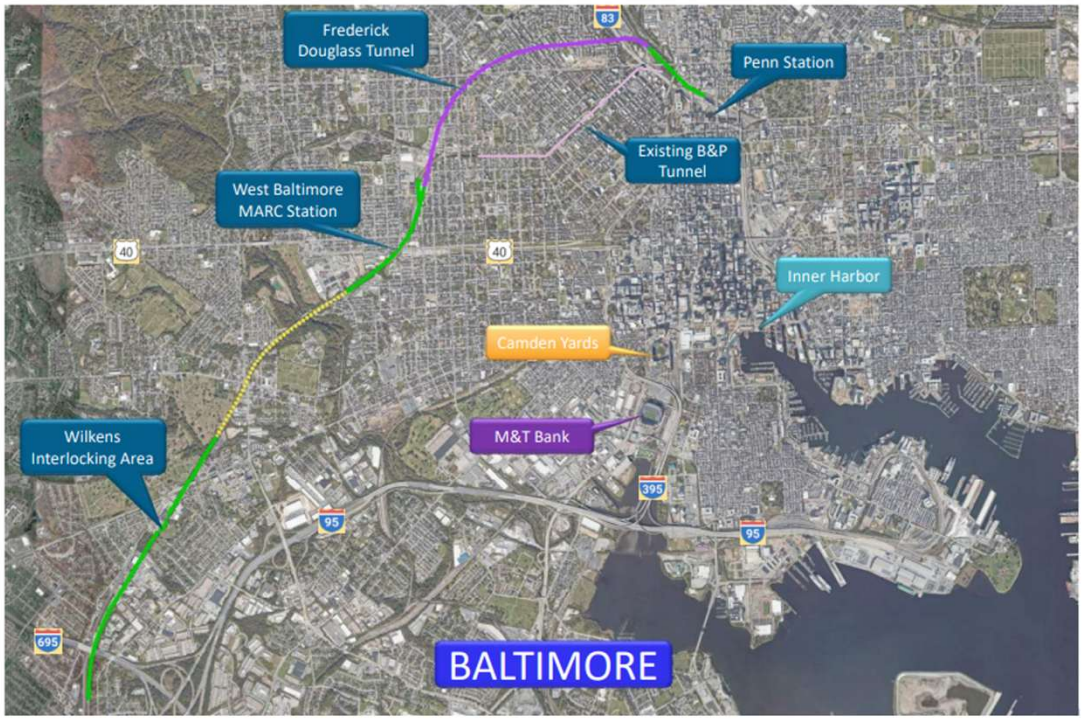




Program Overview

Project Background

- The Federal Railroad Administration (FRA) completed the Final Environmental Impact Statement (FEIS) for the Baltimore and Potomac Tunnel project in 2017
- The Record of Decision (ROD) issued by the FRA identified 43 mitigation measures, including a requirement that Amtrak invest $50M into the community impacted by the Program
- In November 2023, FRA awarded the FSP-NEC Grant for the FDT Program (B&P Tunnel Replacement)
- Community Investment Program Notice of Funding Opportunity and application will open March 23 2026



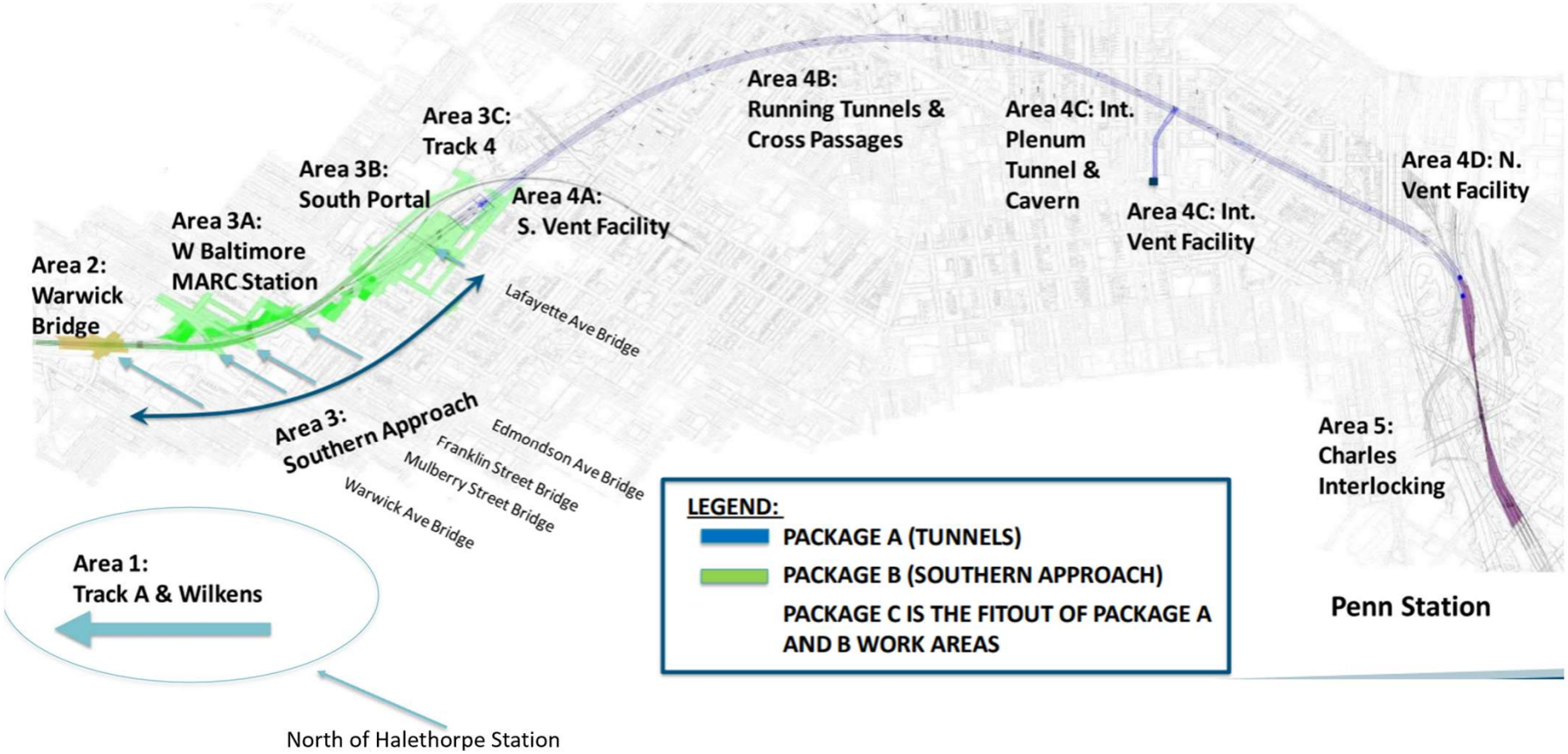
Program Overview

The Frederick Douglass Tunnel Program will modernize and transform a section of the Northeast Corridor (NEC). The Program includes:

- Two new high-capacity tunnel tubes that will serve electrified Amtrak & MARC passenger trains
- New and improved railroad infrastructure stretching approximately 10 miles along the NEC
- New ADA-accessible West Baltimore MARC Station
- 5 Bridge replacements in Baltimore City (2 roadway, 3 railroad bridges)
- 11 Baltimore City roadway modifications
- Noise barriers in Midtown Edmondson and Greater Rosemont communities
- State-of-the-art modern fire/life safety systems
- All electric passenger trains through new tunnel tubes



Program Delivery - Work Areas



Program Delivery – Contracting Approach

- **3 major construction contracts**
  - **Package A: Tunnel Construction - Construction Manager At-Risk (CMAR)**
    - Twin-bore tunnels; ground improvement; shaft and cavern mining; precast and cast-in-place concrete tunnel lining
  - **Package B: Southern Approach - Construction Manager At-Risk (CMAR)**
    - **Builder's Risk already placed**
    - Wilkens Interlocking; West Baltimore MARC Station; south portal excavation; railroad/roadway bridges (Warwick, Mulberry, Franklin & Edmonson, Lafayette); Area 3A track work; utility relocations; roadway realignment and reprofiling; new freight connection to existing rail/tunnel
  - **Package C: Systems Fit-Out - TBD**
    - Tunnel track; mechanical and fire life safety; ventilation facilities; facilities HVAC, plumbing, electrical, communications; catenary, traction power, communications, signaling; interlocking structures
- **Several smaller contracts**
- **Project Delivery Partner**

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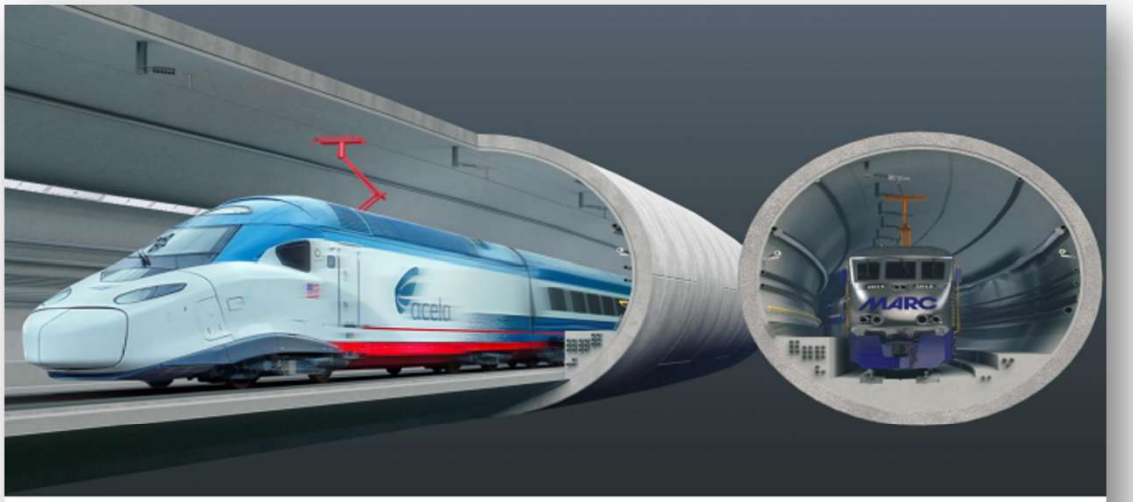
CLARK CONSTRUCTION STACY WITBECK

Clark/Stacy and Witbeck, a Joint Venture

FREDERICK DOUGLASS TUNNEL – PACKAGE A SCOPE ELEMENTS

Construction Package A is part of the overall Frederick Douglass Tunnel Program and primarily consists of the construction of the new Tunnel.

The scope includes construction of the below-grade components, consisting of bored tunnels, mined caverns, cross-passages, and other substructures so that they are ready for fit-out with systems equipment by the contractor selected for Construction Package C.



Disclaimer: Rendering is based on current design and is subject to change as design develops.

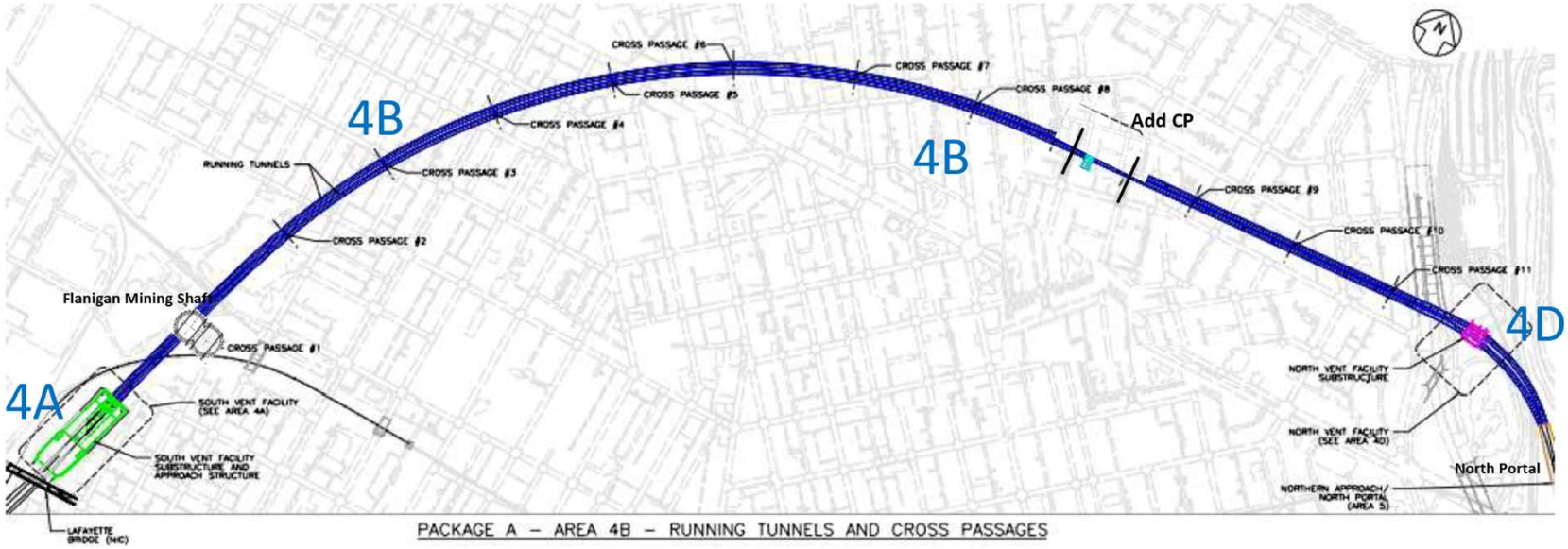
The new tunnel will consist of two single-track 26 ft. diameter tunnels excavated by tunnel boring machines (TBMs).

FREDERICK DOUGLASS TUNNEL – PACKAGE A SCOPE

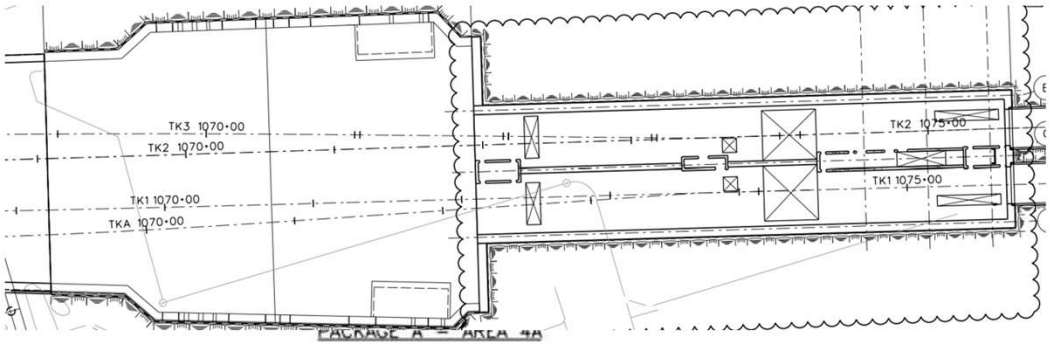
The Construction Work consists of the construction of the underground structures and tunnels for the Frederick Douglass Tunnel which includes:

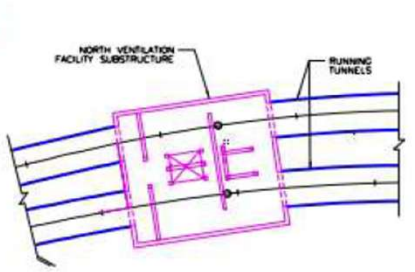
Tunnels	2 TBM bored tunnels, 2 miles long each (10,300 ft), 27' Diameter and grout, 11 cross passages between the tunnels
South Ventilation / Portal Area	SOE (support of excavation), excavation, SEM Excavation (blasting), prepare TBM launch area, water-tight foundation for South Ventilation Building.
North Ventilation Area	SOE, retaining wall along highway I-83, ~40) deep shaft. NVF building by others
North Portal Area and North Approach	SOE, excavation, TBM receiving area, pre-treatment, various retaining wall types and slabs

Project Scope: Package A - Tunnels



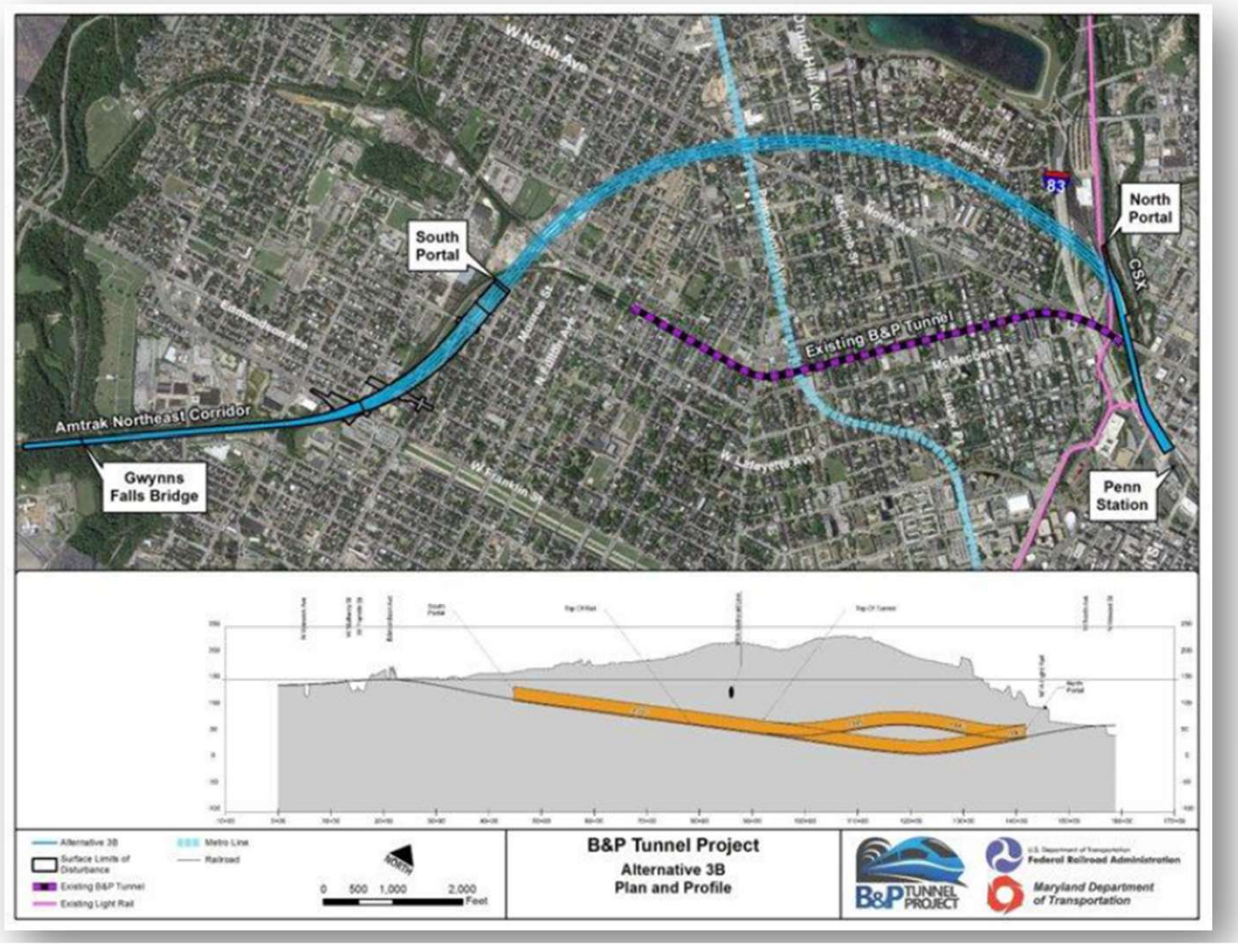
PACKAGE A – AREA 4B – RUNNING TUNNELS AND CROSS PASSAGES

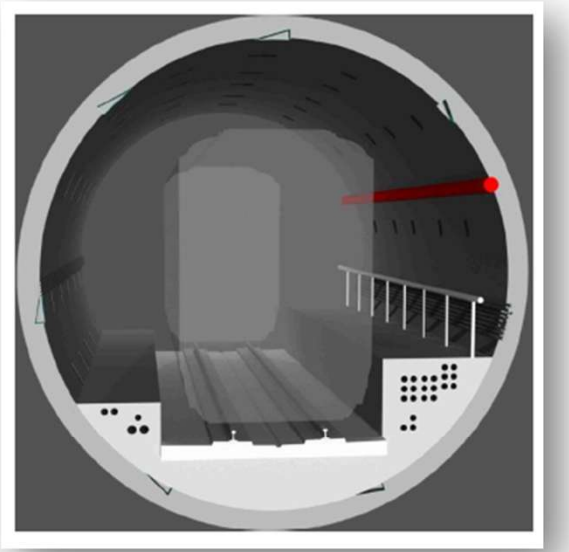




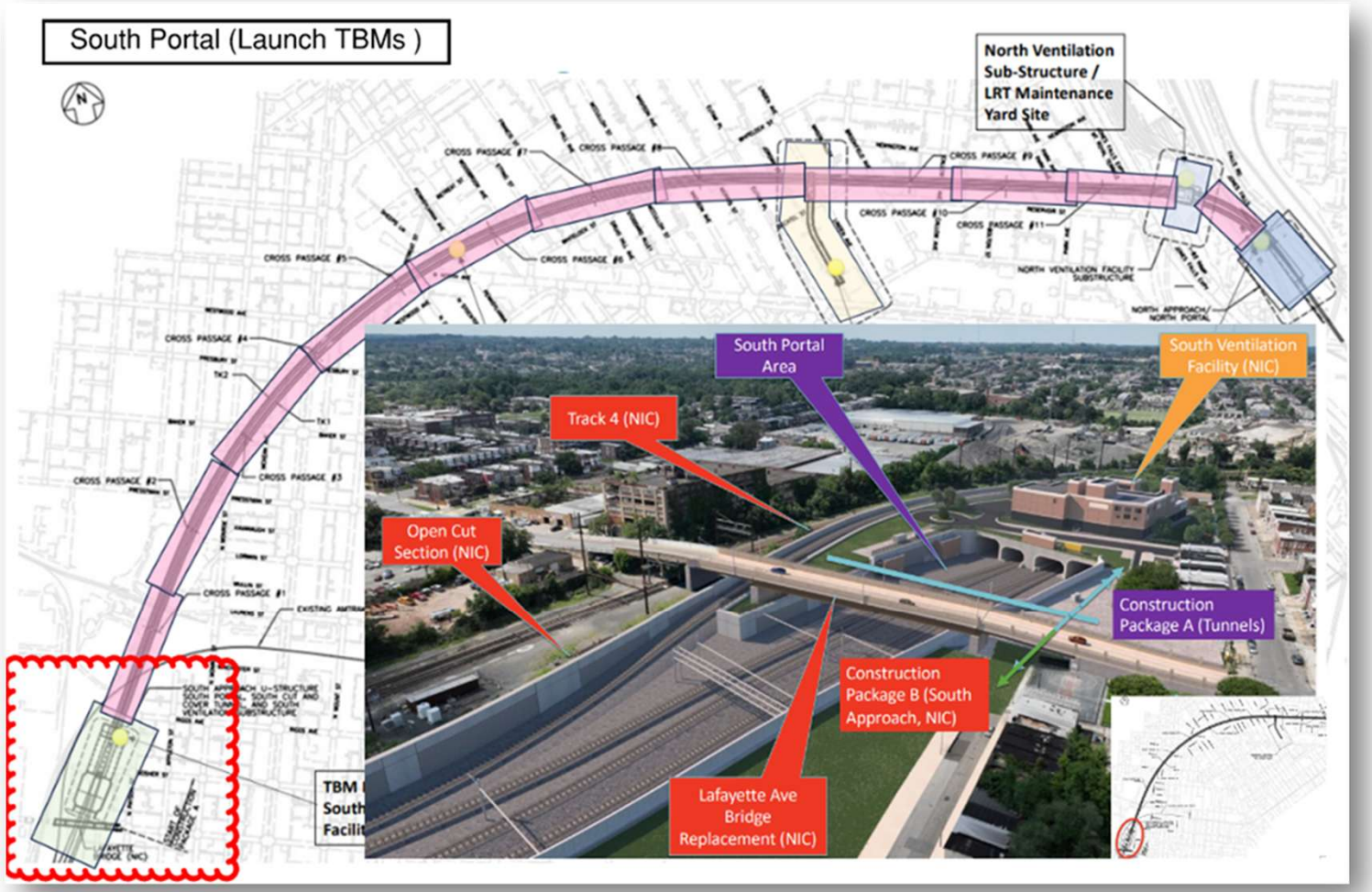
PACKAGE A – AREA 4D

FDT PACKAGE A – TUNNELS

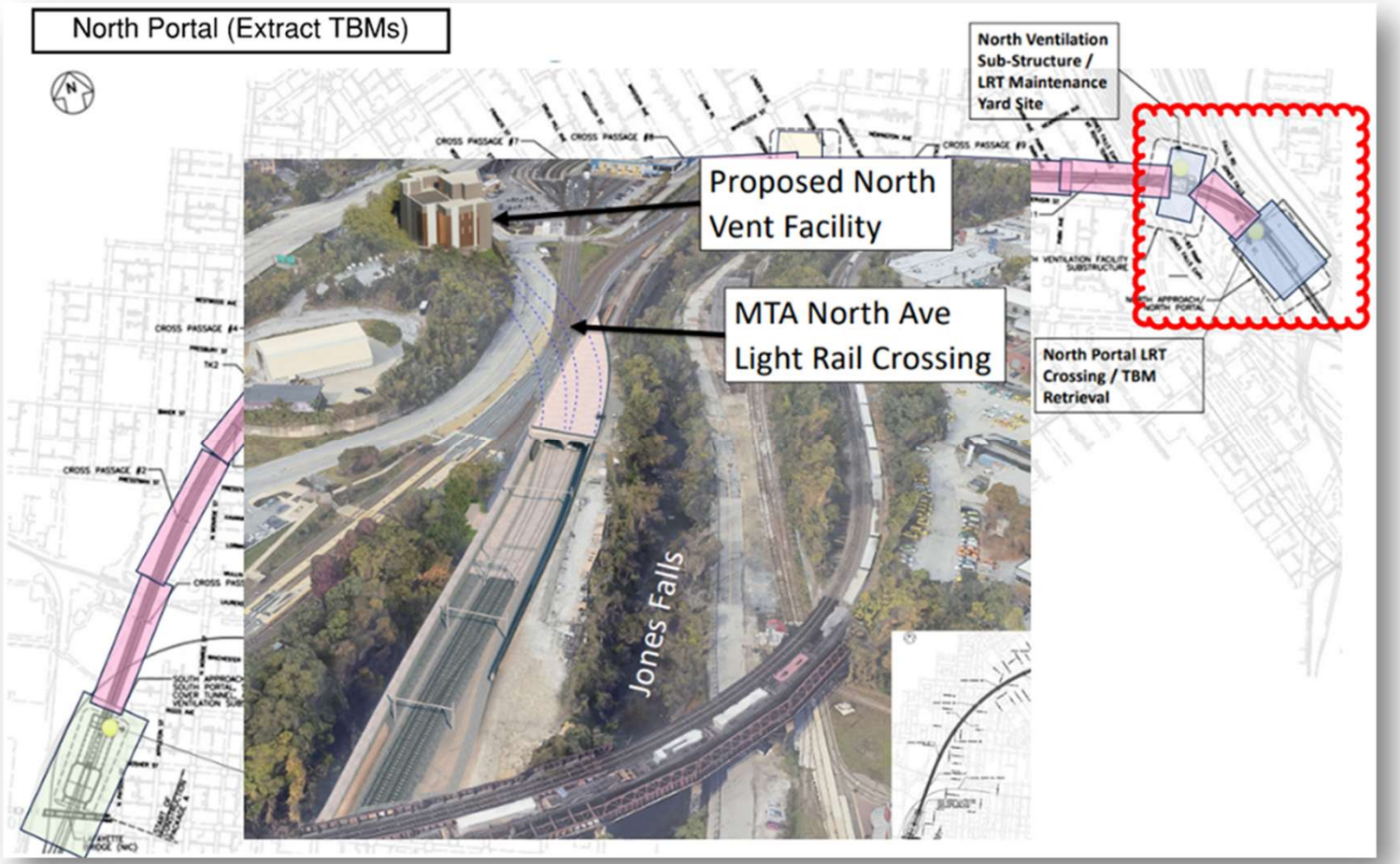




FDT Package A – South Approach, South Vent Facility, South Portal



FDT PACKAGE A – NORTH VENTILATION FACILITY, NORTH PORTAL, NORTH APPROACH



Package A Current Contract Status

Preconstruction Phase (January 18, 2024 – April 24th 2026)

- Design Constructability Reviews –Process Ongoing
- Project Execution Cost Schedule & Plan Development
  - Work Planning – Means & Methods
  - CMAR Delegated Design
  - Project Risk Analysis & Assessment
  - Cost Development – GMP Estimates – Basis of Construction Contract
  - Cost Development – Subcontractor Procurement Process
  - Construction Schedule Development – Basis of Construction Contract
- Community Outreach and Involvement
- Major Project Plan Development
  - Project / Site Specific Safety Plan (SSSP); Project Specific Quality Management Plan (QMP); Project & Construction Management Plans (P/CMPs)

GMP 1A – Site Investigation & Professional Services

GMP 1B – TBMs, Major Tunnel Equipment, PCTL Procurement

GMP 1C Enabling Works for Construction (January 30th, 2026 – July 3rd 2026)

- Demolition activities & Site Prep - N, S F , RY
- Erosion & Sediment Controls – N, S, F, RY
- Long Lead Procurement
- Water Treatment Setup – S, N
- Construction Access
- Trailer Setup

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Package A Pending Award or Future GMPs

GMP 2A – NTP April 2026

- Utility & Worker Bridges Over NEC, South Launch Shaft, N&S Ground Improvement, Flanigan Shaft & Sewer Utility Work, North Approach Reception Block, TBM Assembly, Production Tunneling, TBM Removal

GMP 2B.1 – NTP June 2026

- North Ventilation Facility (NVF) Site Prep, Site Clear, Excavation, Retaining Wall SOE (Temp & Perm), Shaft SOE, Shaft Excavation (Soil & Rock), Invert Slab for Receiving TBM, South Approach SOE

GMP 2B.2 – NTP 1Q 2027

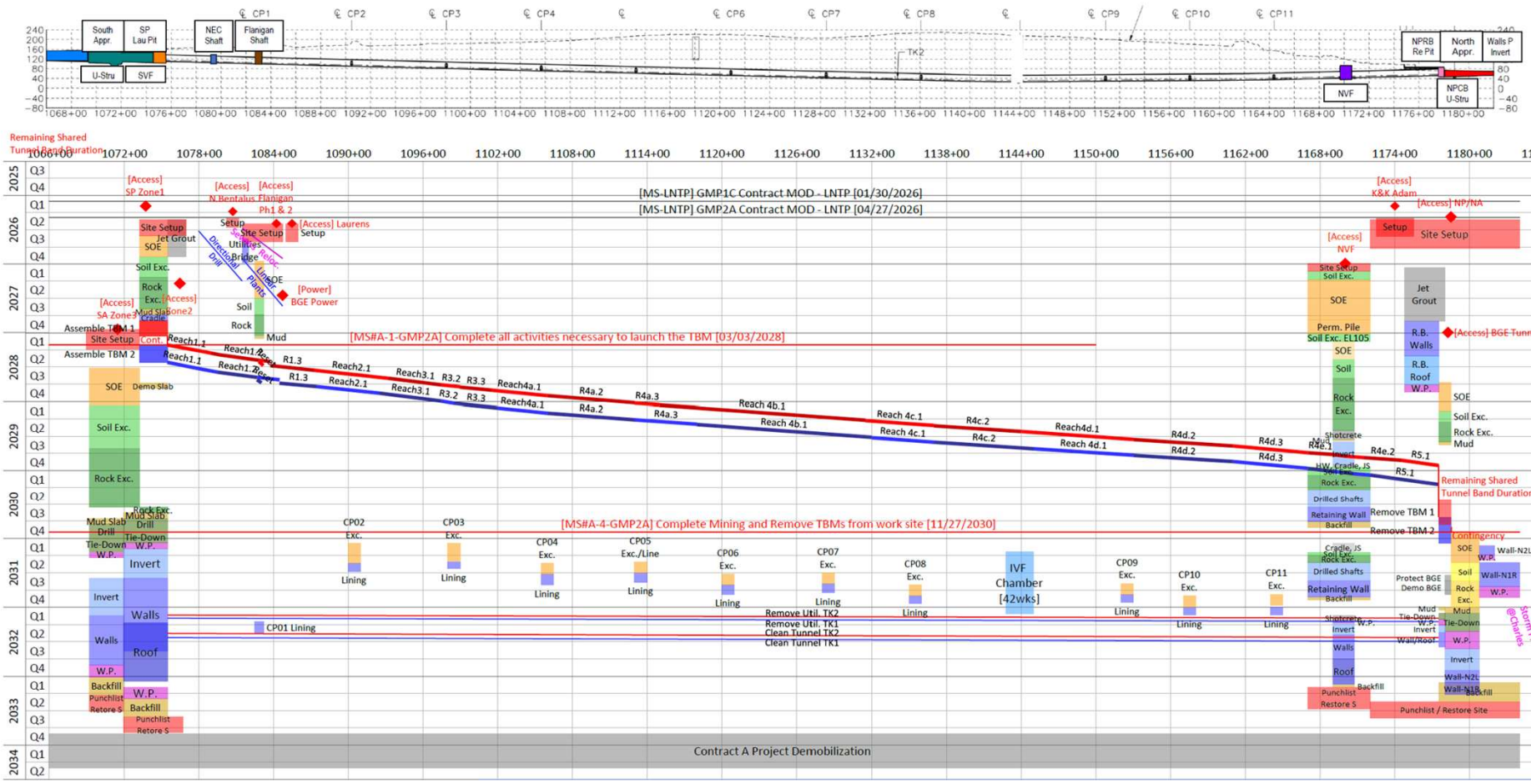
- Remaining North, South, NVF Civil Scope - SOE, Excavation (Soil & Rock)

GMP 2C – NTP 4Q 2027 / 1Q 2028

- All Structures Work for the SVF, SA, NA, Cross Passages, Handover to Package C, Demobilization from all Sites and Yards

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Package A – Projected Construction Schedule



Package A - Future GMPs

UPCOMING BID OPPORTUNITIES: SUBCONTRACT

Subcontractor Scopes for GMP 2B and 2C:

- Asphalt - Final
- Crack Injection
- F&I Reinforcing Steel
- Flatwork
- Joint Sealant
- PVC & Bituminous Waterproofing
- Sawcutting and Coring
- Site Restoration/Final Grading
- Structural Concrete
- Structural Backfill

Supplier/Services Scopes for GMP 2B and 2C:

- Aggregates
- Concrete – Materials, Consumable ST&S
- Concrete – Dimensional Lumber
- Concrete Formwork, Falsework & Formliners
- Concrete Pumping
- Structural Concrete (Ready-Mix)PM

Package A – TBM Fabrication - Germany

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Numerous parts and pieces for S-1447 and/or S-1448



Numerous parts and pieces for S-1447 and/or S-1448

Package A – TBM Fabrication - Germany

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Close-up of S-1448 being rotated and pre-heated



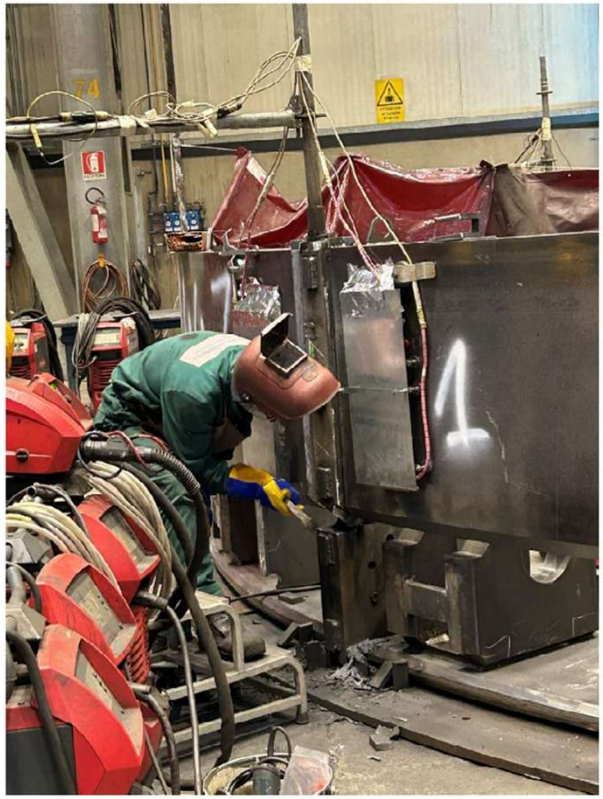
Close-up of pre-heating prior to 3-days of welding



Large Piece for S-1448 being rotated and pre-heated for 3 days of welding

Package A – TBM Fabrication - Italy

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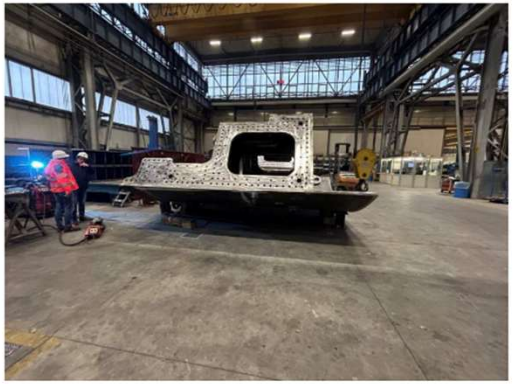
Welder working on Mid-shield for S-1447



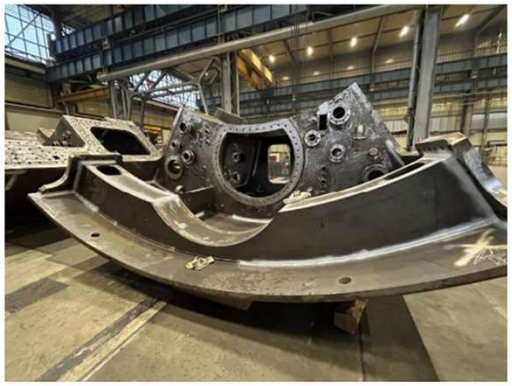
Portion of shield for FDT-A TBM



Portion of shield for FDT-A TBM



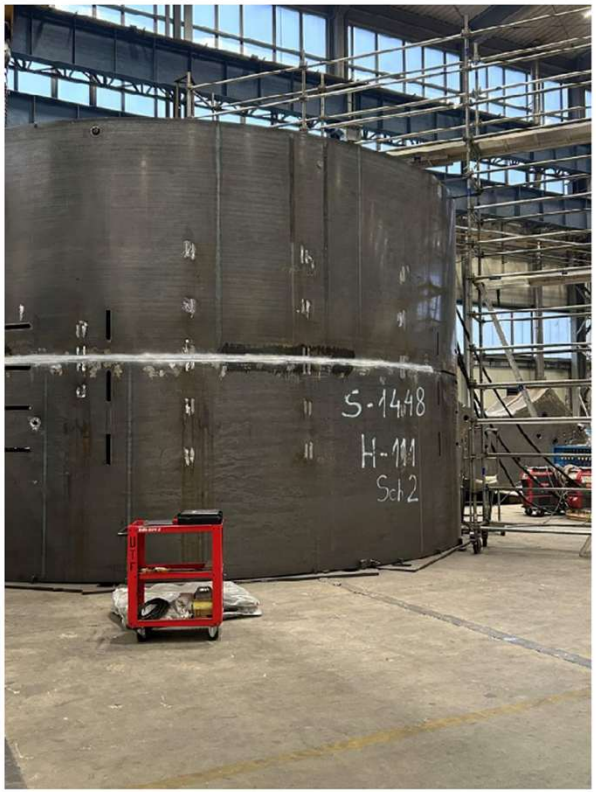
Portion of shield for FDT-A TBM



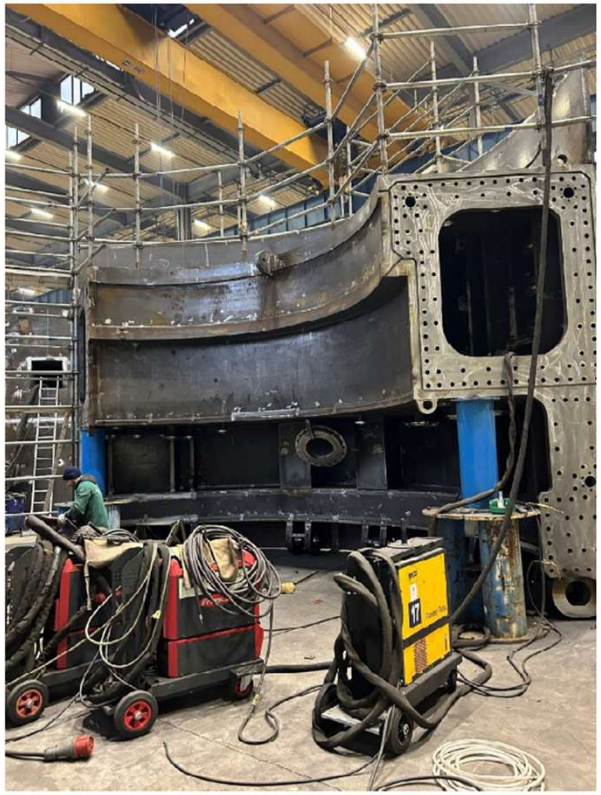
Portion of shield for FDT-A TBM

Package A – TBM Fabrication - Italy

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S-1448 Shield



Shield for S-1447

Package B Site Progress Images



30 Inch Waterline on Raynor Avenue



Payson Street Sheet Pile SOE

Package B Site Progress Images



Utility Siphon East Shaft



Tunnel Breakthrough 2/25/26

Package B Site Progress Images



Utility Siphon West Shaft



Mulberry Street Bridge North Abutment SOE

THANK YOU!


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