



THE Tunnel Project - Contract Package Construction Cost Estimate Ranges

February 2010 Contract Packaging

Description / Packages	Contract No.	Procurement Start	Contract Value
Tonnelle Ave. Underpass: (1) new bridge structure for Tonnelle Ave.; (2) building demolition; (3) site restoration; (4) building alteration; (5) utility construction.	C7	Awarded	\$13.6m
Manhattan Tunnels Design / Build Contract: (1) construction of 160 ft. diameter shaft approximately 160 ft. deep using slurry wall construction; (2) Mixed face starter tunnel breakouts from shaft. (3) 16,500 ft. of bored tunnels through hard rock (4 tunnels); (4) 3 cross passages; (5) utility and sitework.	C12	In Process	\$583m (apparent low bid)
Palisades Tunnel Design / Build Contract: (1) open cut construction from Tonnelle Ave. Bridge to Palisades Portal. (2) 10,400 ft. of hard rock bored tunnels (2 tunnels) with the option for cast in place or segmental liner; (3) waterproofing; (4) 6 cross passages in rock. (5) Construction of 120 ft diameter shaft approximately 100 ft deep using slurry wall.	C8	In Process	\$259m (apparent low bid)
Hudson River Tunnels Design / Build Contract: (1) 14,800 ft. of tunnels mining through soft ground and rock (2 tunnels); (2) 9 cross passages; (3) segmental tunnel liners; (4) access roads; (5) underpinning Willow Ave. Bridge.	C10	In Process	Under \$500m
Kearny Yard Earthwork Management: This contract includes: (1) site preparation; (2) construction of 700 ft. of retaining walls; (3) placement of 2 million CY of fill material; (4) construction of site access roads and internal construction roads.	C22	2010	Under \$100m
Amtrak Transmission Line Tower Relocations: Relocation of 3 138kV transmission towers, including deep foundations and monopole structures.	C3	2010	Under \$50m
Excavation of NYPSE and Interlocking Cavern: (1) excavation and support of shafts at Dyer Ave, 33rd St, and 35th St. (2) staged enlargement of previously bored tunnels to form NYPSE and Interlocking cavern, approximately 96ft wide and 90 ft high.	C13R	2011	\$500m (+)
Loop Track Mainline Connection & FRL Station Connection: (1) 5200 ft. track viaduct and retained fill; (2) 6000 ft. embankment; (3) underpass with retaining wall to NEC; (4) railroad bridge over Penhorn Creek; (5) access bridge over Lower Penhorn Creek, (6) excavation and site grading and capping within landfill.	C1	2011	\$500m (+)
Station Entrances: Construction of 5 station entrance facilities in New York at 6th, 7th and 8th Ave. along 34th Street and 3 ADA shafts: (1) selective demolition and support of existing structures; (2) drill and blast construction for access tunnels to NYPSE cavern; (3) street and site restoration; (4) utility relocation.	C19	2011	Under \$500m
Frank R. Lautenberg Station To West Of Croxton Yard Bridge Includes FRL Station Modifications & Viaduct Through Station: (1) Station building modifications; (2) new center island platform; (3) 1250 ft. of viaduct structure through station; (4) site work modifications and access road.	C4	2011	Under \$500m
Croxton Yard Bridge To Secaucus Road Includes Construction Of Croxton Yard Bridge, Viaduct & Embankment: (1) foundation construction; (2) 800 ft. of bridge viaduct; (3) 1000 ft. of embankment; (4) 2800 ft. of retained fill; (5) construct of site access roads.	C5	2011	Under \$100m
Secaucus Road To West Side Of Tonnelle Ave.: (1) 2000 ft. bridge viaduct structure; (2) 2300 Ft. embankment; (3) bridge over Conrail/NYS&W; (4) Wick drain installations; (5) surcharge placement and removal; (6) access roadways.	C6	2011	Under \$100m
Twelfth Ave. Fan Plant Internal Concrete Structure and Fit Out: (1) construction of cast in place concrete tunnel, invert slab, with underdrain; (2) Cast in place duct bank bench wall; (3) construct below grade fan plant structure; (4) building superstructure and envelope; (5) MEP fit out construction.	C15	2011	Under \$250m
NY Penn Station Expansion - Station Architectural and Station Finishes: (1) Construction of finishes for upper and lower level platforms, mezzanine, and connections to existing Penn Station NY with adjoining subway connections; (2) MEP fit out construction; (3) vertical transportation, including stairs, escalators and elevators.	C17	2012	Under \$500m
West End Wye Track: (1) 700 ft. retained fill; (2) 700 ft. bridge structures; (3) 3400 ft. embankment; (4) 2 rail bridge structures (James Ave. and West Side Ave.)	C2	2012	Under \$100m

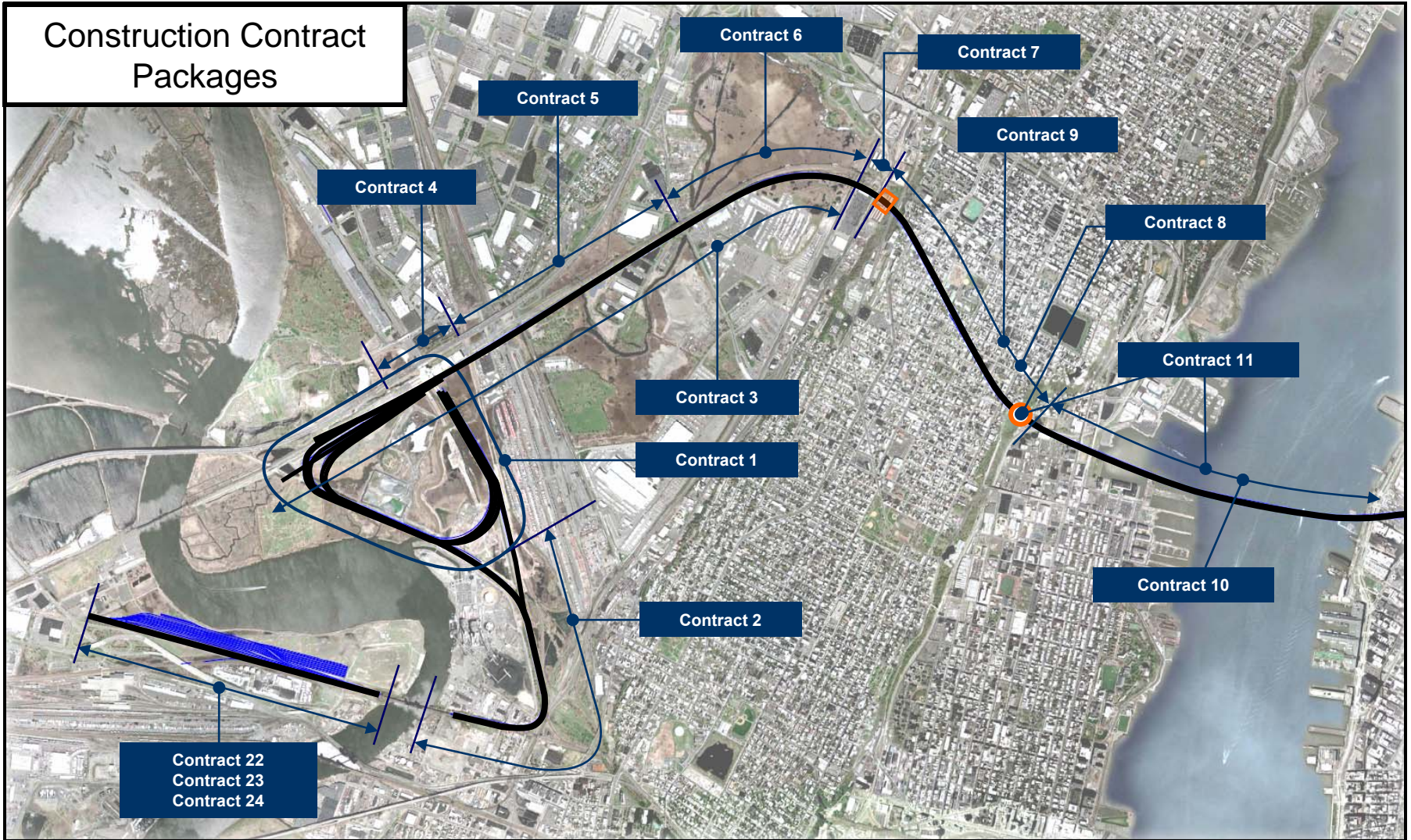


THE Tunnel Project - Contract Package Construction Cost Estimate Ranges

February 2010 Contract Packaging

Description / Packages	Contract No.	Procurement Start	Contract Value
Trackwork: Construction of 9 miles of trackwork along the tunnel alignment in New York and New Jersey, including Kearny Yard. Elements of the work include: (1) 5.6 miles of ballasted track; (2) 3.4 miles of direct fixation track; (3) special trackwork and ancillary devices.	C20	2012	Under \$250m
RR Systems: Installation, testing and commissioning of all railroad systems, including: (1) traction power; (2) catenary; (3) substations; (4) train signal control; (5) communications; (6) CCTV; (7) passenger communications; (8) tunnel lighting; (9) ventilation control.	C21	2012	Under \$500m
Kearny Yard Civil Work: (1) construction of Koppers Coke Bridge; (2) removal and disposal of surcharge materials; (3) construction of rail structure facilities, including inspection pit, sanding facility; (4) 22,000 ft. of paved site access roads; (5) construction of site utilities.	C23	2012	Under \$250m
Tunnel MEP Finishes and Tunnel Fans at Fan Plant Locations: Work in this contract includes: (1) MEP finishes; (2) five tunnel fans at Fan Plant facilities; (3) fan controllers; (4) electrical substations.	C25	2012	Under \$100m
Palisades Tunnels Internal Concrete and Substation Control Facility: (1) cast in place concrete tunnel, invert slab with underdrain; (2) cast in place concrete duct bank benchwall; (3) concrete vent plenum wall; (4) site grading and utilities, construction of traction power substation control buildings.	C9	2012	Under \$50m
Concrete Lining of NYPSE and Interlocking Cavern: (1) Concrete lining of Dyer Ave, 33rd and 35th Street Shafts (2) Concrete lining of NYPSE and Interlocking cavern; 2,200 ft. (3) Concrete lining of 2-550 ft. Warrington Interlocking caverns. (4) Internal framing structures in NYPSE and Interlocking caverns.	C16R	2013	\$500m (+)
Hoboken Fan Plant, Internal Concrete, Structure and Facility Fit Out: (1) cast in place concrete tunnel, invert slab with underdrain; (2) cast in place concrete duct bank benchwall; (3) concrete vent plenum wall; (4) site grading and utilities; (5) construction of below grade and above fan plant structure; (6) building envelope and fit out construction; (7) MEP fit out construction.	C11	2013	Under \$250m
Dyer Ave. Fan Plant Structure & Fit Out: (1) construction of facility superstructure including internal configurations of multiple levels; (2) 6 story building envelope (2 levels belowgrade) with steel and masonry construction; (3) MEP fit out construction.	C14	2013	Under \$50m
33rd and 35th Street Fan Plant Structure and Fit out: (1) construction of facility superstructure, including internal configurations of multiple levels; (2) five-story building envelope (2 levels below grade) with steel and masonry construction; (3) MEP fit out construction.	C18	2013	Under \$100m
Kearny Yard Buildings: Work in this contract includes: (1) construction of employee facility; (2) trainwasher facility; (3) outdoor lighting; (4) catenary structures.	C24	2013	Under \$100m

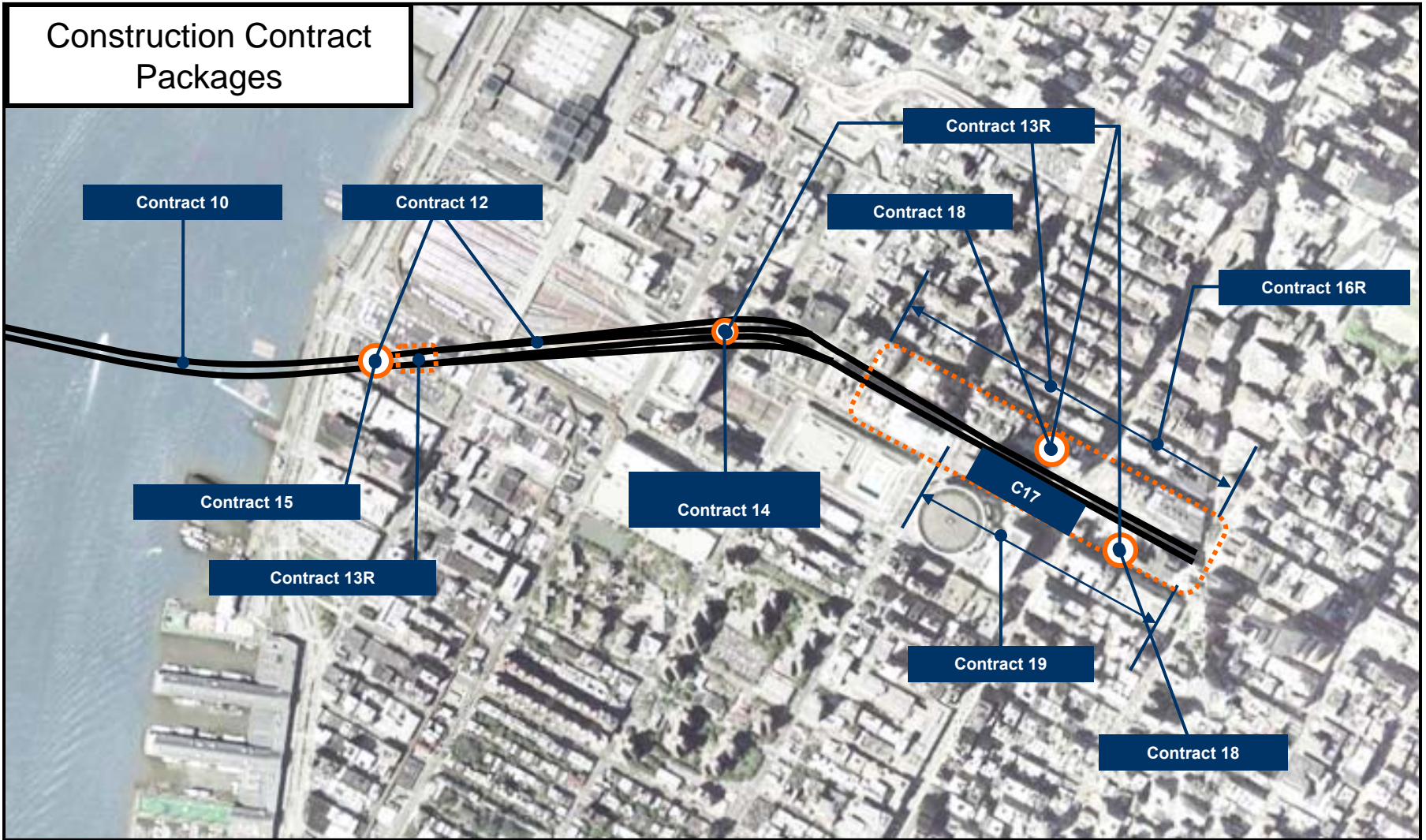
Construction Contract Packages



- Contract 1 Loop Track Mainline Connection and FRL Station Connection
- Contract 2 West End Wye Track
- Contract 3 Amtrak Transmission Tower Relocations
- Contract 4 FRL Station Modification & Viaduct up to West of Croxton Yard Bridge
- Contract 5 Croxton Yard Bridge to Secaucus Rd.
- Contract 6 Secaucus Road to Vicinity of Tonnelle Ave.
- Contract 7 Tonnelle Ave. Underpass

- Contract 8 Palisades Tunnels
- Contract 9 Palisades Tunnels Internal Concrete
- Contract 10 Hudson River Tunnel
- Contract 11 Hoboken Fan Plant
- Contract 22 Kearny Yard Earthwork Management
- Contract 23 Kearny Yard Civil Work
- Contract 24 Kearny Yard Buildings

Construction Contract Packages



- Contract 12 Manhattan Tunnels
- Contract 13R NYPSE & Warrington Interlocking Cavern & Dyer, 33rd, 35th & ADA Shaft Excavation
- Contract 14 Dyer Ave. Fan Plant
- Contract 15 Twelfth Ave. Fan Plant, Tunnel Internal Concrete
- Contract 16R NYPSE & Interlocking Cavern Concrete Lining and Interior Framing Structure
- Contract 17 NYPSE Station Finishes

- Contract 18 Fan Plant Structure at 33rd & 35th Sts.
- Contract 19 Station Entrances
- Contract 20 Trackwork – At-grade Ballasted Track, Special Track Work and DF Track
- Contract 21 Project Wide RR Systems
- Contract 25 Furnish and Install all Fans, Fan Controllers, Fan Plant Substations and other Equipment