

APPENDIX F: LOWER HUDSON RIVER SANDY RESILIENCY PROJECTS

Responsible Entity	Project Name	Project Description
NJState	North Hudson Sewerage Authority Mitigation	Construction of floodwall in garage of administrative building in Hoboken. Installation of watertight doors, sump pump & exhaust system in pipe tunnel; instalation of removable barrier at exterior entrances; and watertight conduit.
NJState	Jersey City Sewer Improvements	Jersey City Municipal Utilities Authority (JCMUA) sewer improvements in Jersey City, including Sixth Street CSO Extension, Regulator Outfall Repair, Claremont Carteret Outfall, East Side Plant and Outfall Chambers.
NYCDOT	Battery Park and West Street Underpass Repairs	Repairs to mechanical and electrical systems at underpass to FDR Drive from West Street in Lower Manhattan, and repairs to mechanical and electrical systems in Lower Manhattan at the West Street on-ramp to Brooklyn Battery Tunnel.
US Federal Railroad Administration	Amtrak Hudson Yards Concrete Casing	Construction of concrete casing near Hudson Yards on the Manhattan side of the Hudson River as the right-of-way for the proposed Amtrak Gateway Hudson Tunnel Project for a new rail tunnel into NY Penn Station.
NJState	Hoboken Microgrid	A microgrid to support continuity of emergency services -- Police Department, Hoboken Hospital, pharmacies -- and assist most vulnerable residents, including senior citizens and the Hoboken Housing Authority. The City of Hoboken will build a medium voltage distribution network on Washington Street.
National Fish and Wildlife Foundation	Transform Hoboken Block 12 into a Green Infrastructure Asset	Construct Block 12 in City of Hoboken, a one-acre impermeable parcel, into a green infrastructure asset and open space.
National Fish and Wildlife Foundation	Liberty State Park Marshes and Upland Habitats Enhancement Project	NJ Department of Environmental Protection's Office of Natural Resource Restoration will construct one of NJ's largest habitat restoration projects in Liberty State Park. Project will include a minimum of 40 new acres of salt marsh and 100 acres of upland enhancement including maritime forest. Removal of contaminated material, clean soil placement, native re-planting, and tidal creek enhancement.
NJTransit	Hoboken Long Slip Canal Flood Protection	This project will design and fill Long Slip Canal, adjacent to Hoboken Terminal and Yard, to an elevation above FEMA 1% base flood elevation (BFE) and construction of six new electrified tracks serving three high-level boarding platforms on the filled area.
PANYNJ	Exchange Place, Newport Station & Grove Street Station Head House Protection	Project to flood-proof major above ground PATH facilities and equipment to prevent flooding of underground assets in Jersey City.
PANYNJ	Penn/Moynihan Station Complex Train Shed Hardening	Project to provide flood protection within Penn-Moynihan Station complex in Manhattan to protect transit facilities from damage during heavy rains.
NJDEP	Hoboken Wet Weather Pump Station H5	A new wet weather pump station to alleviate flooding in NW Hoboken constructed by North Hudson Sewerage Authority. Construction completed Fall 2016.
NYState	Pier 40 Repairs and Mitigation	Repair and mitigation to Pier 40 substation and service equipment.
NJTransit	Hoboken Terminal House Power Repair	Design and construction of repairs and replacement of equipment at Hoboken Terminal House Power Supply (aka "Depot Substation"), including switch gear, transformers and associated relays, circuit breakers, power cables, and electrical system components. Construction completed January 2017.
NJTransit	Relocation of Hoboken's Signal Equipment	Resilient design and construction of new track circuit equipment at Hoboken Terminal Tower and movement of certain signal equipment cases higher. Construction completed December 2016.
NJTransit	Hoboken Yard Signal Power	Project for resilient design and installation of signal devices, cabling and associated systems at the Hoboken Yard following storm damage from salt water that caused multiple circuit failures and delays.
NJTransit	Hoboken Boiler and Terminal Repairs	Construction of resilient repairs to the centralized Hoboken Boiler System that provides heat and hot water throughout the Terminal Building.
NJTransit	Hoboken Terminal Flood Resiliency	Conceptual project to Identify, design, and construct flood protection measures to seal Hoboken Terminal stair openings against rising flood waters, all six of the exterior stairs lie below flood elevation.
PANYNJ	Holland Tunnel Sandy Repairs	Project to repair damages at 22 locations along the Holland Tunnel.