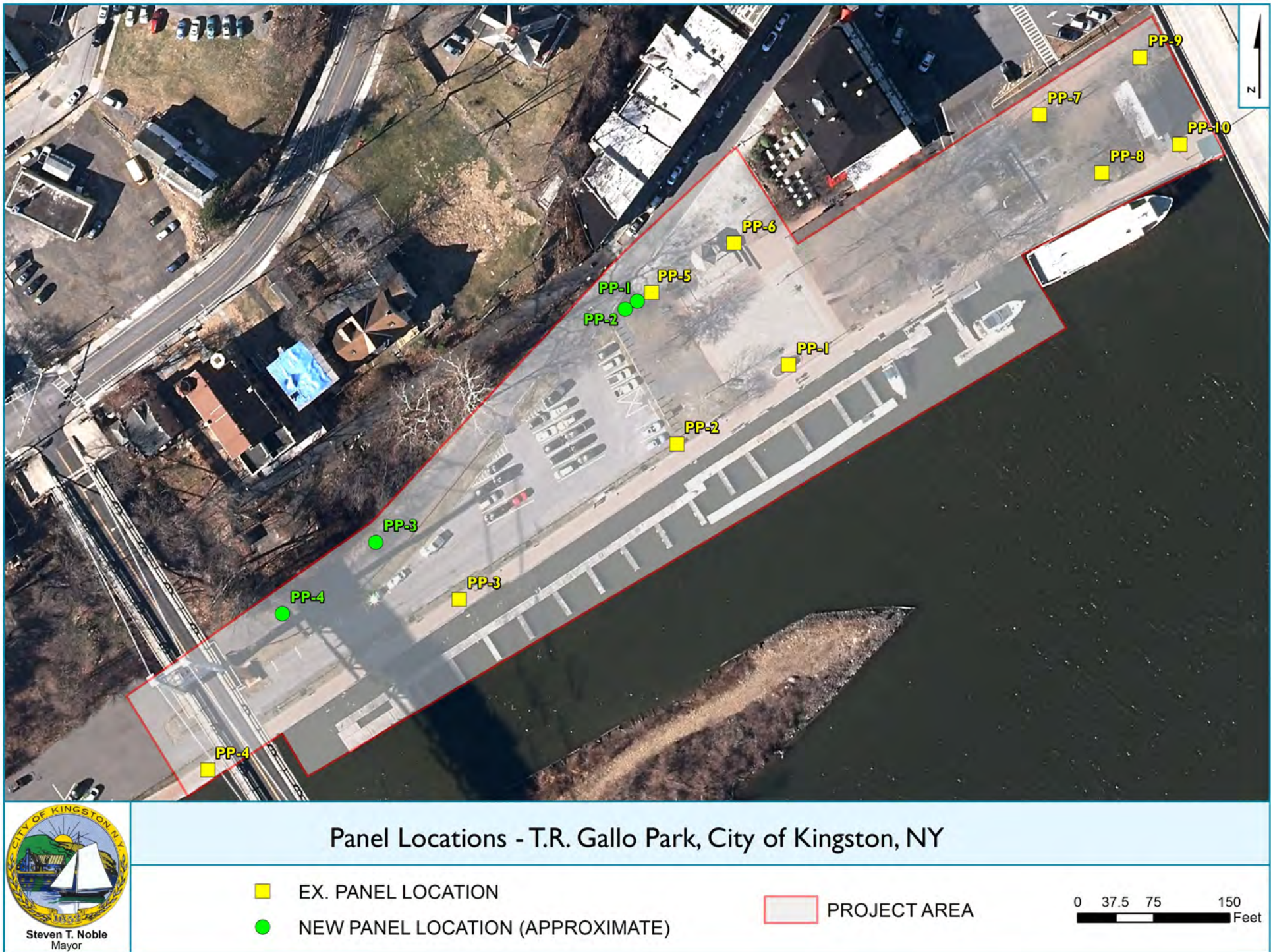


## TR Gallo Park Electrical Repairs & Flood Mitigation Project

On October 27, 2012, Superstorm Sandy struck the City of Kingston with hurricane force winds. Storm surge flooded TR Gallo Park and the adjoining City Marina located on the Rondout Creek just upstream of its connection with the Hudson River. The flooding broke the marina's electrical system and damaged three floating dock sections. Floodwaters and waves from Rondout Creek impacted the park during high tide. Flood height was estimated at 3 feet above ground throughout the park and the electrical systems were particularly damaged.

The project to restore TR Gallo Waterfront Park to its condition prior to Superstorm Sandy includes the replacement of electrical power distribution assets serving all areas of the park, including: the site ground receptacles, tree lighting receptacles, floating dock receptacles, 10 power panels, and 4 associated junction boxes. The electrical power distribution panels, junction boxes, and conduit require upgrades to meet current NEC, NFPA, and IETA / NETA codes and standards with respect to exterior enclosures and mounting heights.

The proposed project consists of the relocation of Power Panels #1 through #4, site ground receptacles, and tree lighting units to an elevation of 3 feet above the 100 year flood elevation (11 AMSL).



*The utilities, represented by yellow squares, will be moved to where the green circles are.*

TR GALLO PARK ELECTRIC AND DOCK IMPROVEMENTS - REPLACEMENT COST SUMMARY  
CITY OF KINGSTON, NY  
OCT. 11, 2019

**Tighe&Bond**  
Engineers | Environmental Specialists  
SERVICES PROVIDED IN NEW YORK BY T&B ENGINEERING, P.C.

Item No.	Item Description	QTY	Units	2013 Recover Unit Cost	2013 Mitigation Unit Cost	City Adj. Factor	2013 Recovery	2013 Mitigation	2019 Cost
1	Power Panel No. 1	1.00	ST	\$ 7,900.00	\$ 35,800.00	1.27	\$ 10,033.00	\$ 45,466.00	\$ 25,175.00
2	Power Panel No. 1 Junction Box	1.00	ST	\$ 1,150.00	\$ -	1.27	\$ 1,460.50	\$ -	\$ 4,550.00
3	Power Panel No. 2	1.00	ST	\$ 7,000.00	\$ 33,500.00	1.27	\$ 8,890.00	\$ 42,545.00	\$ 23,675.00
4	Power Panel No. 2 Junction Box	1.00	ST	\$ 3,700.00	\$ -	1.27	\$ 4,699.00	\$ -	\$ 21,850.00
5	Power Panel No. 3	1.00	ST	\$ 6,500.00	\$ 38,200.00	1.27	\$ 8,255.00	\$ 48,514.00	\$ 20,675.00
6	Power Panel No. 3 Junction Box	1.00	ST	\$ 1,750.00	\$ -	1.27	\$ 2,222.50	\$ -	\$ 4,550.00
7	Power Panel No. 4	1.00	ST	\$ 5,500.00	\$ 21,400.00	1.27	\$ 6,985.00	\$ 27,178.00	\$ 15,800.00
8	Power Panel No. 4 Junction Box	1.00	ST	\$ 1,150.00	\$ -	1.27	\$ 1,460.50	\$ -	\$ 4,550.00
9	Floating Dock Receptacles and Lights	1.00	ST	\$ 13,800.00	\$ -	1.27	\$ 17,526.00	\$ -	\$ 81,250.00
10	Power Panel No. 5	1.00	ST	\$ 6,500.00	\$ -	1.27	\$ 8,255.00	\$ -	\$ 25,275.00
11	Power Panel No. 6	1.00	ST	\$ 5,100.00	\$ -	1.27	\$ 6,477.00	\$ -	\$ 23,175.00
12	Site Ground Receptacles	1.00	ST	\$ 6,400.00	\$ 2,800.00	1.27	\$ 8,128.00	\$ 3,556.00	\$ 3,500.00
13	Tree Lighting Units	1.00	ST	\$ 400.00	\$ 600.00	1.27	\$ 508.00	\$ 762.00	\$ 7,820.00
14	Power Panel No. (Gazebo)	1.00	ST	\$ 500.00	\$ -	1.27	\$ 635.00	\$ -	\$ 20,475.00
15	Power Panel No. (7)	1.00	ST	\$ 500.00	\$ -	1.27	\$ 635.00	\$ -	\$ 30,175.00
16	Power Panel No. (8)	1.00	ST	\$ 500.00	\$ -	1.27	\$ 635.00	\$ -	\$ 29,475.00
17	Power Panel No. (9)	1.00	ST	\$ 500.00	\$ -	1.27	\$ 635.00	\$ -	\$ 17,800.00
18	Bar Screen Panel (pp10-building)	1.00	ST	\$ 500.00	\$ -	1.27	\$ 635.00	\$ -	\$ 26,325.00
19	Docks (pp10-shed)	1.00	ST	\$ 18,000.00	\$ -	1.27	\$ 22,860.00	\$ -	\$ 19,375.00
Total							\$ 110,934.50	\$ 168,021.00	\$ 405,470.00

2013 ARCADIS Subtotal	\$ 278,955.50
2019 Tighe & Bond Subtotal	\$ 405,470.00
Cost Difference (+)	\$ 126,514.50

Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



FEMA



Homeland Security  
and Emergency Services