

***Dredging and Pile Driving Monitoring Plan***  
**Sturgeon Monitoring During Pile Driving**  
**60-day Report**  
**10/19/2013 – 12/19/2013**  
*for the*  
**New NY Bridge Project**

**December 20, 2013**

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**TABLE OF CONTENTS**

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
<b>2.0</b>	<b>Monitoring Methods .....</b>	<b>1</b>
<b>3.0</b>	<b>Results .....</b>	<b>1</b>

**FIGURES**

**Figure 1. Typical Pile Driving Monitoring Transects**

**APPENDICES**

**Appendix A: Summary of Pile Driving Sturgeon Monitoring Activities**

## **1.0 Introduction**

This report summarizes the methods and results of daily sturgeon monitoring occurring during permanent pile driving [REDACTED] piles for the period of October 19, 2013 to December 18, 2013. Sturgeon monitoring was conducted per the Dredging and Pile Driving Monitoring Plan (Revision 2) for the New NY Bridge Project (the Project). This plan was developed to comply applicable requirements of the New York State Department of Environmental Conservation (NYSDEC) Permit DEC ID 3-9903-00043/00012 issued on March 25, 2013 (NYSDEC Permit) and the April 2013 Endangered Species Act Section 7 Consultation Biological Opinion (BO) issued by the National Marine Fisheries Service (NMFS).

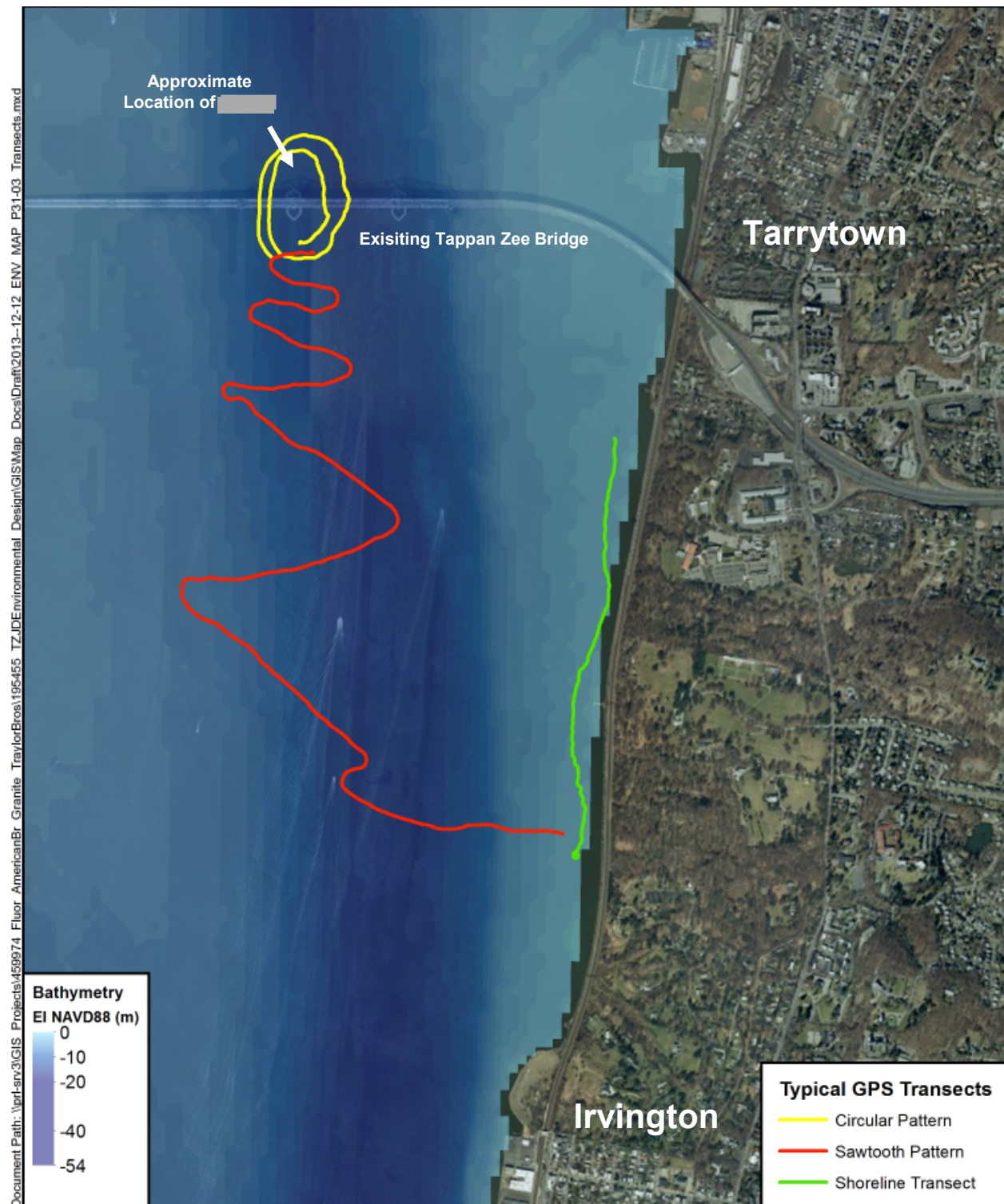
## **2.0 Monitoring Methods**

Tappan Zee Constructors, LLC (TZC) conducted pile driving monitoring during impact driving of permanent [REDACTED] from a small boat and the pile driving barge. Figure 1 provides an example of typical GPS transects completed by the vessel-based monitoring crew while monitoring impact pile driving operations at [REDACTED]. This pile was driven during an ebb current and northwest winds. Based on these river conditions the monitors completed two circular patterns, a sawtooth pattern south of the bridge, and monitored the eastern shoreline south of the bridge. Following the shoreline transect the monitoring crew returned to [REDACTED] to complete circle transects of the next pile about to be driven.

## **3.0 Results**

A total of [REDACTED] piles were impact driven from October 19, 2013 through December 18, 2013. [REDACTED] piles were installed at [REDACTED] and [REDACTED] piles were installed at [REDACTED]. Monitoring activities and results for these pile are summarized in Appendix A. A barge-based monitor was on site for all piles driven during the reporting period. A vessel-based monitor was on site for [REDACTED] piles driven during the reporting period. Pile [REDACTED] was driven during a small craft advisory on November 8, 2013 between 14:13 and 15:19. If a small craft advisory is in effect for future impact pile driving activities, the vessel-based monitors will be transitioned to a vessel that is capable of operating in high wind conditions (i.e. up to 30 mph). Pile [REDACTED] was driven after sunset on November 26, 2013 between 16:33 and 17:28. Pile [REDACTED] was driven after sunset on December 5, 2013 between 17:10 and 18:10.

During the reporting period zero (0) sturgeon were observed (Appendix A). On November 7, 2013 a white perch was observed south of the bridge by the vessel-based monitoring crew (Appendix A). On November 30, 2013 a striped bass was observed south of the bridge by the vessel-based monitoring crew (Appendix A).



**Figure 1.**  
**Typical Pile Driving Monitoring Transects**



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## **APPENDIX A**

### **Summary of Pile Driving Sturgeon Monitoring Activities**

## Appendix A: Summary of Impact Pile Driving Sturgeon Monitoring Activities

### TAPPAN ZEE CONSTRUCTORS, LLC

Report Date: 12/20/2013  
 Reporting Period: 10/19/2013 - 12/19/2013  
 Number of Sturgeon Observed: 0

Created by: C. Coccaro, December 20, 2013  
 Checked by: D. Henshaw, December 20, 2013

Date		Barge-Based Monitoring Time	Vessel-Based Monitoring Time	Number of Fish Observed	Fish Observed			
					Species	Sturgeon Specimen Log Number	Condition (stunned / dead)	Time Observed
10/19/2013		12:04 - 16:25	12:02 - 16:51	0	NA	NA	NA	NA
11/7/2013		14:27 - 16:57	14:26 - 16:57	1	White Perch	NA	Injured	14:56-15:53
11/8/2013		11:55 - 15:19	11:47 - 13:44	0	NA	NA	NA	NA
11/12/2013		10:45 - 16:42	10:45 - 16:42	0	NA	NA	NA	NA
11/13/2013		12:50 - 16:41	12:50 - 16:41	0	NA	NA	NA	NA
11/26/2013		13:46 - 16:18	13:45 - 16:18	0	NA	NA	NA	NA
11/29/2013		12:30 - 16:25	12:29 - 16:25	0	NA	NA	NA	NA
11/30/2013		12:14 - 14:39	12:23 - 15:10	1	Striped Bass	NA	Dead	12:23-13:02
12/2/2013		8:48 - 16:21	8:48 - 16:27	0	NA	NA	NA	NA
12/5/2013		NA	NA	NA	NA	NA	NA	NA
12/6/2013		10:39 - 14:45	10:39 - 13:00	0	NA	NA	NA	NA
12/7/2013		12:00 - 16:26	12:00 - 16:26	0	NA	NA	NA	NA

Notes: <sup>a</sup> Small craft advisory

<sup>b</sup> Pile driven after sunset