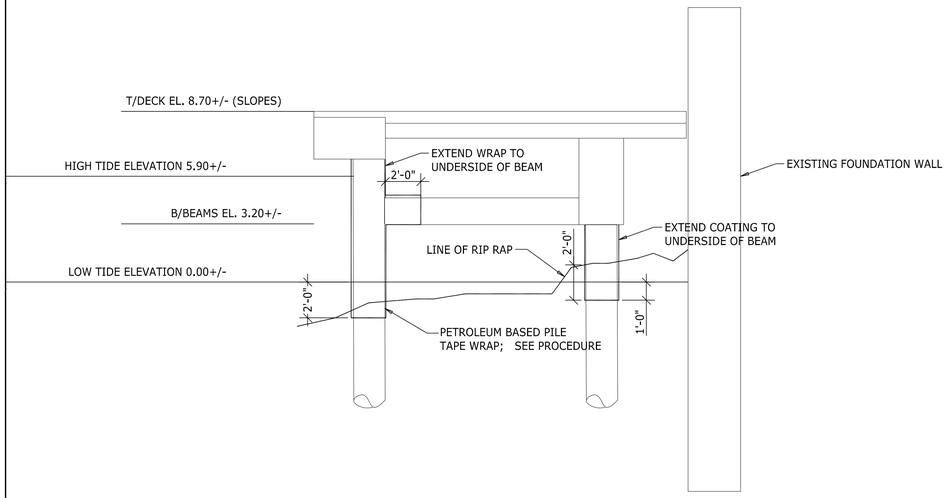


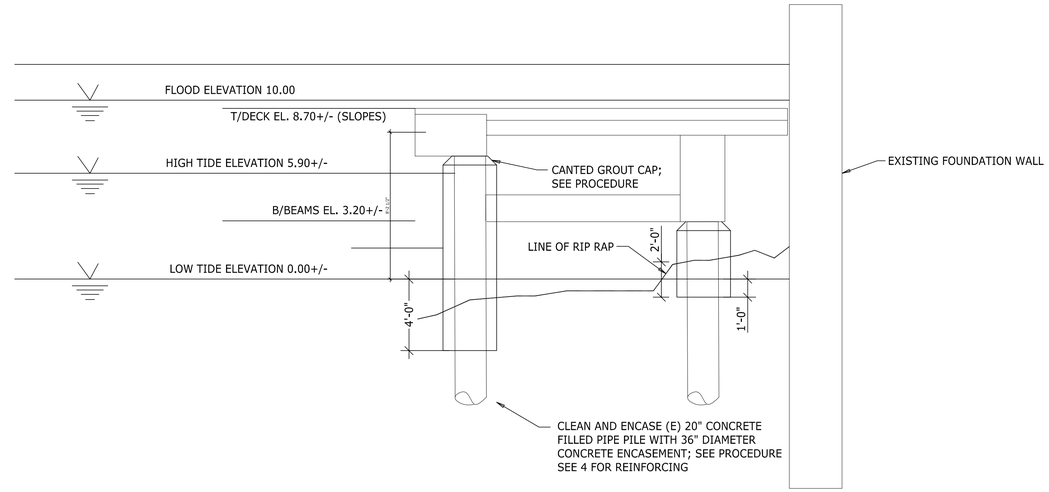
1 PILE REPAIR TYPE 1

1/4"=1'-0"

PROCEDURE:
1. EXPOSE PILE TO LENGTH INDICATED.
2. CLEAN OFF ALL DEBRIS USING SSPC SP3 POWER TOOL CLEANING
3. APPLY PETROLEUM BASED PILING TAPE TO LENGTH OF PILE.
4. TAPE SPECIFICATIONS:
   a. MEETS NACE RE0375-2006
   b. MIN. THICKNESS = 51 MILS (ASTM D1000)
   c. MIN. BREAKING STRENGTH = 22.5 lbf/in. (ASTM E96-66 PROCEDURE A)
   d. ELONGATION AT BREAK = 10%
   e. RESISTANCE TO CATHODIC DISBONDING = 28 in2 avg. (ASTM G-8 - 30 DAYS)
   f. PETROLATUM INPREGNATED FABRIC TAPE WITH HIGH DENSITY POLYETHYLENE FILM COVER.
5. PROVIDE SUBMITTAL OF TAPE FOR APPROVAL.
6. APPLY TAPE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

CONTRACTOR QUALIFICATIONS:

1. MUST HAVE 10 YEARS MIN. EXPERIENCE
2. PROVIDE A LIST OF 5 SIMILAR PROJECTS.
3. MUST HAVE EXPERIENCE IN PUBLIC WORKS PROJECTS. PROVIDE A LIST OF PROJECTS.
4. MUST CARRY INSURANCE TO THE AMOUNT SPECIFIED BY OWNER.
5. OWNER HAS A RIGHT TO SELECT BIDDER BASED ON EXPERIENCE.



2 PILE REPAIR TYPE 2

1/4"=1'-0"

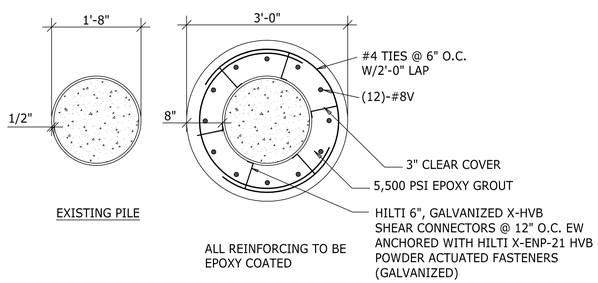
PROCEDURE:
1. EXPOSE PILE TO LENGTH INDICATED.
2. CLEAN OFF ALL DEBRIS USING HIGH PRESSURE WATER (3,500-4,000 PSI)
3. APPLY HDPE JACKET WITH THE FOLLOWING SPECIFICATIONS:

HDPE (high density polyethylene)	
Thickness:	80 mils min. (ASTM D5199)
Tensile strength at break:	324 lb/in–width (ASTM D638)
Elongation at break:	700% (ASTM D6693)
Puncture Resistance:	158 lb (ASTM D4833)
Tear Resistance:	56 lb (ASTM D1004)
Carbon black content:	≥2% (ASTM D1603)
UV Resistance	50 (ASTM D 7238)

3. PLACE BACKER ROD OR SIMILAR AT BASE TO PROVIDE DAM FOR GROUT POUR
4. PROVIDE 4" BASE SET OF EPOXY GROUT.
5. EPOXY GROUT TO MEET THE FOLLOWING SPECIFICATIONS CONFORMING TO ASTM C-881 AND AASHTO M-235:
   a. SIKA SIKADUR 35 HI MOD LPL MODIFIED WITH SAND
5. PROVIDE SUBMITTAL FOR APPROVAL.
6. EPOXY GROUT TO BE PUMPED FROM BOTTOM OF JACKET.
7. AFTER EPOXY GROUT HAS CURED, PROVIDE CANTED NON-SHRINK GROUT AT TOP.

PILE NUMBER	REPAIR TYPE	REPAIR LENGTH (FEET)	REPAIR DETAIL	COMMENTS
1	COATING	6	1	
2	COATING	3	1	
3	COATING	3	1	
4	COATING	8	1	
5	COATING	5	1	
6	COATING	8	1	
7	CONCRETE ENCASEMENT	9	2	
8	COATING	8	1	
9	COATING	5	1	
10	COATING	8	1	
11	COATING	5	1	
12	CONCRETE ENCASEMENT	10	2	
13	COATING	5	1	
14	COATING	3	1	PROTECT TO CONCRETE AT BASE
15	COATING	5	1	
16	COATING	3	1	
17	COATING	6	1	
18	CONCRETE ENCASEMENT	8	2	
19	CONCRETE ENCASEMENT	8	2	
20	COATING	3	1	

3 PILE REPAIR SCHEDULE



4 PILE REPAIR TYPE 2

3/4"=1'-0"

PILE PLANS

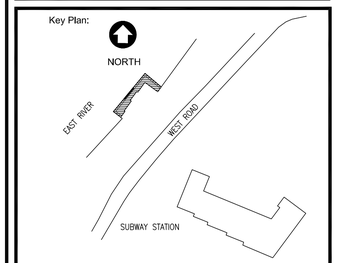
2025.08.04 - ISSUED FOR BID

RIOC
ROOSEVELT ISLAND OPERATING CORPORATION

STRUCTURAL ENGINEER
IMEG
The FUTURE. Built Smarter www.imegcorp.com
1411 BROADWAY
SUITE 610
NEW YORK, NEW YORK 10018

NO.	DESCRIPTION	DATE	CHECKED	DRAWN

Key Plan:



Block # Lot #

PROJECT TITLE:

ELEANOR'S PIER REHABILITATION
W ROAD, NEW YORK, NY

DRAWING TITLE:

PILE REPAIR DETAILS

DATE	08/04/2025
SCALE	AS NOTED
JOB NO.	25003964.00
DRAWN	CHECKED
DOB #	

DRAWING NUMBER
S-102.00

SHEET NO. 3 OF 3