Charleston Seawall Repairs:
The Low battery Seawall Rehabilitation Project

Appendix C
PHOTOGRAPH: 1

Photo Taken: 06-24-15

LOCATION:

Face of Seawall at location near Sta. 1+00 (TP-1)

COMMENTS:

Note different concrete color, potentially indicating different construction period, or a recent repair. Joint is displaced about 2 inches. Wall is curved in this area.

PHOTOGRAPH: 2

Photo Taken: 06-24-15

LOCATION:

Approx. Sta. 0+91 (TP-1)

COMMENTS:

Excavation of TP-1. The exposed seawall did not match the existing drawings geometry.
PHOTOGRAPH: 3
Photo Taken: 06-24-15

LOCATION:
Approx. Sta. 0+91 (TP-1)

COMMENTS:
Core taken from a 12-inch reinforced slab on grade floating on top of the seawall with no apparent connection or purpose.

PHOTOGRAPH: 4
Photo Taken: 06-25-15

LOCATION:
Face of seawall looking west near the steps

COMMENTS:
PHOTOGRAPH: 5
Photo Taken: 06-25-15

LOCATION:
Face of seawall looking east near the steps

COMMENTS:

PHOTOGRAPH: 6
Photo Taken: 06-25-15

LOCATION:
Rectangular drain at the face of the seawall near the steps

COMMENTS:
Drain section appears to be half full with sediments and shells. The geometry of this drain correlates very well with existing drawings.
PHOTOGRAPH: 7
Photo Taken: 06-25-15

LOCATION:
Face of Seawall near King Street

COMMENTS:
Note different concrete deterioration and railing pedestal type, potentially indicating different construction period. Right (East) Seawall constructed from 1909 to 1911. Left (West) Seawall constructed from 1917 to 1919.

PHOTOGRAPH: 8
Photo Taken: 06-25-15

LOCATION:
Face of Seawall near King Street, Phase I of Construction (1909-1911)

COMMENTS:
Note concrete seal overpour.
PHOTOGRAPH: 9
Photo Taken: 06-25-15
LOCATION:
Face of Seawall near King Street

COMMENTS:
Note horizontal opening on concrete face. Hammer blows on top portion sounded as solid concrete. Hammer blows on lower portion sounded hollow. Crack location is approximately half way between water stain for MHW water table and low tide during observation. This correlates very well with location of seawall joint with concrete veil.

PHOTOGRAPH: 10
Photo Taken: 06-25-15
LOCATION:
Face of Seawall near King Street

COMMENTS:
Close up of horizontal crack. Probe hit something slightly softer than concrete after approximately 1 foot of penetration into crack. Concrete thickness below crack appears to be 6 inches thick. Recommended to core a concrete sample below the crack.
PHOTOGRAPH: 11
Photo Taken: 06-25-15

LOCATION:
Face of Seawall near King Street

COMMENTS:
Concrete core below horizontal crack on Seawall face. The concrete core is 6-inch thick and wood was attached to the backs side of the core. This is potentially a confirmation that the crack is actually the joint between the mass seawall concrete and the concrete veil with timber sheeting behind.

PHOTOGRAPH: 12
Photo Taken: 06-25-15

LOCATION:
Face of Seawall near Sta. 4+79 (TP-2) looking east.

COMMENTS:
Note approximately 12-inch diameter steel pipe running horizontally at the base of the wall.
PHOTOGRAPH: 13
Photo Taken: 06-25-15
LOCATION:
Face of Seawall near Sta. 4+79 (TP-2) looking west.

COMMENTS:
Note approximately 12-inch diameter steel pipe running horizontally at the base of the wall.

PHOTOGRAPH: 14
Photo Taken: 06-25-15
LOCATION:
Exposed Seawall at Sta. 4+79 (TP-2).

COMMENTS:
Note stepping resembling the geometry indicated on the existing drawings, and the timber platform supporting the mass concrete seawall. Core was taken from the lower seawall step, and wood samples were taken from the timber platform and exposed pile below.
PHOTOGRAPH: 15
Photo Taken: 06-25-15

LOCATION:
Exposed timber tie beam and pile at Sta. 4+79 (TP-2).

COMMENTS:
Note 12 inch high timber tie beam below timber platform. The timber pile is located behind the beam.

PHOTOGRAPH: 16
Photo Taken: 06-25-15

LOCATION:
Concrete core sample of the lower seawall step at Sta. 4+79 (TP-2).

COMMENTS:
Corehole 2’-3” high divided in two pieces. Rest of timber platform was found attached to the bottom of the core.