

YELLOW - Highlighted items are complete as of November 20, 2010

GREEN – Highlighted items are currently under construction

## **Section 1    A-Pier                                  Slip A-000 to A-022 – 161 linear feet**

### Existing

- Timber seawall thru mudline
- Pilings every 6' OC – outside of timber seawall

### Proposed

- X-Braces under pier on every set of pilings – approx. every 6'
- Vinyl thru mudline as existing timber
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 32 )

## **Section 2                                  A-Pier                                  Slip A-024 to A-040 – 200 linear feet**

### Existing

- Timber seawall thru mudline

### Proposed

- New X-Braces under pier on every set of pilings – approx. every 6'
- New Vinyl thru mudline as existing timber
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- New Pilings every 6' OC – outside of timber seawall
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 30 )

### **Section 3            A-Pier                    Slip A-042 to A-062 – 195 linear feet**

#### Existing

- Outer breakwater timber panels ending 1'-3' from mudline (see Underwater Insp. Report 5-26-10)
- Timber seawall thru mudline – saw cut 1' below MLW

#### Proposed

- Remove and replace outer breakwater timber panels as existing with Vinyl
- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter pile every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl –as skirt 1' below MLW (as existing)
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- New Pilings every 6' OC – outside of timber seawall
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 17 )

### **Section 4            A-Pier                    Slip A-064 to A-072 – 75 linear feet**

#### Existing

- Outer breakwater timber panels ending 3'-4' above mudline (Underwater Insp. Report 5-26-10)
- Timber seawall ( skirt ) ending 1' below MLW - timber below cut remains thru mudline

#### Proposed

- Remove and replace outer breakwater timber panels as existing
- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter pile every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl thru mudline
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- New Pilings every 6' OC – outside of timber seawall
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 1 )

## **Section 5            A-Pier            Slip A-074 to A-106 – 336 linear feet**

### Existing

- Outer breakwater timber panels ending 4'-5' from mudline at slip A-72 to 8'-9' from mudline at slip A-106 (see Underwater Insp. Report 5-26-10)
- Timber seawall ( skirt ) ending 1' below MLW

### Proposed

- Brace existing outer breakwater panels to A-Pier with 6"X6" bracing – 2 per panel
- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter pile every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl skirt ending 1' below MLW as existing
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 18 )

## **Section 6            A-Pier            T-Head – 69 linear feet**

### Existing

- Outer breakwater timber panels ending 7'-8' from mudline (numerous boards missing) (see Underwater Insp. Report 5-26-10)
- Timber seawall ( skirt ) ending 8' or greater below MLW

### Proposed

- Remove and replace outer breakwater timber panels as existing
- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter pile every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl ending 4' from mudline
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 12 )

## **Section 7**

### **B-Pier**

### **Fuel Dock Face – 226 linear feet**

#### Existing

- Submerged barge under fuel pier – timbers to mudline surrounding Barge  
(see Underwater Insp. Report 5-26-10)
- Pilings every 6' OC on fuel dock perimeter  
South end – breakwater panels under pier ending at mudline or 2' from mudline  
(see Underwater Insp. Report 5-26-10)

#### Proposed

##### South End of B-dock - Approx. 130 feet

- New Vinyl ending 4' from mudline
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed

##### North End of B-Dock (Fuel Dock) – Approx. 96 feet

- New Vinyl thru mudline channelward ( protect submerged barge )
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace stringers and decking as needed

## **Section 8**

### **C-Pier**

### **T-Head – 83 linear feet**

No work at this time

## Section 9 D-Pier

## T-Head - 77 linear feet

### Existing

- Outer breakwater timber panels ending 2' from mudline (see Underwater Insp. Report 5-26-10)
- Timber seawall ( skirt ) ending MLW at North End
- Timber seawall ( skirt ) ending 2' below MLW in center of T-Head

### Proposed

- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter pile every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl ending 4' from mudline
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace stringers and decking as needed
- Replace vertical piles in kind under pier as needed ( approx. 18 )

## Section 10

## E-Pier

## T-Head – 66 linear feet

### Existing

- Outer breakwater timber panels ending 2' from mudline (see Underwater Insp. Report 5-26-10)
- Timber seawall ( skirt ) ending 2' below MLW (see Underwater Insp. Report 5-26-10)

### Proposed

- New X-Braces under pier on every set of pilings – approx. every 6'
- New Batter piles every other set of vertical piles under pier secured to New 8"X8" Waler
- New Vinyl ending 4' from mudline
- New 6"X6" walers – upper and lower with 4"X6" outer waler ( sandwiching Vinyl )
- Replace existing pilings under the pier ( approx. 2 )
- Replace stringers and decking as needed

## Future Work included in permit but not included in current MPP

## B, C ,D and E-Piers

- **Proposed items not in designated sections above**
- **No Change in foot print**
- B, C, D and E-piers      Maintenance and Repair In Kind
- New X-Braces under pier on every set of pilings – approx. every 6' from T-Head to land
- Replace in kind Vert. Pilings under piers
- Replace in kind tie and mid-piles
- Repair Existing Finger Piers