

APPENDIX 9B

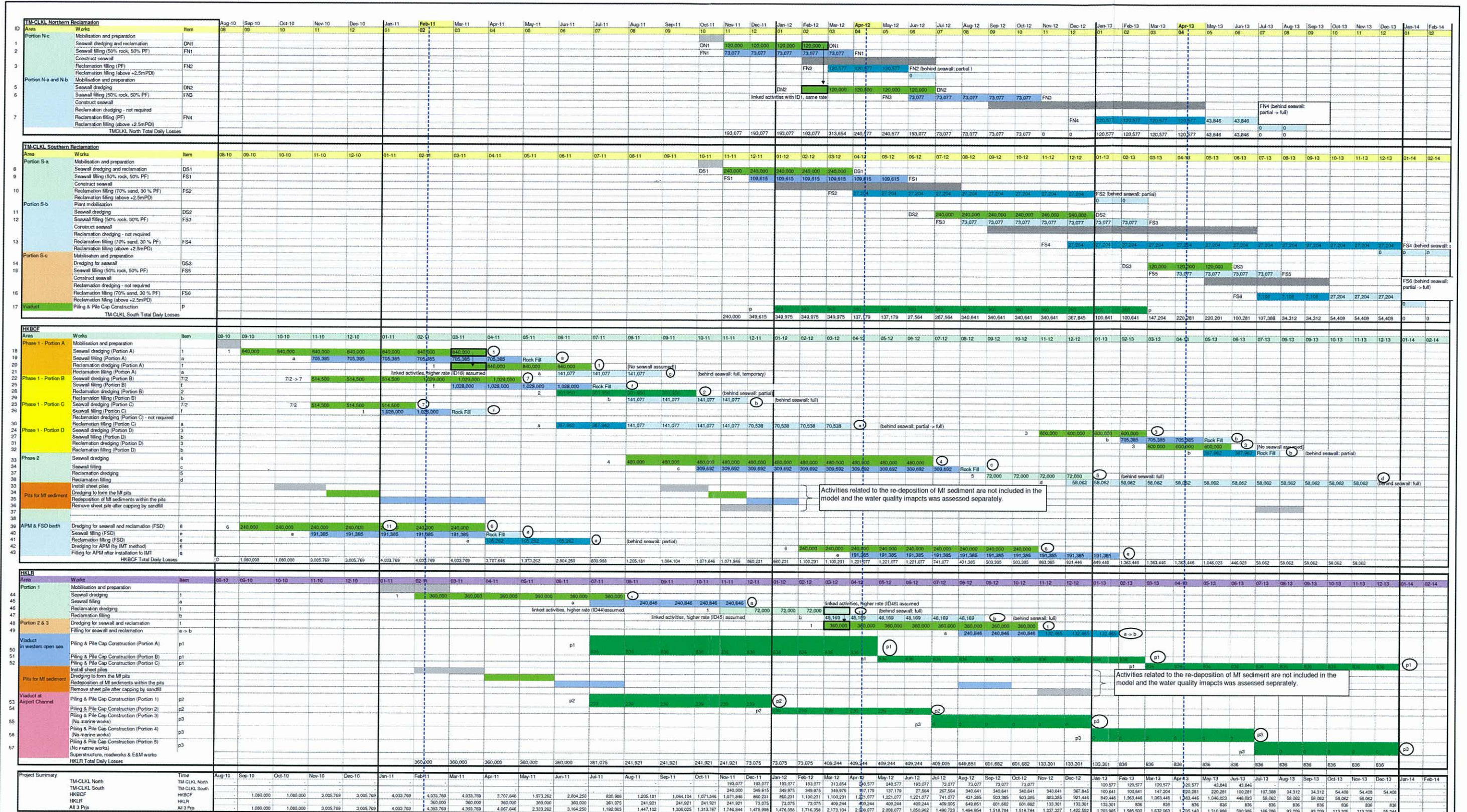
**Comparison of
Sediment Loss Rate of
Sequence A and
Sequence B**

HKBCF Sediment Loss Rates - No Mitigation (Sequence A)

| Work Item | Plant | No. of Plant | Daily Work Time (Hr) | Daily Work Time (min) ** | Working Rate: per Grab or TSHD (m3/day) or per Barge (per trip) | Loss Rate (kg/m3) | Reduction Due to Seawalls | Reduction Due to Silt Curtain | Combined Mitigation Reduction | Sediment Losses (kg/s) per grab, TSHD or barge | No. of events per grab/barge per day | Total Losses (kg/day) all plant | Material Given | Material Assumed |
|-----------------|---|--------------|----------------------|--------------------------|---|-------------------|---------------------------|-------------------------------|-------------------------------|--|--------------------------------------|---------------------------------|----------------|------------------|
| Dredging | | | | | | | | | | | | | | |
| (1) | grab dredger | 7 | 16 | 960 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | - | 840,000 | - | - |
| (1) | grab dredger (behind partial seawall) | 7 | 16 | 960 | 6,000 | 20 | 45% | 0% | 45% | 1.15 | - | 462,000 | - | - |
| (2) | TSHD (9,000m3) (behind partial seawall) | 1 | 24 | 60 | 27,000 | 7 | 45% | 0% | 45% | 9.6 | 3 | 103,950 | - | - |
| (2) | grab dredger (behind partial seawall) | 3 | 16 | 960 | 6,000 | 20 | 45% | 0% | 45% | 1.15 | - | 198,000 | - | - |
| (7) | TSHD (9,000m3) | 1 | 24 | 60 | 27,000 | 7 | 0% | 0% | 0% | 17.5 | 3 | 189,000 | - | - |
| (7) | grab dredger | 7 | 16 | 960 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | - | 840,000 | - | - |
| (3) | grab dredger | 5 | 16 | 960 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | - | 600,000 | - | - |
| (3) | grab dredger (behind partial seawall) | 5 | 16 | 960 | 6,000 | 20 | 45% | 0% | 45% | 1.15 | - | 330,000 | - | - |
| (4) | grab dredger | 4 | 16 | 960 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | - | 480,000 | - | - |
| (5) | grab dredger (behind full seawall) | 3 | 16 | 960 | 6,000 | 20 | 80% | 0% | 80% | 0.42 | - | 72,000 | - | - |
| (6) | grab dredger | 2 | 16 | 960 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | - | 240,000 | - | - |
| (8) | grab dredger (11 m3) | 6 | 24 | 1440 | 11,250 | 20 | 0% | 0% | 0% | 2.60 | - | 1,350,000 | - | - |
| Filling | | | | | | | | | | | | | | |
| (a) | filling barge | 44 | 16 | 32.27 | 769 | | 0% | 0% | 0% | 20.19 | 2 | 705,385 | PF / Sand | |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 511,538 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 193,846 | Sand | Sand |
| (a) | filling barge (behind partial seawall) | 44 | 16 | 32.27 | 769 | | 45% | 0% | 45% | 11.11 | 2 | 387,962 | PF / Sand | 0 |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 45% | 0% | 45% | 33.49 | 2 | 281,346 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 45% | 0% | 45% | 0.66 | 2 | 108,615 | Sand | Sand |
| (a) | filling barge (behind full seawall) | 44 | 16 | 32.27 | 769 | | 80% | 0% | 80% | 4.04 | 2 | 141,077 | PF / Sand | 0 |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 102,308 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 38,769 | Sand | Sand |
| (b) | filling barge | 44 | 16 | 32.27 | 769 | | 0% | 0% | 0% | 20.19 | 2 | 705,385 | PF / Sand | 0 |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 511,538 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 193,846 | Sand | Sand |
| (b) | filling barge (behind partial seawall) | 44 | 16 | 32.27 | 769 | | 45% | 0% | 45% | 11.11 | 2 | 387,962 | PF / Sand | 0 |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 45% | 0% | 45% | 33.49 | 2 | 281,346 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 45% | 0% | 45% | 0.66 | 2 | 108,615 | Sand | Sand |
| (b) | filling barge (behind full seawall) | 44 | 16 | 32.27 | 769 | | 80% | 0% | 80% | 4.04 | 2 | 141,077 | PF / Sand | 0 |
| | dump barge | 14 | 16 | 5 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 102,308 | PF | PF |
| | pelican barge | 30 | 16 | 45 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 38,769 | Sand | Sand |
| (f) | filling barge | 66 | 16 | 32.88 | 769 | | 0% | 0% | 0% | 19.29 | 2 | 1,028,000 | PF / Sand | 0 |
| | dump barge | 20 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 730,769 | PF | PF |
| | pelican barge | 46 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 297,231 | Sand | Sand |
| (c) | filling barge | 20 | 16 | 33.00 | 769 | | 0% | 0% | 0% | 19.11 | 2 | 309,692 | PF / Sand | 0 |
| | dump barge | 6 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 219,231 | PF | PF |
| | pelican barge | 14 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 96,462 | Sand | Sand |
| (c) | filling barge (behind full seawall) | 20 | 16 | 33.00 | 769 | | 80% | 0% | 80% | 3.82 | 2 | 61,938 | PF / Sand | 0 |
| | dump barge | 6 | 16 | 5 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 43,846 | PF | PF |
| | pelican barge | 14 | 16 | 45 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 18,092 | Sand | Sand |
| (d) | filling barge (behind partial seawall) | 17 | 16 | 30.88 | 769 | | 80% | 0% | 80% | 4.45 | 2 | 58,062 | PF / Sand | 0 |
| | dump barge | 6 | 16 | 5 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 43,846 | PF | PF |
| | pelican barge | 11 | 16 | 45 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 14,215 | Sand | Sand |
| (e) | filling barge | 11 | 16 | 30.45 | 769 | | 0% | 0% | 0% | 22.91 | 2 | 191,385 | PF / Sand | 0 |
| | dump barge | 4 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 146,154 | PF | PF |
| | pelican barge | 7 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 45,231 | Sand | Sand |
| (e) | filling barge (behind partial seawall) | 11 | 16 | 30.45 | 769 | | 45% | 0% | 45% | 12.60 | 2 | 105,262 | PF / Sand | 0 |
| | dump barge | 4 | 16 | 5 | 769 | 5% of 25% fines | 45% | 0% | 45% | 33.49 | 2 | 80,395 | PF | PF |
| | pelican barge | 7 | 16 | 45 | 769 | 5% of 5% fines | 45% | 0% | 45% | 0.66 | 2 | 24,877 | Sand | Sand |
| (g) | TSHD (9,000m3) filling | 2 | 24 | 5 | 6,667 | 5% of 5% fines | 0% | 0% | 0% | 93.33 | 3 | 168,000 | Sand | Sand |
| (h) | filling barge | 36 | 16 | 32.78 | 769 | | 0% | 0% | 0% | 19.44 | 2 | 563,462 | PF / Sand | PF |
| | dump barge | 11 | 16 | 5 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 401,923 | PF | PF |
| | pelican barge | 25 | 16 | 45 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 191,538 | Sand | Sand |

Note All plants assume daily working for 16 hour, except TSHD in which 24 hour is assumed ** per event time for barge or TSHD
 Each pelican barge assumes unload in 45 minutes, each dump barge assumes unload in 5 minute.
 Partial Seawall = substantially completed seawall with 200m leading edge.
 Full Seawall = completed seawall with 50-100m opening gap for marine access.

Remark: For the details of the calculations of sediment loss rates for HKBCF (Sequence A or Sequence B), HKLR and TMCLKL, please refer to Appendices 9D5 and 9E.



| Project Summary | Time | Aug-10 | Sep-10 | Oct-10 | Nov-10 | Dec-10 | Jan-11 | Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 | Jul-11 | Aug-11 | Sep-11 | Oct-11 | Nov-11 | Dec-11 | Jan-12 | Feb-12 | Mar-12 | Apr-12 | May-12 | Jun-12 | Jul-12 | Aug-12 | Sep-12 | Oct-12 | Nov-12 | Dec-12 | Jan-13 | Feb-13 | Mar-13 | Apr-13 | May-13 | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | | | | |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| TM-CLKL North | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | 193,077 | |
| TM-CLKL South | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 | 240,000 |
| HKBCF | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | 1,080,000 | |
| HKLR | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | 360,000 | |
| All 3 Pys | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | 1,980,000 | |

HKBCF Sediment Loss Rates - No Mitigation (Sequence B)

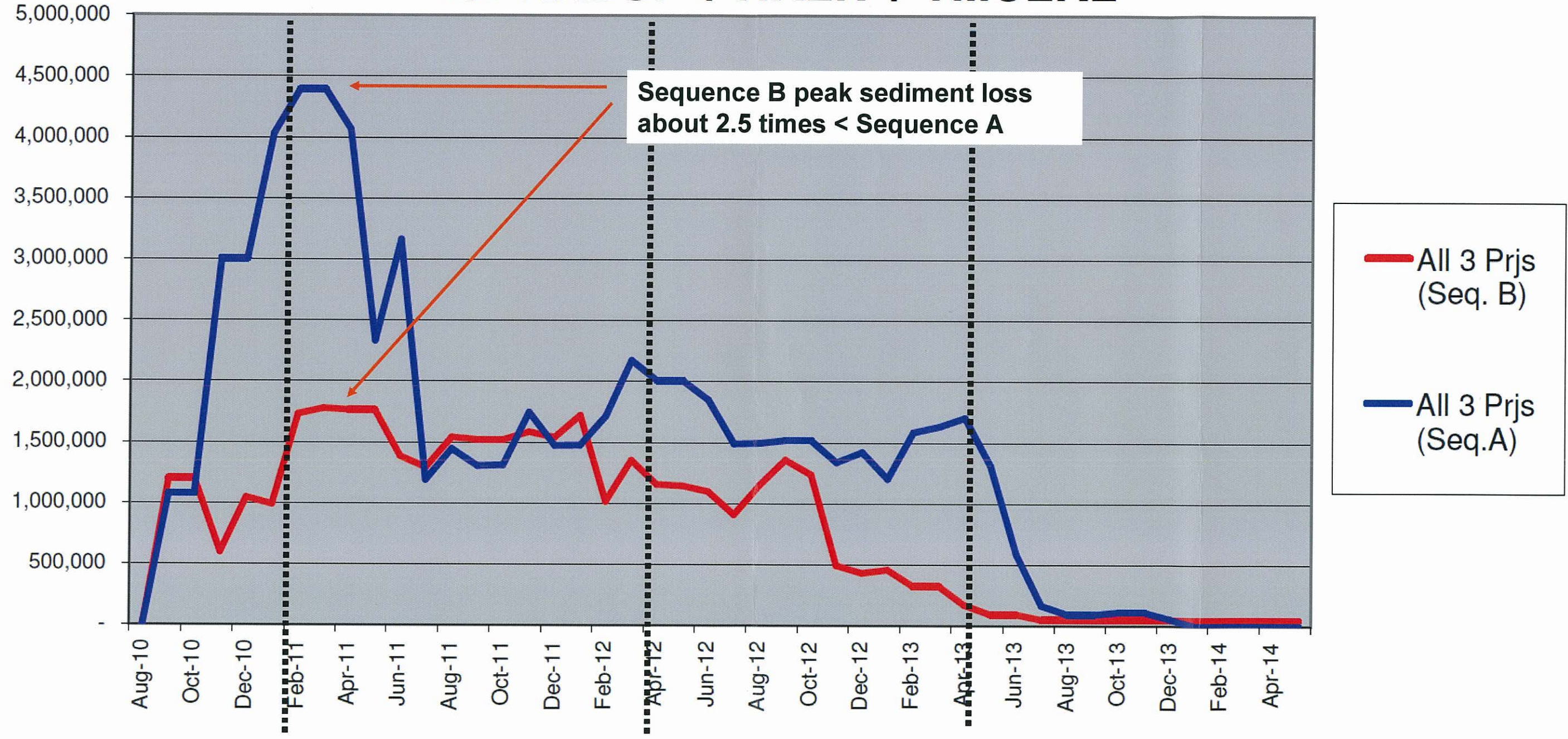
| Work Item | Plant | No. of Plant | Daily Work Time (Hr) | Working Rate: per Grab or TSHD (m3/day) or per Barge (per trip) | Loss Rate (kg/m3) | Reduction Due to Seawalls | Reduction Due to Silt Curtain | Combined Mitigation Reduction | Sediment Losses (kg/s) per grab, TSHD or barge | No. of events per grab/barge per day | Total Losses (kg/day) all plant | Material Given | Material Assumed |
|-----------------|-------------------------------------|--------------|----------------------|---|-------------------|---------------------------|-------------------------------|-------------------------------|--|--------------------------------------|---------------------------------|----------------|------------------|
| Dredging | | | | | | | | | | | | | |
| (8) | grab dredger (11 m3) | 9 | 16 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | | 1,080,000 | - | - |
| (9) | grab dredger (11 m3) | 6 | 16 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | | 720,000 | - | - |
| (10) | grab dredger (11 m3) | 2 | 16 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | | 240,000 | - | - |
| (11) | grab dredger (11 m3) | 1 | 16 | 6,000 | 20 | 0% | 0% | 0% | 2.08 | | 120,000 | - | - |
| Filling | | | | | | | | | | | | | |
| (A) | filling barge | 30 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 193,846 | Sand | Sand |
| | dump barge | 0 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 0 | PF | PF |
| | pelican barge | 30 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 193,846 | Sand | Sand |
| (B) | filling barge | 25 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 161,538 | Sand | Sand |
| | dump barge | 0 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 0 | PF | PF |
| | pelican barge | 25 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 161,538 | Sand | Sand |
| (C) | filling barge | 20 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 129,231 | Sand | Sand |
| | dump barge | 0 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 0 | PF | PF |
| | pelican barge | 20 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 129,231 | Sand | Sand |
| (D) | filling barge (behind full seawall) | 20 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 25,846 | Sand | Sand |
| | dump barge | 0 | 16 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 0 | PF | PF |
| | pelican barge | 20 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 25,846 | Sand | Sand |
| (E) | filling barge (not in programme) | 20 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 19.11 | 2 | 309,692 | | |
| | dump barge | 6 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 219,231 | PF | PF |
| | pelican barge | 14 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 90,462 | Sand | Sand |
| (F) | filling barge (behind full seawall) | 20 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 3.82 | 2 | 61,938 | | |
| | dump barge | 6 | 16 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 48,846 | PF | PF |
| | pelican barge | 14 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 18,092 | Sand | Sand |
| (L) | filling barge (behind full seawall) | 30 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 3.82 | 2 | 92,908 | | |
| | dump barge | 9 | 16 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 65,769 | PF | PF |
| | pelican barge | 21 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 27,138 | Sand | Sand |
| (H) | filling barge (behind full seawall) | 40 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 3.82 | 2 | 123,877 | | |
| | dump barge | 12 | 16 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 87,692 | PF | PF |
| | pelican barge | 28 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 36,185 | Sand | Sand |
| (I) | filling barge (behind full seawall) | 15 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 4.22 | 2 | 49,462 | | |
| | dump barge | 5 | 16 | 769 | 5% of 25% fines | 80% | 0% | 80% | 12.18 | 2 | 36,538 | PF | PF |
| | pelican barge | 10 | 16 | 769 | 5% of 5% fines | 80% | 0% | 80% | 0.24 | 2 | 12,923 | Sand | Sand |
| (J) | filling barge | 10 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 64,615 | | |
| | dump barge | 0 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 0 | PF | PF |
| | pelican barge | 10 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 64,615 | Sand | Sand |
| (K) | filling barge | 10 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 19.11 | 2 | 154,846 | | |
| | dump barge | 3 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 109,615 | PF | PF |
| | pelican barge | 7 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 45,231 | Sand | Sand |
| (M) | filling barge | 5 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 25.08 | 2 | 92,462 | | |
| | dump barge | 2 | 16 | 769 | 5% of 25% fines | 0% | 0% | 0% | 60.90 | 2 | 73,077 | PF | PF |
| | pelican barge | 3 | 16 | 769 | 5% of 5% fines | 0% | 0% | 0% | 1.20 | 2 | 19,385 | Sand | Sand |

Note All plants assume daily working for 16 hour, except TSHD in which 24 hour is assumed ** per event time for barge or TSHD
 Each pelican barge assumes unload in 45 minutes, each dump barge assumes unload in 5 minute.
 Partial Seawall = substantially completed seawall with 200m leading edge.
 Full Seawall = completed seawall with 50-100m opening gap for marine access.

Remark: For the details of the calculations of sediment loss rates for HKBCF (Sequence A or Sequence B), HKLR and TMCLKL, please refer to Appendices 9D5 and 9E.

Unmitigated Sediment Loss Rates for HKBCF + HKLR + TMCLKL

Loss Rate (kg/day)



Unmitigated Sediment Loss Rates for HKBCF + TMCLKL(Southern Connection)

Loss Rate (kg/day)

