

Appendix M

Investigation Report for Exceedances

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

Investigation Report of Environmental Quality Exceedance(s)

Ref. No.: A141017_24TSP

| | |
|---|--|
| Date | 17 October 2014 |
| Time | -- |
| Monitoring Location | SR77 |
| Parameter | 24-Hr Total Suspended Particulate |
| Action / Limit Levels | Action Level: 170.3µg/m ³ Limit Level: 260µg/m ³ |
| Measured Level | 180.8µg/m ³ (Action level being exceeded) |
| Possible reason for the exceedance | <p><u>Construction Works of other Contracts</u></p> <p>Multiple construction works being undertaken by other Contractors have been observed within proximity of the High Volume Sampler (HVS) of the air quality monitoring station at SR77 (refer to the attached photos).</p> <p>Identified construction works including an excavation site (refer to the attached Photo 1); construction of a brick wall with a stockpile of sands (refer to the attached Photo 2) and excavation works under another contractor for Highway's Department (refer to attached Photo 3). These construction sites are located within a distance of about 20m from the SR77. Handling of spoils or concreting has also been observed as evidenced by an empty cement bag near the HVS (refer to the attached Photo 4). These operations may generate dust issues and would contribute to a higher TSP Level during sampling.</p> <p>Also, dusty materials may be disturbed by traffics and release fugitive dust during the sunny weather and such emission would contribute to a higher TSP Level (refer to attached Photo 5).</p> <p>Therefore, these construction works are anticipated to cause the elevated TSP levels as have been measured by our HVS.</p> <p><u>Construction Works of Entrusted Portion</u></p> <p>On the other hand, the construction works carried out for the Entrusted Portion during the monitoring period included backfilling works being carried out at northern side of the site and erection of noise barrier NB71, which were at a much farther distance from the air quality monitoring station at SR77 (refer to the attached location plan showing the works activities of the entrusted portion).</p> <p>In addition, proper mitigation measures for these construction works, including the use of water spraying and covering of exposed slopes where applicable, have been implemented and being monitored by an</p> |

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| | EM&A programme. No significant dust emission has been observed. <u>Conclusion</u> As such, the exceedance was unlikely due to the construction works of the project. |
| Action taken / to be taken | As the exceedance was non-project related, no further investigation and specific remedial measure(s) would be recommended for the Entrusted Works. Nevertheless, the following mitigation measures had been implemented on-site for dust suppression: 1. Exposed slopes near the river were covered with impervious sheets; 2. Any open stockpile of construction materials were covered with impervious sheet; and 3. Sufficient watering was applied along the haul road. |
| Remarks | - |

Photo 1: Excavation Site observed within proximity of SR77 (Red Circle) (Date: 17 October 2014)



Photo 2: Construction of a brick wall with a stockpile of sands observed near the monitoring station SR77 (Date: 17 October 2014)



Photo 3: Excavation works under another contractor for Highway's Department observed near the monitoring station SR77 (Date: 17 October 2014)



Photo 4: Empty cement bag observed near the monitoring station SR77 (Date: 17 October 2014)



Photo 5: Traffic may disturb dusty material and generate fugitive dust as observed near the monitoring station SR77 (Date: 17 October 2014)





SETTING OUT POINTS

| | EASTING | NORTHING |
|---|-------------|-------------|
| A | 833867.6259 | 837368.5638 |
| B | 833945.6833 | 837375.1412 |
| C | 833721.8117 | 838310.5250 |
| D | 833782.3083 | 838375.1303 |

Location of construction works site by other contractors

Trimming ground surface

Installation of sheet pile for DN1400 watermain pipe

Breaking down existing head wall on ID5

Laying watermain pipe in trench

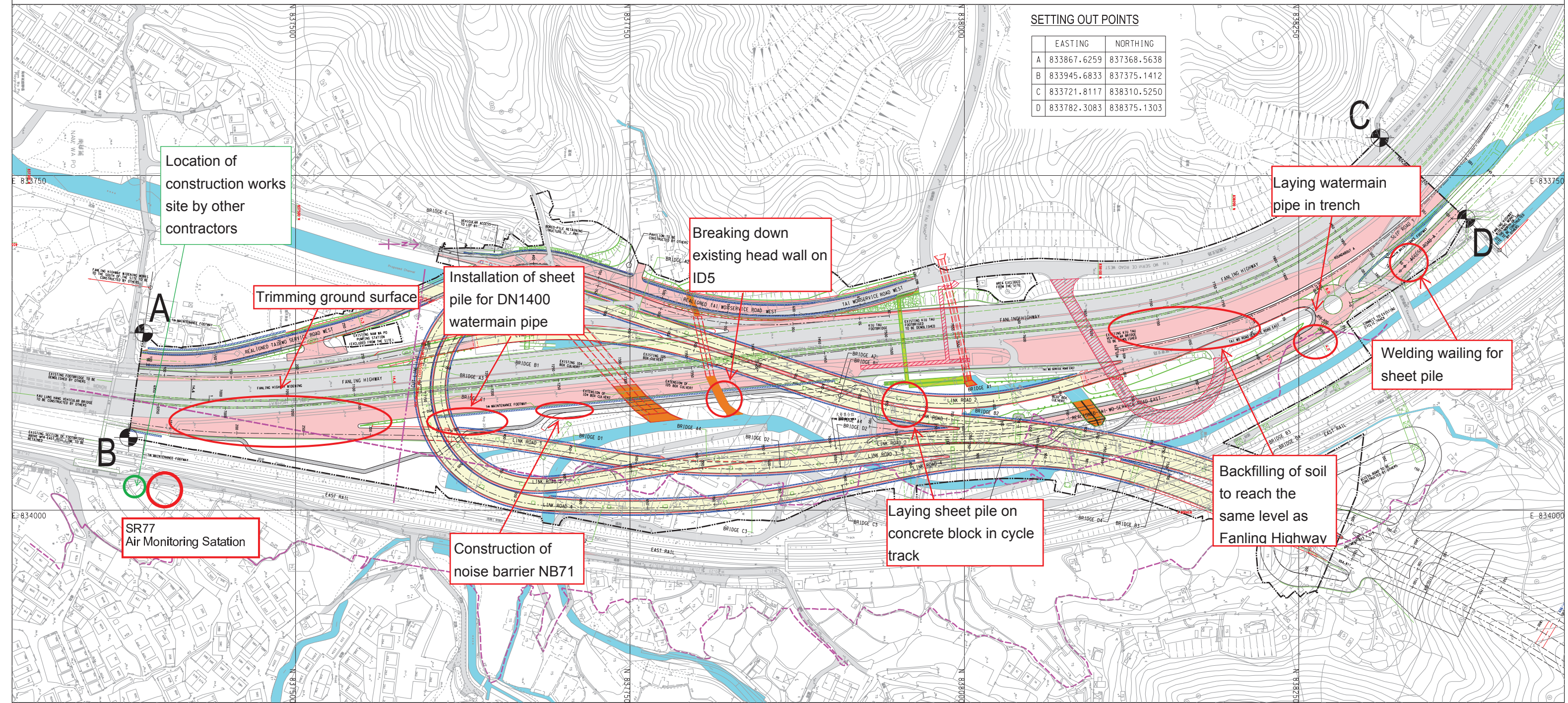
Welding wailing for sheet pile

SR77 Air Monitoring Satation

Construction of noise barrier NB71

Laying sheet pile on concrete block in cycle track

Backfilling of soil to reach the same level as Fanling Highway



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| | <p>EM&A programme. No significant dust emission has been observed.</p> <p><u>Conclusion</u></p> <p>As such, the exceedance was unlikely due to the construction works of the project.</p> |
| Action taken / to be taken | <p>As the exceedance was non-project related, no further investigation and specific remedial measure(s) would be recommended for the Entrusted Works. Nevertheless, the following mitigation measures had been implemented on-site for dust suppression:</p> <ol style="list-style-type: none"> 1. Exposed slopes near the river were covered with impervious sheets; 2. Any open stockpile of construction materials were covered with impervious sheet; and 3. Sufficient watering was applied along the haul road. |
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