

JHCPB Joint Venture

# EPL Monthly Monitoring Report

Reporting Period: May 2020

|               |   |
|---------------|---|
| Project       | Rozelle Interchange and WHT Enabling Works – Design and Construct |
| Document No.  | RIC-JHC-RPT-20-EN-001-027   |
| Revision Date | 04 June 2020  |

## Document Approval

| Rev | Date       | Prepared by | Reviewed by | Approved by | Remarks |
|-----|------------|-------------|-------------|-------------|---------|
| 00  | 04/06/2020 | ██████      | ██████      | ██████      |         |

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## 1. Introduction

WestConnex is one of the NSW Government's key infrastructure projects which aims to ease congestion, create jobs and connect communities. Together with the other components of the WestConnex Program of Works and the proposed future Sydney Gateway, the WestConnex M4M5 Link will facilitate improved connections between western Sydney, Sydney Airport and Port Botany and south and south-western Sydney, as well as better connectivity between the important economic centres along Sydney's Global Economic Corridor and local communities (refer to Figure 1). Due to its importance, the WestConnex M4-M5 Link project was declared to be critical state significant infrastructure (CSSI) by the Minister for Planning on 15 August 2017.

The WestConnex M4-M5 Link is being delivered in two stages:

- Stage 1, the Mainline Tunnels, which includes the construction and operation of the M4-M5 Link Tunnel between the New M4 at Haberfield and the New M5 at St Peters, and
- Stage 2, the Rozelle Interchange, which will connect the Stage 1 mainline tunnels to the surrounding surface road network and includes the construction and operation of (see Figure 1)
  - › An interchange at Lilyfield and Rozelle, including a connection to the proposed future Western Harbour Tunnel and Beaches Link project, and
  - › A tunnel connection between the Anzac Bridge and Victoria Road, east of Iron Cove Bridge.



Figure 1 Westconnex Project Overview

## 2. Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 21278) from the NSW Environment Protection Authority for the Rozelle Interchange Works on behalf of the John Holland CPB (JHCPB) Joint Venture. The licence is for construction works relating to Road Construction as defined under Schedule 1 of the *Protection of the Environment Operations Act, 1997* (POEO Act).

The licence describes monitoring and reporting requirements for the M4-M5 Link Rozelle Interchange Works, and specifically provides discharge criteria for water treatment plant and sediment basin water quality. The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website:

<https://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=188944&SYSUID=1&LICID=21278>

### **3. Water Monitoring**

Water monitoring was undertaken during this reporting period. Table 1 and 2 contains the water monitoring results.

Table 1 Surface water quality monitoring results

| Discharge/Monitoring Point | Date sampled | Total suspended solids (mg/L) | pH      | Oil & Grease | Monitoring frequency | Comment       |
|----------------------------|--------------|-------------------------------|---------|--------------|----------------------|---------------|
|                            |              | 50 <sup>1</sup>               | 6.5-8.5 | Visible      | N/A                  | Licence Limit |
| RRY03                      | 01/05/2020   | 17.1                          | 8.43    | No           | Each discharge       | Compliant     |
| RRY03                      | 01/05/2020   | 20.3                          | 7.63    | No           | Each discharge       | Compliant     |
| ICL02                      | 01/05/2020   | 38.5                          | 7.49    | No           | Each discharge       | Compliant     |
| RRY03                      | 01/05/2020   | 20.3                          | 7.63    | No           | Each discharge       | Compliant     |
| RRY03                      | 05/05/2020   | 14.6                          | 6.97    | No           | Each discharge       | Compliant     |
| RRY02                      | 05/05/2020   | 20.6                          | 6.88    | No           | Each discharge       | Compliant     |
| RRY02                      | 05/05/2020   | 20.3                          | 6.66    | No           | Each discharge       | Compliant     |
| RRY03                      | 06/05/2020   | 19.3                          | 8.06    | No           | Each discharge       | Compliant     |
| RRY02                      | 06/05/2020   | 19.7                          | 7.1     | No           | Each discharge       | Compliant     |
| RRY03                      | 07/05/2020   | 15.2                          | 8.1     | No           | Each discharge       | Compliant     |
| RRY02                      | 08/05/2020   | 48.1                          | 7.42    | No           | Each discharge       | Compliant     |
| ICL01                      | 11/05/2020   | 11.2                          | 8.01    | No           | Each discharge       | Compliant     |
| ICL02                      | 11/05/2020   | 34.4                          | 7.29    | No           | Each discharge       | Compliant     |
| ICL02                      | 11/05/2020   | 23.6                          | 7.5     | No           | Each discharge       | Compliant     |
| ICL02                      | 12/05/2020   | 4.2                           | 7.86    | No           | Each discharge       | Compliant     |
| RRY03                      | 11/05/2020   | 14.4                          | 7.52    | No           | Each discharge       | Compliant     |
| RRY03                      | 12/05/2020   | 21.01                         | 7.74    | No           | Each discharge       | Compliant     |
| RRY03                      | 13/05/2020   | 20.2                          | 8.01    | No           | Each discharge       | Compliant     |
| RRY03                      | 18/05/2020   | 9.5                           | 7.34    | No           | Each discharge       | Compliant     |
| RRY02                      | 19/05/2020   | 47.1                          | 8.1     | No           | Each discharge       | Compliant     |
| RRY03                      | 20/05/2020   | 49.1                          | 8.1     | No           | Each discharge       | Compliant     |
| RRY03                      | 20/05/2020   | 35.1                          | 7.59    | No           | Each discharge       | Compliant     |
| ICL02                      | 20/05/2020   | 29.8                          | 7.16    | No           | Each discharge       | Compliant     |

<sup>1</sup> A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50NTU.

| Discharge/Monitoring Point | Date sampled | Total suspended solids (mg/L) | pH      | Oil & Grease | Monitoring frequency | Comment       |
|----------------------------|--------------|-------------------------------|---------|--------------|----------------------|---------------|
|                            |              | 50 <sup>1</sup>               | 6.5-8.5 | Visible      | N/A                  | Licence Limit |
| ICL02                      | 20/05/2020   | 49.8                          | 7.92    | No           | Each discharge       | Compliant     |
| ICL02                      | 22/05/2020   | 46.5                          | 6.69    | No           | Each discharge       | Compliant     |
| ICL02                      | 22/05/2020   | 12.0                          | 6.80    | No           | Each discharge       | Compliant     |
| RRY03                      | 22/05/2020   | 27.2                          | 7.1     | No           | Each discharge       | Compliant     |
| RRY03                      | 22/05/2020   | 15.7                          | 6.68    | No           | Each discharge       | Compliant     |
| RRY02                      | 23/05/2020   | 43.5                          | 7.54    | No           | Each discharge       | Compliant     |
| RRY03                      | 23/05/2020   | 32.3                          | 7.81    | No           | Each discharge       | Compliant     |
| RRY03                      | 25/05/2020   | 21.3                          | 7.42    | No           | Each discharge       | Compliant     |
| CWL01                      | 25/05/2020   | 6.7                           | 7.64    | No           | Each discharge       | Compliant     |
| CWL01                      | 25/05/2020   | 30.9                          | 7.91    | No           | Each discharge       | Compliant     |
| CWL01                      | 25/05/2020   | 41.1                          | 7.39    | No           | Each discharge       | Compliant     |
| RRY02                      | 26/05/2020   | 25.1                          | 7.75    | No           | Each discharge       | Compliant     |
| RRY03                      | 26/05/2020   | 28.1                          | 8.31    | No           | Each discharge       | Compliant     |
| ICL02                      | 26/05/2020   | 24.8                          | 7.59    | No           | Each discharge       | Compliant     |
| ICL02                      | 26/05/2020   | 4.7                           | 7.90    | No           | Each discharge       | Compliant     |
| ICL02                      | 26/05/2020   | 4.6                           | 8.03    | No           | Each discharge       | Compliant     |
| RRY02                      | 27/05/2020   | 37.1                          | 7.99    | No           | Each discharge       | Compliant     |
| CWL02                      | 27/05/2020   | 17.7                          | 7.63    | No           | Each discharge       | Compliant     |
| ICL02                      | 27/05/2020   | 26.6                          | 6.90    | No           | Each discharge       | Compliant     |
| ICL02                      | 28/05/2020   | 4.5                           | 6.57    | No           | Each discharge       | Compliant     |
| CWL01                      | 28/05/2020   | 45.7                          | 7.27    | No           | Each discharge       | Compliant     |
| RRY03                      | 28/05/2020   | 23.5                          | 6.98    | No           | Each discharge       | Compliant     |
| RRY03                      | 28/05/2020   | 38.4                          | 7.23    | No           | Each discharge       | Compliant     |

<sup>1</sup> A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50NTU.

| Discharge/Monitoring Point | Date sampled | Total suspended solids (mg/L) | pH      | Oil & Grease | Monitoring frequency | Comment       |
|----------------------------|--------------|-------------------------------|---------|--------------|----------------------|---------------|
|                            |              | 50 <sup>1</sup>               | 6.5-8.5 | Visible      | N/A                  | Licence Limit |
| RRY03                      | 28/05/2020   | 33.1                          | 7.1     | No           | Each discharge       | Compliant     |
| ICL02                      | 29/05/2020   | 1.1                           | 8.16    | No           | Each discharge       | Compliant     |
| CWL01                      | 29/05/2020   | 10.5                          | 7.53    | No           | Each discharge       | Compliant     |
| CWL01                      | 29/05/2020   | 43.1                          | 6.79    | No           | Each discharge       | Compliant     |
| RRY03                      | 30/05/2020   | 25.9                          | 8.48    | No           | Each discharge       | Compliant     |

<sup>1</sup> A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50NTU.



Table 2 Water quality monitoring results at Water Treatment Plant which processes ground water

| Discharge/<br>Monitoring<br>Point | Date<br>Sampled | Turbidity<br>(NTU) | pH        | Oil &<br>Grease | Arsenic<br>(mg/L) | Cadmium<br>(mg/L) | Chromium<br>(hexavalent)<br>(mg/L) | Chromium<br>(trivalent)<br>(mg/L) | Copper<br>(mg/L)  | Iron<br>(mg/L) | Lead<br>(mg/L) | Manganese<br>(mg/L) | Mercury<br>(mg/L) | Nickel<br>(mg/L) | Zinc<br>(mg/L)    | Monitoring<br>frequency | Comment          |
|-----------------------------------|-----------------|--------------------|-----------|-----------------|-------------------|-------------------|------------------------------------|-----------------------------------|-------------------|----------------|----------------|---------------------|-------------------|------------------|-------------------|-------------------------|------------------|
|                                   |                 | 50 <sup>1</sup>    | 6.5 - 8.5 | Visible         | 0.05              | 0.014             | 0.07 <sup>2</sup>                  | 0.15                              | 0.04 <sup>1</sup> | 1.5            | 0.03           | 2.5                 | 0.0007            | 0.2              | 0.15 <sup>1</sup> | N/A                     | Licence<br>Limit |
| RRY-C                             | 1/05/2020       | 6.2                | 7.44      | Not visible     | <0.001            | <0.0002           | <0.005                             | <0.005                            | <0.001            | <0.05          | <0.001         | 0.27                | <0.0001           | 0.003            | 0.006             | Monthly                 | Compliant        |
| RRY-A                             | 22/05/2020      | 3                  | 7.79      | Not visible     | <0.001            | <0.0002           | 0.014                              | <0.005                            | <0.001            | <0.05          | <0.001         | <0.005              | <0.0001           | <0.001           | <0.005            | Monthly                 | Compliant        |
| RRY-A                             | 28/05/2020      | 1                  | 6.87      | Not visible     | <0.001            | <0.0002           | 0.014                              | <0.005                            | <0.001            | <0.05          | <0.001         | <0.005              | <0.0001           | <0.001           | <0.005            | Monthly                 | Compliant        |
| RRY-C                             | 29/05/2020      | 17.5               | 7.4       | Not visible     | 0.0003            | 0.00005           | 0.033                              | 0.001                             | 0.0006            | 0.02           | 0.0004         | 0.0009              | 0.0001            | 0.0005           | 0.01              | Monthly                 | Compliant        |

<sup>1</sup> A correlation between TSS and Turbidity has been established. Including a safety factor the turbidity limit is 50NTU.

<sup>2</sup> 90 Percentile concentration limit.

## 4. Noise Monitoring

Noise monitoring was undertaken during this reporting period. Table 3 contains the noise monitoring results.

Table 3 Noise monitoring results

| Monitoring Location (Noise Catchment Area, Street, Suburb) | Date       | Time     | Attended or Continuous Monitoring | Parameter       | Goals/Target dB(A) | Actual dB(A) | Comments  |
|--|------------|----------|-----------------------------------|-----------------|--------------------|--------------|-----------|
| NCA34, Terry St, Rozelle                                   | 04/05/2020 | 6:04 PM  | Attended                          | Laeq 15 minutes | 68                 | 61.3         | Compliant |
| NCA21, Railway Pde, Annandale                              | 16/05/2020 | 1:00 PM  | Attended                          | Laeq 15 minutes | 83                 | 57.9         | Compliant |
| NCA21, Railway Pde, Annandale                              | 16/05/2020 | 1:21 PM  | Attended                          | Laeq 15 minutes | 83                 | 61.1         | Compliant |
| NCA20, Brenan St, Lilyfield                                | 16/05/2020 | 2:00 PM  | Attended                          | Laeq 15 minutes | 82                 | 59.1         | Compliant |
| NCA21, Pritchard St, Annandale                             | 16/05/2020 | 2:24 PM  | Attended                          | Laeq 15 minutes | 75                 | 57.0         | Compliant |
| NCA19, Ryan St, Lilyfield                                  | 16/05/2020 | 2:52 PM  | Attended                          | Laeq 15 minutes | 64                 | 55.0         | Compliant |
| NCA21, Railway Pde, Annandale                              | 17/05/2020 | 8:40 AM  | Attended                          | Laeq 15 minutes | 83                 | 64.0         | Compliant |
| NCA20, Brenan St, Lilyfield                                | 17/05/2020 | 9:01 AM  | Attended                          | Laeq 15 minutes | 82                 | 62.1         | Compliant |
| NCA21, Pritchard St, Annandale                             | 17/05/2020 | 9:21 AM  | Attended                          | Laeq 15 minutes | 75                 | 57.1         | Compliant |
| NCA19, Ryan St, Lilyfield                                  | 17/05/2020 | 9:45 AM  | Attended                          | Laeq 15 minutes | 64                 | 54.0         | Compliant |
| NCA21, Railway Pde, Annandale                              | 17/05/2020 | 10:10 AM | Attended                          | Laeq 15 minutes | 83                 | 57.0         | Compliant |
| NCA33, Springside St, Rozelle                              | 19/05/2020 | 10:37 PM | Attended                          | Laeq 15 minutes | 54                 | 44.1         | Compliant |
| NCA33, Toelle St, Rozelle                                  | 29/05/2020 | 9:03 PM  | Attended                          | Laeq 15 minutes | 82                 | 56.8         | Compliant |
| NCA35, Yarra Ave, Rozelle                                  | 29/05/2020 | 9:39 PM  | Attended                          | Laeq 15 minutes | 84                 | 72.5         | Compliant |
| NCA25, Hornsey St, Rozelle                                 | 29/05/2020 | 10:13 PM | Attended                          | Laeq 15 minutes | 82                 | 62.0         | Compliant |
| NCA25, Quirk St, Rozelle                                   | 29/05/2020 | 10:40 PM | Attended                          | Laeq 15 minutes | 77                 | 66.4         | Compliant |
| NCA25, Hornsey St, Rozelle                                 | 30/05/2020 | 12:44 AM | Attended                          | Laeq 15 minutes | 82                 | 57.0         | Compliant |