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7 November 2023 Ref:201209-ER\_DPE-October 2023

Department of Planning Industry and Environment Locked Bag 5022 PARRAMATTA NSW 2124

Dear

RE: Sydney Metro - Sydney Metro Western Sydney Airport SSI 10051 – ER Monthly Report for October 2023

Healthy Buildings International (HBI) submits this report to the Secretary in accordance with:

Condition A32 (k) of the Sydney Metro Western Sydney Airport, SSI 10051 Approval (23 July 2021)

The attached summary details the key activities undertaken by Environmental Representatives for Sydney Metro Western Sydney Airport for the month of October 2023.

Yours sincerely

**Environmental Representative** 

Cc:

Sydney Metro:

DPE: Major Projects Portal

**Enclosed: Nil** 

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# 1. Advanced and Enabling Works (AEW)

Contract Package	Environmental Representative/s
Advanced and Enabling Works (AEW)	

#### **Key Construction Activities During the Period**

# SSTOM Project Office (SPO):

o The works are largely complete and Syndey Metro are moving into the office

#### St Marys Footbridge (FSM):

- o Piling works have continued
- Compound establishment
- Clearing of trees adjacent to the commuter car park

#### Water:

- o Material receival and load out from the Gipps St compound
- Works are complete on Solander Drive, no complaints have been received from these out of hours works
- o Trenching works adjacent to Mamre Road are ongoing

# **Key Construction Activities Look Ahead**

The Construction activities planned for the upcoming period for the Advanced Enabling Works (AEW) comprise of:

# SSTOM Project Office (SPO):

o The SSTOM Project Office is being occupied by Sydney Metro

# St Marys Footbridge:

- o Continuation of piling works
- Service investigations
- o Establishment of a site compound over the next two weeks

#### Water:

- o Continue trenching adjacent to Mamre Rd
- Continuation of OOHW on Luddenham bridge

# **ER Inspections**

There were no (0) ER inspections of the SPO as the SPO has been handed over to Sydney Metro, two (2) inspections of the St Marys Station Footbridge, and two (2) inspections of the AEW Water contract undertaken by in October 2023 (ER inspections are on a fortnightly cycle weather and health permitting).

# St Marys Footbridge

- 01/10/2023 Key points/ issues raised during this inspection were as follows:
  - Storage of ATF had encroached on the landscaping beds and was removed immediately following detection
  - Spill kits were present on site but needed to be placed in highly visible locations
- 24/10/2023 Key points/ issues raised during this inspection were as follows:

- A clash between SBT rock anchors and FSM piles has been detected and is now requiring input from the designers
- Signage and shade cloth is present however should this be taken down because of Sydney Metro's occupation of the SPO additional signage and shade cloth will need to be erected.

#### **AEW Water**

- 01/10/2023 Key points/ issues raised during this inspection were as follows:
  - Dirt was observed adjacent to a storm water pit and in the gutters on Solander Drive, this material needs to be removed
  - As the project team starts to think about demobilisation, focus needs to be placed on waste management and revegetation
- **24/10/2023** Key points/ issues raised during this inspection were as follows:
  - Disturbed areas to the west and east of Mamre Rd needed to be topsoiled and seeded as soon as practical
  - Waste management is progressing as the project nears completion

#### **Photos**

# St Marys Footbridge



Tree protection zones were in place with paraweb fencing



The ATF stored on the mulch garden bed needs to be moved and the flagging returned to the end of the garden bed



A view of the of the platform where the SBT rock anchor / FSM pile interference could occur



The site compound continues to be built

# **AEW Water**



The rumble grid and ballast were working effectively with no mud tracking evident from the site compound



Trucks were observed with the stickers as per A46



The areas previously worked have had hydromulch applied, however require rain for the seeds to germinate.



Temporary water connections have been installed while works are occurring on the water main

# **Endorsed Document/s**

The following documents were endorsed/approved by the ER

None for the period

The following documents were provided for information or reviewed with comments provided to Sydney Metro.

- Out of Hours Application Form AEW Water Luddenham Road Bridge and Trenching works (rev 05)
- Out of Hours Application Form Footbridge St Marys 21st 22nd October 2023 Footbridge St Marys- Site Early Works (rev 2)

# **Complaints / Incidents / Non-compliance**

No non-compliances or incidents were reported to or identified by the ER for the period.

No complaints were received during the period.

# Audits (specific to packages reported in this report)

None for the period

# **Looking Forward – Core Focus Areas**

AEW Water is due to finish in November 2023, leaving the Footbridge St Marys as the only active AEW project. FSM works are progressing however are due to start operating in normal week day hours at the start of 2024.

# **ER Closing Comments:**

The AEW Water works have been undertaken to a high level of compliance, this was seen with no complaints from the OOHW on Solander Drive, a very good result. The Footbridge St Marys is navigating some design interference issues with SBT, nonetheless works are continuing with regard to contamination sampling and compound establishment.

# 2. Station Boxes and Tunnelling (SBT)

Contract Package	Environmental Representative/s
Station Boxes and Tunnelling (SBT)	

#### **Key Construction Activities During the Period**

- St Marys:
  - Stub tunnel lining completed
  - Stub tunnel air extraction unit operation.
  - Water treatment plant in operation
  - Site fully transferred to SSTOM
  - o Repair/resurfacing of areas of Phillip St asphalt damaged by SBT traffic.
- Claremont Meadows Services Facility:
  - Water treatment plant operating.
  - Sediment basins operational.
  - o Shaft base basement and foundation completed
  - o Surplus site establishment spoil disposed of site
  - Storage of surplus construction materials from other northern sites
- Orchard Hills:
  - o Spoil and topsoil storage.
  - Operation and maintenance of ERSED controls.
  - o Pre-cast tunnel segment storage in the north.
  - o TBMs tunnelling progressed 800 m and 500 m respectively
  - Tunnel segment delivery
  - Processing and storage of tunnel spoil.
  - Tunnel Spoil haulage offsite
  - Grout plant operation.
  - Water treatment plant operation
- Aerotropolis:
  - o Excavation of station box and stub tunnels completed
  - Stubb tunnel lining completed
  - Water Treatment plant operation water reused onsite.
  - Long term spoil stockpiling for SSTOM use.
  - Site fully transferred to SSTOM
- Bringelly Services Facility:
  - Shaft base slab completed
  - Water treatment plant Operation Water treated and disposed at Claremont Meadows
  - o Haulage of spoil materials stored in the west of the site completed
  - Storage of surplus construction materials form other southern sites
- Key Construction Activities Look Ahead
- St Marys:
  - o Nil SBT activities next period.

- Claremont Meadows Services Facility:
  - Continue erosion and sediment controls operation and maintenance.
  - Continue Water Treatment Plant operation and maintenance.
  - Storage of surplus construction materials from other northern sites
  - Potential tunnel segment delivery and storage to be determined by Consistency Assessment
- Orchard Hills:
  - Activities anticipated for the upcoming period are consistent with those for this period.
- Aerotropolis:
  - Nil SBT activities next period.
- **Bringelly Services Facility:** 
  - Continue Erosion sediment controls operation and maintenance.
  - Operation of WTP.

#### **ER Inspections**

There were two (2) ER Inspections conducted on 12/10/23 and 26/10/23 by

#### **12/10/2023** - Key points/ issues raised during this inspection were as follows:

Sites were generally well managed with requirements for improvement noted in relation to effective management of spoil materials storage, and cleanliness of internal roads, to reduce tracking onto Gipps St and Kent Rd.

# 26/10/2023 - Key points/ issues raised during this inspection were as follows:

- o Sites were generally well managed, with tracking previously noted onto Gipps St and Kent Rd. negligible, and road/s in best condition since commencement of offsite haulage.
- Requirement for improvement was noted in relation to tunnel segment delivery and spoil haulage vehicles directed away from site entrance and parked on the verges of Kent Rd. and Lansdowne Rd, and occupying the road at Samuel Marden Dr. The ER advised the Project the subject practice is not consistent with CoA E109, and Section 7 of the approved CTMP and therefore CoA E105, and requested the contractor rectify this situation as a matter of priority, and provide evidence to that effect, to avoid a non-compliance being raised.

ER inspections were on a fortnightly cycle for this period. Inspections of St Marys and Aerotropolis sites will now be paused until SBT site establishment activities for TBM retrieval commence. Inspections of Claremont Meadows and Bringelly sites will now move to a 4 weekly frequency until preparations for TBM breakthrough commence.

# **Photos**



Orchard Hills: TBM spoil materials haulage intensifying - 7 am to 10 pm.

View west. - Settling/holding ponds being used to manage runoff, and TBM water before WTP.





Orchard Hills - View north of queuing onsite of segment delivery vehicles toward Kent Rd.



Orchard hills view west: Segment delivery and spoil haulage vehicles parked on Lansdowne Rd.

Orchard hills view south east: Spoil haulage vehicles parked at Samuel Marsden Drive



Orchard Hills view northwest – Condition of internal haulage road required improvement.

Orchard Hills: TBM Spoil storage area condition and management of haulage areas improved.



Orchard Hills-Wheel wash in operation.



Orchard Hills – Tracking noted from site access on Kent Rd.



View south: Street sweeper in action on Kent Rd at subsequent inspection with all brushes in use.



St Marys: View east of station box stub tunnels completed, with extraction fan to remain.



St Marys – Installation of SM WSA graphics on north west corner of Phillip St. and Blair Av..



Bringelly: Shaft base slab and sump completed with dewatering ongoing.



Claremont Meadows : Shaft base slab and sump



Claremont Meadows: Tracking noted from southern site access onto Gipps Road.

#### **Endorsed Document/s**

No documents were endorsed/approved by the ER.

The following documents were provided for information:

- September Monthly Monitoring Reports comprising Dust (real-time), Noise and Surface Water.
- St Marys Station PRB Monthly Mitigation Monitoring Report 2 August 2023 (Rev A, 2/10/23)
- St Marys Station Environmental Management Plan Construction phase groundwater monitoring from contamination at 1-7 Queen St (Rev C, 11/9/23)
- St Marys Site Audit Report and Site Audit Statement for Validation Report (15/9/2023)
- Quarterly Sustainability Report (QSR) Quarter 3 2023(Rev 1, 3/10/23)

# **Complaints / Incidents / Non-compliance**

No Non-compliances with the Approval were raised by or reported to the ER this period.

There were no incidents of note identified by or reported to the ER this period.

Seven (7) complaints were reported to the ER. Four (4) related to St Mary's and were predominantly about project worker parking on Chesham St, and three(3) related to Orchard Hills/Claremont Meadows and were dominated by tracking on Gipps St and Kent Road.

# Audits (specific to packages reported in this report)

Nil this period.

# **Looking Forward – Core Focus Areas**

Risks now relate mostly to TBM spoil haulage out of Orchard Hills site and coordination with tunnel segment deliveries.

# **ER Closing Comments:**

The contractor continues to be receptive to requests for improvements and proactive in planning of environmental controls, including for future activities at Orchard Hills. This was evidenced by improvements at Orchard hills and Claremont Meadows following concerns raised by the ER, around tracking, at the first inspection of the period.

# 3. Surface and Civil Alignment Works (SCAW)

Contract Package	Environmental Representative/s
Surface and Civil Alignment Works (SCAW)	

#### **Key Construction Activities During the Period**

- Patons Lane:
  - Piling is now complete
  - Sub structure work on going
  - Sandstone placement north of Blaxlands Creek
  - Northern tributary culvert construction ongoing
- Stabling and Maintenance Facility (SMF) Orchard Hills:
  - Stockpiling of vegetation is occurring for use during SSTOM works
  - Material continues to be stockpiles at PS105
- Defence Land
  - Piling almost complete
  - o Sandstone placement is ongoing between Patons Lane and the Warragamba Pipeline
  - Topsoil is being placed on batters
  - Sub structure works ongoing
- Luddenham Station:
  - Ongoing placement of viaduct segments
  - Construction of Luddenham Rd roundabout continues
  - Structural station works continue.
- Luddenham Road South:
  - Ongoing structural works.
  - Sediment basin constructed adjacent to Cosgrove's Creek
- M12 to Cosgrove's Creek:
  - o Sandstone is being used to build the formation.
  - Piling is completed at Cosgrove's Creek
  - Cosgrove's creek clearing and haul road crossing ongoing
- Elizabeth Drive:
  - Sandstone delivery is progressing south of Elizabeth Drive
  - OOHW sandstone delivery continues
  - AEC43 cleared

# **Key Construction Activities Look Ahead**

- Patons Lane:
  - Rehabilitation works are continuing along the alignment
- Stabling and Maintenance Facility (SMF) Orchard Hills:
  - o Structures works will continue at Blaxland Creek
  - Culvert and fauna crossing works will continue at the unnamed tributary
  - o Rehabilitation will commence
- Defence Land
  - o Earthworks to continue
  - Sandstone filling and compaction will continue

- Structures works to commence
- Luddenham Station:
  - o Precast elements for the viaduct will continue to be installed
  - Construction of the roundabout on Luddenham Rd will continue.
- Luddenham Road South:
  - o Asbestos stockpiles to be removed.
  - Structures will continue
- M12 to Cosgroves Creek:
  - o Structures activities to continue.
  - Sandstone will be continued to be placed on the formation
- Construction of the 30ML basin continues which will ultimately be a flood mitigation basin.
  Elizabeth Drive:
  - Ongoing sandstone placement along the alignment

# **ER Inspections**

There were two (2) ER Inspections in October 2023 (ER inspections are on a fortnightly cycle weather and health permitting).

- **05/10/2023** (by Key points/ issues raised during this inspection were as follows:
  - ERSED controls held up well during the recent rain event, however maintenance was required to return capacity to the controls.
  - o Housekeeping was an issue at the Luddenham roundabout
  - o Concrete washouts at the Defence land required maintenance
  - The ER requested that the CPBUI team develop an ERSED strategy to manage cross flow during the construction of the roundabout.
- 19/10/2023 (byKey points/ issues raised during this inspection were as follows:
  - Potential contamination was identified seeping through the Patons Lane cut, testing to be undertaken to determine the level of contamination and possible source
  - o Additional hydromulch is required on areas that have limited regrowth
  - Parts of the SSTOM batter adjacent to the SCAW slipped and sediment was being deposited in the SCAW drainage lines.

#### **Photos**



Sandstone has been placed on the formation adjacent to the EDR compound



Works continue on the roundabout prior to the lane possession



Parts of the SSTOM batter have slipped. SCAW to determine who is responsible for fixing this



Viaduct works are progressing



Potential contamination has been identified, testing to be undertaken and reported to Sydney Metro



The culvert and fauna crossing at the unnamed tributary are being constructed to a high level of environmental compliance



The basin at Blaxlands Creek has been stabilised and is in the process of being made into a bio basin



The rehabilitation at PS105 has been successful and has reduced the ERSED risk

# **Endorsed Document/s**

No documents were endorsed/approved by the ER, however, the following documents were approved as the Sydney Metro (SM) approved delegate pursuant Section 1.4.4 of the Construction Noise and Vibration Standard v4.2:

 Detailed Noise and Vibration Impact Statement 5. Material Delivery and Placement – Elizabeth Drive to Cosgroves Creek and Defence Establishment Orchard Hills & Elizabeth Drive Haul Road Drainage Crossing (rev D)

The following documents were provided for information or reviewed:

■ Ni

# Complaints / Incidents / Non-compliance

No non-compliances were reported to or identified by the ER for the period:

No incidents of note were reported to the ER during the period:

Four (4) complaints were reported to the ER. All complaints were from two (2) 146 Samuel Marsden Drive residents, expressing concerns with dust levels from SMF works.

#### Audits (specific to packages reported in this report)

Nil for the period

# **Looking Forward – Core Focus Areas**

Focus will be on revegetation of completed areas and completion of waterway diversion activities.

**ER Closing Comments:** The unexpected contamination in the Patons Lane cut requires further testing and analysis to determine the source and then potentially manage the discharge to ensure land or waterways aren't further contaminated. Adjoining areas to the SCAW project ie. SSTOM and SBT will require coordination between the contractors to resolve any issues that impact two or more sites. So far a weekly contractor coordination meeting has been established to deal with environmental issues.

# 4. Stations, Systems, Trains, Operations and Maintenance Package (SSTOM)

Contract Package	Environmental Representative/s
Stations, Systems, Trains, Operations and	
Maintenance Package (SSTOM)	

# **Key Construction Activities During the Period**

- RILL accreditation received
- Design review ongoing

#### STM

- Commenced piling in station box.
- Survey of the station box completed.

#### OHE

Site establishment works commenced. Site sheds are currently being installed.

- Soil sampling (bore) occurring in the station box.
- PC to PC handover to occur for CPBG to remove AEC.

#### **SMF**

Site access works commenced. Swale drain works are ongoing and safety bunds are being installed.

#### LDN

Site shed installation ongoing.

#### AEC

Relining of swale drains commenced. Site traffic re-alignment ongoing.

#### **Key Construction Activities Look Ahead**

#### STM

- pile testing hammer / noise outputs.
- OOHW to be submitted for extended concrete works.

# OHE

Site setup

#### **SMF**

Swale and safety traffic bund construction

#### LDN

Station portion handover

#### AEC

- Site establishment
- EPL update for discharge locations

# **ER Inspections**

There was one ER Inspection on 31 November 2023 of STM, OHE and SMF.

It was noted that the sites look generally good, minor notes were related to ERSED maintenance, noise blanket installation and replacing banner mesh from wind damage. The sites were noted to not be producing visible dust even during a high wind event.

# **Photos**

STM - Wheel wash operating

STM - heritage signs and fence.



OHE – long-term stabilisation of the compound batter to be implemented.



OHE - extension of rock check to site dam to be completed



SMF grass stabilisation of the embankments appeared healthy



SMF - no visible dust was observed from the SMF. It was noted that plastic deposited from an adjacent site was being removed by PLM

# **Endorsed Document/s**

No documents were endorsed/approved by the ER, however, the following documents were approved as the Sydney Metro (SM) approved delegate pursuant Section 1.4.4 of the Construction Noise and Vibration Standard v4.2:

**DNVIS STM Rev 0** 

# Complaints / Incidents / Non-compliance

No non-compliances were identified by or reported to the ER during this period.

There were no incidents of note identified by or reported to the ER during this period.

One complaint was reported to the ER during the period about project worker parking on Chesham St., St Mary's.

# Audits (specific to packages reported in this report)

No audits were undertaken during the period.

# **Looking Forward – Core Focus Areas**

ER inspections are undertaken at a fortnightly frequency at each site. As work progresses, inspections The site will be separated into two sections and alternating weekly inspections will commence. The focus will be on the implementation of the CEMP and sub-plans, with particular focus on ERSED.

**ER Closing Comments:** The project team continues to have a healthy team dynamic. Detailed design is continuing. PLM has been actioning on minor handover issues quickly.

#### 5. Statement of Limitations

Healthy Buildings International (HBI) has prepared this report in accordance with the requirements of Condition A32 (k) of the Sydney Metro Western Sydney Airport, Concept and Stage 1 SSI 10051 Approval (23 July 2021). The report is for the sole purposes of Department of Planning and Environment (DPE) and Sydney Metro. It has been prepared based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report. This report did not assess any aspects relating to safety.

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