8.9 Biodiversity Management Plan

Planning, Industry & Environment

Mr Riley Sampson
Assistant Development Manager
ESR Developments (Australia) Pty Ltd
Level 29, 20 Bond Street
SYDNEY NSW 2000

22/06/2021

Dear Mr Sampson

ESR Horsley Logistics Park (SSD-10436)
Construction Environmental Management Plan and
Staging of the Submissions of the Management Plan

I refer to the Lot 201 and Lot 204 Construction Environmental Management Plan (CEMP) submitted in accordance with Conditions C2 and C3, Schedule 2 of the development consent for the ESR Horsley Logistics Park (SSD-10436) and the Staging Plan submitted in accordance with Condition A14, Schedule 2 of SSD-10436 development consent.

The Department has carefully reviewed the CEMP and concludes it addresses the relevant conditions. As such, the following plans are approved:

- Construction Environmental Management Plan, prepared by Hanson Yunken, dated 11 June 2021, Revision 6
- Landscape Management Plan with all attachments, prepared by Site Image Landscape Architects, dated 6 May 2021
- Construction Traffic Management Plan, prepared by Ason Group, dated 11 June 2021, Revision 04
- Construction Noise and Vibration Management Plan, prepared by PWNA, dated 10 June 2021, Revision 5
- Stormwater Management Plan with all attached drawings, prepared by Costin Roe Consulting, dated 28 May 2021, Revision A
- Biodiversity Management Plan, prepared by Eco Logical Australia, dated 11 June 2021 (Ref: 20SYD – 15468)
- Community Consultation Plan, prepared by Urbis, dated 28 April 2021.

The staging of the submission of the management plans is also approved subject to the construction staging set out in the letter dated 17 May 2021 and, in your memo dated 28 May 2021.

Please ensure you continue to consult regularly with the neighbouring residences regarding the progress of construction activities and promptly respond to any queries or concerns they raise. Please note that the Stormwater Management Plan is approved for the construction phase only. Prior to commencement of operation of Lots 201 and 204, you must submit a Stormwater Management Plan for the operational phase and have the Secretary approve this plan.

You are also required to update and submit the CEMP to the Planning Secretary for approval should any modifications to Lot 201 and Lot 204 warehouse buildings be approved. You are reminded of the need to promptly install the 4 m wide landscape area to the south of the Lot 201 warehouse building.

Please ensure that the approved CEMP is placed on the project website at the earliest convenience.

Should you have any questions in relation to this matter, please contact Bruce Zhang on 9274 6137 or bruce.zhang@planning.nsw.gov.au.

Yours sincerely

Chris Ritchie
Director
Industry Assessments
As nominee of the Planning Secretary

Level 3
101 Sussex Street
Sydney NSW 2000
t: (02) 9259 3800

11 June 2021

Our ref: 20SYD - 15468

ESR Australia
Level 29
20 Bond Street
Sydney NSW 2000

Attention: Riley Sampson

Dear Riley,

RE: ESR Horsley Logistics Park SSD 10436 - Condition 36 and 37 Biodiversity Management Plan

Eco Logical Australia Pty Ltd (ELA) was engaged by ESR to provide advice regarding Conditions 36 and 37 of SSD 10436.

The conditions are:

> *B36. Prior to the commencement of construction, the Applicant must prepare a Biodiversity Management Plan (BMP) for the development in consultation with Fairfield City Council to the satisfaction of the Planning Secretary. The Biodiversity Management Plan must be approved by the Planning Secretary prior to the commencement of construction and must form part of the CEMP in accordance with condition C2. The Plan must include the following:*
>
> *(a) be prepared by a suitably qualified and experienced person(s);*
>
> *(b) describe procedures to manage impacts, including erosion and sediment controls, to protect the biodiversity values of:*
>
> *(i) the 25 m Managed Environmental Zone adjacent to the eastern boundary of the site;*
>
> *(ii) the E2 Environmental Conservation lot to the east of the site; and*
>
> *(iii) the southern boundary landscape buffer and bund area.*
>
> *B37. The Applicant must: (a) not commence construction until the Biodiversity Management Plan is approved by the Planning Secretary; and (b) implement the most recent version of the Biodiversity Management Plan approved by the Planning Secretary.*

The following table provides the measures to meet the above requirements and ensure there are no impacts to the 25m MEZ, the E2 Environmental Conservation land and the southern landscape buffer.

Table 1 Biodiversity Management Measures

Potential Impact	Management Measures
Deliberate or accidental placement of vehicles, equipment or stockpiles	No construction is proposed within the 25m MEZ. See Sheet 1 of the stamped plans dated 21 March 2021 for SSD 10436. Fencing has been erected along the outer edge of the MEZ. See figure 2. Fencing is to be maintained throughout the construction phase. Inspections of fencing to occur as per the Sedimentation and Erosion Control Plan.
Sediment laden run-off from the construction site depositing sediments	Implementation of Sedimentation and Erosion Control Plan. The attached plan by Costin Roe (Drawing CRC-CV-CO12990.08-C20) contains the following measures: • Clearly denoted the biodiversity area. • Provides a diversion drain and silt fencing between the 25m MEZ and the construction area. • Dust suppression • Maintenance of measures.

The above measures form the Biodiversity Management Plan for the site. No other vegetation remains on site and therefore no other biodiversity measures (such as pre-clearing surveys) are required.

Regards,

David Bonjer
Principal Consultant

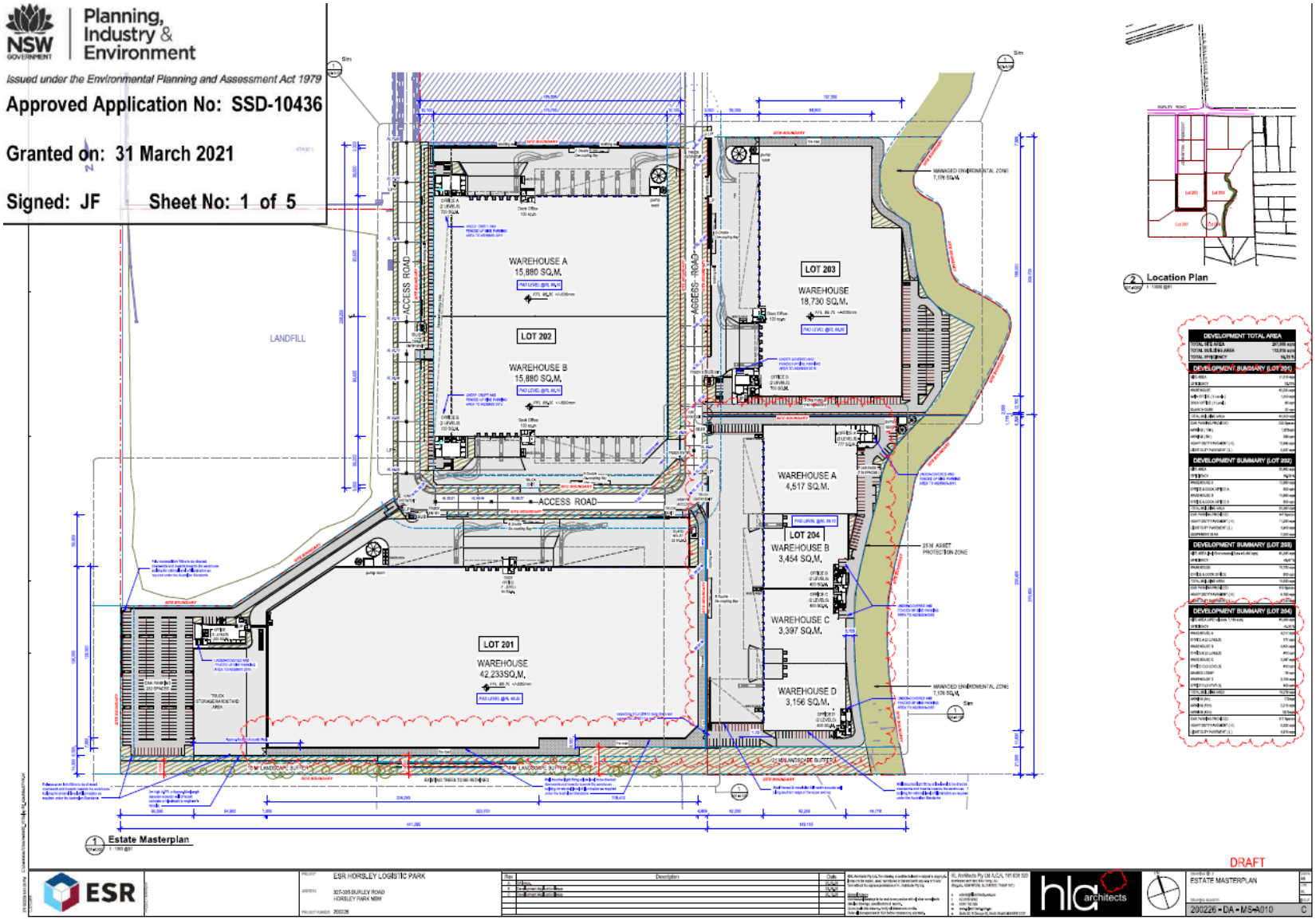
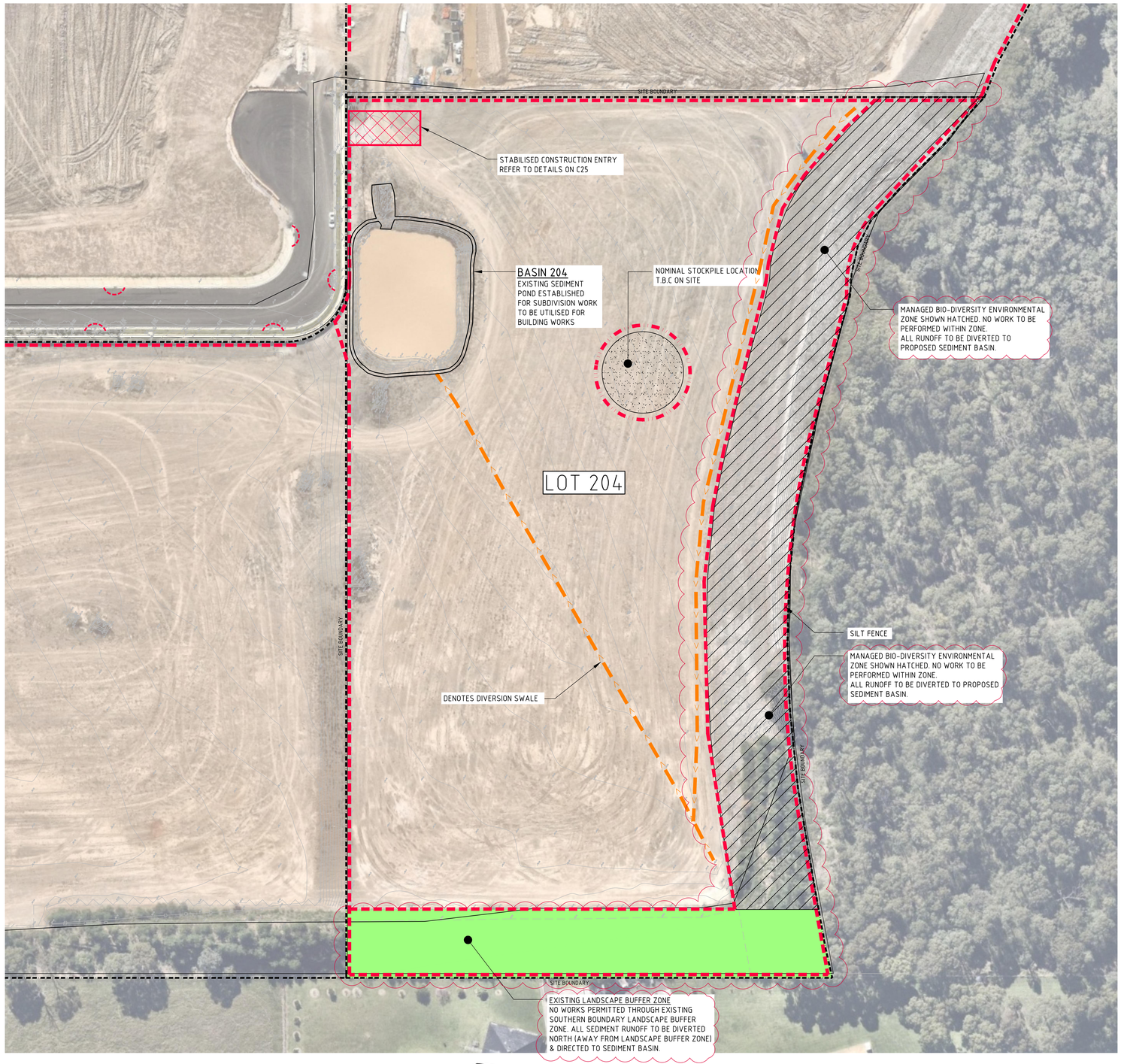


Figure 1:Masterplan showing 25m MEZ

Figure 2 Fencing of the 25m MEZ in the foreground and the E2 zone in the background



EROSION SEDIMENT CONTROL PLAN
SCALE 1:500

DUST CONTROL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE DUST CONTROL MEASURES ARE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN.
2. THE APPLICATION OF LIQUID BASED DUST SUPPRESSION MEASURES MUST BE SUCH THAT SEDIMENT LADEN RUNOFF RESULTING FROM SUCH MEASURES DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD. (EG USING HAY BALES)
3. DUST GENERATION ASSOCIATED WITH WIND EROSION TO BE CONTROLLED USING WATER TRUCKS, DUST SUPPRESSING FOG, MIST GENERATORS, SEALANT PLACED OVER THE SOIL, SURFACE ROUGHENING OR RE-VEGETATION.
4. THE FOLLOWING ACTIVITIES SHALL BE ADOPTED, IF NECESSARY, TO MANAGE DUST CONTROL ON SITE:
   - LIMITING THE AREA OF SOIL DISTURBANCE AT ANY GIVEN TIME
   - REPLACING TOPSOIL AFTER COMPLETION OF EARTHWORKS.
   - PROGRAMMING WORK TO MINIMISE THE LIFE OF STOCKPILES.
   - TEMPORARILY STABILISING LONG-TERM STOCKPILES.
   - GRAVELLING UNSEALED ACCESS AND HAUL ROADS.
   - MINIMISING TRAFFIC MOVEMENT ON EXPOSED SURFACES.
   - LIMITING VEHICULAR TRAFFIC TO 15km/h.
   - RETAINING EXISTING VEGETATION AS WIND BREAKS.
5. OIL, LANDFILL GAS CONDENSATE OR ANY CONTAMINATED LEACHATE OR STORMWATER IS NOT TO BE USED FOR DUST SUPPRESSION.

EROSION CONTROL NOTES:

ALL CONTROL WORK INCLUDING DIVERSION BANKS AND CATCH DRAINS, V-DRAINS AND SILT FENCES SHALL BE COMPLETED DIRECTLY FOLLOWING THE COMPLETION OF THE EARTHWORKS.

1. SILT FENCES AND SILT FENCE RETURNS SHALL BE ERECTED CONVEX TO THE CONTOUR TO POND WATER.
2. HAY BALE BARRIERS AND GEOFABRIC FENCES ARE TO BE CONSTRUCTED TO TOE OF BATTER, PRIOR TO COMMENCEMENT OF EARTHWORKS, IMMEDIATELY AFTER CLEARING OF VEGETATION AND BEFORE REMOVAL OF TOP SOIL.
3. ALL TEMPORARY EARTH BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
4. CLEAR WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ON GOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION.
6. ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING, TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE, APPROVED LOCATION.
7. ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
8. ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
9. ALL FILL AREAS ARE TO BE LEFT WITH A BUND AT THE TOP OF THE SLOPE AT THE END OF EACH DAYS EARTHWORKS. THE HEIGHT OF THE BUND SHALL BE A MINIMUM OF 200mm.
10. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF FORMATION.
11. AFTER REVEGETATION OF THE SITE IS COMPLETE AND THE SITE IS STABLE IN THE OPINION OF A SUITABLY QUALIFIED PERSON ALL TEMPORARY WORK SUCH AS SILT FENCE, DIVERSION DRAINS ETC SHALL BE REMOVED.
12. ALL TOPSOIL STOCKPILES ARE TO BE SUITABLY COVERED TO THE SATISFACTION OF THE SITE MANAGER TO PREVENT WIND AND WATER EROSION.
13. ANY AREA THAT IS NOT APPROVED BY THE CONTRACT ADMINISTRATOR FOR CLEARING OR DISTURBANCE BY THE CONTRACTOR'S ACTIVITIES SHALL BE CLEARLY MARKED AND SIGN POSTED, FENCED OFF OR OTHERWISE APPROPRIATELY PROTECTED AGAINST ANY SUCH DISTURBANCE.
14. ALL STOCKPILE SITES SHALL BE SITUATED IN AREAS APPROVED FOR SUCH USE BY THE SITE MANAGER. A 6m BUFFER ZONE SHALL EXIST BETWEEN STOCKPILE SITES AND ANY STREAM OR FLOW PATH. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM EROSION AND CONTAMINATION OF THE SURROUNDING AREA BY USE OF THE MEASURES APPROVED IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
15. ACCESS AND EXIT AREAS SHALL INCLUDE SHAKE-DOWN OR OTHER METHODS APPROVED BY THE SITE MANAGER FOR THE REMOVAL OF SOIL MATERIALS FORM MOTOR VEHICLES.
16. THE CONTRACTOR IS TO ENSURE RUNOFF FROM ALL AREAS WHERE THE NATURAL SURFACE IS DISTURBED BY CONSTRUCTION, INCLUDING ACCESS ROADS, DEPOT AND STOCKPILE SITES, SHALL BE FREE OF POLLUTANTS BEFORE IT IS EITHER DISPERSED TO STABLE AREAS OR DIRECTED TO NATURAL WATERCOURSES.
17. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SLOPES, CROWNS AND DRAINS ON ALL EXCAVATIONS AND EMBANKMENTS TO ENSURE SATISFACTORY DRAINAGE AT ALL TIMES WATER SHALL NOT BE ALLOWED TO POND ON THE WORKS UNLESS SUCH PONDING IS PART OF AN APPROVED ESCP / SWMP.

SEDIMENTATION BASIN NOTE:

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING CRC-CV-C012990.08-C25.

SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER-THE BLUE BOOK'. CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY FOR FAIRFIELD (31.5mm).

SEDIMENT BASIN 204:

CATCHMENT AREA	= 5.69ha
REQUIRED BASIN VOLUME	= 1,344m³
BASE DIMENSION (LxB)	= 14.0m x 28.0m
TOP DIMENSION (LxB)	= 26.0m x 40.0m
MAX SIDE SLOPE	= 1V:3H
DEPTH	= 2.0m
PROVIDED BASIN VOLUME	= 1,380m³

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:
1. ASSUME TYPE D SOIL (CLAY/SILTY CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)
3. Cv = 0.5 & LENGTH TO WIDTH RATIO OF 2 (MIN.)

SOIL TYPE TO BE ASSESSED BY A GEOTECHNICAL ENGINEER

POND DEWATERING NOTES:

1. DRAIN PONDS OF WATER & DISCHARGE CLEAN WATER TO STORMWATER DRAINAGE SYSTEM (AS PER NOTES 2 & 3) - REFER TO STORMWATER PLAN FOR LOCATIONS.
2. DEWATERING TO BE PERFORMED IN SUCH A MANNER AS TO REMOVE CLEAN WATER WITHOUT REMOVING OR DISTURBING SILT, SEDIMENT OR OTHER ORGANIC MATERIAL FROM THE BASE OF THE PONDS.
3. DISCHARGE OF WATER FROM PONDS TO HAVE A PH RANGE OF 6.5-8.5 AND TSS < 50mg/L. PONDS TO BE DOSED WITH GYPSUM (APPROX. 30mg PER CUBIC METRE) TO ACCELERATE SETTLEMENT OF SUSPENDED SOLIDS.
4. REMOVE ALL SILT, ORGANIC AND WATER LOGGED MATERIAL FROM BASE OF POND (NOM. DEPTH 0.5-1.0m) AND DISPOSE OF IN ACCORDANCE WITH THE ACCEPTABLE PRACTICE.
5. EXPOSE NATURAL SITE SOILS AND COMPACT SUBGRADE IN ACCORDANCE WITH THE SITE PREPARATION NOTES (REFER DRG. SSDA10) REMOVING ANY SOFT ZONES AS REQ'D.
6. PLACE AND COMPACT FILL AS PER SITE PREPARATION NOTES ON DRAWING C10.
7. INFORMATION PROVIDED ON THIS DRAWING SHALL BE USED TO GUIDE THE DEVELOPMENT OF THE COSNTRUCTION ENVIRONMENTAL MANAGEMENT PLAN THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS.
TYPICAL (N.S.O.P.)

- DENOTES DIVERSION DRAIN
- DENOTES SILT FENCE WITH CATCH DRAIN
- DENOTES SILT FENCE ONLY
- DENOTES OVERLAND FLOW PATH
- DENOTES CONSTRUCTION ENTRY
- DENOTES LANDSCAPE BUFFER ZONE
- DENOTES BIO-DIVERSITY ENVIRONMENTAL ZONE

90% DETAILED DESIGN
FOR CONSTRUCTION CERTIFICATE

5m 0 10 20 30 40 50m
SCALE 1:500 AT A0 SIZE SHEET

AMENDMENTS	DATE	ISSUE
ARCHITECTURAL BACKGROUND REMOVED, REVISED AS CLOUDED	04.06.21	C
ISSUED FOR CONSTRUCTION CERTIFICATE - 90% DETAILED DESIGN	25.05.21	B
ISSUED FOR APPROVAL	07.05.21	A

ARCHITECT: hlc architects

CLIENT: HANSEN YUNCKEN ESR

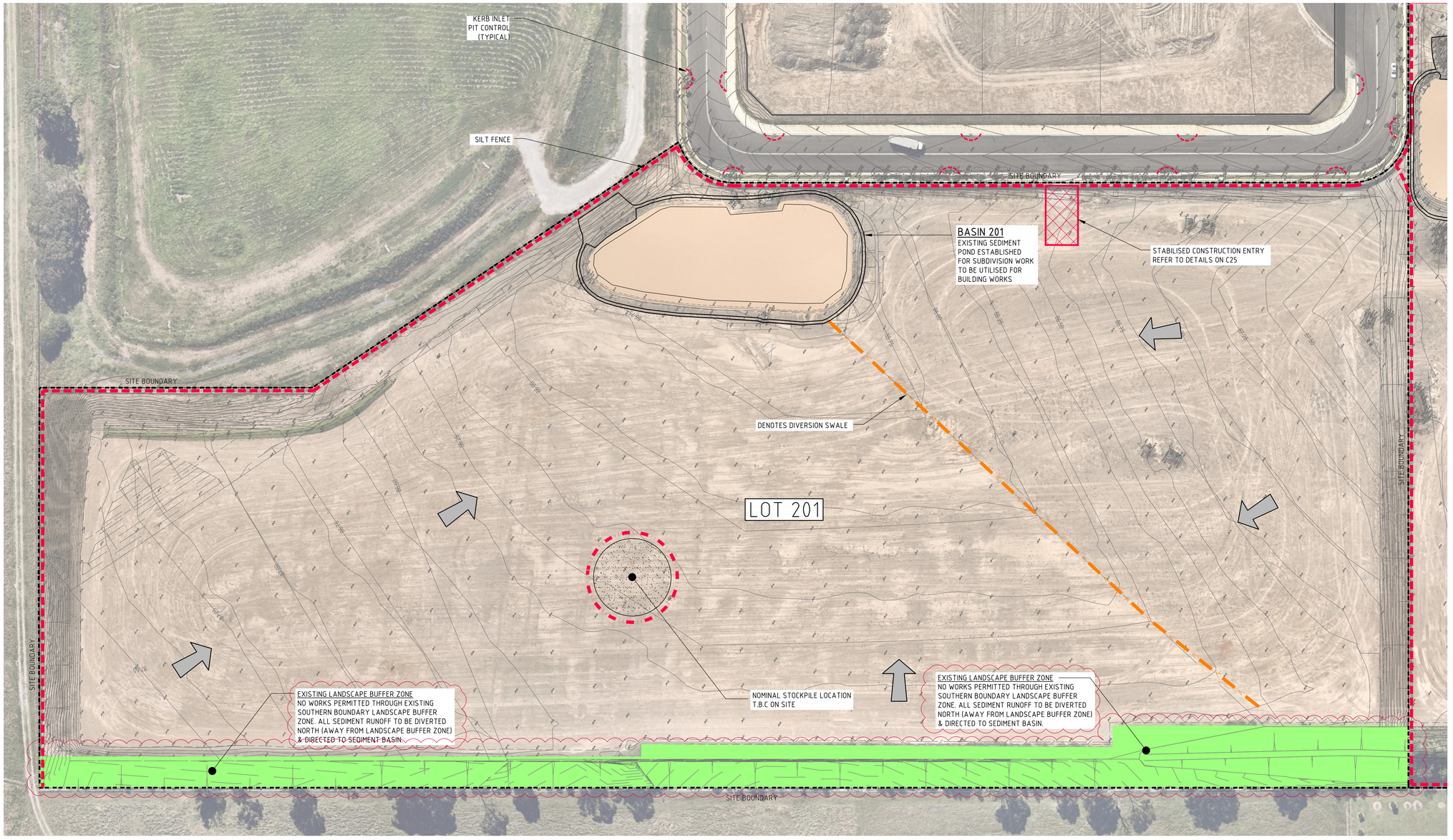
PROJECT: ESR HORSLEY LOGISTICS PARK
LOT 204
327-335 BURLEY ROAD, HORSLEY PARK, 2175

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
TF	ML	MAY '21	XC	A0	AS SHOWN	CRC-CV-C012990.08-C20

Costin Roe Consulting Pty Ltd.
Consulting Engineers ACN 065 475 149
Level 1, 8 Windmill Street
Walsh Bay, Sydney NSW 2000
Tel: (02) 9251-7699 Fax: (02) 9241-3721
email: mail@costinroe.com.au ©

Costin Roe Consulting
PRECISION | COMMUNICATION | ACCOUNTABILITY

DRAWING TITLE: EROSION SEDIMENT CONTROL PLAN
DRAWING NO: CRC-CV-C012990.08-C20
ISSUE: C



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SEDIMENT BASIN 201:

CATCHMENT AREA	= 10.44ha
REQUIRED BASIN VOLUME	= 2,466m^3
BASE DIMENSION (LxB)	= 21.0m x 40.0m
TOP DIMENSION (LxB)	= 33.0m x 52.0m
MAX SIDE SLOPE	= 1V:3H
DEPTH	= 2.0m
PROVIDED BASIN VOLUME	= 2,504m^3

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90% DETAILED DESIGN
FOR CONSTRUCTION CERTIFICATE

5m 0 10 20 30 40 50m
SCALE 1:500 AT A0 SIZE SHEET

AMENDMENTS	DATE	ISSUE
ARCHITECTURAL BACKGROUND REMOVED, REVISED AS CLOUDED	04.06.21	C
ISSUE FOR CONSTRUCTION CERTIFICATE - 90% DETAILED DESIGN	27.05.21	B
ISSUE FOR APPROVAL	07.05.21	A

ARCHITECT: hla

CLIENT: HANSEN YUNCKEN ESR

PROJECT: ESR HORSLEY LOGISTICS PARK
LOT 201
327-335 BURLEY ROAD, HORSLEY PARK, 2175

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
TF	ML	MAY '21	XC	A0	AS SHOWN	CRC-CV-C012990.09-C20

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Consulting Engineers ACN 065 475 149
Level 1, 8 Windmill Street
Walsh Bay, Sydney NSW 2000
Tel: (02) 9241-7699 Fax: (02) 9241-3731
email: mail@costinroe.com.au

Costin Roe Consulting
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