



NSW Department Of Education
North Kellyville New Primary School
Preliminary Construction Management Plan

August 2017

Table of contents

| | | |
|-----|--|---|
| 1. | Introduction..... | 1 |
| 1.1 | Background..... | 1 |
| 1.2 | State significant development application..... | 1 |
| 1.3 | SEARs requirements | 1 |
| 1.4 | Reliance | 2 |
| 1.5 | Purpose of this report..... | 2 |
| 2. | Project description..... | 3 |
| 2.1 | Site description | 3 |
| 2.2 | Site layout | 3 |
| 2.3 | Project construction stages..... | 3 |
| 2.4 | Hours of operation for construction..... | 4 |
| 2.5 | Construction programme | 4 |
| 3. | Environmental management (by Contractor) | 5 |
| 3.1 | Public safety..... | 5 |
| 3.2 | Dust control | 5 |
| 3.3 | Stormwater..... | 5 |
| 3.4 | Noise and vibration | 5 |
| 3.5 | Traffic..... | 6 |
| 3.6 | Waste..... | 6 |
| 4. | Preliminary Construction Traffic Management Plan | 8 |
| 4.1 | Scope..... | 8 |
| 4.2 | Vehicle routes | 8 |
| 4.3 | Size and number of trucks | 8 |
| 4.4 | Access arrangements | 8 |
| 4.5 | Parking..... | 8 |
| 4.6 | Traffic control measures | 8 |
| 5. | References | 9 |

Table index

| | |
|---|----------|
| Table 1 SEARs requirements | 2 |
|---|----------|

Appendices

Appendix A – Site layout plan

Appendix B Erosion and sediment control plan

1. Introduction

1.1 Background

The proposed North Kellyville New Primary School is to be constructed on a site at 120 Hezlett Road, Kellyville, within The Hills Shire Council (THSC) Local Government Area. The NSW Department of Education has acquired the site on which the school is to be constructed.

As part of the planning and development of the design for the school, concept designs have been prepared by GHD for the school buildings and associated infrastructure to support the school operations. The school is designed for 1,000 students.

As the proposed development comprises an educational establishment and has a Capital Investment Value (CIV) in excess of \$30 million it is categorised as State Significant Development (SSD) for the purposes of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Therefore an Environmental Impact Statement (EIS) is required to accompany the Development application (DA).

Think Planners, which is preparing the EIS, sought Secretary's Environmental Assessment Requirements (SEARs) from the NSW Department of Planning and Environment, and these were issued on 11 April 2017.

1.2 State significant development application

The specific elements that this State Significant Development Application seeks approval for are:

- Dewatering of two dams
- Tree removal
- Bulk earthworks
- Construction of a two storey courtyard building that will contain:
 - - 40 teaching spaces
 - - Canteen
 - - Library
 - - Multi-purpose Hall
 - - Office and Administration Space
 - - Amenities for students and staff
 - - OOSH accommodation
- Provision of a school drop off facility in front of the site along Hezlett Road
- Construction of a soccer field
- Construction of two netball/basketball courts
- Construction of two playgrounds
- Provision of a COLA within the central courtyard

1.3 SEARs requirements

The SEARs requirements for the EIS for construction management are addressed as follows:

Table 1 SEARs requirements

| SEARs requirements | Where addressed |
|---|--|
| Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures. | Project description – Section 2 Construction staging – Section 2.3 Environmental management - Section 3 Vehicle routes - Section 4.2 Size of vehicles - Section 4.3 Hours of operation – Section 2.4 Access arrangements – Section 4.4 Traffic control measures – Section 4.6 |

1.4 Reliance

This report: has been prepared by GHD for the NSW Department of Education and may only be used and relied on by the NSW Department of Education for the purpose agreed between GHD and the NSW Department of Education as set out in section 1.5 of this report.

GHD otherwise disclaims responsibility to any person other than the NSW Department of Education arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

1.5 Purpose of this report

This is a Preliminary Construction Management Plan (PCMP), which provides a broad overview of the construction management methodology, construction staging, and environmental management measures.

A Preliminary Construction Traffic Management Plan (PCTMP) which identifies the proposed vehicular routes, points of access/egress and vehicular and pedestrian controls is incorporated in this plan.

A more detailed CMP will be developed following DA approval and appointment of the construction contractor.

2. Project description

2.1 Site description

The proposed development includes:

- One main building on two levels
- Carparks
- Soccer field
- Netball/basketball courts (2)
- Nature Plan area
- Junior and senior adventure playgrounds
- Vegetable garden
- Landscaped areas
- Paved areas

2.2 Site layout

A site layout is shown on the site plan in Appendix A.

2.3 Project construction stages

The expected stages of construction are outlined below.

2.3.1 Demolition

- Demolition and removal of permanent buildings (already completed prior to this project)
- Removal of waste from site

2.3.2 Earthworks and site preparation

- Clearing of vegetation from site and disposal to licensed green waste facilities
- Establishing stormwater drainage systems to divert clean stormwater around cleared areas and construction zones
- Erosion and sediment controls to prevent sediments from leaving site
- Construction of temporary berms to prevent excess stormwater run off to adjacent residential sites
- Establishing internal site construction access roads, laydown areas and a dedicated construction management compound with temporary offices and site facilities
- Connecting temporary site services to the construction compound
- Bulk earthworks to create the general levels for buildings, outdoor recreational areas, soccer field and netball/basketball courts
- Stockpiling and conditioning of existing topsoils
- Dewatering and filling of the onsite dam
- Site reprofiling including construction of retaining walls and batters to create building pads

2.3.3 Services

- Provision of services to the site including sewerage connection, water, gas, telecommunications

2.3.4 Buildings

- Excavations associated with building foundations and slabs
- Provision of below ground building services including plumbing and drainage
- Building slab construction
- Building framing
- Walls, windows and roofing
- Internal services (power, lighting)
- Internal fit out of buildings

2.3.5 Roadways

- Laying stormwater drainage pipes and placing pits
- Constructing kerbs and gutters for roads
- Paving of carparks

2.3.6 Landscaping and external works

- Utilisation of stored topsoil for garden beds
- Planting
- Paving of pedestrian areas
- Sports field construction
- Netball/basketball court construction
- Playground construction
- Vegetable garden area construction
- Landscaping of nature plan area

2.4 Hours of operation for construction

The proposed working hours for this project are as follows:

Monday to Friday- 7:00am to 5:00pm

Saturdays- 7:00am to 1:00pm

Sundays and Public Holidays - No work

If required, after hours permits will be sought from the relevant authorities.

2.5 Construction programme

The anticipated programme of works is as follows:

- Stage 1 - building works completion and handover Jan 2019
- Stage 2 – external works – completion and handover April 2019

3. Environmental management (by Contractor)

3.1 Public safety

Signage and fencing will be used to restrict access to the site.

Work on site will be undertaken in accordance with the requirements of Workcover NSW as well as relevant standards and codes of practice.

Contractors will be required to undertake site inductions prior to entering the site. On-site safety briefings will be held as the site works proceed.

3.2 Dust control

An Air Quality Management Plan will be implemented to minimise dust emissions during construction works. This will include measures such as watering down roads and short term stockpiles, and temporary revegetation of long term stockpiles.

3.3 Stormwater

An erosion and sediment control plan will be implemented on site. This will include establishing stormwater drainage systems to divert clean stormwater around cleared areas and construction of temporary berms to prevent excess stormwater run off to adjacent residential sites. A preliminary sediment and erosion control plan is provided in Appendix B.

3.4 Noise and vibration

A Construction Noise Management Plan will be implemented on site. This will include a number of mitigation measures, as outlined below:

Construction hours and notification

Noise generating construction activities should be undertaken in accordance with the Interim Construction Noise Guideline (DECC, 2009). The standard hours for construction work should be in accordance with the Guideline:

- 7:00 am – 6:00 pm Monday to Friday
- 8:00 am – 1:00 pm Saturdays
- no work on Sundays or Public Holidays.

Work outside normal hours should only comprise:

- the delivery of materials outside normal hours requested by police or other authorities for safety reasons
- emergency work to avoid the loss of lives and/or property

Residences within 500 m of the site should be notified as to the timing and duration of the construction works and provided with a contact phone number for any complaints or concerns during the construction period.

Site inductions

Inductions for the work crew would include the specific noise issues and mitigation measures required for the site. The induction would include:

- all relevant standard noise mitigation measures
- relevant licence and approval conditions
- permissible hours of work
- location of any sensitive receivers that may exceed the construction noise management level
- construction employee parking areas
- designated loading/ unloading areas and procedures
- site opening/closing times (including deliveries)
- behavioural practices that minimise noise: such as avoiding dropping materials from height and avoiding metal to metal contact on material.

Other measures

The distance between plant and equipment and any sensitive receiver should be maximised where practicable.

Vehicles, plant and equipment would be regularly maintained and kept in good operating condition. Machines found to produce excessive noise should be removed from site or stood down until repairs or modifications can be made.

Vibration

Should any buildings be identified that are located within the structural damage vibration buffer distances, a property condition report should be prepared for the premises before and after undertaking the work.

Compliance vibration monitoring should also be undertaken during high vibration generating activities where buildings are located within the structural damage buffer distances to confirm vibration criteria are not exceeded.

3.5 Traffic

A Construction Traffic Management Plan will be prepared by the contractor once appointed to identify the proposed vehicular routes, points of access/egress and vehicular and pedestrian controls. A preliminary version of this plan is provided in Section 4.

3.6 Waste

A Waste Management Plan has already been produced for this project. According to the plan, wastes generated on site would be managed and minimised by a combination of waste planning and on site controls.

3.6.1 Waste planning

Waste planning activities will include:

- Designing buildings to minimise on site cutting of components, and maximising on site assembly tasks
- Careful ordering of materials such as sand and building products to match quantities with amounts required, and on time ordering rather than having materials stored on site for months before being used
- Segregating materials and providing weather protection for stored materials on site, to maximise their fitness for use

- Bringing in material such as sand in large bags rather than as bulk loads, to enable excess materials to be easily picked up and used at other sites
- Encouraging bulk handling and use of reusable and returnable containers
- At the time of tendering, advise contractors and sub-contractors and suppliers of the requirements to minimise waste on site
- Include provision in the tender documentation for the client to monitor the use of waste and recycling bins on site
- Development of a Construction Waste Management Plan by the main site contractor, which includes all of the above elements

3.6.2 On site controls

On site controls would include:

- Implementation by the main site contractor of a Construction Waste Management Plan
- Segregating wastes generated on site, using different skip bins for recycling and waste, with separate bins for different recyclable materials
- Discussion about the site's waste management and recycling policies and practices with employees and subcontractors during site inductions and tool box talks
- Ensuring all waste disposal bins are clearly marked
- Keeping records of quantities of waste and recycled materials disposed of, and the destinations of these materials
- Ensuring that wastes are only disposed to licenced facilities

4. Preliminary Construction Traffic Management Plan

4.1 Scope

The SEARs require a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures to be prepared. This section of the Construction Plan provides preliminary information on these aspects of the project.

4.2 Vehicle routes

The site is located on Hezlett Road, which can be accessed from Samantha Riley Drive, which is accessible from major roads such as Windsor Road and Old Windsor Road. These arterial roads would be used as much as possible. Other routes may also be used.

4.3 Size and number of trucks

Typical truck sizes used for this type of project are:

- 19.5m 'Truck and Dog' combination
- 19m Articulated Vehicle
- 12.5m Heavy Rigid Vehicle

The roads used for site access should be able to accommodate these sized vehicles.

The numbers of trucks used during construction is estimated in the GHD Acoustic Report to not exceed 10 heavy vehicles per day during the peak period of construction.

4.4 Access arrangements

A traffic controller may be positioned at the site access points on Hezlett Road to ensure pedestrian safety as vehicles enter and leave the site. The area around the site is currently used for agricultural purposes and few pedestrians are expected, other than people accessing the adjacent kindergarten.

4.5 Parking

The contractor would establish a site compound with some on-site parking. Workers may be encouraged to ride share and take other steps to minimise the number of vehicles that require parking.

4.6 Traffic control measures

A final Construction Traffic Management Plan that meets all of the requirements of AS 2890.2, AS 1742.3, *RMS Traffic Control at Work Sites Manual* will be prepared before work commences on site.

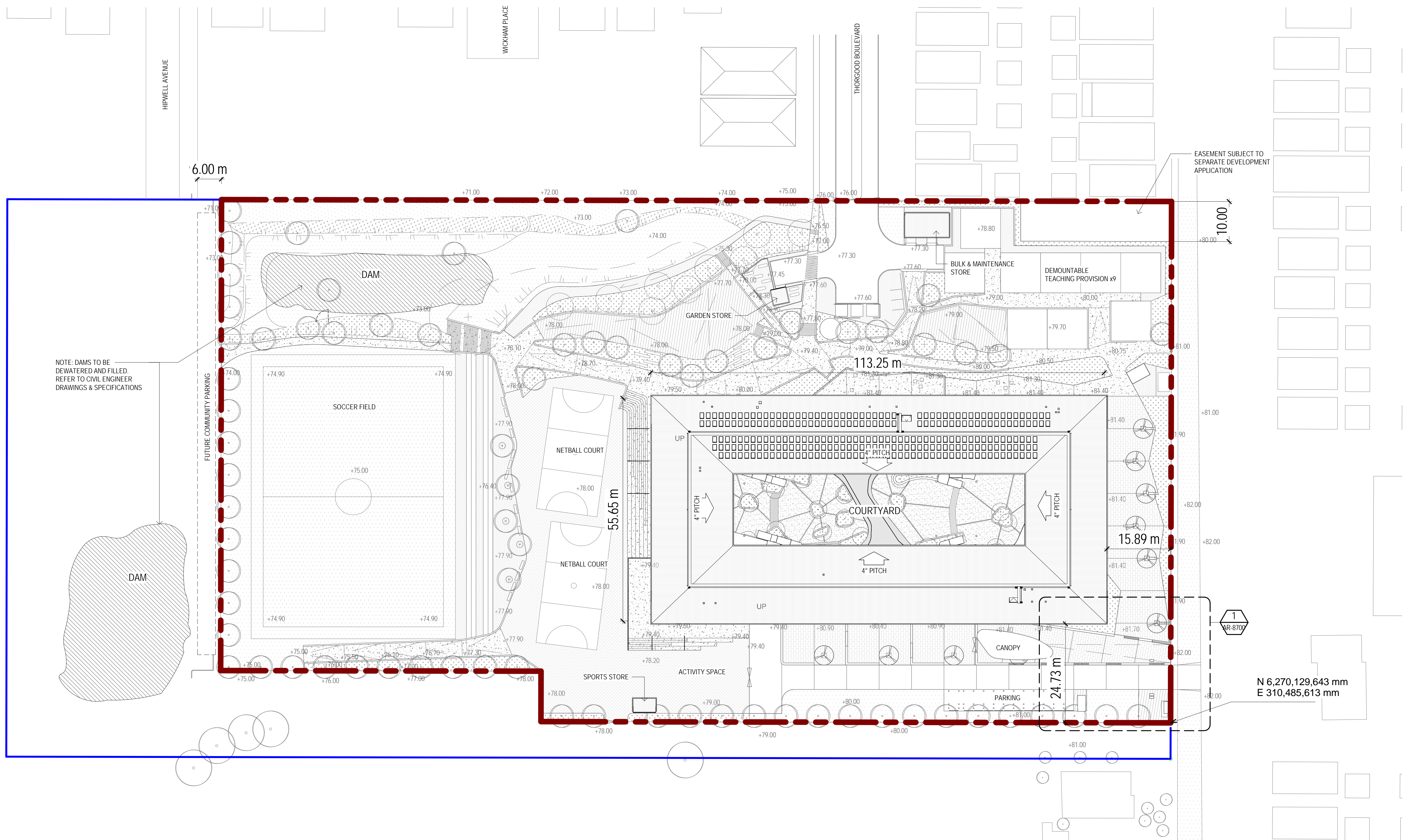
5. References

GHD, NSW Department of Education, North Kellyville New Primary School Acoustic Report, June 2017

GHD, NSW Department of Education, North Kellyville New Primary School Waste Management Plan August 2017

Appendices

Appendix A – Site layout plan



SITE PLAN
SCALE 1: 500

REVISSED SCHOOL BOUNDARY
DOE LAND HOLDING

DEVELOPMENT APPLICATION

| | | | | | | |
|----|--|---|-------|-------------|------------------|------|
| G | SSD SUBMISSION | LR | PM* | MD* | 29.08.2017 | |
| F | SSD SUBMISSION | LR | MD* | MW* | 11.08.2017 | |
| E | TENDER ADDENDUM 02 | LR | MD* | MW* | 28.07.2017 | |
| D | REISSUED FOR TENDER | LR | SM* | MW* | 28.06.2017 | |
| C | 40% SCHEME/TENDER ISSUE | LR | SM* | MW* | 16.06.2017 | |
| B | ISSUED FOR SSD DEVELOPMENT APPLICATION | LR | SM | MW | 09.06.2017 | |
| A | PRELIMINARY ISSUE FOR SSD AND COSTING | LR | SM | MW | 02.06.2017 | |
| No | Revision | Note: * indicates signatures on original issue of drawing or last revision of drawing | Drawn | Job Manager | Project Director | Date |



GHDWOODHEAD
Level 15, 133 Castlereagh St Sydney NSW 2000 Australia
T 61 2 9239 7100 F 61 2 9239 7199
E sydmall@ghd.com W www.ghd.com

DO NOT SCALE



Conditions of Use.
This document may only be used by
GHD's client (and any other person who
GHD has agreed can use this
document) for the purpose for which it
was prepared and must not be used by
any other person or for any other
purpose.

| | | | |
|-----------------------------------|-------------|--------------|--------------|
| Drawn | L. ROQUE | Designer | M. SLOANE |
| Drafting Check | A. MACLEAN* | Design Check | P. THATCHER* |
| Approved (Project Director) | | | |
| Nominated / Responsible Architect | A. MILLER | | |
| Scale | 1 : 500 | | |

| | | | |
|---------------|-------------------------------------|-------------|----------------------------|
| Client | NSW DEPARTMENT OF EDUCATION | | |
| Project | NORTH KELLYVILLE NEW PRIMARY SCHOOL | | |
| Title | SITE PLAN / SETOUT PLAN | | |
| Original Size | A1 | Drawing No: | 21-26108 - KN-SD - AR-1000 |
| Rev: | G | | |

Appendix B Erosion and sediment control plan



| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|--|-------|---|------------------|---|----------|---|--|---|--|--|--|------------------------|--|---------------------------------------|-------------|---------------|--|---|--|--|---------------|--|
| | | | | | |  SCALE 1:500 AT ORIGINAL SIZE | |  | |  Education | |  | |  Level 15, 133 Castlereagh Street, Sydney NSW 2000 Australia T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com W www.ghd.com | | DO NOT SCALE | | Drawn M.RANGWALA Designer G.DE SWARDT | | Client | | NSW DEPARTMENT OF EDUCATION NORTH KELLYVILLE PUBLIC SCHOOL CIVIL EROSION AND SEDIMENT CONTROL PLAN | | | | |
| D | ISSUED FOR DEVELOPMENT APPLICATION | | | | | MR | CS* | SM* | 29.08.17 | | | | | Drafting Check A.MACLEAN* | | Design Check A.RAHMAN* | | Project | | | | | | | | |
| C | ISSUED FOR SSD SUBMISSION | | | | | MR | CS* | SM* | 09.08.17 | | | | | Approved (Project Director) | | | | Title | | | | | | | | |
| B | ISSUED FOR TENDER | | | | | MR | CS* | SM* | 28.06.17 | | | | | Date | | | | | | | | | | | | |
| A | ISSUED FOR SSD DEVELOPMENT APPLICATION | | | | | MR | CS* | SM* | 14.06.17 | | | | | | | | | | | Original Size | | | | | | |
| No | Revision | Note: * indicates signatures on original issue of drawing or last revision of drawing | | | Drawn | Job Manager | Project Director | Date | | | | | | | | | | | Scale 1:500 | | This Drawing must not be used for Construction unless signed as Approved | | Drawing No: 2126108-NK-SD-CI-1035 | | Rev: D | |
| Plot Date: 29 August 2017 - 5:51 PM Plotted by: Mona Rangwala Cad File No: G:\21\26108\6. Kellyville North PS\03 Civil\CADD\Drawings\A A ISSUED\21-26108-KN-DA-CI-1035.dwg | | | | | | | | | | | | | | | | | | | | | | | | | | |

GHD

Level 15

133 Castlereagh Street



T: 61 2 9239 7100 F: 61 2 9239 7199 E: sydmail@ghd.com

© GHD 2017

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

GHDDocId/C:\Users\hmittchell\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\KW5CD8JI\2126108-REP-G-Preliminary Construction Plan for North Kellyville New Primary School.docx

Document Status

| Revision | Author | Reviewer | | Approved for Issue | | |
|----------|----------|--------------|-----------|--|---|---------|
| | | Name | Signature | Name | Signature | Date |
| 01 | D Gamble | | | | | 22/6/17 |
| 02 | D Gamble | T Murace | On file | S Mellor | On file | 26/6/17 |
| 03 | D Gamble | | | | | 10/8/17 |
| 04 | D Gamble | A Montgomery | On file |  |  | 31/8/17 |

www.ghd.com

