

CURL CURL NORTH PUBLIC SCHOOL

Playfair Rd, Sydney NSW 2099

Preliminary Construction Management Plan

Prepared for Department of Education

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1 INTRODUCTION

1.1 Overview

This preliminary Construction Management Plan outlines the methodologies and strategies anticipated for the construction of a new Public school development at Playfair Road, Curl Curl North NSW 2099 – proposed name Curl Curl North Public school development.



Existing Site plan, not to scale.
 Source: NearMap



1.2 Site Description

The subject site is located within the Northern Beaches and is situated at the intersection of Abbott Road and Playfair Road, Curl Curl North. Immediately to the south is John Fisher Park, a series of large Council owned playing fields and netball courts that sit beside Curl Curl Lagoon. To the north, east and west are generally low scale residential dwellings, typically 1-2 storeys in height. The site falls approximately 7m from north to south and comprises two lots, Lot 1 DP 731454 and Lot 286 DP752038. There are a number of perimeter trees across the lots, and separate Arboricultural and Ecological reports have been developed identifying the plan for the development. A preliminary Traffic Management plan has also been prepared and incorporated into this scheme.



1.3 Proposal

The proposed development consists of the Construction of a new Public School and associated sports facilities, site services and landscaping.

This construction management plan (CMP) is a preliminary report, and the measures contained within it are subject to change during the detailed design phase. A more detailed CMP will be developed following appointment of a construction contractor.

1.4 Interface with other Project Plans and Procedures

The Construction Management Plan forms part of an integrated set of Project Management Plans and should be read in conjunction with them.

This document should also be read in conjunction with the following but not limited to:

Construction Traffic Management Plan
Hazardous Materials Assessment
Geotechnical and Structural Report
Environment Site Assessment Report Stage 1
Construction and Demolition Waste Management Plan
Design and Sediment Control Plan
ESD Report
Construction and Operational Noise Report
Stormwater and Erosion Management Plan

1.5 Project Staging

The project will be broken into the following stages:

1.5.1 Pre construction

Project preparation works including surveys, due diligence and approvals

Site preparation and set up etc.

1.5.2 Early Works

Decanting, relocation of demountables on site, remediation of on site asbestos/contamination

Demolition and excavation of existing buildings

1.5.3 Stage 1

Construction works for new Public school 2 storey buildings - Block A, B, C, D, E

Installation of associated Site Services

1.5.4 Stage 2

External works and removal of demountable classrooms

Construction of new sports fields

Hard and Soft Landscaping

1.6 Construction Methodology

The following explains the proposed staging, methodology, sequencing and specific requirements to be adopted during construction of the proposed works.

1.6.1 Pre construction

Prior to construction works being undertaken on site, all necessary planning and investigations will be undertaken to mitigate and control impacts arising from the proposed works:

1. Existing condition and Dilapidation Survey

A detailed dilapidation survey will be performed on surrounding areas including:

- Roads, kerb & gutter, footpath
- Street signs, street furniture, light poles, trees, fences etc.
- Infrastructure installations (pits, bollards etc.)
- 2. Existing Infrastructure Due Diligence

Infrastructure investigation including:

- · Location of in ground services (including marking of location)
- Establish dialogue and liaise with authorities to make relevant applications.
- 3. Authority Approvals

Approval applications (aside from planning requirements) including:

- Utility diversions and/or protection works
- Traffic Management Plan

It is envisaged to utilise the existing paved entry off Playfair road for the majority of the works. Any requirements detailed in the Traffic Management Plan will be installed and incorporated to enable safe access and egress to the site for material vehicular deliveries.

Temporary silt fencing and sedimentation drainage will also be installed where necessary prior to construction earthworks commencing.

1.6.2 Early Works

Demolition

Contractors undertaking demolition works during this phase will be required to develop and implement specific plans to ensure works appropriately deal with safety and environmental issues. Contractor works will include:

- Removal of hazardous materials present on site that are to be demolished as part of the works. Noting that the initial Hazardous building materials survey has highlighted harmful substances ie; Asbestos.
- Demolition of existing internal building finishes, including existing building services not required in the new development.

All demolition materials will be loaded into road trucks and removed offsite and deposited at a designated waste facility.

Site Clearance and Bulk Excavation

All existing trees identified to be removed will be undertaken by an approved specialist Arborist contractor, it is envisaged at this stage that all removed trees will be transported off site to a registered waste disposal recycling facility.

Topsoil strip will be progressed utilising on site dump trucks and deposited to a designated onsite Topsoil storage area for use during later Landscaping works.

Bulk excavation cut and fill operation will generally progress South to North to the required levels and proposed profiles. Where fill material is to be placed on existing ground this will be proof rolled prior to filling operations, placement of fill will then proceed with compaction to the required specification and levels required. Piling platforms will be installed where necessary prior to piling rigs mobilised for piling operations.

Site Stormwater Services

Once bulk earthworks operations are completed site drainage will commence, working from the lowest outfall point and connecting to the existing mains the drains will be laid to fall in excavated trenches as specified, suitable bedding, surround and backfill material will be compacted to final reduced levels. Where necessary trench supports will be installed to ensure safe working conditions during all excavation and drainage installation works. Proposed swale pathways will also be constructed connected to the drainage where required, again temporary supports will be installed if required during excavation and construction.

1.6.3 Stage 1 works

Associated Retaining Walls

Associated retaining walls will be progressed as Bulk earthworks operation allow, these structures comprise of typically reinforced foundations and blockwork construction with associated drainage and fencing as required. These retaining structures will be progressively constructed in conjunction with bulk earthworks operations with cut and fill operations allowing stepped construction as specified.

Main Building Blocks

Once the required levels have been attained following bulk earthworks operations, works will progress on the construction of the proposed blocks. Reinforced piles will be installed and ground floor slabs to progress sequentially incorporating the required construction and movement joints as specified. Reinforced concrete columns and shear walls then be constructed to first floor levels as noted. It is anticipated that Concrete mobile pumps be used for the construction of floor slabs, columns and walls where required. Mobile craneage will also be required for the installation of reinforcement and lifting of formwork where necessary.

Scaffold will be erected directly off the pre-laid concrete slabs or levelled formation allowing erection of the external facades, walls and windows. Craneage will be used where necessary to install panels in a safe and secure method.

Roofing will be delivered and installed utilising mobile craneage to ensure a watertight structure allowing follow on installation of internal services and finishes.

Services, internal partitions and ceilings will be progressed once a weather tight structure is erected. Internal finishes will progress in a sequential manner throughout the blocks.

Site Services

All service routes i.e.; sewers, fire mains, water, communications and security will be installed following installation of the drainage routes and as earthworks and building works allow.

Finishes

External security fencing will be installed to the perimeter of the proposed school grounds, final finishes including lighting, equipment and fittings installed, the clearing of the site compound, carparking areas and storage areas will be completed prior to final landscaping completion and handover of the proposed school facilities.

1.6.4 Stage 2 works

The proposed stage 2 will remove the remaining onsite existing buildings and demountable classrooms. Once the remaining structure and earthwork to the north of the site are removed and cleared, landscape work will progress. Field filtration draining will be installed across full area of the proposed landscape courtyard followed by the installation of layered compacted subbase material as specified to specified falls. Line marking, lighting columns and equipment will then be installed to fully complete the facility.

External landscaping including paved and planted areas will progress to complete landscaping works.

1.7 Hours of Operation and Programme

The proposed working hours for this project are as follows:

Monday to Friday – 7.00am to 5.00pm

Saturdays - 8.00am to 1.00pm

Sundays and Public Holidays - No work

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

The overall Construction Programme period for the proposed development works is circa 16 months which includes 2 weeks Christmas shutdown, standard public holidays and Rostered Days Off (RDO) as well as a 15% weather risk contingency. A copy of the Preliminary Construction Programme is attached in Appendix A which shows the phases of works detailed herein, the durations of the proposed works as well as staging and sequencing.

1.8 Materials Handling Strategy

Prior to commencement of works, the Preliminary Construction Traffic Management Plan will be further developed and traffic controls installed to manage the flow of traffic on and around the proposed site.

During the demolition phase, the handling of materials will be controlled by the demolition contractor with specific consideration for the handling of hazardous materials.

2 ENVIRONMENTAL MANAGEMENT

2.1 Public Safety and Protection

Appropriate signage will be placed on areas at the entrance to the site along Playfair Road and Abbott road indicating the works area and restricted access to the site. The entry to the site (Playfair Road) will have a security guard to control entry of authorised personnel only.

All works will be undertaken in accordance with the requirements of Workcover NSW as well as the relevant standards and codes of practice to ensure the safety of personnel on and around the site.

Contractors will be required to undertake a through induction specific to the site and to hold on-site briefings periodically as the project and site evolves.

2.2 Dust Control Measures

A detailed Air Quality Management Plan will be provided by the contractor once appointed. This will be submitted to the Northern Beaches Council prior to the commencement of works.

All demolition works will be undertaken by appropriately licenced and experienced contractor utilising the relevant codes of practice with regards to the generation of dust.

Regular daily monitoring will be undertaken throughout the construction phase and mitigation measures will be undertaken on an as need basis.

2.3 Stormwater Management Measures

A preliminary Stormwater and Erosion Management Plan is part of the integrated management plan and will be updated by the contractor once appointed. This will be submitted to the Northern Beaches council prior to the commencement of works.

A continuous sedimentation drain and silt fence will be installed to the low side perimeter(south) of the site as specified to prevent any spoil washing from the site. The drains and pits will be inspected regularly and maintained such that they remain effective.

A sediment control trap for vehicles will also be established at the vehicle entry to assist with preventing spoil from being deposited onto adjoining roads.

2.4 Noise and Vibration Control Measures

A preliminary Construction Noise and Vibration Management Plan is part of the integrated management plan and will be updated by the contractor once appointed. This will be submitted to the Northern Beaches council prior to the commencement of works. All works have been planned within the proposed working hours as outlined in Section 1.7.

Control of noise and vibration will be achieved through ongoing and effective monitoring systems.

Plant and equipment utilised during demolition and construction will meet conditions of consent with regards to noise levels. If required, mufflers and acoustic screening will be used to reduce levels of noise on plant and equipment where possible.

Vibration disturbance will be kept at a minimum and these works will be undertaken during suitable times of the day.

2.5 Traffic Management

A preliminary Construction Traffic Management plan is part of the integrated management plan and will be updated by the contractor once appointed. The report has identified the proposed vehicular routes, points of access/egress and vehicular and pedestrian controls. This will be submitted to the Northern Beaches council prior to the commencement of works.

An on site traffic and pedestrian route plan will be maintained for the identification and management of work zones, material deliveries and which will manage the flow of vehicle and pedestrian traffic on and around the proposed works zones to alleviate congestion. Also, signage and directions will be clearly identified to assist safe movements and manoeuvres.

At this stage it is envisaged the demolition and excavation activities be serviced utilising standard Medium Rigid Vehicles (MRV) and Truck and Dog Vehicles which will be loaded on site utilising tracked excavators. Following the demolition and excavation, it is expected that deliveries will increase due to the construction of the structures and internal fit out works.

Bulk deliveries will be unloaded into predefined storage and materials deliveries areas prior to being distributed to the workface for installation. Authorised traffic controllers will be utilised as required to facilitate movements on and off site.

2.6 Waste Management

A preliminary Construction and Demolition Waste Management Plan is part of the integrated management plan and will be updated by the contractor once appointed. The report has identified the proposed vehicular routes, points of access/egress and vehicular and pedestrian controls. This will be submitted to the Northern Beaches council prior to the commencement of works.