Monday, January 29, 2018

Project No. 2018-6059000

Warren Smith & Partners

37 YEARS OF SERVICE

Attention: Ashleigh Zarlenga
Hanson Heidelberg Cement Group
35 Clarence Street
Sydney, NSW 2000

Dear Ashleigh

RE: Hanson Batching Plant - Glebe Island
CIVIL ENGINEERING CONSULTANCY SERVICES

Warren Smith and Partners (WS+P) has been engaged by Hanson Heidelberg Cement Group to assess the impact on Sydney Water services in the proposed development site.

EXISTING SITE

The existing site is located on Glebe Island, Rozelle, and is bound by Jones Bay to the east, Glebe Island Bridge to the south, and James Craig road to the west. Please refer to Figure 1 for an aerial view of the site.

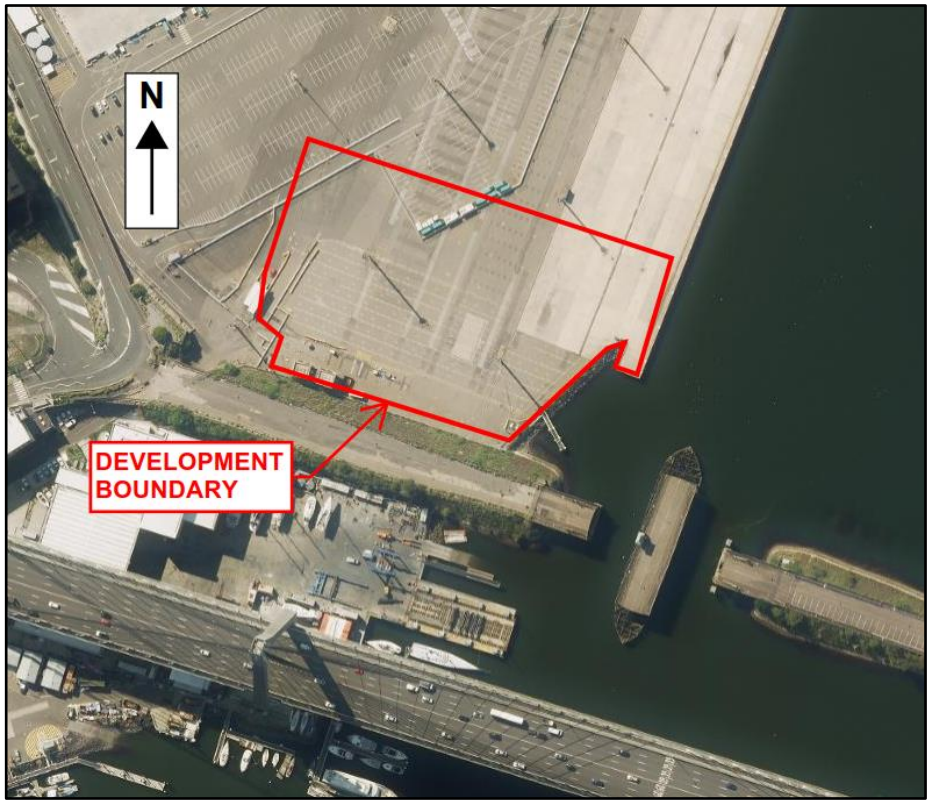


Figure 1: Aerial View of Site. (Source: Six Maps)

The existing site currently has a DN250 CICL watermain and a DN150 CI sewer main traversing the site. A second DN150 CI sewer main reticulates along the northern boundary of the site prior to connecting into the DN150 CI sewer main which traverses the site. The DN250 watermain runs from the south-west corner of the site at James Craig road through the proposed building, and exits at the location of the proposed aggregate storage bins, with a hydrant and stop valve located approximately eight (8) metres south of the proposed filter press.

The first DN150 sewer main traverses the site from the south west corner of the site at James Craig road and exits at a manhole inside the proposed property boundary. The second DN150 sewer main runs from a manhole located in the proposed tipping bin exit ramp and connects into the first sewer line at the manhole. There is also a water meter at the south of the site which connects into a DN150 watermain south-west of the site. Please refer to SK-01 and Figure 2 for a plan of the proposed Hanson Batching Plant and existing Sydney Water services.

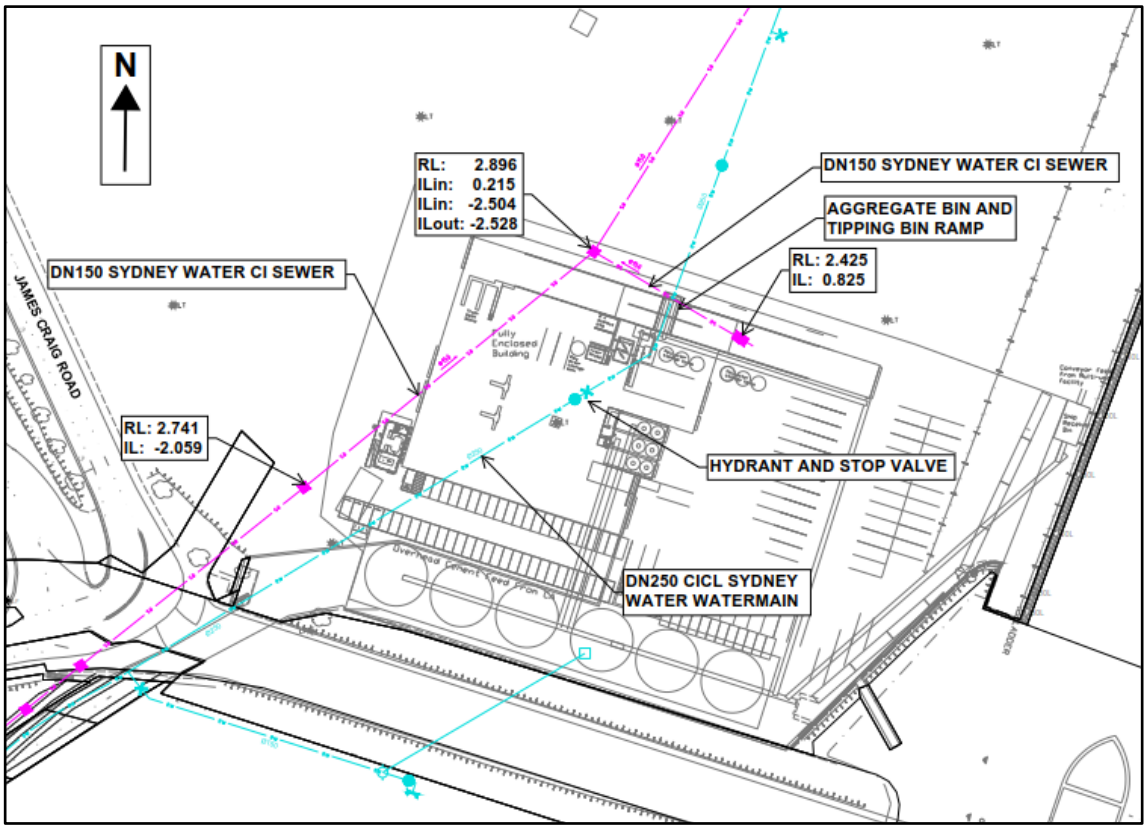


Figure 2: Existing Sydney Water Utilities

IMPACTS ON SYDNEY WATER ASSETS

The Sydney Water assets identified conflict with the proposed plant structures such that deviations will be required. The DN250 watermain runs through the proposed building and must therefore be deviated around the west and north side of the building, maintaining an asphalt surface above the watermain, and is to be constructed with a cover of 750mm. The hydrant and stop valve will also need to be relocated to this location. The water meter at the south of the site will need to be relocated away from the site. Please refer to SK-02 and Figure 3 which outlines the proposed water deviation.

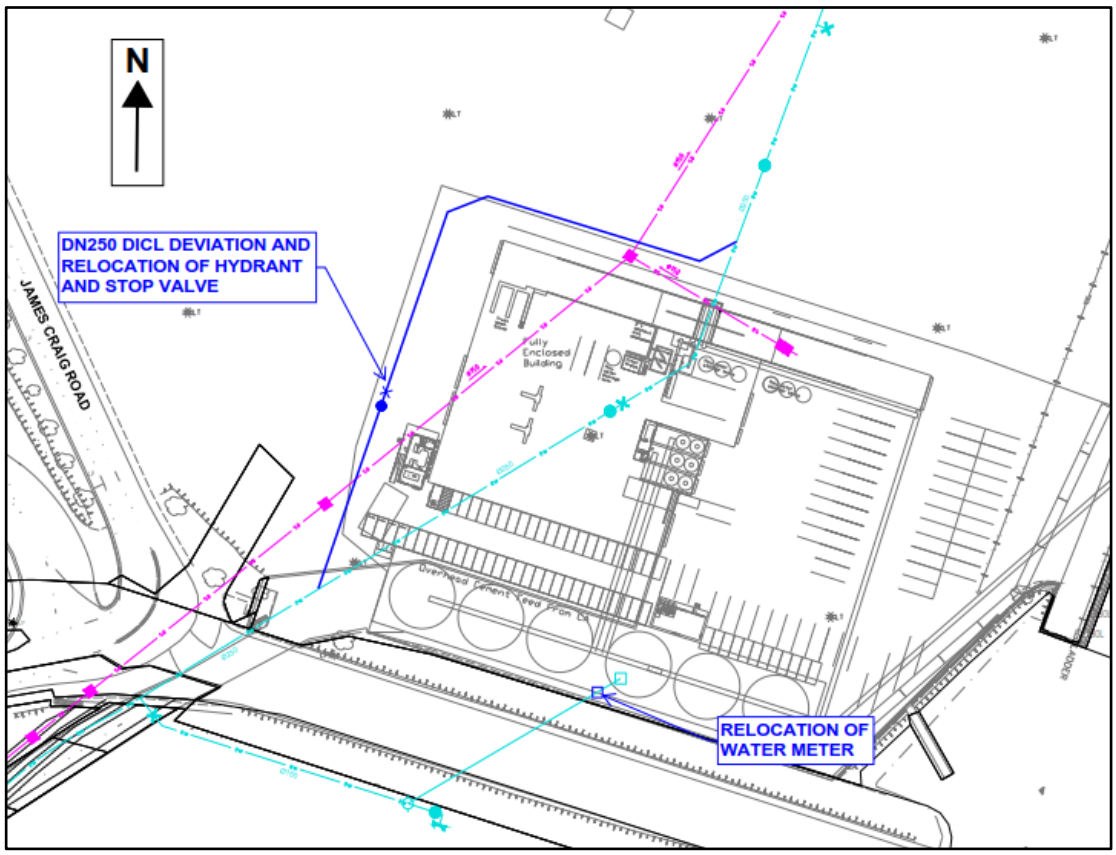


Figure 3: Proposed Water Deviation

The first DN150 sewer line runs through the proposed building and may be resolved through two (2) potential solutions:

1. The DN150 may be deviated around the building, similar to the DN250 watermain, and reconnect into the manhole via two (2) maintenance shafts, or;
2. Retain the existing alignment and provide maintenance-free concrete encasement of the existing pipe through the length of the building.

An investigation will need to be conducted into the purpose of the second DN150 sewer line and manhole located under the proposed tipping bin exit ramp, resulting in three (3) possible solutions:

1. If the sewer is found to not be required, the sewer can be cut before the ramp.
2. If the sewer line is in use and cannot be cut, it will either require concrete reinforcement and for the existing maintenance hole to be raised into the ramp, or it will need to be deviated.
3. The deviation will move the sewer line north of the property boundary with a new maintenance hole installed, and for the sewer services it was supplying to be reconnected.

Please refer to SK-03 and Figure 4 which outlines the proposed sewer options. All private water and sewer services off disconnected existing assets will need to be reconnected to the new assets.

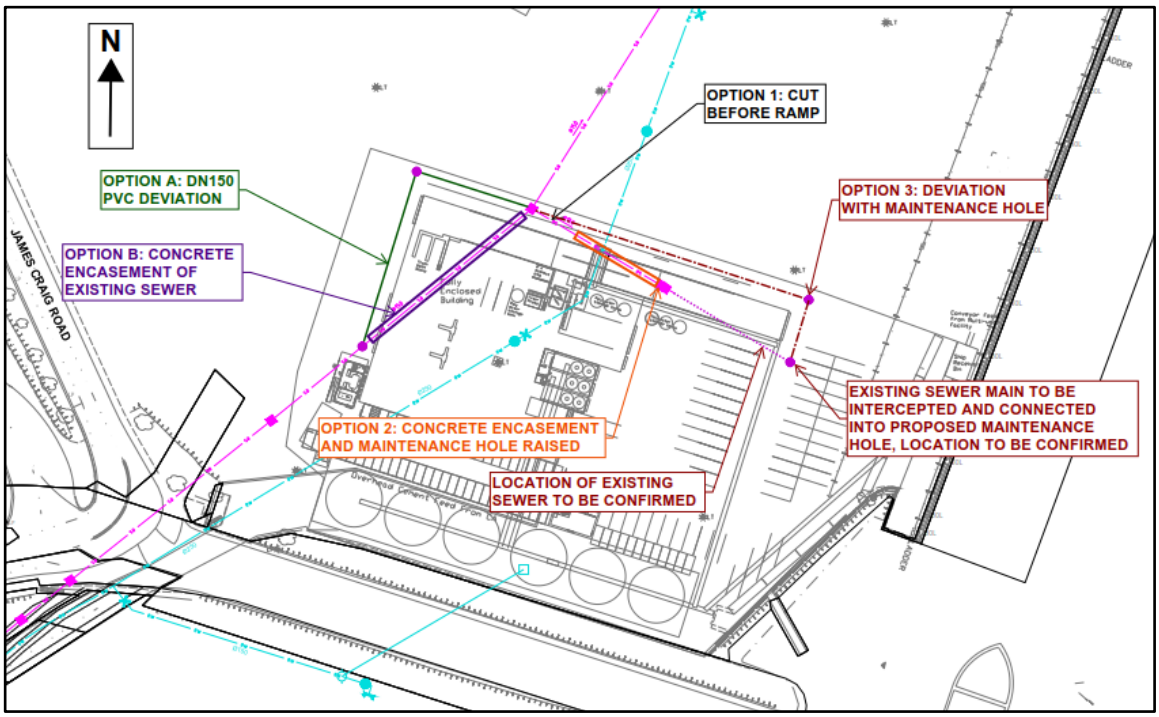


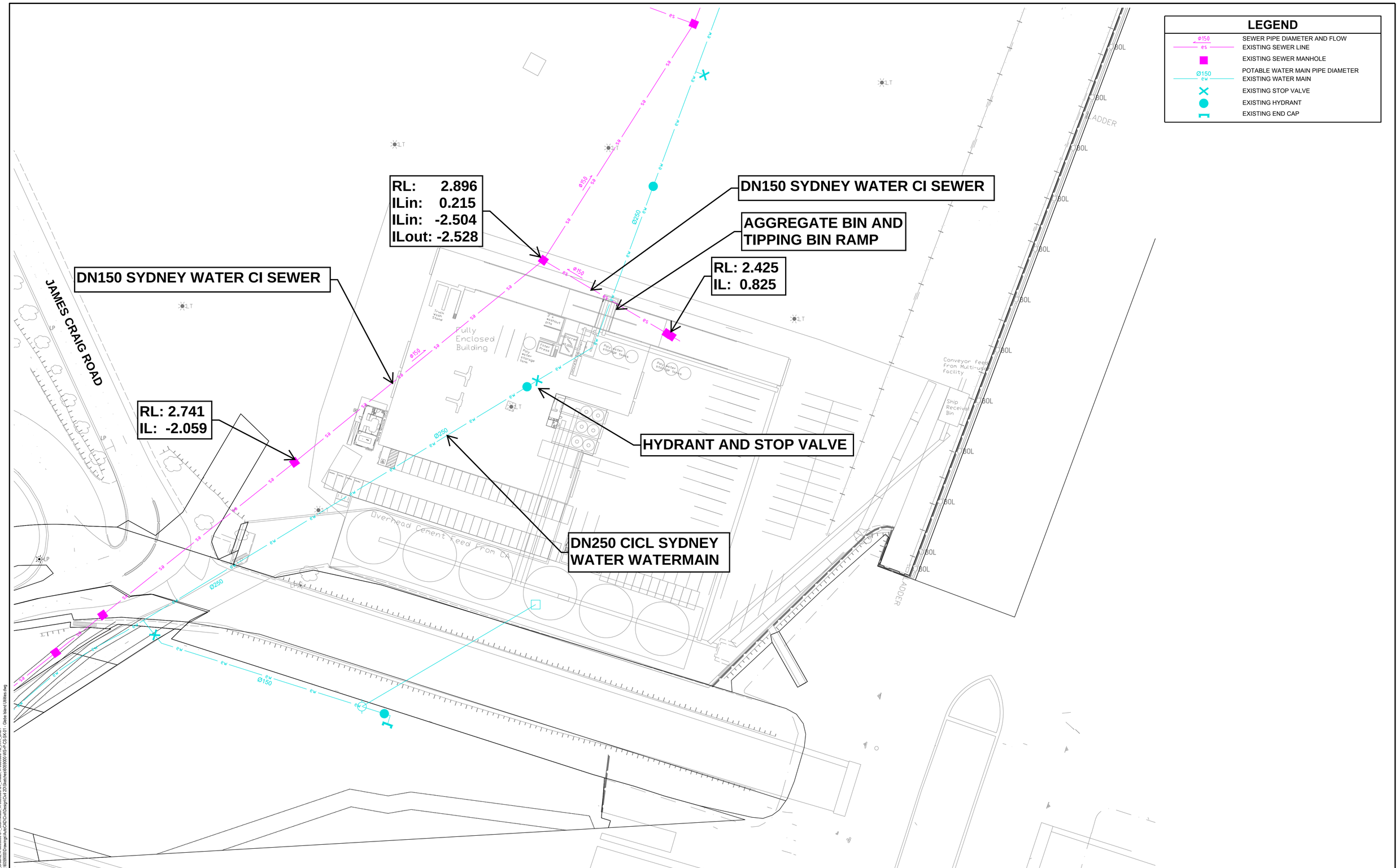
Figure 4: Proposed Sewer Options

If there are any queries regarding the contents of this letter, please do not hesitate in contacting the undersigned.

Yours faithfully,
WARREN SMITH AND PARTNERS

Thomas Keddie

Intern - Civil & Water Engineering
Phone: 02 8234 8640
Email: thomas@warrensmith.com.au



DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM WARREN SMITH AND PARTNERS.

NORTH

10.0 0 5.0 10.0 15.0 20.0m

PLAN SCALE 1:500 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
A	FOR INFORMATION	29/01/18			

CLIENT

HANSON HEIDELBERG CEMENT GROUP

PROJECT

HANSON BATCHING PLANT GLEBE ISLAND

PREPARED BY

Warren Smith & Partners

Warren Smith & Partners Pty Ltd
1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia
T 02 9299 1312 F 02 9290 1295 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 300 430 126

CONSULTING ENGINEERS
Hydraulic Services Fire Protection Civil Engineering
Sydney Water Accredited Water Servicing Co-ordinator
- Design Project Management - Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

Lic No: QAC/RE/10771

TITLE

HANSON BATCHING PLANT EXISTING SYDNEY WATER UTILITIES

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	T.K.	N.M	L.S.	M.C.

JOB No.	DRAWING No.	ISSUE
6059000	SK-01	1

DATE	STATUS
JANUARY 2017	FOR INFORMATION

Xrefs: X:\6059000\UT_Cadastre, X:\6059000\UT_Sewer, X:\6059000\SU_Ground, X:\6059000\UT_Stormwater, X:\6059000\UT_Water, X:\6059000-TB_A1H_SK01
Plot Date: 24.01.2018@16:53:37 Login Name: tjwadde Cad File: T:\6059000\Drawings\AutoCAD\Civil\Design\Civil 2D\Sketches\6059000-WSA-P-CS-SK-01 - Glebe Island Utilities.dwg

Xrefs: X-6059000-UT_Cadastre; X-6059000-SU_Ground; X-6059000-UT_Sewer; X-6059000-UT_Stormwater; X-6059000-UT_Water; X-6059000-TB_A1H_SK01
Plot Date: 24.01.2018@16:53:57 Login Name: tjkeddie Cad File: T:\6059000\Drawings\AutoCAD\Civil\Design\Civil 2D\Sketches\6059000-WS+P-CS-SK-01 - Glebe Island Utilities.dwg

NORTH

10.0 0 5.0 10.0 15.0 20.0m
PLAN SCALE 1:500 A1 SHEET

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
A	FOR INFORMATION	29/01/18			

CLIENT
HANSON HEIDELBERG CEMENT GROUP

PROJECT
HANSON BATCHING PLANT GLEBE ISLAND

PREPARED BY
Warren Smith & Partners
Warren Smith & Partners Pty Ltd
1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia
T 02 9299 1312 F 02 9290 1295 wsp@warrensmith.com.au
www.warrensmith.com.au ABN 36 300 430 126
CONSULTING ENGINEERS
Hydraulic Services Fire Protection Civil Engineering
Sydney Water Accredited Water Servicing Co-ordinator
- Design Project Management - Building Plan Approvals
SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.
Lic No: QAC/R61/0771

TITLE
PROPOSED WATER DEVIATION

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	T.K.	N.M	L.S.	M.C.

JOB No.	DRAWING No.	ISSUE
6059000	SK-02	1

DATE	STATUS
JANUARY 2017	FOR INFORMATION

LEGEND

- SEWER PIPE DIAMETER AND FLOW — Ø150 / es — EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- POTABLE WATER MAIN PIPE DIAMETER — Ø150 / ew — EXISTING WATER MAIN
- EXISTING STOP VALVE
- EXISTING HYDRANT
- EXISTING END CAP

OPTION 1: CUT BEFORE RAMP

OPTION A: DN150 PVC DEVIATION

OPTION B: CONCRETE ENCASEMENT OF EXISTING SEWER

OPTION 3: DEVIATION WITH MAINTENANCE HOLE

EXISTING SEWER MAIN TO BE INTERCEPTED AND CONNECTED INTO PROPOSED MAINTENANCE HOLE, LOCATION TO BE CONFIRMED

OPTION 2: CONCRETE ENCASEMENT AND MAINTENANCE HOLE RAISED

LOCATION OF EXISTING SEWER TO BE CONFIRMED

JAMES CRAIG ROAD

ADDER

DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

THIS DRAWING IS NOT TO BE COPIED IN PART OR WHOLE WITHOUT WRITTEN PERMISSION FROM WARREN SMITH AND PARTNERS.

NORTH

10.0 0 5.0 10.0 15.0 20.0m
PLAN SCALE 1:500 A1 SHEET

REVISION	AMENDMENT	DATE
A	FOR INFORMATION	29/01/18

CLIENT: HANSON HEIDELBERG CEMENT GROUP

PROJECT: HANSON BATCHING PLANT GLEBE ISLAND

PREPARED BY

Warren Smith & Partners

Warren Smith & Partners Pty Ltd
1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia
T 02 9299 1312 **F** 02 9290 1295 wsp@warrensmith.com.au
www.warrensmith.com.au **ABN** 36 300 430 126

CONSULTING ENGINEERS
Hydraulic Services Fire Protection Civil Engineering
Sydney Water Accredited Water Servicing Co-ordinator
- Design Project Management - Building Plan Approvals

SERVING THE CONSTRUCTION INDUSTRY SINCE 1981.

Lic No: QAC/RB10771

TITLE: **PROPOSED SEWER OPTIONS**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	T.K.	N.M	L.S.	M.C.

JOB No.	DRAWING No.	ISSUE
6059000	SK-03	1

DATE: JANUARY 2017 STATUS: FOR INFORMATION

Xrefs: X:\6059000-UT_Civil\xrfs: X:\6059000-UT_Sewer; X:\6059000-SU_Ground; X:\6059000-UT_Stormwater; X:\6059000-UT_Water; X:\6059000-TB_A1H_SK01
Plot Date: 24/01/2018@09:22:15 Login Name: tjacobs Cad File: I:\6059000\Drawings\AutoCAD\Civil Design\Civil 2D\Sketches\6059000-WS-P-CS-SK-01 - Glebe Island Utilities.dwg