

TRANSPORT FOR NSW (TfNSW)
TfNSW SPECIFICATION D&C B341
DEMOLITION OF EXISTING STRUCTURE

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Transport
for NSW

SPECIFICATION D&C B341

DEMOLITION OF EXISTING STRUCTURE

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CONTENTS

CLAUSE	PAGE
FOREWORD	ii
TfNSW Copyright and Use of this Document	ii
Base Specification	ii
1 GENERAL	1
1.1 Scope	1
1.2 Structure of the Specification	1
1.3 Definitions	1
2 GENERAL REQUIREMENTS	2
2.1 Compliance with Regulations, Codes and Standards	2
2.2 Licences	2
2.3 Personnel	3
3 PLANNING	4
3.1 Investigations	4
3.2 Adjoining or Adjacent Structures	6
3.3 Existing Utilities	6
3.4 Use of Explosives	7
3.5 Demolition Plan	8
4 EXECUTION	9
4.1 Notification to SafeWork NSW	9
4.2 Presence of Hazardous Chemicals and Materials	9
4.3 Demolition Process	10
4.4 Removal of Elements below Ground or Water Level	10
4.5 Maintenance of Waterway Navigation	11
5 PROTECTION OF WORKERS AND PUBLIC	11
5.1 Protection of Workers	11
5.2 Protection of the Public	11
6 DISPOSAL OF DEMOLITION WASTE	12
6.1 General	12
6.2 Retained Items	12
7 REINSTATEMENT AND CLEAN UP	13
8 FINAL SURVEY AND UNDERWATER INSPECTION	13
8.1 Final Survey	13
8.2 Underwater Inspection	13
ANNEXURE B341/A – PROJECT SPECIFIC REQUIREMENTS	14
A1 General	14
A2 Hazardous Chemicals and Materials	14
A3 Retained Items	15
A4 Other Matters	15
ANNEXURE B341/B – (NOT USED)	15
ANNEXURE B341/C – SCHEDULES OF HOLD POINTS AND IDENTIFIED RECORDS	16

C1	Schedule of Hold Points	16
C2	Schedule of Identified Records.....	16
ANNEXURE B341/D – PLANNING DOCUMENTS.....		17
ANNEXURES B341/E TO B341/L – (NOT USED)		18
ANNEXURE B341/M – REFERENCED DOCUMENTS.....		19
LAST PAGE OF THIS DOCUMENT IS		19

FOREWORD

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This document should be read with all the documents forming the Project Deed.

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BASE SPECIFICATION

This document is based on Specification TfNSW B341 Edition 3 Revision 2.

TfNSW SPECIFICATION D&C B341

DEMOLITION OF EXISTING STRUCTURE

1 GENERAL

1.1 SCOPE

This Specification sets out the requirements for the demolition of an existing structure, and disposal of the demolition waste, which may or may not contain contaminated material.

It also sets out the work health and safety requirements additional to those specified in Specification TfNSW D&C G22.

1.2 STRUCTURE OF THE SPECIFICATION

This Specification includes a series of annexures that detail project specific and other additional requirements.

1.2.1 Project Specific Requirements

Project specific details of work are shown in Annexure B341/A.

1.2.2 (Not Used)

1.2.3 Schedules of **HOLD POINTS** and Identified Records

The schedules in Annexure B341/C list the **HOLD POINTS** that must be observed. Refer to Specification TfNSW D&C Q6 for the definition of **HOLD POINTS**.

The records listed in Annexure B341/C are **Identified Records** for the purposes of TfNSW D&C Q6 Annexure Q/E.

1.2.4 Planning Documents

Prepare a Demolition Plan in accordance with Clause 3.5, as part of your Project WHS Management Plan to be provided in accordance with TfNSW D&C G22.

1.2.5 Referenced Documents

Standards, specifications and test methods are referred to in abbreviated form (e.g. AS 1234). For convenience, the full titles are given in Annexure B341/M.

1.3 DEFINITIONS

The terms “you” and “your” mean “the Contractor” and “the Contractor’s” respectively.

Demolition of a structure is classified as “construction work” under Clause 289(1) of the *Work Health and Safety Regulation 2017 (NSW)*.

The following definitions apply to this Specification:

Competent	Suitably qualified, adequately trained and appropriately experienced for the particular class or type of work specified.
Contaminated materials	Material classified as Restricted, Hazardous or Special Waste in accordance with EPA's Waste Classification Guidelines.
Demolition	The complete or partial dismantling of a building or structure by pre-planned and controlled methods or procedures.
High risk construction work	As defined in Clause 291 of the WHS Regulation.
Qualified Structural Engineer	Chartered Professional Engineer with Membership of Engineers Australia or registered on the National Engineers Register (NER), who is experienced and currently practising in the field of structural engineering.
Regulatory Authority	The body or bodies legally empowered to control any matters associated with the demolition.
WHS Regulation	<i>Work Health and Safety Regulation 2017 (NSW).</i>

2 GENERAL REQUIREMENTS

2.1 COMPLIANCE WITH REGULATIONS, CODES AND STANDARDS

2.1.1 Compliance with WHS Regulation and Code of Practice

Comply with the requirements of the WHS Regulation, the Safe Work Australia "Demolition Work Code of Practice" and any other requirements of relevant Regulatory Authorities.

Manage the risks associated with the demolition work by identifying the hazards, assessing the risks, implementing control measures in the order of the risk control hierarchy, and maintaining and reviewing the effectiveness of the control measures, in accordance with the Demolition Work Code of Practice.

The Demolition Work Code of Practice is available at:

<https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-demolition-work-v4.pdf>.

Notify the Principal if there is any conflict between the provisions of the relevant Regulatory Authority and those in this Specification. Where this is the case, the provisions of the relevant Regulatory Authority will prevail.

2.1.2 Compliance with AS 2601

Unless otherwise approved, your demolition methods must also comply with AS 2601.

2.2 LICENCES

Maintain records of all licences, notifications, approvals and permits.

2.2.1 Demolition Licence

Where a demolition licence (including a restricted demolition licence) is specified in Annexure B341/A1 as required for the demolition work under the deed, you (or your demolition subcontractor) must possess the appropriate current licence issued by SafeWork NSW, prior to commencement of the demolition work.

2.2.2 Blasting Explosives User Licence

Where the demolition work involves use of explosives, only persons holding a blasting explosives user licence issued by SafeWork NSW can carry out the blasting work, in accordance with the *Explosives Regulation 2013 (NSW)*.

2.2.3 Transporting Explosives Licence

Where transport of explosives is required, only persons holding a licence to transport explosives can undertake the work.

2.2.4 Asbestos Removal Licence

Where asbestos or asbestos-containing material (ACM) are present within the structure to be demolished, only organisations licenced at the appropriate class (whether Class A or Class B) for asbestos removal with SafeWork NSW can remove the material, in accordance with the WHS Regulation.

However, no licence is required for the following:

- (a) removal of less than 10 square metres of non-friable asbestos;
- (b) removal of asbestos contaminated dust or debris arising from the removal of less than 10 square metres of non-friable asbestos;
- (c) dealing with a minor asbestos contamination not associated with the removal of friable or non-friable asbestos.

2.2.5 Asbestos Assessor Licence

Where air monitoring, clearance inspection after removal of asbestos, or issuing of clearance certificates for a Class A asbestos removal is required, only a person holding an asbestos assessor licence issued by SafeWork NSW can undertake the work.

2.2.6 Other Licences

For other licences not specified under Clause 2.2 but are required by a relevant Regulatory Authority (such as licence to carry out high risk work), comply with the licensing requirements of that Authority.

2.3 PERSONNEL

2.3.1 Demolition Site Supervisor

Nominate a competent person as your “site supervisor” who must be present at all stages of the demolition work, including any subcontracted work.

Your demolition site supervisor must have successfully completed the SafeWork NSW approved training, and have three years of experience relevant to the type of demolition work to be carried out.

2.3.2 Training

Prior to commencement of demolition, provide training by a competent and experienced person to your workers that are specific to the type of demolition work to be carried out under the deed and to the particular site.

3 PLANNING

3.1 INVESTIGATIONS

3.1.1 Preliminary Investigation

Study the documents provided by the TfNSW such as the original design drawings or work-as-executed drawings, specifications and the original Designer's Safety Report (if available) which were used in the construction of the structure to be demolished.

Carry out a preliminary investigation of both the structure and the Site, and prepare your proposed methods and procedures for carrying out the demolition.

Appendix A1 of AS 2601 lists some of the matters to be considered in carrying out the preliminary investigation.

Submit a report of the results of your preliminary investigation to the Principal. If applicable, include in the report details of the inspection for the presence of hazardous chemicals and materials, including asbestos (refer Clause 3.1.2).

3.1.2 Hazardous Chemicals and Materials

Annexure B341/A1 will state whether any hazardous chemicals or materials are known or suspected to be present within the structure to be demolished or the Site.

If hazardous chemicals and materials are suspected to be present, but details of their locations are not provided in Annexure B341/A2, determine their types, locations and extent as part of your preliminary investigation.

3.1.3 Asbestos

If asbestos is one of the materials listed as present in accordance with Clause 3.1.2 above, the Principal will provide you with a copy of the asbestos register if so stated in Annexure B341/A1.

Where asbestos or ACM is known or suspected to be present, and an asbestos register is not provided by the Principal, engage a competent person to produce the asbestos register.

Safe Work Australia "How to Manage and Control Asbestos in the Workplace Code of Practice" provides guidance on the types of person considered to be competent to carry out this task. This Code of Practice is available at:

<https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-how-to-manage-and-control-asbestos-in-the-workplace-v2.pdf>

3.1.4 Engineering Investigation

Where any of the following conditions are present:

- (a) load shifting machinery is intended to be used on suspended slabs during demolition;
- (b) the partially demolished structure is anticipated to support the remaining elements of the structure;
- (c) the structure to be demolished is anticipated to provide a lateral or vertical support to adjacent structure(s);
- (d) excavation associated with the demolition is anticipated to undermine adjacent structure(s);
- (e) the structure to be demolished is suspected to contain unbonded prestressing materials (e.g. tendons).
- (f) the structure has been damaged or weakened (for example by fire or deterioration);

engage a Qualified Structural Engineer to carry out an engineering investigation on the structure to be demolished, as well as any adjacent or adjoining structures (refer Clause 3.2).

Appendix C of Demolition Work Code of Practice lists some of the matters to be considered in carrying out the engineering investigation.

3.1.5 Prestressed Concrete and Precast Concrete Panels

Where the structure to be demolished contains pre- or post-tensioned concrete elements or reinforced precast concrete panels, carry out the following inspections as part of the engineering investigation.

(a) Prestressed concrete elements

Inspect and assess the condition of the concrete and tendons, including utilising selective testing in representative areas to assess any weakening or breakage of tendons, particularly in locations where the tendons can be unbonded.

(b) Precast concrete panels

Inspect their connections to the rest of the structure and the lifting points, to establish their existing condition.

Guidance on some of the matters to be considered in assessing the condition of the prestressed concrete elements is given in Section 6.1 of Demolition Work Code of Practice.

3.1.6 Demolition Designer's Safety Report

Based on the engineering investigation carried out under Clause 3.1.4, prepare a Designer's Safety Report for the demolition, containing details of any necessary measures such as temporary bracing, to prevent an unexpected collapse of the structure at any stage of the demolition, or damage to adjacent/adjoining structures.

In particular, where you propose to use powered mobile plant on suspended slabs to carry out the demolition, verify that the suspended floor is capable of carrying the dead and live loads generated by the mobile plant and demolition debris, or else provide details of any propping support required.

Submit a copy of the demolition Designer's Safety Report, complete with calculations, to the Principal prior to commencement of the demolition.

3.1.7 Submission of Designer's Safety Report

HOLD POINT

Process Held: Commencement of demolition.

Submission Details: Report of results of preliminary investigation, and demolition Designer's Safety Report if applicable.

Release of Hold Point: The Nominated Authority will consider the submitted documents prior to authorising the release of the Hold Point.

3.1.8 Resubmission of Designer's Safety Report

Where subsequent investigations or events reveal that the conditions assumed at the time of the report preparation were incorrect or have varied, revise and resubmit the demolition Designer's Safety Report.

The Hold Point stated in Clause 3.1.7 above will again apply to this submission.

3.2 ADJOINING OR ADJACENT STRUCTURES

3.2.1 General

Your demolition process must not affect the structural integrity of other structures, or cause flooding or water penetration to any adjoining structure.

3.2.2 Support of Adjoining or Adjacent Structures

Where the structure to be demolished is suspected to support, in any shape or form, an adjoining or adjacent structure, notify the Principal immediately. Carry out the engineering investigation in accordance with Clauses 3.1.4.

Submit your proposed method of shoring, underpinning or other types of supports as necessary, to the Principal for acceptance.

3.2.3 Hospitals

Take special precautions when carrying out the demolition in the vicinity of hospitals and other buildings containing equipment sensitive to shock and vibration.

3.2.4 Easements, Right of Way, and Other Encumbrances

When planning your demolition, allow for the existence of easements, right of way and other encumbrances.

3.3 EXISTING UTILITIES

3.3.1 General

Locate and identify all existing and disused utilities at the Site.

Contact Dial Before You Dig and obtain the plan locations of all existing underground utilities. Use potholing or other non-destructive digging if necessary to locate these utilities.

3.3.2 Utility Service Lines

Prior to commencement of demolition, shut off, cap or otherwise control all electricity, gas, water, sewer, steam and other utility service lines not required for the demolition work within the structure to be demolished. Liaise with, notify and seek approval from each existing utility owner as necessary.

3.3.3 Disconnect Electrical Wiring

Disconnect, isolate and mark all live electrical wiring and/or components (other than any temporary electrical installations provided for the work) within the structure to be demolished, using a competent person (for example, a licensed electrician) or, where necessary, the local electricity distributor.

3.3.4 Protect Utilities to be Retained

Protect any utility services to be retained for use in the demolition work such as electric power lines.

3.4 USE OF EXPLOSIVES

3.4.1 TfNSW Approval

You may use explosives in the demolition work only if so stated in Annexure B341/A1, and only for the demolition of concrete elements.

Where you propose to use explosives to induce the collapse of the structure, obtain the written approval of SafeWork NSW prior to commencing the work.

3.4.2 Transport, Storage and Use

Where the TfNSW approves the use of explosives, their transport, storage, handling and use must comply with the requirements of the *Explosives Act 2003 (NSW)* and *Explosives Regulation 2013 (NSW)*, and the relevant parts of AS 2187 and the Australian Code for the Transport of Explosives by Road and Rail (AE Code).

The AE Code is available from the Safe Work Australia website at:

https://www.safeworkaustralia.gov.au/system/files/documents/1702/australian_code_transport_explosives_road_rail_3rd_edition.pdf.

3.4.3 Blast Management Plan

Use only persons who hold a blasting explosives user licence issued by SafeWork NSW to carry out the blasting work (refer Clause 2.2.2).

This person must develop the Blast Management Plan in accordance with AS 2187.2 Appendix A, and be responsible for all aspects of the use of explosives in the demolition work.

3.5 DEMOLITION PLAN

3.5.1 Submission of Demolition Plan

Prior to commencement of demolition, submit to the Principal your Demolition Plan containing details of your proposed demolition method(s). Your Demolition Plan must include, as a minimum, all of the requirements listed in Annexure B341/D.

Where your proposed method involves use of explosives, submit also your Blast Management Plan (refer to Clause 3.4.3) as part of your Demolition Plan.

HOLD POINT

Process Held: Commencement of demolition.

Submission Details: At least 5 working days prior, submit to the Principal your Demolition Plan, which must include all items listed in Annexure B341/D.

Release of Hold Point: The Nominated Authority will consider the submitted documents and may request additional information prior to authorising the release of the Hold Point.

3.5.2 Variation to Demolition Plan

If you propose to significantly vary the demolition method(s) from that previously submitted, submit to the Principal your amended Demolition Plan in accordance with the requirements of this Specification.

The Hold Point stated in Clause 3.5.1 above will again apply to this submission.

3.5.3 Safe Work Method Statements

If the demolition work includes activities which are classified as “high risk construction work” (refer Clause 291 of the WHS Regulation for definition of “high risk construction work”), provide in your Project WHS Management Plan Safe Work Method Statements (SWMS) for each of the activities.

Guidance on preparation of SWMS is given in Safe Work Australia “Construction Work Code of Practice”, available at:

<https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-construction-work-v2.pdf>.

Further guidance on preparation of SWMS for demolition work is given in WorkCover NSW (SafeWork NSW) document “Safe Work Method Statement for Demolition Work”, available at:
http://www.safework.nsw.gov.au/_data/assets/pdf_file/0014/50027/swms-for-demolition-work-WC03833.pdf.

Note that above link may not work with Internet Explorer; use Google Chrome instead.

4 EXECUTION

4.1 NOTIFICATION TO SAFEWORK NSW

4.1.1 Notifiable Demolition Work

Where the demolition work involves any of the following:

- (a) demolition of a structure, or a part of a structure that is loadbearing or otherwise related to the physical integrity of the structure, that is at least 6 m in height;
- (b) demolition work involving load shifting machinery on a suspended floor;
- (c) use of explosives;

notify SafeWork NSW in writing at least 5 working days prior to the commencement of the demolition work, in accordance with Clause 142 of the WHS Regulation.

4.1.2 Licensed Asbestos Removal Work

Where the work includes licensed asbestos removal (refer Clauses 2.2.4 and 4.2.4), notify SafeWork NSW in writing at least 5 working days prior to the commencement of the asbestos removal.

4.1.3 Hazardous Chemicals and Materials

If hazardous chemicals and materials (refer also Clause 4.2) are present within the Site, notify SafeWork NSW prior to the commencement of demolition work.

4.2 PRESENCE OF HAZARDOUS CHEMICALS AND MATERIALS

4.2.1 General

Manage the risk of the presence of the hazardous chemicals and materials stated in Annexure B341/A2, or identified by you in your preliminary investigation, during the demolition by implementing appropriate control measures.

4.2.2 Informing Workers

Inform all persons at the Site of the presence of hazardous chemicals and materials, the control measures in place to minimise exposure, and procedures for the safe disposal of these chemicals and materials.

4.2.3 Safety Data Sheets

Make available for reference by all personnel at the Site the Safety Data Sheets for the hazardous chemicals present at the Site or used in the demolition work.

4.2.4 Asbestos

So far as is practicable, remove any existing asbestos or ACM that is likely to be disturbed by the demolition, prior to commencement of the demolition.

Manage the removal of the asbestos in accordance with Safe Work Australia “How to Safely Remove Asbestos Code of Practice”, available at:

<https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-how-to-safely-remove-asbestos-v3.pdf>.

4.2.5 Amenities

Provide appropriate, clean facilities and amenities for your workers where hazardous chemicals and materials are present.

4.3 DEMOLITION PROCESS

Some information on demolition procedures for various types of structural elements is given in Appendix E of AS 2601.

4.3.1 Provide Temporary Support

Maintain the structure to be demolished and all its elements in a safe and structurally stable condition to prevent the unexpected collapse of part or all the structure.

Where appropriate, provide temporary propping, bracing, shoring or other types of support as necessary to maintain stability of the structure. Support load bearing members before their cutting or removal.

4.3.2 Suspended Slabs

Do not overload suspended slabs or their supporting members by plant or accumulated debris/materials to the extent it may cause an unintended collapse.

4.3.3 Special Structures

Take additional safety measures when carrying out the demolition of special structures such as prestressed concrete structures, precast concrete panel and frame structures, to prevent any subsequent sudden spring, twist, or unintended collapse or other movement of the structure.

Do not use deteriorated or corroded lifting points or fittings of precast concrete panels to lift and/or support the panels during their removal.

4.4 REMOVAL OF ELEMENTS BELOW GROUND OR WATER LEVEL

4.4.1 Navigable Waterways

Remove completely any elements of the demolished structure (e.g. piles or piers) in navigable waterways, unless specified otherwise in Annexure B341/A4 or required otherwise.

4.4.2 Land or Non-navigable Waterways

Remove all elements of the demolished structure on land or in non-navigable waterways (e.g. piles, spread footings or similar foundations) within one metre below ground surface or river bed level, unless specified otherwise in Annexure B341/A4 or the SWTC.

The ground surface level is the lower of the specified level of the excavation for the Works and the ground surface level existing at the date one week before the close of tenders.

4.5 MAINTENANCE OF WATERWAY NAVIGATION

Where the work involves demolition of bridges or other structures over waterways, implement measures to maintain navigation of the waterways throughout the demolition work, unless otherwise approved by the relevant Authority.

5 PROTECTION OF WORKERS AND PUBLIC

5.1 PROTECTION OF WORKERS

5.1.1 Exclusion Zones

Establish exclusion zones to protect workers involved in the demolition and prevent unauthorised personnel from entering work areas.

Implement a system to prevent falling objects impacting on persons working on or in the vicinity of the demolition work. Identify and designate any area where a falling object might reasonably be expected to land, as an exclusion zone. Extend the boundaries of the exclusion zone horizontally to a safe distance as appropriate.

5.1.2 Protective Devices for Plant

For the demolition work, use only powered mobile plant fitted with a suitable combination of protective devices designed to eliminate or minimise the risks of injury to the operator due to roll over, or from objects falling on or penetrating the operator's cabin.

5.2 PROTECTION OF THE PUBLIC

5.2.1 Isolate Demolition Work from the Public

Secure the Site to prevent unauthorised access. Monitor ingress and egress points for the Site during the demolition work.

Isolate the demolition work from the public, by measures such as installation of hoarding, security perimeter fencing, containment sheets and mesh, and overhead protective structures. Provide barriers to mitigate the impact of noise from the demolition.

Where necessary, carry out temporary road closures in accordance with Specification TfNSW D&C G10 and/or establish temporary exclusion zones (refer Clause 5.1.1).

5.2.2 Maintain Safe Access in Public Areas

Maintain safe access in public areas adjoining the demolition site, such as public roads and walkways, as the work progresses.

5.2.3 Protection Measures

Provide protection measures where demolition work is adjacent to a public place and there is a risk of falling debris.

Keep the protection measures in place at all times during the progress of the work, and regularly inspect and maintain them.

Overhead protective structures and perimeter fencing must be designed to withstand the appropriate loads.

6 DISPOSAL OF DEMOLITION WASTE

6.1 GENERAL

6.1.1 Removal of Demolition Waste from Site

Other than items to be retained by the TfNSW (refer Clause 6.2), all material resulting from the demolition becomes your property and must be removed from the Site and disposed of legally in accordance with TfNSW D&C G36.

6.1.2 No Burning

Do not use burning as a method of demolition.

Do not dispose of materials removed from the existing structure by burning.

6.1.3 Contaminated Materials

Dispose of contaminated materials in accordance with Specifications TfNSW D&C G36 and TfNSW D&C R44.

6.1.4 Waste Management and Resource Recovery

Comply with all applicable requirements in TfNSW D&C G36 on waste management and resource recovery.

6.2 RETAINED ITEMS

6.2.1 General

Annexure B341/A1 and/or the SWTC will state whether there are materials or components within the structure which will be retained by the TfNSW. Such retained items include items that are to remain behind, undamaged by the demolition work.

When demolishing parts of the structure containing such items, exercise care and take all necessary precautions to avoid damage to the items to be retained.

6.2.2 Damage to Retained Items

If any of the items to be retained are damaged during the demolition, the Principal may require that the damaged items become your property, and be disposed of by you.

The value of these items, as assessed by the TfNSW in their undamaged condition, will be a debt due from you to the TfNSW.

6.2.3 Storage of Retained Items

Transport and store the items (except for items that are to remain) to be retained by the TfNSW at the location nominated in Annexure B341/A3.

Stack the items neatly, at least 150 mm clear of the ground, and support them in a stable condition, and without undue bending or other stresses.

7 REINSTATEMENT AND CLEAN UP

Backfill all excavations to the levels and profile specified in Annexure B341/A1.

Reinstate any disturbed areas and leave the site in a tidy and safe condition.

Batter back any exposed faces of earth slopes to a safe gradient, which must not be steeper than 1.5 (horizontal) to 1 (vertical), unless otherwise accepted by the Principal.

8 FINAL SURVEY AND UNDERWATER INSPECTION

8.1 FINAL SURVEY

Where specified as required in Annexure B341/A1, carry out a final survey upon the completion of the Work in accordance with Specification TfNSW D&C G71. Submit the results of the survey to the Principal.

8.2 UNDERWATER INSPECTION

Where specified as required in Annexure B341/A1, carry out an underwater inspection of the Site, in accordance with Specification TfNSW B350 to verify that the demolition work is complete.

Prepare and submit an underwater inspection report certifying conformity to this Specification.

ANNEXURE B341/A – PROJECT SPECIFIC REQUIREMENTS

Refer to Clause 1.2.1.

A1 GENERAL

NOTES TO TENDER DOCUMENTER (Delete this boxed text after customising Annexure B341/A1)

Include the original design drawings or work-as-executed drawings, specifications and the original Designer's Safety Report (if available) which were used in the construction of the structure to be demolished, as part of the Information Documents for the deed.

Complete the table below by deleting whichever option that is not applicable and filling in the required details. Refer to the front Guide Notes for guidance on completing the table.

Clause	Description	Requirement
2.2.1	Type of demolition licence required	Demolition licence / Restricted demolition licence / No licence required
3.1.2	Hazardous chemicals or materials known or suspected to be present ⁽¹⁾	Yes / No
3.1.3	Asbestos register provided by the Principal ⁽²⁾	Yes / No
3.4.1	Use of explosives in the demolition work permitted	Yes / No
6.2.1	Structure contains materials or components which will be retained by the TfNSW ⁽³⁾	Yes / No
7	Backfill excavations to the levels and profile	matching the adjacent ground surface / to RL / backfilling not required
8.1	Final survey required	Yes / No
8.2	Underwater inspection required	Yes / No

Notes:

- ⁽¹⁾ If "Yes", refer to Section A2 below for further details.
⁽²⁾ If asbestos or ACM is known or suspected to be present, and an asbestos register is not provided by the Principal, engage a competent person to produce the asbestos register.
⁽³⁾ If "Yes", refer to Section A3 below for further details.

A2 HAZARDOUS CHEMICALS AND MATERIALS

Refer to Clause 4.2.

NOTES TO TENDER DOCUMENTER (Delete this boxed text after customising Annexure B341/A2)

Detail here the type, location and extent of any hazardous chemicals and materials that has been identified to be present within the structure to be demolished.

If no hazardous chemicals and materials are known or suspected to be present, then leave this section blank and replace the heading with “Not Used”. Delete also the statement “Refer to Clause ...” shown above.

A3 RETAINED ITEMS

Refer to Clause 6.2.

NOTES TO TENDER DOCUMENTER (Delete this boxed text after customising Annexure B341/A3)

Detail here the type and location within the structure to be demolished of any materials or components which will be retained by the TfNSW. Typically, such items would be ornamental lamp posts or railings, commemorative plaques, and hardwood timber members. They can also include items such as the substructure which is to remain after demolition of the rest of the structure.

Provide a description of the required location for their storage, or alternatively attach a sketch plan of the location.

If there are no retained items, then leave this section blank and replace the heading with “Not Used”. Delete also the statement “Refer to Clause ...” shown above.

A4 OTHER MATTERS

NOTES TO TENDER DOCUMENTER (Delete this boxed text after customising Annexure B341/A4)

Detail here any other relevant matters that the Contractor needs to take into consideration, such as:

- (a) Extent of the demolition required and any applicable restrictions, including whether any part of the structure to be demolished has a heritage value.*
- (b) Required sequence of demolition.*
- (c) Extent of the removal of foundations below the ground surface level or river/sea bed level, whether to be removed completely or cut off at a specified level, if different from that specified in Clause 4.4.*

If there are no other matters, then leave this section blank and replace the heading with “Not Used”. Delete also the statement “Refer to Clause ...” shown above.

ANNEXURE B341/B – (NOT USED)

ANNEXURE B341/C – SCHEDULES OF HOLD POINTS AND IDENTIFIED RECORDS

Refer to Clause 1.2.3.

C1 SCHEDULE OF HOLD POINTS

Clause	Description
3.1.7	Submission of preliminary investigation report, and demolition Designer's Safety Report.
3.5.1	Submission of Demolition Plan.

C2 SCHEDULE OF IDENTIFIED RECORDS

The records listed below are Identified Records for the purposes of TfNSW D&C Q6 Annexure Q/E.

Clause	Description
2.2	Licences, notifications, approvals and permits
3.1.1	Preliminary investigation report
3.1.6	Demolition Designer's Safety Report
3.5	Demolition Plan, incorporating Blast Management Plan
8.1	Final survey report
8.2	Underwater inspection report

ANNEXURE B341/D – PLANNING DOCUMENTS

Refer to Clauses 1.2.4 and 3.5.

Demolition Plan Requirements

The Demolition Plan must include, as a minimum, details of the elements listed below, where applicable.

(a) General

- (i) the structure to be demolished, including its location, site boundaries and adjacent properties having common boundaries with the Site;
- (ii) any adjoining properties where permission has been obtained by the Contractor to occupy temporarily during the demolition work;
- (iii) proposed site arrangement(s) during the demolition work, including locations of perimeter fencing, access and egress points, site facilities, and storage and parking areas;
- (iv) your nominated demolition site supervisor;
- (v) your nominated licensed competent person who will be responsible for all aspects of the use of explosives in the demolition work.

(b) Investigations

- (i) preliminary investigation report, including details of hazardous chemicals and materials present;
- (ii) demolition Designer's Safety Report;
- (iii) locations of existing underground utilities.

(c) Preparatory measures

- (i) shoring, underpinning or other types of support of adjoining structures;
- (ii) disconnection of existing utilities which are not required for the demolition work;
- (iii) protection of utilities which will be retained for use in the demolition work;
- (iv) measures when working in vicinity of sensitive places such as hospitals;
- (v) asbestos removal prior to commencement of demolition;
- (vi) temporary propping, bracing or shoring of elements of the structure to be demolished;
- (vii) measures to maintain waterway navigation during the demolition.

(d) Demolition methods

- (i) proposed sequence of work, including details of staging;
- (ii) method(s) of demolition;
- (iii) locations for temporary storage of demolition waste;
- (iv) number and types of major mechanical equipment proposed for use in the demolition;
- (v) weight and size of powered mobile plant proposed for work on suspended slabs;

- (vi) access arrangements for workers and plant;
 - (vii) method of removal of elements of the structure which are below ground or water level;
 - (viii) recovery of materials or components which will be retained by the TfNSW;
 - (ix) method of disposal of demolition waste.
- (e) **Blast Management Plan** (if use of explosives is proposed for use in the demolition)
- (i) type of explosive and detonator to be used;
 - (ii) method of placing and firing;
 - (iii) maximum instantaneous charge to be fired;
 - (iv) firing pattern and delay sequence.
- (f) **Health and safety measures**
- (i) measures to isolate the demolition work from the public;
 - (ii) measures to protect against the risk of falling debris;
 - (iii) other measures to provide safe access in public areas adjoining the demolition site;
 - (iv) measures for working in the presence of hazardous chemicals and materials including asbestos;
 - (v) method of handling contaminated materials.
- (g) **Other**
- (i) method of stacking materials or components which will be retained by the TfNSW, at the storage location nominated by the TfNSW.

Provide SWMS for activities (other than those directly concerning demolition) which are classified as “high risk construction work” in your Project WHS Management Plan.

ANNEXURES B341/E TO B341/L – (NOT USED)

ANNEXURE B341/M – REFERENCED DOCUMENTS

Refer to Clause 1.2.5.

TfNSW Specifications

TfNSW D&C G10	Traffic Management
TfNSW D&C G22	Work Health and Safety (Construction Work)
TfNSW D&C G36	Environmental Protection
TfNSW D&C G71	Construction Surveys
TfNSW D&C Q6	Quality Management System (Type 6)
TfNSW B350	Underwater Bridge Inspections
TfNSW D&C R44	Earthworks

Australian Standards

AS 2187.2	Explosives - Storage and use, Part 2: Use of explosives
AS 2601	The demolition of structures

NSW Legislation

Explosives Act 2003
Explosives Regulation 2013
Work Health and Safety Regulation 2017

Safe Work Australia / SafeWork NSW Codes of Practice

Australian Code for the Transport of Explosives by Road and Rail (AE Code)
Construction Work Code of Practice
Demolition Work Code of Practice
How to Manage and Control Asbestos in the Workplace Code of Practice
How to Safely Remove Asbestos Code of Practice
Safe Work Method Statement for Demolition Work

EPA Publication

Waste Classification Guidelines