



### CONTRACT RW10397666/21

# DEMOLITION SERVICES OF THE RAND WATER OFFICE BUILDING LOCATED AT WHITE RIVER MPUMALANGA

# ARCHITECTURAL SPECIFICATION DEMOLITION

PREPARED BY: Design Office Architecture

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## **BUILDING DEMOLITIONS**

## 1. SITE INVESTIGATIONS

To be read in conjunction with Sections A and Z, the Preliminaries and Contract Conditions.

#### 1.1 SITE SURVEY

Before commencing any work, examine all available information, carry out a survey of the structures, site and adjacent areas and submit a method statement and a survey report to the Architect, covering all relevant matters listed below:

- a. The form and condition of the structure(s), and proposed demolition methods and sequence.
- b. The form, location and removal methods of any toxic or hazardous materials.
- c. The type and location of adjoining or surrounding premises that may be adversely affected by noise, vibration, dust or removal of structure.
- d. The identification and location of services above and below ground.
- e. Arrangements for disconnection and removal of services, control of traffic, protection of personnel and exclusion of the general public.

## 2. **DEMOLITIONS**

### 2.1 GENERAL

#### Specification and Scope

#### 2.1.1 Prescriptive Works

- a. Supply, deliver, install and warrant that the works are in strict compliance with the materials and workmanship requirements of the Specification.
- b. Where required to prepare drawings these shall be limited to final detailing of components, systems, etc. shown on the Design Drawings, necessary to demonstrate their safe installation.
- c. Where alternative products are offered by the Contractor and accepted by the Architect, provide full supporting documentation in respect of the complete system or installation.

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## 2.1.2 Scope of Works

This section of the Specification, when read in conjunction with the Tender documents, provides particular requirements with respect to the works, which include the following:

- a. Demolish structures down to foundation level: Break up and dig out foundations and column bases.
- b. Re-use as much of the demolished material as possible.
- c. Observance of Health, Safety, Environmental and Asbestos regulations.
- d. Removal and safe disposal of all materials not being reused, arising from the demolition activities.

## 2.1.3 Adjacent Occupation

- a. At all times take suitable measures to ensure that owners and occupiers of any property adjacent to the works are not unduly or unreasonably inconvenienced by the work.
- b. In the event of complaints arising, take immediate steps to eliminate the cause of the problem, rectify any damage done and indemnify the Architect from and against all claims arising out of such cause.
- c. Before Tendering, ensure that the processes intended for use during the Contract do not result in problems for adjoining owners/occupiers. No claim shall be entertained if the Contractor is forced to alter his method of working as a result of complaints.

#### 2.1.4 Clearance

Include for the regular clearance of all mud, debris, etc. deposited on the roads and footpaths/ pavements by all vehicles and plant arriving or departing from the Site.

#### 2.1.5 Schedule of Conditions

- a. Agree a Schedule of Conditions of the existing adjacent areas.
- b. Upon completion of the work make a joint inspection with the Architect of adjacent areas to agree and record their condition, including record photographs for retention.
- c. Any damages so occasioned to be rectified at the Contractor's expense.

#### Description of Works

### 2.1.6 Extent of Demolition

The demolition of all the existing structures at the site, and removal from site of materials arising from the demolition in accordance with the requirements of the local Waste Management Authority.

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## 2.1.7 Licences/Approvals

Obtain all necessary licences and approvals for demolition plans, scaffolding or hoarding and also provide all hoardings, fencing, lighting, barricades, platforms, props, handrails, etc., as required by the Statutory Authorities and Rand Water Architect.

## 2.1.8 Health and Safety

- a. Demolish structure(s) in accordance with the latest Construction Regulations, Guidelines, and Occupational Health and Safety regulations.
- b. Operatives must be appropriately skilled and experienced for the type of work.
- c. Site staff responsible for supervision and control of the work are to be experienced in the assessment of the risks involved and in the methods of demolition to be used.
- d. The Contract Documents.

## 2.1.9 Assessment and Safety Method Statement

- a. Prior to the start of demolitions undertake an assessment which takes due account of the waste and contaminated materials (solid, liquid and gaseous) likely to be encountered.
- b. Produce a written safety method statement which describes in detail the manner in which the workforce (including any sub-contractors), other Site personnel and the general public in the surrounding neighbourhood to be protected during the course of the works.
- c. No demolitions to be carried out until the method statement has been formally accepted in writing by the Contractors' Architect.
- d. All contractors/sub-contractors working with asbestos must submit a written Method Statement (MS) for acceptance of the Rand Water Architect before commencement of work.

#### 3. DEMOLITION

#### **General**

## 3.1. Ownership

Components and materials arising from the demolition work are to become the property of the Contractor except where otherwise provided. Remove from site as work proceeds.

## 3.2. Recycled Materials

a. Materials arising from demolition work may be recycled or reused elsewhere in the project as approved by the Rand Water Architect, subject to compliance with the appropriate work section specification.

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b. Submit full details and all supporting documentation.

#### 3.3. Extent of Demolition

General: Demolish all structures down to their foundation level, break up and dig out foundations.

#### 3.4. Existing Foundations and Slabs etc.

Break out old foundations, surface beds to the extent shown on the drawings.

#### 3.5. Contaminated Material

Remove and carry out remediation required by the Environmental Authority.

#### 3.6. Existing Drains to be Demolished

- a. Break out to the extent shown on the drawings.
- b. Seal off drain ends and remove contaminated soil.

## 3.7. Existing Drains and Services to Remain in Use

- a. General: Protect drains and services, still in use and ensure that they are kept free of debris.
- b. Provide bypass connections as necessary to maintain continuity of services to occupied areas of the same and adjoining properties.
- c. Damage: Make good damage arising from demolition work. Leave clean and in working order at completion.
- d. Damage: Give notice and notify service authority or owner of damage arising from the execution of the works.
- e. Repairs: Complete as directed, and to the satisfaction of the service authority or owner.

## 4. WORKMANSHIP

#### **Demolition**

#### 4.1. Generally

- a. Ensure that Site staff responsible for supervision and control of the works are experienced in the assessment of the risks involved and in the methods of demolition to be used.
- b. Take account of the Site limitations and restrictions as to access and the use of equipment and plant necessary to complete the works.

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- c. Provide and maintain temporary barricades, fences, guardrails, warning signs, warning lights,
- d. Provide and maintain fire extinguishers;
- e. Maintain existing utilities which are to remain in service and protect from damage during demolition operations.

#### 4.2. Vehicular and Pedestrian Traffic

- a. Maintain accessibility for firefighting apparatus.
- b. Conduct demolition operations and debris removal to avoid interference with use of roads, streets, walkways, and adjacent occupied facilities.
- c. Obtain written permission from authorities prior to closing or obstructing streets, walkways, or other adjacent occupied facilities.
- d. Provide alternate routes when closing or obstructing traffic routes as required by local authorities or Police.
- e. Ensure safe passage of persons around area of demolition.
- f. Provide and maintain temporary covered passageways; comply with requirements of local authorities.

## 4.3. Gas or Vapour Risks

Take adequate precautions to prevent fire or explosion caused by gas or vapour.

#### 4.4. Health Hazards

Take adequate precautions to protect Site operatives and the general public from health hazards associated with dangerous fumes and dust arising during the course of the works.

#### 4.5. Control of Dust

- a. Control dust caused by the works to avoid inconvenience to the occupants of adjacent buildings.
- b. Sprinkle debris with water to minimise dust. Provide hoses and water connections as necessary.
- c. Do not cause flooding or contaminated run-off.

#### 4.6. Completion

Clear away all debris and leave the Site in a tidy condition on completion.

## 4.7. Materials Arising

Components and materials arising from the works to become the property of the Contractor, unless otherwise stipulated. Remove from Site as work proceeds.

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#### 4.8. Noise

- a. Restrict noise levels to levels acceptable to the Rand Water Architect.
- b. Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended in writing by the manufacturers of the compressors, tools or vehicles.
- c. Do not use or permit employees to use radios or other audio equipment in ways or at times that may cause a nuisance.

#### 4.9. Fire

Take all necessary precautions to prevent damage to the works or other property from fire.

## 4.10. Burning on Site

Burning on Site of materials arising from the demolition and or other work is not permitted.

#### 4.11. Waste removal

- a. Remove rubbish, debris and surplus material and spoil regularly; keep the Site and works clean and tidy.
- b. Waste is not to be allowed to build up within the work area and must be removed at least at the end of every working day to suitable transportation or storage areas.
- c. Remove all rubbish, dirt and residues from voids and cavities before filling or closing in.
- d. Remove all waste hazardous materials and their containers regularly for disposal off Site in accordance with relevant regulations.
- e. Retain waste transfer documentation on Site.
- f. All waste to be transported in appropriate vehicles.

#### 4.12. Rubbish removal

- Remove rubbish, debris and surplus material and spoil regularly; keep the Site and works clean and tidy.
- Remove all rubbish, dirt and residues from voids and cavities before filling or closing in.
- c. Remove all waste hazardous materials and their containers regularly for disposal off Site in accordance with relevant regulations.
- d. Retain waste transfer documentation on Site.

#### 4.13. Electromagnetic Interference

Prevent excessive electromagnetic interference to apparatus outside the Site.

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#### 4.14. Nuisance

Prevent nuisance from smoke, dust, rubbish, vermin and other causes.

#### 4.15. Asbestos Based Materials

- Report immediately to the Rand Water Architect any suspected asbestos based materials discovered during demolition work. Avoid disturbing such materials.
- b. Removal: By a Contractor licensed by the Health and Safety Authority, or submit proposals, prior to other works starting in these locations
- c. Asbestos waste is not allowed to remain on Site overnight unless contained within a suitable locked container.
- d. Disposal to only be at a site licensed for the disposal of asbestos waste.

## 4.16. Dangerous Openings

Illuminate and protect as necessary.

#### 4.17. Adjoining Property

- a. Provide temporary support and protection, maintain and alter as necessary as work progresses.
- b. Damage: Minimize any damage and repair promptly.
- c. Make good as required to ensure safety, stability, weather protection and security.

#### 4.18. Finishes

- a. Finish new surfaces as specified in individual Specification sections.
- b. Finish making good to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

# Cleaning

## 4.19. Cleaning

- a. Clean Employer occupied areas daily. Clean spillage, overspray, and heavy collection of dust in Employer occupied areas immediately.
- b. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations.
- c. Return adjacent areas to condition existing prior to start of Work.

#### **End of Section**

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