

Construction Hours/ Noise within the Central Business District

**City of Sydney
Code of Practice 1992**

**CITY
OF
SYDNEY**



CONTENTS

Foreword	i
Categories of Working Hours, and Noise Criteria (Table 1)	ii
Listed Appliances and Allowable Noise Levels (Schedule 1)	iii
Map	iv
INTRODUCTION	
Object of the Code	1
Council's general powers to control noise	1
Noise Control Act 1975	2
PART 1. INTERPRETATION AND ABBREVIATION	3
Interpretation	3
Abbreviations	5
PART 2. APPLICATION AND ENFORCEMENT OF THE CODE	
Implementation	6
Development consents	6
Building approvals or civic works approvals	6
PART 3. APPROVED HOURS	
Specifying categories of hours	7
Determining approved hours	7
Category 1 Hours	7
Category 2, 3 and 4 hours - development consent	7
Category 2, 3 and 4 hours - building or civic works approval	7
Compliance	7
Cranes	8
Service Vehicles	8
PART 4. CONSTRUCTION NOISE IMPACT STATEMENT FOR CATEGORY 2, 3 AND 4 HOURS	
Noise Impact Statement	9
PART 5. NOISE MONITORING DURING CATEGORY 2, 3 AND 4 HOURS	
Noise Monitoring	10
Noise Monitoring Technician	10
Noise Monitoring Record	10
PART 6. NOISE LEVELS ON CONSTRUCTION SITES	
Appliance Noise Levels	11
Noise at site boundary from appliances	11
noise at nominated affected occupancy	11
Approval for variation of prescribed noise levels	11
Measurement of noise levels	12
General requirements	12
Statistical noise measurement	12
Measurement of noise in response to a complaint	12

PART 7. CERTIFICATE OF ACOUSTIC PERFORMANCE

Certificate to specify appliance or operation 13
Certificate to specify time, location and type of measurement 13

PART 8. ACOUSTIC COMPLIANCE NOTICE

Acoustic compliance notice 14
Service of Acoustic compliance notice 15
Applicant to comply with acoustic compliance notice 15

PART 9. APPLICANT TO SUPERVISE COMPLIANCE WITH THE CODE

Applicant's nominee 16
Site supervisor for Category 2, 3 and 4 hours 16
Community Consultation 16

PART 10. COMPLAINTS ABOUT OFFENSIVE NOISE

Complaints about offensive noise 17
Procedure for making complaints 17
Procedure for dealing with complaints 17
Register of Complaints 18
Council's Costs 18

PART 11. SANCTIONS FOR BREACHES DURING CATEGORY 2, 3 AND 4 HOURS

Performance Bond 19
Amount 19
Evidence 19
Forfeiture 19
Criteria for assessment of proportion of Performance Bond to be forfeited 20
Adjudication of disputes 20
Topping-up 20
Release of the Performance Bond 20
Revocation of consents for Category 2, 3 and 4 hours 21
Applicant's rights 21
Adjudication of disputes 21

PART 12. ENFORCEMENT

Enforcement 22
Legal proceedings 22

PART 13. EMERGENCIES

Emergencies 23

FORM A: Construction Noise Impact Statement 24
FORM B: Noise Monitoring Procedures 25
FORM C: Directors' Monitoring Statement 25
FORM D: Certificate of Acoustic Performance 26
FORM E: Acoustic Compliance Notice 27
FORM F: Bank Guarantee 28

THE CITY OF SYDNEY CODE OF PRACTICE CONSTRUCTION HOURS/NOISE 1992

FOREWORD

Sydney is the financial centre of Australia and the major contributor to its economic growth. Of equal importance, Sydney is a "people city", a vibrant and exciting place; an amalgam of historic and modern structures nestled around the foreshores of the world's finest harbour.

Growth and development are essential if Sydney is to remain the pre-eminent city of Australia and the regional hub of the Pacific Rim. To remain an inviting and pleasant place in which to live, work, and visit, it must exhibit the attributes associated with a pleasant environment.

Herein lies the dilemma. Growth and development are inextricably linked with construction activity, the attendant noise and general disruption; whereas residential and tourist activities expect a more tranquil environment, particularly at night and in the early morning. By favouring any one activity, we may jeopardise the other.

The Code recognises the need to balance the competing interests of the City's worker, resident and tourist population with that of the property development industry.

The Code provides comprehensive guide-lines to permit construction work during all hours of the day, seven days per week subject to compliance with noise criteria, and will allow construction to be planned and undertaken without affecting the amenity of residents, commercial operators, tourists and other city users.

The overriding principle which will contribute to the success of the Code, is open communication with the city community, be they residents, owners or tenants. The opening of effective communication channels as early as possible, will facilitate practical plans to satisfy the needs of those who may be affected by the construction process.

The Code prescribes the obligations that an applicant accepts with regard to addressing:

- Construction hours to be worked
- Noise criteria applying to those hours of work
- Regular reporting by the firm's principals
- Site supervision needed to comply with the Code
- Special requirements if work is intended during Category 2, 3 and 4 hours.

The Code also prescribes obligations upon Council to assist in processing applications and the consultation process with the community.

Adherence to the Code by all parties will result in a better understanding of the needs of those who seek building efficiency, earlier completions and improved competitiveness for development within the City, while improving the civic amenity for the business and residential community.

The Code represents a landmark in Australian construction practice and has been prepared in consultation with representatives of the City's residential, tourist and worker population and the property development industry. Subsequent to the operation of the Code for a 12 month period, it will be reviewed in the light of its performance.

TABLE 1

CATEGORIES OF WORKING HOURS, AND NOISE CRITERIA

DAY	TIME ZONE	CATEGORY	NOISE CRITERIA (which must not be exceeded)
Monday to Friday	00.00 - 07.00	4	Background + 0 dBA Background + 5 dBA Background + 5 dBA + 5 dBA to be determined on a site basis Background + 3 dBA Background + 0 dBA
	07.00 - 08.00	1	
	08.00 - 19.00	1	
	19.00 - 23.00	2	
	23.00 - 24.00	4	
Saturday	00.00 - 07.00	4	Background + 0 dBA Background + 5 dBA Background + 5 dBA + 5 dBA to be determined on a site basis Background + 3 dBA Background + 0 dBA
	07.00 - 08.00	1	
	08.00 - 17.00	1	
	17.00 - 23.00	2	
	23.00 - 24.00	4	
Sundays and Public Holidays	00.00 - 07.00	4	Background + 0 dBA Background + 3 dBA Background + 0 dBA
	07.00 - 17.00	3	
	17.00 - 24.00	4	

NOTE: 00.00 or 24.00 means 12.00 midnight.

1. All noise levels to be $L_{A\ av\ max}$ (15 minute) measured at the nearest Nominated Occupancy.
2. The permissible noise level is to be complied with during each fifteen (15) minute period during the relevant Category of Hours.
3. The guidelines for control of construction noise as outlined in AS2436 shall be applied, where appropriate.
4. Background is "Background Noise Level" as defined in para 18.j (page 5).

LISTED APPLIANCES AND ALLOWABLE NOISE LEVELS

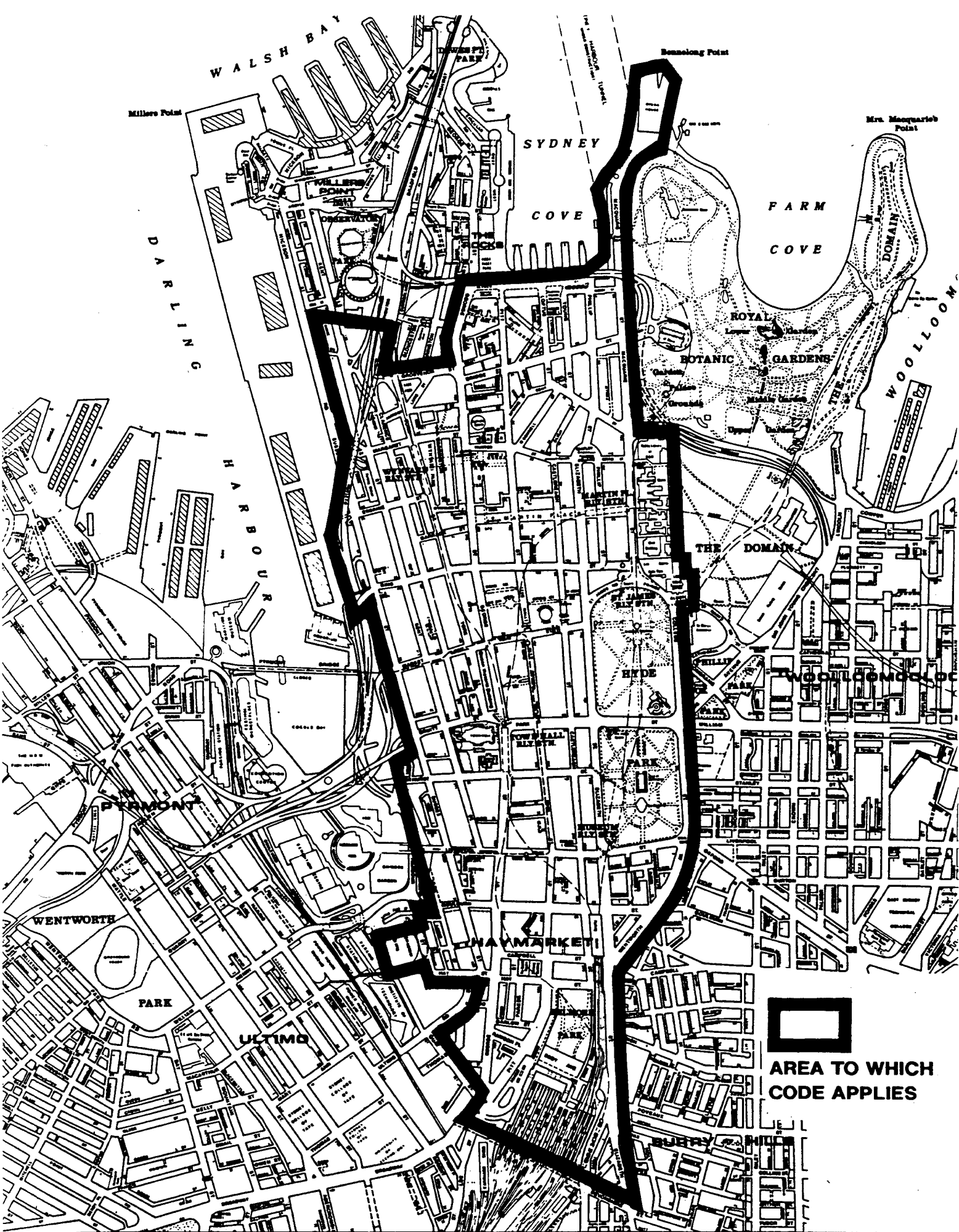
GROUP A (see Note 2)	GROUP B 90dBA	GROUP C 85dBA	GROUP D 80dBA	GROUP E 75dBA	GROUP F 70Dba
Pile drivers	Earthmoving equipment of engine capacity above 200kW NEP Warning sirens* Reversing alarms+ Trucks	Impulsive tools - air, electric or hydraulic	Concrete agitators	Air compressors above 170 L/s capacity	Air compressors up to 170 L/s capacity
Hydraulic hammers		Earthmoving equipment of engine capacity between 100kW and 200kW NEP	Concrete pumps	Construction dumpers over 1m ³ capacity	Fluid pumps
Machine mounted rock breakers		Explosive power tools	Concrete saws	Public address system*	Internal combustion or electrically driven equipment (unless grouped elsewhere) up to 14kW NEP
Sand blasters		Impact wrenches	Cranes (fixed)	Internal combustion or electrically driven equipment (unless grouped elsewhere) over 14kW NEP	
Steam cleaners		Refuse chutes*	Cranes (mobile)		
Mole borers		Scabblers	Earthmoving equipment up to and including engine capacities of 100kW NEP		
		Chain saws	Concrete vibrators		
	Rock drills	Portable hand tools			
		Vibratory compacters			

* To be measured at the site boundary closest to the affected area.

+ Reversing alarms must be controlled so that noise levels produced do not exceed the background sound level by more than 10dBA.

Notes

- Where any appliance is unable to comply with the allowable noise level, para 43 applies.
- A Certificate of Acoustic Performance (see Form D) shall be provided for each appliance listed in Group A.
- All noise levels are to be $L_{A\ av\ max}$ (1 minute) measured at 7 m from the point nearest to an Appliance.
- "NEP" means the Net Engine Power and shall be determined in accordance with Australian Design Rule No.28/00 External Noise of Motor Vehicles, Other Than L-Group Vehicles dated March 1989;



**THE CITY OF SYDNEY CENTRAL BUSINESS DISTRICT
CONSTRUCTION HOURS / NOISE CODE**

INTRODUCTION

Object of the Code

1. The object of the City of Sydney Code of Practice Construction Hours/Noise 1992 (the Code) is to prevent the creation and emission of Offensive Noise on Construction Sites consistent with safe working practices, and to avoid the imposition of restraints which would hinder development unnecessarily.
2. The Code is a statement of Council's policy, and a guide to the Council's decision-making in administering the Noise Control Act 1975, and in imposing conditions on development consents, building approvals and Civic Works approvals.
3. The Sydney Building Sites Noise Code 1988 is replaced by this Code.
4. The Code sets objective standards of permissible noise levels for all Appliances and for all Construction Sites at all times. The Code prescribes clear criteria for compliance. Methods are prescribed to assess levels of noise emissions.
5. The Code also contains detailed enforcement mechanisms. All construction activity in the City of Sydney (the City) is required to comply with the noise emission standards prescribed in the Code.
6. A secondary object of the Code, is to prescribe preventative and remedial measures, and guidelines for when those measures must be taken.
7. In adopting the Code, Council supports the principle that, for efficiency of the development and building process, the Applicant should, subject to compliance with the Code, be permitted to maximise the hours of work.
8. Applicants are encouraged to consult with all potentially affected residents before lodging applications to undertake Construction Work, and to consult regularly during Construction Work.
9. The Council emphasises the importance of regular communications between all interested parties.
10. Applicants should be prepared to revise their working Schedules to reduce potential inconvenience. The Council will make Council officers available to assist where appropriate.
11. The Code is intended as a model for future codes regulating all environmental aspects of construction activities in the City.

Council's general powers to control noise

12. Council is conscious of its responsibility to control noise within the City. It is the Council's intention to ensure that noise within the City is minimised without impairing commercial activity and necessary development work in the City.
13. The Code, as part of the Council's regulatory structure, balances the needs of residents and visitors for undisturbed quiet and the City's need for development. In striking this balance, the Council is particularly conscious of the importance of providing a quiet and secure environment for the City's residents and visitors.
14. Nothing in the Code limits the right of any person to bring private action for nuisance, including interference with quiet enjoyment, nor does the Code restrict the powers of the Council or any other body under the Noise Control Act 1975.

Noise Control Act 1975

15. The general legislative power to control noise in New South Wales is the Noise Control Act 1975 and the Noise Control Regulations.

16. In carrying out its functions under the Noise Control Act, Council recognises that, in the special circumstances of the City, problems that arise from noise on Construction Sites pose particular difficulties - difficulties that may impinge directly on the lifestyle of residents and the needs of the construction industry.

PART 1. INTERPRETATION AND ABBREVIATIONS

17. **Interpretation.** Unless the context otherwise requires:

a. "Acoustic Adviser" means a person, independent of the Applicant and acceptable to Council, who has been in continuous practice in the field of Environmental Acoustics for not less than five years and has been accredited by a body or Society approved by Council for the purpose of the Code;

b. "Acoustic Compliance" means a statement issued by an Acoustic Adviser in accordance with Form E under Part 8 served by the Council on the Applicant's Nominee;

c. "Ambient" noise level means (in relation to Construction Work) the level of noise which occurs at a specified location in the absence of the noise emanating from the Construction Work;

d. "Appliance" means any apparatus, equipment or machine used on or in connection with any Construction Site, and includes sound amplification equipment, bells, sirens, radios and the like, incidental or ancillary to the activities on Site, motor vehicles and earth moving machinery;

e. "Applicant" means the person seeking development consent or building approval or Civic Works approval (as the case may be) and to whom the development consent, building approval or Civic Works approval (as the case may be) is issued by the Council;

f. "Applicant's Nominee" means the person nominated by the Applicant in accordance with para 74 as being the Applicant's official representative in all dealings with the Council relating to the Construction Work;

g. "Approved Hours" means the permissible hours of Construction Work specified in any building approval or development consent granted by the Council for the particular Construction Site and shall be specified as Categories of Hours, as defined;

h. "Authorised Officer" means the Town Clerk, an officer of the Council authorised by the Town Clerk for the purposes of the Code, or any person who holds an authority under the Noise Control Act 1975;

i. "Background Noise Level" means the A weighted sound pressure level obtained by using time weighting "F" and arithmetically averaging the lowest levels of the Ambient noise measured in the absence of the noise under investigation (It may be expressed as the level exceeded for 90% of the time interval considered L_{A90});

j. "Building" includes any structure or part thereof;

k. "Business Day" excludes Sundays;

l. "Category 1 Hours" means the hours of work stipulated by the Applicant and approved by the Council where such hours do not extend beyond:

- | | |
|---------------------------------|-----------------|
| i. Monday to Friday (inclusive) | 07.00 to 19.00 |
| ii. Saturday | 07.00 to 17.00; |

m. "Category 2 Hours" means the hours of work stipulated by the Applicant and approved by the Council where such hours do not extend beyond:

- | | |
|---------------------------------|-----------------|
| i. Monday to Friday (inclusive) | 19.00 to 23.00 |
| ii. Saturday | 17.00 to 23.00; |

n. "Category 3 Hours" means the hours of work stipulated by the Applicant and approved by the Council where such hours do not extend beyond:

- i. Sunday 07.00 to 17.00;
- ii. Public Holidays 07.00 to 17.00;

o. "Category 4 Hours" means the hours of work stipulated by the Applicant and approved by the Council where such hours do not extend beyond:

- i. Monday to Friday (inclusive) 00.00 to 07.00 and 23.00 to 24.00
- ii. Saturday 00.00 to 07.00 and 23.00 to 24.00
- iii. Sunday 00.00 to 07.00 and 17.00 to 24.00
- iv. Public holidays 00.00 to 07.00 and 17.00 to 24.00

p. "Certificate of Acoustic Performance" means a Certificate issued by an Acoustic Adviser as prescribed in Form D;

q. "Civic Works" includes any works undertaken or supervised by the City Engineer or other officer of the Council supervised by the City Engineer;

r. "Construction Arbiter" means the person appointed under Part 11 to determine disputes referred under paras 103, 108 and 112 and shall be the Chairman of the Board of Arbitrators or the person nominated by the Chairman;

s. "Construction Noise Impact Statement" (NIS) means a statement as prescribed in Form A;

t. "Construction Site" includes any railway, road, tunnel, land or building where Construction Work is performed;

u. "Construction Work" includes any construction or demolition Work undertaken pursuant to any development consent, building approval or Civic Works approval issued by the Council;

v. "Council" means the Council of the City or the Central Sydney Planning Committee, as the context requires.

w. "Development" has the meaning ascribed to it in the Environmental Planning and Assessment Act 1979;

x. "Earth Moving Equipment" means any machine constructed or used for the purpose of excavating, moving, boring, carrying or compressing soil, rock or other materials;

y. "Materials" means any matter or thing derived from or used in the Construction Work;

z. "Measured Maximum Noise Level" means the maximum allowable noise level in dB(A) as set out in Schedule 1 and measured in accordance with paras 61 to 63 of the Code;

aa. "Nominated Affected Occupancy" is the occupancy which is nominated by the Council from time to time to be likely to be subject to the greatest nuisance level from noise on a Construction Site. Where circumstances indicate, the Council may require more than one occupancy to be treated as the Nominated Affected Occupancy;

ab. "Noise Monitoring" means monitoring of Construction Work during Category 2, 3 and 4 Hours in accordance with Form B and required by the Council under Part 5;

ac. "Noise Monitoring Record" means the record maintained by the Noise Monitoring Technician under Part 5;

ad. "Noise Monitoring Technician" means a person nominated by the Applicant who has demonstrated, to the satisfaction of the Acoustic Adviser, an acceptable ability to measure, record or report on sound levels;

ae. "Offensive Noise" means noise which exceeds a noise standard prescribed in the Code and, if generated in:

- i. a public place, is detected within or outside that place; or
- ii. premises which are not a public place, is detected outside those premises.

af. "Operation" means any Construction Work involving the combined use of more than one Appliance and which is directed towards a specific task;

ag. "Register of Acoustic Advisers" means the register, kept by the Council, of those persons recognised by the Council as Acoustic Advisers for the purpose of the Code;

ah. "Road" means any thoroughfare and includes, but is not limited to, any road, street, lane, pathway, right of way, bridge, viaduct or culvert;

ai. "Site Supervisor" means a person from time to time appointed by the Applicant or by the Applicant's authorised agent, and who is empowered and required to carry out the duties and responsibilities of a Site Supervisor as specified in the Code;

aj. "Town Clerk" means the person appointed or acting as the Town Clerk of the Council.

18. Abbreviations

a. "AS 1055" means Australian Standard - Acoustics - Description and Measurement of Environmental Noise.

b. "AS 1259" means Australian Standard Specification - Sound Level Meters.

c. "AS 2012" means Australian Standard - Acoustics - Measurement of Airborne Noise Emitted by Earth Moving Machinery and Agricultural Tractors - Stationary Test Conditions.

d. "AS 2221" means Australian Standard - Methods for Measurement of Airborne Sound emitted by Compressor Units, including Prime Movers and by Pneumatic Tools and Machines.

e. "AS 2436" means Australian Standard - Guide to Noise Control on Construction Maintenance and Demolition Sites.

f. " L_{A1} " means the one (1) percentile noise level, being the sound level which is exceeded 1% of the time by the varying noise signal.

g. " L_{A10} " means the ten (10) percentile noise level, being the sound level which is exceeded 10% of the time by the varying noise signal. L_{A10} is deemed to be equivalent to $L_{A\text{ av max}}$

h. " L_{A50} " means the fifty (50) percentile noise level, being the sound level which is exceeded 50% of the time by the varying noise signal.

i. " L_{A90} " means the ninety (90) percentile noise level, being the sound level which is exceeded 90% of the time by the varying noise signal.

j. " $L_{A\text{ av max}}$ " means the A-weighted sound pressure level obtained by using the time weighting "F" and arithmetically averaging the maximum levels measured during the interval considered.

PART 2. IMPLEMENTATION AND APPLICATION OF THE CODE

Implementation

19. The Code shall:
- a. be implemented as and from 27th August 1992 and apply throughout the Central Business District of the City of Sydney (the CBD), as indicated in Map 1;
 - b. apply to all Construction Sites in the CBD for which development consent and/or building approval or Civic Works approval is required and granted after the date of implementation;
 - c. apply to all existing premises, in the CBD, for which development consent for a change of use is required or granted after the date of implementation;
 - d. apply to all Construction Work in the CBD;
 - e. apply to all works approved or permitted by Council in or on the Roads under its control.

Development consents

20. All applications for development consent (DA) must identify the Categories of Hours during which demolition or construction activities are proposed.
21. All development consents issued by or on behalf of the Council shall prescribe:
- a. the Categories of Hours during which demolition or construction activities will be permitted; and
 - b. the types of information which must be provided so that Approved Hours may be determined in building approvals or Civic Works approvals.
22. Where neither a building approval or Civic Works approval is required before demolition or construction activities are permitted, the Approved Hours will be specified in the development consent.

Building approvals or Civic Works approvals

23. Where a building approval or Civic Works approval is required before demolition or construction activities are permitted, the Approved Hours will be specified in the building approval or Civic Works approval.
24. All building approvals and Civic Works approvals issued by or on behalf of the Council shall prescribe Approved Hours.

PART 3. APPROVED HOURS

Specifying Categories of Hours

25. The Applicant must specify the categories of hours for which the Applicant seeks approval for Construction Work in:
- a. the application for development consent; and
 - b. the application for building approval or Civic Works approval.
26. The Council will specify the Approved Hours in:
- a. the development consent; and
 - b. the building approval or Civic Works approval.
27. Where building approval or Civic Works approval is required for Construction Work in addition to development consent, Council may specify in the development consent whether building approval or Civic Works approval may be granted for Construction Work in Category 2, 3 and 4 hours.
28. Where an Applicant does not specify the hours during which Construction Work will occur, the Applicant will be presumed to be applying for approval only for Category 1 Hours.

Determining Approved Hours

29. **Category 1 Hours.** Council may at any time approve Category 1 Hours.
30. **Category 2, 3 and 4 Hours - Development consent.**
- a. **No building approval or Civic Works approval required.** Where the Applicant seeks approval for Construction Work during Category 2, 3 and 4 hours, Council may require as a condition of development consent if no building approval or Civic works approval will be required;
 - i. a Construction Noise Impact Statement prepared in accordance with Part 4;
 - ii. Noise Monitoring in accordance with Part 5; and/or
 - iii. a Performance Bond in accordance with Part 11.
 - b. **Building approval or Civic Works approval is required.** Where building approval or Civic Works approval is required, the Council may require as a condition of development consent that a Construction Noise Impact Statement prepared in accordance with Part 4 be submitted with any application for building approval or Civic Works approval.
31. **Category 2, 3 and 4 Hours - Building or Civic Works approval.** Council may require as a condition of building approval or Civic Works approval:
- a. a Construction Noise Impact Statement prepared in accordance with Part 4;
 - b. Noise Monitoring in accordance with Part 5; and/or
 - c. a Performance Bond in accordance with Part 11.
32. **Compliance.** The Applicant must comply with the Approved Hours and may undertake no Construction Work outside of those Approved Hours.

Cranes

33. The maintenance and use of cranes located on a construction site and cranes located and operated from a road, with the approval of Council, may be permitted during Category 2 and 3 hours, subsequent to consultation between the developer, any affected parties and Council in order to minimise any inconvenience that may be experienced during the operation of the crane.

34. The maintenance and use of cranes during Category 4 hours may be permitted, subsequent to consultation between the applicant, any affected parties and Council in order to minimise any inconvenience that may be experienced during the operation of the crane.

35. The maintenance and use of cranes during Category 4 hours will also require the special approval of Council via the City Planner. Such approval shall not be unreasonably withheld.

Service Vehicles

36. During Category 2 and 3 hours, the loading and unloading of all service vehicles should be carried out within the building site where practicable.

37. For the servicing of sites during Category 4 hours, the special approval of Council, via the City Planner, will be required. Such approval shall not be unreasonably withheld.

PART 4. CONSTRUCTION NOISE IMPACT STATEMENT FOR CATEGORY 2, 3 AND 4 HOURS

38. Council may require an Applicant to supply a Construction Noise Impact Statement (NIS) where the Applicant seeks approval for Construction Work during Category 2, 3 and 4 Hours.

39. **Construction Noise Impact Statement (NIS).** An NIS must be prepared by, or under the supervision of an Acoustic Adviser who will be required to certify as to its contents. An NIS must be in accordance with Form A and contain (as appropriate) the following matters:

- a. a description of the Background Noise Level on, and immediately surrounding the Construction Site;
- b. a description of the area identifying potentially affected occupancies;
- c. a description of the Background Noise Level at the Nominated Affected Occupancy;
- d. a description of the Appliances and Operations involved in the Construction Work;
- e. an assessment of the noise levels likely to be generated by each Appliance or Operation;
- f. a description of the noise generating activities associated with the Construction Work, whether occurring solely on the Construction Site or not (including matters such as transportation);
- g. an assessment of the noise levels likely to be generated by those associated activities; and
- h. a description of the measures to be taken to ensure that noise levels generated by the Construction Work does not exceed the levels required by the Code.

40. Where the Council requires an NIS and the Applicant fails to supply the Statement, Council may refuse to approve Construction Work other than during Category 1 Hours.

41. Where the Council approves Construction Work during Category 2, 3 and 4 Hours after consideration of a NIS, the Applicant must ensure that:

- a. such Construction Work during Category 2, 3 and 4 Hours complies with the NIS; or
- b. Council approves any technical amendment of fact to that NIS.

PART 5. NOISE MONITORING DURING CATEGORY 2, 3 AND 4 HOURS

42. As a condition of approving Construction Work during Category 2, 3 and 4 Hours Council may require that an Applicant:

- a. undertake Noise Monitoring;
- b. report to the Council at specified times that monitoring is being conducted in accordance with Form B.

43. Where an Applicant is required to undertake Noise Monitoring during Category 2, 3 and 4 Hours, the Applicant must ensure that Noise Monitoring is conducted:

- a. during the hours required;
- b. at the locations (if any) specified;
- c. by a Noise Monitoring Technician; and
- d. in accordance with Form B.

44. **Noise Monitoring Technician.** Where Council requires Noise Monitoring, the Applicant shall appoint a Noise Monitoring Technician. The Noise Monitoring Technician shall:

- a. monitor construction noise in accordance with Form B;
- b. be supervised by and report to the Acoustic Adviser;
- c. report any apparent breach to the Applicant's Nominee;
- d. maintain and calibrate noise monitoring equipment; and
- e. maintain the Noise Monitoring Record.

45. **Noise Monitoring Record.** The Applicant must retain any Noise Monitoring Record until the Applicant ceases all construction activity on the site, or reverts to Category 1 hours by way of a modified development and/or building consent.

46. The Applicant must provide an extract from the Noise Monitoring Record relating to a specified time and date when so required by the Council.

47. Where Council so requires, the Applicant's Nominee must confirm to the Council at the times specified by the Council that Noise Monitoring is being undertaken in accordance with the Code.

48. Where the Applicant is required to undertake noise monitoring, a director of the Applicant shall certify that acoustic monitoring of the site is being undertaken in accordance with Form C.

PART 6. NOISE LEVELS ON CONSTRUCTION SITES

49. **Appliance Noise Levels.** Except as provided in paras 35 to 37 or para 43, and notwithstanding the requirement for compliance with the noise criteria detailed in Table 1, no Appliance of a class referred to in Schedule 1 shall be used on a Construction Site and/or in connection with the work being performed on a Construction Site if the $L_{A\ av\ max}$ noise level emitted by that Appliance as measured over a one (1) minute period is greater than the noise level specified in Schedule 1 as measured at a distance of 7 metres from the nearest point of the Appliance.

50. **Noise at site boundary from Appliances.** Notwithstanding the requirement for compliance with the noise criteria detailed in Table 1, the $L_{A\ av\ max}$ noise level emitted from all Appliances in use at any time on the Construction Site, as measured over any 15 minute period, shall not exceed a level of 85 dB(A) at any point on the Construction Site boundary.

51. **Noise at Nominated Affected Occupancy.** The $L_{A\ av\ max}$ noise level emitted from all Appliances in use or from any Operation being performed at any time on the Construction Site as measured over any 15 minute period shall not exceed the permissible noise level specified in Table 1 at the Nominated Affected Occupancy.

52. No Appliance may be used in any construction activity unless:

- a. it is listed in Group B to F (inclusive) of Schedule 1; or
- b. specific approval has been obtained from the Council in advance.

53. Where an Applicant intends to permit the use on a Construction Site, or in connection with work being performed on a Construction Site, an Appliance of a class not specified in Group B to F (inclusive) of Schedule 1 the Applicant shall:

- a. obtain a Certificate of Acoustic Performance in respect of the unlisted Appliance;
- b. provide that Certificate of Acoustic Performance to the Council; and
- c. obtain the approval of the Council in writing for the use of that unlisted Appliance.

54. An Applicant shall ensure that the use of any Appliance for which no noise level is specified in the Code shall comply with the conditions (if any) of any Council approval, including the hours during which such Appliance may be used.

Approval for variation of prescribed noise levels

55. An Applicant may apply to the Council for approval to use an Appliance which does not comply with the noise standards prescribed in Schedule 1. A Certificate of Acoustic Performance shall be submitted to the Council with any such application.

56. The Council may approve the use of an Appliance which does not comply with the noise standards prescribed in the Code where the Applicant satisfies the Council that the Construction Work cannot be undertaken reasonably without the use of the Appliance.

57. The Council may impose conditions on the use of an Appliance as the Council reasonably considers consistent with the Code. Such conditions may include:

- a. specifying the maximum noise levels for the Appliance;
- b. specifying the hours during which the Appliance may be used;

- c. specifying the conditions under which the Appliance may be used; and/or
- d. requiring the erection of sound attenuating barriers as a condition of operating the Appliance.

Measurement of noise levels

58. Measurement of the levels of noise emitted from an Appliance, Operation or Construction Site shall be carried out in accordance with paras 61 - 63 by an Acoustic Adviser or a Noise Monitoring Technician and shall form the basis for determination of compliance or non-compliance with the Code.

59. General requirements

- a. The measurement of noise levels shall be carried out to the satisfaction of the City Planner and as recommended by AS 1055, AS 2221 and AS 2012 as appropriate, except as indicated below.
- b. All noise measurements shall be carried out using a sound level meter complying with AS1259 or using another instrument approved by the Council. The meter or instrument shall have been calibrated within two years of the date of measurements.

60. Statistical noise measurement

- a. Statistical noise measurements may be required to determine background noise levels or noise levels emanating from Appliances or Operations performed on a Construction Site and/or in connection with the work being performed on a Construction Site.
- b. All noise measurements shall be carried out at a point 1.2 metres above the ground or building floor (whether inside or outside) as appropriate.
- c. When attempting to measure the $L_{A\ av\ max}$ noise level of an appliance or operation and such measurement is affected by ambient noise, then a sound level meter set on time weighting F may be used so that spot measurement may be made during times of low ambient noise level. The results of such spot measurements during the period in question shall be averaged to determine an approximate $L_{A\ av\ max}$ noise level. If spot measurements of the noise in question cannot be made during periods of low ambient noise level, then it should be reported that the noise cannot be measured.

61. Measurement of noise in response to a complaint

- a. Spot measurements may be necessary when investigating a complaint which has arisen as a result of noise emanating from a Construction Site during any one of Category 2, 3 and 4 Hours. Spot measurements shall be made at a point 1.2 metres above the ground or floor (whether inside or outside) as appropriate.
- b. For such measurements, a sound level meter set on time weighting F shall be used to determine noise levels resulting from noise emanating from the Construction Site. The average of the maximum noise levels measured shall be taken as the $L_{A\ av\ max}$ level.

PART 7. CERTIFICATE OF ACOUSTIC PERFORMANCE

62. The Council may require an Applicant to provide a Certificate of Acoustic Performance prepared by an Acoustic Adviser, in accordance with Form D for any Appliance, Operation or Construction Work. Such a requirement may be served by the Council in writing delivered to the Applicant's Nominee.

63. **Certificate to specify Appliance or Operation.** The Council may require a Certificate of Acoustic Performance in respect of:

- a. a specified Appliance; and/or
- b. a specified Operation; and/or
- c. the Construction Work.

64. Where the Council requires a Certificate of Acoustic Performance, the Applicant must ensure that the certificate is provided to the Council within:

- a. three (3) Business Days; or
- b. such later time as may be specified by the Council in its notice.

65. **Certificate to specify time, location and type of measurement.** The Council may require that the Certificate of Acoustic Performance report on the levels of noise emitted from an Appliance, Operation or Construction Work:

- a. at a specified time; and/or
- b. as measured from a specified location; and/or
- c. certify the $L_{A,av,max}$ noise level:
 - i. measured at a distance of 7 metres from the nearest point of the Appliance over a one (1) minute period in accordance with the Code;
 - ii. emanating from the Construction Site as measured on each (to a maximum of four designated boundaries if there are more than this number) of the Construction Site boundaries over a fifteen (15) minute period in accordance with the Code or such points on the boundaries as may be specified by the Council; and/or
 - iii. emanating from the Construction Site as measured at the Nominated Affected Occupancy (as nominated by the Council in the notice requiring the Certificate of Acoustic Performance) over a fifteen (15) minute period in accordance with Table 1: and/or.
 - iv. certify the Ambient L_{A90} noise level as measured at the Nominated Affected Occupancy (as nominated by the Council in the notice requiring the Certificate of Acoustic Performance) over a fifteen (15) minute period in accordance with the Code.

66. The Applicant may apply for a variation in accordance with para 43 when supplying the Certificate of Acoustic Performance.

67. If an Applicant does not supply a Certificate of Acoustic Performance when required, the Applicant must ensure that, from the date of the failure to supply such Certificate:

- a. any Appliance for which such Certificate was required is not used: or
- b. any Operation for which such Certificate was required is not undertaken on the Construction Site or in connection with the Construction Work until such Certificate has been supplied.

PART 8. ACOUSTIC COMPLIANCE NOTICE

68. Council may issue an Acoustic Compliance Notice where Council has required a Certificate of Acoustic Performance and:

- a. the Applicant has failed to provide such Certificate within 3 Business Days or such longer time as was specified by Council;
- b. on the basis of a Certificate of Acoustic Compliance the Council reasonably forms the opinion that noise emanating from an operation, Construction Work or a specified Appliance exceeds the levels specified in Schedule 1 and/or Table 1; or
- c. on the basis of an extract from the Noise Monitoring Record in relation to Construction Work during Category 2, 3 and 4 Hours the Council reasonably forms the opinion that noise emanating from an operation, Construction Work or a specified Appliance exceeds the levels specified in Schedule 1 and/or Table 1.

69. An Acoustic Compliance Notice may require the Applicant to:

- a. ensure that a specified Appliance or Operation or Construction Work complies with the Code;
- b. ensure that a specified Appliance or Operation or Construction Work complies with a specified noise level (being a level not greater than is specified in the Code);
- c. ensure that a specified Appliance or Operation or Construction Work is undertaken only during Category 1 Hours;
- d. implement one or more of the following preventative measures to ensure that the noise emanating from that Appliance or Operation will comply with the levels specified in Schedule 1 and/or Table 1;
 - i. ensure that specified Appliances are used only during hours specified in the Acoustic Compliance Notice or with the prior written approval of the Council;
 - ii. require the erection of sound attenuation barriers as specified in the Acoustic Compliance Notice so as to ensure that noise levels do not exceed the levels specified in Schedule 1 and/or Table 1;
 - iii. require the installation of specified noise control kits on specified Appliances so as to ensure that noise levels do not exceed the levels specified in Schedule 1 and/or Table 1;
 - iv. restrict the use of specified Appliances or the performance of specified Operations to specified areas within the Construction Site so as to ensure that noise levels do not exceed the levels specified in Schedule 1 and/or Table 1;
 - v. undertake specified testing or trials of alternative methods of noise attenuation before using specified Appliances;
- e. suspend the use of a specified Appliance on the Construction Site:
 - i. for a specified time; or
 - ii. until the Applicant provides to the Council a Certificate of Acoustic Performance in accordance with Form D showing what steps will be taken to ensure that the levels of noise emanating from that Appliance will comply with the levels specified in Schedule 1 and/or Table 1;

- f. suspend a specified Operation on the Construction Site:
 - i. for a specified time; or
 - ii. until the Applicant provides to the Council a Certificate of Acoustic Performance in accordance with Form D showing what steps will be taken to ensure that the levels of noise emanating from that Operation will comply with the levels specified in Schedule 1 and/or Table 1.

70. **Service of Acoustic Compliance Notice.** The Council may serve an Acoustic Compliance Notice by notice in writing delivered to the Applicant's Nominee in accordance with Form E.

71. **Applicant to comply with Acoustic Compliance Notice.** The Applicant must comply with an Acoustic Compliance Notice as soon as is practicable or within such time as is specified in the Notice.

PART 9. APPLICANT TO SUPERVISE COMPLIANCE WITH THE CODE

72. **Applicant's Nominee.** The Applicant must nominate in writing the Applicant's Nominee when applying for development consent or (if no development consent is required) building or Civic Works approval.
73. No Construction Work may be undertaken until the Applicant ensures that the name and contact telephone number of the Applicant's Nominee has been conveyed to the Council.
74. The Applicant may substitute another Applicant's Nominee in place of a previous nomination from time to time by advice in writing to the Council.
75. The Applicant's Nominee is responsible for supervising the Applicant's compliance with the Code, and for all communication with Council in relation to the Code.
76. Service by the Council on the Applicant's Nominee of any notice or other requirement under the Code is service on the Applicant.
77. The Applicant's Nominee must be acceptable to the Council. If the Council advises the Applicant that the Council does not accept the nominated Applicant's Nominee, the Applicant must nominate another person as the Applicant's Nominee.
78. All requirements, notices and other directions issued by the Council under the Code shall be directed to the Applicant's Nominee.
79. **Site Supervisor for Category 2, 3 and 4 Hours.** The Applicant shall appoint sufficient persons as Site Supervisors for each Construction Site. A Site Supervisor shall be responsible for the Construction Site at all times when Construction Work is undertaken during Category 2, 3 and 4 Hours.
80. During Category 2, 3 and 4 Hours, the Site Supervisor on the Construction Site shall be responsible for compliance with the Code and with any approvals or conditions relating to the creation and emission of noise from Construction Work.
81. When Construction Work is undertaken during Category 2, 3 and 4 Hours, the name and telephone number of the Site Supervisor on the Construction Site from time to time shall be displayed prominently and indelibly on every street elevation of the site in an illuminated position and be legible from the public way.
82. The Applicant shall ensure that the name and contact telephone number of the Site Supervisors and their respective hours of duty shall be conveyed to the Council before any Construction Work is undertaken during Category 2, 3 and 4 Hours.
83. The Applicant from time to time may nominate another Site Supervisor in place of a previous nomination provided that, at the time of such change, the information displayed on the Construction Site is amended accordingly and the change is notified to the Council.
84. **Community Consultation.** To ensure that the application of the Code minimises community disruption, applicants are encouraged to consult with all persons potentially affected by construction activity prior to lodging applications to undertake construction work and regularly during the construction process. Council emphasises the importance of regular communication between all interested parties.

PART 10 - COMPLAINTS ABOUT OFFENSIVE NOISE

85. Any person may complain about Offensive Noise or an alleged breach of the Code.
86. **Procedure for making complaints.**
- a. **During Category 1 Hours.** Any person who wishes to complain about an alleged breach (whenever occurring) of the standards prescribed by the Code may contact:
- i. the Council's "Hotline" on telephone number 265 9160 between 8.30am and 5.00pm Monday to Friday; or
 - ii. the Applicant directly. The Applicant can be contacted through the Applicant's Nominee, whose name is available from the Council.
- b. **During Category 2, 3 and 4 Hours.** Any person who wishes to complain about an alleged breach of the standards prescribed by the Code may contact:
- i. the Council's "Hotline" on telephone number 265 9160 between 8.30am and 5.00pm, Monday to Friday; or
265 9333 after hours; or
 - ii. the Applicant directly. The Applicant can be contacted through the Site Supervisor, whose name and telephone number is displayed on the Construction Site and is also available from the Council.
87. **Procedure for dealing with complaints.**
- a. **Complaint to Council during Category 1 Hours.** The Council will contact the Applicant's Nominee. The Applicant's Nominee must:
- i. investigate the complaint immediately;
 - ii. take any necessary remedial action; and
 - iii. report to the Council on the results of that investigation.
- b. **Complaint to Applicant's Nominee during Category 1 Hours.** The Applicant's Nominee must:
- i. investigate the complaint immediately;
 - ii. take any necessary remedial action; and
 - iii. report to the Council on the results of that investigation.
- c. **Complaint to Council during Category 2, 3 and 4 Hours.** The Council will contact the Site Supervisor on duty at the time. The Site Supervisor must:
- i. investigate the complaint immediately and, where appropriate, examine any relevant noise meter;
 - ii. immediately stop the Appliance or Operation generating the Offensive Noise (provided that site safety is not impaired); and
 - iii. report to the Applicant's Nominee on the complaint and remedial measures taken (if any).

88. The Appliance or Operation generating the Offensive Noise may not be started again until the Applicant's Nominee has been informed and the Applicant's Nominee forms the opinion that that Appliance or Operation can operate in accordance with the Code.

- a. Complaint to Site Supervisor during Category 2, 3 and 4 Hours. The Site Supervisor must:
- i. investigate the complaint immediately and, where appropriate, examine any relevant noise meter;
 - ii. immediately stop the Appliance or Operation generating the Offensive Noise (provided that site safety is not impaired); and
 - iii. report to the Applicant's Nominee on the complaint and remedial measures taken (if any).

89. The Appliance or Operation generating the Offensive Noise may not be started again until the Applicant's Nominee has been informed and the Applicant's Nominee forms the opinion that that Appliance or Operation can operate in accordance with the Code.

90. The Applicant's Nominee or Site Supervisor must report to the Council on the results of investigation of the complaint.

91. Register of Complaints. A register shall be maintained by Council which records, on a site by site basis, complaints relating to construction noise.

92. Council's Costs. The Applicant shall reimburse Council all relevant inspection fees in respect inspections which arise from justified complaints during Category 2, 3 and 4 Hours.

PART 11. SANCTIONS FOR BREACHES DURING CATEGORY 2, 3 AND 4 HOURS

93. **Performance Bond.** Prior to the issue of a development consent or building approval which involves construction during Category 2 to 4 hours, the applicant shall enter into a deed with Council wherein the applicant agrees to lodge a Performance Bond with Council. This Bond may be forfeited in part or in full for breaches of conditions of the Code.

94. The Performance Bond is to be provided by a Bank Guarantee, see Form F, or such other Guarantee as is acceptable to the Council.

95. **Amount.** The amount of the Performance Bond shall be calculated as follows.

a. Where the Construction Noise Impact Statement concludes that no noise will be generated in excess of Background Noise during Category 2, 3 and 4 Hours:

i. a minimum of \$5,000; up to

ii. a maximum of \$100,000 being calculated at 0.5% of the value of the works to be undertaken in accordance with the development consent, building approval or Civic Works approval (as the case may be);

b. Where noise will be generated in excess of Background Noise during Category 2, 3 and 4 Hours but that noise will comply with the standards prescribed in the Code:

i. a minimum of \$10,000; up to

ii. a maximum of \$200,000 being calculated at 1.0% of the value of the works to be undertaken in accordance with the development consent or building approval (as the case may be);

96. **Evidence.** Evidence that noise has been emitted in excess of the standards prescribed by the Code may be substantiated by:

a. a Certificate of Acoustic Performance in relation to any Construction Work in respect of any incident occurring during Category 2, 3 or 4 Hours; or

b. an extract from the Applicant's required Noise Monitoring Record in relation to an incident occurring during Category 2, 3 and 4 Hours.

97. **Forfeiture.** The Council may require forfeiture of a proportion of the Performance Bond where:

a. Council has served an Acoustic Compliance Notice in relation to an incident occurring during Category 2, 3 and 4 Hours; and

b. there is subsequent evidence of a breach of the noise standards prescribed by the Code in respect of the Appliance or Operation or Construction Work which was the subject of that Acoustic Compliance Notice.

98. The Council may exercise its right to require forfeiture of a proportion of the Performance Bond by:

a. advising the Applicant's Nominee in writing that Council has evidence of a breach of the noise standards prescribed by the Code;

b. providing a copy of that evidence; and

c. advising of the proportion of the Performance Bond which the Council requires by way of forfeiture.

99. **Criteria for assessment of proportion of Performance Bond to be forfeited.** The proportion of the Performance Bond to be forfeited will be determined according to:

- a. the degree by which the breach exceeds the prescribed standards;
- b. the wilfulness of the breach;
- c. the frequency or duration of the breach; and
- d. the Applicant's record of compliance with the Code.

100. Where the Applicant is advised of Council's demand for forfeiture of a proportion of the Performance Bond, the Applicant may:

- a. accept the Council's decision;
- b. provide to the Council evidence disputing the Council's evidence that a noise standard has been breached; or
- c. dispute the proportion of the Performance Bond to be forfeited.

101. The Applicant has seven (7) days in which to advise the Council in writing of whether the Applicant wishes to dispute the Council's demand for forfeiture of a proportion of the Performance Bond under para 99.

102. If the Applicant does not advise the Council in writing within seven (7) days that the Applicant wishes to dispute the Council's demand for forfeiture of a proportion of the Performance Bond under para 99, the Council may exercise its rights under the Bank Guarantee in accordance with Form F.

103. **Adjudication of disputes.** Where the Applicant and the Council do not agree within seven (7) days on the Council's demand for forfeiture of, or the proportion of the Performance Bond demanded, the dispute shall be referred to the Construction Arbiter. In making any decision, the Construction Arbiter shall have regard to the matters specified in para 98. The decision of the Construction Arbiter shall be final.

104. **Topping-up.** In the event that the entire Performance Bond is forfeited, the Applicant shall either top-up the Bond or revert to Category 1 hours.

105. **Release of the Performance Bond.** Council will release the Performance Bond (or such proportion of the Performance Bond as has not been forfeited) when the Applicant advises the Council in writing that the Applicant will not undertake any further Construction Work during Category 2, 3 and 4 Hours. In this regard, Council will impose as a condition of development and/or building consent for extended working hours, the following condition:

"The applicant has approval to work during Categories 2, 3 and 4 hours until such time as the applicant advises Council in writing that no further work will be undertaken during those hours. Upon receipt of such advice, the approved hours for the site shall be Category 1 Hours only."

106. Where the Council does not release the Performance Bond in accordance with para 107, the matter shall be referred to the Construction Arbiter for resolution. In making any decision, the Construction Arbiter shall have regard to any evidence of an alleged breach of the Code provided by the Council or the Applicant, and the matters specified in para 98. The decision of the Construction Arbiter shall be final.

107. **Revocation of consents for Category 2, 3 and 4 Hours.** Prior to the issue of a development consent or building approval, which involves construction work during Category 2 to 4 (inclusive) hours, the applicant shall enter into a deed which requires the applicants to apply to rescind the consent for Category 2, 3 and 4 Hours, if so requested by Council.

108. If, subsequent to a number of breaches which have resulted in the forfeiture of all the Performance Bond, the Performance Bond is not "topped-up", or if Council is of the opinion that as a result of a series of breaches which are considered to be of such seriousness or as a result of the repetition of instances of significant breaches, then Council may notify the applicant that it intends to revoke the consent for Category 2, 3 and 4 hours.

109. **Applicant's rights.** Where the Applicant is advised of Council's intention to revoke the consent for Category 2, 3 and 4 Hours, the Applicant may:

- a. accept Council's decision; or
- b. dispute Council's decision and request that the matter be determined by the Construction Arbiter.

110. **Adjudication of disputes.** Where Council and the applicant do not agree within seven (7) days on the revocation notice, the matter shall be referred to the Construction Arbiter for determination.

PART 12 - ENFORCEMENT

Enforcement

111. Enforcement of the Code is the responsibility of the Town Clerk, who may delegate, in writing, the Town Clerk's powers in this regard to any Authorised Officer.

112. The Council may enforce compliance with the Code by:

- a. sanctions as set out in Part 11; or
- b. initiating legal proceedings;

but will reserve the right to revert from one course of action to the other if necessary.

113. Legal proceedings. The Council may initiate legal proceedings:

- a. under the Noise Control Act 1975;
- b. under the Environmental Planning and Assessment Act 1979 (for a breach of a development consent);
- c. under the Local Government Act 1919 (for a breach of a building approval); or
- d. at common law for nuisance.

114. The Council specifically draws to the attention of all persons holding development consents, building approvals and Civic Works approvals that, where compliance with the Code is a condition of the consent or approval, emission of Offensive Noise is also a breach of that consent or approval.

115. Where the Council or an Authorised Officer of the Council forms the opinion that a breach of:

- a. the Code;
- b. a condition of a development consent which applies to the Code;
- c. a condition of a building approval which applies to the Code;
- d. a condition of a Civic Works approval which applies to the Code,

Council or that Authorised Officer may serve on the Applicant's Nominee, such direction, order or notice under the Code, the Noise Control Act 1975 and the Environmental Offences and Penalties Act 1989 as is deemed necessary.

PART 13 - EMERGENCIES

116. Nothing in the Code shall prevent the Council from approving the carrying out of Construction Work at any time in any case where the Council considers that an emergency exists. In such cases the Council may attach such conditions as are deemed necessary in the circumstances.

117. Occupiers of adjoining premises shall be notified by the contractor before any work is undertaken. This notification shall include details of the nature of the emergency and the expected duration of the work and the type of work and noise level to be expected.

118. This requirement for notification may be varied by the Council in circumstances where the Council considers that delay would add to the risk.

CONSTRUCTION NOISE IMPACT STATEMENT (NIS)

1. This Statement identifies any potential noise which may be generated and noise control measures designed to eliminate the impact.
2. The NIS shall cover the following aspects and any other aspects relevant to the assessment:
 - a. Survey of potentially affected occupancies
 - i. A survey of the area surrounding the Construction Site shall be carried out to identify all potentially affected occupancies. Occupancies as residences, hotels, hospitals, churches or other religious/ceremonial premises, theatres, entertainment spaces, audio and television studios, restaurants and office premises (occupied during the hours in question) shall be considered.
 - ii. A Schedule of potentially affected occupancies shall be prepared and attached to the Statement.
 - b. Background noise levels
 - i. The background noise level ($L_{A,av,max}$) during each 15 minute period during the time in question shall be measured at representative occupancies in the surrounding area. Such measurements shall be made either inside or outside of the premises, as appropriate where possible, and, where necessary, estimates of the background levels at the appropriate location shall be made.
 - ii. Background noise levels shall be measured during one weekday, during one Saturday and during one Sunday/public holiday during the hours nominated by the applicant or approved by the Council as appropriate. The results obtained on the days surveyed shall be taken as representative of other days of the same classification.
 - c. Estimate of construction noise levels
 - i. Estimates shall be made of ($L_{A,av,max}$)(15 minute) noise levels emanating from the Construction Site and resulting from the proposed Operations at a selected number of representative potentially affected occupancies. Where possible, and with the approval of the Council, tests of typical Operations shall be carried out whilst measurements of construction noise levels are made at the potentially affected occupancies. Otherwise, measurements of the Appliances to be used on the Construction Site are to be made and calculations are to be undertaken to determine noise levels at the potentially affected occupancies.
 - ii. Construction noise levels should be estimated at the appropriate points of assessment, being inside and/or outside and at locations where Background Noise Levels have been determined or estimated.
 - d. Construction noise assessment. Estimated construction noise levels shall be assessed against the permissible noise levels specified in Table 1.
 - e. Transportation noise assessment. Noise exposure from truck movements associated with Operations on the Construction Site shall be estimated generally to assess the impact of that movement within the CBD.
 - f. Noise control measures. Where initial estimates indicate that the permissible noise levels specified will be exceeded by noise emanating from the Construction Site, noise control measures required to ensure that the permissible levels are complied with shall be determined and reported.
3. Consideration can be given to noise control measures such as:
 - a. Restricting the hours of use of an Appliance or the hours of performance of an Operation.
 - b. Restricting the areas within the Construction Site where specific Appliances may be used or Operations may be performed during specific hours.
 - c. Erecting sound attenuating barriers to provide shielding to potentially affected occupancies.
 - d. Installing noise control kits on Appliances to achieve a maximum noise level.
4. Evidence shall be given in the Statement that the proposed noise control measures can achieve the permissible levels specified in Table 1.
5. Final Statement. A statement shall be provided confirming that with the implementation of the noise control measures outlined within the report, $L_{A,av,max}$ noise levels measured over any 15 minute period during Categories 2, 3, and 4 hours will comply with the permissible noise levels specified in Table 1.

Noise Monitoring Procedures

1. Noise Monitoring shall be carried out when Operations are being performed on the Construction Site and also during one weekday, one Saturday and one Sunday/public holiday (as appropriate) when no Construction Work is being performed.
2. Monitoring locations. Monitoring shall be carried out at locations specified by the Council at a point 1.2 metres above the ground or the floor (inside and outside) as appropriate. Details of the monitoring locations and of the occupancy at which monitoring is carried out are to be recorded.
3. Monitoring equipment. Equipment used for monitoring shall be a sound level meter complying with AS1259, or any other instrument approved by the Council.
4. Noise measures to be recorded. Statistical noise measurements shall be carried out during each 15 minute period over the specified hours and the L_{A1} , L_{A10} , ($L_{A \text{ av max}}$), L_{A50} and L_{A90} descriptors shall be determined. These descriptors shall be graphed for each 24 hour period and shall be retained in accordance with para 47 of the Code.

Director's Monitoring Statement

I....(name of Applicant's Director)....., of(name of Applicant),..... hereby certify that Noise Monitoring required under Development Consent/Building Approval/Civic Works Approval* number issued on(date).... was undertaken in compliance with the City of Sydney Construction Hours/Noise Code 1992 between(date)... and(date) by(name of Noise Monitoring Technician).... under the supervision of(name of Acoustic Adviser).....

Certificate Of Acoustic Performance

1. General information

- a. Construction Site (address)
- b. Applicant
- c. Acoustic Adviser
- d. Date and time of test
- e. Weather conditions during test
- f. Instruments used for Noise Measurements
- g. Details of Nominated Affected Occupancy (example windows open/closed, air-conditioned)

2. Appliance noise levels. The following $L_{A\ av\ max}$ noise levels were measured at a distance of 7 metres from the nearest point of each Appliance:

Appliance $L_{A\ av\ max}$ Noise level (dBA)

3. Noise levels at boundaries. The following $L_{A\ av\ max}$ noise levels were measured at the boundaries nominated during the Construction Work/...(specified) .. Operation:

Boundary $L_{A\ av\ max}$ Noise level (dBA)

Boundary $L_{A\ av\ max}$ Noise level (dBA)

4. Noise Levels at Nominated Affected Occupancy. The following $L_{A\ av\ max}$ noise levels were measured at the Nominated Affected Occupancy during Construction Work/.... (specified)....Operation:

Address/ $L_{A\ av\ max}$ Noise level (dBA)
Location

5. Background Noise Levels. The following ambient L_{A90} noise levels were measured during the 15 minute periods shown at the Nominated Affected Occupancy:

Address Time Period L_{A90} Noise Level (dBA)

I (full name), qualified Acoustic Adviser of(name of company/employer) certify that this form has been prepared in accordance with the City of Sydney Code of Practice for Construction Hours/Noise Code 1992.

(signature)

Acoustic Compliance Notice

1. General Information

- a. Construction Site (address)
- b. Applicant
- c. Testing Officer
- d. Date and time of test
- e. Weather conditions during test
- f. Instruments used for Noise Measurements
- g. Details of Nominated Affected Occupancy (example windows open/closed, air-conditioned)

2. Appliance noise levels

- a. $L_{A\ av\ max}$ noise levels emanating from the following Appliances exceed the noise levels specified in Schedule 1 by the following amounts:

Appliance Amount by which specified level is exceeded (dBA)

- b. The following noise levels emanating from the Appliances listed in "2a" above will comply with the levels specified in Schedule 1:

Appliance Level

3. Operation noise levels

- a. $L_{A\ av\ max}$ noise levels emanating from the following Operations exceed the permissible noise levels specified in Table 1 by the following amounts:

Operation Amount by which specified level is exceeded (dBA)

- b. The following noise levels emanating from the Operations listed in "3a" above will comply with the permissible levels:

Operation Level

4. Served by

Name
Title
Date of Notice

Signature

Bank Guarantee

BETWEEN

1. Applicant (A.C.N. #####) Address (the "Customer");
2. Bank Address (the "Bank"); and
3. The Council of the City of Sydney (the "Principal").

RECITALS

- A. Pursuant to condition ## of Development Consent/Building Approval/Civic Works Approval number ####, the Customer is obliged to lodge with the Council a bank guarantee in favour of the Council.
- B. At the request of the Customer, the Bank has agreed to provide a guarantee to the Council in the terms set out below.

OPERATIONAL PART

1. In consideration of, among other things, the Council accepting this undertaking and subject to clauses 3 and 4, the Bank shall pay to the Council on demand made in accordance with clause 2 a sum or sums the aggregate of which, together with any other sum or sums demanded pursuant to this guarantee, does not exceed the maximum aggregate sum of \$###.
2. The Bank shall pay the sum or sums to the Principal on demand by the Principal even if the Customer has given the Bank notice not to pay the money, and except as is elsewhere provided in this Guarantee, without regard to the performance of the Customer or the Principal of the conditions of Development Consent/Building Approval/Civic Works Approval number ####.
3. Any demand made by the Principal on the Bank under this guarantee shall:
 - a. be in writing signed for and on behalf of the Principal;
 - b. state the amount demanded;
 - c. be delivered to the Bank at its office at # or such other address as is notified from time to time in writing to the Council by the Bank (the "Bank's Office"); and
 - d. state that the demand is made in accordance with the City of Sydney Code of Practice for Construction Hours/Noise Code 1992 (the "Code") and:
 - (i) following an agreement pursuant to para 95 of the Code; or
 - (ii) following a decision by the Construction Expert pursuant to para 105 of the Code; as the case may be.
4. No demand shall be made by the Principal on the Bank under this guarantee unless there has been:
 - a. an agreement pursuant to para 95 of the Code; or
 - b. a decision by the Construction Expert pursuant to para 108 of the Code;
5. The liability of the Bank under this guarantee shall determine immediately upon the first to occur of any of the following:
 - a. return of this guarantee to the Bank's Office;
 - b. receipt at the Bank's Office of written notice from the Council to the effect that this guarantee is no longer required;
 - c. written advice by the Customer to the Principal that the Customer does not intend to undertake further Construction Works during Category 2, 3 and 4 Hours under Development Consent/Building Approval/Civic Works Approval number #.
6. The Customer shall, on demand, pay and indemnify the Principal in respect of all costs, fees and expenses and taxes and stamp duties in connection with this Deed.

DATED at SYDNEY, this day of 199 .
 Executed for and on behalf of:
 Applicant Pty Limited A.C.N. #####
 by two duly constituted attorneys appointed
 under power of attorney registered No. of Book No. OR SEAL
 in the presence of (name of witness)

The Council Of The City of Sydney.
 by its duly appointed attorney appointed
 under power of attorney registered No. of Book No. OR SEAL
 in the presence of (name of witness)

BANK by two duly constituted attorneys appointed
 under power of attorney registered No. of Book No. OR SEAL
 in the presence of (name of witness)

ERRATUM (Issued 28.3.96)

The "Note 4" at the base of Table 1 on page ii should be amended to read:-

"Background is "Background Noise Level" as defined in paragraph 17.i (page 3)"

NOT "Background is "Background Noise Level" as defined in paragraph 18.j (page 5)."

ERRATUM (Issued 20.10.97)

The references to "Category 2 Hours" within Table 1 on page ii should have the "Time Zone" column amended to read:-

"19.00 – 22.00"

NOT "19.00 – 23.00"

This amendment will then amend all references to "Category 2 Hours" within the text of the Code of Practice.

The references to "Category 4 Hours" within Table 1 on page ii should have the "Time Zone" column amended to read:-

"00.00 – 07.00 and 22.00 – 24.00"

NOT "00.00 – 07.00 and 23.00 – 24.00"

This amendment will then amend all references to "Category 4 Hours" within the text of the Code of Practice.

A further "Note" is to be inserted to the "Notes" on at the base of Table 1 on page ii to read:-

- 5. Noise monitoring of demolition and excavation works are required during Category 1 hours.**