Engineers Australia

Guidelines

for the

Engineering Heritage Australia

National Engineering Oral History Program

Doug Ayre 2010
Version 2.0

Judy Lindsay 2017
Version 3.0

Contents

Foreword

A National Engineering Oral History Program was established in June 2001 and commenced in 2001/02. This document recognises that significance at National, State or Territory level often overlaps and so it broadens the scope of the program and these associated guidelines to include all oral history work in the area of Engineering Heritage in Australia. Its objectives are to:

- record for posterity in their own voice, the experiences, achievements and observations of significant people and engineers,
- establish an engineering oral history data base for researchers, biographers, historians, journalists, social scientists etc.

The interviews are to be biographical, covering the whole of the interviewee's life, but with emphasis on their engineering career and major achievements. The recorded audio interviews are to be of a standard acceptable for broadcasting. It is envisaged that the interviewers will be volunteers that are well versed in interviewing techniques and able to carry out appropriate research for the purpose of the interview.

It is assumed that people carrying out the oral history work will be unpaid volunteers so Division Heritage Committee members must ensure that they are suitable and competent to carry out the work and are clearly briefed on the purpose and importance of the interview and the significant aspects of the interviewee's career.

Management of the Program by Engineering Heritage Australia (EHA) is directed at ensuring:

- best use is made of the limited resources available
- interviews are carried out in accordance with a list of priorities established from nominations received
- interview costs are reasonable
- acceptable interviewing and transcription standards are maintained
- the outputs of the interview are recorded in a register
- there are appropriate organisations who have resources to receive, store and provide easy access to interviews
- existence of the 'collection' is publicised and
- engineering heritage groups are provided with up-to-date guidance and training in their management of the interview process.

Judy Lindsay
Engineering Heritage Australia
National Oral History Coordinator
November 2017

Policy and Procedures

1. Objectives

The objectives of the program are to:

- record for posterity in their own voice, the experiences, achievements and observations of significant engineers;
- provide resources to Division heritage units that may not otherwise be able to afford to undertake oral history;
- establish an engineering oral history data base for researchers, biographers, historians, journalists, social scientists etc.

The interviews will be biographical, covering the whole of the interviewee's life, but with emphasis on their engineering related work and major achievements.

2. Management and Conduct of the Program

The Program is managed by Engineering Heritage Australia *(EHA), which oversees prioritised interview list established by the Divisions.*

Day to day management of the Program is by the Division Oral History Project Coordinators under the broad oversight of the National Oral History Coordinator.

Each Division Heritage Groups should appoint an Oral History Coordinator to manage the oral history process at the Divisional level.

The National Oral History Coordinator and Oral History Project Coordinators are to declare any personal or commercial interest in a specific Oral History Project and to stand aside from any related selection and decision process in which they may have an interest so that these duties can be carried out by a person appointed by the EHA Executive specifically for that purpose.

3. Nomination and Selection of Prospective Interviewees

Interviewees will be significant people that have engineering related experiences and achievements worthy of recording for posterity.

The candidates will generally have lived through and possibly participated in significant technological and social change so the interviews will not only focus on their engineering career and major achievements but they will also have a wider biographical and social perspective, covering the whole of the interviewee's life.

Nominations should include:

- name, date of birth, address and other contact details;
- a brief statement of the prospect's career, highlighting their significance at a national, state and/or territory level, and achievements as engineers;
- mention of honours and awards received together with other relevant information such as inclusion in *Who's Who in Australia*
- a statement describing why the nominee might be considered significant and why their experiences and achievements will be of historical significance; and
- an indication of any urgency or impediment that might attach to the timing or holding of an interview.

Verbal nominations can also be made to the Division Heritage Committee for assessment if there is reason of urgency.

Interviewees do not have to be members of the institution but should have contributed significantly to engineering heritage.

Apart from a prospect's significance, factors such as age, memory, and state of health may also influence whether they may be considered a suitable candidate for interview. Consequently, these factors should be assessed subjectively beforehand, through personal knowledge or enquiry, and should be addressed when making the nomination.
NOTE: In some instances, engineers who have worked together on a specific project deemed to have state or national significance, may be interviewed together (2 or 3) about the concept, design and implementation of that project. This should be determined by the division oral history coordinator.

Nominations may be made by any member or unit of the Institution or interested party. The Division Heritage Committee with guidance from the Division Oral History coordinator will be deemed to have the necessary knowledge of the local nominee to assist in prioritizing interviews.

4. Interviewee's Concurrence

Upon notification that a nominee has been selected for interview, the nominee's concurrence should be sought by the Division Oral History Coordinator or person appointed by the coordinator eg. the interviewer. Some prospective interviewee's may not be familiar with oral history and may feel apprehensive or wish to become better informed. Consequently, the Oral History Coordinator should take time to explain the process and what is involved. This can be formalised with a letter or email from the division oral history coordinator confirming the agreement for the interview which:

- explains the sequence of events that will follow;
- asking them to provide a brief résumé of their career identifying their date and place of birth, qualifications, awards and honours, and making specific mention of significant work performed, projects worked on and their achievements;
- explaining that their agreement will be required to use the material emanating from the interview;
- advising that an interviewer will contact them to make arrangements, and
- including a copy of the explanatory leaflet, *Oral History – What's It All About?* as well as any other material considered relevant.

At the interview, interviewees will be asked to complete an Interviewee's Release Document (see Guidelines for Interviewers) authorising use of all or part of the interview material by Engineers Australia, or others with a bona fide interest, subject to any special conditions that may be applied.

5. Estimates of costs and expenses

It is envisaged that no funding will be available for this program in the forseeable future. Individual divisions and individuals may seek sponsorship but this must fall within Engineers Australia sponsorship guidelines.

Once the prospect's concurrence has been obtained, the Division Oral History Coordinator should arrange for a volunteer oral historian to undertake the interview in accordance with EHA's procedures. The Coordinator must ensure that they have competence as interviewers and have an adequate appreciation of the task and the ability to complete the interview within the desired time.

Interviewers are expected to be familiar with EHA National Oral History Guidelines (this document) and are able to participate in any training offered by EHA. Training is to be arranged via the National Oral History Coordinator if necessary.

6.   Appointment of Volunteer Oral Historian

The oral historian is required to complete an Interviewer's Copyright Agreement assigning copyright and ownership of all the material relating to an interview, to Engineers, Australia (refer to Attachment E: Standard Conditions of Engagement).

The Copyright Agreement will remain in force for all subsequent interviews carried out for Engineers Australia by that interviewer. Each division oral history coordinator will be responsible to store these agreements.

Where training is required then an oral history training work shop may be conducted by the National Oral History Coordinator undertaken via Engineers Australia's video conference facilities.

7.   Quality of Interviews

The interviewer should conduct a pre-interview meeting/ discussion and then prepare their interview plan.

Interviews are to be of professional standard and recordings of broadcast quality, both in terms of style and the use of approved or agreed digital format.

8.   Logging

All interviews are to be logged in a standard format – see attachment.

9.   Biographical Notes

The purpose of the biographical notes is to provide a summarised biography of the interviewee to assist in preparation of a catalogue entry and to enable researchers to determine whether the interview is of interest to them.

Biographical notes shall not exceed 600 words (two A4 pages) and shall include:

- the interviewer's
  - full name;
  - date and place of birth;
  - schools and educational institutions attended and dates;
  - qualifications, affiliations, awards and honours; and

- a résumé of the interviewee's career, with specific mention of significant work performed, projects involved with and achievements.
- In some instances, the interviewee may be willing to prepare the biographical notes and should be provided with the template (see attachment) to do so.

10.   Outputs

The outputs of an interview will comprise:

- a set of identified recordings of the interview on archive quality CDROM.
- The original Release Document scanned or saved in electronic form giving the interviewee's permission (with or without conditions) for subsequent use of the material;
- Hard copy of the interview log plus the Biographical Notes and any biographical material obtained or scanned in standard electronic format on thumb drive or CDROM.

11.   Post Interview Action

After the interview has been completed, the interviewee should be sent a letter, thanking them for their participation and offering an electronic copy of the transcript and recordings. This letter should also confirm that the interviewee has been provided with a copy of the Release.

The Division Oral History Coordinator should prepare an entry for the Oral History Register in the format of the attached sample, and forward it to the National Oral History Coordinator.

12.   Repository of Outputs

The outputs i.e. electronic copies on thumb drive (if acceptable to the archivist) or on archive quality CDROM, interview logs, biographical notes and associated hard copy material) are to be lodged as follows.

Interview recordings, logs and release documents (note that one copy of the log and release should **always** accompany a set of interview recordings). Copies of the recordings should be sent to:

- Divisional Engineering Heritage Group
- At approved/agreed entity who will receive and share interviews. Each division currently has arrangements for storage at local and State repositories e.g. NSW State Library (Sydney division), University of Newcastle Living Histories Collection (Newcastle division), Western Australia State Library (Western Australia division), ACT Heritage Library (Canberra division)
- The interviewee.

13.   Records

The National Oral History Coordinator will maintain the Oral History Register of interviews. It will be compiled from material lodged by Division Heritage Groups following completion of interviews and will comprise:

- full name of interviewee;
- date of interview;
- name of interviewer;
- identification number of interview recording tracks;
- any restrictions that have been placed on use of the material;
- whether the interview has been logged and/or transcribed
- storage site and accessibility

14. Publicity

A list of completed interviews and the locations where the interviews <u>may be</u> accessed will be:

- posted on The Institution's *Engineering Heritage and History* web pages; and
- published from time to time, in the newsletter of *Engineering Heritage Australia*.

15. Enquiries

Enquiries concerning procedures and all matters relating to the Oral History Program should be made to the National Oral History Coordinator.

16. Preparation and Preservation of Oral History Recordings

1. Ensure existing records are adequate.

Where supporting documentation (i.e. written transcripts, bio notes and interview logs) is available then it must be held both as a printed copy as well as on a computer with a back up and clearly associated with the digital recording. If necessary, it should be scanned electronically.

Where supporting documentation is not available then it should be produced where possible. Priority should be given to the biographical notes, the interview log and resume.

Note - Recordings that are already digitised should not require any action except to ensure that they are well documented, safely preserved and backed up on CD and on a computer system.

2. Transfer recordings to digital if not done already

Magnetic tape recordings are to be digitised, copied to CD, placed on a computer and backed up. Where recordings have been made in stereo they should be digitised in stereo and WAV format. Where recordings were originally made in MP3 format then they should be retained as MP3 format as there will be no advantage in converting them to WAV.

3. Review the release documents.

The release document associated with each oral history recording are to reviewed to ensure that it is a formal sign off by the interviewee with any limitations by the interviewee on release into the public domain and usage properly noted. The format set out in the Oral History Guidelines should be used to ensure adequate rights to use and publish the material and to provide the information required by archivists.

The original release documents should be scanned electronically and clearly linked with the digital sound recording to ensure that the wishes of the interviewee are available to the archivist and researcher and can be complied with.

4. Methodology and resources for future interviews

Local panels of EHA should utilise the engineering and administrative skill base and professionalism of its members and supporters for oral history work by:

- establishing and leading a team of local volunteers

- organising appropriate training and mentoring for them. If the training and mentoring cannot be made available locally then the National Oral History Coordinator will provide support and if need be carry out training utilizing EA video conference facilities.

Oral History - What's It All About?

Written history is often sanitised and is edited to make it (in today's jargon) "politically correct" - it tells the official story, but with often the human interest and the real motivating factors culled.

On the other hand, oral history reveals what you often won't find in the files and the history books - the facts and the real reasons things happened. It is told by the people who were there, who were involved, who made it happen, who were affected - in the colour, passion and inflection of their own voices.

Oral history accounts also tell about relationships, perceptions, social and political climates, all of which are part of living and influence our actions and those of others. It often reveals the unsung heroes, the names of those actually responsible for innovations and important changes.

So, oral history provides a counterbalance to the clinically written record by giving in addition, the personal, intimate, human and social account of events and why they happened.

Oral history is about what we believe to be the real story. Even if our version of an event differs from another's, theirs is not necessarily the valid one. We all have different perceptions of events, some of us may even have inaccurate or biased recall, but that is part of being human - it is part of oral history.

So when asked to participate in an oral history interview, don't be concerned your story may differ from someone else's, that your memory may be imperfect, or that you won't get dates right. You were approached to be interviewed because you were involved in events, because you have an important story to tell and valuable comment to make.

How should you prepare for an oral history interview? You will generally have been asked to provide a brief résumé of your career to assist the interviewer - some personal and family history, places where you've worked and things you've done. This, plus perhaps some memory-jogger notes (if you feel they are necessary) are all that is really required. You certainly don't need to prepare detailed notes or a biography. Spontaneity is the essence of oral history.

During the interview take your time, treat it as a conversation with a friend. It's not a question and answer session. If you feel the interviewer hasn't asked about important matters, or you think does not understand your answers, volunteer the information and provide clarification. And don't hesitate to ask for a break if necessary, to collect your thoughts, or to improve an answer.

Thanks for agreeing to share your experiences, and welcome to oral history - we hope you find it rewarding.

Basic Requirements for the Interviewer

Objective

The prime objective of the interview is to produce a broadcast quality digital audio record in the form of a natural discussion using a simple question and answer approach covering a broadly outlined list of topics.

The subject is to be the engineering career of the interviewee and any subjects of special historical and heritage interest which flow from that such as education, places of work, positions held, work performed, significant achievements, honours bestowed and notable projects worked on, including personal contribution to the project. The interview should include voluntary activities, a degree of personal and family history, as well as leisure and sports pursuits.

The interview should also seek to record fact, comment and opinion on social, political and work practices/factors/conditions experienced during the interviewee's career. This should include the influence of those things on society and the interviewee's life and work, and their impact on decision-making, whether of a personal, work or national nature.

As the interview will undoubtedly be with a knowledgeable and possibly expert interviewee the interviewer must have some reasonable knowledge of the subjects to be discussed.

The secondary objective is to produce a written summary log of the audio interview.

The interviewee must complete a *Interviewee's Release Document* a copy of which is at Attachment A. It is preferable that as little limitation be placed on use of the interview material, but whilst there might be persuasive discussion on this aspect, ultimately the interviewee's wishes must prevail. One copy of the *Release* is to be provided to the interviewee at conclusion of the interview.

Prior to the Interview

The Division Oral History Coordinator will liaise with you (the interviewer) on the person (the interviewee) that you are required to interview and will specify the criteria which you are to meet. The local coordinator or nominated interviewer will make the initial informal contact with the interviewee and may arrange for a formal email introducing the project, providing the list of broad topics for discussion, the proposed outcomes of a recording, the copyright release requirements and the interviewer's role.

You must complete an Interviewer's Copyright Agreement (Attachment E) assigning copyright and ownership of all the material relating to an interview, to Engineers Australia. The Copyright Agreement will remain in force for all subsequent interviews carried out by you for The Institution.

Preparing for the Interview

It is important that you build up a personal rapport with the interviewee and preferably have meeting to follow up the formal email, or if circumstances require it a telephone call in order to introduce yourself personally and to explain the process, objectives, ethics and confidentiality, outcomes of the oral history project and the copyright release and usage restrictions form.

Personal Preparation

It is essential for you to be well prepared and to be very clear in your own mind what you want from the interview. To achieve this, you will need to carry out some research into the background of the interviewee and made some personal notes to guide you during the interview. These notes must be consistent with the list broad topics provided by the coordinator to the interviewee.

The Recording Equipment

The recording equipment is to be of approved quality. You must become very comfortable with using it before you undertake the interview as you need to be able to concentrate on the interview process itself. It is disconcerting for an interviewee if you are not confident with your recording equipment and you want this to be an enjoyable experience for both of you.

The recorder is to be digital. Note: with the rapid technological changes, the division oral history coordinator should determine the most appropriate equipment to be used.

Management of the Interview – useful tips

Outline the broad topics to be covered and advise the interviewee for what might seem to them to be your naïve questions. Ensure that they understand that they don't have to answer a question of they do not wish to.

If it is necessary for the interviewee to have a companion present then it must be understood that they may not interrupt the interview process and confidentiality must be maintained.

Arrange visual signals if an interruption is required by either the companion or the interviewee.

Eliminate background noise where possible. Common problems come from ticking clocks, humming of fridges and air conditioners and telephones.

Conducting the Question Session

Ask the initial set of questions required by the co-coordinator then keep to the list of broad topics.

An introduction and recording identification is to be along the following lines and is to be used on the first track:

> *"This is Rufus Shackleton interviewing Mr William Bloggs at his home in Newtown on the twenty sixth of August 1997, for The Institution of Engineers' Engineering Heritage Oral History Program. Disc ID xxxx"*

> *"Mr Bloggs, to start our interview, could you tell me your full name, when you were born and where?"*

- It does not matter if the interviewee deals with a topic outside of your planned sequence. Just keep track of where you need to return to and be gently assertive about getting back to where you need to be.

- Use open ended questions – who / when / where / why / what / describe / explain.

- Use simple and neutral questions and don't introduce your opinions.

- Minimise your intrusion.

- Don't be afraid of pauses and silences as they are often just as significant as the spoken words.

- Note names and make notes to obtain correct spelling after the interview.

- Don't be afraid of emotion and don't turn the recorder off in such circumstances unless the interviewee requests it. Remain silent and let the interviewee compose themselves.

- Explain to the interviewee that you will have to occasionally monitor your recording timer and sound levels but that you will be listening to them when you are doing so.

Ending the Question Session

- Look for clues indicating that you should finish the session such as tiredness of yourself or the interviewee.

- Don't pack up immediately or leave the interviewee with a feeling of being used.

After the Interview Session

Ring or email the person the next day to thank them for their time and check if they are alright if you think it is appropriate.

Ensure that a copy of the recording and a thank you letter is sent as soon as possible.

Preservation of the Recording

As soon as possible after the interview, copy and secure the recording.

Remember that ethics and confidentiality requirements require you to treat the material as strictly confidential between you and the interviewee until the interviewee has signed the copyright release and usage restrictions form. You should be prepared to provide MP3 versions of the audio files to the interviewee so that they are aware of the content.

Editing of Recordings and Transcripts

A synopsis and index should be prepared if required by the co-coordinator.

Audio should not be edited except to delete a passage at the request of the interviewee. This can arise where, in retrospect, they regret placing a comment on record. In such a case it should be deleted from the recording and the transcript.

Where the interviewee wishes to make a further statement then you should make a separate recording but do not insert extracts from it into the original recording. Supplementary information can usually just be added as a footnote at an appropriate point in the transcript.

Logging of the recording

The interview log is to be in accordance with the format at Attachment C in accordance with the instructions at Attachment D. Tracks are to be logged on a track / time basis based on the master copy.

Biographical Notes

Beforehand - Optional but some sort of outline.
Biographical notes are required of the interviewee of about 600 words (two A4 pages) in length. This is normally the responsibility of the interviewer and you should liaise with the Divisional Oral History Coordinator if it is envisaged that this will be carried out by another party.

The notes shall include the interviewee's full name; date and place of birth; schools and educational institutions attended and dates; qualifications, affiliations, awards and honours; and a résumé of the interviewee's career, with specific mention of significant work performed, projects involved with and achievements.

The career résumé is the most important part of the biographical notes and should comprise three quarters of the document or more.

The notes shall be in the format at **Attachment F.**

Attachments:

Interviewee's Release Document	**A**
Labeling of Recordings	**B**
Log Pro Forma	**C**
Interview Logging Guide	**D**
Interviewer's Copyright Agreement	**E**
Biographical Notes & Resume (Example)	**F**
Oral History Register (Sample)	**G**

Attachment A

Engineering Heritage Australia

National Engineering Oral History Program

Interviewee's Release Document

I authorise Engineers Australia to use this interview, or part of this interview as required, for research, publication, transcription, broadcasting and publication on the Internet, and for copies of the interview and material prepared therefrom, to be lodged in libraries for similar use by bona fide researchers, biographers, historians, journalists, broadcasters etc., subject to any special conditions listed below.

Name (please print): ....…………

Address: ....

....

....

....

Signed: ....

Date: ....

Interviewer (please print): …...

Signed: …………..…..

Track Numbers:. ....…………………

Special Conditions (if any): ....……..

....

Engineering Heritage Australia

National Engineering Oral History Program

**Labeling of Recordings -
Identification and Numbering
of recording tracks and CD cases**

Each track should be identified in the computer file with a simple name and number combination using the initials of the interviewee such as 'JB 01'. When the CD is burned then its identifier should be consistent and reflect the tracks on the CD (i.e. JB 01 & 02)

Sample Label for CD case
(attached by Interviewer)

Engineers Australia

Oral History Program

Interview of **Joe Bloggs**
   by **Rufus Shackleton**
   on **30 July 2001**

Track Numbers 1 and 2

MASTER RECORDING

Engineering Heritage Australia

National Engineering Oral History Program

Log Pro Forma

Tape log of interview with: _____ Date: _____

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National Engineering Oral History Program

INTERVIEW LOG

Interviewee: _____ Track Identifier: _____

Interviewer: _____ Number of Tracks: _____

Date and place of Interview: _____

Restrictions on Use: _____

Track Identifier		
Track/ Minutes	**Subject**	**Proper Names & Keywords**

Engineering Heritage Australia

National Engineering Oral History Program

Summary Log

Interview Logging Guide*

Listening to tapes and particularly those of lengthy interviews to determine whether they contain matters of interest, is time-consuming and can be frustrating. This can largely be avoided by the preparation of an interview log, which is an index or guide to the contents of the interview and the subjects discussed. A log makes it easy for researchers etc. to determine whether the interview is likely to include matters in which they are interested.

The log should be prepared while the interviewer's memory is still fresh.

The following tabulation illustrates the type of information the log should include. The format to be used for the National Engineering Oral History Program is at **Attachment 'C'.**

Time/ Counter	Track Identifier	Proper Names & Keywords
0.00	Provides date and place of birth.	Newcastle
0.30	Names and occupations of parents and siblings.	Bill and Pam Docker
2.00	Discusses early schooling at Raymond Terrace.	Raymond Terrace
10.00	Discusses depression years and schooling.	Maitland Boys High School
20.30	Describes studying for engineering degree at university from which he graduated in 1955.	NSW University of Technology
29.00	First position as Engineering Assistant with Department of Main Roads NSW.	Department of Main Roads NSW.

The information in the 'Subject' column should be concise but informative. Excessive information can make the log voluminous and time-consuming to peruse. As a guide, a log should not occupy more than one or at the most two A4 pages for each 30 minutes of recording.

The 'Proper Names & Keywords' column should include names and keywords that will assist a researcher to quickly identify whether particular people, places activities etc. are mentioned.

Attachment E

Engineering Heritage Australia

National Engineering Oral History Program

Interviewer's Copyright Agreement

I, ...

of....

   ……

agree to the following conditions:

1. All the material I create or collect in the course of preparing for or carrying out an interview, will be owned by Engineers Australia.

2. All copyright in any questionnaires, recordings, transcripts of interview, notes or any other copyright material made in connection with the Oral History Program conducted by or on behalf of Engineering Heritage Australia, or any part of Engineers Australia, is hereby assigned to Engineers Australia.

Signed: .....

(Print name): ....

Date: ……………………………...

                              Signed: ....

                              On behalf of Engineers Australia

                                Date: ....

Engineering Heritage Australia

National Engineering Oral History Program

Biographical Notes and Resume
(Example)

Cecil FURLONG (1929-   )
Municipal Engineer

Birth & Family:	Born 23 May 1929, St Agatha's Hospital, Sydney. Third child of James Furlong (1902-1971), surveyor, and Elizabeth (nee Bone) (1908-1982).
	Siblings Arthur (1926), Mary (1928), Elizabeth (1932).
Education:	Attended Primary school at Sisters of Mercy Convent, Growingup, WA (1935-1937) and Actingup State School (1938-1940), Secondary school at Marist Brothers High School, Climbingup (1941-1945). West Australian Leaving Certificate 1945.
Qualifications:	WA Local Government Engineers' Certificate, 1957.
Memberships:	FIEAust.
Awards:	Taylor Memorial Medal 1979, from Local Government Engineers Institute.
Work History:	After completing the Leaving Certificate in 1945, Furlong first found work as a laboratory assistant with the WA Education department.
	In 1946 he obtained a position as an Engineering Trainee at Lookingup Council, under the Council Engineer Ralph Rhodes. Following Rhodes' retirement in mid 1947, Furlong served as acting Council Engineer. His main duties were the upgrading and sealing of roads in the Shire, and associated surveying and drainage works. At the time of his departure in 1952, the total length of sealed roads increasing from 26 km to 350 km.
	In January 1952 he moved to Standingup, WA, as Assistant Engineer for Standingup Council, under Council Engineer Ray Macadam, and later became Works Engineer. He was responsible for a major road upgrading program, including the design and construction of road bridges, principally timber - first job was to design a timber bridge over Drywater River. Work involved a limited and primitive range of construction equipment available, and innovative methods and materials - including first use of Armco culvert in place of bridge, and development of mechanical stabilisation process to get better road base.

Con't
Cecil FURLONG (1929-   )
Municipal Engineer

Responsible for construction of Standingup airport, from a greenfield site. Design for construction of new Standingup cattle saleyards was highly innovative and far ahead of its time - designed in consultation with transport specialist, to move stock through scales and central selling areas.

In 1967 he was employed by Walkingup Council as Design Engineer. His work included design of flood pump, detention ponds, sewerage, roads, saleyards, levee bank system, and construction of Leaningup Dam. There was a big catch up in sewering of the city and new developments were sewered from start. This time also saw sewerage of the outlying villages of Sittingup & Walkingup.

Appointed Deputy City engineer in 1970. This was the beginning of serious large-scale town planning, which Walkingup was early to adopt - Walkingup was always well developed and ensured expansion was conducted in an orderly way. Furlong introduced asset management and preventative maintenance concepts into council operations.

Progressed to City Engineer in 1984, and Director of Engineering & Technical Services in 1993.

Following retirement from Walkingup Council at age 65, in 1994, formed Furlong and Associates to carry out consulting work, mainly involved with saleyards and the planning and development of heavy vehicle routes for long articulated trucks (B-Doubles).

He retired from consulting work in 1998.

_____
Prepared by Rufus Shackleton, August 2002 from oral history interview con

Engineering Heritage Australia

National Engineering Oral History Program

Oral History Register
(Sample)

KEY:

C: Conditions placed on use	**T or L:** Transcribed or logged	**NC**: No conditions
WWA (year): *Who's Who in Australia (year)*	**M**: Master recordings	**Cpy:** Copy recordings
SL (State): State Library (State)		

Interviewee / Resume & DOB	Details	
FURLONG, Cecil **Born:** 23.5.29	Date of interview	26.7.2002
Municipal Engineer. Educated in WA; Local Government Engineers Certificate 1957; junior engineer in various LG councils; became Assistant Engineer Standingup Council 1952 – major road upgrading, design and construction of bridges, Standingup airport and cattleyards. Design Engineer Walkingup Council 1957 – sewerage, roads, saleyards, flood levees and Leningup Dam. Deputy City Engineer 1970 – involved in town planning and introduced asset management and preventative maintenance. Became City Engineer 1984, and Director of Engineering & Technical Services 1993. Retired 1994 and formed consulting practice of Furlong & Associates.	Interviewer	R Shackleton
	Track identifier	
	C or NC	NC
	T or L	L
	Heritage group	West. Australia
	Location of recordings	M - SL (NSW) Cpy - SL (WA) Cpy - IEA (WA)