

**REPORT TO: PERSONNEL AND MANAGEMENT SERVICES COMMITTEE –  
11 FEBRUARY 2002**

**REPORT ON: PLANNING AND TRANSPORTATION CAREER GRADE AND  
STAFFING STRUCTURE**

**JOINT REPORT BY: DIRECTOR OF PERSONNEL AND MANAGEMENT SERVICES AND  
DIRECTOR OF PLANNING AND TRANSPORTATION**

**REPORT NO: 146-2002**

## **1 PURPOSE OF REPORT**

- 1.1 To report on proposed changes to the career grade structure for the Planning and Transportation Department and to the staffing structure of the City Engineer's and Roads and Transportation Divisions.

## **2 RECOMMENDATIONS**

- 7.2 It is recommended that the Committee

- approve the proposed new career grade structure;
- approve the proposed new staffing structure within the City Engineer's Division; and
- approve the proposed new staffing structure within the Roads and Transportation Division.

## **3 FINANCIAL IMPLICATIONS**

The proposed new career grade in the department with effect from 1 February 2002 will result in expenditure of £638 and £4,787 (inclusive of salary, National Insurance and Superannuation) in a full financial year. These costs will be offset from savings identified in the review of the Staffing Structure of the City Engineers Division identified in paragraph 3.2 below.

The proposed staffing structure in the City Engineers Division with effect from 1 February 2002, will result in savings of £1,542 (inclusive of salary, National Insurance and superannuation) and savings of £11,415 in a full financial year.

The proposed staffing structure in the Roads and Transportation Division will result in costs of £95,216 (inclusive) with effect from 1 April 2002. These costs will be funded as follows.

External funding currently being secured for Access Officer post (SNH, NHS Trust and SET)	£30,000	
Deletion of Technician Vacancy	£14,306	
Public Transport Fund Design and Implementation Fees (Secured for initial period of 3 years)	£50,000	(This represents 1.97% of committed PTF Funding for 2001/04 and 0.45% of PTF Funding Bids for 2003/06.)
Cycling, Walking, Safer Routes and associated National and Local Initiatives	<u>£910</u>	(This represents 0.18% of Committed Cycling, Walking and Safer Streets Funding for 2001/04 and 0.08% of ITF Funding Bid for 2003/06.)
Total	£95,216	

#### **4 LOCAL AGENDA 21 IMPLICATIONS**

4.1 There are no Local Agenda 21 implications.

#### **5 EQUAL OPPORTUNITIES IMPLICATIONS**

5.1 There are no equal opportunity implications.

#### **6 BACKGROUND**

##### **6.1 CAREER GRADE STRUCTURE**

6.1.1 The Institution of Civil Engineers have recently amended their routes to membership and as a consequence a review of the existing career grade structure has been carried out for continuing relevance.

6.1.2 The revision to the routes to membership have resulted in the raising of existing standards for qualification at the three main grades of:

- Chartered Engineer;
- Incorporated Engineer; and
- Technician Engineer.

6.1.3 The above designations are Engineering Council qualifications and the Institution has decided to award the title of Members of the Institution of Civil Engineers (MICE) to both Chartered and Incorporated Engineers. As a consequence in future the industry will produce individuals with the qualifications:

- MICE, C Eng;
- MICE, I Eng; and
- TMICE, Eng Tech.

7.2.5 At present within the industry, there a large number of Incorporated Engineers who are Associate Members of the institution and they have the current title of IEng, AMICE. The institution has agreed to allow all members in this current category to upgrade their membership qualification to MICE, IEng by the completion of an additional professional review.

7.2.6 The Roads and Transportation Division, whilst having at its core staff from a civil engineering background, also have staff from differing professional institutes which also have Engineering Council recognition namely:

- Chartered Institute of Transport;
- Institution of Electrical Engineers;
- Institute of Lighting Engineers; and
- Institute of Highways and Transportation

## 6.2 REVIEW OF EXISTING CAREER GRADE STRUCTURE

6.2.1 A review of the existing career grade structure has highlighted the need for modifications to take account of the above changes in the routes to membership. In addition, and as a consequence of this review, a number of anomalies have been identified within the existing system which it is recommended should be addressed at the same time.

6.2.2 The major issues which require to be addressed are as follows:

- the existing structure does not recognise the existing IEng, AMICE and IHT qualification;
- the entry point for a graduate entering with a prescribed degree may be interpreted as below the entry point for a graduate with an HNC;
- the differential between a member of staff with Eng Tech or CEng is too small; and
- experience in lieu of academic and professional qualification is not recognised.

7.2.5 The attached charts show the existing career grade structures in their current separated format and in their merged format which clarifies the above, refer Figures 1 and 2.

## 6.3 PROPOSED CHANGES

7.2.5 Charts have been prepared showing a proposal for addressing the above issues and for recognising the new routes to membership being adopted by the Institution of Civil Engineers, together with the other recognised institutions, refer Figures 3, 4, 5 and 6.

7.2.6 There are also posts within the department which do not necessarily require professional or technical qualifications and where specific vocational experience is more applicable. These posts have been identified with appropriate career grade progression criteria as shown in Figure 7.

6.3.3 In addition, this has been reviewed against other professional qualifications within the department to ensure compatibility.

6.3.4 The proposed changes to the career grade structure will have little immediate financial impact with an increase in staff costs of £4,787.00 for the first full year of implementation.

## **7 STAFFING STRUCTURE**

### **7.1 CITY ENGINEER'S DIVISION**

- 7.2.5 The work of the City Engineer's Division is largely dependent on the Council's capital programme. Fees are recovered from capital projects which pay for the revenue costs associated with operating the Division including direct staff costs and all associated overheads. The work of the Division has been subject to several Best Value reviews and has demonstrated that it provides a cost effective quality service in comparison with purchasing this service from the private sector.
- 7.2.6 The City Engineer's Division has a core permanent establishment of 32 full time equivalent (FTE) staff members. This permanent establishment is insufficient to deal with the fluctuations in current workload and is supplemented by a combination of temporary staff, agency staff and external consultants. The total estimated number of FTE staff employed by the Division is approximately 46. An analysis of the workload of the Division for last year shows that approximately 70% was carried out by staff on the permanent establishment with the remaining 30% carried out by the temporary, agency or external consultants. An analysis over the last five years is given in Figure 8 and shows a consistent pattern.
- 7.2.7 The current staffing structure is not correctly geared to dealing with the management of the current workload. As a consequence, there is great pressure on senior engineering staff who are increasingly having to rely on less senior staff taking on increased responsibility.
- 7.2.8 Over the past five years, there has been a major change in the way that work of the Division undertaken with increased usage of computer aided design and drafting packages. As a result, there is more need for staff who can contribute to the overall management of projects and less of a requirement for staff at technician level.
- 7.2.9 The external job market is extremely buoyant at present. This is evident from severe difficulties experienced in recent attempts to recruit for a number of vacant posts. All of this is leading to staff retention problems and in the last two months, two permanent members of staff have left and a third is currently applying for another post.
- 7.2.10 It is vital that these issues are tackled now in order that the Division can continue to provide a high quality service and to prevent a loss of staff morale.
- 7.2.11 A proposed staffing structure has been prepared and is shown in Figure 9. This structure will deal with many of the above issues. In addition, this structure reflects the proposed changes to the existing career grade structure.
- 7.2.12 The above proposals have been costed and it is anticipated that these will provide a saving of £11,415 to the Division during the first full year. This has been achieved by deleting one of the temporary posts from the establishment.

### **7.3 ROADS AND TRANSPORTATION DIVISION**

#### **7.2.1 Current Staff Structure**

The Roads and Transportation Division consists currently of four teams.

- Network Management – responsible for New Roads and Street Works Act – the

co-ordination, approval of temporary traffic management on the road network. This includes safety issues for all road users in and around works. 7 staff.

- Road Maintenance – responsible for inspecting and maintaining the road network including winter maintenance. (The term roads include adopted footways). 11 staff.
- Street Lighting – responsible for all road and some footpath lighting columns and electrical supply and safety of said and electrical street equipment (illuminated signs). This team is also at the forefront in energy conservation. 8 staff.
- Traffic and Transportation – responsible for the urban traffic control system, traffic management, road safety, accident investigation and prevention, car parks, traffic orders, public transport, transportation assessments, traffic modelling, traffic monitoring, safety audits, traffic noise assessments, cycling and walking. 26 staff

#### 7.2.5 The New Transport Agenda

Towards the end of the 1990's transport began to move in a new direction. Policies which concentrated on car use were recognised as being unaffordable, unsustainable and ultimately self-defeating. In their place came a desire to achieve a more integrated transport system which through coherent and co-ordinated policies would reduce the need to travel and increase mobility for everyone by promoting alternative modes of travel such as walking, cycling and public transport.

However, as the transport objectives have changed the staffing structure of the Roads and Transportation Division has so far not been altered to respond to the new transport agenda. The reorganisation proposed within this report is designed to achieve this and optimise the service provided to Dundee's citizens.

New central government initiatives have regularly come forward for implementation with no matching human resource.

- Travel Plans
- Safer Routes to School
- Local Transport Strategy
- Road Traffic Reduction Act
- Noise Mapping
- Walking and Cycling Projects
- Public Transport Fund
- 20 mph Zones

All of these require time and skills to deal with the demands and expectations at both ends of the spectrum, the public and the Executive.

The Government's recently unveiled ten year plan for Transport has underlined the priority being afforded to the new transport agenda, with a major commitment to invest in new infrastructure and services well beyond the next two general elections. It is essential therefore that Dundee City Council are in a position to bid and implement the schemes in the Government's Agenda and Initiatives.

#### 7.2.3 Roads and Transportation Staffing Initiatives

Whilst professionals involved in both planning and delivery of transport have welcomed

the new agenda, there is recognition that the level and quality of expertise to deliver it in practice is scarce. This problem is being addressed within the Roads and Transportation Department and a focussed training programme has been introduced for existing staff. However, it is clear that additional resources are necessary to implement these programmes.

In addition, systems are being analysed and introduced to maximise professional time focused on priority issues.

#### 7.2.4 Revised Staff Structure

The proposals (as displayed in Figure 10) are to address the resource gap in the Roads and Transportation Division (as identified above). In order to address the new Transport Agenda, therefore, the existing Traffic and Transportation Team, which is currently too large for one Team Leader, has been split into two district teams.

The change to structures, new posts and justifications are summarised below:

- **Network Management**

New Post: Senior Engineer.

Justification:

This team has adopted new practices and systems including the customer care and asset management package CONFIRM and has had to take on additional duties (eg coring programme of Public Utility reinstatements).

- **Road Maintenance**

Deletion of Technical Assistant post.

Justification

In reviewing the Division's structure the opportunity to redistribute the functions of the Technical Assistant post has been made possible with the introduction of revised work practices and technology.

- **Traffic Section**

New Post: Assistant Engineer.

Justification

It is intended to remove the transportation and public transport duties from this team to allow development towards decriminalisation of parking and to focus on traffic management, identifying and designing schemes as part of the agreed public transport and integrated transport fund bids.

- **Transportation Section**

New Posts: Team Leader and Travel Plan Co-ordinator (Travel Plans for the Council and other major employers).

Justification

The new direction in transport places a greater emphasis on alternative modes of transport and safety of vulnerable road users. This team will provide a comprehensive and cohesive approach to delivering this service for Dundee and will enable the implementation of the various local and national initiatives.

- 7.2.5 The total cost of the posts proposed in para 7.2.4 is £95,216 inclusive of Pay, National Insurance and Superannuation and it is proposed to fund this cost as follows.

SNH, NHS Trust and SET funding agreement towards Access Officer	£30,000
Deletion of Technical Vacancy (Roads Maintenance)	£14,306
Public Transport Fund – Design and Implementation Fees	£50,000
Cycling, Walking and Safer Routes New Initiative	<u>£910</u>
Total	£95,216

## CONSULTATIONS

- 8.1 The Chief Executive and the Director of Finance have been consulted and are in agreement with the contents of this report.

## 9 BACKGROUND PAPERS

- 9.1 None

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KL/KW

21 December 2001

Dundee City Council  
Tayside House  
Dundee

### CAREER GRADE STRUCTURE - EXISTING

POST TITLE	GRADE	SCP	Minimum Qualifications			Minimum Experience		
			C Eng Route	I Eng Route	T Eng Route	C Eng Route	I Eng Route	T Eng Route
Team Leader	PO 14 PO13 PO 12 PO 11	48 47 46 45	CEng, MICE	N/a	n/a	10 yrs + 5 yrs post membership	n/a	n/a
Senior Engineer	PO 10 PO 9 PO 8 PO 7	44 43 42 41						
Engineer	PO4 PO3 PO2 PO1 AP5 AP4  AP4 AP3 AP2 AP1 GS3	38 37 36 35 31 30  27 23 19 15 13	CEng, MICE        Exemp. Degree Non- Ex. Degree		n/a	Complete Training Review  3 yrs 2 yrs 1 yr 0 yrs	n/a	n/a
Senior Technician	T5	34 31						
Technician	T4 T4 T3 T3  T2  T1 T1  GS2 GS1	30 27 26 22  17  16 13  12 3			TEng     HNC   ONC			2 Yrs Post Qual. (3 Yrs In-House) 1 Year Post Qual. (2 Yrs In-House)  1 Year Post Qual. (2 Yrs In-House)



### CAREER GRADE STRUCTURE – EXISTING MERGED

POST TITLE		GRADE	SCP	SALARY 01/02/2001	Minimum Qualifications			Minimum Experience		
					C Eng Route	I Eng Route	T Eng Route	C Eng Route	I Eng Route	T Eng Route
Team Leader		PO 14 PO13 PO 12 PO 11	48 47 46 45	32,724 31,932 31,221 30,504	CEng, MICE	n/a	n/a	10 yrs + 5 yrs post membership	n/a	n/a
Senior Engineer		PO 10 PO 9 PO 8 PO 7	44 43 42 41	29,823 29,103 28,404 27,687	CEng, MICE	n/a	n/a	6 yrs + 3 yrs post membership	n/a	n/a
Engineer	Senior Technician	PO4 PO3 PO2 PO1 T5  AP5/T5	38 37 36 35 34 33 32 31	25,476 24,741 24,045 23,430 22,959 22,317 21,666 21,036	CEng, MICE					10 yrs + 5 yrs post membership
Trainee Engineer	Technician	AP4/T4  AP4/T4 T3  AP3 T3  AP2 T2  T1 AP1 GS3/T1	30  29 28 27 26 25 24 23 22  21 20 19 18 17  16 15 14 13	20,397  19,737 18,984 18,378 17,796 17,232 16,707 16,173 15,717  15,315 14,889 14,484 14,118 13,740  13,476 13,164 12,861 12,624	Exemp. Degree  Non-Ex. Degree		TEng          HNC    ONC	Complete Training Review  3 yrs  2 yrs  1 yr  0 yrs	n/a	n/a    2 Yrs Post Qual. (3 Yrs In-House)    1 Year Post Qual. (2 Yrs In-House)   1 Year Post Qual. (2 Yrs In-House)
		GS2  GS1	12  3	12,399  9,180						18 yrs Old

**FIGURE 3**

**CAREER GRADE STRUCTURE – PROPOSED MERGED – ICE AND IStructE**

POST TITLE		GRADE	SCP	SALARY 01/02/2001	Minimum Qualifications			Minimum Experience		
					C Eng Route	I Eng Route	Eng Tech Route	C Eng Route	I Eng Route	Eng Tech
Team Leader		PO 14 PO13 PO 12 PO 11	48 47 46 45	32,724 31,932 31,221 30,504	CEng, MICE or MIStructE	IEng, MICE	n/a	10 Years (5yrs post membership)	10 Years (5yrs post membership)	n/a
Senior Engineer		PO 10 PO 9 PO 8 PO 7	44 43 42 41	29,823 29,103 28,404 27,687	CEng, MICE or MIStructE	IEng, MICE	n/a	6 Years (3yrs post membership)	6 Years (3yrs post membership)	n/a
Engineer		PO4 PO3 PO2 PO1	38 37 36 35	25,476 24,741 24,045 23,430	CEng, MICE or MIStructE	IEng, MICE	n/a	Complete Training Review 3 yrs Training   		



**FIGURE 4**

**CAREER GRADE STRUCTURE – PROPOSED MERGED – ILE and IEE**

POST TITLE		GRADE	SCP	SALARY 01/02/2001	Minimum Qualifications			Minimum Experience				
					C Eng Route	I Eng Route	Eng Tech Route	C Eng Route	I Eng Route	Eng Tech		
Team Leader		PO 14	48	32,724	CEng, MILE or MIEE	IEng, MILE & MIEE	n/a	10 Years (5yrs post membership)	10 Years (5yrs post membership)	n/a		
		PO13	47	31,932								
		PO 12	46	31,221								
		PO 11	45	30,504								
Senior Engineer		PO 10	44	29,823	CEng, MILE or MIEE	IEng, MILE & MIEE	n/a	6 Years (3yrs post membership)	6 Years (3yrs post membership)	n/a		
		PO 9	43	29,103								
		PO 8	42	28,404								
		PO 7	41	27,687								
Engineer	Assistant Engineer	PO4	38	25,476	CEng, MILE or MIEE	IEng, MILE & MIEE	n/a	Complete Training Review 3 yrs Training	Complete Training Review 3 yrs Training	n/a		
		PO3	37	24,741								
		PO2	36	24,045								
		PO1	35	23,430								
		T5	34	22,959								
			33	22,317								
			32	21,666								
		AP5/T5	31	21,036		IEng, AMILE & AMIEE	New Eng Tech, TMILE & TMIEE			2 yrs Training	2 yrs Training	15 yr Exp or ONC/HNC + 10yr or Complete Training Review
		AP4/T4	30	20,397								
			29	19,737								
			28	18,984								
		AP4/T4	27	18,378								
		T3	26	17,796								
			25	17,232	Exem. Degree	Exem. Degree	0 yrs	0 yrs	2 yrs Training			
		AP3	24	16,707								
		T3	23	16,173								
			22	15,717								
			21	15,315								
			20	14,889								
		AP2	19	14,484	Non-Exem. Degree	Non-Exem. Degree	HNC/HND	1 yr Training	1 yr Training			
			18	14,118								
		T2	17	13,740								
		T1	16	13,476								
		AP1	15	13,164								
			14	12,861	ONC							
		GS3/T1	13	12,624								
		GS2	12	12,399								
		GS1	3	9,180						18 yrs Old		

**FIGURE 5**

**CAREER GRADE STRUCTURE – PROPOSED MERGED**

**FIGURE 5**

**CAREER GRADE STRUCTURE – PROPOSED MERGED – IHT**

POST TITLE		GRADE	SCP	SALARY 01/02/2001	Minimum Qualifications			Minimum Experience			
					C Eng Route	I Eng Route	Eng Tech Route	C Eng Route	I Eng Route	Eng Tech	
Team Leader		PO 14 PO13 PO 12 PO 11	48 47 46 45	32,724 31,932 31,221 30,504	CEng, MIHT*	IEng, MIHT*	n/a	10 Years (5yrs post membership)	10 Years (5yrs post membership)	n/a	
Senior Engineer		PO 10 PO 9 PO 8 PO 7	44 43 42 41	29,823 29,103 28,404 27,687	CEng, MIHT*	IEng, MIHT*	n/a	6 Years (3yrs post membership)	6 Years (3yrs post membership)	n/a	
Engineer		PO4 PO3 PO2 PO1	38 37 36 35	25,476 24,741 24,045 23,430	CEng, MIHT	IEng, MIHT	n/a			n/a	
	Assistant Engineer	T5	34	22,959			IEng, MIHT (Prior to 1998 SARTOR 3)				n/a
			33	22,317							
			32	21,666							
		AP5/T5	31	21,036							
		AP4/T4	30	20,397							
			29	19,737							
			28	18,984							
		AP4/T4	27	18,378							
		T3	26	17,796							
			25	17,232							
			24	16,707							
		AP3	23	16,173							
		T3	22	15,717							
			21	15,315							
			20	14,889							
		AP2	19	14,484							
			18	14,118							
		T2	17	13,740							
		16	13,476								
	AP1	15	13,164								
		14	12,861								
	GS3/T1	13	12,624								
	GS2	12	12,399								
				Exem. Degree	Exem. Degree		0 yrs	0 yrs			
				Non-Exem. Degree	Non-Exem. Degree						

\* MIHT denotes MIHT gained post, 2001, SARTOR 3



## CAREER GRADE STRUCTURE – PROPOSED MERGED – ILT and CIT

POST TITLE		GRADE	SCP	SALARY 01/02/2001	Minimum Qualifications			Minimum Experience		
					C Eng Route	I Eng Route	Eng Tech Route	C Eng Route	I Eng Route	Eng Tech
Team Leader		PO 14 PO13 PO 12 PO 11	48 47 46 45	32,724 31,932 31,221 30,504	Currently awaiting advice and confirmation from the Institute of Logistics and Transport and Chartered Institute of Transport. Further Report to follow if required.					
Senior Engineer		PO 10 PO 9 PO 8 PO 7	44 43 42 41	29,823 29,103 28,404 27,687						
Engineer		PO4 PO3 PO2 PO1	38 37 36 35	25,476 24,741 24,045 23,430						
	Assistant Engineer	T5	34	22,959						
			33	22,317						
			32	21,666						
		AP5/T5	31	21,036						
		AP4/T4	30	20,397						
			29	19,737						
			28	18,984						
		AP4/T4	27	18,378						
		T3	26	17,796						
			25	17,232						
			24	16,707						
		AP3	23	16,173						
		T3	22	15,717						
			21	15,315						
			20	14,889						
		AP2	19	14,484						
			18	14,118						
		T2	17	13,740						
		T1	16	13,476						
		AP1	15	13,164						
			14	12,861						
		GS3/T1	13	12,624						
		GS2	12	12,399						
		GS1	3	9,180						



**FIGURE 7****CAREER GRADE STRUCTURE – SPECIALIST POSTS**

POST TITLE	GRADE	SCP	SALARY AT 1/02/01	MINIMUM QUALIFICATIONS	EXPERIENCE
Transport Officer	AP5-PO4	31-34	21,036-22,959	MILT CPC > AP5	3 yrs post qualification
		35-38	23,430-25,476	PO1-PO4 MCIT	
Superintendent	T4-5	22-34	15,717-22,959	-	Bar at T4 – appropriate professional or academic
Supervisors	T3	22-26	15,717-17,796	-	5 yrs
Street Lighting Operative	GS1/2	3-12	9,180-12,399	-	-
Car Park Controller	T3	22-26	15,717-17,796	-	5 yrs
Meter Mechanic	T3	22-26	15,717-17,796	-	5 yrs
Travel Plan Co-ordinator	T2-5	17-34	13,740-22,959	(Relevant degree ie Transportation, Economics, Planning)	3 yrs
Clerk of Works	T2-4	17-30	13,740-20,397	-	5 yrs

FIGURE 8

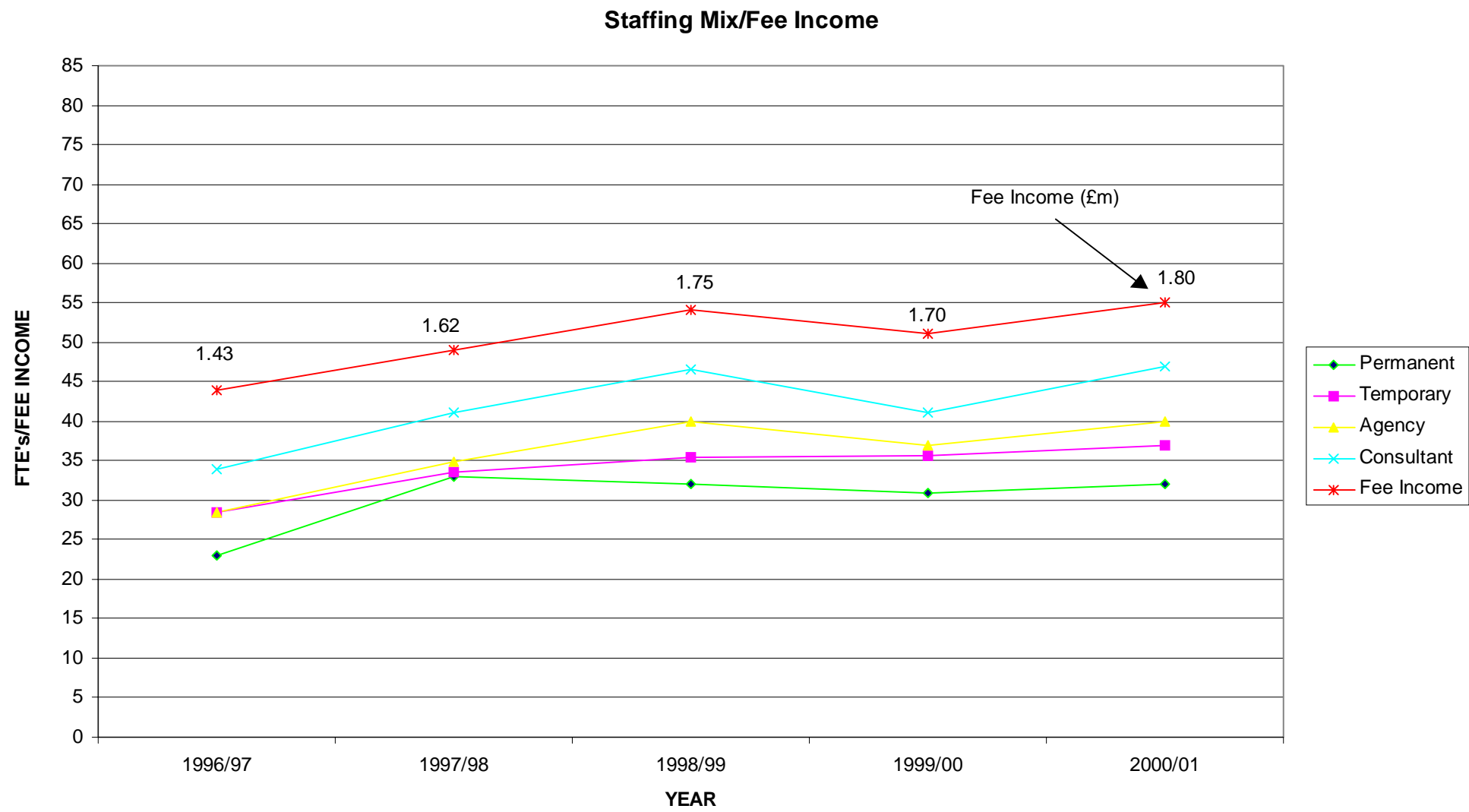


FIGURE 9

CITY ENGINEER'S DIVISION  
PROPOSED ORGANISATION CHANGE

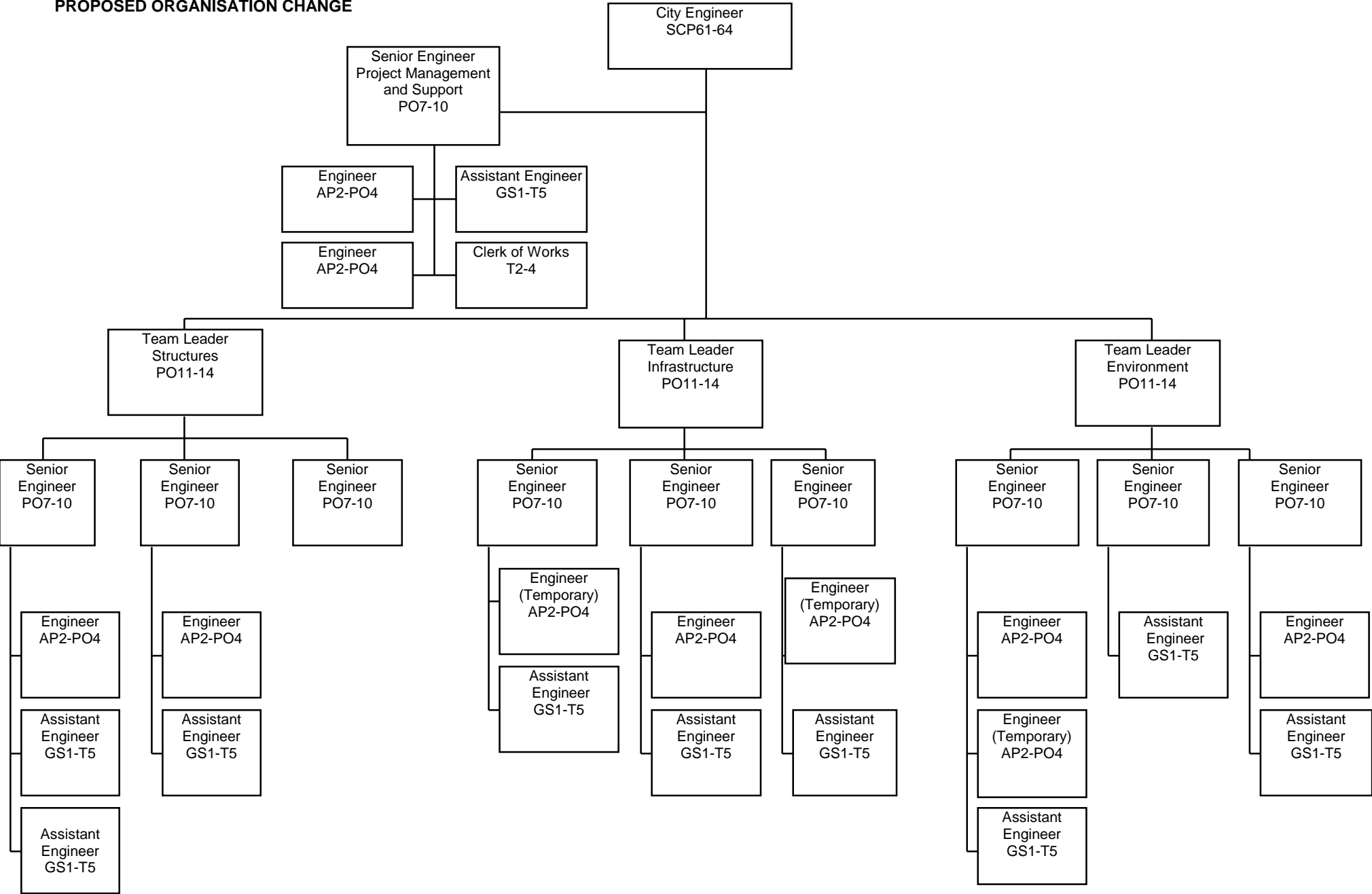
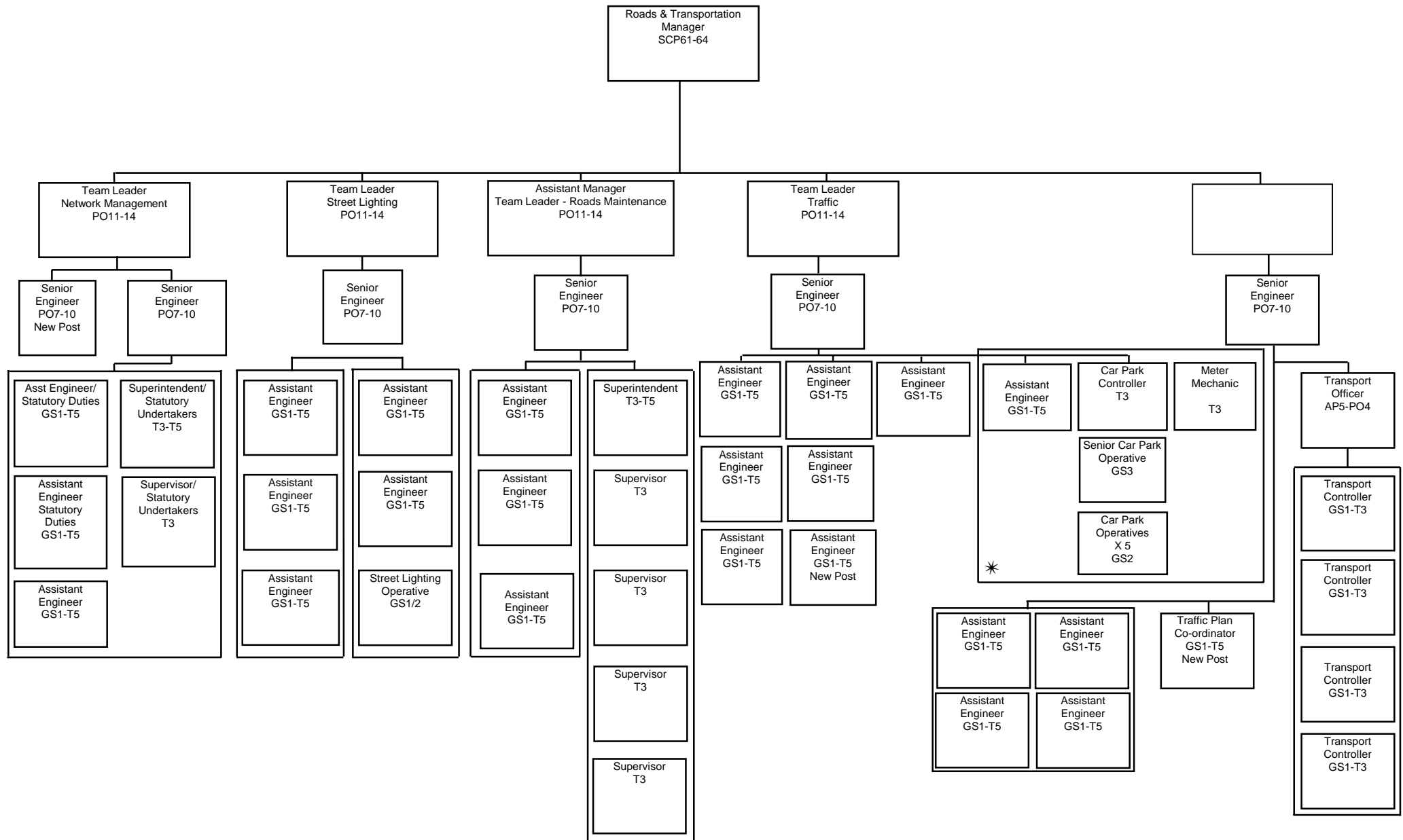


FIGURE 10

ROADS AND TRANSPORTATION DIVISION  
PROPOSED ORGANISATION CHANGE



\* This section will be the subject of a future report on the decriminalisation of car parking enforcement