

COST AND SCHEDULE

STATUS REPORT

NOVEMBER 1984

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

NOVEMBER 1984



METRO RAIL PROJECT PROJECT UNIT INDEX

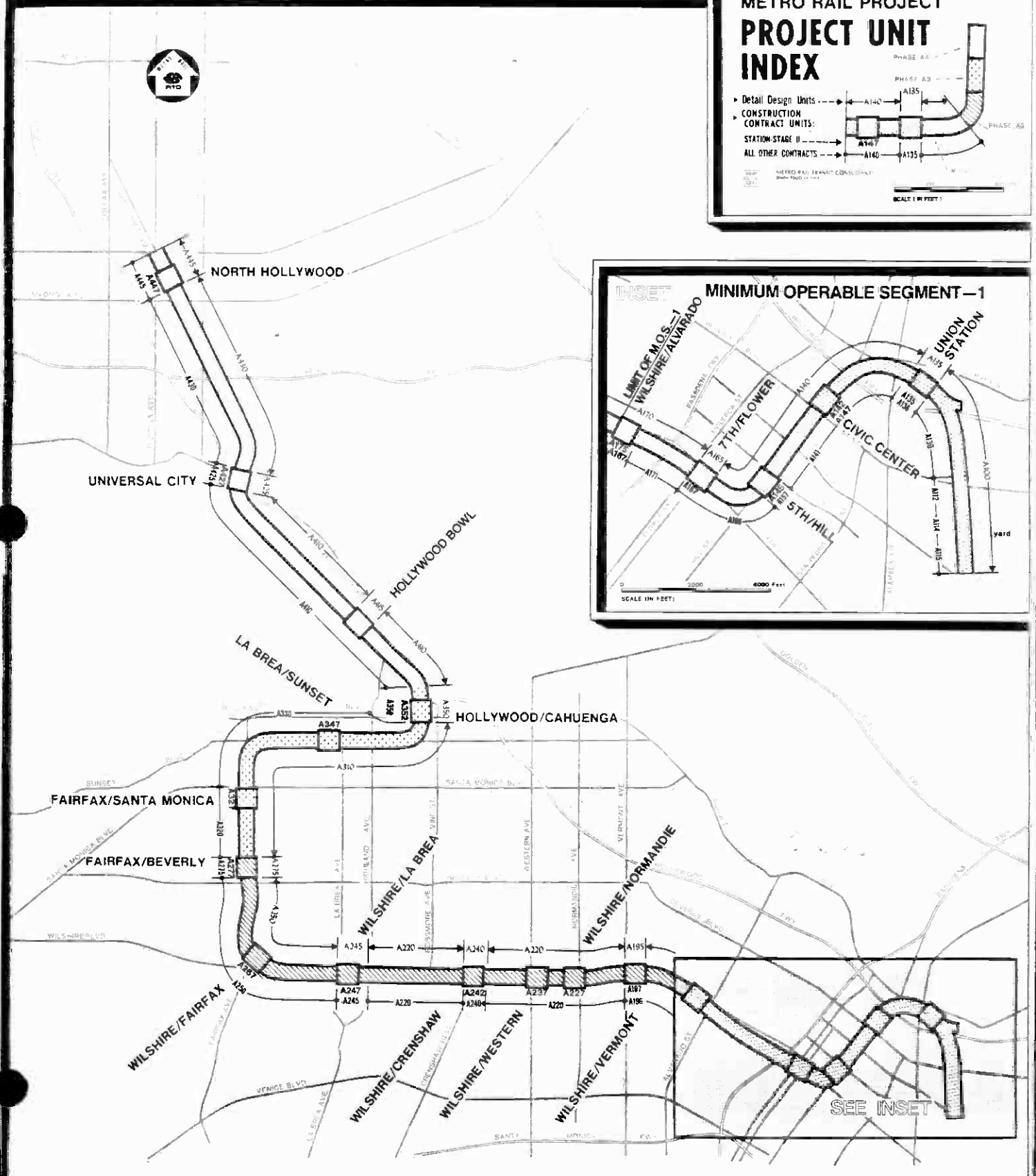
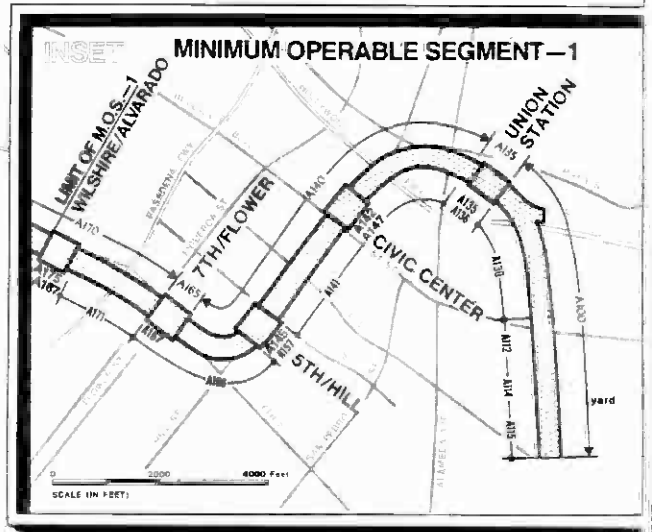
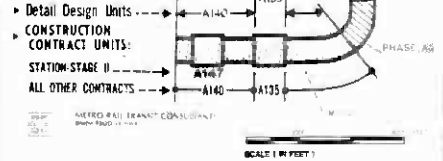


TABLE OF CONTENTS

		<u>Page</u>
I. BUDGET SUMMARY		
A.	Total Project Status Narrative	3
B.	Total Project Summary by MACS Code	4
C.	Total Project Status Graph	5
D.	Total Project Funding Breakdown	6
E.	Metro Rail Open Professional Services Contracts	7-9
II. CONTRACT EVALUATION		
A. Cost		
	(i) Explanation of Terms	12-13
	(ii) Section Designer Evaluation Summary	14
	(iii) Contract Evaluations	
	a) A100	15-18
	b) A135	19-22
	c) A140	23-26
	d) A165	27-30
	e) A170	31-34
	f) Systemwide	35-53
B. Schedule		
	(i) Project CPM (MOS-1) definition	55
	(ii) Exception Reports	56-57
	(iii) Design Schedule Status	58-63

SECTION I: BUDGET SUMMARY

RTD METRO RAIL PROJECT

STATUS NARRATIVE

NOVEMBER 1984

The Total Project Approved Budget is now \$344.100 million; Expenditures to date total \$118.967 million.

The accompanying graph illustrates the planned expenditures of \$191.5 million against the actual expenditures. This variance of \$72.5 million is primarily due to the late issuance of contract NTP's and the late acquisition of R-O-W properties.

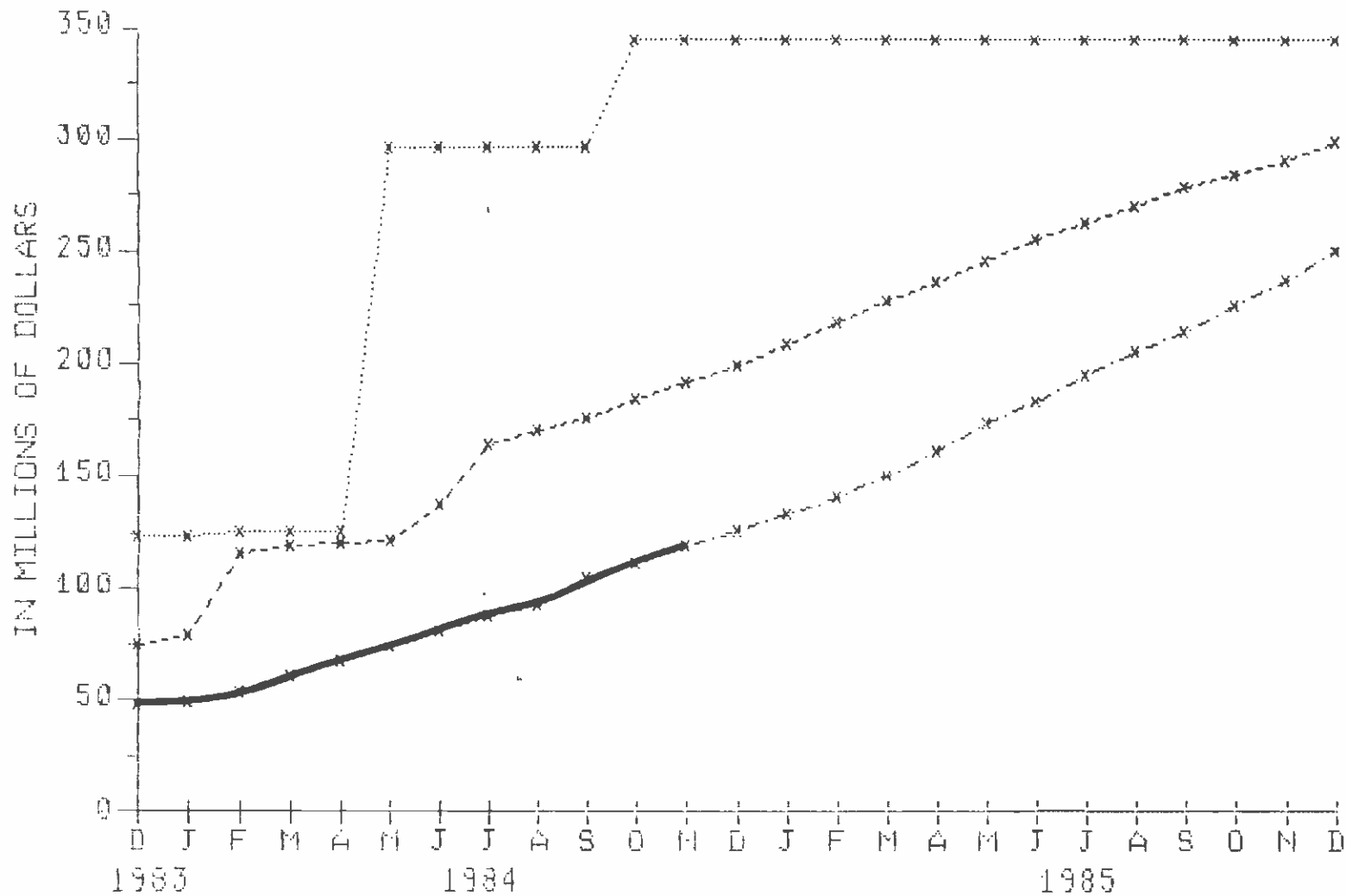
Presently, Preliminary Engineering is complete and Program Control is taking steps to close out Continued Preliminary Engineering.

SCRD METHOD PROJECT
 TOTAL PROJECT BUDGET
 SUMMARY BY MACS CODE (5000's)
 STATUS AS OF: 11/30/84

AFE	(MACS CODE) DESCRIPTION	UNOBLIGATED			OBLIGATIONS TO DATE			FORECAST BUDGET (7=3+6)	APPROVED BUDGET (9)	VARIANCE (9=8-7)
		RESERVED (1)	COMMITTED (2)	TOTAL (3=1+2)	UNEXPENDED (4)	EXPENDED (5)	TOTAL (6=4+5)			
02101	(20.02.01) Purchase of Support Autos	\$ - 0 -	\$ - 0 -	\$ - 0 -	\$ 48	\$ 22	\$ 70	\$ 70	\$ 70	- 0 -
02102	(20.02.02) Purchase/Installation of Support Equipment	957	- 0 -	957	125	1,208	1,333	2,290	2,290	- 0 -
02108	(20.02.07) Purchase/Installation of MIS Equipment	177	- 0 -	177	823	- 0 -	823	1,000	1,000	- 0 -
02100	(20.02.08) Purchase/Installation of Communications Equipment	100	- 0 -	100	- 0 -	- 0 -	- 0 -	100	100	- 0 -
04501	(20.06.10) Yard & Shops Acquisition (CALTRANS)	805	- 0 -	805	26,026	169	26,195	27,000	31,000	4,000
04502	(20.06.10) Yard & Shops Acquisition (LACTC)	1,630	- 0 -	1,630	- 0 -	- 0 -	- 0 -	1,630	1,630	- 0 -
02110	(20.06.10) Right-of Way	60,644	- 0 -	60,644	- 0 -	219	219	60,863	60,863	- 0 -
02103	(20.08.01) Professional Services Contracts for Eng. & Design	- 0 -	853	853	46,035	96,872	142,907	143,760	141,975	<1,785>
02111	(02.08.02) Professional Services Contracts for Constr. Mgmt.	2,410	- 0 -	2,410	5,566	1,024	6,590	9,000	9,000	- 0 -
02112	(20.11.01) Owner Controlled Insurance	3,106	- 0 -	3,106	794	100	894	4,000	4,000	- 0 -
02104	(20.15.02) Force Account Work	6,918	- 0 -	6,918	- 0 -	12,498	12,498	19,416	19,416	- 0 -
02106	(20.16.00) General & Administrative	251	- 0 -	251	47	527	574	825	825	- 0 -
02105	(20.16.90) Other Supporting Services	181	- 0 -	181	- 0 -	3,169	3,169	3,350	3,350	- 0 -
02107	(12.00.00) Contingencies	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	3,537	3,537
02114	(41.00.00) Revenue Financing	- 0 -	- 0 -	- 0 -	- 0 -	<4,439>	<4,439>	<4,439>	- 0 -	4,439
02115	(41.00.00) Revenue Financing	- 0 -	- 0 -	- 0 -	- 0 -	2,610	2,610	2,610	- 0 -	<2,610>
02116	(20.13.11) Railroad Relocation	- 0 -	- 0 -	- 0 -	17,000	- 0 -	17,000	17,000	17,000	- 0 -
05401	(10.06.90) Advanced Land Acquisition	7,352	- 0 -	7,352	2,420	4,988	7,408	14,760	14,760	- 0 -
XXXX	(XX.XX.XX) Funds available for Future Match/Am	33,284	- 0 -	33,284	- 0 -	- 0 -	- 0 -	33,284	33,284	- 0 -
TOTAL		584,451	8,865	593,316	608,884	310,867	904,151	610,616	610,616	7,400

4

RTD METRO RAIL PROJECT
 TOTAL PROJECT STATUS
 AS OF NOVEMBER 1984



--*-- FORECAST — ACTUALS -*- PLANNED EXPENDITURES CAPITAL GRANT FUNDS



SCRIPD METRO RAIL PROJECT

DETAILED FUNDING BREAKDOWN

Funding Increment	FUNDING SOURCE					TOTAL
	UMTA Section 3	UMTA Section 9	State	LACTC	City of LA	
Preliminary Engineering Phase I (6/80) CA-03-0130	\$ 12,000,000	\$ -0-	\$ 2,816,250	\$ 750,000	\$ -0-	\$ 15,566,250
Preliminary Engineering Phase II (5/82) CA-03-0130-01	\$ 9,800,000	\$ -0-	\$ 1,683,250	\$ 612,500	\$ -0-	\$ 12,095,750
Preliminary Engineering Phase III (7/82) CA-03-0130-02	\$ 9,274,400	\$ -0-	\$ 1,326,950	\$ 579,650	\$ -0-	\$ 11,181,000
SUB-TOTAL Preliminary Engineering	\$ 31,074,400	\$ -0-	\$ 5,826,450	\$ 1,942,150	\$ -0-	\$ 38,843,000
Continued Preliminary Engineering, Phase I (9/82) CA-03-0130-03	\$ 15,000,000	\$ -0-	\$ 2,812,500	\$ 937,500	\$ -0-	\$ 18,750,000
Continued Preliminary Engineering, Phase II (4/83) CA-03-0130-04	\$ 25,000,000	\$ -0-	\$ 5,503,000	\$ 2,830,000	\$ -0-	\$ 33,333,000 (1)
SUB-TOTAL Continued Preliminary Engineering	\$ 40,000,000	\$ -0-	\$ 8,315,500	\$ 3,767,500	\$ -0-	\$ 52,083,000
Acquisition of Santa Fe Rail Yard (9/83) X-7619	\$ -0-	\$ -0-	\$ 31,000,000	\$ 1,630,000	\$ -0-	\$ 32,630,000
Advanced Land Acquisition (9/83) CA-90-0022	\$ -0-	\$ 14,760,000	\$ -0-	\$ -0-	\$ -0-	\$ 14,760,000
Pre-Construction (5/84) CA-03-0130-06	\$ 105,400,000	\$ -0-	\$ 24,400,000	\$ 33,900,000	\$ 6,300,000	\$ 170,000,000 (2)
Busway Modification (7/84)	\$ -0-	\$ -0-	\$ -0-	\$ 2,500,000	\$ -0-	\$ 2,500,000
Funds Available For Future Use/Match	\$ -0-	\$ 25,483,720	\$ 3,000,000	\$ 4,100,000	\$ 700,000	\$ 33,283,720
TOTAL, ALL GRANT ALLOCATIONS	\$ 176,474,400	\$ 40,243,720	\$ 72,541,950	\$ 47,839,650	\$ 7,000,000	\$ 344,099,720

(1) Share ratio changes from 80% Federal/20% State and Local to 75% Federal/25% State And Local.

(2) Local shares are tentative and include revenue financing.

RTD METRO RAIL PROJECT
OPEN PROFESSIONAL SERVICES CONTRACTS

11/30/84

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>\$</u> <u>BUDGET</u>
I. Transit Facilities		
2284-5	Lindvall Richter (Geotech. II)	480,900
3138	City of Los Angeles (Master Agreement)	693,000
3058	Los Angeles County Museum	24,500
3172	Pacific Bell	156,000
3301	CALTRANS	2,553,000
3237	Western Union Telegraph	60,000
3262	Dr. N.J. Maloney	1,500
3211	Eugene Stann	7,000
3351	John Gordon	20,000
3320	Julia Brown	20,000
3323	Alan Sieorty	20,000
3464-A	Dept. of Water & Power - Water Section	90,000
3173-A	Dept. of Water & Power - Power Section	360,000
2160-6	Barton Aschman	161,700
2611-3	County of Los Angeles (Staff Asst.)	229,300
2274	Carl Englund	14,153
3212	W.H. Patterson	7,000
3520	Southern California Gas Co.	45,000
3480	O'Brien & Kreitzberg	24,900
	Sub-Total	\$ 4,967,953

II. System Design & Analysis		
3394	MIDCOM	10,000
3282	SRI International	19,985
3090-1	Cons. Fire Prot. District	103,286
3136-1	Booz-Allen & Hamilton	1,499,031
3170-1	Mellon Institute	24,900
3371	COMMUNICOM	7,500
2218	Commission de Transport	5,000
2218	Walter Woods	1,020
	Sub-Total	\$ 1,670,722

RTD METRO RAIL PROJECT
 OPEN PROFESSIONAL SERVICES CONTRACTS
 (CONT.)

11/30/84

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>\$</u> <u>BUDGET</u>
III. Planning		
3010-1	Community Redevelopment Agency	542,000
3137	City of Los Angeles (Station Dev.)	573,000
3254-2	Schimpeler - Corradino	927,213
2900-2	Schimpeler - Corradino	151,000
3328	CMB Communications	<u>2,500</u>
	Sub-Total	\$ 2,195,713
IV. Real Estate		
A. Yard & Shops Acquisition		
2963	AT & SF Railway	64,000
3033	Lea Associates	50,000
3102-1	Robert Swanson	<u>22,500</u>
	Sub-Total	\$ 136,500
B. Other Real Estate		
3116	Chicago Title Insurance	50,000
3175	TICOR Title Insurance	75,000
3379	Joseph Gary	10,000
3357	Business Valuation Services	8,500
3461	Leon Beliaevsky	6,450
3462	James Himes	6,250
3209	Arthur Anderson	1,550
3463	R.P. Laurain	7,500
2930	Lincoln Inst. of Land Policy	24,500
3407	Olof Olsen	5,250
3408	Edward Reilly	7,000
3522	Carl M. Lau	1,000
2210-4	R.H. Flavell & Asoc.	71,036
3189-2	Joseph Gary	10,026
3479	Marshall & Stevens	1,900
3523	Thomas Scalora	6,000
3485	Appraisal Engineering Co.	4,050
3477	Marshall & Stevens	6,000
3461	Leon Beliaevsky	6,450

RTD METRO RAIL PROJECT
 OPEN PROFESSIONAL SERVICES CONTRACTS
 (CONT.)

11/30/84

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>\$</u> <u>BUDGET</u>
3430	Eugene Gutierrez	2,200
3431	Jack Jue	3,000
3484	Robert Swanson	2,750
3483	Norman Eichel	13,250
2211-4	George Jones	74,000
3482	Donahue & Co.	15,000
3478	John Wright	7,500
3487	Merrill Lynch Appraisal	<u>5,000</u>
	Sub-Total	\$ 431,212

V. Legal

2910-4	NEMBW & M	115,000
2943	O'Melveny & Myers	<u>100,000</u>
	Sub-Total	\$ 215,000

VI. Misc. Contracts

3065	David Ashley	7,000
3030	Dillon Read & Co.	24,900
3054	Haverson International	24,900
2499	Barton-Aschman	4,121
2430	Bureau de Transit Metro	2,187
2940	Steve Mertz (U.S.C.)	5,000
2276	U.S.C.	4,320
3506	California Newspaper Service Bureau	<u>105,000</u>
	Sub-Total	\$ 177,428

VII. General Consultant

2967	MRTC	<u>102,388,000</u>
	Sub-Total	\$ 102,388,000

VIII. Construction Management

3369	PDCD	<u>6,589,849</u>
	Sub-Total	\$ 6,589,849

TOTAL OPEN PROFESSIONAL SERVICES CONTRACTS	\$ 118,772,377
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PC-MO.STAT.#2

SECTION II: CONTRACT EVALUATIONS

MTA LIBRARY



A. COST

RTD

EXPLANATION OF TERMS

Cost Performance Index (C.P.I.)	- Used to indicate the actual cost of each planned dollar of work accomplished. = $\frac{\text{Earned Costs}}{\text{Expenditures}}$
Cost Variance (C.V.)	- The difference between the actual dollars spent and the actual dollars earned. = Actual \$ Spent - Earned \$
Current Contract Cost	- The dollar value on which contractual agreement has been reached.
Expended	- The entry into official RTD accounting ledgers of the use of resources.
Forecast at Completion	- An estimate and prediction of the total cost of the contract.
Independent Estimate at Completion (I.E.A.C.)	- A calculated EAC based on the current rate of cost performance. = $\frac{\text{Forecast at Completion}}{\text{C.P.I.}}$
Negotiated Contract Changes	- The cumulative cost applicable to definitized contract changes which have occurred since the beginning of the contract.
Original Contract Cost	- The dollar value negotiated in the original contract.
Pending Changes	- The estimated cost for contract changes that have yet to be negotiated or approved.
Percent Complete	- A comparison of the completion status to the current projection of total work.
Productivity	- A relative measure of labor efficiency compared to an established base. = $\frac{\% \text{ complete} \times \text{Total MH forecast}}{\text{MH's spent}}$

To Complete Performance Index

(T.C.P.I.) - Basically a comparison of the work remaining to the amount of money remaining. The results of this formula indicate the cost efficiency the contractor must perform to meet the Forecast at Completion.

$$= \frac{\text{Forecast at Completion} - \text{Earned Costs}}{\text{Forecast at Completion} - \text{Actual \$ Spent}}$$

Variance

- Any actual or potential deviation from a budget or plan.

METRO RAIL PROJECT
SECTION DESIGN EVALUATION SUMMARY
NOVEMBER 1984

UNIT NO.	DESCRIPTION	TOTAL % COMPLETE		CURRENT INCRE- MENTAL PROGRESS	PRODUCTIVITY BASED ON		ORIGINAL NEGOTIATED CONTRACT AMOUNT	FORECAST AT COMPLETION		TO COMPLETE AVERAGE EFFICIENCY *
		F'CAST	ACTUAL		MHRS	\$\$		MRTC	TSD PROJECTED	
MOS-1 CONTRACTS:										
A100	YARD AND SHOPS	90%	73%	6	98%	100%	\$ 4,080,878	\$ 6,617,000	\$ 6,617,000	145%
A135	UNION STATION	90%	91%	3	102%	104%	2,946,000	4,200,000	4,038,462	77%
A140	CIVIC CENTER/5TH & HILL/LINE	66%	64%	6	124%	128%	6,203,707	6,812,439	5,304,688	73%
A165	7TH & FLOWER	93%	87%	4	98%	98%	2,129,587	3,800,000	3,877,551	113%
A170	WILSHIRE/ALVARADO + LINE	93%	92%	4	101%	99%	3,119,430	4,016,000	4,056,566	102%
TOTAL MOS-1 CONTRACTS:							\$ 18,479,602	\$ 25,445,439	\$ 23,894,267	

* FOR CONTRACTS TO BE COMPLETED AT MRTC'S FORECAST

COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A100, Yard & Shops
 CONTRACTOR : DMJM/PBQD
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 4,080,878	\$ 479,020	\$ 4,559,898	\$ 2,057,102	\$ 6,617,000	\$ 5,977,000	\$ 640,000

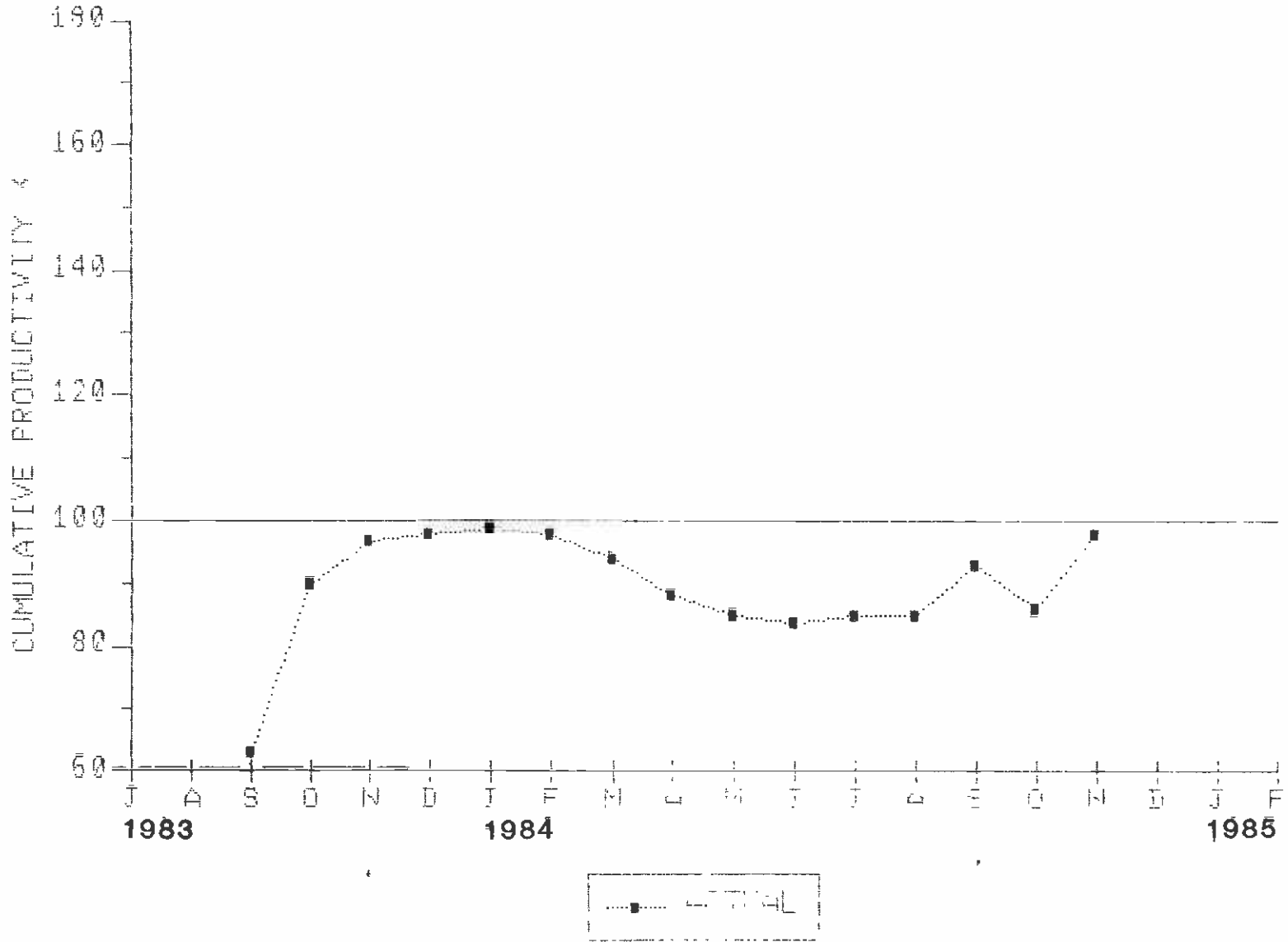
CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	90%	86%	98%	\$ 1.00	\$ 286,380	145%	\$ 6,617,000

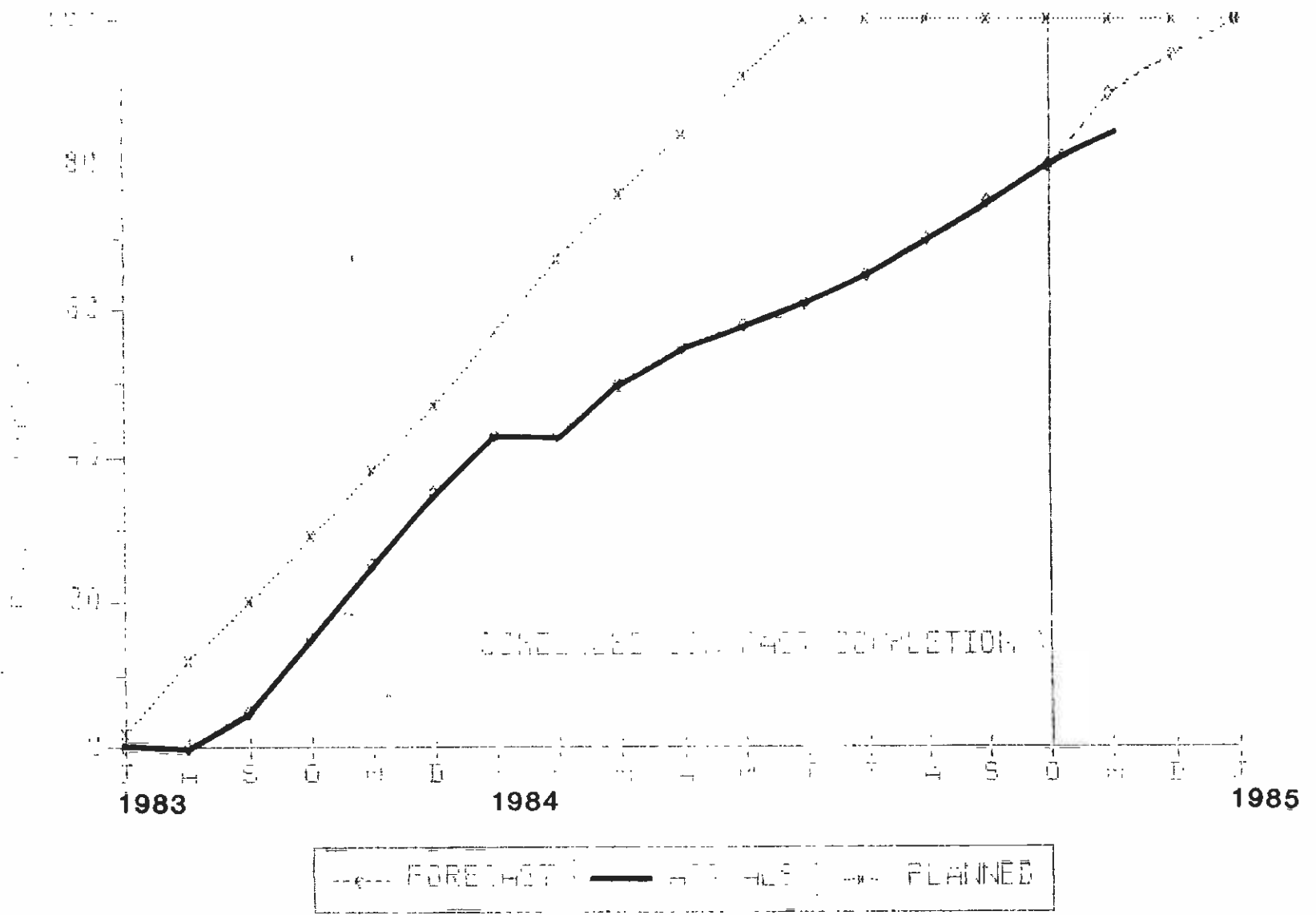
CONCLUSIONS AND OBSERVATIONS:

Contractor's productivity is increasing and it appears likely that they will come in on forecast. But there is still 14% of the contract to be completed, and the contractor must work at a very high performance level to attain this within schedule.

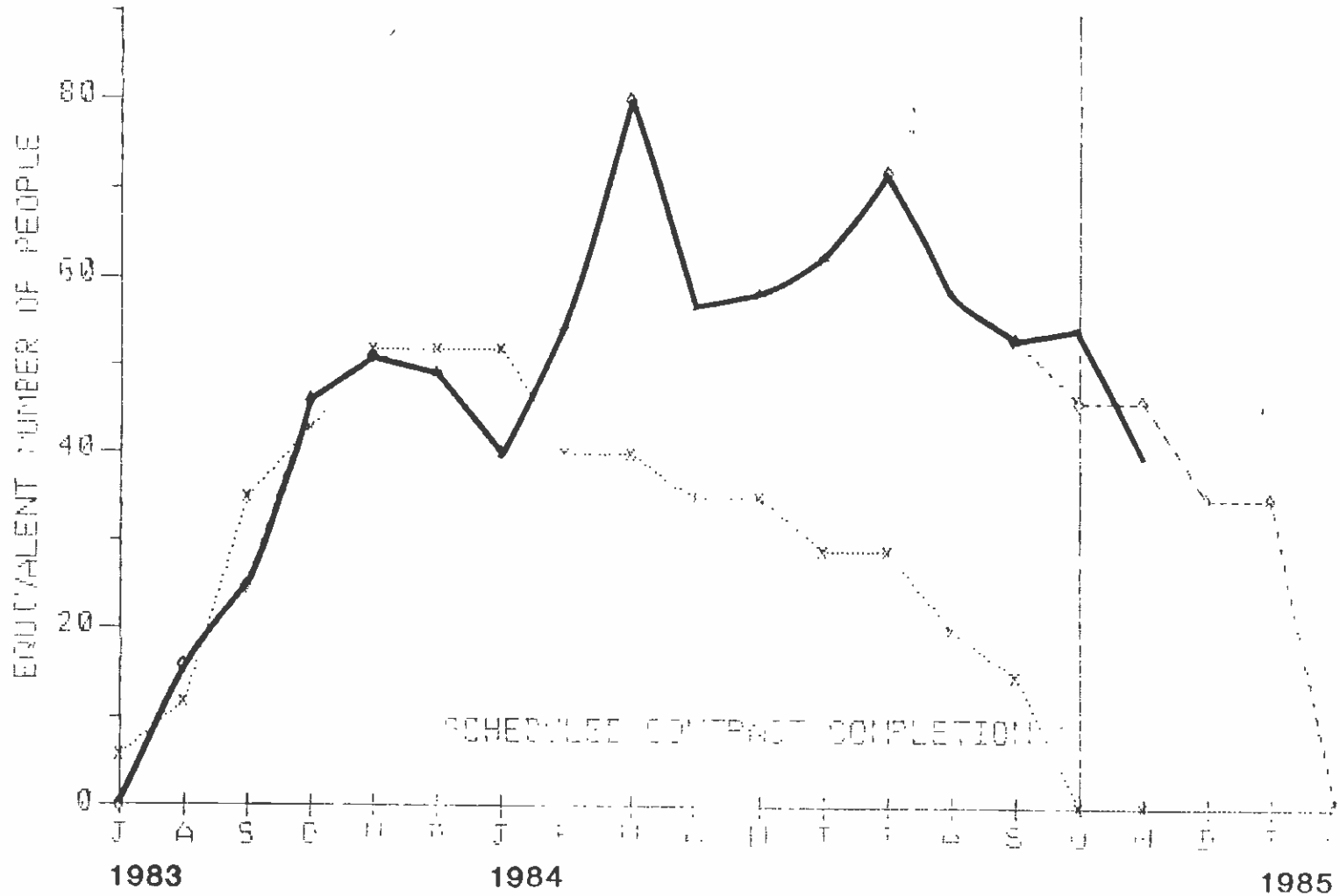
RTR MET SOIL PROTECT
CONTRACT #100 - MAIN YARD AND SHOPS
SECTION DESIGNER: DMSH/FB9D
NOVEMBER 1984



PROJECT NAME: [Illegible]
 PROJECT NO: [Illegible]
 DATE: [Illegible]



RAIL METRO RAIL PROJECT
 CONTRACT 4100 - MAIN YARD AND SHOPS
 SECTION DESIGNER: DMH: 1700
 NOVEMBER 1984



SCHEDULED CONTRACT COMPLETION

COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A135, Union Station
 CONTRACTOR : Harry Weese & Associates
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 2,897,000	\$ 457,997	\$ 3,354,997	\$ 845,003	\$ 4,200,000	\$ 3,706,000	\$ 494,000

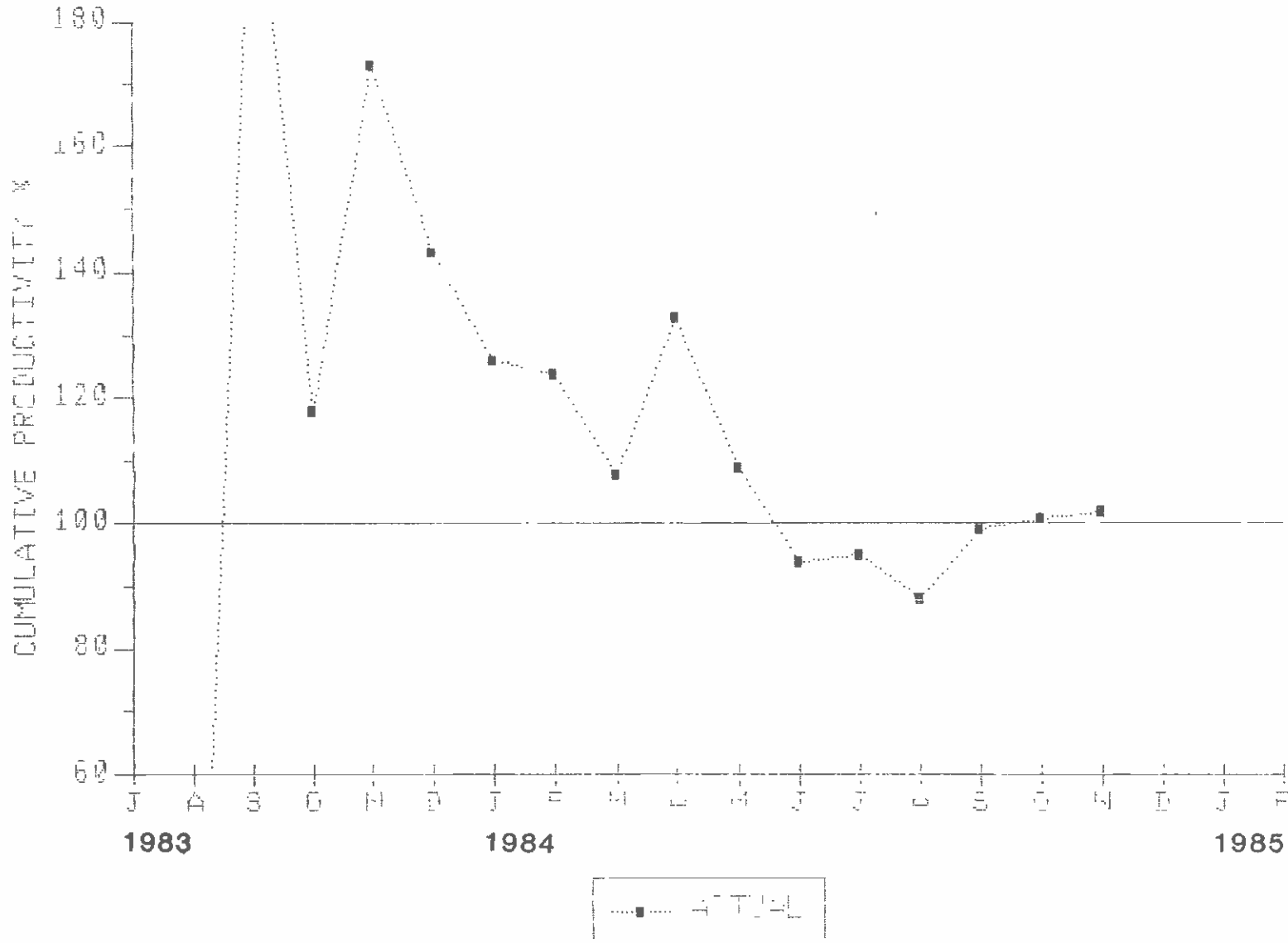
CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C
PLANNED	FORECAST	ACTUAL					
100%	90%	91%	102%	\$ 1.04	\$ (116,000)	77%	\$ 4,038,462

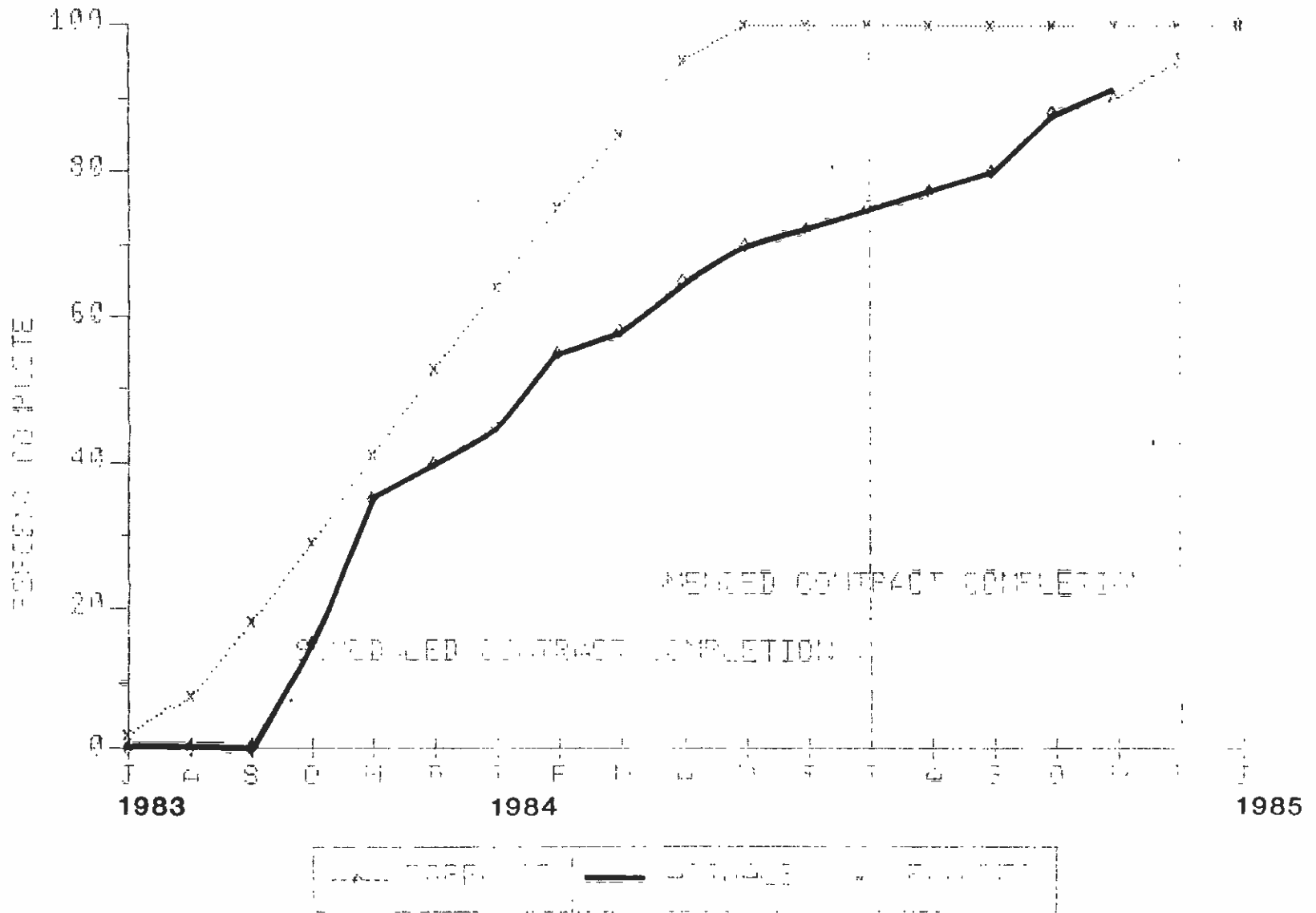
CONCLUSIONS AND OBSERVATIONS:

With two months to contract completion, this Section Designer is proceeding satisfactorily. During November the cost to complete this contract was negotiated for a total contract cost of \$3,943,725; this amount is pending District approval.

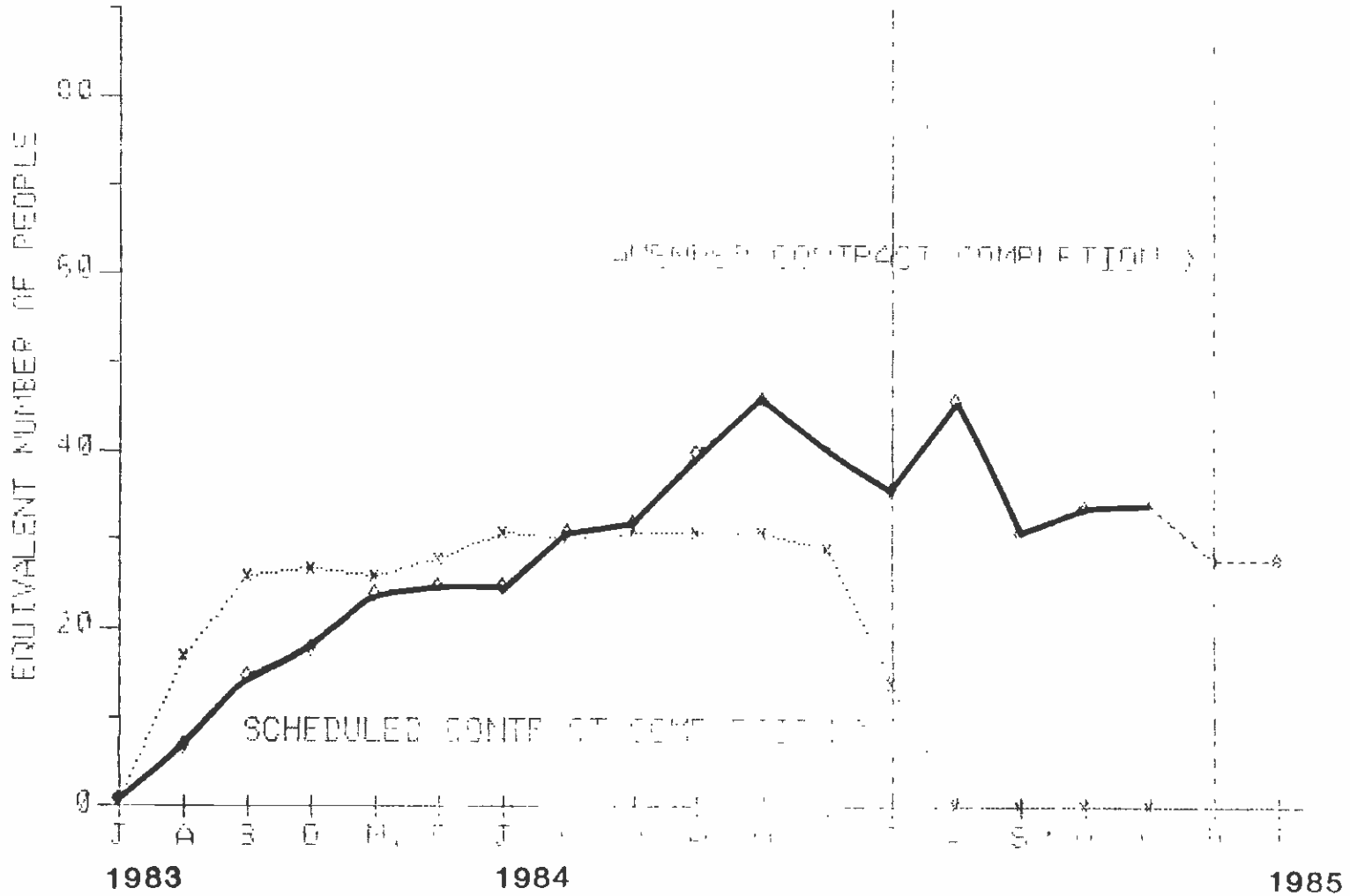
RTM MEI PAUL PROTECT
CONTRACT H135 - UNION STATION
SECTION DESIGNER: HARRY WEESE AND ASSOC.
NOVEMBER 1984



S. P. METRO RAIL BOARD
 CONTRACT #11 - UNION STATION
 SECTION DESIGNER: HARRI, MEDCO & ASSOC.
 NOVEMBER, 1984



RTA NEWPORT TUNNEL PROJECT
 CONTRACT # 1133 - TUNNEL SECTION
 SECTION OF TUNNEL: HARRY WEEB TUNNEL, 4900',
 12/1/83 - 1/1/84



x SCHEDULED CONTRACT COMPLETION
▲ ACTUAL CONTRACT COMPLETION

COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A140, Civic Center/ 5th & Hill Stations + line
 CONTRACTOR : Delon Hampton & Associates
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 6,203,707	\$ 6,732	\$ 6,210,439	\$ 602,000	\$ 6,812,439	\$ 3,414,000	\$ 3,398,439

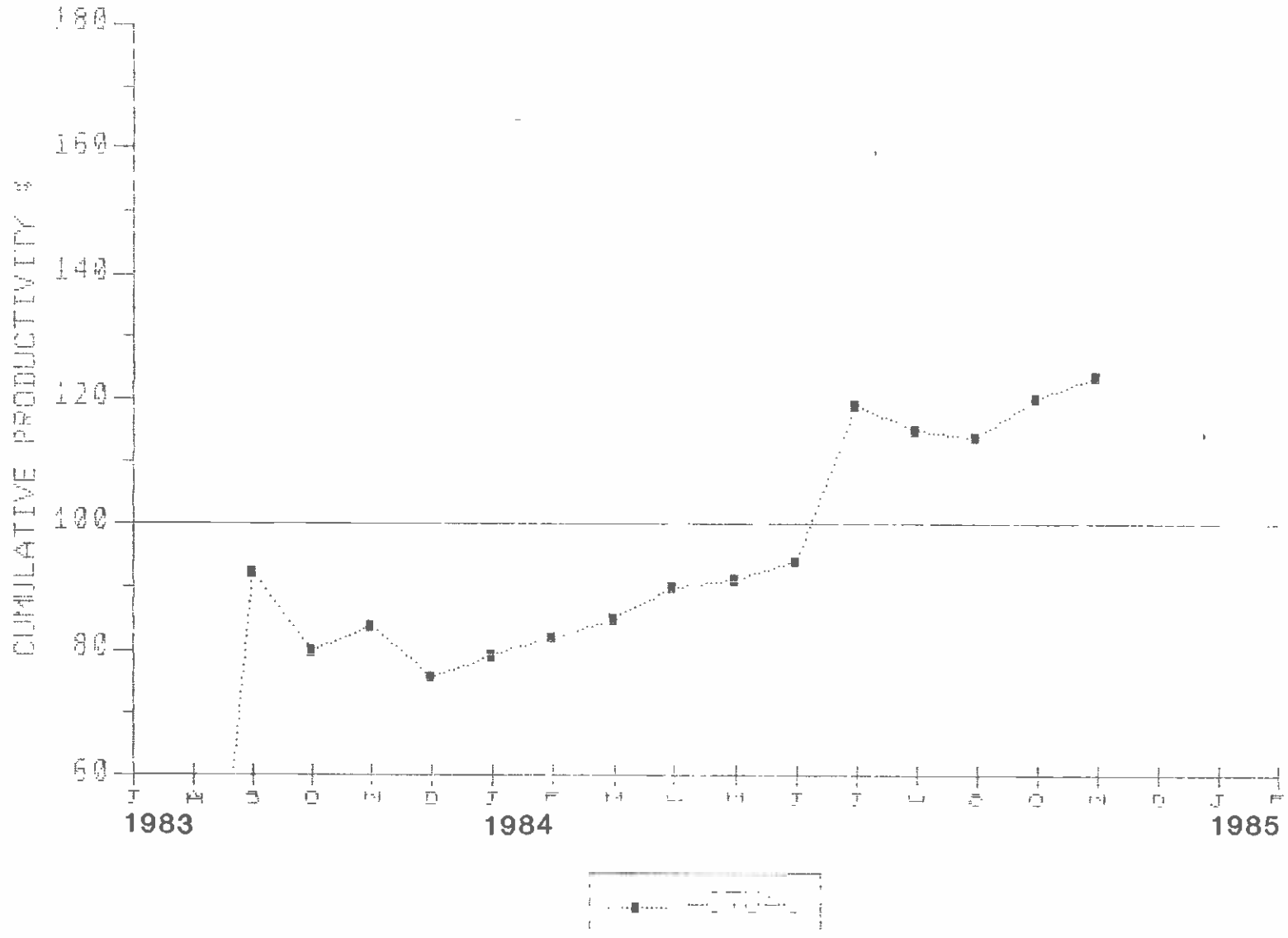
CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
71%	66%	64%	124%	\$ 1.28	\$ (931,600)	73%	\$ 5,304,688

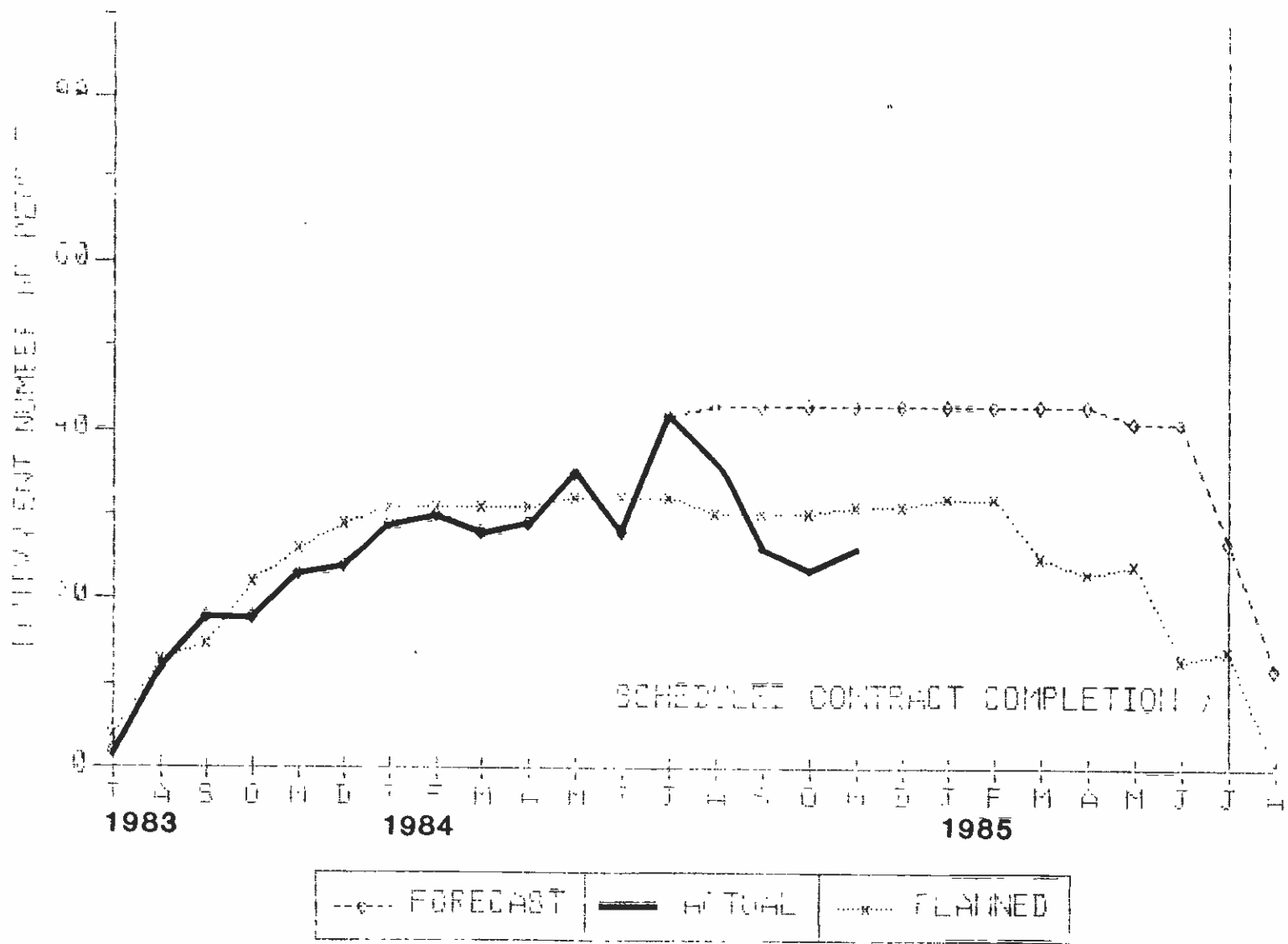
CONCLUSIONS AND OBSERVATIONS:

This Section Designer continues to proceed satisfactorily, achieving high productivity and C.P.I. despite his chronic inability to attain forecasted or planned progress. With eight months until forecasted completion, the performance of this designer indicates a substantial cost underrun.

RFD METRO RAIL PROJECT
 CONTRACT 4140 - CIVIC CENTER-FIFTH & HILL
 SECTION DESIGNER: DELON HARRISON & ASSOC.
 NOVEMBER 1984



FEDERAL BUREAU OF INVESTIGATION
 COMMUNITY CENTER CIVIC CENTER NORTH & HILL
 SECURITY DETAIL - INDEPENDENT CONTRACTOR ASSOC.
 WASHINGTON, D.C.
 DECEMBER 1984



COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A165, 7th/Flower Station
 CONTRACTOR : Gannett Fleming/Dworsky
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 2,129,587	\$ 645,369	\$ 2,774,956	\$ 1,025,044	\$ 3,800,000	\$ 3,361,000	\$ 439,000

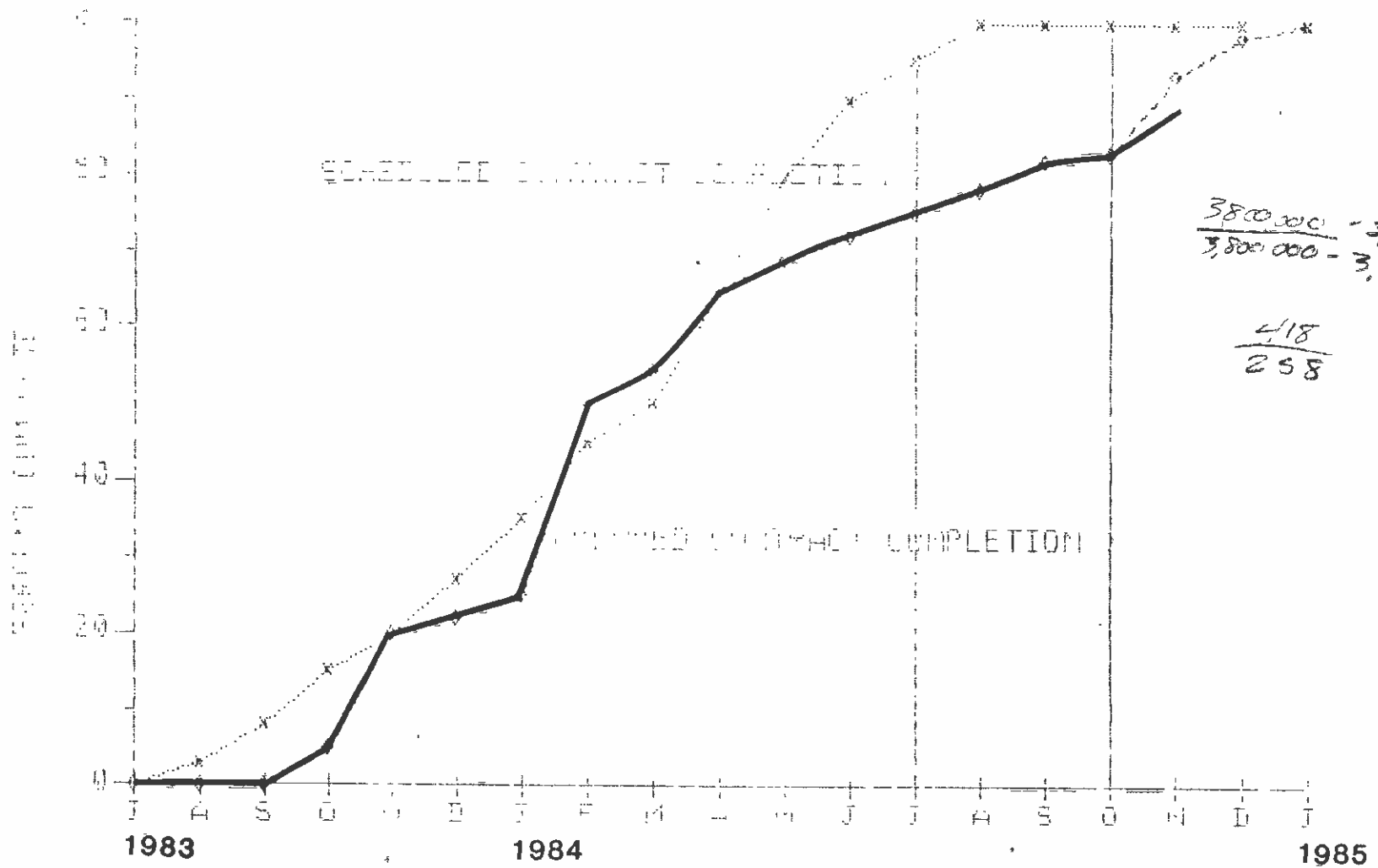
CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOURL PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	93%	87%	98%	\$.98	\$ 55,000	113%	\$ 3,877,551

CONCLUSIONS AND OBSERVATIONS:

During November, the cost to complete for this contract was negotiated for a total cost of approximately \$3,600,000. The new approved contract cost will be reflected in the December report.

PROJECT NO. 100-100-100-100
 PROJECT NAME: [Illegible]
 PROJECT LOCATION: [Illegible]



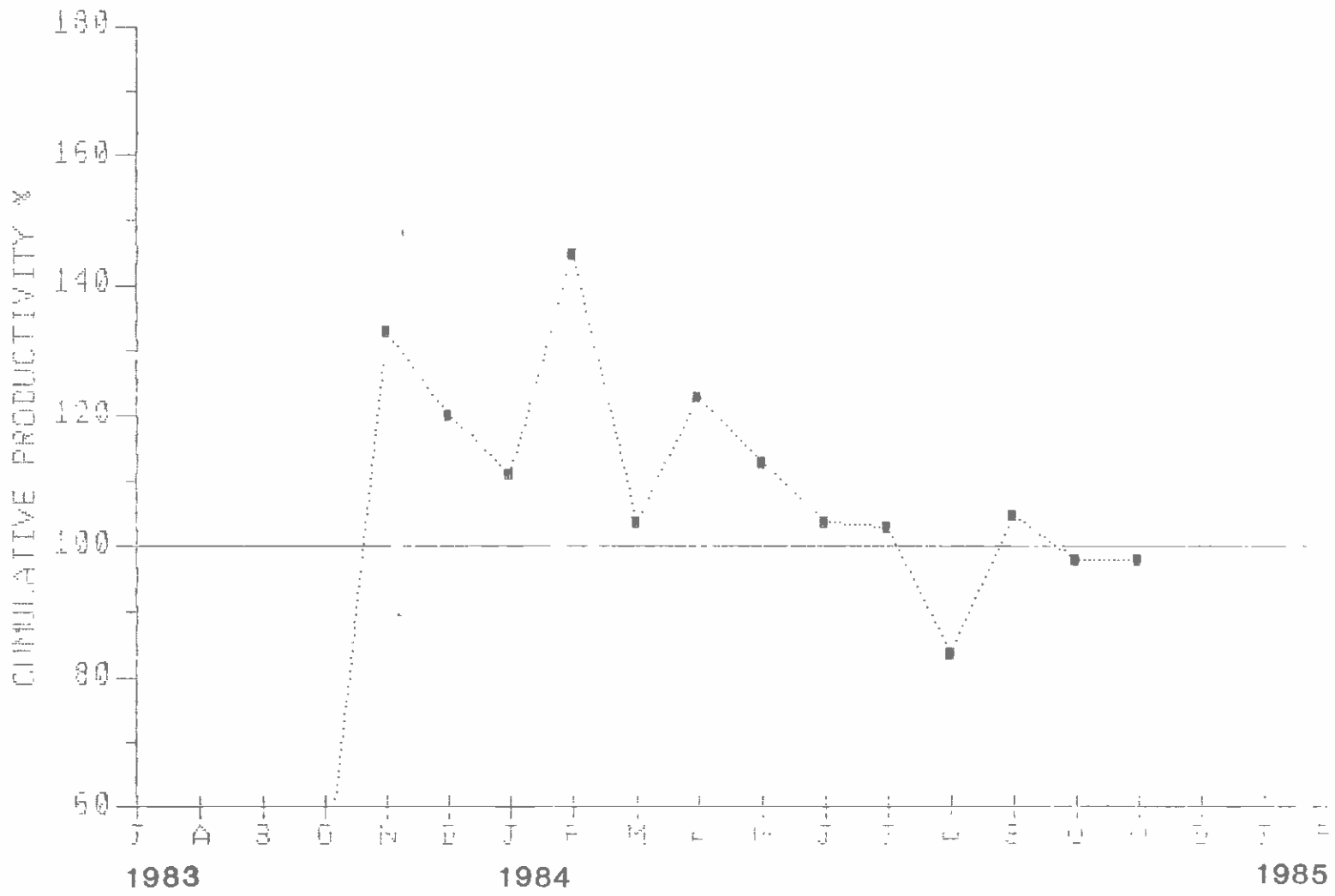
$$\frac{3800000}{3,800,000} = 3,382,000$$

$$\frac{418}{258}$$

--- FORECAST — ACTUAL - - - PLANNED

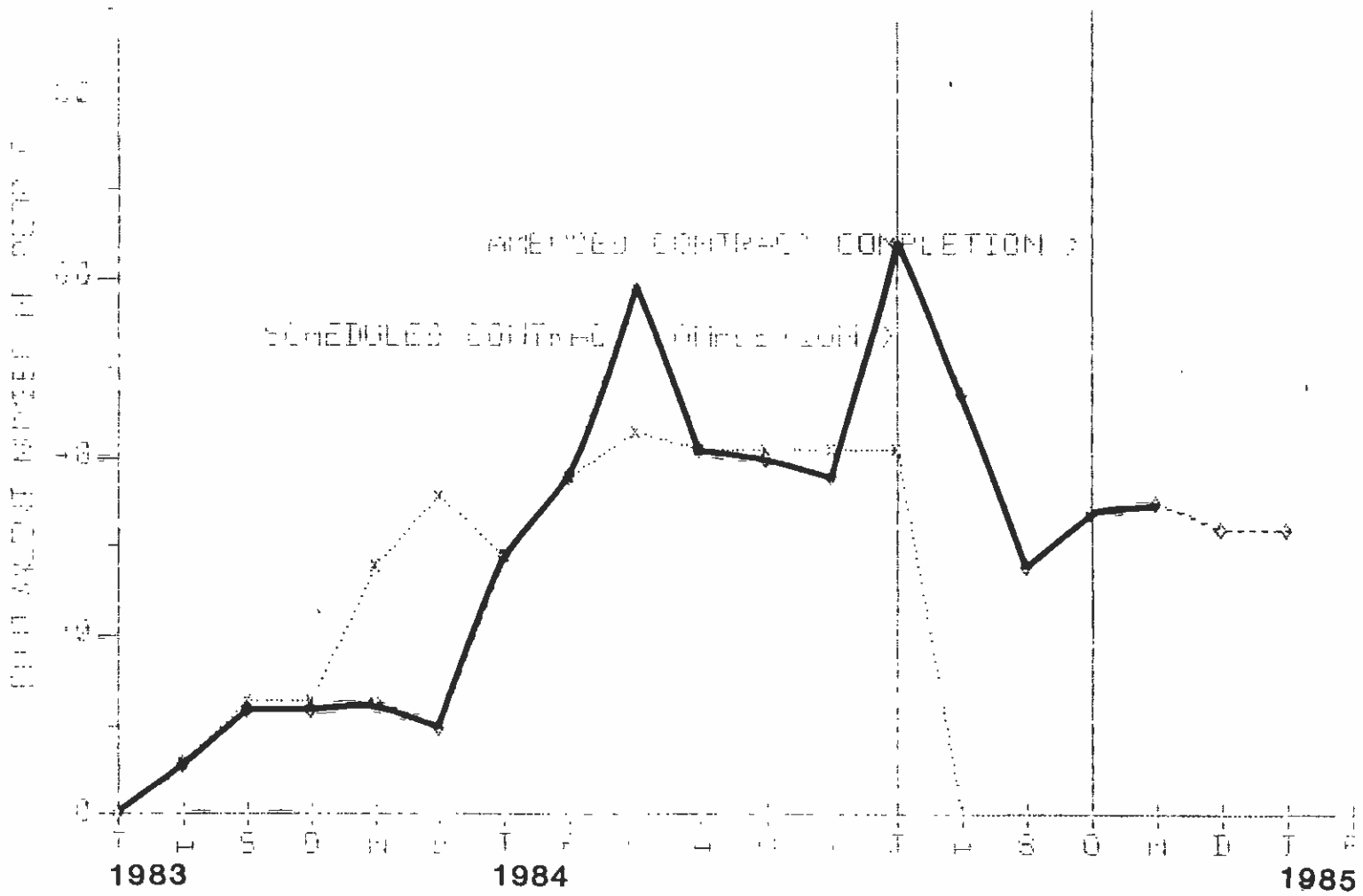
EXPENDITURE IN MILLIONS OF DOLLARS

RTD METRO RAIL PROJECT
 CONTRACT A165 - SEVENTH & FLOWER
 SECTION: BESTANER: GOSWETT FLEMING-KRUMHOLTZ
 NOVEMBER 1984



RTD

CONTRACTS COMPLETED
 SCHEDULED CONTRACTS COMPLETED
 CONTRACTS COMPLETED
 CONTRACTS COMPLETED
 CONTRACTS COMPLETED



x SCHEDULED CONTRACTS COMPLETED
 — AMENDED CONTRACTS COMPLETED
 — CONTRACTS COMPLETED

30

COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A170, Wilshire/Alvarado Station
 CONTRACTOR : Sverdrup Corporation
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 3,119,430	\$ 233,496	\$ 3,352,926	\$ 663,074	\$ 4,016,000	\$ 3,700,000	\$ 316,000

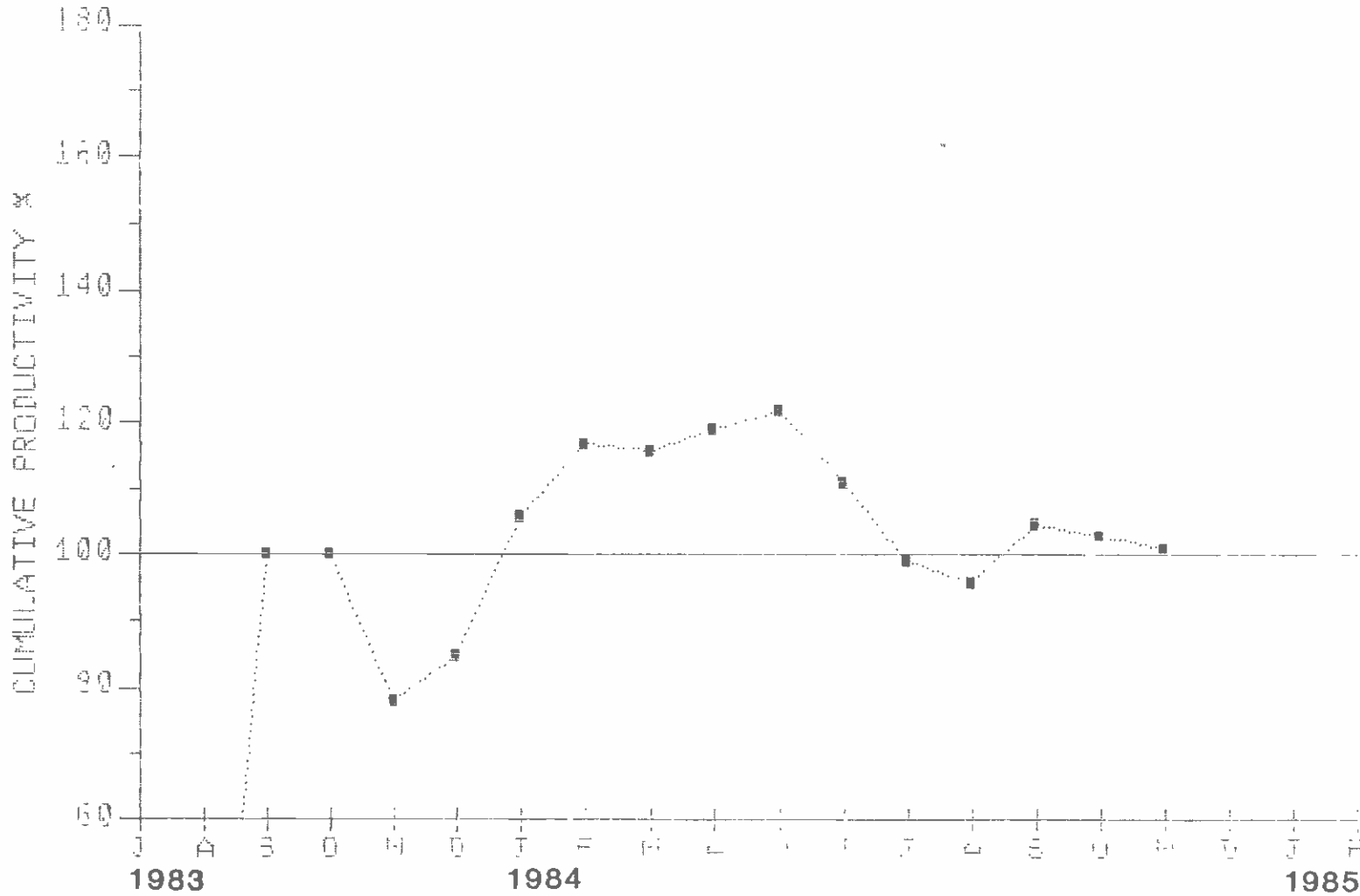
CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	93%	92%	101%	\$.99	\$ 5,280	102%	\$ 4,056,566

CONCLUSIONS AND OBSERVATIONS:

The consultant continues to progress at a satisfactory level; however, expenditures are presently exceeding the approved contract amount. Negotiations will take place in December for the cost to complete on this contract. The final negotiated cost will be reported when the 4400 forms are submitted by the consultant.

RTD METRO RAIL PROJECT
 CONTRACT #170 - MILSHIRE/ALVARADO
 SECTION DESIGNER: SVERDRUP CORP.
 NOVEMBER 1984

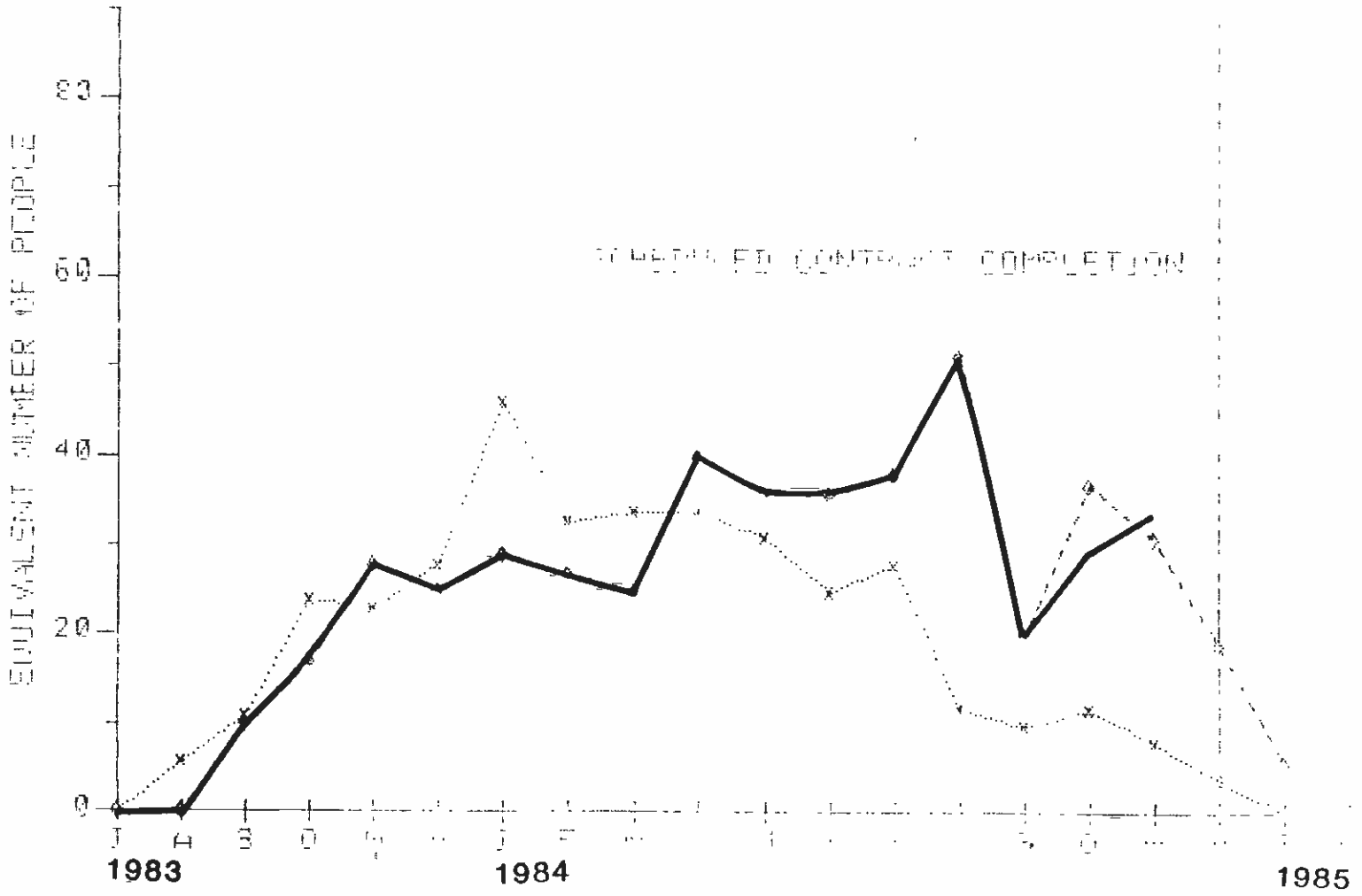


32

$$\frac{3,900,000 - 3,549,000}{3,900,000} = \frac{351}{58}$$

RTD METRO RAIL PROJECT

P10 METRO RAIL PROJECT
 CONTRACT ALTO - WILSHIRE-CLARKSON
 SECTION RESTORED OVERBRIDGE LOOP
 LEVEL TIT 1384



MTA LIBRARY

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A610, Main Line Trackwork Installation
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 826,000	\$ 415,000	\$ 411,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	43 %	87 %	\$.86	\$ 59,820	115 %	\$ 960,500

CONCLUSIONS AND OBSERVATIONS:

No Comment.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A612,A615,A630 - Traction Power Procurement
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$912,000	\$798,000	\$114,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
85%	N/A	83%	96%	\$0.95	\$41,040	136%	\$960,000

CONCLUSIONS AND OBSERVATIONS:

The traction power procurement contracts are significantly overrunning. Despite a new cost and manhour forecast this month, calculations indicate that if progress does not increase, this contract will overrun by nearly \$50,000, or 6%.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A620, Automatic Train Control
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$888,000	\$502,000	\$386,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
85%	57%	58%	96%	\$1.03	\$(13,040)	97%	\$862,136

CONCLUSIONS AND OBSERVATIONS:

The District Train Control Engineer feels that the reported percent complete is slightly overstated, thereby resulting in inflated productivity and C.P.I. figures.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A631, Traction Power Installation
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$461,000	\$85,000	\$376,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
20%	17%	17%	94%	\$0.93	\$6,630	102%	\$495,699

CONCLUSIONS AND OBSERVATIONS:

A new cost and manhour forecast this month indicates a slight overrun in the traction power installation contract. If productivity is increased, this trend can be quickly turned around.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A640, Communications
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$1,362,000	\$703,000	\$659,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
62%	48%	48%	91%	\$.93	\$49,240	107%	\$1,464,516

CONCLUSIONS AND OBSERVATIONS:

Final submission of specifications revised to December '85 from April '85 with no explanation.

Also, percent complete of the contract dropped from prior report due to a change in forecasting methods.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A650, Passenger Vehicles
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 898,000	\$ 594,000	\$ 304,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
85%	72%	73%	108%	\$ 1.10	\$ (61,540)	80%	\$ 816,364

CONCLUSIONS AND OBSERVATIONS:

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A660, Fare Collection
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 507,000	\$ 218,000	\$289,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
53%	N/A	47%	106%	\$1.09	\$(20,290)	93%	\$ 465,138

CONCLUSIONS AND OBSERVATIONS:

41

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A671-679 Auxiliary Vehicles
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				*	\$146,820	*

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
*	*	*	* %	*	*	* %	*

CONCLUSIONS AND OBSERVATIONS:

Insufficient Information

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A710, Escalators
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 95,000	\$ 84,456	\$ 10,544

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURL PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	100%	105 %	\$ 1.13	\$ (10,544)	N/A %	N/A

CONCLUSIONS AND OBSERVATIONS:

Design of escalators is complete; however, final documents are being repackaged for MOS-1.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A720, Elevators
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 64,000	\$ 58,260	\$ 5,740

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	100%	102%	\$ 1.10	\$ (5,740)	N/A %	N/A

CONCLUSIONS AND OBSERVATIONS:

Design of elevators is complete; however, final documents are being repackaged for MOS-1.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A740, Fans & Blowers
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 51,000	\$ 63,263	\$ (12,263)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	95%	74%	\$ 0.77	\$ 14,813	N/A %	\$ 66,234

CONCLUSIONS AND OBSERVATIONS:

A cost overrun continues to be projected for this contract despite an increase in MRTC's estimate at completion. At the present rate of performance, this design contract will overrun by 30%.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A745, Station Air-Handling Units, TPSS Supply Fans, & Automatic Roll-type Filters Procurement
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				N/A	\$ 9,900	N/A

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	50%	* %	*	*	* %	*

CONCLUSIONS AND OBSERVATIONS:

* Insufficient information.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACTOR NO. : A760, Graphics & Signage
 CONTRACTOR : MRTC
 REPORT PERIOD : November 1984

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
				\$ 72,500	\$ 77,900	\$ (5,400)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURS PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	45%	34 %	\$ 0.42	\$ 45,275	N/A %	\$ 172,619

CONCLUSIONS AND OBSERVATIONS:

The productivity and C.P.I. continue to be extremely low and the cost overrun is increasing. At the present performance rate, this contract will overrun its budget by 138%, despite an increase this month in the MRTC's estimate at completion.

B. SCHEDULE

MTA LIBRARY



MOS-1 CRITICAL PATH

The Critical Path (MOS-1) defined in the Level II Schedule originates at Design Contract A140 (Civic Center Station, 5th & Hill and Line Section) and continues to Design Completion and the Construction Bid Process. This path follows construction through Utility Relocation, Support and Excavation, Tunnel Excavation and Invert Placement. The path then shifts to Trackwork Installation and on to Automatic Train Control and Communications Cabling and Installation to Energization of the system. The path then continues through Vehicle Acceptance Testing, ATC Dynamic Testing and finally to Simulated Revenue Service.

METRO RAIL PROJECT
SCHEDULE EXCEPTION REPORT

Minimum Operable Segment-1 Design Contracts

CONTRACT: A112 Main Shop Building and Service Area

AREA OF CONCERN: Contract completion is forecast eleven (11) weeks beyond the Contract Time of Performance (10/15/84). Delay is due to the following:

- o reclassifying the Main Shop Building as a B-2 occupancy and of Type II-FR construction per 1979 Uniform Building Code (UBC),
- o repackaging of all contracts within A100 due to ROW acquisition - Santa Fe.

RECOMMENDATION: Final approval be given to amend Contract Time of Performance.

CONTRACT: A115 Yard Storage Area

AREA OF CONCERN: Contract completion is forecast twelve (12) weeks beyond the Contract Time of Performance (10/15/84). Delay is due to the repackaging of all contracts within A100 due to ROW acquisition - Santa Fe.

RECOMMENDATION: Final approval be given to amend Contract Time of Performance.

CONTRACT: A130 Yard Leads and Transfer Zone

AREA OF CONCERN: Contract completion is forecast fifteen (15) weeks beyond the Contract Time of Performance (10/15/84). Delay is due to the following:

- o incorporation of seismic design criteria,
- o repackaging of all contracts within A100 due to ROW acquisition - Santa Fe.

RECOMMENDATION: Final approval be given to amend Contract Time of Performance.

CONTRACT: A135 Union Station

AREA OF CONCERN: Contract completion is forecast 22 weeks beyond the Contract Time of Performance (10/09/84). Delay is due to the late submittal of seismic design criteria to Section Designer. The schedule has been revised to show remaining work items and is updated weekly.

RECOMMENDATION: MRTC to transmit to RTD all updated schedules. The amendment (#7) extending the Contract Time of Performance to 2/15/85 should be expedited.

CONTRACT: A165 7th/Flower Station

AREA OF CONCERN: Contract completion is forecast 19 weeks beyond the Contract Time of Performance (10/15/84). Delay is due to the following:

- o lack of design criteria,
- o continuous design changes,
- o late receipt of seismic design criteria.

RECOMMENDATION: It is again recommended the schedule be revised to reflect remaining work items and strictly monitored to avoid further delays.

CONTRACT: A170 Wilshire/Alvarado Station & Line

AREA OF CONCERN: The delay to contract completion remains the area of concern. The new forecast date for contract completion is 3/28/85, 16 weeks beyond the Contract Time of Performance (12/07/84). Delay is due to the following:

- o numerous ECR's that require changes in Design Criteria and Standard,
- o changes in the baseline final specifications
- o repackaging of the contract.

RECOMMENDATION: Schedule dates should be revised to reflect the delay. Consultant should increase efforts in order to meet submittal dates.

BEYOND MINIMUM OPERABLE SEGMENT-1 DESIGN CONSULTANTS

CONTRACT: A195/A197 WILSHIRE/VERMONT STATION & LINE

AREA OF CONCERN: Contract completion is forecast 26 weeks beyond the Contract Time of Performance (08/11/84). Delay is due to the following:

- o numerous changes in the standard and directive drawings,
- o breaking out A195 contract into A195 Stage I and A197 Stage II contracts,
- o delayed submittal of seismic design criteria to Section Designer.

RECOMMENDATION: The CPM schedule should be revised to show remaining work items required to complete the project to Increment I (sign and seal Civil, Utility and Structural Drawings).

CONTRACT: A610 MOS-1 Trackwork

AREA OF CONCERN: The main line trackwork installation, yard trackwork, running rail, timber tie, direct fixation rail fastener, and rail welding contracts have been combined into one "furnish and install" contract. Design completion is critical to the project construction schedule (MOS-1 LEVEL II). Timely issuance of Notice to Proceed is necessary to allow adequate procurement time for long lead items.

RECOMMENDATION: A revised base-line schedule should be established and strictly monitored to avoid any slippages.

CONTRACT: A612 Contact Rail Procurement
A615 Coverboard Procurement
A630 Traction Power Substation
Equipment Procurement

AREA OF CONCERN: Project completion is forecast 9 weeks beyond the original scheduled date (2/25/85). Slippage is due to the design directive to incorporate options in procurement for phases II, III and IV.

RECOMMENDATION: The schedule should be revised to correspond to the LEVEL II Project Schedule. This will insure availability of the procurement packages for long lead items.

CONTRACT: A620 Automatic Train Control

AREA OF CONCERN: Project completion is forecast 23 weeks beyond the original scheduled dates. Delay is due to incorporation of numerous industry review comments.

RECOMMENDATION: The schedule should be revised to correspond to the LEVEL II Project Schedule. This will insure availability of the procurement packages for long lead items.

1-82
10-01A.8

METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL F'CAST(F) ACTUAL(A)	PRE-FINAL SUBMITTAL SCHEDULE	SUBMITTAL F'CAST(F) ACTUAL(A)	FINAL SUBMITTAL SCHEDULE	F'CAST(F) ACTUAL(A)	BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
									SCHEDULE	F'CAST(F) ACTUAL(A)		
MUS-1: YARD & SHOPS	07/13/83	10/15/84										
A112			02/01/84	06/14/84A	03/28/84	10/11/84A	05/23/84	12/10/84P	-	12/31/84P	21	11
A114			-	01/27/84A	04/25/84	05/30/84A	06/13/84	08/27/84A	-	09/10/84A	-	-
A115			09/10/84	09/24/84A	10/08/84	11/01/84A	12/10/84	12/28/84P	-	01/07/85P	18	12
A130			03/07/84	09/10/84A	05/02/84	12/24/84P	06/27/84	01/07/85P	-	01/29/85P	14	15
UNION STATION	07/13/83	10/09/84										
A133 BAGGAGE HANDLING			-	11/08/84A	-	-	-	12/14/84P	-	-	-	-
A135 STAGE I			02/01/84	03/09/84A	04/01/84	11/30/84A	06/01/84	02/01/85P	07/18/84	03/15/85P	-	22
A136 STAGE II			02/01/84	03/09/84A	04/01/84	11/30/84A	06/01/84	02/01/85P	07/18/84	03/15/85P	-	22
CIVIC CENTER/ 5TH & HILL, LINE	07/21/83	01/21/85										
A140 STAGE I			08/01/84	08/01/84A	03/01/85	03/01/85P	06/10/85	06/10/85P	07/15/85	07/15/85P	36	-
A142 EXC./SUP.			08/01/84	07/16/84A	09/07/84	09/21/84A	10/15/84	12/07/84P	11/15/84	12/21/84P	-	-
A147 STAGE II			08/01/84	08/01/84A	03/01/85	03/01/85P	06/10/85	06/10/85P	07/15/85	07/15/85P	-	-
A157 STAGE II			08/01/84	08/01/84A	03/01/85	03/01/85P	06/10/85	06/10/85P	07/15/85	07/15/85P	-	-
7TH & FLOWER	08/09/83	10/15/84										
A165 STAGE I			02/01/84	03/12/84A	05/22/84	11/26/84A	08/07/84	01/14/85P	10/14/84	03/01/85P	-	19
A167 STAGE II			02/01/84	03/12/84A	05/22/84	11/26/84A	08/07/84	01/14/85P	10/14/84	03/01/85P	-	19
WILSH./ALVARADO	08/09/83	12/07/84										
A170 STAGE I			02/14/84	02/16/84A	05/30/84	11/26/84A	08/14/84	02/28/85P	09/26/84	03/28/85P	30	16
A167 STAGE II			04/02/84	05/07/84A	07/25/84	11/26/84A	11/05/84	02/28/85P	12/28/84	03/28/85P	62	16

54

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

Page 2 of 6

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL	PRE-FINAL	FINAL	BID DOCUMENT	CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)	
				F'CAST(F) ACTUAL(A)	SCHEDULE	SCHEDULE	SCHEDULE			F'CAST(F) ACTUAL(A)
BEYOND MOS-1 - INCREMENT - 1 *										
WILSH./VERMONT A195 STAGE I A197 STAGE II	03/12/83	03/11/84	02/07/84	02/10/84A	05/22/84	12/14/84F	03/07/84	02/11/85F	-	26
			02/07/84	02/10/84A	-	-	-	-	-	-
WILSH./WESTERN A220 STAGE I A237 STAGE II	10/10/83	10/07/85	03/06/84	03/23/84A	11/05/84	01/09/85F	02/04/85	04/17/85F	-	-
			03/23/84	03/23/84A	-	-	-	-	-	-
WILSH./NORMANDIE A230 STAGE I A227 STAGE II A222 LINE			12/03/84	01/17/85F	03/04/85	07/10/85F	06/03/85	03/16/85F	-	-
			12/03/84	01/17/85F	-	-	-	-	-	-
			10/08/84	06/26/84A	04/08/85	06/12/85F	10/07/85	06/12/85F	-	-
WILSH./CRENSIAW A240 STAGE I A242 STAGE II	01/27/84	01/26/85	07/26/84	09/13/84A	11/01/84	03/14/85F	01/14/85	04/15/85F	-	11
			07/26/84	09/13/85A	-	-	-	-	-	-
WILSH./LA BREA A245 STAGE I A247 STAGE II	10/10/83	10/15/84	04/16/84	05/07/84A	07/07/84	02/22/85F	10/16/84	03/30/85F	-	24
			04/16/84	05/07/84A	-	-	-	-	-	-
WILSH./PAIRFAX & LINE A250 STAGE I A267 STAGE II	03/02/84	06/17/85	11/12/84	11/15/84A	03/04/85	03/04/85F	05/06/85	05/06/85F	-	-
			11/12/84	11/15/84A	-	-	-	-	-	-

* CONTRACT NEGOTIATIONS FOR INCREMENT 1 SCOPE OF WORK HAVE BEEN COMPLETED FOR ALL CONTRACTS EXCEPT A220. THIS REPORT HAS BEEN REVISED TO REFLECT THE NEGOTIATED FORECAST COMPLETION DATES. CONTRACT AMENDMENTS ARE BEING PREPARED TO EXTEND THE CONTRACT TIME OF PERFORMANCE.

55

MTRO HAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

Page 5 of 6

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SUBMITTAL		PRE-FINAL SUBMITTAL		FINAL SUBMITTAL		BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
			SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)		
FAIRFAX/BEVERLY A275 STAGE I A277 STAGE II	12/30/83	12/27/84	06/28/84	06/28/84A	09/27/84	12/28/84F	12/27/84	03/01/85F	-	-	-	9
			06/28/84	06/28/84A	-	-	-	-	-	-	-	-
FAIRFAX/SANTA MONICA & TUNNEL A320 STAGE I A327 STAGE II	12/05/83	12/05/85	11/10/84	11/10/84A	03/10/85	03/10/85F	06/10/85	06/10/85F	-	-	-	-
			11/10/84	11/10/84A	-	-	-	-	-	-	-	-
LA BREA/SUNSET A350 STAGE I A347 STAGE II			02/10/85	02/10/85F	06/25/85	06/25/85F	10/10/85	10/10/85F	-	-	-	-
			-	-	-	-	-	-	-	-	-	-
HOLLYWOOD/ CAHUENGA A350 STAGE I A352 STAGE II	12/29/83	05/02/85	08/27/84	09/10/84A	12/20/84	03/04/85F	05/02/85	04/15/85F	-	-	-	-
			08/27/84	09/10/84A	-	-	-	-	-	-	-	-
LINE BETWEEN HOLLYWOOD/ CAHUENGA AND UNIVERSAL CITY A410	12/29/83	12/29/84	06/28/84	07/31/84A	09/28/84	11/26/84A	12/28/84	01/18/85F	-	-	-	-
HOLLYWOOD BOWL A415	02/13/84	02/11/85	08/13/84	11/16/84A	-	-	-	-	-	-	-	-
UNIVERSAL CITY A425 STAGE I A427 STAGE II	02/13/84	02/11/85	08/13/84	08/15/84A	11/19/84	02/04/85F	02/11/85	03/18/85F	-	-	-	5
			08/13/84	08/15/84A	-	-	-	-	-	-	-	-

56

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METRO RAIL PROJECT
 DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

Page 4 of 6

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL F'CAST(F) ACTUAL(A)	PRE-FINAL SUBMITTAL		FINAL SUBMITTAL		BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
					SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)		
LINE BETWEEN UNIVERSAL CITY & NO. HOLLYWOOD A430	12/29/83	03/20/85	07/06/84	08/06/84A	02/06/85	02/06/85F	03/20/85	03/20/85F	-	-	-	-
NORTH HOLLYWOOD A445 STAGE I	12/29/83	05/03/85	09/20/84	10/01/84A	01/31/85	03/01/85F	05/27/85	05/03/85F	-	-	-	-
A447 STAGE II			09/20/84	10/01/84A	-	-	-	-	-	-	-	-

57

1/3 85
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METRO RAIL PROJECT
 DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

Page 5 of 6

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL P'CAST(F) ACTUAL(A)	PRE FINAL SCHEDULE	SUBMITTAL P'CAST(F) ACTUAL(A)	FINAL SCHEDULE	SUBMITTAL P'CAST(F) ACTUAL(A)	BID DOCUMENTS SCHEDULE	P'CAST(F) ACTUAL(A)	CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
SYSTEMWIDE												
A610 MCS-1 TRACKWORK	03/01/84	-	01/15/85	01/15/85P	05/01/85	05/15/85P	07/01/85	07/01/85P	09/01/85	09/01/85P	-	-
A620 ATC	05/02/83	-	09/28/84	02/14/85P	12/09/84	07/09/85P	04/19/85	09/26/85P	-	-	-	23
A630 TRACTION POWER EQUIP.	02/01/84	r	04/30/84	05/29/84A	11/30/84	12/28/84P	02/25/85	04/30/85P	-	-	64	9
A631 TRACTION POWER INSTAL.	02/01/84	-	07/01/85	07/01/85P	01/31/86	01/31/86P	04/30/86	04/30/86P	-	-	-	-
A640 COMM.	05/02/83	-	03/30/85	02/15/85P	05/30/85	08/19/85P	07/30/85	12/02/85P	-	-	-	-
A650 PASS. VEHICLES	05/02/83	-	07/23/84	07/23/84A	11/01/84	03/01/85P	02/15/85	07/01/85P	-	-	-	19.5
A660 FARE COLLECTION	05/02/83	-	11/01/84	03/08/85P	06/01/85	06/01/85P	01/02/86	01/02/86P	-	-	-	-
A670 - 671 LOCOMOTIVE	05/02/83	-	05/01/84	05/11/84A	10/01/84	11/07/84A	02/15/85	02/15/85P	-	-	-	-
A710 ESCALATORS	05/02/83	-	01/30/84	02/08/84A	05/02/84	06/21/84A	07/02/84	10/30/84A	-	02/17/85P	-	-
A720 ELEVATORS	05/02/83	-	05/01/84	07/02/84A	N/A	N/A	08/01/84	10/24/84A	-	02/17/85P	-	-
A740 FANS	01/15/84	-	04/02/84	04/16/84A	N/A	N/A	09/01/84	01/15/85P	05/13/85	03/12/85P	-	-
A745 TPSS AIR HANDLING EQUIP.	05/15/84	-	11/15/84	11/15/84P	02/15/85	02/15/85P	-	-	04/15/85	04/15/85P	-	-

N/A = Not Applicable

58

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: November 30, 1984

Page 6 of 6

DESIGN CONTRACTS	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL		PRE- FINAL SUBMITTAL		FINAL SUBMITTAL		BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
				F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)			
A750 TUNNEL LINERS	10/01/83	-	05/16/84	05/16/84A	08/15/84	08/23/84A	11/16/84	-	N/A	N/A	-	-	
A760 SIGNING	02/22/84	-	08/27/84	02/15/85F	10/22/84	03/22/85F	12/17/84	04/19/85F	-	06/19/85F	-	-	

59