

- **Board of Directors**
Engineering and Operations Committee

December 12, 2000 Board Meeting

10-2

Subject

Status report for the Inland Feeder Project for the month ending October 2000

[Any discussion of claims will be heard in closed session – conference with legal counsel – significant exposure to litigation (two matters) pursuant to Gov. Code § 54956.9(b).]

Description

Arrowhead Tunnels (Design and Bid) – Reaches 1 and 2

Redesign activities related to the Arrowhead West Tunnel and the remaining portion of the Arrowhead East Tunnel are nearing completion. The final drawings and specifications checkset are scheduled to be completed in early November for final review.

Arrowhead West Tunnel – Reach 1

Negotiations with the contractor continue over settlement of the remaining construction claim issues.

Arrowhead East Tunnel – City Creek Heading – Reach 2

The contractor continued final lining operations at the City Creek heading. Approximately 1,330 feet of the final impermeable liner have been installed in the 8,000-foot tunnel. Lining operations are scheduled to be completed by mid-2001. Discussions with the contractor continue over settlement of the remaining construction claim issues.

Alternative Contingency Alignments to Arrowhead Tunnels

Staff has completed its evaluation of alternative contingency alignments as a potential replacement for the Arrowhead Tunnels, should a special use permit to proceed not be obtained from the U.S. Forest Service (USFS). An oral and written report will be given to the Board in November. Board action on how to proceed with the project is expected in January 2001.

Highland Pipeline – Reach 3

The Highland Pipeline design package is 90 percent complete. Design activities have been placed on hold pending Board action on how to proceed with the project.

Mentone Pipeline – Reach 4

The contractor has completed installation and encasement of 800 feet of pipe across the Santa Ana River Wash. Approximately 1,200 feet of pipe has been installed near the Redlands Airport. Shoring operations continued along Mentone Boulevard and are expected to be completed in early November. This reach is scheduled for completion in fall 2001.

Riverside Badlands Tunnel – Reaches 5 & 6

In September 2000, the tunnel boring machine (TBM) encountered loose unconsolidated material under groundwater pressure, which has temporarily halted mining operations. Grouting is being performed to stabilize the ground ahead of the TBM, and a dewatering well to temporarily reduce groundwater levels will be installed in early November. Mining is expected to resume in mid-November. These ground conditions, which are expected to be encountered for approximately 1,000 feet, will require probing and grouting out in front of the TBM plus additional dewatering, which will temporarily reduce mining rates from those previously experienced. Overall

work on this reach remains ahead of schedule. A total of 16 feet was mined in October, bringing the total distance tunneled to 28,369 feet (see [Attachment 1](#) for a summary of tunneling progress).

Schedule and Budget

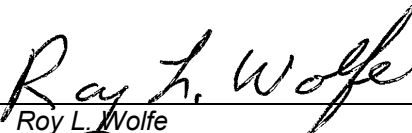

The Inland Feeder Project is currently scheduled for completion in 2005; however, this date may be extended due to the revised construction work plan for the Arrowhead Tunnels or an alternative contingency alignment. The project budget remains at \$1.188 billion. Based on a 30 percent design estimate for the Arrowhead Tunnels, the projected total cost is \$981.5 million. Total expenditures through October 2000 are \$479.2 million (see [Attachment 2](#) for a financial summary and [Attachment 3](#) for a budget comparison and schedule summary).

Policy

Board Request

Fiscal Impact

Refer to the attachments.

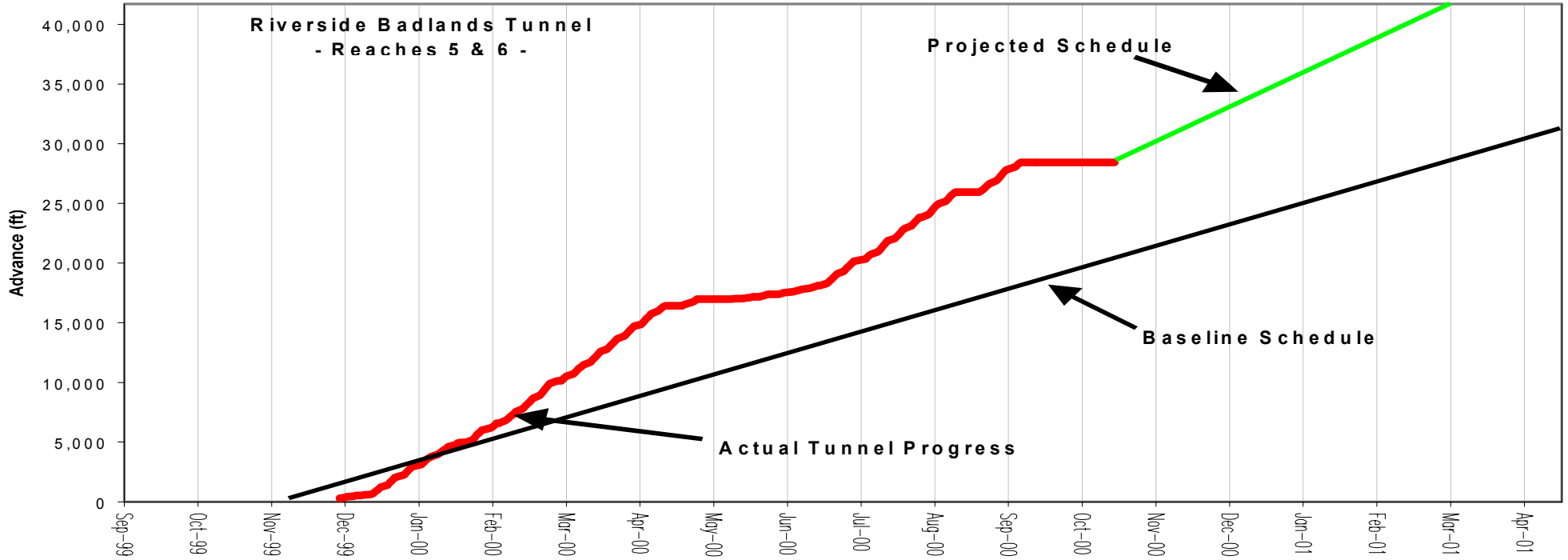
	11/17/2000
Roy L. Wolfe Manager, Corporate Resources	Date
	11/18/2000
Ronald R. Jester General Manager	Date

[Attachment 1 – Riverside Badlands Tunneling Progress](#)

[Attachment 2 – Financial Summary](#)

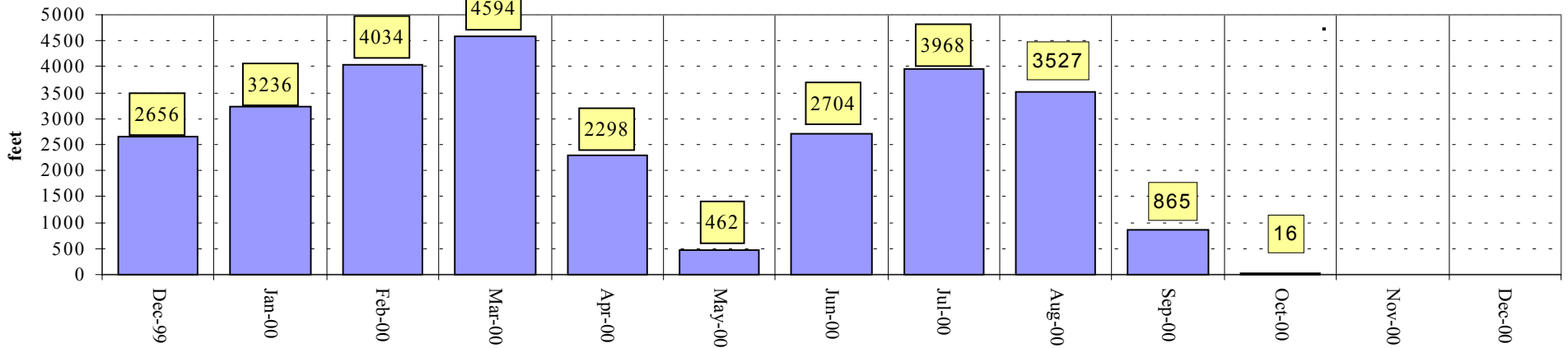
[Attachment 3 – Budget Comparison and Schedule Summary](#)

BLA #471

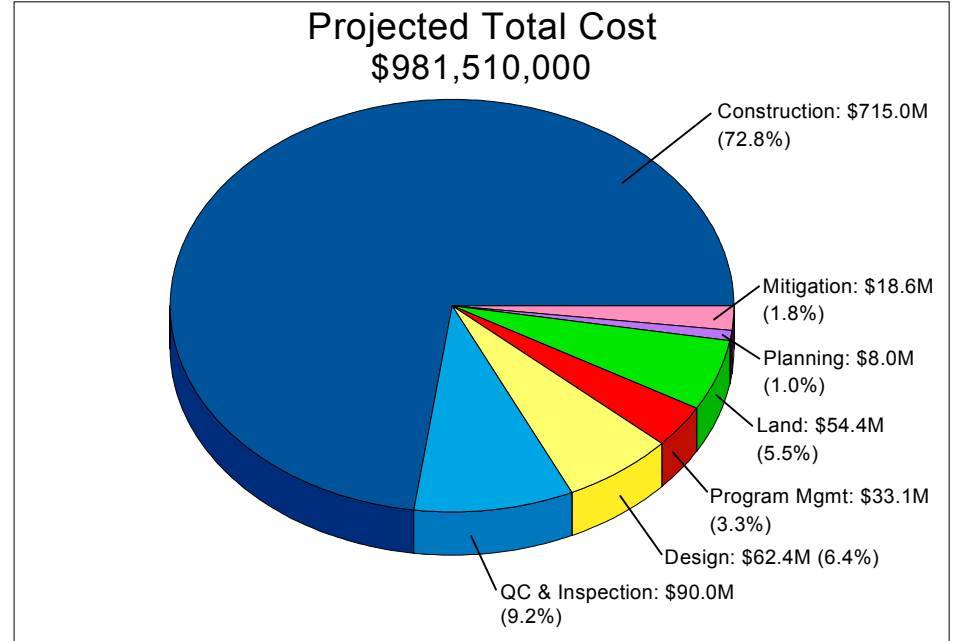
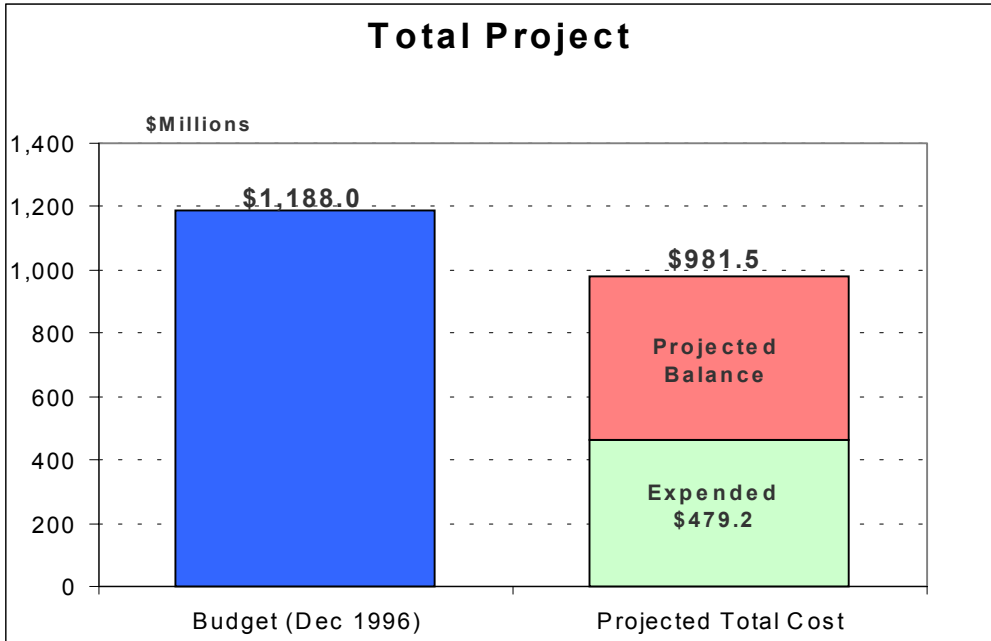


**Monthly Tunnel Progress
Riverside Badlands Tunnel
Reaches 5 & 6**

Total Tunnel Length = 41,719 feet
% Tunnled (10/31/00) = 28,369 feet (68.0%)

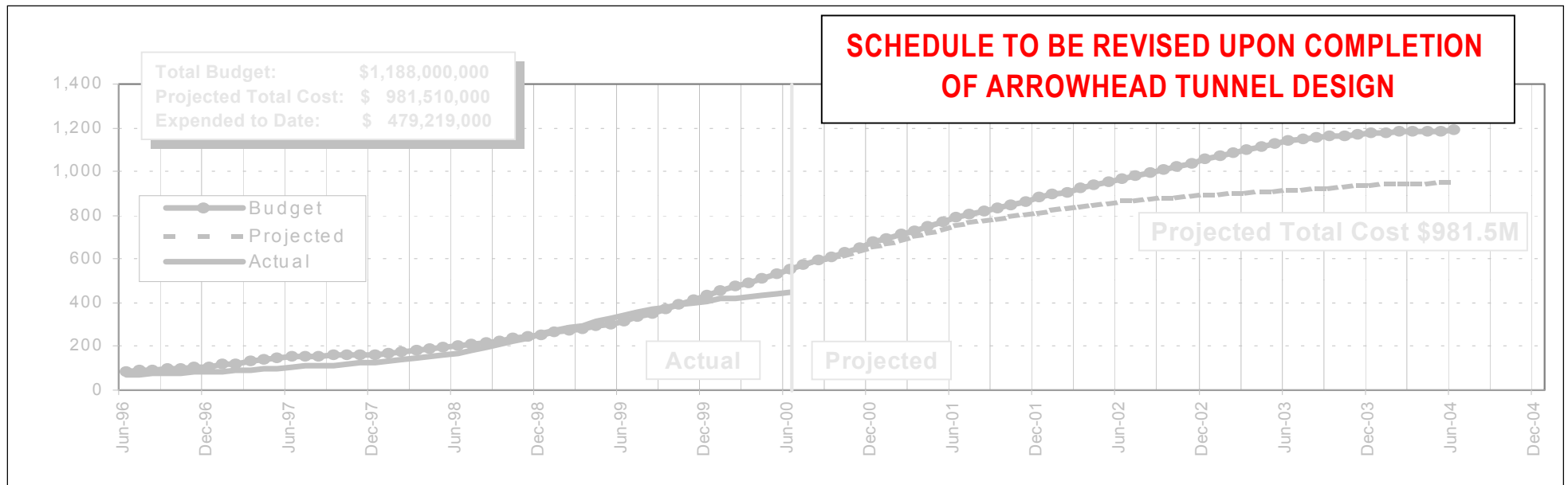


Financial Summary



1. Based on knowledge of current field conditions.

Project Cash Flow



Budget Comparison and Schedule Summary

	INITIAL AUTHORIZATION (DEC-96)	PRELIMINARY REBASELINE (JUN-2000) ⁽¹⁾	VARIANCE	ACTUALS THRU (OCT-00) ⁽²⁾	PROGRESS		COMPLETION DATE		COMMENTS
					PLANNED 100%	ACTUAL % COMPLETE (OCT-00) ⁽⁴⁾	CONTRACT (5)	FORECAST (OCT-00)	
Construction Reaches									
Arrowhead West Tunnel	\$ 200,450,000	\$ 211,728,000	\$ (11,278,000)	\$ 55,373,000	----	25%	Dec-02	T.B.D.	On hold.
Arrowhead East Tunnel	\$ 184,550,000	\$ 281,607,000	\$ (97,057,000)	\$ 116,342,000	----	38%	Jan-03	T.B.D.	On hold.
Highland Pipeline ⁽³⁾	\$ 95,230,000	\$ 57,199,000	\$ 38,031,000	\$ 7,090,000	0%	0%	-----	T.B.D.	In Design.
Mentone Pipeline	\$ 74,140,000	\$ 35,056,000	\$ 39,084,000	\$ 23,893,000	18%	49%	Mar-02	Oct-01	Under construction.
Riverside Badlands Tunnel	\$ 204,300,000	\$ 142,534,000	\$ 61,766,000	\$ 85,112,000	47%	59%	125%	Apr-02	Under construction.
Riverside North Pipeline	\$ 106,840,000	\$ 57,984,000	\$ 48,856,000	\$ 55,219,000	100%	100%	Completed	Nov-99	Completed Nov. 99
Riverside South Pipeline	\$ 77,200,000	\$ 42,358,000	\$ 34,842,000	\$ 42,342,000	100%	100%	Completed	Aug-99	Completed Aug. 99
Construction Support									
Right-of-Way and Land	\$ 47,830,000	\$ 54,448,000	\$ (6,618,000)	\$ 42,009,000	-----	77%	-----	-----	-----
Environmental Planning/Mitigation	\$ 10,960,000	\$ 18,598,000	\$ (7,638,000)	\$ 10,747,000	-----	58%	-----	-----	-----
Owner Controlled Insurance Prog.	\$ -	\$ 38,889,000	\$ (38,889,000)	\$ 15,701,000	-----	40%	-----	-----	-----
Study/Initial Planning	\$ 8,024,000	\$ 8,024,000	\$ -	\$ 8,024,000	-----	100%	-----	-----	-----
Program Management	\$ 20,170,000	\$ 33,085,000	\$ (12,915,000)	\$ 17,367,000	-----	52%	-----	-----	-----
Projected Total Cost	\$ 1,029,694,000	\$ 981,510,000	\$ 48,184,000	\$ 479,219,000					
Remaining Budget	\$ 158,306,000	\$ 206,490,000							
Total Approved Budget	\$ 1,188,000,000	\$ 1,188,000,000	\$ 48,184,000						

(1) Based on 30% design for Arrowhead Tunnels

(2) Actuals for construction reaches include design costs

(3) Expenditure for design which is at 90%. Once design has been completed, construction bidding will be placed on hold once work on the Arrowhead Tunnels is scheduled.

(4) Based on work complete for construction reaches and \$ expended for construction support

(5) Based on original contract duration and approved extensions

Remaining Budget ¹

