

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

May 17, 2000 Board Meeting

10-2

Subject

Inland Feeder Project Status Report for March 2000

Description

Arrowhead Tunnels – Reaches 1 & 2

Metropolitan has conferred with its outside experts to evaluate a number of alternative procedures for completion of the tunnels. Based on the recommendation of our board of consultants and other experts, Metropolitan proposed to modify tunnel construction in response to concerns of the U.S. Forest Service (USFS) and the San Manuel Band of Mission Indians.

In January 2000, Metropolitan submitted a specific plan to the USFS to complete the Arrowhead Tunnels. The plan calls for the immediate lining of City Creek, dismantling the tunnel boring machine (TBM) and the installation of reinforced concrete cylinder pipe in the 8,008 feet of excavated tunnel. The remainder of the Arrowhead East and Arrowhead West Tunnel will be excavated with a new TBM using bolted and gasketed tunnel segments if approved by the USFS.

Numerous meetings were held between Metropolitan and the USFS to discuss this plan. Finally, in March of this year, the USFS conditionally approved Metropolitan's plan to line the City Creek heading of the Arrowhead East Tunnel.

Highland Pipeline – Reach 3

The Highland Pipeline design remains at about 90 percent complete. Construction bidding will be placed on hold until work on the Arrowhead Tunnels is scheduled.

Mentone Pipeline – Reach 4

At its February meeting, the Board authorized the General Manager to award a construction contract for the Mentone Pipeline. Construction is expected to begin in late spring 2000.

Riverside Badlands Tunnel – Reaches 5 & 6

On December 1, 1999, mining began at the Gilman Springs Portal of the Riverside Badlands Tunnel. In March 2000, the TBM progressed 4,594 feet, bringing the total completed through March 31 to 14,529 feet (see [Attachment 1](#) for a summary of mining progress). Dewatering operations continue in San Timoteo Canyon to lower the groundwater level prior to mining in this area, which is scheduled for late April 2000.

Schedule and Projected Costs

The Inland Feeder Project is currently scheduled for completion in 2004; however, this date will be extended due to the revised construction work plan for the Arrowhead Tunnels. A new completion date will be established after USFS approval of the bolted and gasketed system. The project remains on budget at \$1.188 billion. Total expenditures through March are \$429.6 million (see [Attachment 2](#) for a financial summary and [Attachment 3](#) for a schedule summary).

RECENT DEVELOPMENTS

Arrowhead Tunnels – Reaches 1 & 2

After the April 11, 2000 Board meeting, Metropolitan notified the contractor, Shank/Balfour Beatty, that the tunneling portion of their contracts for the Arrowhead West and Arrowhead East Tunnels have been deleted from their current contracts due to impracticability.

Mentone Pipeline – Reach 4

Notice To Proceed was given to the contractor, J.F. Shea Co., Inc., at the end of April 2000.

Riverside Badlands Tunnel – Reaches 5 & 6

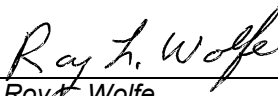

Mining on the Riverside Badlands Tunnel has advanced a total of 16,242 feet through April 14, 2000.

Policy

Board Request

Fiscal Impact

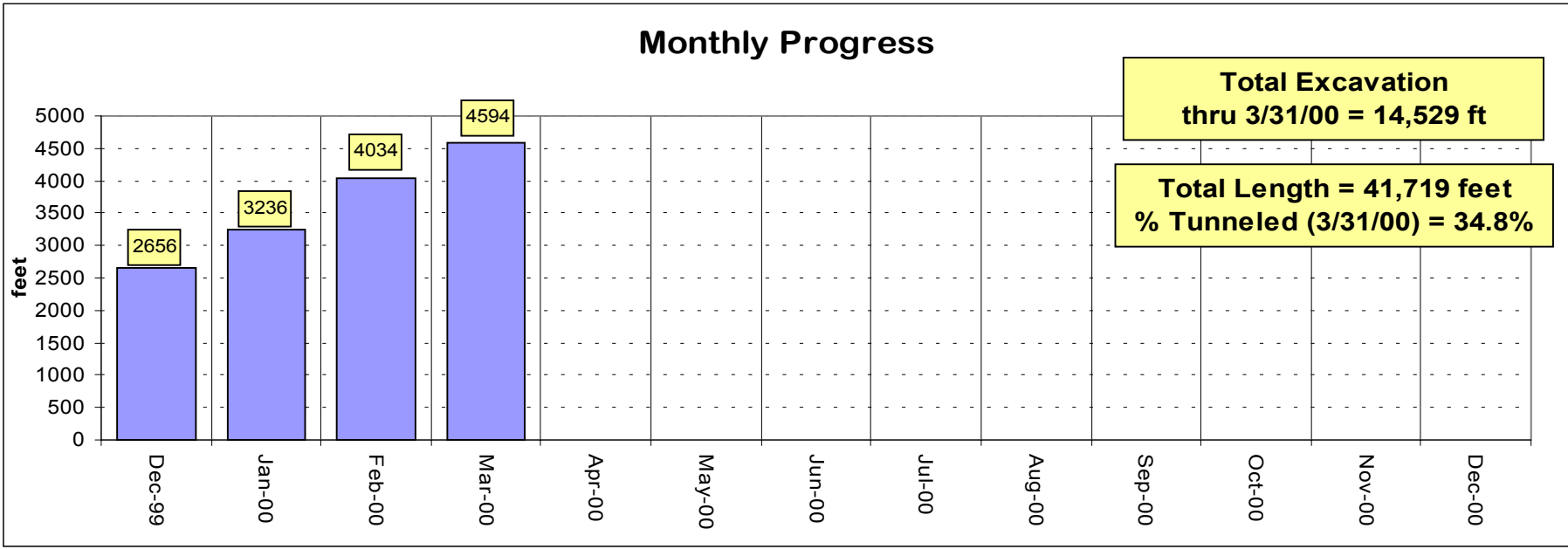
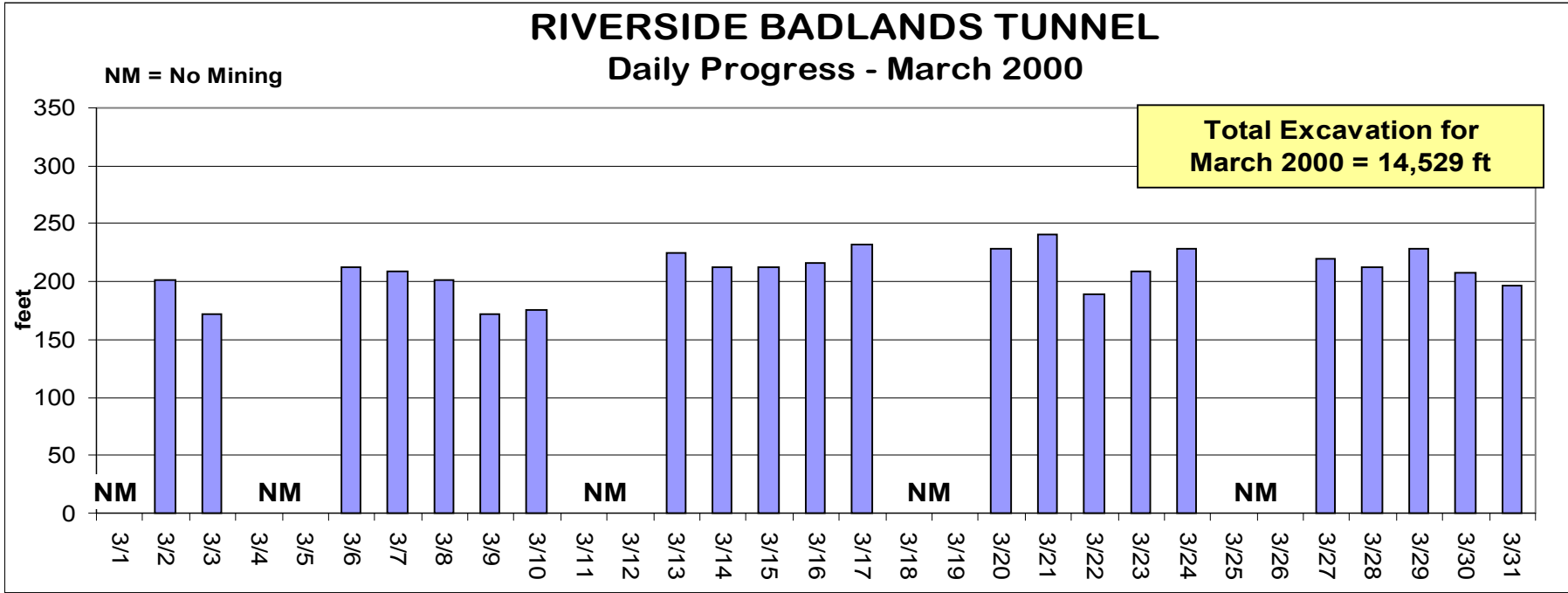
None.

	4/19/2000
Roy L. Wolfe	Date
Acting Manager, Corporate Resources	
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	4/27/2000
General Manager	Date

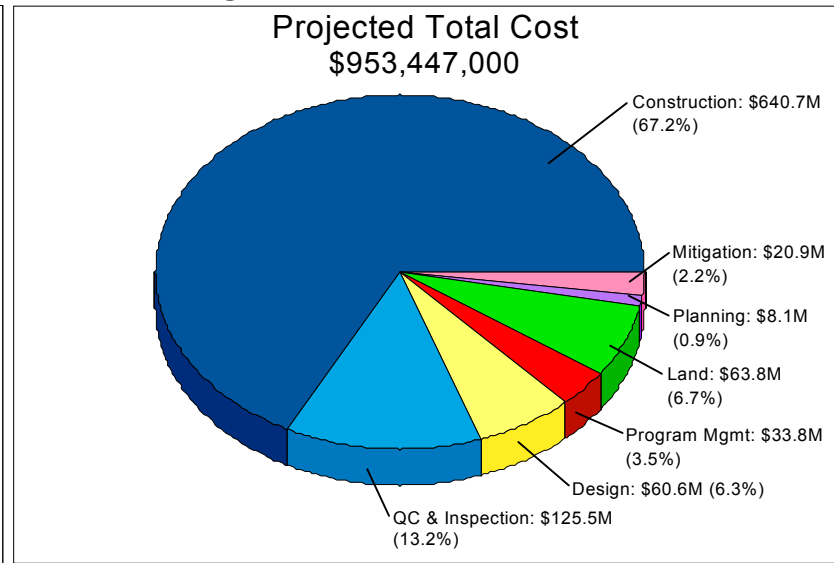
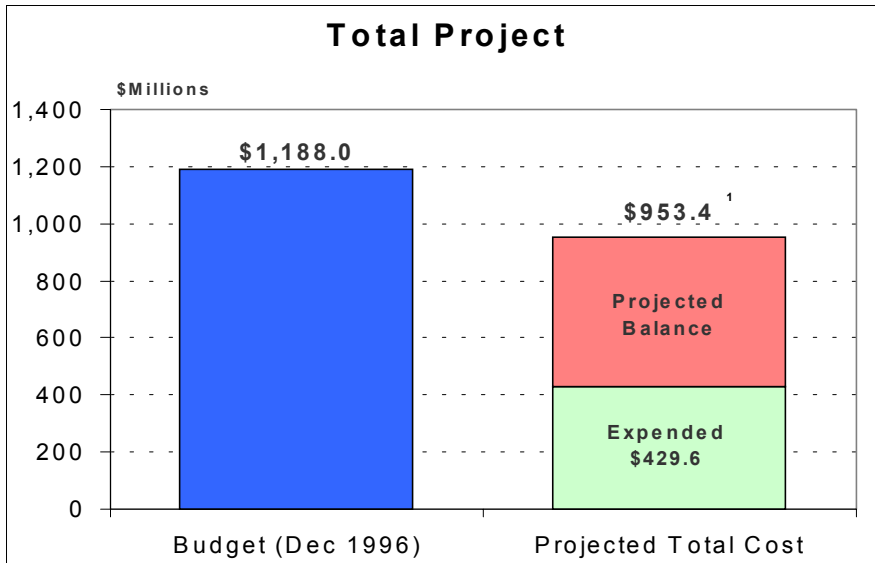
Attachment 1 – Riverside Badlands Tunnel mining progress

Attachment 2 – Financial Summary

Attachment 3 – Schedule Summary

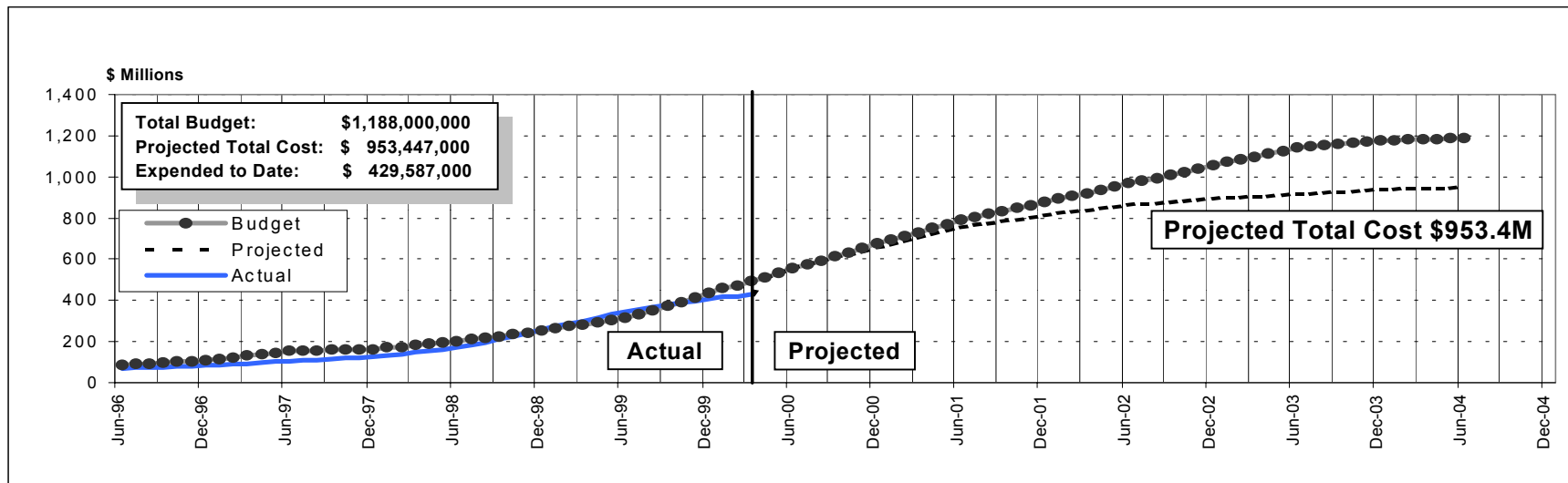


Financial Summary



1. Based on knowledge of current field conditions.

Project Cash Flow



Schedule Summary

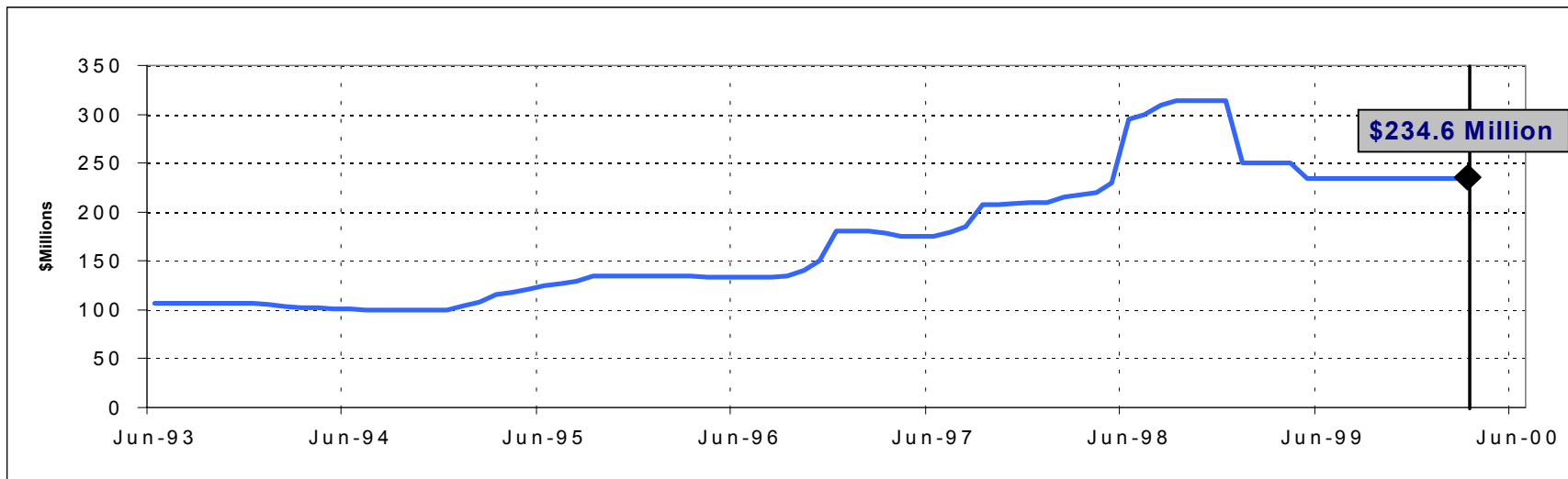
DESCRIPTION	PROGRESS		COMPLETION DATE		COMMENTS
	PLANNED ¹	ACTUAL	CONTRACT ²	FORECAST	
<i>Design</i>					
Highland Pipeline	100%	90%	----	Jun-00	Scheduled for advertisement in early summer 2000.
Mentone Pipeline	100%	100%	Complete	Complete	Awarded contract at the February 2000 Board.
<i>Construction</i>					
Arrowhead West Tunnel	40%	25%	Dec-02	T.B.D.	On hold.
Arrowhead East Tunnel	67%	38%	Jan-03	T.B.D.	On hold.
Mentone-RUSD Pipeline ³	100%	100%	Complete	Complete	Construction completed February 1998.
Riverside Badlands Tunnel	34%	42%	Jul-03	Dec-02	Mining has advanced 14,529 feet.
Riverside Pipeline North	100%	100%	Complete	Complete	Construction completed November 1999.
Riverside Pipeline South	100%	100%	Complete	Complete	Construction completed August 1999.

1. Based on Approved Schedule

2. Original Contract Duration + Approved Extensions

3. Represents 3,400 foot section of Mentone Pipeline constructed to support opening of new high school.

Remaining Budget ¹



1. Project budget minus projected total cost.