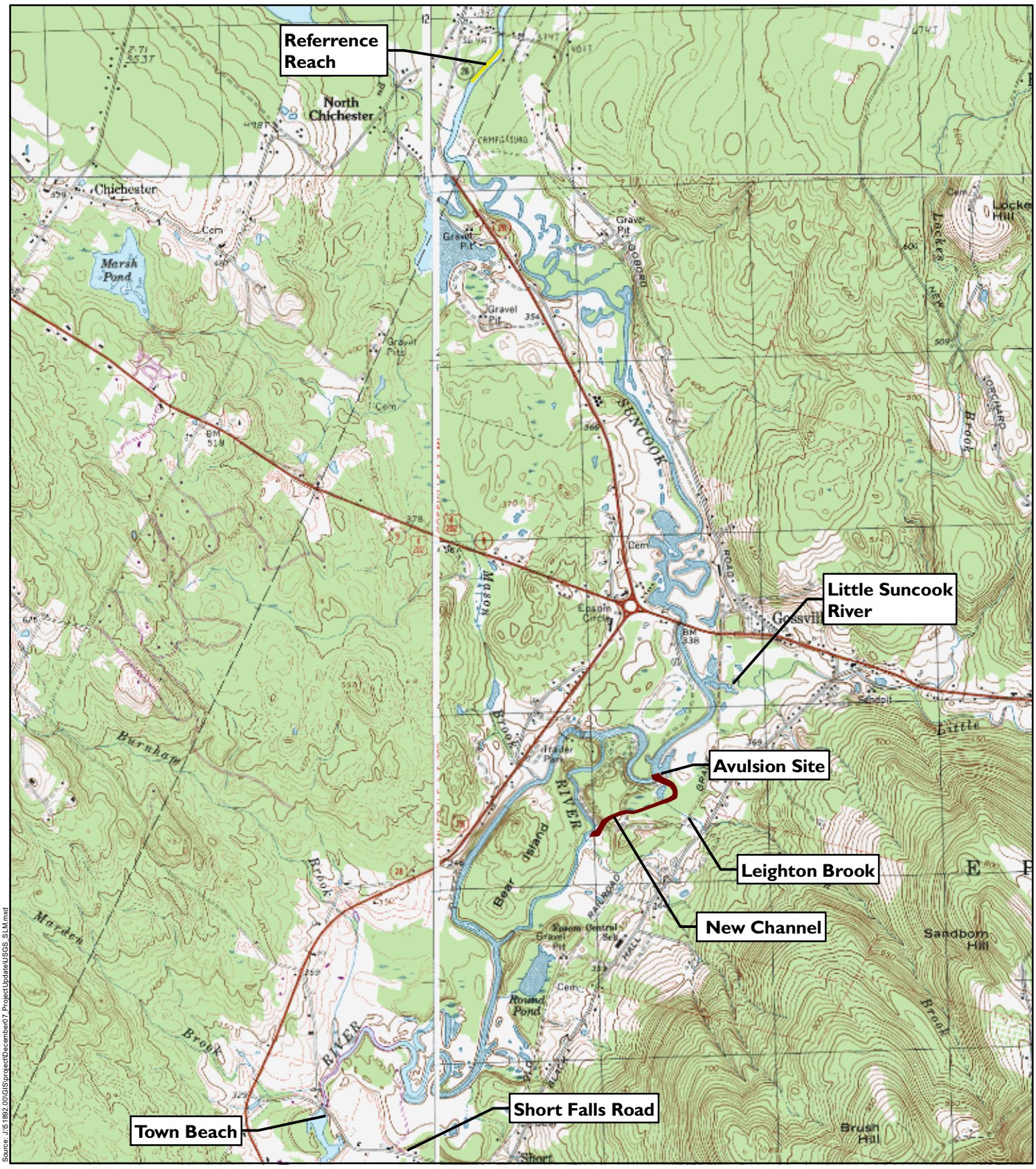

Source: J:\51892.00\GIS\project\December07 ProjectUpdate\USGS_SLM.mxd

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Figure 1

December 2007
Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: USGS

Geomorphology Findings

Headcut extends up to confluence with Little Suncook. Comparison of our survey with FEMA data suggests 3 feet of degradation here.

Slope above the avulsion is 0.95%.

Old Channel is 12 feet higher than new channel at the avulsion site.

Slope below the avulsion is 0.17%.

Channel bed is elevated 3 to 4 feet relative to pre-avulsion conditions downstream of confluence.

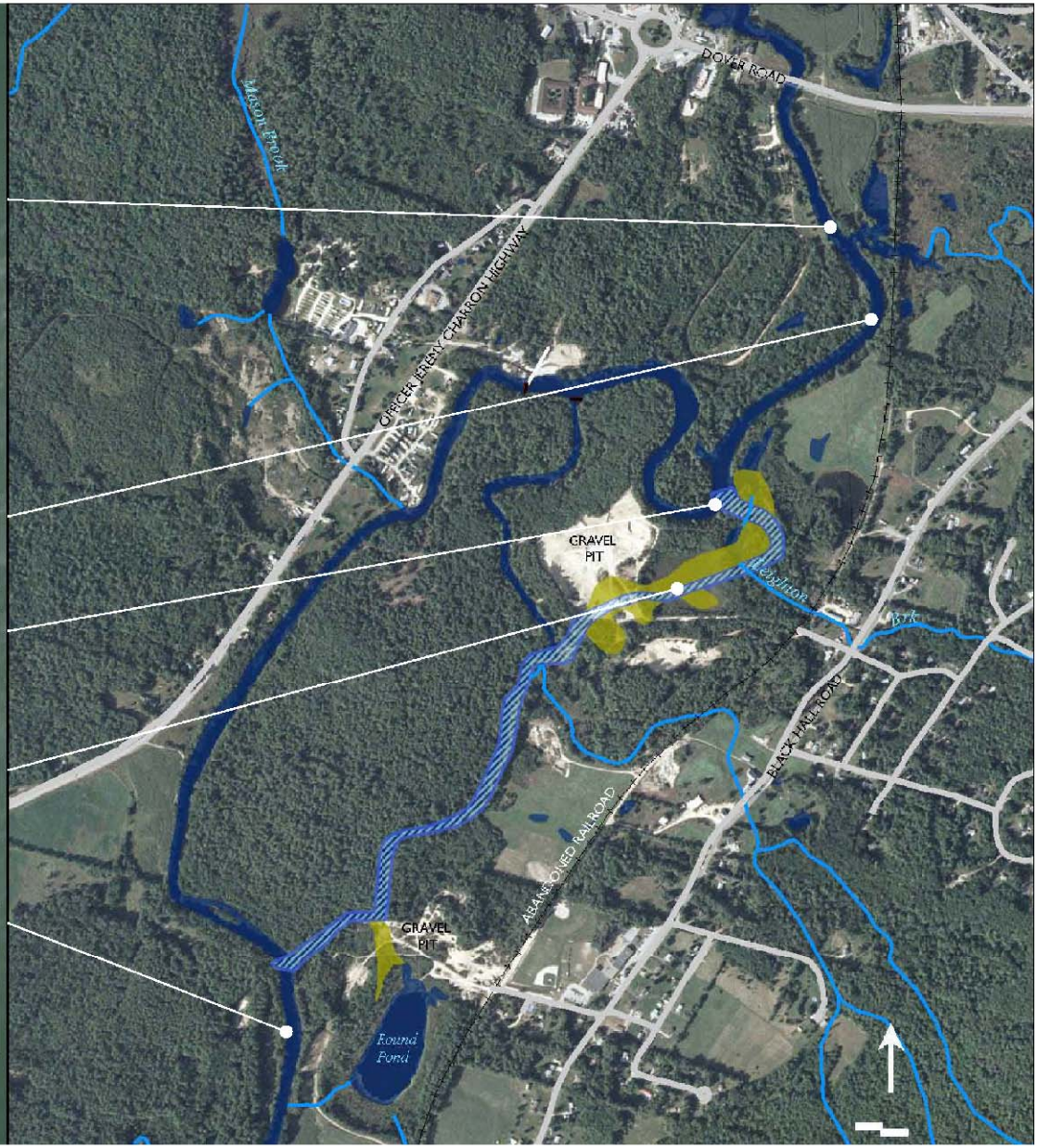

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Figure 2

December 2007 Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: NH GRANIT & VHB, Inc.

Source: J:\51\82.00\GIS\project\December07_Project\Update\Figure 2.mxd

Alternative 1

No Action

1. Headcutting continues to advance upstream

2. New channel continues to evolve toward dynamic equilibrium

3. Reduced channel capacity

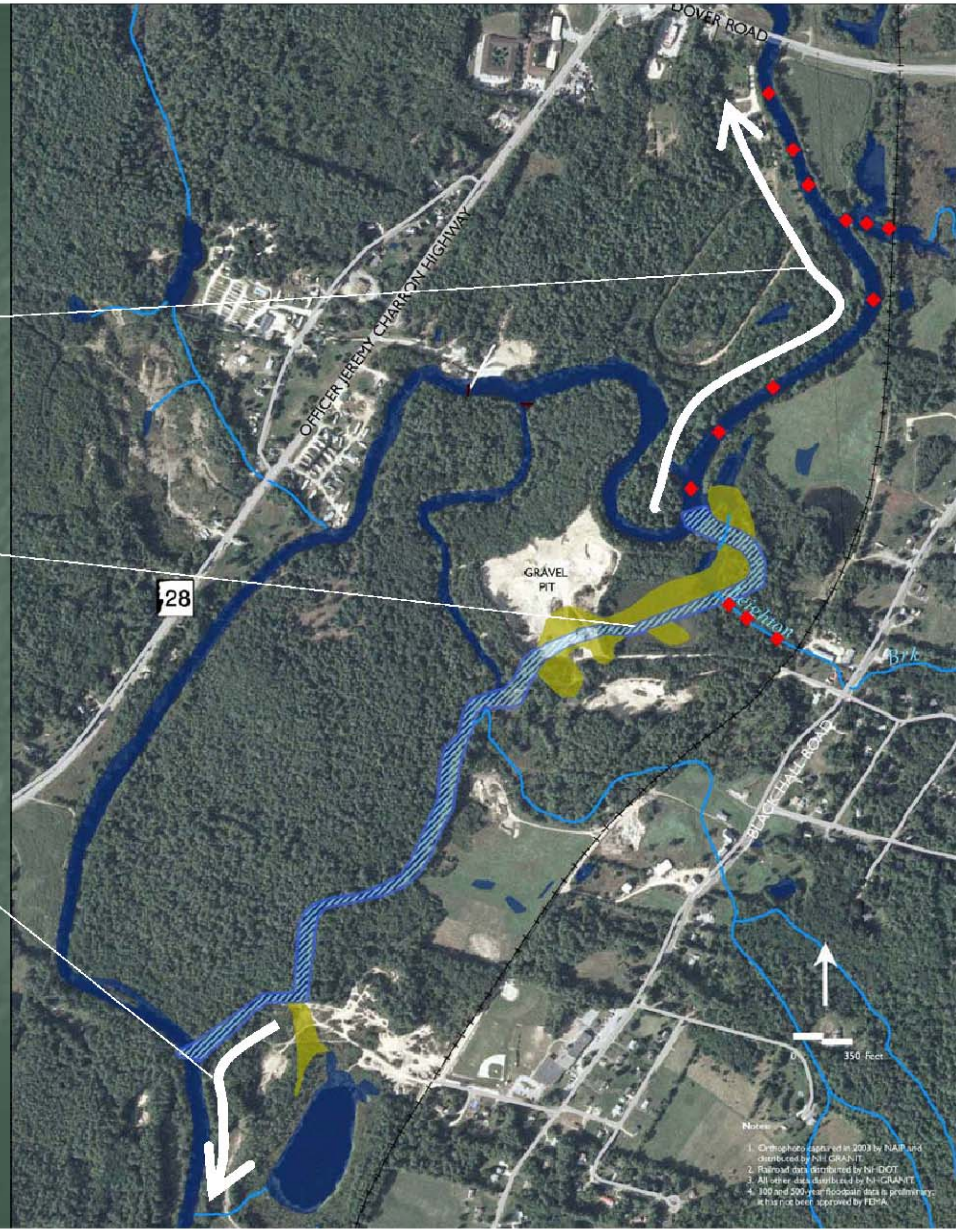

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Figure 3

December 2007
Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: NH GRANIT & VHB, Inc.

Source: J:\51892.00\GIS\project\December07_ProjectUpdate\Figure_3.mxd

Alternative 2

Strategic Treatments

1. Place grade control structures to control headcutting

2. Excavate as necessary to ensure bankfull channel capacity

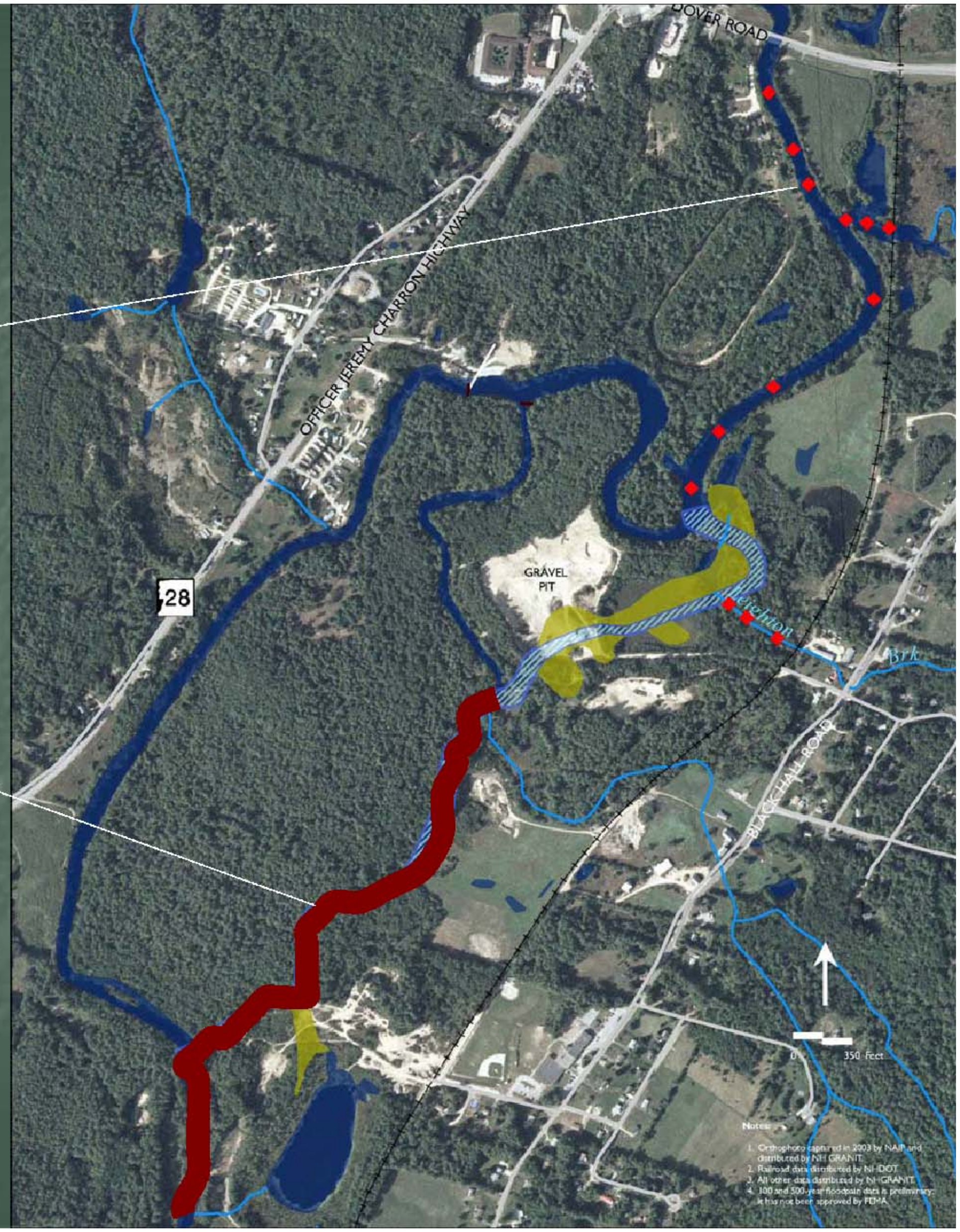

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Figure 4

December 2007
Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: NH GRANIT & VHB, Inc.

Source: J:\51892.00\GIS\project\December07_ProjectUpdate\Figure_4.mxd

Alternative 3

Alt 2 + New Channel

1. Place grade control structures to control headcutting

2. Restore appropriate form to river to establish equilibrium

3. Excavate as necessary to ensure bankfull channel capacity

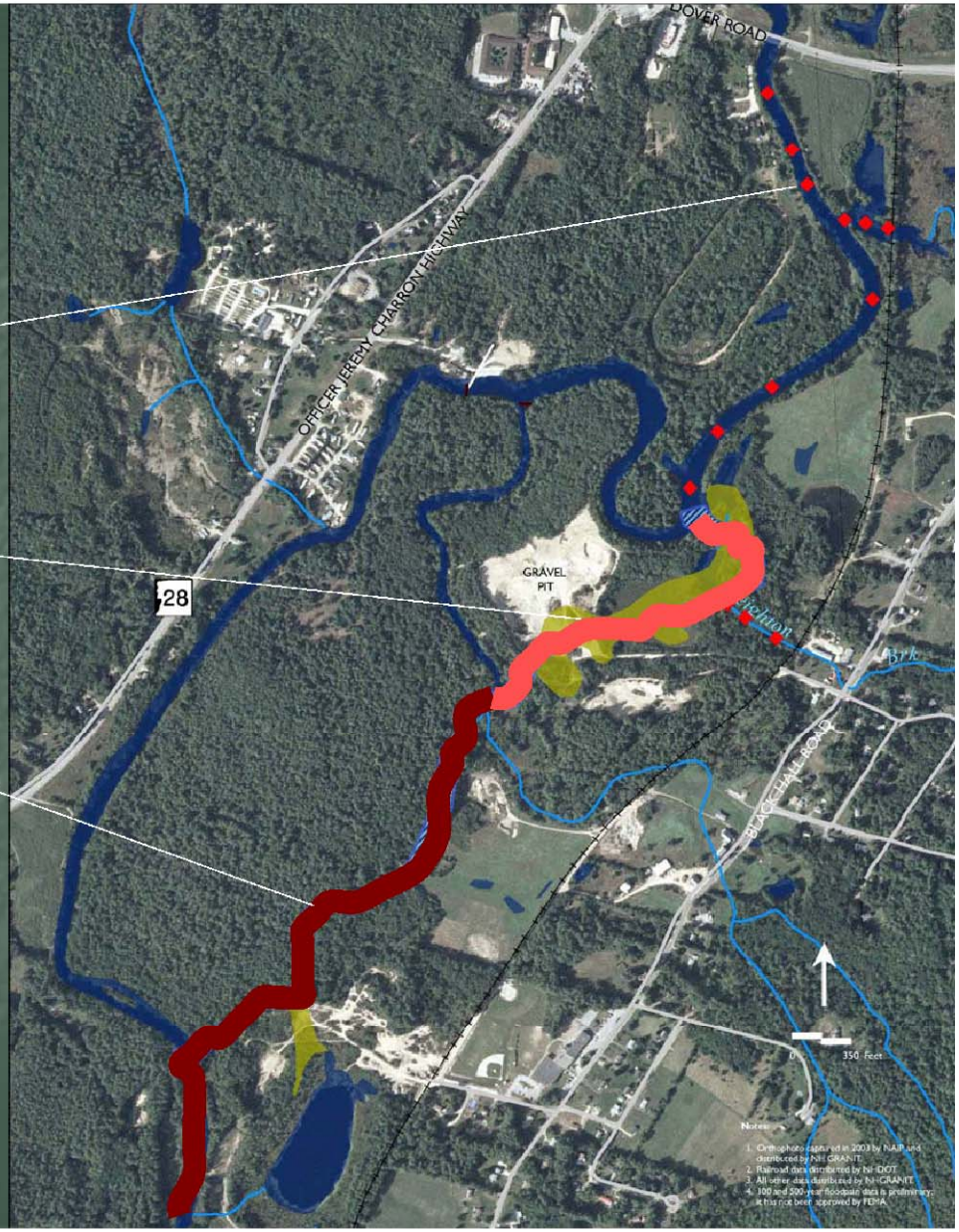

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Figure 5

December 2007 Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: NH GRANIT & VHB, Inc.

Alternative 4

Restore Flow to Old Channel

Alt 4A – Cut new channel to divert river to Old Primary Channel.

Alt 4B – Reconstruct Avulsion Site.

Repair or remove dams.

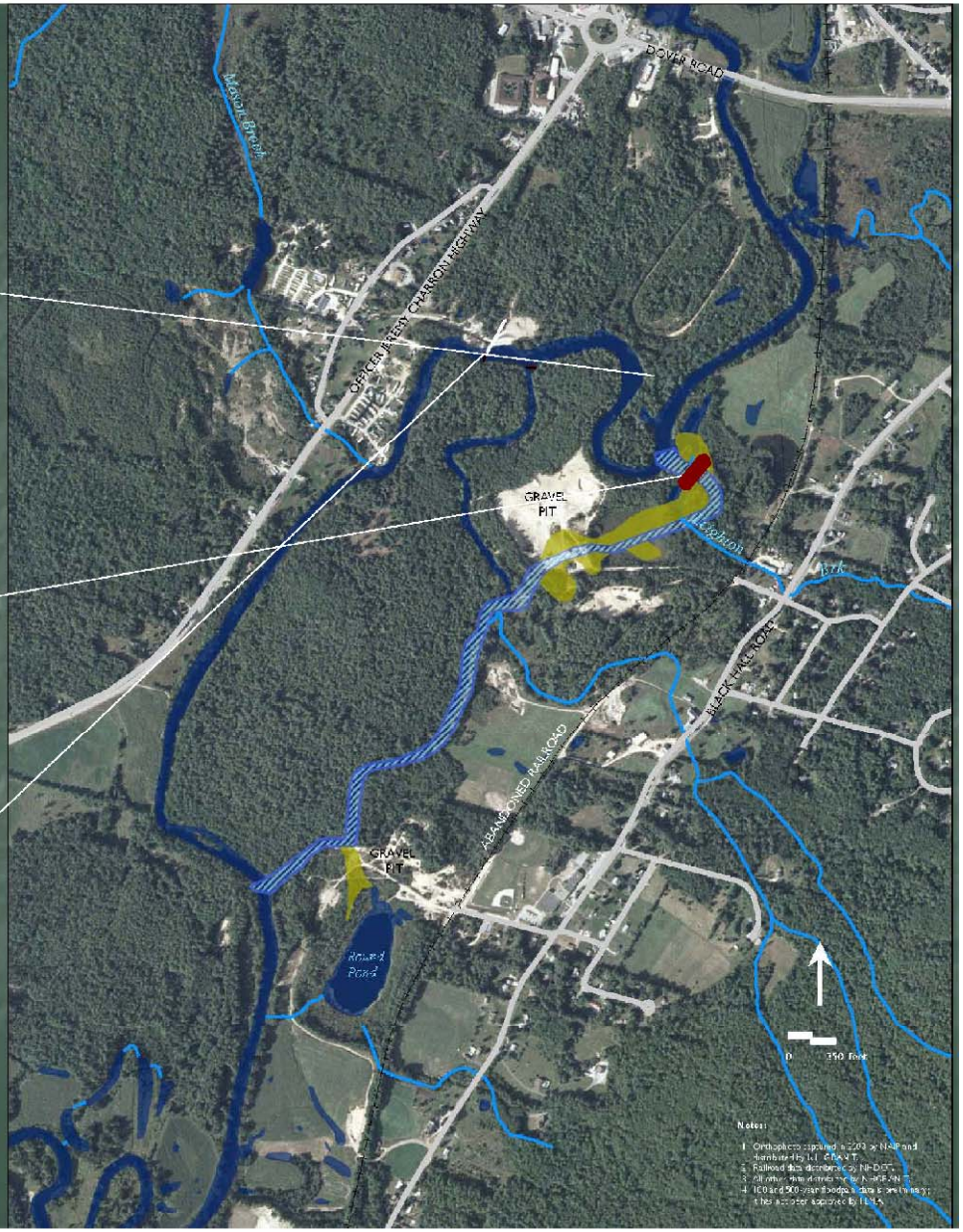

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Figure 6

December 2007 Project Update

Suncook River Restoration
Epsom, New Hampshire

Source: NH GRANIT & VHB, Inc.